



# Standard Power Supplies

From The World's No.1 Power Supply Company

October 2017



[www.DeltaPSU.com](http://www.DeltaPSU.com)



# Augmented Reality (AR) Power Supply Catalog

## Delta Standard Power Supplies

Our innovations in a new perspective


Download **DeltaPSU AR** app to explore the products in 3D details (pages 20-21, 54-55 and 90-91).



### 4 easy steps

- 1 Download **DeltaPSU AR** app from the App Store or Google Play.



- 2 Open the app and select the "Scan AR" menu.
- 3 Scan product image with the  logo on the page to view the 3D product simulation.
- 4 Follow the instructions on the top right tab and users will be able to zoom in/out or rotate the product's 3D image for greater details.

**\*Software and Hardware Requirements**

- iOS devices: Requires iOS 8.0 or above. Compatible with iPhone 5 or above; iPad 2 or above.
- Android devices: Requires Android 4.0 or above. Requires 1 GB RAM or above.

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# Company Profile

## Delta Electronics Group

### World's No.1\* Power Supply Company

Delta Electronics Group is the world's largest provider of switching power supplies and a major source for power management and renewable energy solutions. Established in 1971, Delta has sales offices and R&D facilities worldwide with manufacturing plants located in Taiwan, Thailand, China, Mexico, India and Europe.

As a global leader in power electronics, Delta has long been adopting Green manufacturing processes, recycling initiatives, waste management programs and environmentally-friendly green buildings. In 2017, Delta Electronics was selected for the prestigious Dow Jones Sustainability Index (DJSI) World for the seventh consecutive year. Amongst many other national and international awards, since 2010, Delta has also received more than 49 internationally recognized technology and design awards.

#### 1 Standard Industrial and Medical Power Supplies



Delta offers an extensive range of standard power supplies for industrial and medical applications. The industrial power supplies comprise of DIN rail, panel mount and open frame types and LED drivers. The medical power supplies include open frame, enclosed, ATX and AC adapter types. All Delta standard power supplies offer customers the same industrial leading technology and quality that Delta's ODM partners are familiar with. Due to Delta's highly reliable products and world class customer support, we have been expanding our product portfolio aggressively to meet the global demands which have been growing annually. Please visit our standard product homepage at [www.DeltaPSU.com](http://www.DeltaPSU.com) for more product information.

#### 2 Modified Standard Power Supplies



Many top tier electronics companies on the Fortune® 500 list have long regarded Delta as a trusted ODM partner. These companies expect nothing less than the best technology and quality. With decades of industrial leading manufacturing and design experiences in ODM power management products, the IPS team can also offer our customers modified standard products by leveraging from the wide range of standard products in our catalog. Modified standard products enable our customers to optimize their costs and product development time. For further query, please contact your local Delta distributor or simply send your query to [info@deltapsu.com](mailto:info@deltapsu.com).

\* Based on global sales revenue as reported in Micro-Tech Consultants March 2017 Report.

# Latest Products

## Delta Standard Power Supplies

### CliQ III

High Power Density and Competitively Priced



# CliQ<sup>III</sup>

**24V 240W**  
**24V 480W**

**PAGES 34-35**

- Universal AC input voltage range
- High power density in corrosion resistant aluminium casing
- Power Boost of 150% up to 5s
- Conformal coating on PCBAs to protect against common dust and chemical pollutants

### CliQ M

Slim Design with Advanced Power Boost (APB)



# CliQ<sup>M</sup>

**24V 960W**

**PAGES 36-37**

- Universal AC input voltage range
- High power density in corrosion resistant aluminium casing
- Power Boost of 150% up to 7s
- DNV GL and ABS approvals for maritime applications
- Conformal coating on PCBAs to protect against common dust and chemical pollutants

### Chrome

For Home and Building Automation Systems



# CHROME

**24V 10W**

**PAGES 42-43**

- Protection Class II, Double Isolation (No Earth connection is required)
- Household appliance approvals IEC/EN 60335-1
- 4kV Electrical Fast Transient / Burst
- Universal AC input voltage and full power up to 55°C
- NEC Class 2 / Limited Power Source (LPS) certified

### Chrome DC-UPS

DC-UPS Module with Compact Design



# CHROME

**24V 10A**

**PAGES 52-53**

- Suitable for 24V system up to 10A
- Built-in diagnostic monitoring for DC OK, Discharge and Battery Fail by relay contacts
- High MTBF > 500,000 hrs as per Telcordia SR-332
- Wide operating temperature range from -20°C to +60°C

### PMH

Panel Mount for Household Application



# PMH

**12V, 24V 100W**  
**24V 150W**

**PAGES 68-73**

- Universal AC Input voltage range
- Household appliance approvals IEC/EN 60335-1, IEC/EN 61558-1 and IEC/EN 61558-2-16
- 1U Low Profile for PMH-12V100WCL□, PMH-24V100WCL□, PMH-24V100WCM□ and PMH-24V150WCL□
- NEC Class 2 for PMH-24V100WCN□ and PMH-24V100WCM□

### PJU

Open Frame with Integrated DC-UPS



# PJU

**27V 60W**

**PAGES 110-111**

- Universal AC Input voltage range
- Small standard footprint of 2" x 4"
- Conforms to harmonic current IEC/EN 61000-3-2, Class A
- Monitoring signals for AC OK and Battery Low indication



# Typical Applications

## Delta Standard Power Supplies



### LED Signage/ Display

LED Signage

#### Applicable Series

PMC, PMT, PMF, PMR



### Oil & Gas

Oil & Gas

- Petrol station
- Oil refinery

#### Applicable Series

CliQ, CliQ II, CliQ M



### LED Lighting

LED Lighting

#### Applicable Series

LNE, LNV



### Factory

Industry

- Automation process
- Automation engineering

#### Applicable Series

CliQ, CliQ II, CliQ III, CliQ M, Lyte, Chrome, Sync, PMC, PMT, PMF, PMU



### Maritime

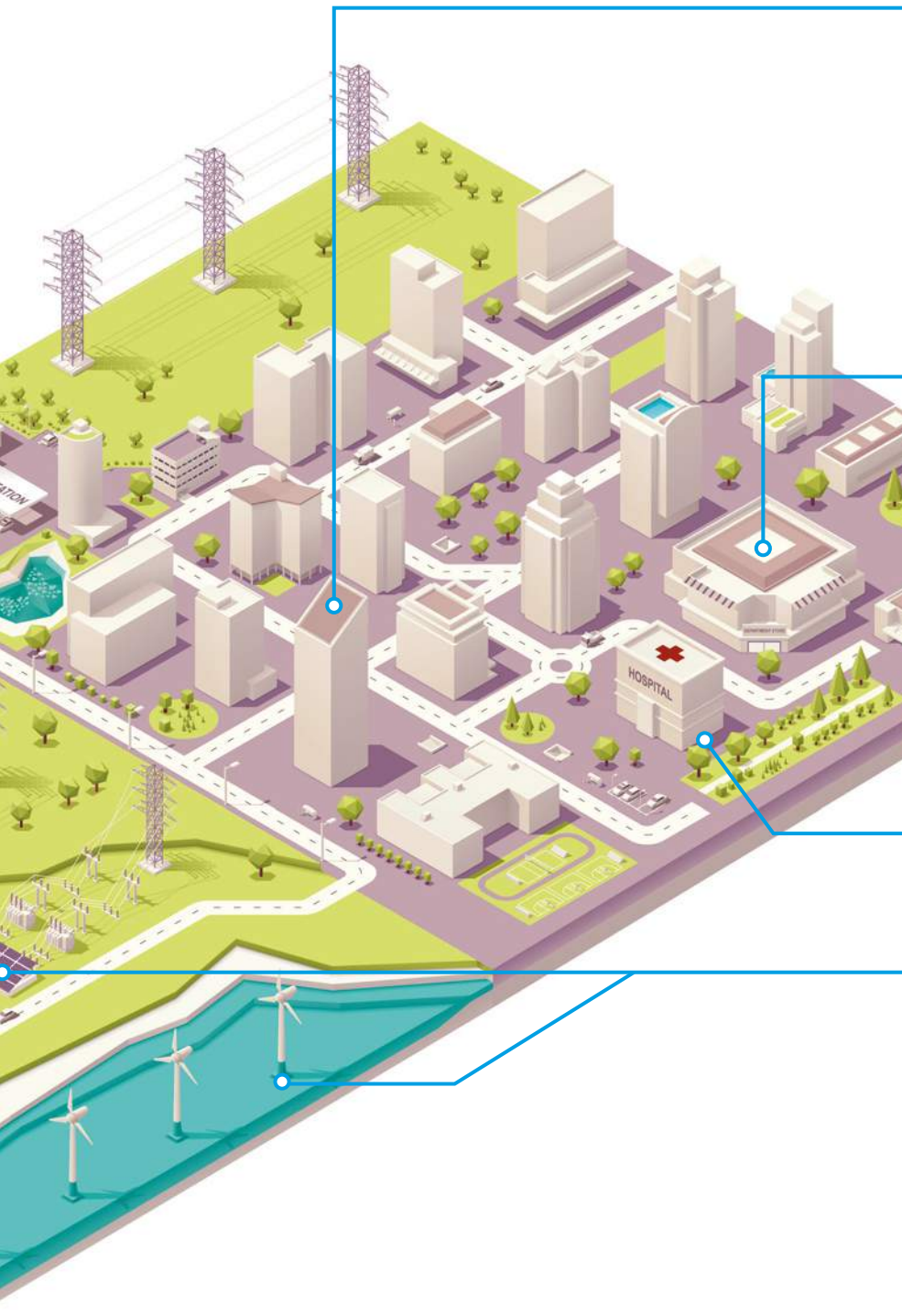
Marine

- Offshore

#### Applicable Series

CliQ M





IT

### Smart Building

- Elevator
- Escalator
- Data center
- HVAC

#### Applicable Series

CliQ, CliQ II, CliQ III, CliQ M, Lyte, Chrome, Sync



IT

### Department Store

- Automatic door
- Vending machine
- ATM

#### Applicable Series

PMC, PMT, PMH, PMF, PMU, PJ, PJB, PJT, PJU



Medical

### Hospital

#### Applicable Series

MDS, MEB, MEU



Renewable Energy

### Green Energy

- Wind turbine
- Solar farm

#### Applicable Series

CliQ, CliQ II, CliQ III, CliQ M, Lyte



Household

### Home

- Electrical appliances
- Home automation controller

#### Applicable Series

CliQ II, Chrome, PMC, PMH

# Selection Guide

## Delta Standard Power Supplies

New products are frequently introduced. Please visit [www.DeltaPSU.com](http://www.DeltaPSU.com) for latest product updates.

Product Type	Series	Model Name	Phase			PFC	Output Voltage	Output Current	Output Power			
			1	2	3				15W	30W	48W	60W
DIN Rail Power Supply	CliQ • Terminal block • Power Boost up to 3s	DRP012V015W1A□	●				12V	1.25A	●			
		DRP012V030W1A□	●					2.5A		●		
		DRP012V060W1AA	●					5.0A				●
		DRP012V100W1AA	●					8.33A				●
		DRP-24V48W1AZ	●				24V	2.0A			●	
		DRP024V060W1AZ	●					2.5A				●
		DRP024V060W1AA	●					2.5A				●
		DRP024V120W1AA	●			●		5.0A				
		DRP024V240W1AA	●			●		10.0A				
	DRP024V480W1AA	●			●	20.0A						
	DRP024V060W1B□	●				24V		2.5A				●
	DRP024V120W1B□	●						5.0A				
	DRP024V240W1B□	●			●		10.0A					
	DRP024V480W1B□	●			●		20.0A					
	DRP024V060W1N□	●					2.5A				●	
	DRP-24V100W1NN	●			●		3.8A					
	DRP-24V120W2BN	●	●				5.0A					
	DRP-24V240W2BN	●	●		●		10.0A					
	DRP024V060W3B□		●	●			2.5A				●	
	DRP024V120W3B□		●	●			5.0A					
	DRP024V240W3B□		●	●			10.0A					
	DRP024V480W3B□		●	●	●		20.0A					
	DRP024V960W3BN		●	●	●		40.0A					
	DRP048V060W1B□	●					48V	1.25A				●
	DRP048V120W1B□	●			●			2.5A				
	DRP048V240W1B□	●			●			5.0A				
	DRP048V480W1B□	●			●	10.0A						
	CliQ III • Slim design • Power Boost up to 5s	DRP-24V120W1CAN	●			●	24V	5.0A				
		DRP-24V120W1CBN	●			●		5.0A				
		DRP-24V240W1CAN	●			●		10.0A				
		DRP-24V240W1CBN	●			●		10.0A				
		DRP-24V480W1CAN	●			●		20.0A				
		DRP-24V480W1CBN	●			●		20.0A				
	CliQ M • Slim design • Advanced Power Boost	DRM-24V80W1PN	●			●	24V	3.4A				
		DRM-24V120W1PN	●			●		5.0A				
		DRM-24V240W1PN	●			●		10.0A				
		DRM-24V480W1PN	●			●		20.0A				
		DRM-24V960W1PN	●			●		40.0A				

### CliQ DIN Rail Power Supply Model Numbering

DR	P	XXXV	XXXW	1	A	□
DIN Rail	Product Type P - Power Supply	Output Voltage	Output Power	Phase Input 1 - Single Phase	A - CliQ Series	A - Metal Case, with Class I, Div 2 Y - Plastic Case, with Class I, Div 2 Z - Plastic Case, without Class I, Div 2

### CliQ II DIN Rail Power Supply Model Numbering

DR	P	XXXV	XXXW	□	□	□
DIN Rail	Product Type P - Power Supply	Output Voltage	Output Power	Phase Input 1 - Single Phase 2 - Two Phase 3 - Three Phase	B - CliQ II Series N - NEC Class 2	A - Metal Case, with Class I, Div 2 N - Metal Case, without Class I, Div 2 Y - Plastic Case, with Class I, Div 2 Z - Plastic Case, without Class I, Div 2



Output Power						Input Voltage Range*	Safety Standards	Page
80W	100W	120W	240W	480W	960W			
						85-264Vac (DC input range 120-375Vdc)		22-23
	●					85-264Vac (DC input range 120-375Vdc)		24-25
		●				85-264Vac (DC input range 120-375Vdc)		26-27
			●			85-264Vac (DC input range 120-375Vdc)		26-27
				●		85-264Vac (DC input range 120-375Vdc)		26-27
					●	85-264Vac (DC input range 120-375Vdc)		28-29
	91.2W					85-264Vac (DC input range 120-375Vdc)		28-29
		●				2 x 180-550Vac or 180-305Vac (Single Phase) (DC input range 254-780Vdc)		30-31
			●			3 x 320-600Vac or 2 x 360-600Vac (DC input range 450-800Vdc)		30-31
				●		For 960W: 3 x 320-600Vac or 2 x 380-600Vac (DC input range 450-800Vdc)		30-31
					●	85-264Vac (DC input range 120-375Vdc)		32-33
		●				88-264Vac		34-35
		●				88-264Vac (DC input range 88-375Vdc)		34-35
			●			88-264Vac		34-35
			●			88-264Vac (DC input range 88-375Vdc)		34-35
				●		88-264Vac		34-35
				●		88-264Vac (DC input range 88-375Vdc)		34-35
●						85-276Vac (DC input range 88-375Vdc)		36-37
		●				85-264Vac (DC input range 88-375Vdc)		36-37
			●			85-276Vac (DC input range 88-375Vdc)		36-37
				●		85-264Vac		36-37

\* DC input is certified for selected models

### CliQ III DIN Rail Power Supply Model Numbering

DR	P –	XXV	XXXW	1	C	□	N
DIN Rail	Product Type P - Power Supply	Output Voltage	Output Power	Phase Input 1 - Single Phase	C - CliQ III Series	Input Voltage A - AC Input B - AC & DC Input	N - Metal Case, without Class I, Div 2

### CliQ M DIN Rail Power Supply Model Numbering

DR	M –	XXV	XXXW	1	P	N
DIN Rail	Product Series M - CliQ M Series	Output Voltage	Output Power	Phase Input 1 - Single Phase	Advanced Power Boost (APB)	N - Metal Case, without Class I, Div 2

# Selection Guide

## Delta Standard Power Supplies

New products are frequently introduced. Please visit [www.DeltaPSU.com](http://www.DeltaPSU.com) for latest product updates.

Product Type	Series	Model Name	Phase		PFC	Output Voltage	Output Current	Power			
			1	3				10W	30W	50W	
DIN Rail Power Supply	Lyte <ul style="list-style-type: none"> <li>Competitively priced</li> <li>Built-in constant current circuit</li> </ul>	DRL-24V120W1A□	●			24V	5.0A				
		DRL-24V240W1A□	●		●		10.0A				
		DRL-24V480W1A□	●		●		20.0A				
		DRL-48V120W1A□	●				48V	2.5A			
	Chrome <ul style="list-style-type: none"> <li>Compact</li> <li>Class II double isolation</li> <li>NEC Class 2</li> </ul>	DRC-5V10W1A□	●			5V	1.5A	7.5W			
		DRC-12V10W1A□	●			12V	0.83A	●			
		DRC-12V30W1A□	●				2.1A		25.2W		
		DRC-12V60W1A□	●				4.5A				
		DRC-12V100W1AZ	●				6.0A				
		DRC-24V10W1A□	●			24V	0.42A	●			
		DRC-24V10W1HZ	●				0.42A	●			
		DRC-24V30W1A□	●				1.25A		●		
		DRC-24V60W1A□	●				2.5A				
		DRC-24V100W1A□	●				3.8A				
	DRC-24V100W1N□	●			3.8A						
	Sync <ul style="list-style-type: none"> <li>Compact</li> <li>Competitively priced</li> </ul>	DRS-5V30W1NZ	●			5V	3.0A		15W		
		DRS-5V50W1A□	●				6.0A			30W	
		DRS-5V50W1N□	●				5.0A			25W	
		DRS-12V50W1N□	●			12V	4.0A			48W	
		DRS-24V30W1AZ	●				24V	1.25A		●	
DRS-24V30W1NZ		●			1.25A			●			
DRS-24V50W1N□		●			2.1A				●		
DRS-24V100W1A□		●		●	4.0A						
DRS-24V100W1N□	●		●	3.8A							

Product Type	Series	Model Name	Output Voltage	Output Current	Power
Redundancy Module	CliQ II	DRR-20□	22-60V	20.0A	(1+1 Redundancy) = Nominal 2 x 12.5A
		DRR-40□		40.0A	(1+1 Redundancy) = Nominal 2 x 25A
Buffer Module	CliQ II	DRB-24V020AB□	24V	20.0A	Charging Mode:
		DRB-24V040ABN		40.0A	Charging Mode:
DC-UPS Module	CliQ II	DRU-24V40ABN	24V	40.0A	Charging Mode:
	Chrome	DRU-24V10ACZ		10.0A	Charging Mode:

### Lyte DIN Rail Power Supply Model Numbering

DR	L –	XXV	XXXW	1	A	□
DIN Rail	Product Series L - Lyte Series	Output Voltage	Output Power	Phase Input 1 - Single Phase	Standard Bracket	A - Without DC OK Relay Contact S - With DC OK Relay Contact

### Chrome DIN Rail Power Supply Model Numbering

DR	C –	XXV	XXXW	1	□	□
DIN Rail	Product Type C - Isolation Class II Power Supply	Output Voltage	Output Power	Phase Input 1 - Single Phase	A - No PFC H - Household Approval	Z - Black Plastic Case G - Grey Plastic Case C - Black Plastic Case with conformal coating <sup>1)</sup>

1) Options for DRC-24V100W1A□ only

Output Power					Input Voltage Range*	Safety Standards	Page
60W	100W	120W	240W	480W			
		●			85-264Vac (DC input range 120-375Vdc)		38-39
			●				
				●			
		●					
					90-264Vac		40-41
54W							
	72W						
					90-264Vac		42-43
●							
	91.2W				90-264Vac (DC input range 120-375Vdc)		44-45
					85-264Vac (DC input range 120-375Vdc)		
					85-264Vac		
					85-264Vac (DC input range 120-375Vdc)		46-47
	96W						
	91.2W						

\* DC input is certified for selected models

Input Current	Input Voltage Range	Safety Standards	Page
(N+1 Redundancy) = Nominal 2 x 10A	22-60Vdc		48-49
(N+1 Redundancy) = Nominal 2 x 20A			
< 0.6A	22.8-28.8Vdc		50-51
< 0.6A			
2.0A ± 1.0A	24-28Vdc		52-53
0.5A ± 0.1A			

### Sync DIN Rail Power Supply Model Numbering

DR	S –	XXV	XXXW	1	<input type="checkbox"/>	<input type="checkbox"/>
DIN Rail	Product Series S - Sync Series	Output Voltage	Output Power	Phase Input 1 - Single Phase	A - Non NEC Class 2 N - NEC Class 2	Z - Without DC OK Relay Contact R - With DC OK Relay Contact

### Redundancy Module Model Numbering

DR	R –	XX	<input type="checkbox"/>
DIN Rail	Product Type R - Redundancy Module	Output Current 20 - 20A 40 - 40A	A - Metal Case, with Class I, Div 2 N - Metal Case, without Class I, Div 2

### DC-UPS Module and Buffer Module Model Numbering

DR	<input type="checkbox"/> –	24V	XXXA	<input type="checkbox"/>	<input type="checkbox"/>
DIN Rail	Product Type U - DC-UPS Module B - Buffer Module	Output Voltage	Output Current	B - CliQ II Series C - Chrome Series	A - Metal Case, with Class I, Div 2 N - Metal Case, without Class I, Div 2 Z - Plastic Case, without Class I, Div 2

# Selection Guide

## Delta Standard Power Supplies

New products are frequently introduced. Please visit [www.DeltaPSU.com](http://www.DeltaPSU.com) for latest product updates.

Product Type	Series	Model Name	Phase		PFC	Output Voltage	Output Current	Power				
			1	3				15W	35W	50W	60W	75W
Panel Mount Power Supply	PMC <ul style="list-style-type: none"> <li>Aluminium casing</li> <li>Universal AC input voltage</li> </ul>	PMC-05V015W1AA	●			5V	3.0A	●				
		PMC-05V035W1A□	●				7.0A		●			
		PMC-05V050W1AA	●				10.0A			●		
		PMC-12V035W1A□	●			12V	3.0A		●			
		PMC-12V050W1A□	●				4.17A			●		
		PMC-12V060W1NA	●				5.0A				●	
		PMC-12V100W1AA	●				8.33A					
		PMC-12V150W1B□	●		●		12.5A					
		PMC-24V035W1A□	●				24V	1.46A		●		
		PMC-24V050W1A□	●			2.1A				●		
		PMC-24V075W1A□	●			3.12A					●	
		PMC-24V100W1A□	●			4.17A						●
		PMC-24V150W1A□	●			6.25A						
		PMC-24V150W2AA	●			6.25A						
		PMC-24V150W1B□	●		●	6.25A						
		PMC-24V300W1BA	●		●	12.5A						
		PMC-24V600W1BA	●		●	25.0A						
		PMC-DSPV100W1A	●			24V / 5V		2.7A / 7.0A				
	PMC-48V150W1BA	●		●	48V	3.125A						
	PMF	<ul style="list-style-type: none"> <li>Remote ON/OFF</li> <li>Built-in PFC</li> </ul>	PMF-4V320WC□□	●		●	4.2V	55.0A				
	PMF-5V320WC□□		●		●	5V	55.0A					
	PMF-24V200WC□□		●		●	24V	8.4A					
	PMF-24V240WC□□		●		●	10.0A						
	PMF-24V320WC□□		●		●	13.3A						

### PMC Panel Mount Power Supply Model Numbering

PM	C -	XXV	XXXW	□	□	□
Panel Mount	Product Type C - Enclosed	Output Voltage	Output Power	Phase Input 1 - Single Phase, Wide Range Input Voltage 2 - Single Phase, High Line Input Voltage	A - No PFC B - With PFC N - NEC Class 2	Connector Type A - Terminal Block <sup>3)</sup> J - IP20 Connector <sup>1)</sup> L - Front Face <sup>2)</sup>

1) Options

2) Options for 150W with PFC

3) For PMC-05V015W1AA and PMC-24V600W1BA, the connector type is a Front Face connector

PM	C -	D	SPV	100W	1	A
Panel Mount	Product Type C - Enclosed	Dual Output	Output Voltage S - 24V P - 5V	Output Power	Phase Input Single Phase	Delta Standard



Output Power							Input Voltage Range*	Safety Standards	Page
100W	150W	200W	240W	300W	320W	600W			
							85-264Vac (DC input range 125-375Vdc)		56-57
							85-264Vac (DC input range 125-375Vdc)		58-59
•									
	•								
							85-264Vac (DC input range 125-375Vdc)		60-61
•									
	•								
	•								
							180-264Vac (DC input range 220-375Vdc)		62-63
							85-264Vac (DC input range 125-375Vdc)		62-63
							85-264Vac (DC input range 120-370Vdc)		62-63
•							85-264Vac (DC input range 125-375Vdc)		62-63
							85-264Vac (DC input range 125-375Vdc)		64-65
					231W		85-264Vac		64-65
					275W				
							85-264Vac		66-67

\* DC input is certified for selected models

### PMF Panel Mount Power Supply Model Numbering

PM	F -	XXV	XXXW	C	□	□
Panel Mount	Product Series F - PFC Series	Output Voltage	Output Power	Package Type C - Enclosed	Connector Type G - Front Face A - Terminal Block <sup>1)</sup>	Variable B - No Remote ON/OFF R - With Remote ON/OFF <sup>1)</sup>

1) Options

# Selection Guide

## Delta Standard Power Supplies

New products are frequently introduced. Please visit [www.DeltaPSU.com](http://www.DeltaPSU.com) for latest product updates.

Product Type	Series	Model Name	Phase		PFC	Output Voltage	Output Current	Power		
			1	3				50W	100W	
Panel Mount Power Supply	PMH • Household and ITE safety approvals	PMH-24V50WCA□	●			24V	2.1A	●		
		PMH-24V100WCA□	●				4.16A		●	
		PMH-24V100WCC□	●				4.16A		●	
		PMH-24V100WCN□	●				3.8A			91.2W
		PMH-24V150WCB□	●		●		6.25A			
		PMH-24V150WCD□	●		●		6.25A			
		PMH-24V200WCB□	●		●		8.33A			
		PMH-12V100WCL□	●				12V	8.5A		●
		PMH-24V100WCL□	●				24V	4.5A		●
		PMH-24V100WCM□	●				3.8A			91.2W
		PMH-24V150WCL□	●				6.5A			
	PMU • Power supply with integrated DC-UPS	PMU-13V155W□BA	●			13.8V	V1: 9.5A B+: 1.5A			
		PMU-13V155W□CA	●							
		PMU-27V155W□BA	●			27.6V	V1: 4.0A (Enclosed) B+: 1.5A (Enclosed) V1: 4.3A (L Frame) B+: 1.2A (L Frame)			
		PMU-27V155W□CA	●							
	PMR • Thickness < 1U • Built-in PFC	PMR-4V320WCA□	●		●	4.2V	60.0A			
		PMR-4V320WDAA	●		●		60.0A			
		PMR-4V320WDGA	●		●		60.0A			
		PMR-4V320WDBA	●		●		60.0A			
		PMR-4V320WDCA	●		●		60.0A			
PMR-5V320WCA□		●		●	5V	60.0A				
PMR-5V320WDAA		●		●		60.0A				
PMR-5V320WDGA		●		●		60.0A				
PMR-5V320WDBA		●		●		60.0A				
PMR-5V320WDCA		●		●		60.0A				

### PMH Panel Mount Power Supply Model Numbering

PM	H -	XXV	XXXW	C	□	□
Panel Mount	Product Series H - Household Series	Output Voltage	Output Power	Package Type C - Enclosed	Pollution Degree 2 A - No PFC B - With PFC  Pollution Degree 3 C - No PFC D - With PFC L - Low Profile M - Low Profile with NEC Class 2 N - NEC Class 2	Output Non-Isolated to PE (PELV) A - Terminal Block J - IP20 connector L - Front Face H - Harness  Output Isolated to PE (SELV) S - Terminal Block U - IP20 Connector V - Front Face T - Harness

### PMU Panel Mount Power Supply Model Numbering

PM	U -	XXV	XXXW	□	□	A
Panel Mount	Product Series U - With DC UPS Function	Output Voltage	Output Power	Package Type C - Enclosed L - L Frame <sup>1)</sup>	Signal B - Without Signal C - With Signal	Connector Type A - Terminal Block

1) Options

Output Power				Input Voltage Range*	Safety Standards	Page
150W	155W	200W	320W			
				85-264Vac (DC input range 120-375Vdc)	CE, S, UL, V, EMI	68-69
					CE, S, UL, V, EMI	
					CE, S, UL, V, EMI	
					CE, S, UL, V, EMI	
•				85-264Vac (DC input range 120-375Vdc)	CE, S, UL, V, EMI	70-71
•					CE, S, UL, V, EMI	
		•			CE, S, UL, V, EMI	
				85-264Vac (DC input range 120-375Vdc)	CE, S, UL, V, EMI	72-73
					CE, S, UL, V, EMI	
					CE, S, UL, V, EMI	
•					CE, S, UL, V, EMI	
	151W			90-132Vac, 180-264Vac (Selectable by Switch)	CE, S, UL, V, EMI, CCC	74-75
	151W				CE, S, UL, V, EMI, CCC	
	151W				CE, S, UL, V, EMI, CCC	
	151W				CE, S, UL, V, EMI, CCC	
			252W	88-264Vac	CE, S, UL, V, EMI, CCC	76-77
			252W		CE, S, UL, V, EMI, CCC	
			252W		CE, S, UL, V, EMI, CCC	
			252W		CE, S, UL, V, EMI, CCC	
			252W		CE, S, UL, V, EMI, CCC	
			300W	88-264Vac	CE, S, UL, V, EMI, CCC	78-79
			300W		CE, S, UL, V, EMI, CCC	
			300W		CE, S, UL, V, EMI, CCC	
			300W		CE, S, UL, V, EMI, CCC	
			300W		CE, S, UL, V, EMI, CCC	

\* DC input is certified for selected models

### PMR Panel Mount Power Supply Model Numbering

PM	R -	XXV	XXXW	□	□	□
Panel Mount	Product Series R - Standard Rack Type Series (1U)	Output Voltage	Output Power	Package Type C - Enclosed with Fan D - Enclosed without Fan	Connector Type A - Terminal Block B - Terminal Block (Parallel Operation) <sup>1)</sup> G - Front Face <sup>2)</sup> C - Front Face (Parallel Operation) <sup>1)</sup>	Variable A - With conformal coating

1) Options for Enclosed without Fan (PMR-□V320WDBA and PMR-□V320WDCA)

2) Options

# Selection Guide

## Delta Standard Power Supplies

New products are frequently introduced. Please visit [www.DeltaPSU.com](http://www.DeltaPSU.com) for latest product updates.

Product Type	Series	Model Name	Phase		PFC	Output Voltage	Output Current	Power	
			1	3				35W	50W
Panel Mount Power Supply	PMT • UL approval • Basic specs • High MTBF	PMT-4V350W1A□	●			4.2V	60.0A		
		PM□-5V35W1A□	●			5V	7.0A	●	
		PM□-5V50W1A□	●				10.0A		●
		PMT-5V350W1A□	●			12V	60.0A		
		PM□-12V35W1A□	●				2.92A	●	
		PM□-12V50W1A□	●				4.2A		●
		PM□-12V100W1A□	●				8.5A		
		PM□-12V150W1A□	●				12.5A		
		PMT-12V350W1A□	●				29.0A		
		PM□-15V50W1A□	●			15V	3.4A		●
		PM□-24V35W1A□	●			24V	1.46A	●	
		PM□-24V50W1A□	●				2.09A		●
		PM□-24V100W1A□	●				4.5A		
		PM□-24V150W1A□	●				6.5A		
		PM□-24V200W1A□	●				8.8A		
		PMT-24V350W1AG	●				14.6A		
		PMT-24V350W1AM	●				14.6A		
		PMT-24V350W1AK	●				14.6A		
		PMT-24V350W1AR	●			14.6A			
		PMT-36V350W1A□	●			36V	9.7A		
		PM□-48V150W1A□	●			48V	3.3A		
		PMT-48V350W1A□	●				7.3A		
		PM□-D1V100W1A□	●			12V / 5V	7.0A / 3.0A		
PM□-D2V100W1A□	●			24V / 5V	3.5A / 3.0A				

### PMT Panel Mount Power Supply Model Numbering

PM	□ -	XXV	XXXW	1	A	□	□
Panel Mount	Product Type T - Enclosed L - L Frame <sup>1)</sup> B - Open Frame <sup>2)</sup>	Output Voltage	Output Power	Phase Input Single Phase	No PFC	Connector Type With UL, TUV, CE, CCC A - Terminal Block G - Front Face <sup>3)5)</sup> H - Harness <sup>3)</sup> With UL, TUV, CE R - Terminal Block K - Front Face <sup>4)</sup> With UL M - Terminal Block <sup>5)</sup> N - Front Face	CC Code <sup>6)</sup> Blank - Without connector cover A - With connector cover B - With conformal coating C - With conformal coating and connector cover

1) Options for 35W-200W

2) Options for 35W and 50W (except for 5V/35W, 5V/50W and 15V/50W models)

3) Options (Harness connector is not available for 5V/50W model)

4) Options for PMT-24V350W1AK, PMT-36V350W1A□ and PMT-48V350W1A□

5) PMT-24V350W1AG and PMT-24V350W1AM is certified to UL only

6) Options for Terminal Block with Enclosed type only

A - For 4V/350W, 5V/350W, 24V/35W-100W models

B - For 4V/350W, 5V/350W, 12V/35W-150W, 24V/35W-200W models

C - For PMT-4V350W1AM and PMT-5V350W1AM



Output Power				Input Voltage Range	Safety Standards	Page
100W	150W	200W	350W			
			252W	90-132Vac, 180-264Vac (Selectable by Switch)		80-81
				85-264Vac		
			300W	90-132Vac, 180-264Vac (Selectable by Switch)		82-83
				90-264Vac		
●				90-132Vac, 180-264Vac (Selectable by Switch)		
	●					
			348W			84-85
				85-264Vac		
				90-264Vac		
●				90-132Vac, 180-264Vac (Selectable by Switch)		
	●					86-87
		●		90-132Vac, 180-264Vac (Selectable by Switch)		
			●			
			●			
			●			88-89
			●			
	●			90-132Vac, 180-264Vac (Selectable by Switch)		
●				88-132Vac, 176-264Vac (Selectable by Switch)		
●						

							CC Code <sup>2)</sup>
PM	<input type="checkbox"/> -	<b>XXV</b>	<b>XXXW</b>	<b>1</b>	<b>A</b>	<input type="checkbox"/>	<input type="checkbox"/>
Panel Mount	Product Type T - Enclosed L - L Frame <sup>1)</sup>	Output Voltage Dual Output D1 - 12V / 5V D2 - 24V / 5V	Output Power	Phase Input Single Phase	No PFC	Connector Type A - Terminal Block G - Front Face <sup>1)</sup> H - Harness <sup>1)</sup>	Blank - Without connector cover B - With conformal coating

1) Options  
2) Options for Terminal Block with Enclosed type only

# Selection Guide

## Delta Standard Power Supplies

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






























Product Type	Series	Model Name	Phase		PFC	Output Voltage	Output Current	Power	
			1	3				15W	30W
Open Frame Power Supply	PJ <ul style="list-style-type: none"> <li>Built-in PFC</li> <li>Versatile configurations</li> <li>Conformal coating</li> </ul>	PJ-12V15W□NA	●			12V	1.3A	●	
		PJ-12V30W□NA	●				2.5A		●
		PJ-12V50W□NA	●		●		4.3A		
		PJ-12V100W□□A	●		●		8.5A		
		PJ-12V150W□□A	●		●		12.5A		
		PJ-24V30W□NA	●			24V	1.25A		●
		PJ-24V50W□NA	●		●		2.1A		
		PJ-24V100W□□A	●		●		4.3A		
		PJ-24V150W□□A	●		●		6.3A		
		PJ-5V15W□NA	●				5V	3.0A	●
	PJ-48V50W□NA	●			●	48V	1.1A		
	PJB <ul style="list-style-type: none"> <li>Built-in PFC</li> <li>Power Boost up to 10s</li> <li>Conformal coating</li> </ul>	PJB-24V100W□□A	●		●	24V	4.3A		
		PJB-24V150W□□A	●		●		6.3A		
PJB-24V240W□□A		●		●	10.0A				

### PJ Open Frame Power Supply Model Numbering

PJ –	XXV	XXXW	□	□	A
Open Frame	Output Voltage	Output Power	Product Type C - Enclosed L - L Frame <sup>1)</sup> B - Open Frame <sup>1)</sup>	Remote ON/OFF Function N - No Remote ON/OFF R - With Remote ON/OFF <sup>2)</sup>	Delta Standard

1) Options

2) Options for 100W and above

Output Power				Input Voltage Range	Safety Standards	Page
50W	100W	150W	240W			
				85-264Vac	CE   	92-94
					CE    	
•					CE   	
	•				CE   	
		•			CE   	
				85-264Vac	CE   	95-97
•					CE   	
	•				CE   	
		•			CE   	
				85-264Vac	CE   	98-99
•					CE   	
				85-264Vac	CE   	100-101
	•				CE   	
		•			CE   	
			•		CE   	

### PJB Open Frame Power Supply Model Numbering

PJ	B -	XXV	XXXW	□	□	A
Open Frame	Product Series B - Power Boost Series	Output Voltage	Output Power	Package Type C - Enclosed L - L Frame <sup>1)</sup> B - Open Frame <sup>1)</sup>	Remote ON/OFF Function N - No Remote ON/OFF R - With Remote ON/OFF <sup>1)</sup>	Delta Standard

1) Options

# Selection Guide

## Delta Standard Power Supplies

New products are frequently introduced. Please visit [www.DeltaPSU.com](http://www.DeltaPSU.com) for latest product updates.

Product Type	Series	Model Name	Phase		PFC	Output Voltage	Output Current	Power	
			1	3				40W	60W
Open Frame Power Supply	PJT <ul style="list-style-type: none"> <li>High efficiency</li> <li>Small footprint</li> </ul>	PJT-12V40WBA□	●			12V	3.33A	●	
		PJT-12V65WBA□	●				5.0A		
		PJT-12V100WBA□	●		●		8.33A		
		PJT-12V100WBB□	●				6.67A (Convection) 8.33A (Forced Cooling)		
		PJT-15V40WBA□	●			15V	2.67A	●	
		PJT-15V65WBA□	●				4.2A		
		PJT-15V100WBA□	●		●		6.67A		
		PJT-15V100WBB□	●				5.33A (Convection) 6.67A (Forced Cooling)		
		PJT-18V40WBA□	●			18V	2.22A	●	
		PJT-18V65WBA□	●				3.61A		
		PJT-18V100WBA□	●		●		5.55A		
		PJT-18V100WBB□	●				4.44A (Convection) 5.55A (Forced Cooling)		
		PJT-24V40WBA□	●			24V	1.66A	●	
		PJT-24V65WBA□	●				2.71A		
	PJT-24V100WBA□	●		●	4.17A				
	PJT-24V100WBB□	●			3.33A (Convection) 4.17A (Forced Cooling)				
	PJT-27V150WBNA	●			●	V1: 27V V <sub>SB</sub> : 12V	V1: 5.55A V <sub>SB</sub> : 0.5A		
	PJU <ul style="list-style-type: none"> <li>Power supply with integrated DC-UPS</li> <li>Compact size</li> </ul>	PJU-27V60W□A□	●			27V	2.15A		●
		PJU-27V60W□B□	●				2.15A		●

### PJT Open Frame Power Supply Model Numbering

PJ	T -	XXV	XXXW	B	□	□
Open Frame	Product Series T - ITE Application Series	Output Voltage	Output Power	Package Type B - Open Frame	A - Family Code B - Family Code N - No Remote ON/OFF	Connector Type A - JST connector B - Molex connector <sup>1)</sup> C - JWT connector <sup>1)</sup>

1) Options



Output Power			Input Voltage Range	Safety Standards	Page
65W	100W	150W			
60W	•		90-264Vac	CE	102-103
	•			CE	
				CE	
				CE	
•	•		90-264Vac	CE	104-105
	•			CE	
	•			CE	
				CE	
•	•		90-264Vac	CE	106-107
	•			CE	
	•			CE	
				CE	
•	•		90-264Vac	CE	108-109
	•			CE	
	•			CE	
				CE	
		•	85-264Vac	CE   EMI	
			90-264Vac	CE	110-111
				CE	

## PJU Open Frame Power Supply Model Numbering

PJ	U –	XXV	XXXW	□	□	□
Open Frame	Product Series U - With DC-UPS Function	Output Voltage	Output Power	Package Type C - Enclosed L - L Frame <sup>1)</sup> B - Open Frame <sup>1)</sup>	Signal A - Without Signal B - With Signal	Connector Type A - Terminal Block B - JST connector <sup>1)</sup> C - Molex connector <sup>1)</sup>

1) Options

# Standard Products

## DIN Rail Power Supply



The CliQ DIN rail power supply series from one of the world's leading power supply companies, Delta Electronics Group, offers state-of-the-art designs made to withstand harsh industrial environments in accordance to ATEX requirements. The rugged metal or plastic case is both shock and vibration resistant according to IEC 60068-2. The CliQ power supplies include overvoltage, overload and over temperature protections for the output. Using a wide input voltage range design, Delta CliQ DIN rail power supply series is usable worldwide and features built-in Power Boost of 150% for 3 seconds. Such feature enables reserve power to be always available for reliable startup of loads with high inrush current thus eliminating the need of a more expensive power supply at higher power rating.

### Typical Applications



Delta CliQ II DIN rail power supply series are made to withstand harsh industrial environments with its PCBAs applied with conformal coating. The rugged metal or plastic case is both shock and vibration resistant according to IEC 60068-2 and adhere to IP20 protection level with ATEX certification available as option. The CliQ II power supplies also provide overvoltage, overload and over temperature protections for the output. Using a wide input voltage range design, Delta CliQ II DIN rail power supply series is usable worldwide and features built-in Power Boost of 150% for 5 seconds. Such feature enables reserve power to be always available for reliable startup of loads with high inrush current without the need of a more expensive power supply at higher power rating.

### Typical Applications



The CliQ III series of DIN rail power supply is designed with high power density and intelligent overload protection features. All the models in the series are encased in rugged yet lightweight and full corrosion resistant aluminium casing. The single output with universal input design offers overcurrent protection in constant current mode which makes the series suitable for charging application. Like the rest of the CliQ family of products, conformal coating is applied on the PCBAs to protect against common dust and chemical pollutant often found in harsh industrial environment. Delta CliQ III DIN rail power supply series features built-in Power Boost of 150% for 5 seconds. Such feature enables reserve power to be always available for reliable startup of loads with high inrush current without the need of a more expensive power supply at higher power rating.

### Typical Applications



All Delta power supplies are fully compliant with RoHS Directive 2011/65/EU for environmental protection. For more information or enquiries, please do not hesitate to contact your local Delta Electronics distributor or visit [www.DeltaPSU.com](http://www.DeltaPSU.com).

# CliQ<sup>M</sup>



Delta Electronics is introducing one of the slimmest DIN rail industrial power supplies in its class, the CliQ M DIN rail power supply series. The high power density product is designed according to major industrial and marine (Lloyd's Register) safety standards. In addition to having Power Boost of 150% up to 7 seconds, the CliQ M series is the first in the CliQ family to provide the Advanced Power Boost (APB) feature. With multiple loads connected in a system and due to one of fault load a large outrush current is drawn (demanded), this will be detected by APB. This APB will trip the circuit breaker (circuit breaker with appropriate rating base on the system load) on the current path of faulty load due to high current. This thus prevents the system from shutting down while the other connected current paths continue to operate without interruption.

## Typical Applications



# LYTE



Delta Lyte DIN rail power supply series is designed for cost sensitive users with essential features fulfilling the needs in general industrial applications without compromising on quality and reliability. The series offers overcurrent protection in constant current mode which makes the Lyte series suitable for inductive and capacitive load applications. In addition, the Lyte series comes with both panel and DIN rail mounting options to provide users with more installation flexibility. The Lyte series features universal AC input range and is certified to safety standard according to IEC/EN/UL 60950-1 for Information Technology Equipment (ITE) and UL 508 for Industrial Control Equipment (ICE).

## Typical Applications



# CHROME



The Chrome DIN rail power supply series is designed for use in compact cabinets which are widely adopted in home automations and the food and beverage industry. Current available specifications are with 5V, 12V and 24V output voltage for power ratings of 10W to 100W. Delta Chrome DIN rail power supply series offers double isolated input. This means that no earth connection is required thus resulting in low leakage current. The Chrome series features universal AC input range and is certified to safety standard according to IEC/EN/UL 60950-1 for Information Technology Equipment (ITE) and UL 508 for Industrial Control Equipment (ICE). NEC Class 2 and Limited Power Source (LPS) approvals are available.

## Typical Applications



# SYNC



The ultra compact and competitively priced Delta Sync DIN rail power supply series is designed for general industrial applications requiring highly reliable power supply within a tight space. The Sync series operates with universal AC input range and offers full power up to 55°C. All models in the series are certified according to IEC/EN/UL 60950-1 Information Technology Equipment (ITE) and UL 508 Industrial Control Equipment (ICE).

## Typical Applications



# CliQ DIN Rail Power Supply

## 12V Output



### HIGHLIGHTS & FEATURES

- Universal AC input voltage range
- Power will not de-rate for the entire input voltage range
- Power Boost of 150% for 3 seconds
- Full corrosion resistant aluminium casing for 12V/60W and 12V/100W
- Conforms to harmonic current IEC/EN 61000-3-2, Class A
- Multiple wire connections to terminals allowed
- Conformal coating on PCBAs to protect against common dust and chemical pollutants
- Hazardous Locations approval to ATEX and Class I, Div 2

### GENERAL SPECIFICATIONS

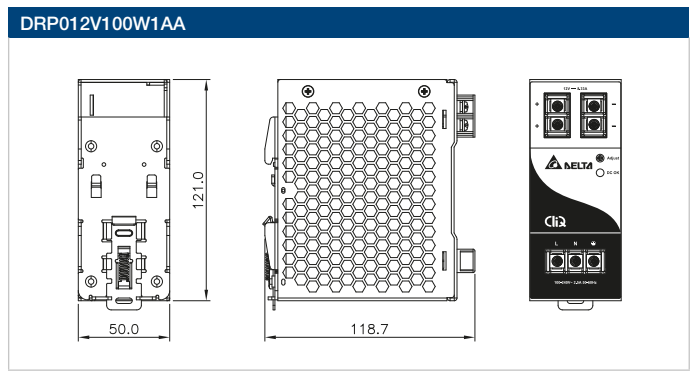
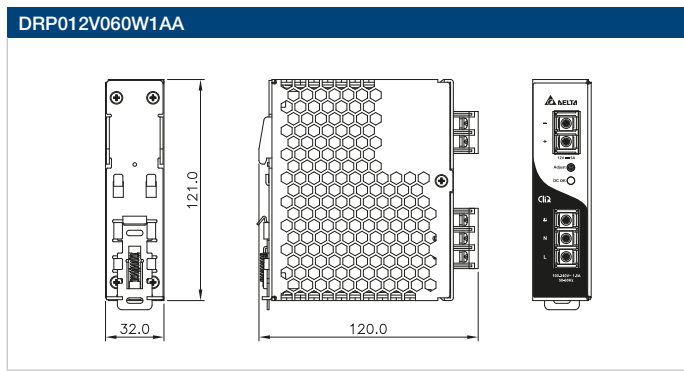
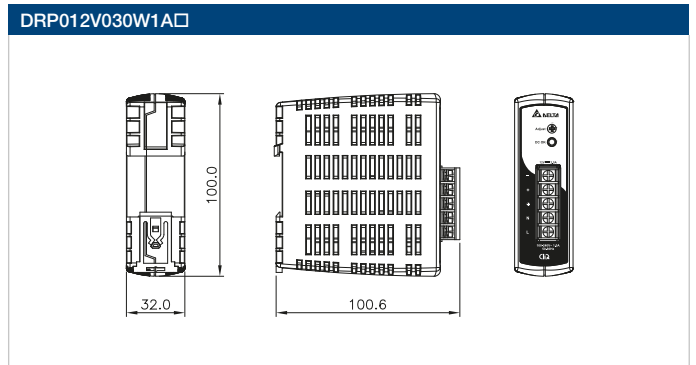
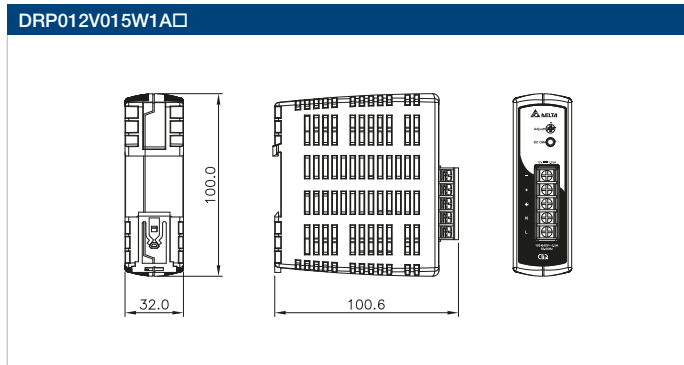
OUTPUT	DRP012V015W1A□	DRP012V030W1A□	DRP012V060W1AA	DRP012V100W1AA
Output Voltage	12V	12V	12V	12V
Output Voltage Range	11-14V	11-14V	11-14V	11-14V
Output Current	0-1.25A	0-2.5A	0-5.0A	0-8.33A
Output Power	15W	30W	60W	100W
Line Regulation	< 0.5% typ. (@ 85-264Vac input, 100% load)			
Load Regulation	< 1.0% typ. (@ 85-264Vac input, 0-100% load)			
PARD (20MHz)	< 100mVpp			
Hold-up Time	> 22ms @ 115Vac, > 110ms @ 230Vac			
<b>INPUT</b>				
Phase Input	Single Phase			
Input Voltage Range	85-264Vac (DC input range 120-375Vdc) <sup>1)</sup>			
Input Frequency	47-63Hz			
Input Current	< 0.37A @ 115Vac, < 0.22A @ 230Vac	< 0.70A @ 115Vac, < 0.42A @ 230Vac	< 1.35A @ 115Vac, < 0.80A @ 230Vac	< 2.50A @ 115Vac, < 1.50A @ 230Vac
Efficiency <sup>2)</sup> at 100% Load	> 84.0% @ 115Vac, > 83.0% @ 230Vac	> 85.0% @ 115Vac & 230Vac	> 86.0% @ 115Vac & 230Vac	> 85.5% @ 115Vac, > 87.5% @ 230Vac
Max Inrush Current (Cold Start)	< 30A @ 115Vac, < 65A @ 230Vac	< 40A @ 115Vac, < 80A @ 230Vac	< 50A @ 115Vac, < 100A @ 230Vac	< 100A @ 115Vac, No Damage @ 230Vac
Power Factor	Conform to EN 61000-3-2			
Leakage Current	< 1mA @ 240Vac			
<b>MECHANICAL</b>				
Case Cover / Chassis	Plastic		Aluminium	
Dimensions (L x W x D)	100 x 32 x 100.6 mm (3.94" x 1.26" x 3.96")	100 x 32 x 100.6 mm (3.94" x 1.26" x 3.96")	121 x 32 x 120 mm (4.76" x 1.26" x 4.72")	121 x 50 x 118.7 mm (4.76" x 1.97" x 4.67")
Unit Weight	0.18 kg (0.40 lb)	0.20 kg (0.44 lb)	0.33 kg (0.73 lb)	0.64 kg (1.41 lb)
Cooling System	Convection			
Input Terminal	5 Pins (Rated 300V/15A)		3 Pins (Rated 300V/20A)	
Output Terminal	5 Pins (Rated 300V/15A)		2 Pins (Rated 300V/20A)	
Input / Output Wire	AWG 22-14	AWG 22-14	AWG 22-14	AWG 18-14
MTBF <sup>3)</sup>	> 500,000 hrs	> 500,000 hrs	> 500,000 hrs	> 500,000 hrs
<b>ENVIRONMENT</b>				
Operating Temperature	-20°C to +80°C			
Storage Temperature	-25°C to +85°C			
Power De-rating	> 50°C (2.5% / °C), > 70°C (4% / °C)			
Operating Humidity	5 to 95% RH (Non-Condensing)			
Operating Altitude	0 to 2,000 m (0 to 6,560 ft)			

#### Notes

- 1) All models are certified for DC input.
- 2) At 25°C ambient temperature by vertical mounting orientation.
- 3) MTBF as per Telcordia SR-332 (Confidence level: 90%, I/P: 115Vac, O/P: 100% load) for vertical mounting orientation.
- 4) All parameters are specified at 25°C ambient temperature unless otherwise indicated.



## MECHANICAL DRAWINGS



\*Units in mm

# CliQ DIN Rail Power Supply

## 24V Output



### HIGHLIGHTS & FEATURES

- Universal AC input voltage range
- Power will not de-rate for the entire input voltage range
- Power Boost of 150% for 3 seconds (480W: 200% for 2 seconds)
- Full corrosion resistant aluminium casing
- SEMI F47 Certified for selected models
- Conforms to harmonic current IEC/EN 61000-3-2, Class A
- Conformal coating on PCBAs to protect against common dust and chemical pollutants (except DRP-24V48W1AZ and DRP024V060W1AZ)
- Hazardous Locations approval to ATEX and Class I, Div 2 (except DRP-24V48W1AZ and DRP024V060W1AZ)

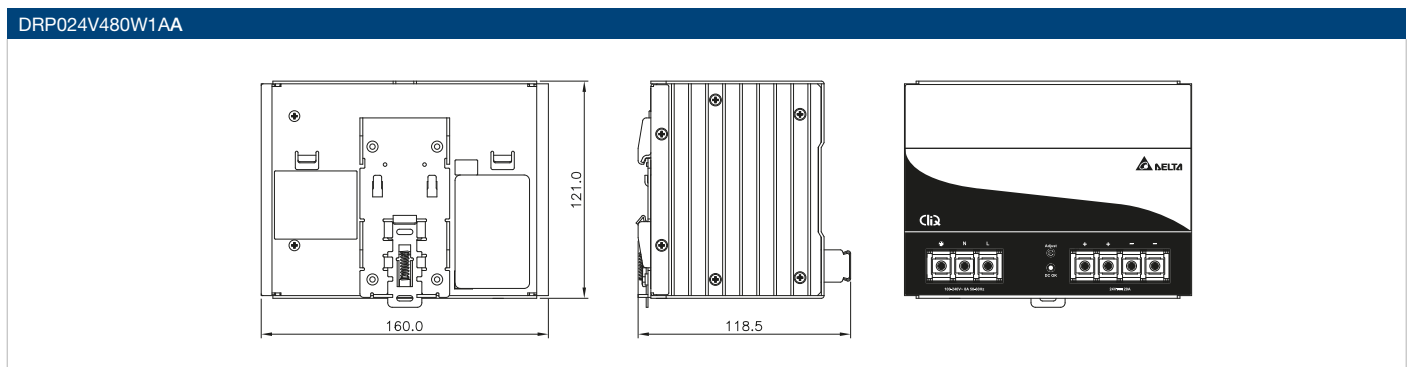
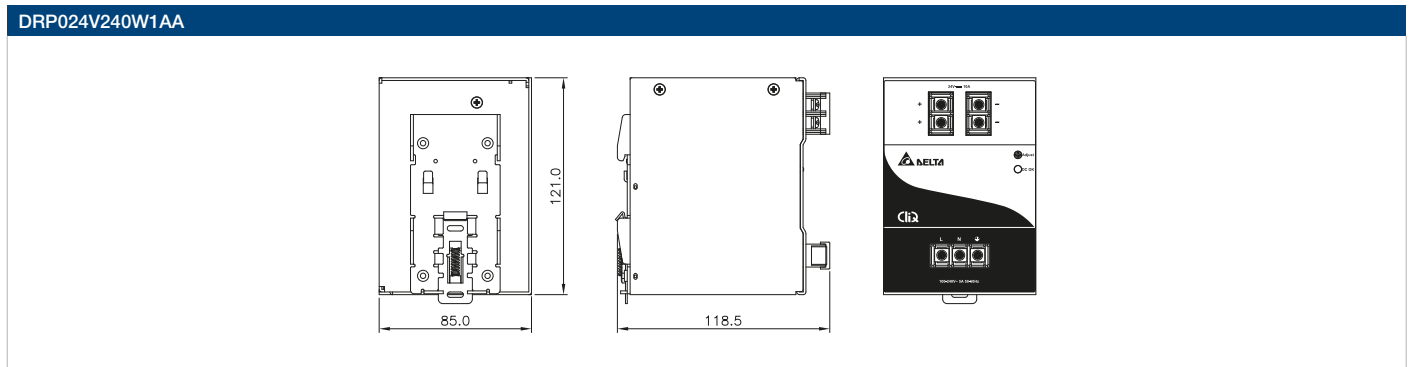
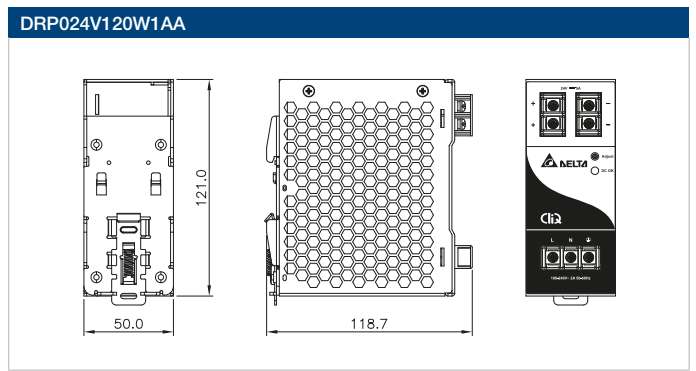
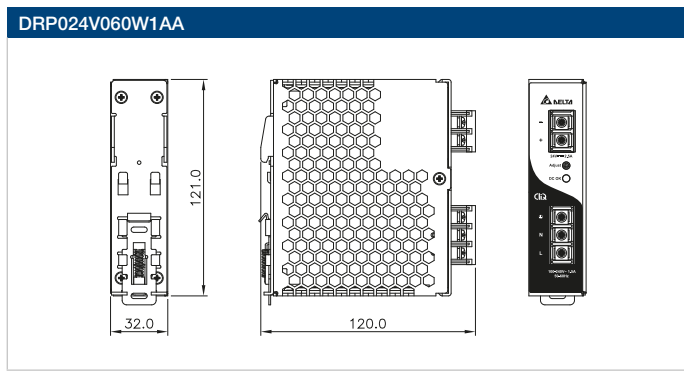
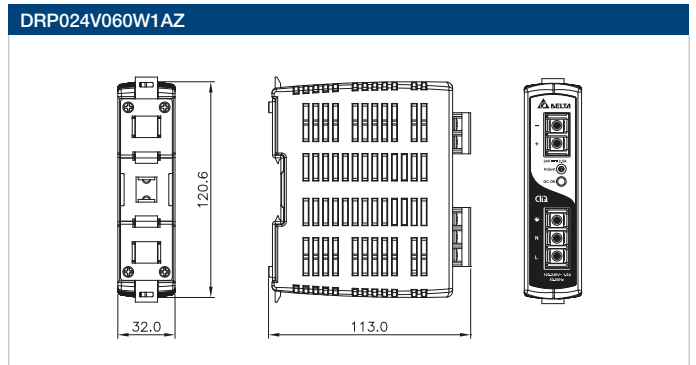
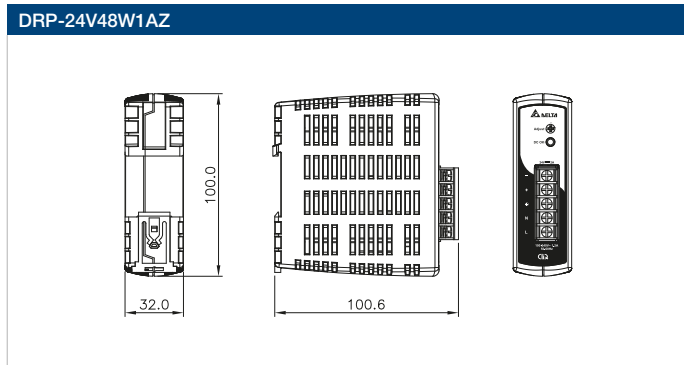
### GENERAL SPECIFICATIONS

OUTPUT	DRP-24V48W1AZ	DRP024V060W1AZ	DRP024V060W1AA	DRP024V120W1AA	DRP024V240W1AA	DRP024V480W1AA
Output Voltage	24V	24V	24V	24V	24V	24V
Output Voltage Range	22-26V	22-28V	22-28V	22-28V	22-28V	22-28V
Output Current	0-2.0A	0-2.5A	0-2.5A	0-5.0A	0-10.0A	0-20.0A
Output Power	48W	60W	60W	120W	240W	480W
Line Regulation	< 0.5% typ. (@ 85-264Vac input, 100% load), DRP-24V48W1AZ: < 1% typ.					
Load Regulation	< 1.0% typ. (@ 85-264Vac input, 0-100% load)					
PARD (20MHz)	< 480mVpp		< 240mVpp			
Hold-up Time	> 10ms @ 115Vac, > 60ms @ 230Vac	> 20ms @ 115Vac, > 125ms @ 230Vac		> 35ms @ 115Vac, > 70ms @ 230Vac	> 20ms @ 115Vac & 230Vac	
<b>INPUT</b>						
Phase Input	Single Phase					
Input Voltage Range	85-264Vac (DC input range 120-375Vdc) <sup>1)</sup>					
Input Frequency	47-63Hz					
Input Current	< 1.4A @ 115Vac, < 0.7A @ 230Vac	< 1.1A @ 115Vac, < 0.7A @ 230Vac		< 1.4A @ 115Vac, < 0.8A @ 230Vac	< 2.9A @ 115Vac, < 1.5A @ 230Vac	< 5.7A @ 115Vac, < 2.8A @ 230Vac
Efficiency <sup>2)</sup> at 100% Load	> 87.0% @ 115Vac & > 230Vac	> 86.0% @ 115Vac, > 87.0% @ 230Vac			> 89.0% @ 115Vac, > 91.0% @ 230Vac	> 85.0% @ 115Vac, > 88.0% @ 230Vac
Max Inrush Current (Cold Start)	< 28A @ 115Vac, < 56A @ 230Vac	< 40A @ 115Vac, < 80A @ 230Vac		< 80A @ 115Vac, < 150A @ 230Vac	< 40A @ 115Vac, < 100A @ 230Vac	< 50A @ 115Vac, < 150A @ 230Vac
Power Factor	Conform to EN 61000-3-2			> 0.98 @ 115Vac, > 0.87 @ 230Vac	> 0.96 @ 115Vac, > 0.90 @ 230Vac	> 0.97 @ 115Vac, > 0.95 @ 230Vac
Leakage Current	< 1mA @ 240Vac					< 1.25mA @ 240Vac
<b>MECHANICAL</b>						
Case Cover / Chassis	Plastic			Aluminium		
Dimensions (L x W x D)	100 x 32 x 100.6 mm (3.94" x 1.26" x 3.96")	120.6 x 32 x 113 mm (4.75" x 1.26" x 4.45")	121 x 32 x 120 mm (4.76" x 1.26" x 4.72")	121 x 50 x 118.7 mm (4.76" x 1.97" x 4.67")	121 x 85 x 118.5 mm (4.76" x 3.35" x 4.67")	121 x 160 x 118.5 mm (4.76" x 6.30" x 4.67")
Unit Weight	0.22 kg (0.49 lb)	0.33 kg (0.73 lb)	0.37 kg (0.82 lb)	0.54 kg (1.19 lb)	1.04 kg (2.29 lb)	1.80 kg (3.97 lb)
Cooling System	Convection					
Input Terminal	5 Pins (Rated 300V/15A)		3 Pins (Rated 300V/20A)			
Output Terminal	5 Pins (Rated 300V/15A)		2 Pins (Rated 300V/20A)			4 Pins (Rated 300V/20A)
Input / Output Wire	AWG 22-14	AWG 22-14	AWG 22-14	AWG 22-14	AWG 22-14	I/P: AWG 16-14, O/P: AWG 12-10
MTBF <sup>3)</sup>	> 500,000 hrs	> 500,000 hrs	> 500,000 hrs	> 500,000 hrs	> 300,000 hrs	> 300,000 hrs
<b>ENVIRONMENT</b>						
Operating Temperature	-20°C to +70°C		-20°C to +80°C			
Storage Temperature	-25°C to +85°C					
Power De-rating	< -10°C to -20°C (1% / °C), < 0°C to -10°C (2% / °C), > 50°C (2.5% / °C)	-20°C to -10°C: 80% Load, < 0°C (2% / °C), > 50°C (2.5% / °C)		< 0°C to -20°C (1% / °C), > 50°C (2.5% / °C)	> 50°C (2.5% / °C)	> 50°C (2.5% / °C), > 70°C (4% / °C)
Operating Humidity	5 to 95% RH (Non-Condensing)					
Operating Altitude	0 to 2,000 m (0 to 6,560 ft)					

#### Notes

- 1) All models are certified for DC input except DRP-24V48W1AZ which still fulfills the test conditions of this range. DC input safety approval can be obtained upon request.
- 2) At 25°C ambient temperature by vertical mounting orientation.
- 3) MTBF as per Telcordia SR-332 (Confidence level: 90%, I/P: 115Vac, O/P: 100% load) for vertical mounting orientation.
- 4) All parameters are specified at 25°C ambient temperature unless otherwise indicated.

## MECHANICAL DRAWINGS



\*Units in mm

# CliQ II DIN Rail Power Supply

## 24V Output



### HIGHLIGHTS & FEATURES

- Universal AC input voltage range
- Power will not de-rate for the entire input voltage range
- High Efficiency > 90.0% @ 230Vac
- Power Boost of 150% for 5 seconds (480W: 200% for 2 seconds)
- Full corrosion resistant aluminium casing
- Conforms to harmonic current IEC/EN 61000-3-2, Class A
- Extreme low temperature cold start at -40°C
- Conformal coating on PCBAs to protect against common dust and chemical pollutants
- Hazardous Locations approval to ATEX and Class I, Div 2

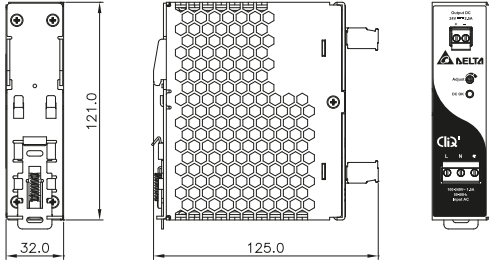
### GENERAL SPECIFICATIONS

OUTPUT	DRP024V060W1B□	DRP024V120W1B□	DRP024V240W1B□	DRP024V480W1B□
Output Voltage	24V	24V	24V	24V
Output Voltage Range	24-28V	24-28V	24-28V	24-28V
Output Current	0-2.5A	0-5.0A	0-10.0A	0-20.0A
Output Power	60W	120W	240W	480W
Line Regulation	< 0.5% typ. (@ 85-264Vac input, 100% load)			
Load Regulation	< 1.0% typ. (@ 85-264Vac input, 0-100% load)			
PARD (20MHz)	< 150mVpp			
Hold-up Time	> 20ms @ 115Vac, > 125ms @ 230Vac	> 20ms @ 115Vac, > 115ms @ 230Vac		> 20ms @ 115Vac & 230Vac
<b>INPUT</b>				
Phase Input	Single Phase			
Input Voltage Range	85-264Vac (DC input range 120-375Vdc) <sup>1)</sup>			
Input Frequency	47-63Hz			
Input Current	< 1.4A @ 115Vac, < 0.8A @ 230Vac	< 2.2A @ 115Vac, < 1.1A @ 230Vac	< 2.5A @ 115Vac, < 1.3A @ 230Vac	< 5.0A @ 115Vac, < 3.0A @ 230Vac
Efficiency <sup>2)</sup> at 100% Load	> 90.0% @ 115Vac & 230Vac	> 89.0% @ 115Vac, > 90.0% @ 230Vac	> 90.0% @ 115Vac, > 92.0% @ 230Vac	> 91.0% @ 115Vac, > 92.0% @ 230Vac
Max Inrush Current (Cold Start)	< 20A @ 115Vac, < 35A @ 230Vac	< 35A @ 115Vac & 230Vac		
Power Factor	Conform to EN 61000-3-2		> 0.96 @ 115Vac, > 0.90 @ 230Vac	> 0.96 @ 115Vac, > 0.95 @ 230Vac
Leakage Current	< 1mA @ 240Vac			
<b>MECHANICAL</b>				
Case Cover / Chassis	Aluminium			
Dimensions (L x W x D)	121 x 32 x 125 mm (4.76" x 1.26" x 4.92")	121 x 50 x 123.1 mm (4.76" x 1.97" x 4.85")	121 x 85 x 124.1 mm (4.76" x 3.35" x 4.89")	121 x 144 x 118.6 mm (4.76" x 5.67" x 4.67")
Unit Weight	0.37 kg (0.82 lb)	0.72 kg (1.59 lb)	1.10 kg (2.43 lb)	1.37 kg (3.02 lb)
Cooling System	Convection			
Input Terminal	Pluggable Connector 3 Pins (Rated 300V/15A)			3 Pins (Rated 300V/30A)
Output Terminal	Pluggable Connector 2 Pins (Rated 300V/15A)	Pluggable Connector 4 Pins (Rated 300V/15A)		4 Pins (Rated 300V/30A)
Input / Output Wire	AWG 22-12	AWG 20-12	AWG 16-12	I/P: AWG 18-10, O/P: AWG 12-10
MTBF <sup>3)</sup>	> 800,000 hrs	> 800,000 hrs	> 500,000 hrs	> 500,000 hrs
<b>ENVIRONMENT</b>				
Operating Temperature	-25°C to +80°C			-25°C to +75°C
Storage Temperature	-40°C to +85°C			
Power De-rating	> 50°C (2.5% / °C)			> 50°C (2.5% / °C), > 70°C (5% / °C)
Operating Humidity	5 to 95% RH (Non-Condensing)			
Operating Altitude	0 to 2,500 m (0 to 8,200 ft)			

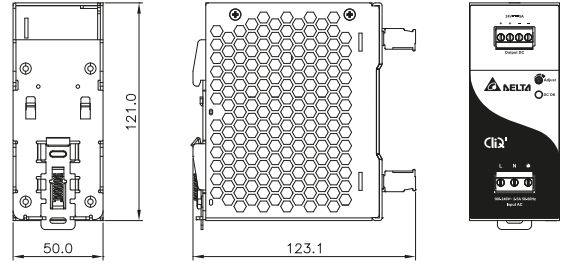
Notes  
 1) All models fulfill the test conditions for this range. DC input safety approval can be obtained upon request. While DRP024V060W1B□ is also certified for DC input.  
 2) At 25°C ambient temperature by vertical mounting orientation.  
 3) MTBF as per Telcordia SR-332 (Confidence level: 90%, I/P: 115Vac, O/P: 100% load) for vertical mounting orientation.  
 4) All parameters are specified at 25°C ambient temperature unless otherwise indicated.

## MECHANICAL DRAWINGS

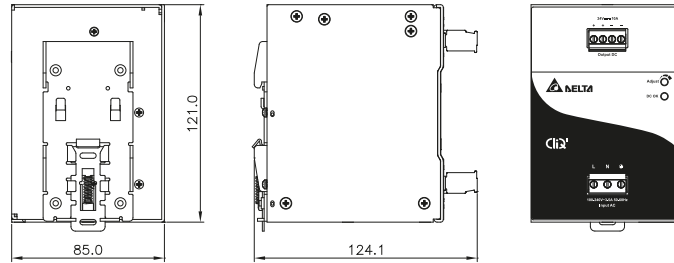
DRP024V060W1 B□



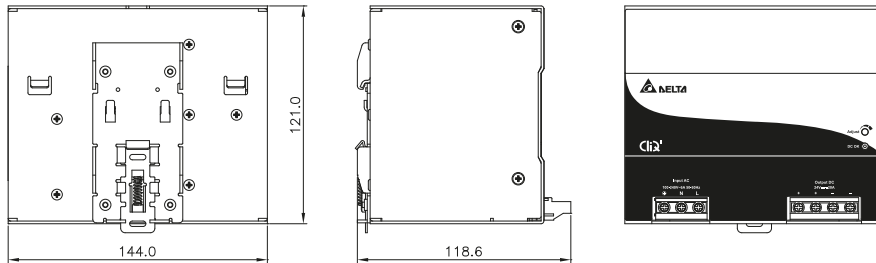
DRP024V1 20W1 B□



DRP024V240W1 B□



DRP024V480W1 B□



\*Units in mm

# CliQ II DIN Rail Power Supply

## 24V Output NEC Class 2



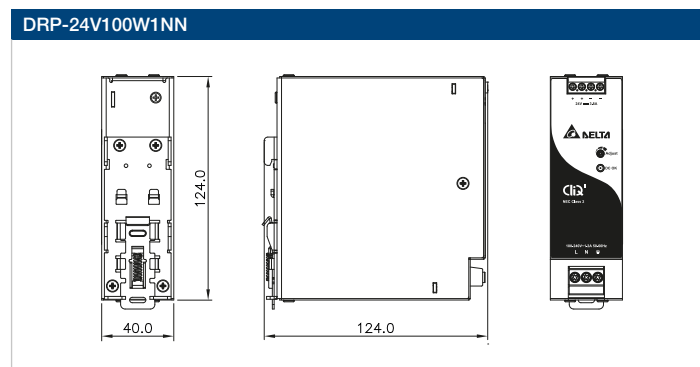
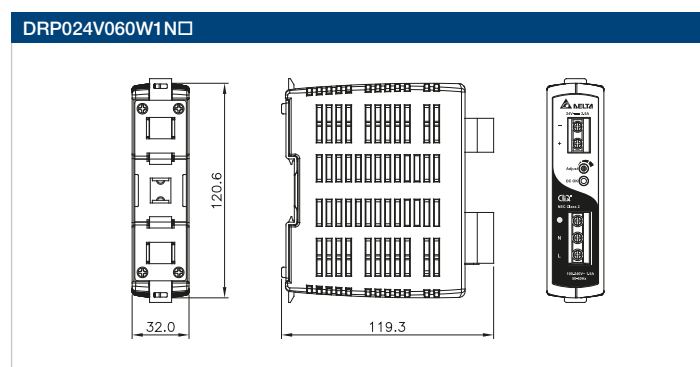
### HIGHLIGHTS & FEATURES

- Universal AC input voltage range
- Power will not de-rate for the entire input voltage range
- UL 1310 safety approval
- NEC Class 2 and Limited Power Source (LPS) approvals
- Conforms to harmonic current IEC/EN 61000-3-2, Class A
- Conformal coating on PCBAs to protect against common dust and chemical pollutants
- Hazardous Locations approval to ATEX and Class I, Div 2 (DRP024V060W1NY)

### GENERAL SPECIFICATIONS

OUTPUT	DRP024V060W1N□	DRP-24V100W1NN
Output Voltage	24V	24V
Output Voltage Range	24-28V	22-24V
Output Current	0-2.5A	0-3.8A
Output Power	60W	91.2W
Line Regulation	< 0.5% typ. (@ 85-264Vac input, 100% load)	
Load Regulation	< 1.0% typ. (@ 85-264Vac input, 0-100% load); DRP-24V100W1NN: < 1.0% typ. (-25°C to +25°C), < 2.0% typ. (+25°C to +50°C)	
PARD (20MHz)	< 240mVpp	< 150mVpp
Hold-up Time	> 20ms @ 115Vac, > 125ms @ 230Vac	> 20ms @ 115Vac, > 30ms @ 230Vac
INPUT		
Phase Input	Single Phase	
Input Voltage Range	85-264Vac (DC input range 120-375Vdc) <sup>1)</sup>	
Input Frequency	47-63Hz	
Input Current	< 1.50A @ 115Vac, < 0.80A @ 230Vac	< 1.00A @ 115Vac, < 0.53A @ 230Vac
Efficiency <sup>2)</sup> at 100% Load	> 88.0% @ 115Vac, > 89.0% @ 230Vac	
Max Inrush Current (Cold Start)	< 40A @ 115Vac, < 80A @ 230Vac	< 30A @ 115Vac, < 60A @ 230Vac
Power Factor	Conform to EN 61000-3-2 > 0.99 @ 115Vac, > 0.94 @ 230Vac	
Leakage Current	< 0.5mA @ 240Vac	
MECHANICAL		
Case Cover / Chassis	Plastic	Aluminium
Dimensions (L x W x D)	120.6 x 32 x 119.3 mm (4.75" x 1.26" x 4.70")	124 x 40 x 124 mm (4.88" x 1.57" x 4.88")
Unit Weight	0.33 kg (0.73 lb)	0.60 kg (1.32 lb)
Cooling System	Convection	
Input Terminal	3 Pins (Rated 300V/30A)	3 Pins (Rated 600V/35A)
Output Terminal	2 Pins (Rated 300V/30A)	4 Pins (Rated 300V/28A)
Input / Output Wire	AWG 22-10	AWG 18-12
MTBF <sup>3)</sup>	> 800,000 hrs	
ENVIRONMENT		
Operating Temperature	-25°C to +80°C	
Storage Temperature	-40°C to +85°C	
Power De-rating	> 50°C (2.5% / °C), > 70°C (4% / °C)	
Operating Humidity	5 to 95% RH (Non-Condensing)	
Operating Altitude	0 to 2,500 m (0 to 8,200 ft)	

### MECHANICAL DRAWINGS



\*Units in mm

#### Notes

- 1) All models fulfill the test conditions for DC input. DC input safety approval can be obtained upon request.
- 2) At 25°C ambient temperature by vertical mounting orientation.
- 3) MTBF as per Telcordia SR-332 (Confidence level: 90%, I/P: 115Vac, O/P: 100% load) for vertical mounting orientation.
- 4) All parameters are specified at 25°C ambient temperature unless otherwise indicated.



# 24V Output



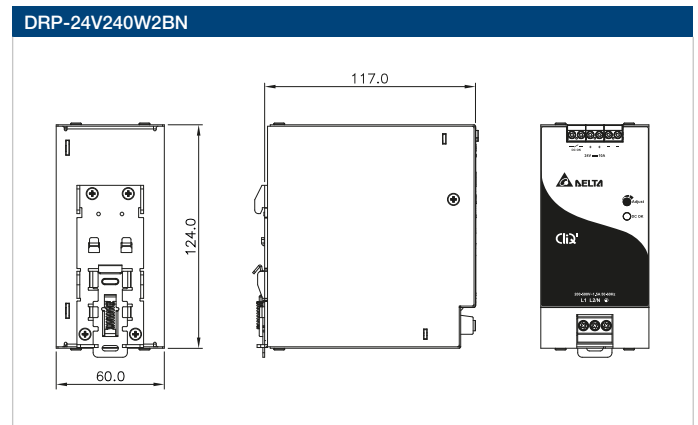
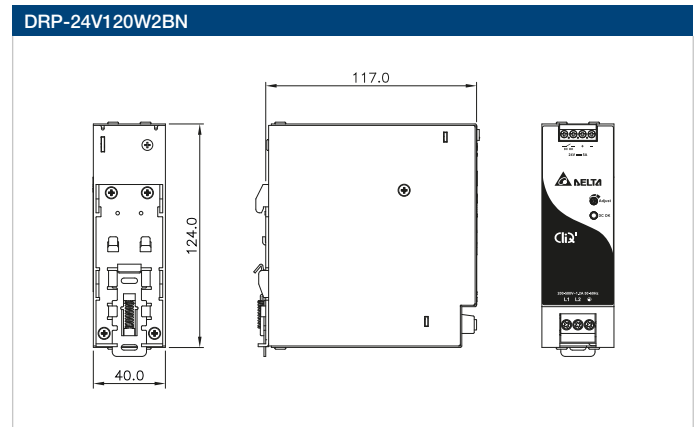
## HIGHLIGHTS & FEATURES

- Designed for single phase input 180-305Vac (for L-N) or 2 of 3-Phase system 2 x 180-550Vac (for L-L) or 254-780Vdc
- Compact and corrosion resistant aluminium casing
- High Efficiency > 90.0%
- Conforms to harmonic current IEC/EN 61000-3-2, Class A
- Wide operating temperature range from -30°C to +70°C
- Built-in DC OK contact
- Conformal coating on PCBAs to protect against common dust and chemical pollutants

## GENERAL SPECIFICATIONS

OUTPUT	DRP-24V120W2BN	DRP-24V240W2BN
Output Voltage	24V	24V
Output Voltage Range	24-28V	24-28V
Output Current	0-5.0A	0-10.0A
Output Power	120W	240W
Line Regulation	< 0.5% typ. (@ 200-550Vac input, 100% load)	
Load Regulation	< 1.0% typ. (@ 200-550Vac input, 0-100% load)	
PARD (20MHz)	< 150mVpp	
Hold-up Time	> 10ms @ 2 x 230Vac, > 50ms @ 2 x 400Vac	> 18ms @ 2 x 230Vac, > 30ms @ 2 x 400Vac
INPUT		
Phase Input	Single Phase or Two Phase	
Input Voltage Range	2 x 180-550Vac or 180-305Vac (Single Phase) (DC input range 254-780Vdc) <sup>1)</sup>	
Input Frequency	47-63Hz	
Input Current	< 1.20A @ 2 x 230Vac, < 0.65A @ 2 x 400Vac	< 2.00A @ 2 x 230Vac, < 1.00A @ 2 x 400Vac
Efficiency <sup>2)</sup> at 100% Load	> 90.0% @ 2 x 400Vac	
Max Inrush Current (Cold Start)	< 50A @ 2 x 200Vac & 500Vac	
Power Factor	Conform to EN 61000-3-2	> 0.84 @ 2 x 230Vac & 400Vac
Leakage Current	< 3.5mA @ 500Vac	
MECHANICAL		
Case Cover / Chassis	Aluminium	
Dimensions (L x W x D)	124 x 40 x 117 mm (4.88" x 1.57" x 4.61")	124 x 60 x 117 mm (4.88" x 2.36" x 4.61")
Unit Weight	0.62 kg (1.37 lb)	0.81 kg (1.79 lb)
Cooling System	Convection	
Input Terminal	3 Pins (Rated 600V/35A)	
Output Terminal	4 Pins (Rated 300V/28A)	6 Pins (Rated 300V/28A)
Input / Output Wire	I/P: AWG 18-8, O/P: AWG 18-12	I/P: AWG 18-8, O/P: AWG 16-12
MTBF <sup>3)</sup>	> 800,000 hrs	> 500,000 hrs
ENVIRONMENT		
Operating Temperature	-30°C to +70°C	
Storage Temperature	-40°C to +85°C	
Power De-rating	> 60°C (4% / °C)	> 50°C (2.25% / °C)
Operating Humidity	5 to 95% RH (Non-Condensing)	
Operating Altitude	Industrial Application: 0 to 2,000 m (0 to 6,560 ft); ITE Application: 0 to 2,500 m (0 to 8,200 ft)	

## MECHANICAL DRAWINGS



\*Units in mm

### Notes

- 1) All models are certified for DC input.
- 2) At 25°C ambient temperature by vertical mounting orientation.
- 3) MTBF as per Telcordia SR-332 (Confidence level: 90%, I/P: 115Vac, O/P: 100% load) for vertical mounting orientation.
- 4) All parameters are specified at 25°C ambient temperature unless otherwise indicated.

# CliQ II DIN Rail Power Supply

## 24V Output



### HIGHLIGHTS & FEATURES

- Universal AC input voltage range
- Power will not de-rate for the entire input voltage range
- Power Boost of 150% for 5 seconds (480W: 200% for 2 seconds)
- Full corrosion resistant aluminium casing
- Conforms to harmonic current IEC/EN 61000-3-2, Class A
- Extreme low temperature cold start at -40°C
- Conformal coating on PCBAs to protect against common dust and chemical pollutants
- Hazardous Locations approval to ATEX and Class I, Div 2 (except DRP024V960W3BN)

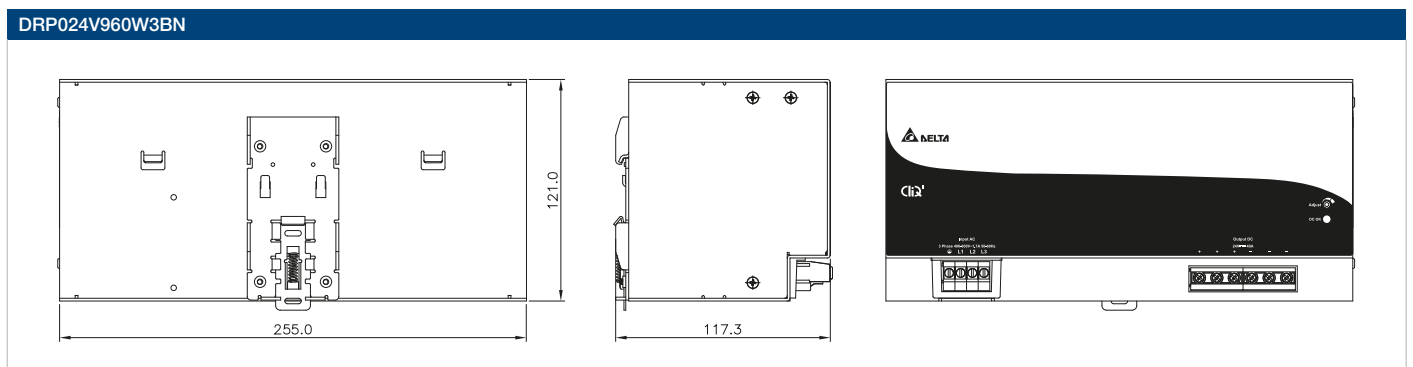
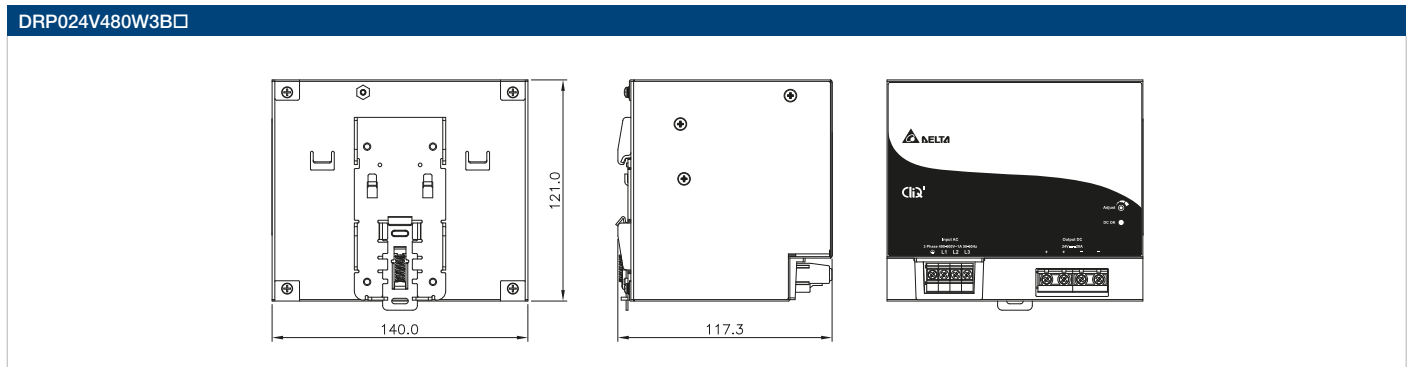
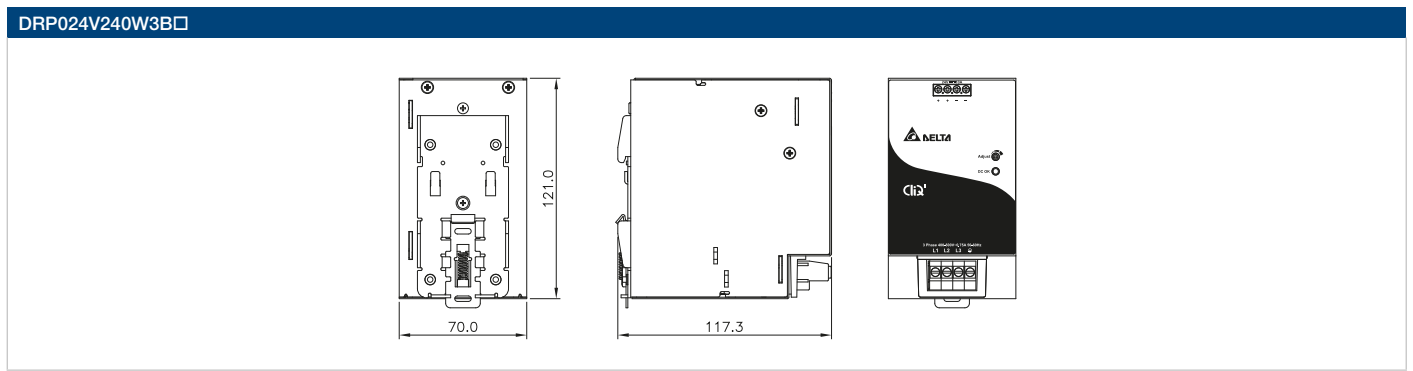
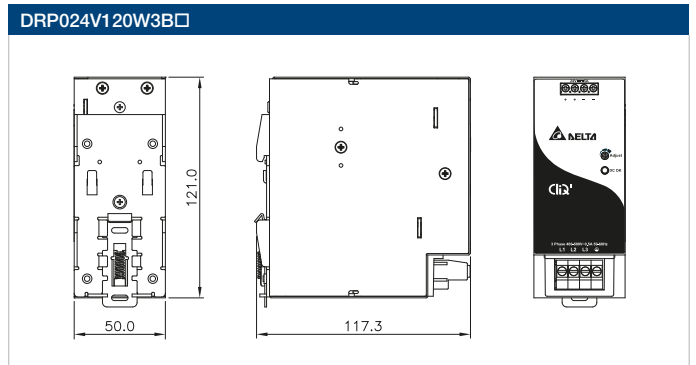
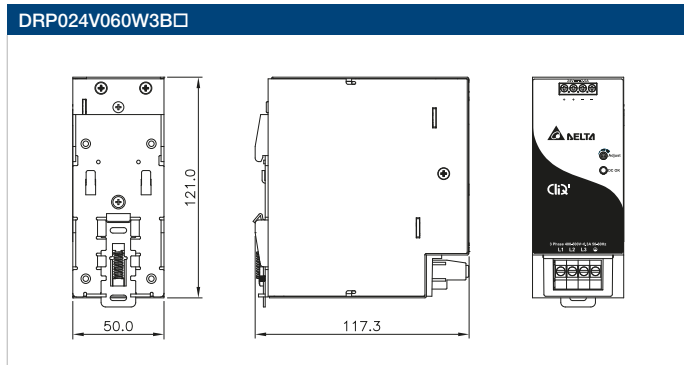
### GENERAL SPECIFICATIONS

OUTPUT	DRP024V060W3B□	DRP024V120W3B□	DRP024V240W3B□	DRP024V480W3B□	DRP024V960W3BN
Output Voltage	24V	24V	24V	24V	24V
Output Voltage Range	24-28V	24-28V	24-28V	24-28V	24-28V
Output Current	0-2.5A	0-5.0A	0-10.0A	0-20.0A	0-40.0A
Output Power	60W	120W	240W	480W	960W
Line Regulation	< 0.5% typ. (@ 320-600Vac input, 100% load)				
Load Regulation	< 1.0% typ. (@ 320-600Vac input, 0-100% load)				
PARD (20MHz)	< 150mVpp				
Hold-up Time	> 20ms @ 3 x 400Vac, > 40ms @ 3 x 500Vac			> 20ms @ 3 x 400Vac & 500Vac	
<b>INPUT</b>					
Phase Input	Two Phase or Three Phase				
Input Voltage Range (Does not exceed 600Vac)	3 x 320-600Vac or 2 x 360-600Vac (DC input range 450-800Vdc) <sup>1)</sup>				3 x 320-600Vac or 2 x 380-600Vac (DC input range 450-800Vdc) <sup>1)</sup>
Input Frequency	47-63Hz				
Input Current	< 0.30A/Phase @ 400Vac, < 0.25A/Phase @ 500Vac	< 0.50A/Phase @ 400Vac, < 0.40A/Phase @ 500Vac	< 0.75A/Phase @ 400Vac, < 0.65A/Phase @ 500Vac	< 1.00A/Phase @ 400Vac, < 0.75A/Phase @ 500Vac	< 1.70A/Phase @ 400Vac, < 1.40A/Phase @ 500Vac
Efficiency <sup>2)</sup> at 100% Load	> 86.0% @ 3 x 400Vac & 500Vac	> 88.0% @ 3 x 400Vac & 500Vac	> 92.0% @ 3 x 400Vac & 500Vac	> 91.0% @ 3 x 400Vac & 500Vac	> 92.0% @ 3 x 400Vac & 500Vac
Max Inrush Current (Cold Start) <sup>3)</sup>	< 30A @ 3 x 400Vac & 500Vac	< 30A @ 3 x 400Vac & 500Vac	< 40A @ 3 x 400Vac & 500Vac	< 50A @ 3 x 400Vac & 500Vac	< 60A @ 3 x 400Vac & 500Vac
Power Factor	Conform to EN 61000-3-2			> 0.95 @ 3 x 400Vac, > 0.94 @ 3 x 500Vac	
Leakage Current	< 3.5mA @ 500Vac				
<b>MECHANICAL</b>					
Case Cover / Chassis	Aluminium				
Dimensions (L x W x D)	121 x 50 x 117.3 mm (4.76" x 1.97" x 4.62")	121 x 50 x 117.3 mm (4.76" x 1.97" x 4.62")	121 x 70 x 117.3 mm (4.76" x 2.76" x 4.62")	121 x 140 x 117.3 mm (4.76" x 5.51" x 4.62")	121 x 255 x 117.3 mm (4.76" x 10.0" x 4.62")
Unit Weight	0.66 kg (1.46 lb)	0.66 kg (1.46 lb)	0.89 kg (1.96 lb)	1.35 kg (2.98 lb)	2.60 kg (5.73 lb)
Cooling System	Convection				
Input Terminal	4 Pins (Rated 600V/35A)				
Output Terminal	4 Pins (Rated 300V/28A)			4 Pins (Rated 300V/30A)	6 Pins (Rated 300V/30A)
Input / Output Wire	AWG 18-12	AWG 18-12	I/P: AWG 18-12, O/P: AWG 16-12	I/P: AWG 18-8, O/P: AWG 12-10	I/P: AWG 18-8, O/P: AWG 12-10
MTBF <sup>4)</sup>	> 500,000 hrs	> 500,000 hrs	> 500,000 hrs	> 500,000 hrs	> 300,000 hrs
<b>ENVIRONMENT</b>					
Operating Temperature	-25°C to +80°C				-25°C to +65°C
Storage Temperature	-40°C to +85°C				
Power De-rating	> 50°C (2.5% / °C), > 70°C (5% / °C)				> 50°C (2.5% / °C)
Operating Humidity	5 to 95% RH (Non-Condensing)				
Operating Altitude	Industrial Application: 0 to 2,000 m (0 to 6,560 ft); ITE Application: 0 to 2,500 m (0 to 8,200 ft)				

#### Notes

- 1) All models fulfill the test conditions for this range. DC input safety approval can be obtained upon request. While DRP024V480W3B□ and DRP024V960W3B□ are also certified for DC input.
- 2) At 25°C ambient temperature by vertical mounting orientation.
- 3) AC Source capability up to 3kVA.
- 4) MTBF as per Telcordia SR-332 (Confidence level: 90%, I/P: 400Vac, O/P: 100% load) for vertical mounting orientation.
- 5) All parameters are specified at 25°C ambient temperature unless otherwise indicated.

## MECHANICAL DRAWINGS



\*Units in mm

# CliQ II DIN Rail Power Supply

## 48V Output



### HIGHLIGHTS & FEATURES

- Universal AC input voltage range
- Power will not de-rate for the entire input voltage range
- High Efficiency > 91.0% @ 230Vac
- Power Boost of 150% for 5 seconds
- Full corrosion resistant aluminium casing
- Conforms to harmonic current IEC/EN 61000-3-2, Class A
- Extreme low temperature cold start at -40°C
- Conformal coating on PCBAs to protect against common dust and chemical pollutants
- Hazardous Locations approval to ATEX and Class I, Div 2

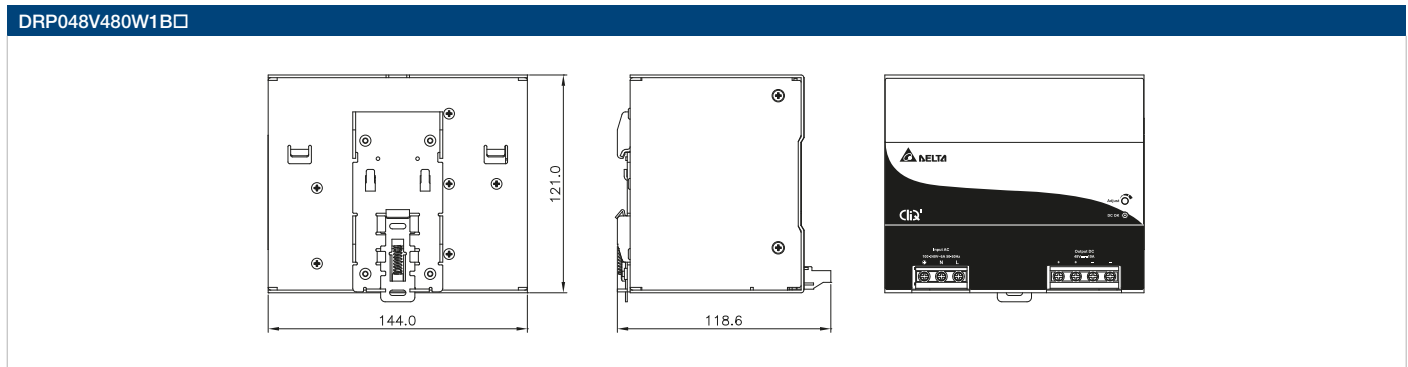
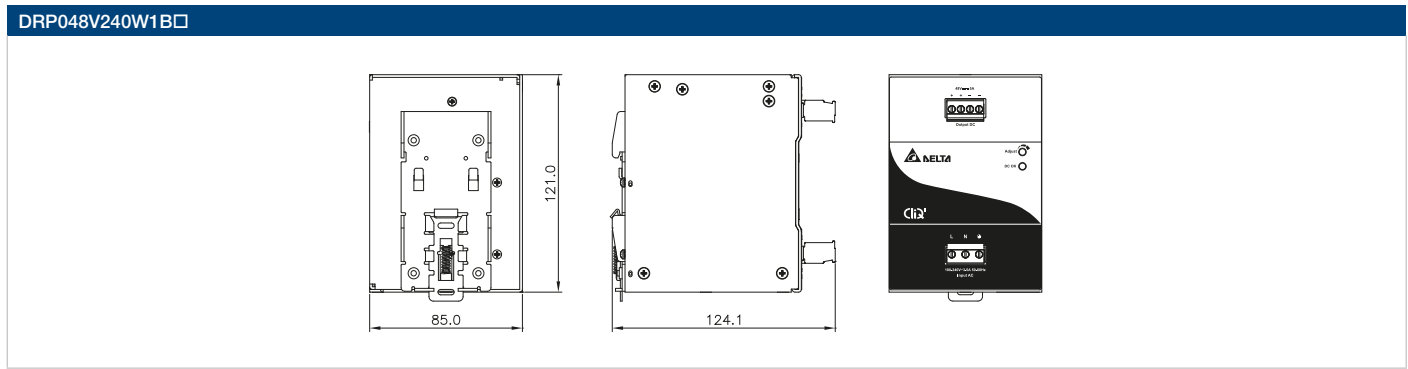
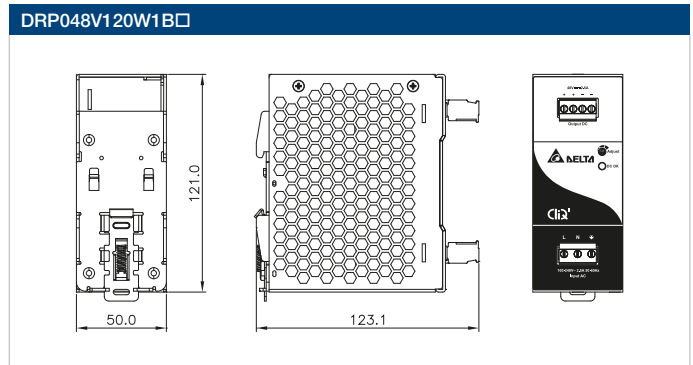
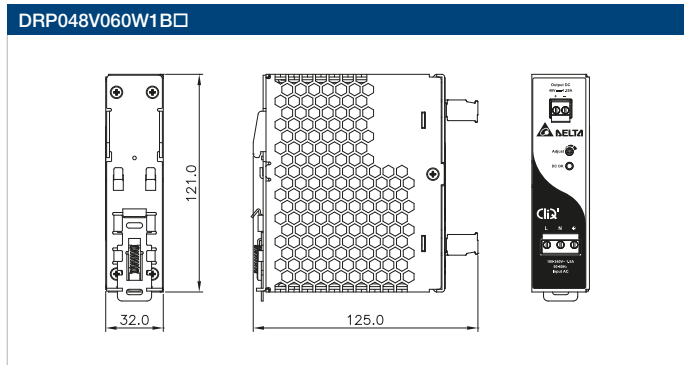
### GENERAL SPECIFICATIONS

OUTPUT	DRP048V060W1B□	DRP048V120W1B□	DRP048V240W1B□	DRP048V480W1B□
Output Voltage	48V	48V	48V	48V
Output Voltage Range	48-56V	48-56V	48-56V	48-56V
Output Current	0-1.25A	0-2.5A	0-5.0A	0-10.0A
Output Power	60W	120W	240W	480W
Line Regulation	< 0.5% typ. (@ 85-264Vac input, 100% load)			
Load Regulation	< 1.0% typ. (@ 85-264Vac input, 0-100% load)			
PARD (20MHz)	< 200mVpp			
Hold-up Time	> 20ms @ 115Vac, > 125ms @ 230Vac	> 20ms @ 115Vac, > 50ms @ 230Vac		> 20ms @ 115Vac & 230Vac
<b>INPUT</b>				
Phase Input	Single Phase			
Input Voltage Range	85-264Vac (DC input range 120-375Vdc) <sup>1)</sup>			
Input Frequency	47-63Hz			
Input Current	< 1.4A @ 115Vac, < 0.8A @ 230Vac	< 2.2A @ 115Vac, < 1.1A @ 230Vac	< 2.5A @ 115Vac, < 1.3A @ 230Vac	< 5.0A @ 115Vac, < 3.0A @ 230Vac
Efficiency <sup>2)</sup> at 100% Load	> 91.0% @ 115Vac, > 92.0% @ 230Vac	> 90.0% @ 115Vac, > 91.0% @ 230Vac	> 90.0% @ 115Vac, > 92.0% @ 230Vac	> 91.0% @ 115Vac, > 93.0% @ 230Vac
Max Inrush Current (Cold Start)	< 20A @ 115Vac, < 35A @ 230Vac	< 35A @ 115Vac & 230Vac		
Power Factor	Conform to EN 61000-3-2	> 0.99 @ 115Vac, > 0.93 @ 230Vac	> 0.96 @ 115Vac, > 0.90 @ 230Vac	
Leakage Current	< 1mA @ 240Vac			< 3mA @ 240Vac
<b>MECHANICAL</b>				
Case Cover / Chassis	Aluminium			
Dimensions (L x W x D)	121 x 32 x 125 mm (4.76" x 1.26" x 4.92")	121 x 50 x 123.1 mm (4.76" x 1.97" x 4.85")	121 x 85 x 124.1 mm (4.76" x 3.35" x 4.86")	121 x 144 x 118.6 mm (4.76" x 5.67" x 4.67")
Unit Weight	0.38 kg (0.84 lb)	0.72 kg (1.59 lb)	0.96 kg (2.12 lb)	1.37 kg (3.02 lb)
Cooling System	Convection			
Input Terminal	Pluggable Connector 3 Pins (Rated 300V/15A)			3 Pins (Rated 300V/30A)
Output Terminal	Pluggable Connector 2 Pins (Rated 300V/15A)	Pluggable Connector 4 Pins (Rated 300V/15A)		4 Pins (Rated 300V/30A)
Input / Output Wire	AWG 22-12	AWG 20-12	AWG 20-12	I/P: AWG 18-10, O/P: AWG 16-10
MTBF <sup>3)</sup>	> 800,000 hrs	> 800,000 hrs	> 500,000 hrs	> 500,000 hrs
<b>ENVIRONMENT</b>				
Operating Temperature	-25°C to +80°C			-25°C to +75°C
Storage Temperature	-40°C to +85°C			
Power De-rating	> 50°C (2.5% / °C)			> 50°C (2.5% / °C), > 70°C (5% / °C)
Operating Humidity	5 to 95% RH (Non-Condensing)			
Operating Altitude	0 to 2,500 m (0 to 8,200 ft)			

#### Notes

- 1) All models fulfill the test conditions for DC input. DC input safety approval can be obtained upon request.
- 2) At 25°C ambient temperature by vertical mounting orientation.
- 3) MTBF as per Telcordia SR-332 (Confidence level: 90%, I/P: 115Vac, O/P: 100% load) for vertical mounting orientation.
- 4) All parameters are specified at 25°C ambient temperature unless otherwise indicated.

## MECHANICAL DRAWINGS



\*Units in mm

# CliQ III DIN Rail Power Supply

## 24V Output



### HIGHLIGHTS & FEATURES

- Universal AC input voltage range
- Built-in constant current circuit for charging application
- High efficiency of up to 94% at 230Vac
- Power Boost of 150% for 5 seconds
- SEMI F47 compliance at 120Vac
- Extreme low temperature cold start at -40°C
- Built-in DC OK Contact and LED indicator for DC OK
- Conformal coating on PCBA to protect against common dust and chemical pollutants

### GENERAL SPECIFICATIONS

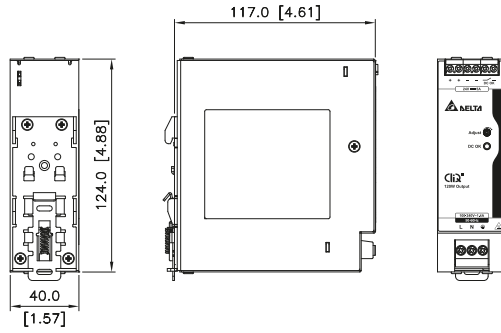
	COMING SOON	COMING SOON	NEW	NEW	NEW	NEW
OUTPUT	DRP-24V120W1CAN	DRP-24V120W1CBN	DRP-24V240W1CAN	DRP-24V240W1CBN	DRP-24V480W1CAN	DRP-24V480W1CBN
Output Voltage	24V	24V	24V	24V	24V	24V
Output Voltage Range	24-28V	24-28V	24-28V	24-28V	24-28V	24-28V
Output Current	0-5.0A	0-5.0A	0-10.0A	0-10.0A	0-20.0A	0-20.0A
Output Power	120W	120W	240W	240W	480W	480W
Line Regulation	< 0.5% (@ 88-264Vac input, 100% load)					
Load Regulation	< 1.0% (@ 88-264Vac input, 0-100% load)					
PARD (20MHz)	< 100mVpp					
Hold-up Time	> 20ms @115Vac & 230Vac				> 16ms @115Vac & 230Vac	
<b>INPUT</b>						
Phase Input	Single Phase					
Input Voltage Range	88-264Vac	88-264Vac (DC input range 88-375Vdc) <sup>1)</sup>	88-264Vac	88-264Vac (DC input range 88-375Vdc) <sup>1)</sup>	88-264Vac	88-264Vac (DC input range 88-375Vdc) <sup>1)</sup>
Input Frequency	47-63Hz					
Input Current	< 1.4A @ 115Vac, < 0.7A @ 230Vac		< 2.6A @ 115Vac, < 1.3A @ 230Vac		< 5.0A @ 115Vac, < 2.5A @ 230Vac	
Efficiency <sup>2)</sup> at 100% Load	> 90.6% @115Vac, > 91.7% @ 230Vac		> 92.0% @115Vac, > 94.0% @ 230Vac		> 93.0% @115Vac, > 94.0% @ 230Vac	
Max Inrush Current (Cold Start)	< 35A @ 115Vac, < 75A @ 230Vac		< 33A @ 115Vac, < 65A @ 230Vac		< 40A @ 115Vac, < 80A @ 230Vac	
Power Factor	> 0.96 @ 115Vac, > 0.93 @ 230Vac		> 0.99 @ 115Vac, > 0.93 @ 230Vac		> 0.99 @ 115Vac, > 0.95 @ 230Vac	
Leakage Current	< 1.2mA @240Vac					
<b>MECHANICAL</b>						
Case Cover / Chassis	Aluminium					
Dimensions (L x W x D)	124 x 40 x 117 mm (4.88" x 1.57" x 4.60")		124 x 60 x 117 mm (4.88" x 2.36" x 4.60")		124 x 82 x 127 mm (4.88" x 3.23" x 5.00")	
Unit Weight	0.58 kg (1.27 lb)	0.58 kg (1.27 lb)	0.84 kg (1.85 lb)	0.84 kg (1.85 lb)	1.20 kg (2.65 lb)	1.20 kg (2.65 lb)
Cooling System	Convection					
Input Terminal	3 Pins (Rated 600V/35A)					
Output Terminal	6 Pins (Rated 300V/28A)					
Input / Output Wire	I/P: AWG 18-8, O/P: AWG 18-12		I/P: AWG 18-8, O/P: AWG 16-12		I/P: AWG 18-8, O/P: AWG 14-12	
MTBF <sup>3)</sup>	> 1,409,000 hrs		> 1,366,200 hrs		> 1,041,600 hrs	
<b>ENVIRONMENT</b>						
Operating Temperature	-25°C to +70°C					
Storage Temperature	-40°C to +85°C					
Power De-rating	> 60°C (2.5% / °C)				AC input: > 60°C (2.5% / °C), DC input: > 50°C (2.5% / °C)	
Operating Humidity	5 to 95% RH (Non-Condensing)					
Operating Altitude	0 to 5,000 m (0 to 16,400 ft)					

#### Notes

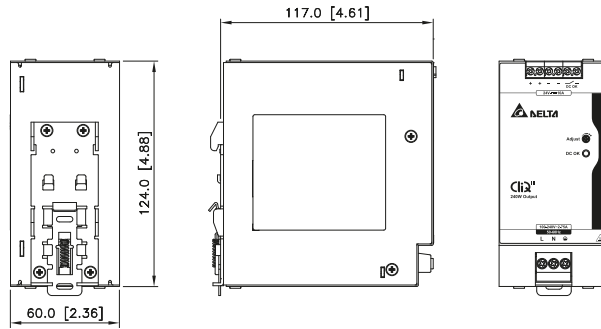
- 1) All models are certified for DC input.
- 2) At 25°C ambient temperature by vertical mounting orientation.
- 3) MTBF as per Telcordia SR-332 (Confidence level: 90%, I/P: 115Vac, O/P: 100% load) for vertical mounting orientation.
- 4) All parameters are specified at 25°C ambient temperature unless otherwise indicated.



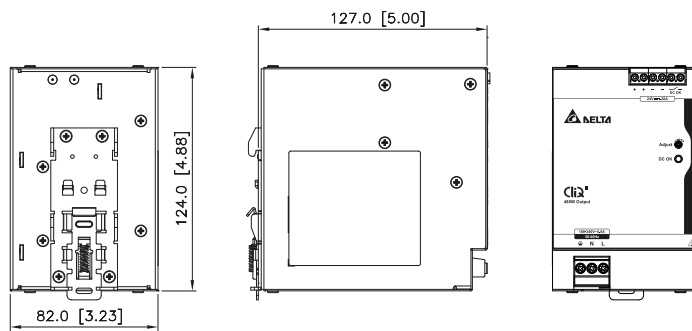
DRP-24V120W1CAN, DRP-24V120WCBN



DRP-24V240W1CAN, DRP-24V240WCBN



DRP-24V480W1CAN, DRP-24V480WCBN



\*Units in mm [inch]

# CliQ M DIN Rail Power Supply

## 24V Output



### HIGHLIGHTS & FEATURES

- Universal AC input voltage range
- High power density in corrosion resistant aluminium casing
- Power Boost of 150% up to 7 seconds
- Advanced Power Boost (APB) – large reserve output current for fuse tripping
- DNV GL and ABS approvals for maritime applications
- Extreme low temperature cold start at -40°C
- Built-in DC OK contact and LED indicator for DC OK/ Over Load
- Conformal coating on PCBAs to protect against common dust and chemical pollutants

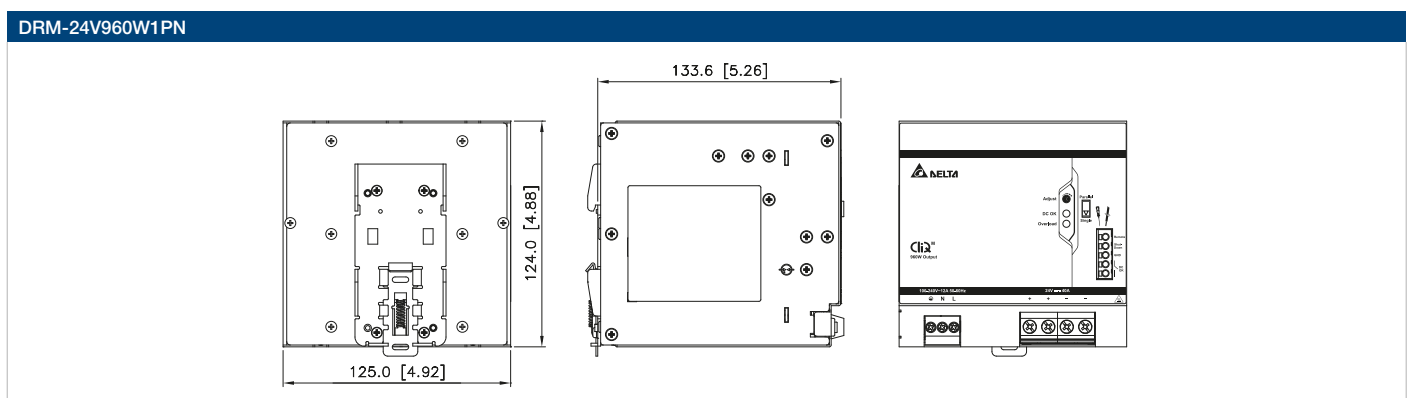
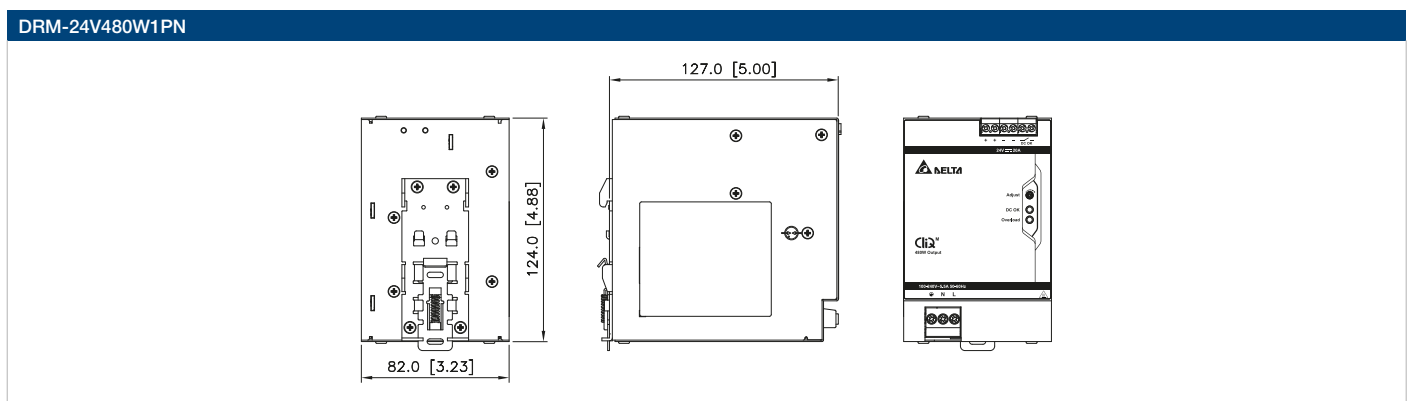
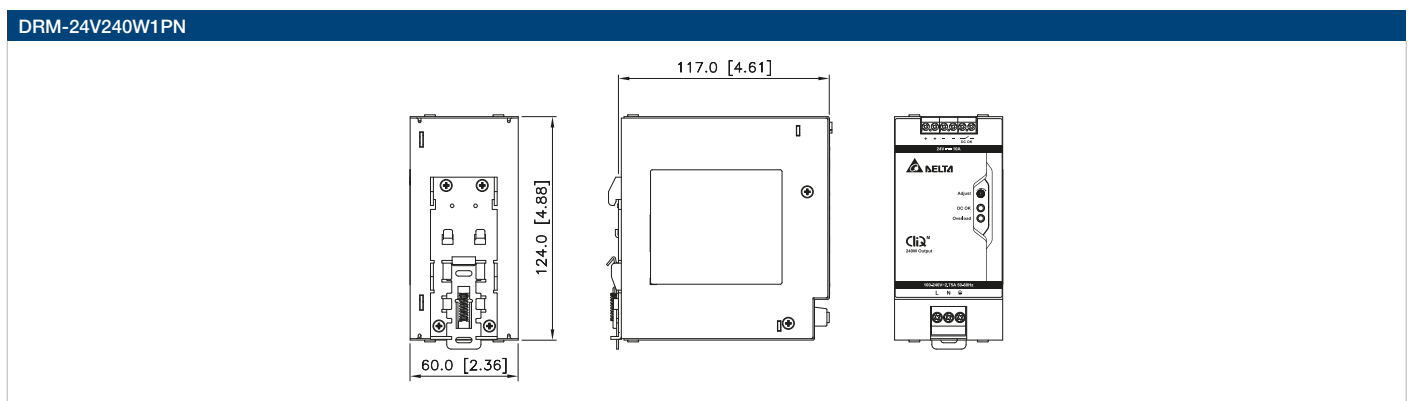
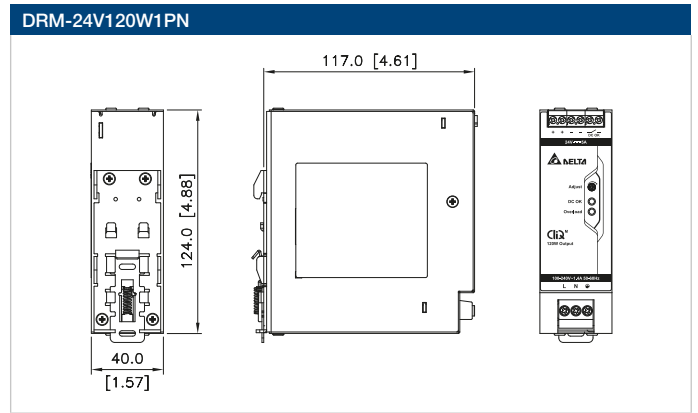
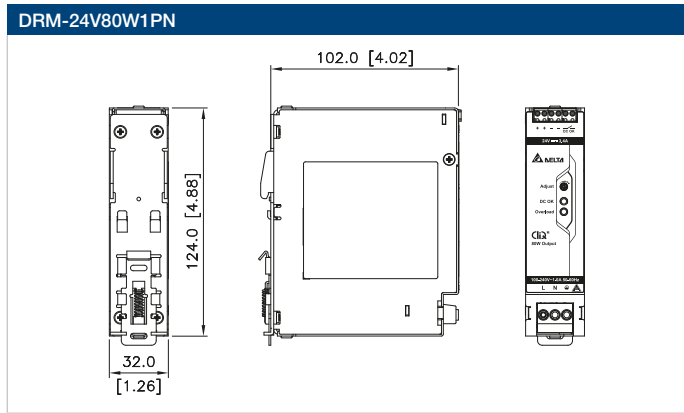
### GENERAL SPECIFICATIONS

	DRM-24V80W1PN	DRM-24V120W1PN	DRM-24V240W1PN	DRM-24V480W1PN	NEW DRM-24V960W1PN
<b>OUTPUT</b>					
Output Voltage	24V	24V	24V	24V	24V
Output Voltage Range	24-28V	24-28V	24-28V	24-28V	24-28V
Output Current	3.4-3.0A	5.0-4.5A	10.0-9.0A	20.0-17.0A	40.0-34.3A
Output Power	81.6W	120W	240W	480W	960W
Line Regulation	10mV (@ 85-264Vac input, 100% load)	20mV (@ 85-264Vac input, 100% load)	10mV (@ 85-276Vac input, 100% load)		10mV (@ 85-300Vac input, 100% load)
Load Regulation	100mV (@ 85-276Vac input, 0-100% load); <u>120W</u> : 100mV (@ 85-264Vac input, 0-100% load); <u>960W</u> : 50mV (@ 85-264Vac input, 0-100% load)				
PARD (20MHz)	< 50mVpp			< 100mVpp	
Hold-up Time	> 41ms @ 120Vac, > 70ms @ 230Vac	> 34ms @ 120Vac, > 65ms @ 230Vac	> 28ms @ 120Vac & 230Vac	> 30ms @ 120Vac & 230Vac	> 23ms @ 120vac & 230Vac
<b>INPUT</b>					
Phase Input	Single Phase				
Input Voltage Range	85-276Vac (DC input range 88-375Vdc) <sup>1)</sup>	85-264Vac (DC input range 88-375Vdc) <sup>1)</sup>	85-276Vac (DC input range 88-375Vdc) <sup>1)</sup>		85-264Vac
Input Frequency	47-63Hz				
Input Current	< 0.90A @ 120Vac, < 0.60A @ 230Vac	< 1.12A @ 120Vac, < 0.62A @ 230Vac	< 2.26A @ 120Vac, < 1.25A @ 230Vac	< 4.60A @ 120Vac, < 2.50A @ 230Vac	< 10.10A @ 120Vac, < 6.00A @ 230Vac
Efficiency <sup>2)</sup> at 100% Load	> 90.1% @ 120Vac, > 90.0% @ 230Vac	> 91.6% @ 120Vac, > 92.7% @ 230Vac	> 92.6% @ 120Vac, > 93.5% @ 230Vac	> 92.2% @ 120Vac, > 93.4% @ 230Vac	> 93.6% @ 120Vac, > 94.6% @ 230Vac
Max Inrush Current (Cold Start)	< 7A @ 120Vac, < 13A @ 230Vac	< 15A @ 120Vac & 230Vac	< 10A @ 120Vac & 230Vac	< 13A @ 120Vac & 230Vac	< 13A @ 120Vac, < 20A @ 230Vac
Power Factor	> 0.95 @ 120Vac, > 0.80 @ 230Vac	> 0.99 @ 120Vac, > 0.91 @ 230Vac	> 0.98 @ 120Vac, > 0.92 @ 230Vac	> 0.92 @ 120Vac, > 0.87 @ 230Vac	> 0.97 @ 120Vac, > 0.95 @ 230Vac
Leakage Current (264Vac, 50Hz)	TT/TN < 0.36mA IT < 0.95mA	< 0.45mA < 1.08mA	< 0.74mA < 1.29mA	< 0.80mA < 2.00mA	< 1.18mA < 2.82mA
<b>MECHANICAL</b>					
Case Cover / Chassis	Aluminium				
Dimensions (L x W x D)	124 x 32 x 102 mm (4.88" x 1.26" x 4.02")	124 x 40 x 117 mm (4.88" x 1.57" x 4.61")	124 x 60 x 117 mm (4.88" x 2.36" x 4.61")	124 x 82 x 127 mm (4.88" x 3.23" x 5.00")	124 x 125 x 133.6 mm (4.88" x 4.92" x 5.26")
Unit Weight	0.50 kg (1.10 lb)	0.63 kg (1.39 lb)	0.94 kg (2.07 lb)	1.40 kg (3.09 lb)	2.87 kg (6.33 lb)
Cooling System	Convection				
Input / Output Terminal	I/P: 3 Pins (Rated 600V/35A), O/P: 6 Pins (Rated 300V/8A)	I/P: 3 Pins (Rated 600V/35A), O/P: 6 Pins (Rated 300V/28A)			I/P: 3 Pins (Rated 600V/35A), O/P: 4 Pins (Rated 300V/65A)
Input / Output Wire	I/P: AWG 20-8, O/P: AWG 22-16	I/P: AWG 18-8, O/P: AWG 18-12	I/P: AWG 18-8, O/P: AWG 16-12		I/P: AWG 16-8, O/P: AWG 10-6
MTBF <sup>3)</sup>	> 2,000,000 hrs	> 1,800,000 hrs	> 1,400,000 hrs	> 778,800 hrs	> 513,800 hrs
<b>ENVIRONMENT</b>					
Operating Temperature	-25°C to +70°C				
Storage Temperature	-40°C to +85°C				
Power De-rating	> 60°C (2.5% / °C)				
Operating Humidity	5 to 95% RH (Non-Condensing)				
Operating Altitude	0 to 5,000 m (0 to 16,400 ft); IEC/EN 61558: 0 to 2,500 m (0 to 8,200 ft)				

#### Notes

- 1) All models are certified for DC input. DC input is not applicable for DRM-24V960W1PN.
- 2) At 25°C ambient temperature by vertical mounting orientation.
- 3) MTBF as per Telcordia SR-332 (Confidence level: 90%, I/P: 100Vac, O/P: 100% load) for vertical mounting orientation.
- 4) All parameters are specified at 25°C ambient temperature unless otherwise indicated.

## MECHANICAL DRAWINGS



\*Units in mm [inch]

# Lyte DIN Rail Power Supply

## 24V, 48V Output



# LYTE

### HIGHLIGHTS & FEATURES

- Universal AC input voltage range
- High power density
- Built-in constant current circuit for reactive loads
- Conforms to harmonic current IEC/EN 61000-3-2, Class A
- Built-in DC OK relay contact (for DRL-□□□W1AS)
- Compliance to SEMI F47 @ 200Vac
- 15kV common mode & 8kV differential mode ESD immunity
- Conformal coating on PCBAs to protect against common dust and chemical pollutants

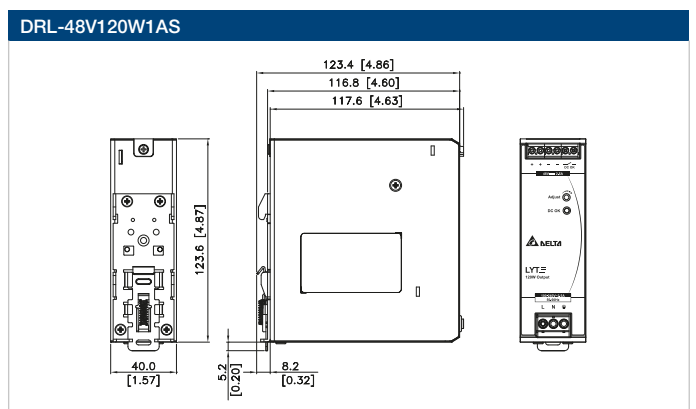
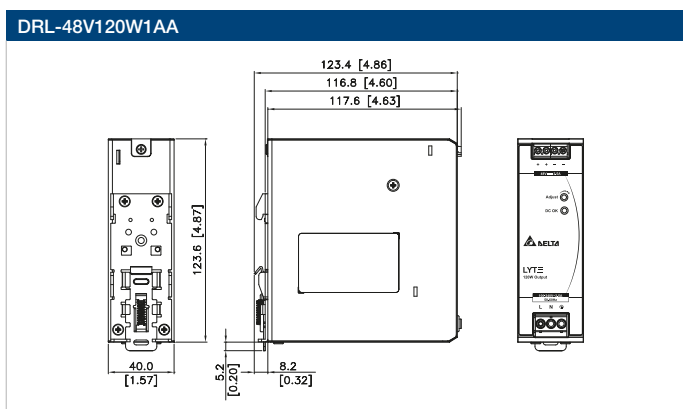
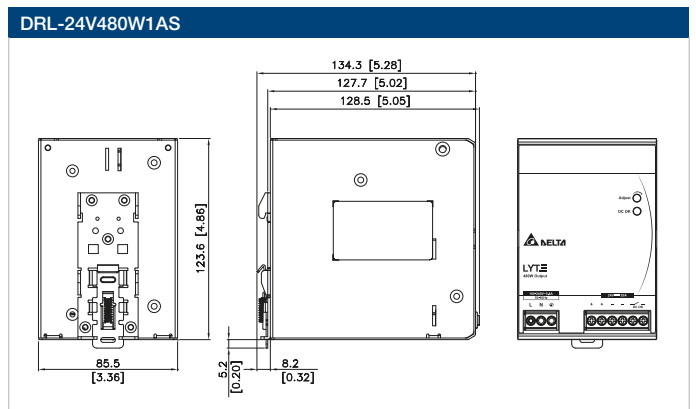
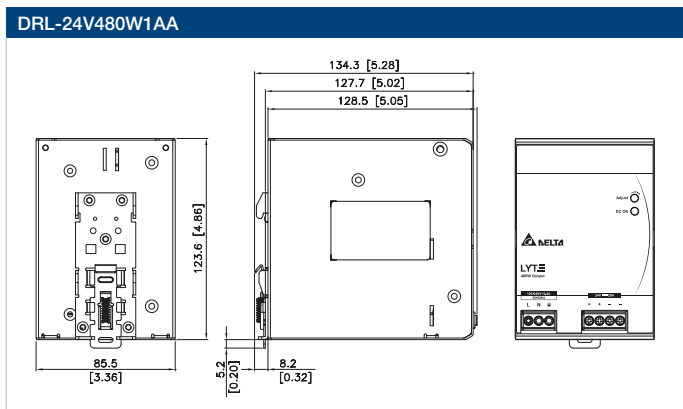
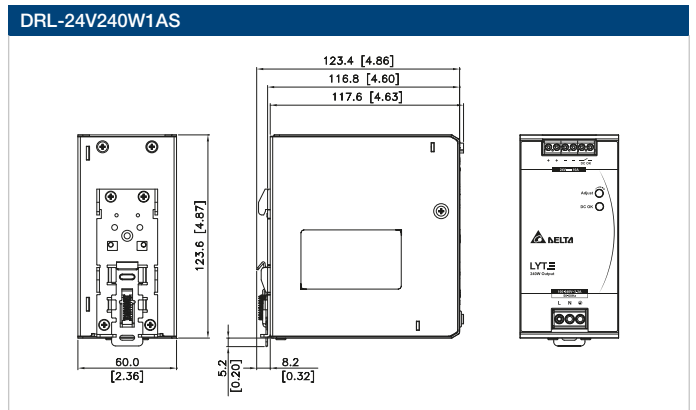
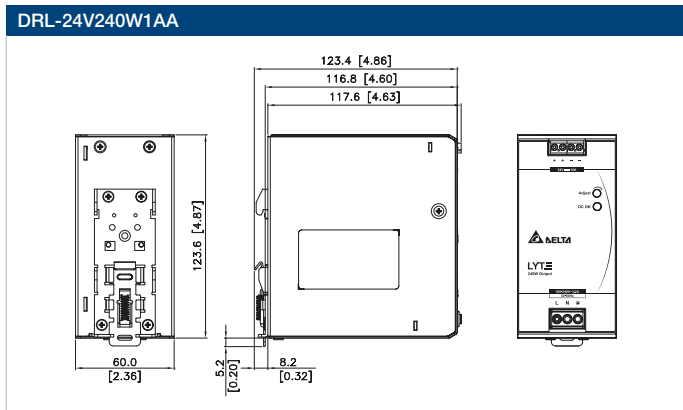
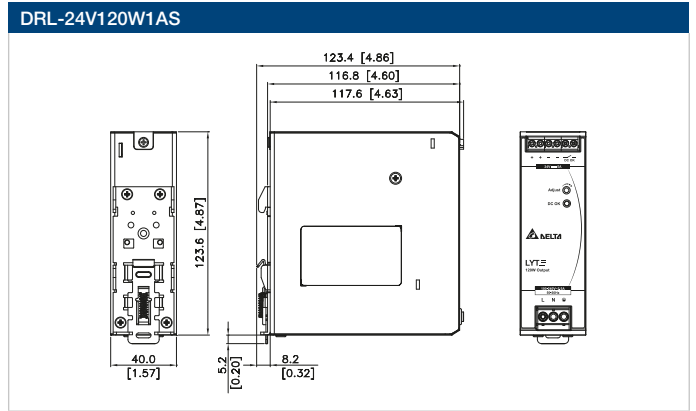
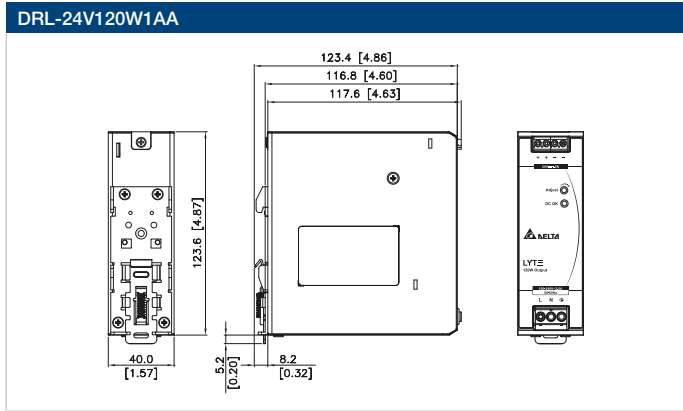
### GENERAL SPECIFICATIONS

OUTPUT	DRL-24V120W1A□	DRL-24V240W1A□	DRL-24V480W1A□	DRL-48V120W1A□
Output Voltage	24V	24V	24V	48V
Output Voltage Range	22-28V	22-28V	22-28V	44-56V
Output Current	5.0A	10.0A	20.0A	2.50A
Output Power	120W	240W	480W	120W
Line Regulation	< 0.5% (@ 85-264Vac input, 100% load)			
Load Regulation (0-100% Load)	< 1.0%	< 1.0% @ -10°C to +70°C < 1.5% @ -20°C to -10°C	< 1.5% @ -10°C to +70°C < 2.0% @ -20°C to -10°C	< 1.0%
PARD (20MHz)	< 120mVpp @ -10°C to +70°C, < 240mVpp @ -20°C to -10°C	< 120mVpp @ 0°C to +70°C, < 240mVpp @ -10°C to 0°C, < 360mVpp @ -20°C to -10°C,		< 150mVpp @ -10°C to +70°C, < 300mVpp @ -20°C to -10°C
Hold-up Time	20ms typ. @ 115Vac, 90ms typ. @ 230Vac	10ms typ. @ 115Vac, 16ms typ. @ 230Vac		20ms typ. @ 115Vac, 90ms typ. @ 230Vac
<b>INPUT</b>				
Phase Input	Single Phase			
Input Voltage Range	85-264Vac (DC input range 120-375Vdc) <sup>1)</sup>			
Input Frequency	47-63Hz			
Input Current	2.2A typ. @ 115Vac, 1.2A typ. @ 230Vac	2.8A typ. @ 115Vac, 1.4A typ. @ 230Vac	5.4A typ. @ 115Vac, 2.7A typ. @ 230Vac	2.2A typ. @ 115Vac, 1.2A typ. @ 230Vac
Efficiency <sup>2)</sup> at 100% Load	85.0% typ. @ 115Vac, 88.0% typ. @ 230Vac	88.0% typ. @ 115Vac, 90.0% typ. @ 230Vac	85.0% typ. @ 115Vac, 88.0% typ. @ 230Vac	89.0% typ. @ 115Vac, 90.0% typ. @ 230Vac
Max Inrush Current (Cold Start)	20A typ. @ 115Vac, 40A typ. @ 230Vac		40A typ. @ 115Vac, 80A typ. @ 230Vac	20A typ. @ 115Vac, 40A typ. @ 230Vac
Power Factor	Conform to EN 61000-3-2	> 0.95 @ 115Vac & 230Vac		Conform to EN 61000-3-2
Leakage Current	< 0.25mA @ 264Vac	< 1mA @ 264Vac		< 0.25mA @ 264Vac
<b>MECHANICAL</b>				
Case Cover / Chassis	SGCC / Aluminium			
Dimensions (L x W x D)	123.6 x 40 x 117.6 mm (4.87" x 1.57" x 4.63")	123.6 x 60 x 117.6 mm (4.87" x 2.36" x 4.63")	123.6 x 85.5 x 128.5 mm (4.87" x 3.37" x 5.06")	123.6 x 40 x 117.6 mm (4.87" x 1.57" x 4.63")
Unit Weight	0.54 kg (1.19 lb)	0.80 kg (1.76 lb)	1.30 kg (2.86 lb)	0.54 kg (1.19 lb)
Cooling System	Convection			
Input / Output Terminal	I/P: 3 Pins (Rated 600V/35A); O/P: DRL-□□□W1AA: 4 Pins (Rated 300V/28A), DRL-□□□W1AS: 6 Pins (Rated 300V/28A)			
Input / Output Wire	I/P: AWG 18-8, O/P: AWG 24-12	AWG 16-12	AWG 16-12	I/P: AWG 18-8, O/P: AWG 24-12
MTBF <sup>3)</sup>	> 700,000 hrs	> 700,000 hrs	> 700,000 hrs	> 700,000 hrs
<b>ENVIRONMENT</b>				
Operating Temperature	-20°C to +70°C			
Storage Temperature	-40°C to +85°C			
Power De-rating	120W: < -10°C (2% / °C) & > 40°C (1.67% / °C) @ 115Vac; < -10°C (2% / °C) & > 50°C (2.5% / °C) @ 230Vac 240W & 480W: > 40°C (1.67% / °C) @ 115Vac; > 50°C (2.5% / °C) @ 230Vac			
Operating Humidity	5 to 95% RH (Non-Condensing)			
Operating Altitude	Industrial Application: 0 to 2,000 m (0 to 6,560 ft) ITE Application: 0 to 5,000 m (0 to 16,400 ft)			

#### Notes

- 1) All models fulfill the test conditions for DC input. DC input safety approval can be obtained upon request.
- 2) At 25°C ambient temperature by vertical mounting orientation.
- 3) MTBF as per Telcordia SR-332 (Confidence level: 90%, I/P: 100Vac, O/P: 100% load) for vertical mounting orientation.
- 4) All parameters are specified at 25°C ambient temperature unless otherwise indicated.

## MECHANICAL DRAWINGS



\*Units in mm [inch]

# Chrome DIN Rail Power Supply

## 5V, 12V Output



# CHROME

### HIGHLIGHTS & FEATURES

- Class II Double Isolation (No earth connection is required)
- Universal AC input voltage range and full power up to 55°C
- Power will not de-rate for the entire input voltage range
- Can be installed in compact cabinets
- NEC Class 2 and Limited Power Source (LPS) approvals (except DRC-12V100W1AZ)
- Conforms to harmonic current IEC/EN 61000-3-2, Class A
- Safety approval according to IEC/EN/UL 60950-1 (ITE standard) and UL 508 (Industrial standard)

### GENERAL SPECIFICATIONS

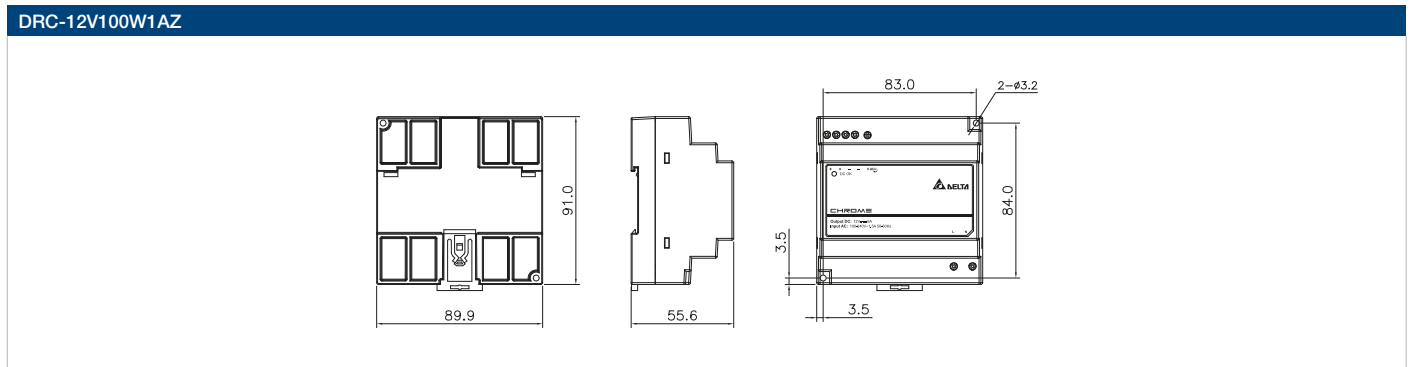
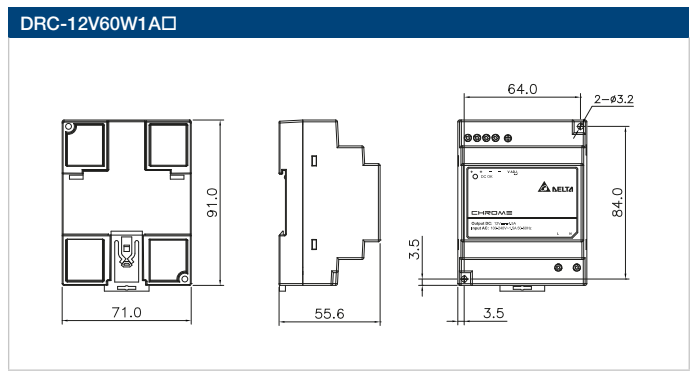
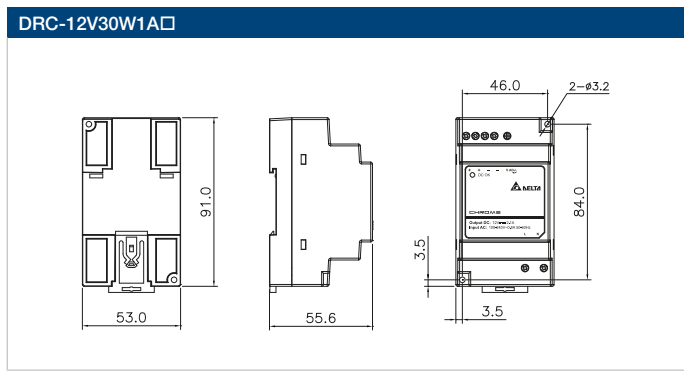
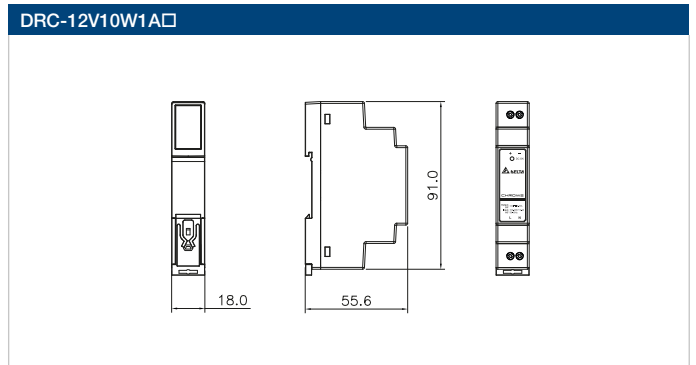
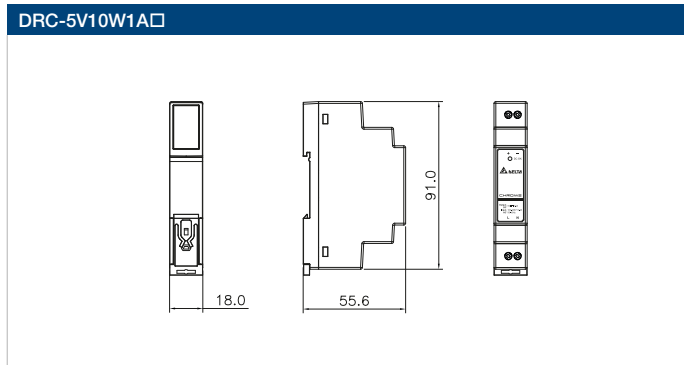
OUTPUT	DRC-5V10W1A□	DRC-12V10W1A□	DRC-12V30W1A□	DRC-12V60W1A□	DRC-12V100W1AZ
Output Voltage	5V	12V	12V	12V	12V
Output Voltage Range	5V	12V	11.5-14.5V	11.5-14.0V	12-14V
Output Current	0-1.5A	0-0.83A	0-2.1A	0-4.5A	0-6.0A
Output Power	7.5W	10W	25.2W	54W	72W
Line Regulation	< 1.0% typ. (@ 90-264Vac, 100% load)				< 0.5% typ. (@ 90-264Vac, 100% load)
Load Regulation	< 2.0% typ. (@ 90-264Vac, 100% load)				< 1.0% typ. (@ 90-264Vac, 0-100% load)
PARD (20MHz)	< 150mVpp				< 100mVpp
Hold-up Time	> 10ms @ 115Vac, > 30ms @ 230Vac	> 10ms @ 115Vac, > 30ms @ 230Vac	> 25ms @ 115Vac, > 30ms @ 230Vac	> 16ms @ 115Vac, > 30ms @ 230Vac	> 20ms @ 115Vac, > 100ms @ 230Vac
<b>INPUT</b>					
Phase Input	Single Phase				
Input Voltage Range	90-264Vac				
Input Frequency	47-63Hz				
Input Current	< 0.3A @ 115Vac, < 0.2A @ 230Vac	< 0.3A @ 115Vac, < 0.2A @ 230Vac	< 0.8A @ 115Vac, < 0.6A @ 230Vac	< 1.5A @ 115Vac, < 0.8A @ 230Vac	< 1.5A @ 115Vac, < 0.9A @ 230Vac
Efficiency <sup>1)</sup> at 100% Load	> 78.0% @ 115Vac, > 77.0% @ 230Vac	> 82.0% @ 115Vac & 230Vac	> 85.0% @ 115Vac & 230Vac	> 86.0% @ 115Vac & 230Vac	
Max Inrush Current (Cold Start)	< 15A @ 115Vac, < 30A @ 230Vac		< 25A @ 115Vac, < 50A @ 230Vac	< 30A @ 115Vac, < 60A @ 230Vac	< 30A @ 115Vac, < 65A @ 230Vac
Power Factor	Conform to EN 61000-3-2				
Leakage Current	< 0.25mA @ 240Vac				< 0.25mA @ 264Vac
<b>MECHANICAL</b>					
Case Cover / Chassis	Plastic				
Dimensions (L x W x D)	91 x 18 x 55.6 mm (3.58" x 0.71" x 2.19")	91 x 18 x 55.6 mm (3.58" x 0.71" x 2.19")	91 x 53 x 55.6 mm (3.58" x 2.09" x 2.19")	91 x 71 x 55.6 mm (3.58" x 2.80" x 2.19")	91 x 89.9 x 55.6 mm (3.58" x 3.54" x 2.19")
Unit Weight	0.06 kg (0.13 lb)	0.06 kg (0.13 lb)	0.14 kg (0.31 lb)	0.22 kg (0.49 lb)	0.36 kg (0.79 lb)
Cooling System	Convection				
Input Terminal	2 Pins (Rated 300V/16A)		2 Pins (Rated 300V/25A)		
Output Terminal	2 Pins (Rated 300V/16A)		4 Pins (Rated 300V/25A)		
Input / Output Wire	AWG 26-12	AWG 26-12	AWG 24-12	AWG 22-12	AWG 20-12
MTBF <sup>2)</sup>	> 500,000 hrs	> 500,000 hrs	> 500,000 hrs	> 500,000 hrs	> 500,000 hrs
<b>ENVIRONMENT</b>					
Operating Temperature	-25°C to +71°C				
Storage Temperature	-25°C to +85°C				-40°C to +85°C
Power De-rating	> 55°C (2.5% / °C)				
Operating Humidity	5 to 95% RH (Non-Condensing)				
Operating Altitude	0 to 2,000 m (0 to 6,560 ft)				

#### Notes

- 1) At 25°C ambient temperature by vertical mounting orientation.
- 2) MTBF as per Telcordia SR-332 (Confidence level: 90%, I/P: 100Vac, O/P: 100% load, Ta: 35°C) for vertical mounting orientation.
- 3) All parameters are specified at 25°C ambient temperature unless otherwise indicated.



## MECHANICAL DRAWINGS



\*Units in mm

# Chrome DIN Rail Power Supply

## 24V Output



# CHROME

### HIGHLIGHTS & FEATURES

- Class II Double Isolation (No earth connection is required)
- Universal AC input voltage range and full power up to 55°C
- Power will not de-rate for the entire input voltage range
- Can be installed in compact cabinets
- NEC Class 2 and Limited Power Source (LPS) approvals
- Conforms to harmonic current IEC/EN 61000-3-2, Class A
- Safety approval according to IEC/EN/UL 60950-1 (ITE standard) and UL 508 (Industrial standard)
- Household appliance approvals IEC/EN 60335-1 (DRC-24V10W1HZ)

### GENERAL SPECIFICATIONS

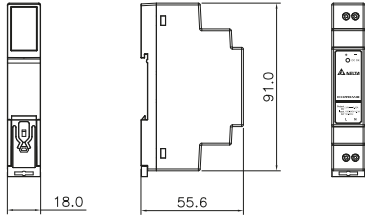
	NEW				
OUTPUT	DRC-24V10W1A□	DRC-24V10W1HZ	DRC-24V30W1A□	DRC-24V60W1A□	DRC-24V100W1A□
Output Voltage	24V	24V	24V	24V	24V
Output Voltage Range	24V	24V	24-28V	24-28V	22-24V
Output Current	0-0.42A	0-0.42A	0-1.25A	0-2.5A	0-3.8A
Output Power	10W	10W	30W	60W	91.2W
Line Regulation	< 1.0% typ. (@ 90-264Vac, 100% load)				
Load Regulation	< 2.0% typ. (@ 90-264Vac, 100% load)				
PARD (20MHz)	< 150mVpp				
Hold-up Time	> 10ms @ 115Vac, > 30ms @ 230Vac		> 25ms @ 115Vac, > 30ms @ 230Vac	> 16ms @ 115Vac, > 30ms @ 230Vac	> 10ms @ 115Vac, > 30ms @ 230Vac
<b>INPUT</b>					
Phase Input	Single Phase				
Input Voltage Range	90-264Vac				90-264Vac (DC input 125-375Vdc)
Input Frequency	47-63Hz				
Input Current	< 0.3A @ 115Vac, < 0.2A @ 230Vac		< 0.8A @ 115Vac, < 0.6A @ 230Vac	< 1.5A @ 115Vac, < 1.0A @ 230Vac	< 2.2A @ 115Vac, < 1.0A @ 230Vac
Efficiency <sup>1)</sup> at 100% Load	> 80.0% @ 115Vac & 230Vac		> 83.0% @ 115Vac & 230Vac	> 86.0% @ 115Vac & 230Vac	> 85.0% @ 115Vac, > 87.0% @ 230Vac
Max Inrush Current (Cold Start)	< 15A @ 115Vac, < 30A @ 230Vac		< 25A @ 115Vac, < 50A @ 230Vac	< 30A @ 115Vac, < 60A @ 230Vac	
Power Factor	Conform to EN 61000-3-2				
Leakage Current	< 0.25mA @ 240Vac				
<b>MECHANICAL</b>					
Case Cover / Chassis	Plastic				
Dimensions (L x W x D)	91 x 18 x 55.6 mm (3.58" x 0.71" x 2.19")	91 x 18 x 55.6 mm (3.58" x 0.71" x 2.19")	91 x 53 x 55.6 mm (3.58" x 2.09" x 2.19")	91 x 71 x 55.6 mm (3.58" x 2.80" x 2.19")	91 x 89.9 x 55.6 mm (3.58" x 3.54" x 2.19")
Unit Weight	0.065 kg (0.14 lb)	0.065 kg (0.14 lb)	0.14 kg (0.31 lb)	0.22 kg (0.49 lb)	0.35 kg (0.77 lb)
Cooling System	Convection				
Input Terminal	2 Pins (Rated 300V/16A)		2 Pins (Rated 300V/25A)	2 Pins (Rated 300V/25A)	2 Pins (Rated 300V/25A)
Output Terminal	2 Pins (Rated 300V/16A)		4 Pins (Rated 300V/25A)	4 Pins (Rated 300V/25A)	4 Pins (Rated 300V/25A)
Input / Output Wire	AWG 26-12		AWG 24-12	AWG 22-12	AWG 24-12
MTBF <sup>2)</sup>	> 500,000 hrs	> 500,000 hrs	> 500,000 hrs	> 500,000 hrs	> 500,000 hrs
<b>ENVIRONMENT</b>					
Operating Temperature	-25°C to +71°C				
Storage Temperature	-25°C to +85°C				
Power De-rating	> 55°C (2.5% / °C)				
Operating Humidity	5 to 95% RH (Non-Condensing)				
Operating Altitude	0 to 2,000 m (0 to 6,560 ft)				

#### Notes

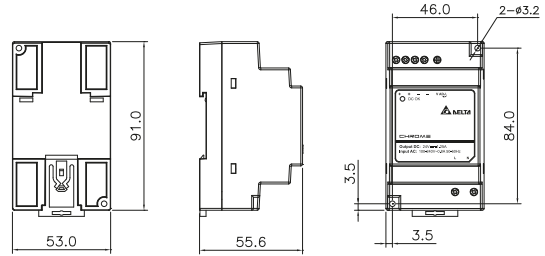
- 1) At 25°C ambient temperature by vertical mounting orientation.
- 2) MTBF as per Telcordia SR-332 (Confidence level: 90%, I/P: 100Vac, O/P: 100% load, Ta: 35°C) for vertical mounting orientation.
- 3) All parameters are specified at 25°C ambient temperature unless otherwise indicated.

## MECHANICAL DRAWINGS

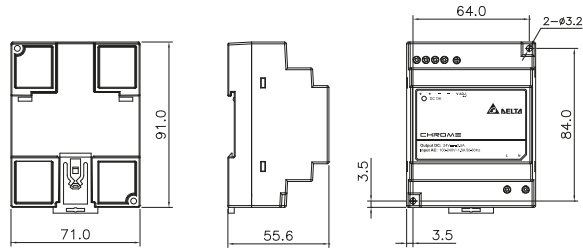
DRC-24V10W1A□, DRC-24V10W1HZ



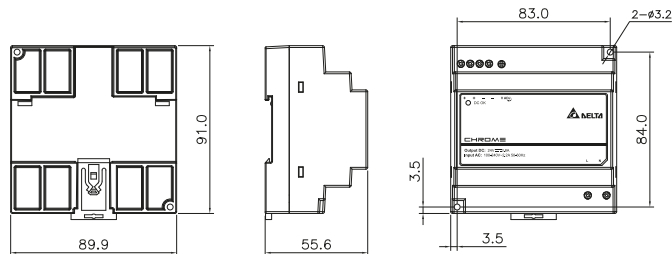
DRC-24V30W1A□



DRC-24V60W1A□



DRC-24V100W1A□



\*Units in mm

# Sync DIN Rail Power Supply

## 5V, 12V Output



sync

### HIGHLIGHTS & FEATURES

- Ultra-compact size and galvanic isolation up to 3.0kVac between input to output and input to ground
- Universal AC input voltage and full power from -10°C to +55°C operation
- Up to 89.0% efficiency
- Low earth leakage current < 0.5mA @ 264Vac
- Built-in DC OK relay contact option available
- Extreme low temperature cold start at -40°C
- NEC Class 2 / Limited Power Source (LPS) certified

### GENERAL SPECIFICATIONS

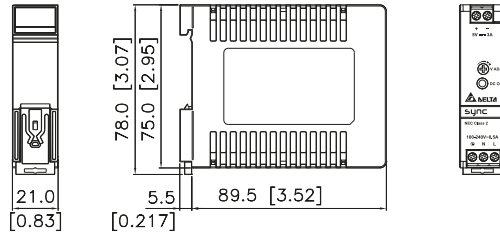
OUTPUT	DRS-5V30W1NZ	DRS-5V50W1A□	DRS-5V50W1N□	DRS-12V50W1N□
Output Voltage	5V	5V	5V	12V
Output Voltage Range	5-5.5V	5-5.5V	5-5.5V	12-15V
Output Current	0-3.0A	0-6.0A	0-5.0A	0-4.0A
Output Power	15W	30W	25W	48W
Line Regulation	< 0.5% (@ 85-264Vac, 100% load)			
Load Regulation	< 1.0% (@ 85-264Vac, 0-100% load)			
PARD (20MHz)	< 75mVpp @ > 0°C to 70°C, < 150mVpp @ 0°C to -20°C	< 50mVpp @ > 0°C to 70°C, < 150mVpp @ 0°C to -20°C		< 50mVpp @ > 0°C to 70°C, < 100mVpp @ 0°C to -20°C
Hold-up Time	> 20ms @ 115Vac, > 100ms @ 230Vac			
<b>INPUT</b>				
Phase Input	Single Phase			
Input Voltage Range	85-264Vac (DC input range 120-375Vdc) <sup>1)</sup>			
Input Frequency	47-63Hz			
Input Current	< 0.40A @ 115Vac, < 0.20A @ 230Vac	< 0.60A @ 115Vac, < 0.40A @ 230Vac		< 0.90A @ 115Vac, < 0.55A @ 230Vac
Efficiency <sup>2)</sup> at 100% Load	> 79.0% @ 115Vac & 230Vac	> 82.0% @ 115Vac & 230Vac		> 88.0% @ 115Vac, > 89.0% @ 230Vac
Max Inrush Current (Cold Start)	< 20A @ 115Vac, < 40A @ 230Vac	< 35A @ 115Vac, < 65A @ 230Vac		< 25A @ 115Vac, < 50A @ 230Vac
Power Factor	Conform to EN 61000-3-2			
Leakage Current	< 0.5mA @ 264Vac	< 0.75mA @ 264Vac		< 0.5mA @ 264Vac
<b>MECHANICAL</b>				
Case Cover / Chassis	Plastic			
Dimensions (L x W x D)	75 x 21 x 89.5 mm (2.95" x 0.83" x 3.52")	75 x 30 x 89.5 mm (2.95" x 1.18" x 3.52")	75 x 30 x 89.5 mm (2.95" x 1.18" x 3.52")	75 x 30 x 89.5 mm (2.95" x 1.18" x 3.52")
Unit Weight	0.11 kg (0.24 lb)	0.16 kg (0.35 lb)	0.16 kg (0.35 lb)	0.18 kg (0.40 lb)
Cooling System	Convection			
Input Terminal	3 Pins (Rated 300V/16A)			
Output Terminal	2 Pins (Rated 300V/16A)	4 Pins (Rated 300V/16A)		
Input / Output Wire	I/P: AWG 22-12, O/P: AWG 20-12	I/P: AWG 22-12, O/P: AWG 18-12	I/P: AWG 22-12, O/P: AWG 18-12	I/P: AWG 22-12, O/P: AWG 20-12
MTBF <sup>3)</sup>	> 700,000 hrs	> 700,000 hrs	> 700,000 hrs	> 700,000 hrs
<b>ENVIRONMENT</b>				
Operating Temperature	-20°C to +70°C			
Storage Temperature	-40°C to +85°C			
Power De-rating	< -10°C (2% / °C), > 55°C (3.33% / °C)			
Operating Humidity	5 to 95% RH (Non-Condensing)			
Operating Altitude	0 to 2,000 m (0 to 6,560 ft)			

#### Notes

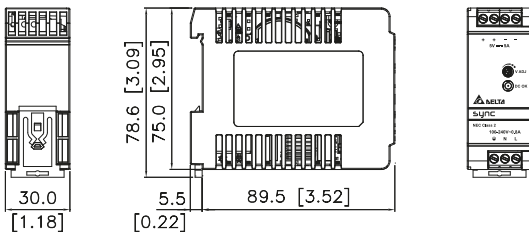
- 1) All models fulfill the test conditions for DC input. DC input safety approval can be obtained upon request.
- 2) At 25°C ambient temperature by vertical mounting orientation.
- 3) MTBF as per Telcordia SR-332 (Confidence level: 90%, I/P: 115Vac & 230Vac, O/P: 100% load) for vertical mounting orientation.
- 4) All parameters are specified at 25°C ambient temperature unless otherwise indicated.

## MECHANICAL DRAWINGS

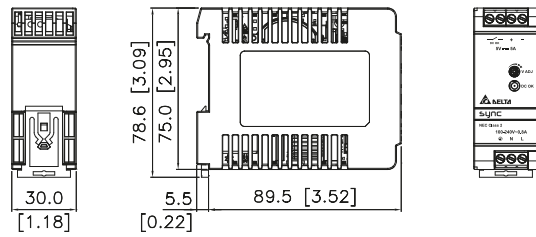
DRS-5V30W1NZ



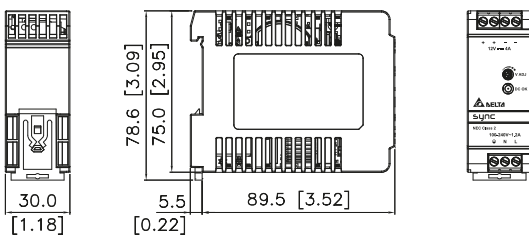
DRS-5V50W1□Z



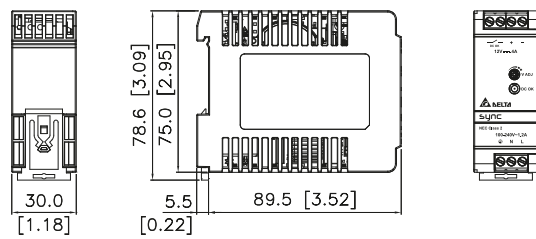
DRS-5V50W1□R



DRS-12V50W1□Z



DRS-12V50W1□R



\*Units in mm [inch]

# Sync DIN Rail Power Supply

## 24V Output



sync

### HIGHLIGHTS & FEATURES

- Ultra-compact size and galvanic isolation up to 3.0kVac between input to output and input to ground
- Universal AC input voltage and full power from -10°C to +55°C operation
- Up to 90.0% efficiency
- Low earth leakage current < 0.5mA @ 264Vac
- Built-in DC OK relay contact option available
- Extreme low temperature cold start at -40°C
- NEC Class 2 / Limited Power Source (LPS) certified

### GENERAL SPECIFICATIONS

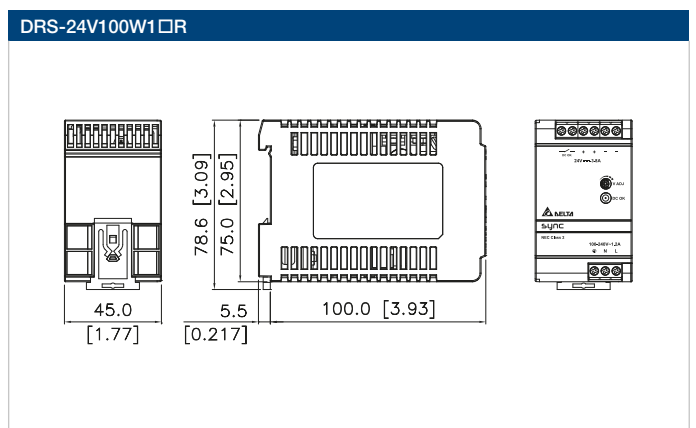
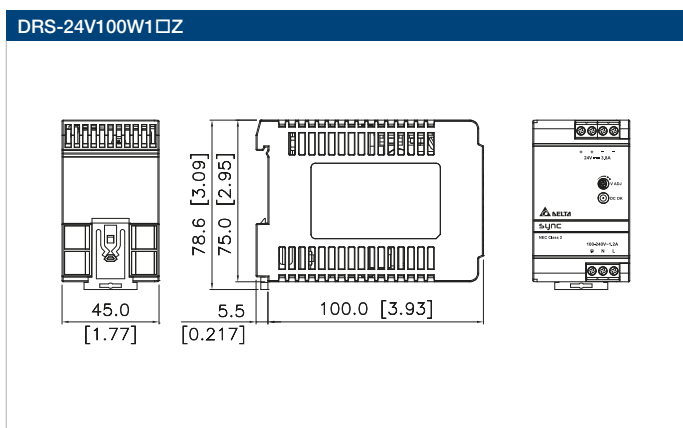
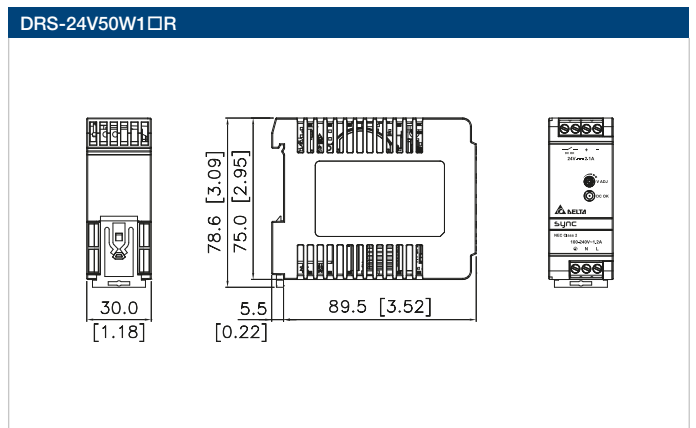
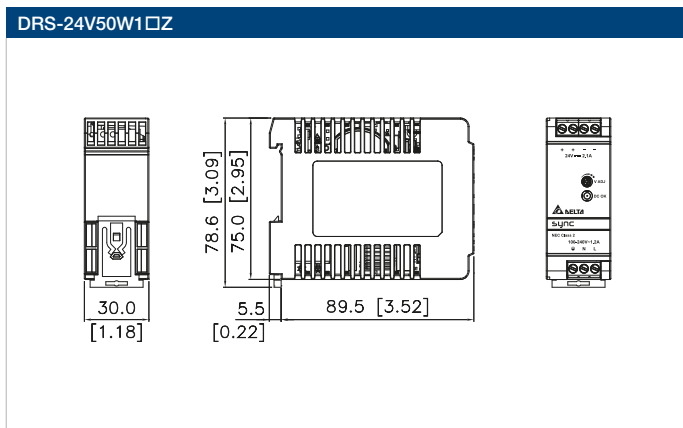
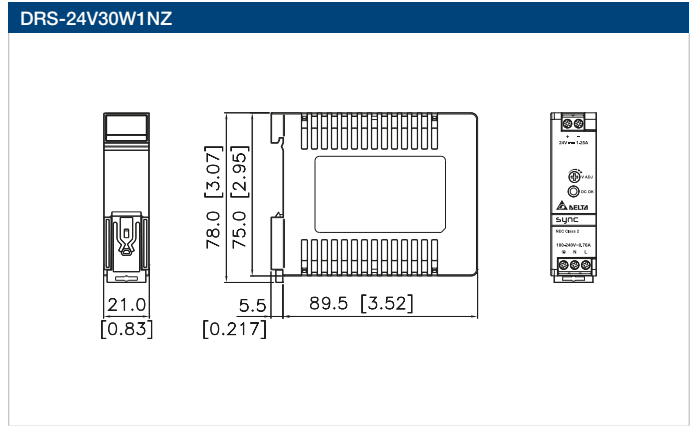
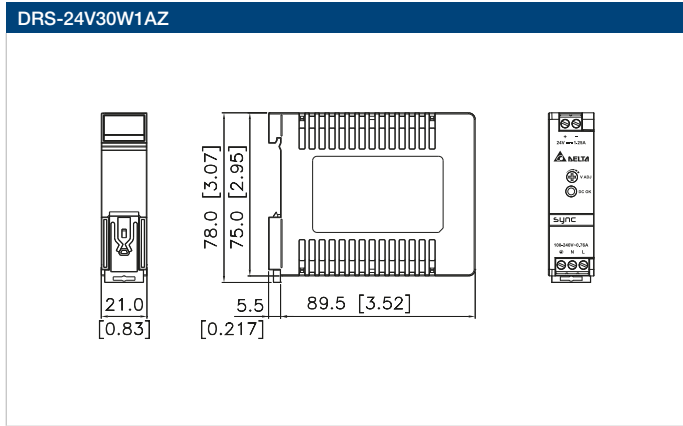
OUTPUT	DRS-24V30W1AZ	DRS-24V30W1NZ	DRS-24V50W1N□	DRS-24V100W1A□	DRS-24V100W1N□
Output Voltage	24V	24V	24V	24V	24V
Output Voltage Range	21.6-26.4V	24-28V	24-28V	24-28V	22-24V
Output Current	0-1.25A	0-1.25A	0-2.1A	0-4.0A	0-3.8A
Output Power	30W	30W	50W	96W	91.2W
Line Regulation	< 1.0%	< 0.5% (@ 85-264Vac, 100% load)			
Load Regulation	< 1.0%	< 1.0% (@ 85-264Vac, 0-100% load)			
PARD (20MHz)	< 150mVpp	< 75mVpp @ > 0°C to 70°C, < 150mVpp @ 0°C to -20°C	< 70mVpp @ > 0°C to 70°C, < 100mVpp @ 0°C to -20°C	< 50mVpp @ > 0°C to 70°C, < 100mVpp @ 0°C to -20°C	
Hold-up Time	> 20ms @ 230Vac	> 20ms @ 115Vac, > 100ms @ 230Vac		> 50ms @ 115Vac & 230Vac	
<b>INPUT</b>					
Phase Input	Single Phase				
Input Voltage Range	85-264Vac	85-264Vac (DC input range 120-375Vdc) <sup>1)</sup>			
Input Frequency	47-63Hz				
Input Current	< 0.80A @ 115Vac, < 0.40A @ 230Vac	< 0.55A @ 115Vac, < 0.35A @ 230Vac	< 0.95A @ 115Vac, < 0.55A @ 230Vac	< 1.20A @ 115Vac, < 0.60A @ 230Vac	
Efficiency <sup>2)</sup> at 100% Load	88.0% typ. @ 230Vac	> 87.5% @ 115Vac, > 88.0% @ 230Vac	> 89.0% @ 115Vac, > 90.0% @ 230Vac	> 89.0% @ 115Vac & 230Vac	
Max Inrush Current (Cold Start)	< 60A @ 230Vac	< 20A @ 115Vac, < 40A @ 230Vac	< 30A @ 115Vac, < 50A @ 230Vac	< 25A @ 115Vac, < 40A @ 230Vac	
Power Factor	Conform to EN 61000-3-2			> 0.97 @ 115Vac, > 0.90 @ 230Vac	
Leakage Current	< 0.5mA @ 240Vac	< 0.5mA @ 264Vac			
<b>MECHANICAL</b>					
Case Cover / Chassis	Plastic				
Dimensions (L x W x D)	75 x 21 x 89.5 mm (2.95" x 0.83" x 3.52")	75 x 21 x 89.5 mm (2.95" x 0.83" x 3.52")	75 x 30 x 89.5 mm (2.95" x 1.18" x 3.52")	75 x 45 x 100 mm (2.95" x 1.77" x 3.94")	75 x 45 x 100 mm (2.95" x 1.77" x 3.94")
Unit Weight	0.10 kg (0.22 lb)	0.11 kg (0.24 lb)	0.18 kg (0.40 lb)	0.325 kg (0.72 lb)	0.325 kg (0.72 lb)
Cooling System	Convection				
Input Terminal	3 Pins (Rated 300V/16A)				
Output Terminal	2 Pins (Rated 300V/16A)		4 Pins (Rated 300V/16A)	DRS-24V100W1□Z: 4 Pins (Rated 300V/16A) DRS-24V100W1□R: 6 Pins (Rated 300V/16A)	
Input / Output Wire	AWG 26-12	I/P: AWG 22-12, O/P: AWG 20-12	I/P: AWG 22-12, O/P: AWG 20-12	I/P: AWG 22-12, O/P: AWG 20-12	I/P: AWG 22-12, O/P: AWG 20-12
MTBF <sup>3)</sup>	> 700,000 hrs	> 700,000 hrs	> 700,000 hrs	> 700,000 hrs	> 700,000 hrs
<b>ENVIRONMENT</b>					
Operating Temperature	-20°C to +70°C				
Storage Temperature	-40°C to +85°C				
Power De-rating	< -10°C (5% / °C), > 55°C (3.33% / °C)	< -10°C (2% / °C), > 55°C (3.33% / °C)			
Operating Humidity	5 to 95% RH (Non-Condensing)				
Operating Altitude	0 to 2,000 m (0 to 6,560 ft)				

#### Notes

- 1) All models fulfill the test conditions for DC input. DC input safety approval can be obtained upon request.
- 2) At 25°C ambient temperature by vertical mounting orientation.
- 3) MTBF as per Telcordia SR-332 (Confidence level: 90%, I/P: 115Vac & 230Vac, O/P: 100% load) for vertical mounting orientation.
- 4) All parameters are specified at 25°C ambient temperature unless otherwise indicated.



## MECHANICAL DRAWINGS



\*Units in mm [inch]

# Standard Products

## DIN Rail Modules

### CliQ<sup>II</sup>



#### Redundancy Modules

The CliQ II series of redundancy modules are designed according to major industrial safety standards. The rugged and compact aluminium casing is shock and vibration resistant according to IEC60068-2-6. The 20A and 40A models offer a wide input and output voltage range of 22-60V and a wide temperature range from -40°C to 80°C which allows the modules to be used in most industrial applications. The modules can be used to operate in 1+1 and N+1 redundant operation. In addition, the DRR modules has built-in DC OK indicators and relay contact to monitor the condition of the two DC inputs.

##### Typical Applications



### CliQ<sup>II</sup>



#### Buffer Modules

Delta CliQ II series of buffer modules offer the most widely used output voltage of 24V and one of the longest minimum buffering time of up to 250ms at maximum load in wide input range from 22.8Vdc to 28.8Vdc. The buffer module utilizes maintenance-free electrolytic capacitors to store energy, thus eliminates the need for periodic replacement as compared to costlier batteries which also have shorter functional life span. The modules come with comprehensive protection features like overvoltage, over current and short circuit protections. The rugged compact aluminium case is shock and vibration resistant according to IEC 60068-2 standard.

##### Typical Applications



### CliQ<sup>II</sup>



#### DC-UPS Module

The CliQ II series of DC-UPS module is designed to support 24Vdc output system with external battery capacity of up to 15AH. The product offers a wide input voltage from 24-28Vdc and a wide operating temperature range from -20°C to +60°C without de-rating the power. For ease of battery condition monitoring, the CliQ II DC-UPS comes with potential free contacts for battery management signals and LED indicator for battery status. The rugged and compact aluminium case is shock and vibration resistant according to IEC 60068-2.

##### Typical Applications



### CHROME



#### DC-UPS Module

Delta Chrome series of DC-UPS modules is designed for use in small cabinets. The modules require less installation space due to its flat body measuring only 55.6mm thick and 91mm tall. The tough plastic case has flame retardant property certified to UL 94V-0 specification. All the models in the series support 24Vdc system with external 12AH battery capacity and comes with potential free contacts for battery management signals and LED indicator for battery status. The highly efficient convection cooling design is certified to major safety approvals including IEC/EN/UL 60950-1 for ITE and UL 508 for Industrial which allow the module to be used reliably in most industrial applications.

##### Typical Applications



# CliQ II DIN Rail Modules

## Redundancy Modules



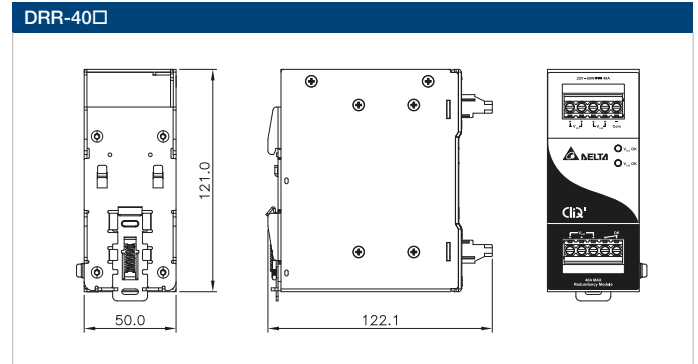
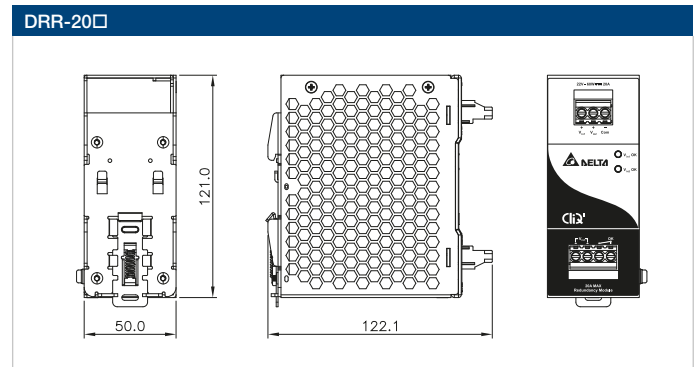
### HIGHLIGHTS & FEATURES

- Wide input and output range of 22-60Vdc
- Very wide operating temperature from -40°C to +80°C
- Built-in 2 channel DC OK signal and alarm relay contact
- Support N+1 Redundancy connection
- Conformal coating on PCBAs to protect against common dust and chemical pollutants
- Hazardous Locations approval to ATEX and Class I, Div 2
- IP20 Certified

### GENERAL SPECIFICATIONS

OUTPUT	DRR-20□	DRR-40□
Output Current	Normal mode = 0-20Amps; Short Circuit or Overload = 25Amps max	Normal mode = 0-40Amps; Short Circuit or Overload = 50Amps max
Voltage Drop ( $V_{in} - V_{out}$ )	Typical 0.65V	
INPUT		
Input Voltage Range	22-60Vdc	
Input Current	(1+1 Redundancy) = Nom. 2 x 12.5Amps (N+1 Redundancy) = Nom. 2 x 10Amps (Single use) = Nom. 20Amps	(1+1 Redundancy) = Nom. 2 x 25Amps (N+1 Redundancy) = Nom. 2 x 20Amps (Single use) = Nom. 40Amps
MECHANICAL		
Case Cover / Chassis	Aluminium	
Dimensions (L x W x D)	121 x 50 x 122.1 mm (4.76" x 1.97" x 4.81")	121 x 50 x 122.1 mm (4.76" x 1.97" x 4.81")
Unit Weight	0.38 kg (0.84 lb)	0.52 kg (1.15 lb)
Cooling System	Convection	
LED Indicators	Green LED DC OK: $V_{in1}$ and $V_{in2}$	
MTBF <sup>1)</sup>	> 800,000 hrs	> 800,000 hrs
ENVIRONMENT		
Operating Temperature	-40°C to +80°C	
Storage Temperature	-40°C to +85°C	
Power De-rating	> 50°C (2.5% / °C)	
Operating Humidity	5 to 95% RH (Non-Condensing)	
Operating Altitude	0 to 2,500 m (0 to 8,200 ft)	

### MECHANICAL DRAWINGS



\*Units in mm

#### Notes

- 1) MTBF as per Telcordia SR-332 (Confidence level: 90%, I/P: 24Vdc, O/P: 100% load) for vertical mounting orientation.
- 2) All parameters are specified at 25°C ambient temperature unless otherwise indicated.

# CliQ II DIN Rail Modules

## Buffer Modules



### HIGHLIGHTS & FEATURES

- Minimum buffering time of:
  - 250ms @ 24V/20A for DRB-24V020AB□
  - 200ms @ 24V/40A for DRB-24V040ABN
- Flexible operating buffering voltage modes:
  - Fixed mode at 22Vdc
  - Dynamic mode for  $V_{in} - 1V$
- Support parallel connection to extend buffering time
- Conformal coating on PCBAs to protect against common dust and chemical pollutants
- Hazardous Locations approval to ATEX and Class I, Div 2 (DRB-24V020ABA)

### GENERAL SPECIFICATIONS

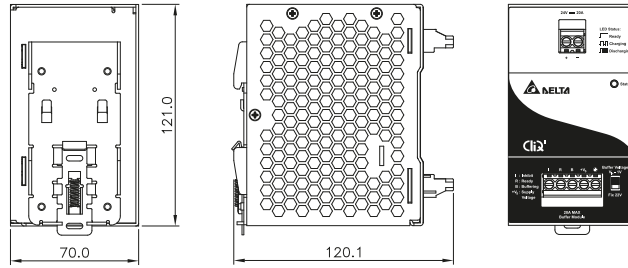
OUTPUT	DRB-24V020AB□	DRB-24V040ABN
Output Voltage	24Vdc typ. (Depends on $V_{in}$ )	24Vdc typ. (Depends on $V_{in}$ )
Output Voltage Range	22-28V (Switch = "Fix 22V" buffering starts if terminal voltage falls below 22V) (Switch = " $V_{in} - 1V$ " buffering starts if terminal voltage is decreased by more than 1V)	
Output Current	20.0A Max	40.0A Max
PARD (20MHz)	< 200mVpp, Buffering Mode	< 350mVpp, Buffering Mode
Buffer Time	> 250ms @ 24V/20A load, > 5s @ 24V/1A load	> 200ms @ 24V/40A load, > 8s @ 24V/1A load
INPUT		
Input Voltage Range	22.8-28.8Vdc	
Input Current	Charging Mode: < 0.6A	Charging Mode: < 0.6A
Input Power	2.5W average (Standby Mode)	
Charging Time	< 30s	< 40s
Polarity Protection	Yes	Yes
MECHANICAL		
Case Cover / Chassis	Aluminium	Aluminium
Dimensions (L x W x D)	121 x 70 x 120.1 mm (4.76" x 2.76" x 4.73")	121 x 70 x 120.1 mm (4.76" x 2.76" x 4.73")
Unit Weight	0.76 kg (1.68 lb)	0.90 kg (1.98 lb)
Cooling System	Convection	
LED Indicators	Green LED Off = Unit is discharged or $V_{in} < 22Vdc$ Green LED On = Unit is fully charged (Ready) Green LED Flashing Slowly (1Hz) = Unit is charging Green LED Flashing Quickly (10Hz) = Unit is discharging (Buffering)	
Input / Output Terminal	2 Pins (Rated 300V/30A)	4 Pins (Rated 300V/30A)
Signal Terminal	5 Pins (Rated 300V/30A)	
Input / Output Wire	AWG 12-10	AWG 12-10
Signal Wire	AWG 24-10	AWG 24-10
MTBF <sup>1)</sup>	> 800,000 hrs	> 800,000 hrs
SAFETY / ENVIRONMENT		
Operating Temperature	-25°C to +75°C	
Storage Temperature	-25°C to +85°C	
Power De-rating	> 70°C (5% / °C)	
Operating Humidity	5 to 95% RH (Non-Condensing)	
Operating Altitude	0 to 2,500 m (0 to 8,200 ft)	

#### Notes

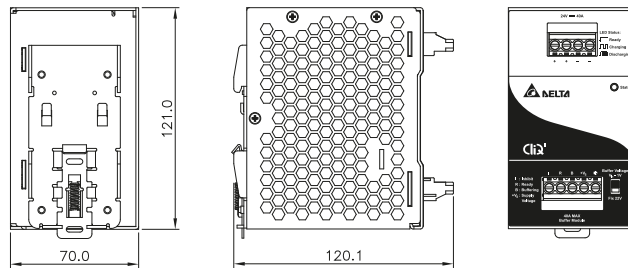
- 1) MTBF as per Telcordia SR-332 (Confidence level: 90%, I/P: 24Vdc, O/P: 100% load) for vertical mounting orientation.
- 2) All parameters are specified at 25°C ambient temperature unless otherwise indicated.

## MECHANICAL DRAWINGS

DRB-24V020AB□



DRB-24V040ABN



\*Units in mm

# CliQ II DIN Rail Modules

## DC-UPS Module



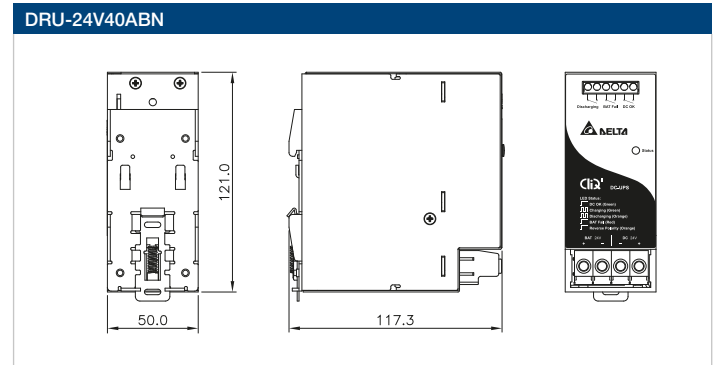
### HIGHLIGHTS & FEATURES

- Full corrosion resistant aluminium casing
- Suitable for 24V system up to 40A
- Built-in diagnostic monitoring for DC OK, Discharge and Battery Fail by relay contacts
- LED indicator for DC OK, Battery Charging, Battery Discharging, Battery Fail and Battery Reverse Polarity
- High MTBF > 500,000 hrs per Telcordia SR-332
- Conformal coating option on PCBAs to protect against common dust and chemical pollutants

### GENERAL SPECIFICATIONS

OUTPUT	DRU-24V40ABN
Output Voltage Range	23-28Vdc
Output Current	40.0A Max
Output Power	960W Max
INPUT	
Input Voltage Range	24-28Vdc
Input Current	Charging Mode: 2.0A ± 1.0A
Charging Time	< 3hr ± 1 hr (for battery 24V/15AH)
Efficiency	Charging Mode: > 70.0% Buffering Mode: > 99.0%
MECHANICAL	
Case Cover / Chassis	Aluminium
Dimensions (L x W x D)	121 x 50 x 117.3 mm (4.76" x 1.97" x 4.62")
Unit Weight	0.60 kg (1.32 lb)
Cooling System	Convection
LED Indicators	Green LED ON = Battery is fully charged Green LED Flashing = Battery is charging Orange LED ON = Battery 24V or DC 24V reverse polarity Orange LED Flashing = Battery is discharging Red LED ON = Battery fail (no battery is connected)
Input / Output Terminal	4 Pins (Rated 600V/60A)
Signal Terminal	6 Pins (Rated 300V/27A)
Input / Output Wire	AWG 12-6 (Load: 0-20A) AWG 8-6 (Load: 20-40A)
Signal Wire	AWG 24-12
MTBF <sup>1)</sup>	> 500,000 hrs
ENVIRONMENT	
Operating Temperature	-20°C to +60°C
Storage Temperature	-40°C to +85°C
Operating Humidity	5 to 95% RH (Non-Condensing)
Operating Altitude	0 to 3,000 m (0 to 9,840 ft)

### MECHANICAL DRAWINGS



\*Units in mm

#### Notes

- 1) MTBF as per Telcordia SR-332 (Confidence level: 90%, I/P: 24Vdc, O/P: 100% load) for vertical mounting orientation.
- 2) All parameters are specified at 25°C ambient temperature unless otherwise indicated.



# Chrome DIN Rail Module

## DC-UPS Module

# CHROME



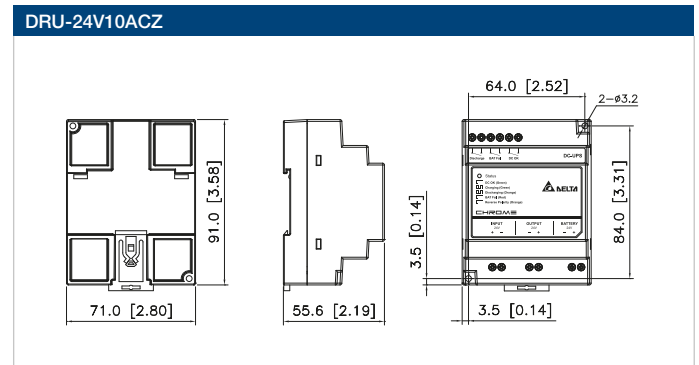
### HIGHLIGHTS & FEATURES

- Suitable for 24V system up to 10A
- Zero switch over time from loss of DC input to battery operation
- Built-in diagnostic monitoring for DC OK, Discharge and Battery Fail by relay contacts
- Full power for the entire temperature range from -20°C to +60°C
- LED indicator for DC OK, Battery Charging, Battery Discharging, Battery Fail and Battery Reverse Polarity
- High MTBF > 500,000 hrs as per Telcordia SR-332

### GENERAL SPECIFICATIONS

COMING SOON	
<b>OUTPUT</b>	<b>DRU-24V10ACZ</b>
Output Voltage Range	23-28Vdc
Output Current	10.0A Max
Output Power	240W Max
<b>INPUT</b>	
Input Voltage Range	24-28Vdc
Input Current	Charging Mode: 0.5A ± 0.1A
Charging Time	< 25hr ± 5 hr (for battery 24V/12AH)
Efficiency	Charging Mode: > 70.0% Buffering Mode: > 99.0%
<b>MECHANICAL</b>	
Case Cover / Chassis	Plastic
Dimensions (L x W x D)	91 x 71 x 55.6 mm (3.58" x 2.80" x 2.19")
Unit Weight	0.14 kg (0.31 lb)
Cooling System	Convection
LED Indicators	Green LED ON = Battery is fully charged Green LED Flashing = Battery is charging Orange LED ON = Battery 24V or DC 24V reverse polarity Orange LED Flashing = Battery is discharging Red LED ON = Battery fail (no battery is connected)
Input / Output Terminal	6 Pins (Rated 300V/25A)
Signal Terminal	6 Pins (Rated 300V/25A)
Input / Output Wire	TBA
Signal Wire	AWG 24-12
MTBF <sup>1)</sup>	> 500,000 hrs
<b>ENVIRONMENT</b>	
Operating Temperature	-20°C to +60°C
Storage Temperature	-40°C to +85°C
Operating Humidity	5 to 95% RH (Non-Condensing)
Operating Altitude	0 to 3,000 m (0 to 9,840 ft)

### MECHANICAL DRAWINGS



\*Units in mm [inch]

#### Notes

- 1) MTBF as per Telcordia SR-332 (Confidence level: 90%, I/P: 24Vdc, O/P: 100% load) for vertical mounting orientation.
- 2) All parameters are specified at 25°C ambient temperature unless otherwise indicated.

# Standard Products

## Panel Mount Power Supply

### PMC



The PMC panel mount power supply series offers nominal output voltages of 5V, 12V, 24V, 48V and dual output of 24V/5V. These single phase power supplies have wide operating temperature range of -10°C to +70°C and a highly dependable minimum hold-up time. The lightweight design is able to withstand harsh industrial environments and is encased in a full corrosion resistant aluminium casing except for the 5V/15W and 24V/600W models. In addition to overvoltage, over temperature and overcurrent protections, the highly reliable PMC series come with universal AC input and the power will not de-rate for the entire input voltage range. Most PMC power supplies conform to IEC/EN 61000-3-2 standards.

#### Typical Applications



### PMF



The PMF panel mount power supply series currently offers nominal output voltages of 24V with power rating at 200W, 240W and 320W; 4.2V at 231W and 5V at 275W. The products come with universal AC input from 85Vac to 264Vac and wide operating temperature of -10°C to +70°C. The built-in PFC provides high power factor which is greater than 0.93 and conforms to harmonic current IEC/EN 61000-3-2, Class A and Class D. In addition to features like overvoltage and overcurrent protections, the PMF series can meet the price demand of cost competitive markets without compromising the quality of the components. This versatile series has two different connector options (Terminal Block and Front Face) to satisfy different application needs. Remote ON/OFF feature is also available for this series.

#### Typical Applications



### PMH



Delta PMH panel mount power supply series is designed for use in household application and has wide operating temperature range of -30°C to +70°C. The product comes with universal AC input encased in a full corrosion resistant and lightweight aluminium body that can fit into compact household equipment enclosures. The PMH series complies with EN 60335-1 (Safety for household and similar electrical appliances); EN 61558-1 (Safety of power transformers, power supplies, reactors and similar products); EN 55014 (Emission for household appliances, electric tools and similar apparatus) and IEC/EN/UL 60950-1 (Safety for information technology equipment).

#### Typical Applications



All Delta power supplies are fully compliant with RoHS Directive 2011/65/EU for environmental protection. For more information or enquiries, please do not hesitate to contact your local Delta Electronics distributor or visit [www.DeltaPSU.com](http://www.DeltaPSU.com).

# PMU



AR

The PMU series of panel mount power supply with integrated DC-UPS function prevents system downtime for the customer in the event of main power disruption or being disconnected unexpectedly. The DC-UPS function will switch to battery operation without interruption to increase the operational reliability of the critical mission. The monitoring signals for AC OK, DC OK and Battery Low will alert the user of any failure through TTL open collector as option. The convection-cooled single phase power supply has a wide operating temperature range from -20°C to +70°C and is suitable for security system, access control, automatic doors, alarm system, etc. In addition to features like overvoltage, overload, over temperature, short circuit and deep discharge protections and battery polarity protections, the PMU series can also be converted into L Frame platform for different application needs.

### Typical Applications



# PMT



AR

The PMT panel mount power supply series offers nominal output voltages of 4.2V, 5V, 12V, 15V, 24V, 36V, 48V and dual output of 12V/5V and 24V/5V with a wide operating temperature range from -10°C to +70°C and can withstand shock and vibration according to IEC 60068-2. In addition to features like overvoltage and overcurrent protections, Delta's PMT series of panel mount power supplies can meet the price demand of cost competitive markets without compromising the quality of the components and product specifications. This versatile series has three different connector options (Terminal Block, Front Face and Harness) and can also be converted into L Frame (PML) or Open Frame (PMB) platform to satisfy different application needs.

### Typical Applications



# PMR



AR

The PMR panel mount power supply series offers nominal output voltage of 4.2V and 5V with a wide operating temperature range from -10°C to +70°C and can withstand shock and vibration according to IEC 60068-2. The product comes with universal AC input voltage range at 88Vac to 264Vac. At only 30mm height and encased in a full corrosion resistant aluminium casing, the PMR series is made for installation in narrow space while its built-in active PFC circuit provides high power factor values and conforms to harmonic current emission according to IEC/EN 61000-3-2.

### Typical Applications



## Connector Options



1



2



3



4

1. Terminal Block connector
2. IP20 connector
3. Front Face connector
4. Harness connector

\*Please refer the Model Numbering on pages 10-15.

# PMC Panel Mount Power Supply

## 5V Output



# PMC

### HIGHLIGHTS & FEATURES

- Universal AC input voltage range
- Power will not de-rate for the entire input voltage range
- Full corrosion resistant aluminium casing (except PMC-05V015W1AA)
- Conforms to harmonic current IEC/EN 61000-3-2, Class A
- High MTBF > 700,000 hrs per Telcordia SR-332
- Safety approval according to IEC/EN/UL 60950-1 (ITE standard) and EMI to EN 55032, Class B

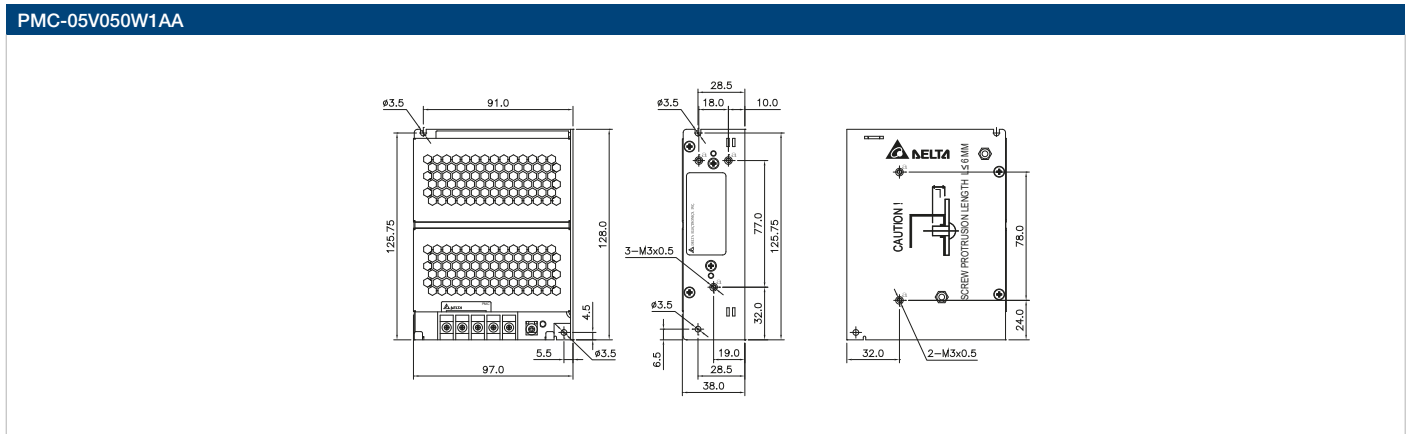
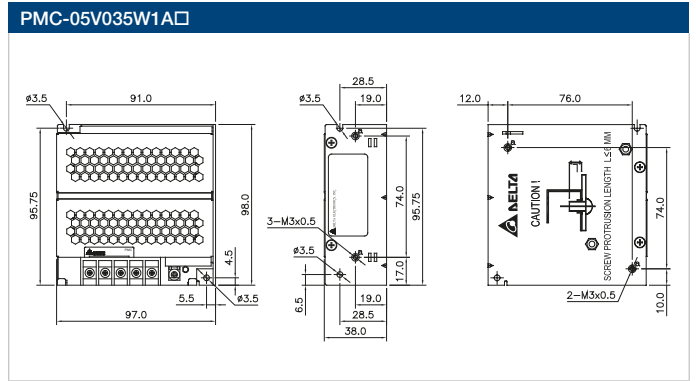
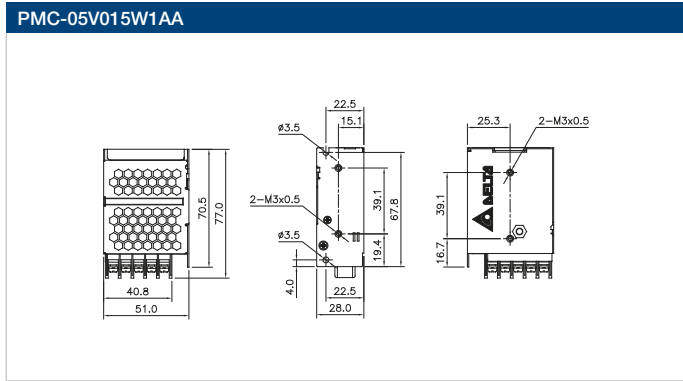
### GENERAL SPECIFICATIONS

OUTPUT	PMC-05V015W1AA	PMC-05V035W1A□	PMC-05V050W1AA
Output Voltage	5V	5V	5V
Output Voltage Range	4.75-5.50V	4.75-5.50V	4.75-5.50V
Output Current	0-3.0A	0-7.0A	0-10.0A
Output Power	15W	35W	50W
Line Regulation	< 0.5% typ. (@ 85-264Vac input, 100% load)		
Load Regulation	< 1.0% typ. (@ 85-264Vac input, 0-100% load)		
PARD (20MHz)	< 70mV/pp		
Hold-up Time	> 15ms @ 115Vac, > 80ms @ 230Vac		
<b>INPUT</b>			
Phase Input	Single Phase		
Input Voltage Range	85-264Vac (DC input range 125-375Vdc) <sup>1)</sup>		
Input Frequency	47-63Hz		
Input Current	< 0.32A @ 115Vac, < 0.22A @ 230Vac	< 0.90A @ 115Vac, < 0.80A @ 230Vac	< 1.10A @ 115Vac, < 0.70A @ 230Vac
Efficiency <sup>2)</sup> at 100% Load	> 79.0% @ 115Vac & 230Vac	> 78.0% @ 115Vac, > 79.0% @ 230Vac	> 79.0% @ 115Vac & 230Vac
Max Inrush Current (Cold Start)	< 30A @ 115Vac, < 65A @ 230Vac	< 30A @ 115Vac, < 60A @ 230Vac	< 30A @ 115Vac, < 65A @ 230Vac
Power Factor	Conform to EN 61000-3-2		
Leakage Current	< 1mA @ 240Vac		
<b>MECHANICAL</b>			
Case Cover / Chassis	SECC Steel	Aluminium	
Dimensions (L x W x D)	77 x 51 x 28 mm (3.03" x 2.01" x 1.10")	98 x 97 x 38 mm (3.86" x 3.82" x 1.50")	128 x 97 x 38 mm (5.04" x 3.82" x 1.50")
Unit Weight	0.16 kg (0.35 lb)	0.18 kg (0.40 lb)	0.26 kg (0.57 lb)
Cooling System	Convection		
MTBF <sup>3)</sup>	> 700,000 hrs	> 700,000 hrs	> 700,000 hrs
<b>ENVIRONMENT</b>			
Operating Temperature	-10°C to +70°C		
Storage Temperature	-25°C to +85°C		
Power De-rating	> 60°C (2.5% / °C)	> 50°C (2.5% / °C)	
Operating Humidity	5 to 95% RH (Non-Condensing)		
Operating Altitude	0 to 3,000 m (0 to 9,840 ft)		

#### Notes

- 1) All models are certified for DC input except PMC-05V015W1AA which still fulfills the test conditions of this range. DC input safety approval can be obtained upon request.
- 2) At 25°C ambient temperature by vertical mounting orientation.
- 3) MTBF as per Telcordia SR-332 (Confidence level: 90%, I/P: 115Vac, O/P: 100% load) for vertical mounting orientation.
- 4) All parameters are specified at 25°C ambient temperature unless otherwise indicated.

## MECHANICAL DRAWINGS



\*Units in mm

	PMC-05V015W1AA	PMC-05V035W1A□	PMC-05V050W1AA
Input / Output Terminal	M3.5 x 5 Pins (Rated 300V/15A)	<ul style="list-style-type: none"> <li>PMC-05V035W1AA: M3.5 x 5 Pins (Rated 300V/15A)</li> <li>PMC-05V035W1AJ: M3.5 x 5 Pins (Rated 300V/20A)</li> </ul>	M3.5 x 5 Pins (Rated 300V/15A)
Input / Output Wire	AWG 22-16	<ul style="list-style-type: none"> <li>PMC-05V035W1AA: AWG 18-14</li> <li>PMC-05V035W1AJ: AWG 18-12</li> </ul>	I/P: AWG 18-14 O/P: AWG 16-14



# PMC Panel Mount Power Supply

## 12V Output



# PMC

### HIGHLIGHTS & FEATURES

- Universal AC input voltage range
- Power will not de-rate for the entire input voltage range
- Full corrosion resistant aluminium casing
- Conforms to harmonic current IEC/EN 61000-3-2, Class A
- High MTBF > 700,000 hrs per Telcordia SR-332
- Safety approval according to IEC/EN/UL 60950-1 (ITE standard) and EMI to EN 55032, Class B
- Also available: IP20 connector

### GENERAL SPECIFICATIONS

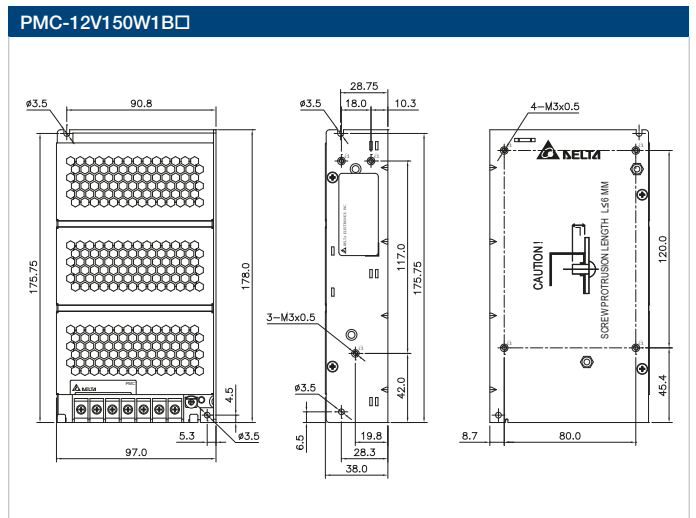
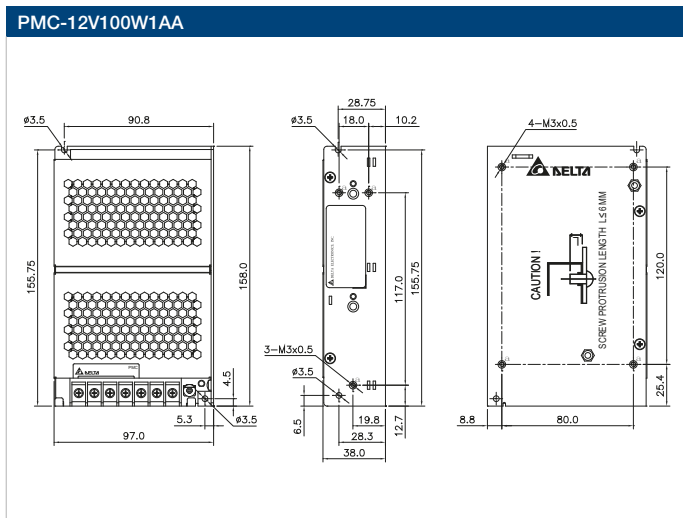
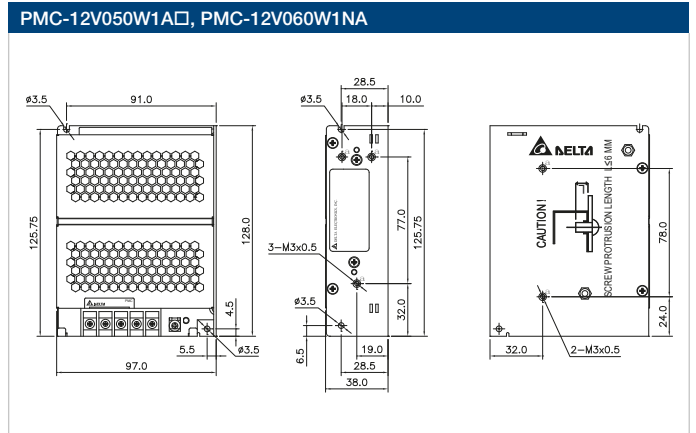
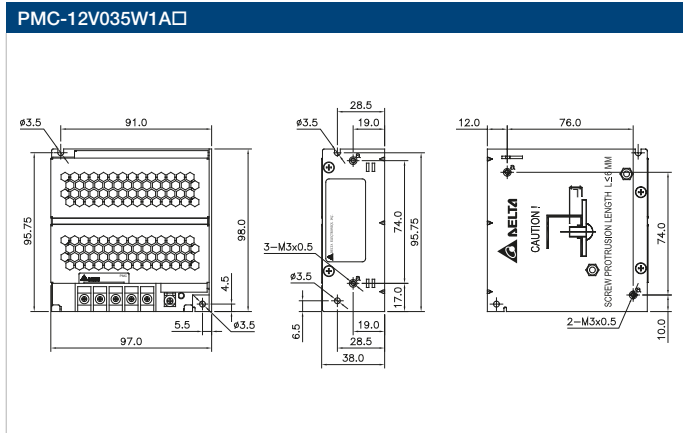
OUTPUT	PMC-12V035W1A□	PMC-12V050W1A□	PMC-12V060W1NA	PMC-12V100W1AA	PMC-12V150W1B□
Output Voltage	12V	12V	12V	12V	12V
Output Voltage Range	11-14V	11-14V	12-14V	11-14V	11-14V
Output Current	0-3.0A	0-4.17A	0-5.0A	0-8.33A	0-12.5A
Output Power	35W	50W	60W	100W	150W
Line Regulation	< 0.5% typ. (@ 85-264Vac input, 100% load)				
Load Regulation	< 1.0% typ. (@ 85-264Vac input, 0-100% load)				
PARD (20MHz)	< 100mVpp				
Hold-up Time	> 15ms @ 115Vac, > 80ms @ 230Vac				> 30ms @ 115Vac & 230Vac
<b>INPUT</b>					
Phase Input	Single Phase				
Input Voltage Range	85-264Vac (DC input range 125-375Vdc) <sup>1)</sup>				
Input Frequency	47-63Hz				
Input Current	< 0.75A @ 115Vac, < 0.50A @ 230Vac	< 1.10A @ 115Vac, < 0.70A @ 230Vac	< 1.35A @ 115Vac, < 0.90A @ 230Vac	< 2.00A @ 115Vac, < 1.10A @ 230Vac	< 1.70A @ 115Vac, < 1.00A @ 230Vac
Efficiency <sup>2)</sup> at 100% Load	> 85.0% @ 115Vac, > 86.0% @ 230Vac	> 84.0% @ 115Vac & > 83.0% @ 230Vac	> 86.0% @ 115Vac, > 87.0% @ 230Vac	> 84.0% @ 115Vac, > 86.0% @ 230Vac	> 87.0% @ 115Vac, > 88.0% @ 230Vac
Max Inrush Current (Cold Start)	< 30A @ 115Vac, < 60A @ 230Vac	< 30A @ 115Vac, < 65A @ 230Vac	< 50A @ 115Vac, < 100A @ 230Vac	< 60A @ 115Vac, < 130A @ 230Vac	< 60A @ 115Vac, < 120A @ 230Vac
Power Factor	Conform to EN 61000-3-2				> 0.99 @ 115Vac, > 0.90 @ 230Vac
Leakage Current	< 1mA @ 240Vac				
<b>MECHANICAL</b>					
Case Cover / Chassis	Aluminium				
Dimensions (L x W x D)	98 x 97 x 38 mm (3.86" x 3.82" x 1.50")	128 x 97 x 38 mm (5.04" x 3.82" x 1.50")	128 x 97 x 38 mm (5.04" x 3.82" x 1.50")	158 x 97 x 38 mm (6.22" x 3.82" x 1.50")	178 x 97 x 38 mm (7.01" x 3.82" x 1.50")
Unit Weight	0.21 kg (0.46 lb)	0.26 kg (0.57 lb)	0.28 kg (0.62 lb)	0.45 kg (0.99 lb)	0.54 kg (1.19 lb)
Cooling System	Convection				
MTBF <sup>3)</sup>	> 700,000 hrs	> 700,000 hrs	> 700,000 hrs	> 700,000 hrs	> 700,000 hrs
<b>ENVIRONMENT</b>					
Operating Temperature	-10°C to +70°C		-20°C to +70°C		-10°C to +70°C
Storage Temperature	-25°C to +85°C				
Power De-rating	> 50°C (2.5% / °C)		< -10°C (2% / °C), > 50°C (2.5% / °C)		> 50°C (2.5% / °C)
Operating Humidity	5 to 95% RH (Non-Condensing)				
Operating Altitude	0 to 3,000 m (0 to 9,840 ft)				

#### Notes

- 1) All models are certified for DC input except PMC-12V150W1B□ which still fulfills the test conditions of this range. DC input safety approval can be obtained upon request.
- 2) At 25°C ambient temperature by vertical mounting orientation.
- 3) MTBF as per Telcordia SR-332 (Confidence level: 90%, I/P: 115Vac, O/P: 100% load) for vertical mounting orientation.
- 4) All parameters are specified at 25°C ambient temperature unless otherwise indicated.



## MECHANICAL DRAWINGS



\*Units in mm

	PMC-12V035W1A□	PMC-12V050W1A□	PMC-12V060W1NA	PMC-12V100W1AA	PMC-12V150W1B□
Input / Output Terminal	<ul style="list-style-type: none"> <li>PMC-12V035W1AA: M3.5 x 5 Pins (Rated 300V/15A)</li> <li>PMC-12V035W1AJ: M3.5 x 5 Pins (Rated 300V/20A)</li> </ul>	<ul style="list-style-type: none"> <li>PMC-12V050W1AA: M3.5 x 5 Pins (Rated 300V/15A)</li> <li>PMC-12V050W1AJ: M3.5 x 5 Pins (Rated 300V/20A)</li> </ul>	M3.5 x 5 Pins (Rated 300V/15A)	M3.5 x 7 Pins (Rated 300V/15A)	<ul style="list-style-type: none"> <li>PMC-12V150W1BA: M3.5 x 7 Pins (Rated 300V/15A)</li> <li>PMC-12V150W1BJ: M3.5 x 7 Pins (Rated 300V/20A)</li> <li>PMC-12V150W1BL: M3.5 x 7 Pins (Rated 300V/15A)</li> </ul>
Input / Output Wire	<ul style="list-style-type: none"> <li>PMC-12V035W1AA: AWG 22-14</li> <li>PMC-12V035W1AJ: AWG 22-12</li> </ul>	<ul style="list-style-type: none"> <li>PMC-12V050W1AA: AWG 22-14</li> <li>PMC-12V050W1AJ: AWG 22-12</li> </ul>	AWG 22-14	AWG 22-14	<ul style="list-style-type: none"> <li>PMC-12V150W1BA: AWG 18-14</li> <li>PMC-12V150W1BJ: AWG 18-12</li> <li>PMC-12V150W1BL: AWG 18-14</li> </ul>

# PMC Panel Mount Power Supply

## 24V Output



# PMC

### HIGHLIGHTS & FEATURES

- Universal AC input voltage range
- Power will not de-rate for the entire input voltage range
- Full corrosion resistant aluminium casing
- Conforms to harmonic current IEC/EN 61000-3-2, Class A
- High MTBF > 700,000 hrs per Telcordia SR-332
- Safety approval according to IEC/EN/UL 60950-1 (ITE standard) and EMI to EN 55032, Class B
- Also available: IP20 connector

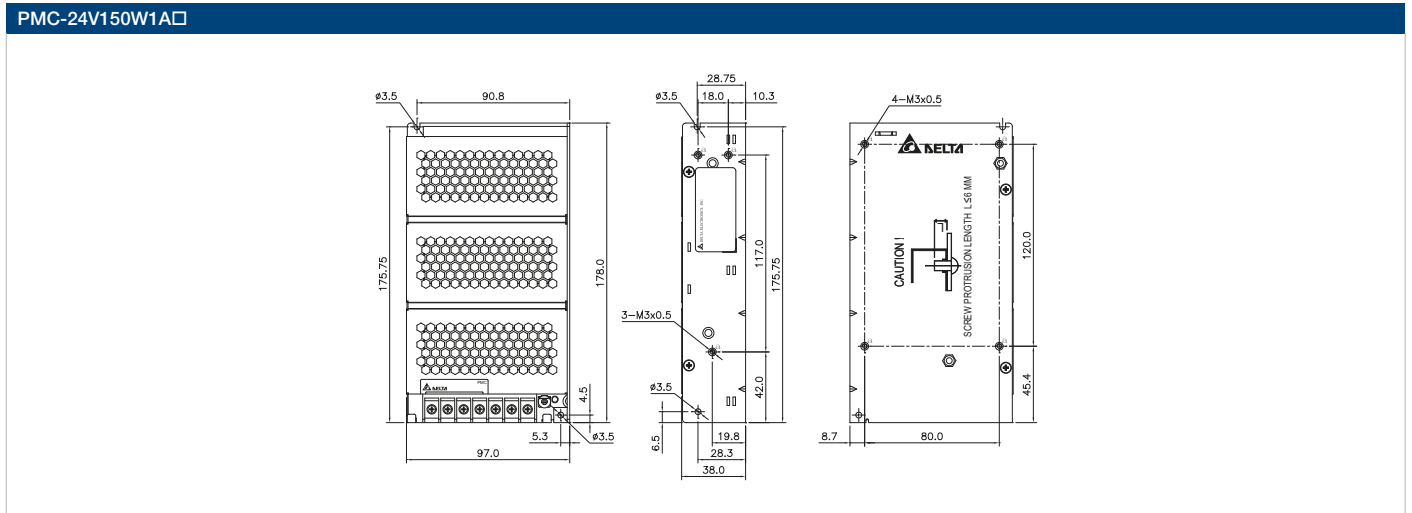
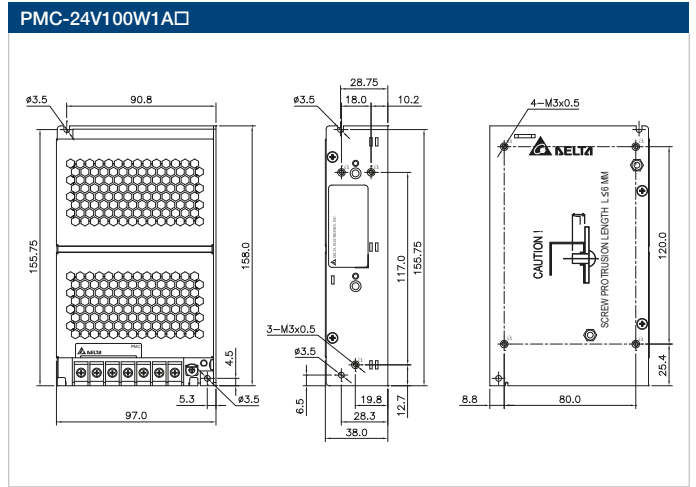
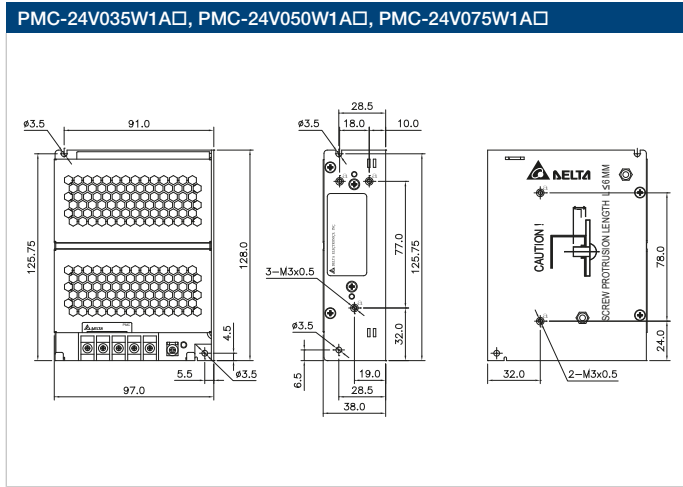
### GENERAL SPECIFICATIONS

OUTPUT	PMC-24V035W1A□	PMC-24V050W1A□	PMC-24V075W1A□	PMC-24V100W1A□	PMC-24V150W1A□
Output Voltage	24V	24V	24V	24V	24V
Output Voltage Range	22-28V	22-28V	22-28V	22-28V	22-28V
Output Current	0-1.46A	0-2.1A	0-3.12A	0-4.17A	0-6.25A
Output Power	35W	50W	75W	100W	150W
Line Regulation	< 0.5% typ. (@ 85-264Vac input, 100% load)				
Load Regulation	< 1.0% typ. (@ 85-264Vac input, 0-100% load)				
PARD (20MHz)	< 150mVpp		< 100mVpp	< 150mVpp	< 100mVpp
Hold-up Time	> 15ms @ 115Vac, > 80ms @ 230Vac	> 15ms @ 115Vac, > 90ms @ 230Vac			> 15ms @ 115Vac, > 80ms @ 230Vac
<b>INPUT</b>					
Phase Input	Single Phase				
Input Voltage Range	85-264Vac (DC input range 125-375Vdc) <sup>1)</sup>				
Input Frequency	47-63Hz				
Input Current	< 0.75A @ 115Vac, < 0.50A @ 230Vac	< 1.10A @ 115Vac, < 0.70A @ 230Vac	< 1.50A @ 115Vac, < 1.00A @ 230Vac	< 2.00A @ 115Vac, < 1.10A @ 230Vac	< 3.10A @ 115Vac, < 2.00A @ 230Vac
Efficiency <sup>2)</sup> at 100% Load	> 85.0% @ 115Vac & > 230Vac	> 86.0% @ 115Vac & 230Vac			> 87.0% @ 115Vac, > 88.0% @ 230Vac
Max Inrush Current (Cold Start)	< 30A @ 115Vac, < 60A @ 230Vac		< 40A @ 115Vac, < 80A @ 230Vac	< 50A @ 115Vac, < 100A @ 230Vac	< 60A @ 115Vac, < 120A @ 230Vac
Power Factor	Conform to EN 61000-3-2				NA
Leakage Current	< 1mA @ 240Vac				
<b>MECHANICAL</b>					
Case Cover / Chassis	Aluminium				
Dimensions (L x W x D)	128 x 97 x 38 mm (5.04" x 3.82" x 1.50")	128 x 97 x 38 mm (5.04" x 3.82" x 1.50")	128 x 97 x 38 mm (5.04" x 3.82" x 1.50")	158 x 97 x 38 mm (6.22" x 3.82" x 1.50")	178 x 97 x 38 mm (7.01" x 3.82" x 1.50")
Unit Weight	0.24 kg (0.53 lb)	0.26 kg (0.57 lb)	0.30 kg (0.66 lb)	0.41 kg (0.90 lb)	0.48 kg (1.06 lb)
Cooling System	Convection				
MTBF <sup>3)</sup>	> 700,000 hrs	> 700,000 hrs	> 700,000 hrs	> 700,000 hrs	> 700,000 hrs
<b>ENVIRONMENT</b>					
Operating Temperature	-10°C to +70°C				
Storage Temperature	-25°C to +85°C				
Power De-rating	> 50°C (2.5% / °C)				
Operating Humidity	5 to 95% RH (Non-Condensing)				
Operating Altitude	0 to 3,000 m (0 to 9,840 ft)				0 to 5,000 m (0 to 16,400 ft)

#### Notes

- 1) All models are certified for DC input.
- 2) At 25°C ambient temperature by vertical mounting orientation.
- 3) MTBF as per Telcordia SR-332 (Confidence level: 90%, I/P: 115Vac, O/P: 100% load) for vertical mounting orientation.
- 4) All parameters are specified at 25°C ambient temperature unless otherwise indicated.

## MECHANICAL DRAWINGS



\*Units in mm

	PMC-24V035W1A□	PMC-24V050W1A□	PMC-24V075W1A□	PMC-24V100W1A□	PMC-24V150W1A□
Input / Output Terminal	<ul style="list-style-type: none"> <li>PMC-24V035W1AA: M3.5 x 5 Pins (Rated 300V/15A)</li> <li>PMC-24V035W1AJ: M3.5 x 5 Pins (Rated 300V/20A)</li> <li>PMC-24V035W1AL: M3.5 x 5 Pins (Rated 300V/20A)</li> </ul>	<ul style="list-style-type: none"> <li>PMC-24V050W1AA: M3.5 x 5 Pins (Rated 300V/15A)</li> <li>PMC-24V050W1AJ: M3.5 x 5 Pins (Rated 300V/20A)</li> <li>PMC-24V050W1AL: M3.5 x 5 Pins (Rated 300V/20A)</li> </ul>	<ul style="list-style-type: none"> <li>PMC-24V075W1AA: M3.5 x 5 Pins (Rated 300V/15A)</li> <li>PMC-24V075W1AJ: M3.5 x 5 Pins (Rated 300V/20A)</li> </ul>	<ul style="list-style-type: none"> <li>PMC-24V100W1AA: M3.5 x 7 Pins (Rated 300V/15A)</li> <li>PMC-24V100W1AJ: M3.5 x 7 Pins (Rated 300V/20A)</li> <li>PMC-24V100W1AL: M3.5 x 7 Pins (Rated 300V/20A)</li> </ul>	<ul style="list-style-type: none"> <li>PMC-24V150W1AA: M3.5 x 7 Pins (Rated 300V/15A)</li> <li>PMC-24V150W1AJ: M3.5 x 7 Pins (Rated 300V/20A)</li> </ul>
Input / Output Wire	<ul style="list-style-type: none"> <li>PMC-24V035W1AA: AWG 22-14</li> <li>PMC-24V035W1AJ: AWG 22-12</li> <li>PMC-24V035W1AL: AWG 22-12</li> </ul>	<ul style="list-style-type: none"> <li>PMC-24V050W1AA: AWG 22-14</li> <li>PMC-24V050W1AJ: AWG 22-12</li> <li>PMC-24V050W1AL: AWG 22-12</li> </ul>	<ul style="list-style-type: none"> <li>PMC-24V075W1AA: AWG 22-14</li> <li>PMC-24V075W1AJ: AWG 22-12</li> </ul>	<ul style="list-style-type: none"> <li>PMC-24V100W1AA: AWG 22-14</li> <li>PMC-24V100W1AJ: AWG 22-12</li> <li>PMC-24V100W1AL: AWG 22-12</li> </ul>	<ul style="list-style-type: none"> <li>PMC-24V150W1AA: AWG 22-14</li> <li>PMC-24V150W1AJ: AWG 22-12</li> </ul>

# PMC Panel Mount Power Supply

## 24V Output



# PMC

### HIGHLIGHTS & FEATURES

- Universal AC input voltage range
- Power will not de-rate for the entire input voltage range
- Full corrosion resistant aluminium casing (except PMC-24V600W1BA)
- Conforms to harmonic current IEC/EN 61000-3-2, Class A
- High MTBF > 700,000 hrs per Telcordia SR-332
- Safety approval according to IEC/EN/UL 60950-1 (ITE standard) and EMI to EN 55032, Class B
- Also available: IP20 and Front Face connectors



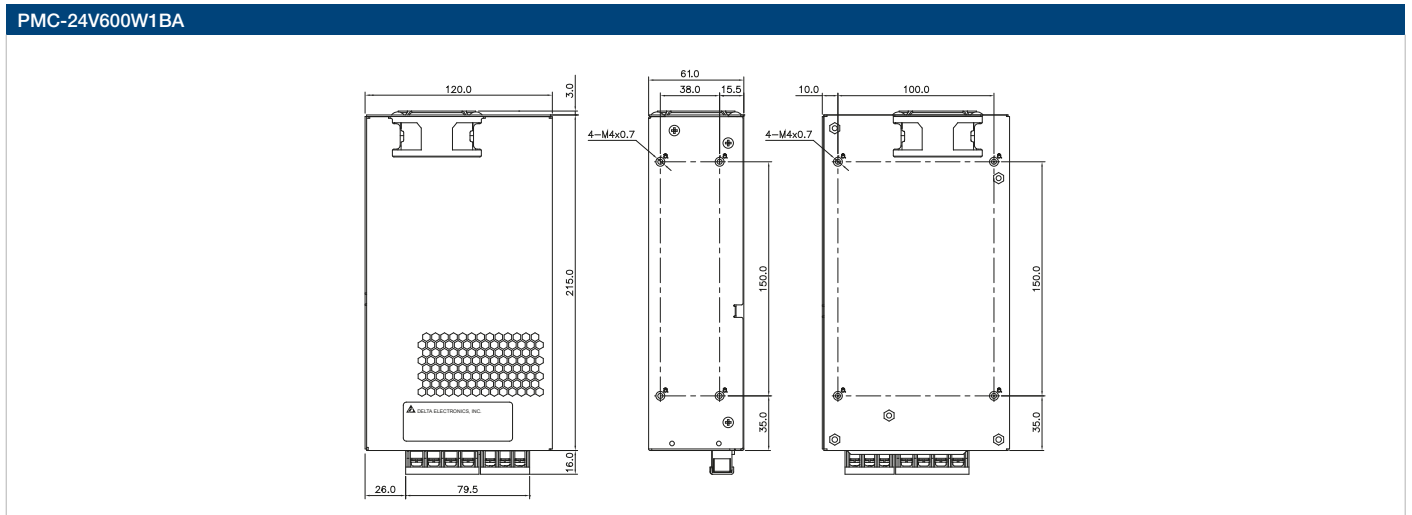
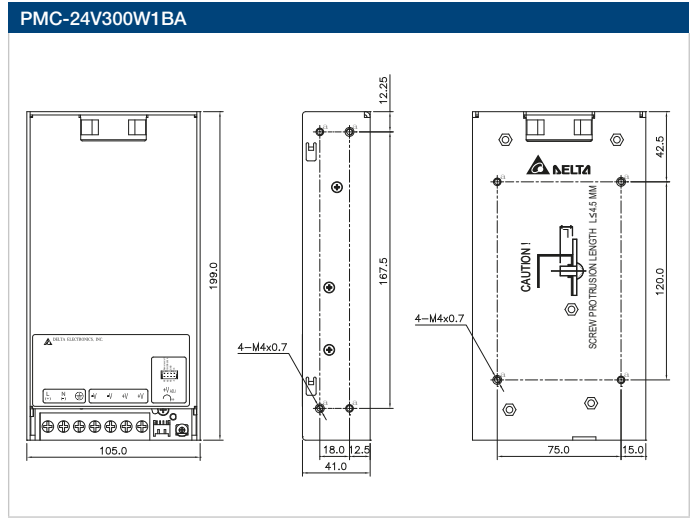
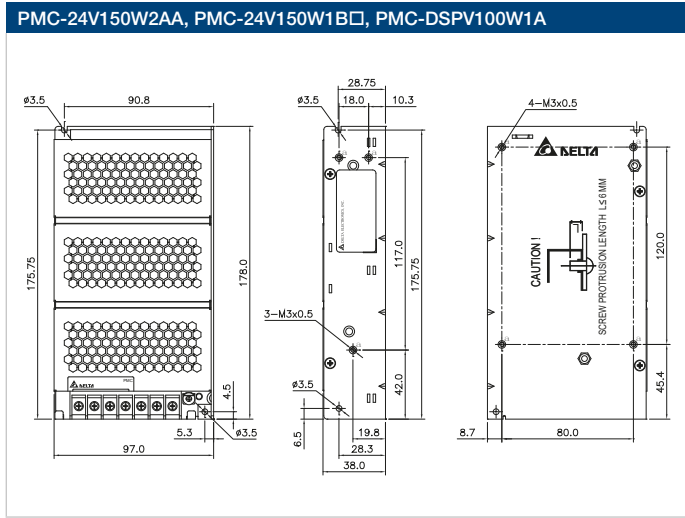
### GENERAL SPECIFICATIONS

OUTPUT	PMC-24V150W2AA	PMC-24V150W1B□	PMC-24V300W1BA	PMC-24V600W1BA	PMC-DSPV100W1A
Output Voltage	24V	24V	V1: 24V, V2 SB: 12V	24V	V1: 24V, V2: 5V
Output Voltage Range	22-28V	22-28V	V1: 22-28V	21.6-26.4V	V1: 22.8-26.4V
Output Current	0-6.25A	0-6.25A	V1: 12.5A (0-12.5A) V2 SB: 0.5A (0-0.5A)	0-25.0A (50.0A for 5s)	V1: 2.7A (0.3-4.0A) V2: 7.0A (0.8-7.0A)
Output Power	150W	150W	300W	600W (1,200W for 5s)	100W
Line Regulation	< 0.5% typ. (@ 170-264Vac input, 100% load)	< 0.5% typ. (@ 85-264Vac input, 100% load)	< 0.5% typ. (@ 85-264Vac input, 100% load)		
Load Regulation	< 1.0% typ. (@ 170-264Vac input, 0-100% load)	< 1.0% typ. (@ 85-264Vac input, 0-100% load)	< 1.0% typ. (@ 85-264Vac input, 0-100% load)		
PARD (20MHz)	< 100mVpp		V1: < 100mVpp, V2: < 200mVpp	< 180mVpp	V1: < 200mVpp, V2: < 80mVpp
Hold-up Time	> 20ms @ 230Vac	> 30ms @ 115Vac & 230Vac	> 15ms @ nominal input, 100% load	> 20ms @ 115Vac & 230Vac	> 15ms @ 115Vac, > 80ms @ 230Vac
INPUT					
Phase Input	Single Phase				
Input Voltage Range	180-264Vac (DC input range 220-375Vdc) <sup>1)</sup>	85-264Vac (DC input range 125-375Vdc) <sup>1)</sup>		85-264Vac (DC input range 120-370Vdc) <sup>1)</sup>	85-264Vac (DC input range 125-375Vdc) <sup>1)</sup>
Input Frequency	47-63Hz				
Input Current	< 1.6A @ 230Vac	< 1.7A @ 115Vac, < 1.0A @ 230Vac	< 4.0A @ 115Vac, < 2.0A @ 230Vac	< 6.5A @ 115Vac, < 3.2A @ 230Vac	< 2.0A @ 115Vac, < 1.1A @ 230Vac
Efficiency <sup>2)</sup> at 100% Load	> 87.0% @ 230Vac	> 89.0% @ 115Vac, > 91.0% @ 230Vac	> 86.0% @ 115Vac, > 88.0% @ 230Vac	> 86.0% @ 115Vac, > 89.0% @ 230Vac	> 84.0% @ 115Vac, > 86.0% @ 230Vac
Max Inrush Current (Cold Start)	< 120A @ 230Vac	< 60A @ 115Vac, < 120A @ 230Vac	< 35A @ 115Vac, < 70A @ 230Vac	< 20A @ 115Vac, < 40A @ 230Vac	< 50A @ 115Vac, < 100A @ 230Vac
Power Factor	Conform to EN 61000-3-2	> 0.99 @ 115Vac, > 0.90 @ 230Vac	> 0.99 @ 115Vac, > 0.97 @ 230Vac	> 0.99 @ 115Vac, > 0.94 @ 230Vac	Conform to EN 61000-3-2
Leakage Current	< 1mA @ 240Vac			< 1.5mA @ 240Vac	< 1mA @ 240Vac
MECHANICAL					
Case Cover / Chassis	Aluminium			SECC Steel	Aluminium
Dimensions (L x W x D)	178 x 97 x 38 mm (7.01" x 3.82" x 1.50")	178 x 97 x 38 mm (7.01" x 3.82" x 1.50")	199 x 105 x 41 mm (7.83" x 4.13" x 1.61")	215 x 120 x 61 mm (8.46" x 4.72" x 2.40")	178 x 97 x 38 mm (7.01" x 3.82" x 1.50")
Unit Weight	0.50 kg (1.10 lb)	0.54 kg (1.19 lb)	0.82 kg (1.81 lb)	1.60 kg (3.53 lb)	0.52 kg (1.15 lb)
Cooling System	Convection			Forced Cooling	Convection
MTBF <sup>3)</sup>	> 700,000 hrs	> 700,000 hrs	> 700,000 hrs	> 300,000 hrs	> 700,000 hrs
ENVIRONMENT					
Operating Temperature	-10°C to +70°C			-20°C to +70°C	-10°C to +70°C
Storage Temperature	-25°C to +85°C			-20°C to +75°C	-25°C to +85°C
Power De-rating	> 50°C (2.5% / °C)				
Operating Humidity	5 to 95% RH (Non-Condensing)				
Operating Altitude	0 to 3,000 m (0 to 9,840 ft)	0 to 5,000 m (0 to 16,400 ft)	0 to 3,000 m (0 to 9,840 ft)		

#### Notes

- 1) All models fulfill the test conditions for this range. DC input safety approval can be obtained upon request. While PMC-24V150W2AA and PMC-DSPV100W1A are also certified for DC input.
- 2) At 25°C ambient temperature by vertical mounting orientation.
- 3) MTBF as per Telcordia SR-332 (Confidence level: 90%, I/P: 115Vac, O/P: 100% load) for vertical mounting orientation. For PMC-24V300W1BA and PMC-24V600W1BA models, MTBF calculations do not include fan life time.
- 4) All parameters are specified at 25°C ambient temperature unless otherwise indicated.

## MECHANICAL DRAWINGS



\*Units in mm

	PMC-24V150W2AA	PMC-24V150W1B□	PMC-24V300W1BA	PMC-24V600W1BA	PMC-DSPV100W1A
Input / Output Terminal	M3.5 x 7 Pins (Rated 300V/15A)	<ul style="list-style-type: none"> <li>PMC-24V150W1BA: M3.5 x 7 Pins (Rated 300V/15A)</li> <li>PMC-24V150W1BJ: M3.5 x 7 Pins (Rated 300V/20A)</li> <li>PMC-24V150W1BL: M3.5 x 7 Pins (Rated 300V/15A)</li> </ul>	M3.5 x 7 Pins (Rated 300V/20A)	I/P: M4 x 3 Pins (Rated 300V/20A) O/P: M4 x 4 Pins (Rated 300V/25A)	M3.5 x 7 Pins (Rated 300V/15A)
Input / Output Wire	AWG 22-14	<ul style="list-style-type: none"> <li>PMC-24V150W1BA: AWG 22-14</li> <li>PMC-24V150W1BJ: AWG 22-12</li> <li>PMC-24V150W1BL: AWG 22-12</li> </ul>	AWG 20-12	AWG 14-12	AWG 22-14

# PMC Panel Mount Power Supply

## 48V Output



# PMC

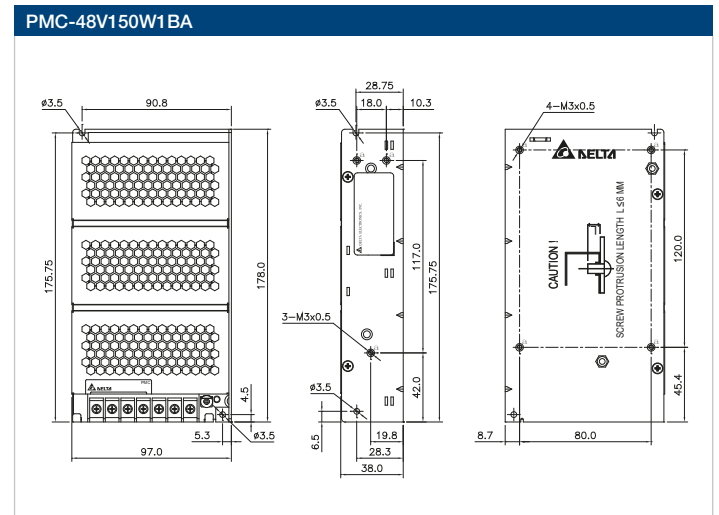
### HIGHLIGHTS & FEATURES

- Universal AC input voltage range
- Power will not de-rate for the entire input voltage range
- Full corrosion resistant aluminium casing
- Conforms to harmonic current IEC/EN 61000-3-2, Class A
- High MTBF > 700,000 hrs per Telcordia SR-332
- Safety approval according to IEC/EN/UL 60950-1 (ITE standard) and EMI to EN 55032, Class B

### GENERAL SPECIFICATIONS

OUTPUT	PMC-48V150W1BA
Output Voltage	48V
Output Voltage Range	44-53V
Output Current	0-3.125A
Output Power	150W
Line Regulation	< 0.5% typ. (@ 85-264Vac input, 100% load)
Load Regulation	< 1.0% typ. (@ 85-264Vac input, 0-100% load)
PARD (20MHz)	< 200mVpp
Hold-up Time	> 30ms @ 115Vac & 230Vac
INPUT	
Phase Input	Single Phase
Input Voltage Range	85-264Vac (DC input range 125-375Vdc) <sup>1)</sup>
Input Frequency	47-63Hz
Input Current	< 1.7A @ 115Vac, < 1.0A @ 230Vac
Efficiency <sup>2)</sup> at 100% Load	> 89.0% @ 115Vac, > 91.0% @ 230Vac
Max Inrush Current (Cold Start)	< 20A @ 115Vac, < 40A @ 230Vac
Power Factor	> 0.99 @ 115Vac, > 0.92 @ 230Vac
Leakage Current	< 1.5mA @ 240Vac
MECHANICAL	
Case Cover / Chassis	Aluminium
Dimensions (L x W x D)	178 x 97 x 38 mm (7.01" x 3.82" x 1.50")
Unit Weight	0.53 kg (1.17 lb)
Cooling System	Convection
MTBF <sup>3)</sup>	> 700,000 hrs
ENVIRONMENT	
Operating Temperature	-10°C to +70°C
Storage Temperature	-25°C to +85°C
Power De-rating	> 50°C (2.5% / °C)
Operating Humidity	5 to 95% RH (Non-Condensing)
Operating Altitude	0 to 5,000 m (0 to 16,400 ft)

### MECHANICAL DRAWINGS



\*Units in mm

	PMC-48V150W1BA
Input / Output Terminal	M3.5 x 7 Pins (Rated 300V/15A)
Input / Output Wire	AWG 22-14

#### Notes

- 1) All models fulfill the test conditions for DC input. DC input safety approval can be obtained upon request.
- 2) At 25°C ambient temperature by vertical mounting orientation.
- 3) MTBF as per Telcordia SR-332 (Confidence level: 90%, I/P: 115Vac, O/P: 100% load) for vertical mounting orientation.
- 4) All parameters are specified at 25°C ambient temperature unless otherwise indicated.



# PMF Panel Mount Power Supply

## 4.2V, 5V Output



# PMF

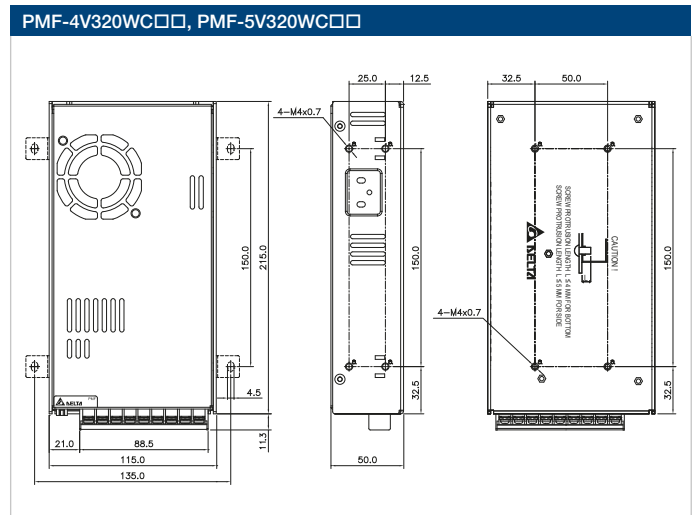
### HIGHLIGHTS & FEATURES

- Universal AC input voltage range
- Built-in active PFC and automatic fan speed control
- Full corrosion resistant aluminium casing
- Conforms to harmonic current IEC/EN 61000-3-2, Class D
- Remote ON/OFF is available as an option
- Short Circuit / Overvoltage / Overcurrent / Over Temperature Protections

### GENERAL SPECIFICATIONS

OUTPUT	PMF-4V320WC□□	PMF-5V320WC□□
Output Voltage	4.2V	5V
Output Voltage Range	3.78-4.62V	4.50-5.50V
Output Current	55.0A	55.0A
Output Power	231W	275W
Line Regulation	< 0.5%	
Load Regulation	< 1.5%	< 1.0%
PARD (20MHz)	< 150mVpp	
Hold-up Time	16ms typ. @ 115Vac & 230Vac	
INPUT		
Phase Input	Single Phase	
Input Voltage Range	85-264Vac	
Input Frequency	47-63Hz	
Input Current	5.0A typ. @ 115Vac, 2.5A typ. @ 230Vac	5.0A typ. @ 115Vac, 2.5A typ. @ 230Vac
Efficiency <sup>1)</sup> at 100% Load	76.5% typ. @ 230Vac	78.5% typ. @ 230Vac
Max Inrush Current (Cold Start)	20A typ. @ 115Vac, 40A typ. @ 230Vac	
Power Factor	0.97 typ. @ 115Vac, 0.94 typ. @ 230Vac	0.98 typ. @ 115Vac, 0.95 typ. @ 230Vac
Leakage Current	< 1mA @ 240Vac	
MECHANICAL		
Case Cover / Chassis	Aluminium	
Dimensions (L x W x D)	215 x 115 x 50 mm (8.46" x 4.53" x 1.97")	215 x 115 x 50 mm (8.46" x 4.53" x 1.97")
Unit Weight	0.86 kg (1.90 lb)	0.86 kg (1.90 lb)
Cooling System	Forced Cooling	
MTBF <sup>2)</sup>	> 700,000 hrs	
ENVIRONMENT		
Operating Temperature	-10°C to +70°C	
Storage Temperature	-25°C to +85°C	
Power De-rating	> 55°C (3.33% / °C)	
Operating Humidity	5 to 95% RH (Non-Condensing)	
Operating Altitude	0 to 5,000 m (0 to 16,400 ft)	

### MECHANICAL DRAWINGS



\*Units in mm

	PMF-4V320WC□□	PMF-5V320WC□□
Input / Output Terminal	<ul style="list-style-type: none"> <li>• PMF-4V320WCA□□: M3.5 x 9 Pins (Rated 300V/15A)</li> <li>• PMF-4V320WCG□□: M3.5 x 9 Pins (Rated 300V/20A)</li> </ul>	<ul style="list-style-type: none"> <li>• PMF-5V320WCA□□: M3.5 x 9 Pins (Rated 300V/15A)</li> <li>• PMF-5V320WCG□□: M3.5 x 9 Pins (Rated 300V/20A)</li> </ul>
Input / Output Wire	AWG 14-12**	AWG 14-12**

\*\*Only use wire that can withstand operating temperature of more than 125°C.

#### Notes

- 1) At 25°C ambient temperature by vertical mounting orientation.
- 2) MTBF as per Telcordia SR-332 (Confidence level: 90%, I/P: 100Vac, O/P: 100% load, Ta: 35°C). MTBF calculations do not include fan life time.
- 3) All parameters are specified at 25°C ambient temperature unless otherwise indicated.

# PMF Panel Mount Power Supply

## 24V Output



AR

# PMF

### HIGHLIGHTS & FEATURES

- Universal AC input voltage range
- Built-in active PFC and automatic fan speed control
- Full corrosion resistant aluminium casing
- Conforms to harmonic current IEC/EN 61000-3-2, Class D
- Remote ON/OFF is available as an option
- Short Circuit / Overvoltage / Overcurrent / Over Temperature Protections

### GENERAL SPECIFICATIONS

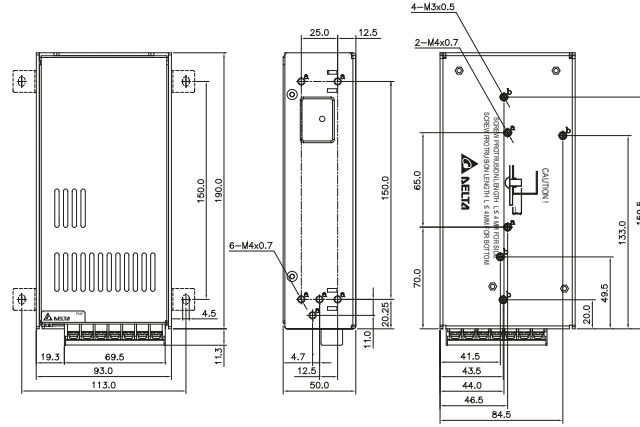
OUTPUT	PMF-24V200WC□□	PMF-24V240WC□□	PMF-24V320WC□□
Output Voltage	24V	24V	24V
Output Voltage Range	21.6-26.4V	21.6-26.4V	21.6-26.4V
Output Current	8.4A	10.0A	13.3A
Output Power	201.6W	240W	320W
Line Regulation	< 0.5%		
Load Regulation	< 0.5%		< 1%
PARD (20MHz)	150mVpp		
Hold-up Time	20ms typ. @ 115Vac & 230Vac		
<b>INPUT</b>			
Phase Input	Single Phase		
Input Voltage Range	85-264Vac		
Input Frequency	47-63Hz		
Input Current	3.5A typ. @ 115Vac, 1.7A typ. @ 230Vac	3.6A typ. @ 115Vac, 1.8A typ. @ 230Vac	5.0A typ. @ 115Vac, 2.5A typ. @ 230Vac
Efficiency <sup>1)</sup> at 100% Load	87.0% typ. @ 230Vac		
Max Inrush Current (Cold Start)	30A typ. @ 115Vac, 50A typ. @ 230Vac	30A typ. @ 115Vac, 60A typ. @ 230Vac	20A typ. @ 115Vac, 40A typ. @ 230Vac
Power Factor	0.98 typ. @ 115Vac, 0.95 typ. @ 230Vac	0.99 typ. @ 115Vac, 0.95 typ. @ 230Vac	0.98 typ. @ 115Vac, 0.95 typ. @ 230Vac
Leakage Current	< 0.5mA @ 240Vac		< 1mA @ 240Vac
<b>MECHANICAL</b>			
Case Cover / Chassis	Aluminium		
Dimensions (L x W x D)	190 x 93 x 50 mm (7.48" x 3.66" x 1.97")	190 x 93 x 50 mm (7.48" x 3.66" x 1.97")	215 x 115 x 50 mm (8.46" x 4.53" x 1.97")
Unit Weight	0.66 kg (1.46 lb)	0.66 kg (1.46 lb)	0.84 kg (1.85 lb)
Cooling System	Forced Cooling		
MTBF <sup>2)</sup>	> 700,000 hrs	> 700,000 hrs	> 700,000 hrs
<b>ENVIRONMENT</b>			
Operating Temperature	-10°C to +70°C		
Storage Temperature	-20°C to +85°C		
Power De-rating	> 50°C (2.5% / °C)		
Operating Humidity	5 to 95% RH (Non-Condensing)		
Operating Altitude	0 to 5,000 m (0 to 16,400 ft)		

#### Notes

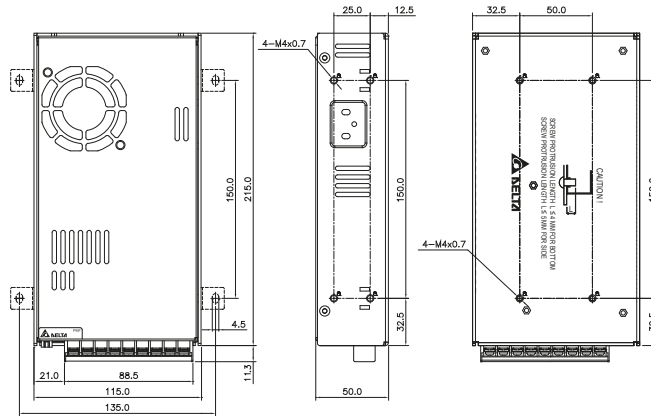
- 1) At 25°C ambient temperature by vertical mounting orientation.
- 2) MTBF as per Telcordia SR-332 (Confidence level: 90%, I/P: 100Vac, O/P: 100% load, Ta: 35°C). MTBF calculations do not include fan life time.
- 3) All parameters are specified at 25°C ambient temperature unless otherwise indicated.

## MECHANICAL DRAWINGS

PMF-24V200WC□□, PMF-24V240WC□□



PMF-24V320WC□□



\*Units in mm

	PMF-24V200WC□□	PMF-24V240WC□□	PMF-24V320WC□□
Input / Output Terminal	<ul style="list-style-type: none"> <li>PMF-24V200WCA□□: M3.5 x 7 Pins (Rated 300V/15A)</li> <li>PMF-24V200WCG□□: M3.5 x 7 Pins (Rated 300V/20A)</li> </ul>	<ul style="list-style-type: none"> <li>PMF-24V240WCA□□: M3.5 x 7 Pins (Rated 300V/15A)</li> <li>PMF-24V240WCG□□: M3.5 x 7 Pins (Rated 300V/20A)</li> </ul>	<ul style="list-style-type: none"> <li>PMF-24V320WCA□□: M3.5 x 9 Pins (Rated 300V/15A)</li> <li>PMF-24V320WCG□□: M3.5 x 9 Pins (Rated 300V/20A)</li> </ul>
Input / Output Wire	AWG 20-12	AWG 20-12	AWG 20-12

# PMH Panel Mount Power Supply

## 24V Output

# PMH



AR

### HIGHLIGHTS & FEATURES

- Household appliance approvals to IEC/EN 60335-1, IEC/EN 61558-1 and IEC/EN 61558-2-16
- Universal AC input voltage range
- Full power from -20°C to +50°C operation
- Full corrosion resistant aluminium casing
- High MTBF > 700,000 hrs per Telcordia SR-332
- Also available: IP20, Front Face and Harness connectors

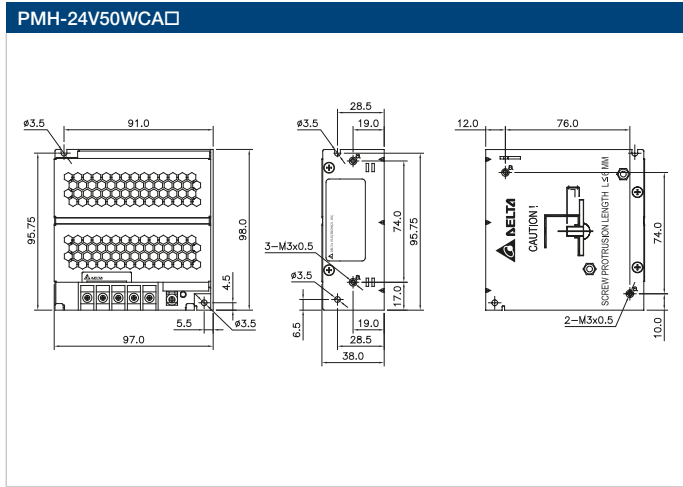
### GENERAL SPECIFICATIONS

			NEW	NEW
OUTPUT	PMH-24V50WCA□	PMH-24V100WCA□	PMH-24V100WCC□	PMH-24V100WCN□
Output Voltage	24V	24V	24V	24V
Output Voltage Range	22-28V	22-28V	22-28V	22-24V
Output Current	0-2.1A	0-4.16A	0-4.16A	0-3.8A
Output Power	50W	100W	100W	91.2W
Line Regulation	< 0.5% typ. (@ 85-264Vac input, 100% load)			
Load Regulation	< 0.5% typ. (@ 85-264Vac input, 0-100% load)			< 1.0% typ. (@ 85-264Vac input, 0-100% load)
PARD (20MHz) <sup>1)</sup>	< 100mVpp @ -20°C to 70°C < 150mVpp @ < -20°C to -30°C	< 100mVpp	< 150mVpp	
Hold-up Time	> 15ms @ 115Vac, > 90ms @ 230Vac	> 15ms @ 115Vac, > 100ms @ 230Vac	> 15ms @ 115Vac, > 90ms @ 230Vac	
<b>INPUT</b>				
Phase Input	Single Phase			
Input Voltage Range	85-264Vac (DC input range 120-375Vdc) <sup>2)</sup>			
Input Frequency	47-63Hz			
Input Current	< 0.94A @ 115Vac, < 0.59A @ 230Vac	< 1.90A @ 115Vac, < 1.00A @ 230Vac	< 2.00A @ 115Vac, < 1.20A @ 230Vac	< 1.80A @ 115Vac, < 1.00A @ 230Vac
Efficiency <sup>3)</sup> at 100% Load	> 87.0% @ 115Vac, > 88.0% @ 230Vac	> 87.0% @ 115Vac, > 89.0% @ 230Vac	> 86.5% @ 115Vac, > 88.0% @ 230Vac	> 86.5% @ 115Vac, > 88.0% @ 230Vac
Max Inrush Current (Cold Start)	< 35A @ 115Vac, < 70A @ 230Vac	< 50A @ 115Vac, < 100A @ 230Vac	< 60A @ 115Vac, < 120A @ 230Vac	
Power Factor	Conform to EN 61000-3-2			
Leakage Current	< 0.5mA @ 264Vac	< 1.5mA @ 264Vac	< 0.5mA @ 240Vac	
<b>MECHANICAL</b>				
Case Cover / Chassis	Aluminium			
Dimensions (L x W x D)	98 x 97 x 38 mm (3.86" x 3.82" x 1.50")	158 x 97 x 38 mm (6.22" x 3.82" x 1.50")	158 x 97 x 38 mm (6.22" x 3.82" x 1.50")	158 x 97 x 38 mm (6.22" x 3.82" x 1.50")
Unit Weight	0.21 kg (0.46 lb)	0.43 kg (0.95 lb)	0.43 kg (0.95 lb)	0.43 kg (0.95 lb)
Cooling System	Convection			
MTBF <sup>4)</sup>	> 700,000 hrs	> 700,000 hrs	> 700,000 hrs	> 700,000 hrs
<b>ENVIRONMENT</b>				
Operating Temperature	-30°C to +70°C			
Storage Temperature	-30°C to +85°C			
Power De-rating	< -20°C (2% / °C), > 50°C (2.5% / °C)			
Operating Humidity	5 to 95% RH (Non-Condensing)			
Operating Altitude	0 to 5,000 m (0 to 16,400 ft)			

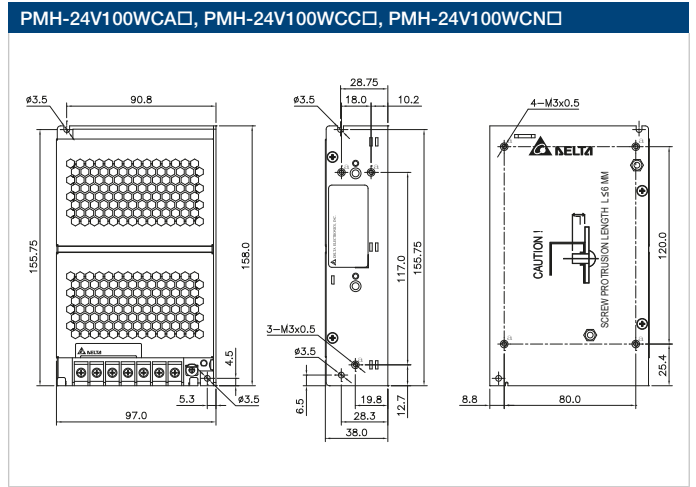
#### Notes

- 1) PARD is measured with an AC coupling mode, 5cm wires, and in parallel with 0.1µF ceramic capacitor & 47µF electrolytic capacitor.
- 2) All models are certified for DC input.
- 3) At 25°C ambient temperature by vertical mounting orientation.
- 4) MTBF as per Telcordia SR-332 (Confidence level: 90%, I/P: 115Vac, O/P: 100% load) for vertical mounting orientation.
- 5) All parameters are specified at 25°C ambient temperature unless otherwise indicated.

## MECHANICAL DRAWINGS



\*Units in mm



	PMH-24V50WCA□	PMH-24V100WCA□	PMH-24V100WCC□	PMH-24V100WCN□
Input / Output Terminal	<ul style="list-style-type: none"> <li>PMH-24V50WCAA (S): M3.5 x 5 Pins (Rated 300V/15A)</li> <li>PMH-24V50WCAJ (U): M3.5 x 5 Pins (Rated 300V/20A)</li> <li>PMH-24V50WCAL (V): M3.5 x 5 Pins (Rated 300V/20A)</li> <li>PMH-24V50WCAH (I): - I/P (JST): B3P(6-2.3.5)-VH(LF)(SN), - O/P (JST): B2P3-VH(LF)(SN)</li> </ul>	<ul style="list-style-type: none"> <li>PMH-24V100WCAA (S): M3.5 x 7 Pins (Rated 300V/15A)</li> <li>PMH-24V100WCAJ (U): M3.5 x 7 Pins (Rated 300V/20A)</li> <li>PMH-24V100WCAL (V): M3.5 x 7 Pins (Rated 300V/20A)</li> <li>PMH-24V100WCAH (I): - I/P (JST): B3P(6-2.3.5)-VH(LF)(SN), - O/P (JST): B4P7-VH(LF)(SN)</li> </ul>	<ul style="list-style-type: none"> <li>PMH-24V100WCCA (S): M3.5 x 7 Pins (Rated 300V/15A)</li> <li>PMH-24V100WCCJ (U): M3.5 x 7 Pins (Rated 300V/20A)</li> <li>PMH-24V100WCCL (V): M3.5 x 7 Pins (Rated 300V/20A)</li> <li>PMH-24V100WCCH (I): - I/P (JST): B3P(6-2.3.5)-VH(LF)(SN), - O/P (JST): B4P7-VH(LF)(SN)</li> </ul>	<ul style="list-style-type: none"> <li>PMH-24V100WCNA (S): M3.5 x 7 Pins (Rated 300V/15A)</li> <li>PMH-24V100WCNJ (U): M3.5 x 7 Pins (Rated 300V/20A)</li> <li>PMH-24V100WCNL (V): M3.5 x 7 Pins (Rated 300V/20A)</li> <li>PMH-24V100WCNH (I): - I/P (JST): B3P(6-2.3.5)-VH(LF)(SN), - O/P (JST): B4P7-VH(LF)(SN)</li> </ul>
Input / Output Wire	<ul style="list-style-type: none"> <li>PMH-24V50WCAA (S): AWG 20-14</li> <li>PMH-24V50WCAJ (U): AWG 20-12</li> <li>PMH-24V50WCAL (V): AWG 20-12</li> </ul>	<ul style="list-style-type: none"> <li>PMH-24V100WCAA (S): AWG 20-14</li> <li>PMH-24V100WCAJ (U): AWG 20-12</li> <li>PMH-24V100WCAL (V): AWG 20-12</li> </ul>	<ul style="list-style-type: none"> <li>PMH-24V100WCCA (S): AWG 20-14</li> <li>PMH-24V100WCCJ (U): AWG 20-12</li> <li>PMH-24V100WCCL (V): AWG 20-12</li> </ul>	<ul style="list-style-type: none"> <li>PMH-24V100WCNA (S): AWG 20-14</li> <li>PMH-24V100WCNJ (U): AWG 20-12</li> <li>PMH-24V100WCNL (V): AWG 20-12</li> </ul>

# PMH Panel Mount Power Supply

## 24V Output



# PMH

## HIGHLIGHTS & FEATURES

- Household appliance approvals to IEC/EN 60335-1, IEC/EN 61558-1 and IEC/EN 61558-2-16
- Universal AC input voltage range
- Full power from -20°C to +50°C operation (except PMH-24V200WCB□)
- Full corrosion resistant aluminium casing
- High MTBF > 700,000 hrs per Telcordia SR-332
- Also available: IP20, Front Face and Harness connectors

## GENERAL SPECIFICATIONS

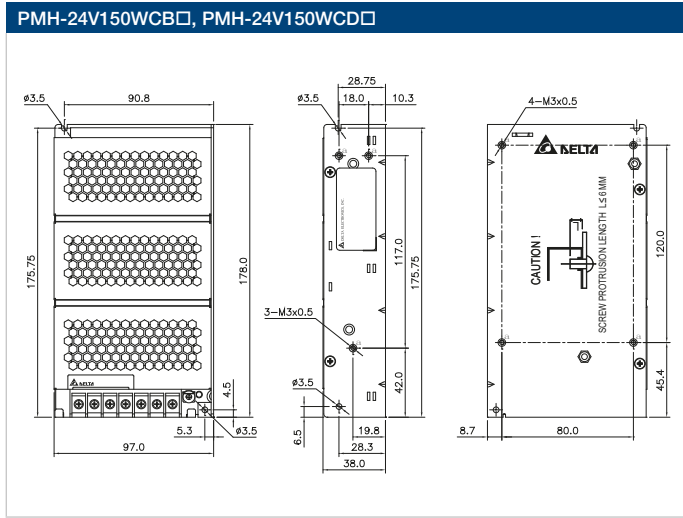
	NEW		
OUTPUT	PMH-24V150WCB□	PMH-24V150WCD□	PMH-24V200WCB□
Output Voltage	24V	24V	24V
Output Voltage Range	22-28V	22-28V	22-28V
Output Current	0-6.25A	0-6.25A	0-8.33A
Output Power	150W	150W	200W
Line Regulation	< 0.5% typ. (@ 85-264Vac input, 100% load)		
Load Regulation	< 0.5% typ. (@ 85-264Vac input, 0-100% load)		
PARD (20MHz) <sup>1)</sup>	< 100mVpp		< 100mVpp @ -20°C to 70°C < 240mVpp @ < -20°C to -30°C
Hold-up Time	> 40ms @ 115Vac, > 50ms @ 230Vac		> 20ms @ 115Vac & 230Vac
INPUT			
Phase Input	Single Phase		
Input Voltage Range	85-264Vac (DC input range 120-375Vdc) <sup>2)</sup>		
Input Frequency	47-63Hz		
Input Current	< 1.6A @ 115Vac, < 0.9A @ 230Vac		< 2.2A @ 115Vac, < 1.2A @ 230Vac
Efficiency <sup>3)</sup> at 100% Load	> 89.0% @ 115Vac, > 91.0% @ 230Vac		> 89.5% @ 115Vac, > 91.5% @ 230Vac
Max Inrush Current (Cold Start)	< 30A @ 115Vac, < 60A @ 230Vac		< 60A @ 115Vac, < 120A @ 230Vac
Power Factor	> 0.98 @ 115Vac, > 0.89 @ 230Vac		> 0.98 @ 115Vac, > 0.92 @ 230Vac
Leakage Current	< 0.9mA @ 264Vac		< 1mA @ 264Vac
MECHANICAL			
Case Cover / Chassis	Aluminium		
Dimensions (L x W x D)	178 x 97 x 38 mm (7.01" x 3.82" x 1.50")	178 x 97 x 38 mm (7.01" x 3.82" x 1.50")	190 x 97 x 38 mm (7.48" x 3.82" x 1.50")
Unit Weight	0.56 kg (1.23 lb)	0.56 kg (1.23 lb)	0.61 kg (1.34 lb)
Cooling System	Convection		
MTBF <sup>4)</sup>	> 700,000 hrs	> 700,000 hrs	> 700,000 hrs
ENVIRONMENT			
Operating Temperature	-30°C to +70°C		
Storage Temperature	-30°C to +85°C		
Power De-rating	< -20°C (2% / °C), > 50°C (2.5% / °C)		< -20°C (2% / °C), > 45°C (2% / °C)
Operating Humidity	5 to 95% RH (Non-Condensing)		
Operating Altitude	0 to 5,000 m (0 to 16,400 ft)		

### Notes

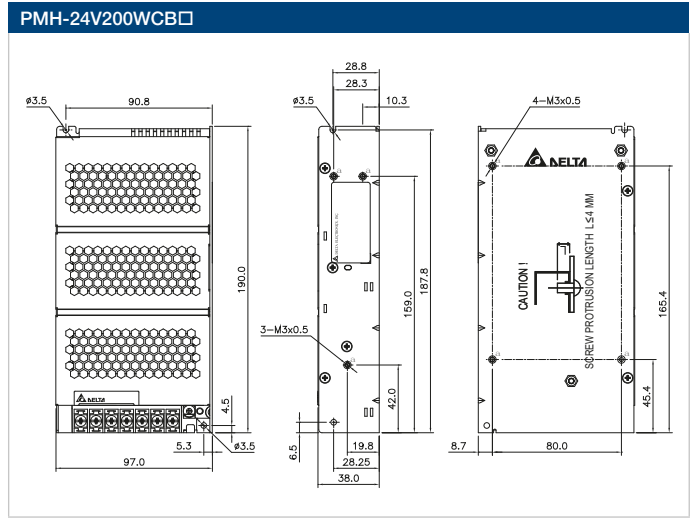
- 1) PARD is measured with an AC coupling mode, 5cm wires, and in parallel with 0.1µF ceramic capacitor & 47µF electrolytic capacitor.
- 2) All models fulfill the test conditions of this range. DC input safety approval can be obtained upon request.
- 3) At 25°C ambient temperature by vertical mounting orientation.
- 4) MTBF as per Telcordia SR-332 (Confidence level: 90%, I/P: 115Vac, O/P: 100% load) for vertical mounting orientation.
- 5) All parameters are specified at 25°C ambient temperature unless otherwise indicated.



## MECHANICAL DRAWINGS



\*Units in mm



	PMH-24V150WCB□	PMH-24V150WCD□	PMH-24V200WCB□
Input / Output Terminal	<ul style="list-style-type: none"> <li>PMH-24V150WCB<u>A</u> (S): M3.5 x 7 Pins (Rated 300V/15A)</li> <li>PMH-24V150WCB<u>J</u> (U): M3.5 x 7 Pins (Rated 300V/20A)</li> <li>PMH-24V150WCB<u>L</u> (V): M3.5 x 7 Pins (Rated 300V/20A)</li> <li>PMH-24V150WCB<u>H</u> (T): - I/P (JST): B3P(6-2.3.5)-VH(LF)(SN), - O/P (JST): B4P7-VH(LF)(SN)</li> </ul>	<ul style="list-style-type: none"> <li>PMH-24V150WCD<u>A</u> (S): M3.5 x 7 Pins (Rated 300V/15A)</li> <li>PMH-24V150WCD<u>J</u> (U): M3.5 x 7 Pins (Rated 300V/20A)</li> <li>PMH-24V150WCD<u>L</u> (V): M3.5 x 7 Pins (Rated 300V/20A)</li> <li>PMH-24V150WCD<u>H</u> (T): - I/P (JST): B3P(6-2.3.5)-VH(LF)(SN), - O/P (JST): B4P7-VH(LF)(SN)</li> </ul>	<ul style="list-style-type: none"> <li>PMH-24V200WCB<u>A</u> (S): M3.5 x 7 Pins (Rated 300V/15A)</li> <li>PMH-24V200WCB<u>J</u> (U): M3.5 x 7 Pins (Rated 300V/20A)</li> <li>PMH-24V200WCB<u>L</u> (V): M3.5 x 7 Pins (Rated 300V/20A)</li> <li>PMH-24V200WCB<u>H</u> (T): - I/P (JST): B3P(6-2.3.5)-VH(LF)(SN), - O/P (JST): B4P7-VH(LF)(SN)</li> </ul>
Input / Output Wire	<ul style="list-style-type: none"> <li>PMH-24V150WCB<u>A</u> (S): AWG 20-14</li> <li>PMH-24V150WCB<u>J</u> (U): AWG 20-12</li> <li>PMH-24V150WCB<u>L</u> (V): AWG 20-12</li> </ul>	<ul style="list-style-type: none"> <li>PMH-24V150WCD<u>A</u> (S): AWG 20-14</li> <li>PMH-24V150WCD<u>J</u> (U): AWG 20-12</li> <li>PMH-24V150WCD<u>L</u> (V): AWG 20-12</li> </ul>	<ul style="list-style-type: none"> <li>PMH-24V200WCB<u>A</u> (S): AWG 20-14</li> <li>PMH-24V200WCB<u>J</u> (U): AWG 20-12</li> <li>PMH-24V200WCB<u>L</u> (V): AWG 20-12</li> </ul>

# PMH Panel Mount Power Supply

## 12V, 24V Output

# PMH



### HIGHLIGHTS & FEATURES

- Household appliance approvals for pollution degree 3 to IEC/EN 60335-1, IEC/EN 61558-1 and IEC/EN 61558-2-16
- Universal AC input voltage
- Full corrosion resistant aluminium casing
- Low profile design for 1U installation
- Low earth leakage current < 0.5mA
- No load input power consumption < 0.5W @ 230Vac
- Full power from -25°C to +50°C operation @ 5,000 m or 16,400 ft altitude
- Also available: IP20, Front Face and Harness connectors

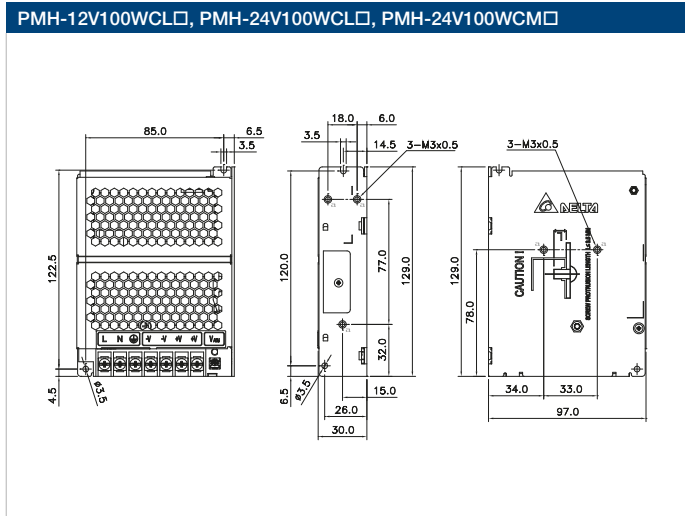
### GENERAL SPECIFICATIONS

	COMING SOON	COMING SOON	COMING SOON	NEW
<b>OUTPUT</b>	<b>PMH-12V100WCL□</b>	<b>PMH-24V100WCL□</b>	<b>PMH-24V100WCM□</b>	<b>PMH-24V150WCL□</b>
Output Voltage	12V	24V	24V	24V
Output Voltage Range	12-14V	24-28V	22-24V	24-28V
Output Current	0-8.5A	0-4.5A	0-3.8A	0-6.5A
Output Power	102W	108W	91.2W	156W
Line Regulation	< 1.0% typ. (@ 100-264Vac input, 100% load)	< 0.5% typ. (@ 100-264Vac input, 100% load)		
Load Regulation	< 1.0% typ. (@ 100-264Vac input, 0-100% load)	< 0.5% typ. (@ 100-264Vac input, 0-100% load)		
PARD (20MHz) <sup>1)</sup>	< 120mVpp	< 150mVpp		< 200mVpp
Hold-up Time	> 5ms @ 115Vac, > 30ms @ 230Vac			
<b>INPUT</b>				
Phase Input	Single Phase			
Input Voltage Range	85-264Vac (DC input range 120-375Vdc) <sup>2)</sup>			
Input Frequency	47-63Hz			
Input Current	< 1.9A @ 115Vac, < 1.2A @ 230Vac			< 2.8A @ 115Vac, < 1.6A @ 230Vac
Efficiency <sup>3)</sup> at 100% Load	> 83.0% @ 115Vac, > 85.0% @ 230Vac	> 85.0% @ 115Vac, > 88.0% @ 230Vac		> 85.0% @ 115Vac, > 88.0% @ 230Vac
Max Inrush Current (Cold Start)	< 30A @ 115Vac, < 60A @ 230Vac			
Power Factor	Conform to EN 61000-3-2			
Leakage Current	< 0.5mA @ 240Vac			
<b>MECHANICAL</b>				
Case Cover / Chassis	Aluminium			
Dimensions (L x W x D)	129 x 97 x 30 mm (5.08" x 3.82" x 1.18")	129 x 97 x 30 mm (5.08" x 3.82" x 1.18")	129 x 97 x 30 mm (5.08" x 3.82" x 1.18")	159 x 97 x 30 mm (6.26" x 3.82" x 1.18")
Unit Weight	0.31 kg (0.68 lb)	0.31 kg (0.68 lb)	0.31 kg (0.68 lb)	0.41 kg (0.90 lb)
Cooling System	Convection			
MTBF <sup>4)</sup>	> 700,000 hrs	> 700,000 hrs	> 700,000 hrs	> 700,000 hrs
<b>ENVIRONMENT</b>				
Operating Temperature	-30°C to +70°C			
Storage Temperature	-30°C to +85°C			
Power De-rating	< -25°C (5% / °C), > 50°C (2.5% / °C)			
Operating Humidity	5 to 95% RH (Non-Condensing)			
Operating Altitude	0 to 5,000 m (0 to 16,400 ft)			

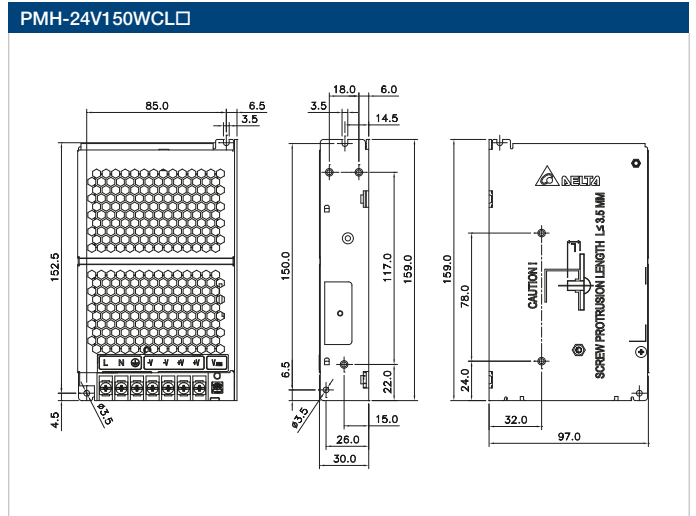
#### Notes

- 1) PARD is measured with an AC coupling mode, 5cm wires, and in parallel with 0.1µF ceramic capacitor & 47µF electrolytic capacitor.
- 2) All models fulfill the test conditions of this range. DC input safety approval can be obtained upon request.
- 3) At 25°C ambient temperature by vertical mounting orientation.
- 4) MTBF as per Telcordia SR-332 (Confidence level: 90%, I/P: 115Vac, O/P: 100% load) for vertical mounting orientation.
- 5) All parameters are specified at 25°C ambient temperature unless otherwise indicated.

## MECHANICAL DRAWINGS



\*Units in mm



	<b>PMH-12V100WCL□</b>	<b>PMH-24V100WCL□</b>	<b>PMH-24V100WCM□</b>	<b>PMH-24V150WCL□</b>
<b>Input / Output Terminal</b>	<ul style="list-style-type: none"> <li>PMH-12V100WCLS: M3.5 x 7 Pins (Rated 300V/15A)</li> <li>PMH-12V100WCLU: M3.5 x 7 Pins (Rated 300V/20A)</li> <li>PMH-12V100WCLY: M3.5 x 7 Pins (Rated 300V/20A)</li> <li>PMH-12V100WCLT: - I/P (JST): B3P(6-2.3.5)-VH(LF)(SN), - O/P (JST): B4P7-VH(LF)(SN)</li> </ul>	<ul style="list-style-type: none"> <li>PMH-24V100WCLS: M3.5 x 7 Pins (Rated 300V/15A)</li> <li>PMH-24V100WCLU: M3.5 x 7 Pins (Rated 300V/20A)</li> <li>PMH-24V100WCLY: M3.5 x 7 Pins (Rated 300V/20A)</li> <li>PMH-24V100WCLT: - I/P (JST): B3P(6-2.3.5)-VH(LF)(SN), - O/P (JST): B4P7-VH(LF)(SN)</li> </ul>	<ul style="list-style-type: none"> <li>PMH-24V100WCMS: M3.5 x 7 Pins (Rated 300V/15A)</li> <li>PMH-24V100WCMU: M3.5 x 7 Pins (Rated 300V/20A)</li> <li>PMH-24V100WCMV: M3.5 x 7 Pins (Rated 300V/20A)</li> <li>PMH-24V100WCMT: - I/P (JST): B3P(6-2.3.5)-VH(LF)(SN), - O/P (JST): B4P7-VH(LF)(SN)</li> </ul>	<ul style="list-style-type: none"> <li>PMH-24V150WCLS: M3.5 x 7 Pins (Rated 300V/15A)</li> <li>PMH-24V150WCLU: M3.5 x 7 Pins (Rated 300V/20A)</li> <li>PMH-24V150WCLY: M3.5 x 7 Pins (Rated 300V/20A)</li> <li>PMH-24V150WCLT: - I/P (JST): B3P(6-2.3.5)-VH(LF)(SN), - O/P (JST): B4P7-VH(LF)(SN)</li> </ul>
<b>Input / Output Wire</b>	<ul style="list-style-type: none"> <li>PMH-12V100WCLS: AWG 20-14</li> <li>PMH-12V100WCLU: AWG 20-12</li> <li>PMH-12V100WCLY: AWG 20-12</li> </ul>	<ul style="list-style-type: none"> <li>PMH-24V100WCLS: AWG 20-14</li> <li>PMH-24V100WCLU: AWG 20-12</li> <li>PMH-24V100WCLY: AWG 20-12</li> </ul>	<ul style="list-style-type: none"> <li>PMH-24V100WCMS: AWG 20-14</li> <li>PMH-24V100WCMU: AWG 20-12</li> <li>PMH-24V100WCMV: AWG 20-12</li> </ul>	<ul style="list-style-type: none"> <li>PMH-24V150WCLS: AWG 20-14</li> <li>PMH-24V150WCLU: AWG 20-12</li> <li>PMH-24V150WCLY: AWG 20-12</li> </ul>

# PMU Panel Mount Power Supply

## 13V, 27V Output



# PMU

## HIGHLIGHTS & FEATURES

- AC input voltage range selectable by switch
- LED indicators for DC OK (Green) and Battery Reverse Polarity Connection (Red)
- Zero switch over time from loss of AC to battery operation
- Conforms to harmonic current IEC/EN 61000-3-2, Class A
- High MTBF > 700,000 hrs. per Telcordia SR-332
- Monitoring signals for AC OK, DC OK and Battery Low indication
- Overvoltage / Overcurrent / Over Temperature / Short Circuit Protections

## GENERAL SPECIFICATIONS

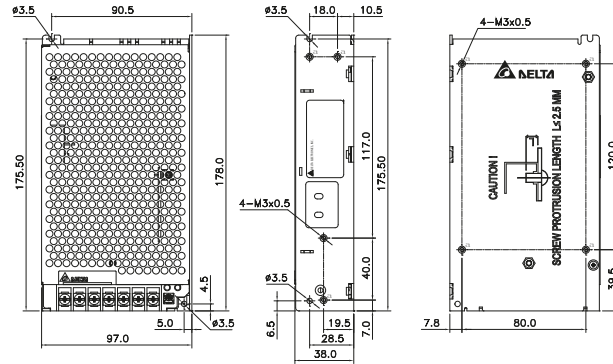
OUTPUT	PMU-13V155W□BA	PMU-13V155W□CA	PMU-27V155W□BA	PMU-27V155W□CA
Output Voltage	V1: 13.8V, B+: 13.3V	V1: 13.8V, B+: 13.3V	V1: 27.6V, B+: 27.1V	V1: 27.6V, B+: 27.1V
Output Voltage Range	12-14V	12-14V	24-28V	24-28V
Output Current	V1: 9.5A (0-11.0A) B+: 1.5A (0.5-1.5A)	V1: 9.5A (0-11.0A) B+: 1.5A (0.5-1.5A)	PMU-27V155WCBA V1: 4.0A (0-5.5A) B+: 1.5A (0.5-1.5A) PMU-27V155WLBA V1: 4.3A (0-5.5A) B+: 1.2A (0.50-1.2A)	PMU-27V155WCCA V1: 4.0A (0-5.5A) B+: 1.5A (0.5-1.5A) PMU-27V155WLCA V1: 4.3A (0-5.5A) B+: 1.2A (0.50-1.2A)
Output Power	151W	151W	151W	151W
Line Regulation	< 0.5% (90-132Vac @ 90% load, 180-264Vac @ 100% load)			
Load Regulation	< 1.0% (90-132Vac @ 0-90% load, 180-264Vac @ 0-100% load)			
PARD (20MHz)	< 150mVpp @ 0°C to -20°C, < 100mVpp @ > 0°C to 70°C			
Hold-up Time	20ms without Battery at B+			
<b>INPUT</b>				
Phase Input	Single Phase			
Input Voltage Range	90-132Vac, 180-264Vac (Selectable by Switch)			
Input Frequency	47-63Hz			
Input Current	< 2.5A @ 115Vac, < 1.5A @ 230Vac			
Efficiency <sup>1)</sup> at 100% Load	> 85.0% @ 115Vac, > 86.0% @ 230Vac		> 88.0% @ 115Vac, > 89.0% @ 230vac	
Max Inrush Current (Cold Start)	< 25A @ 115Vac & 230Vac			
Power Factor	Conform to EN 61000-3-2			
Leakage Current	< 0.5mA @ 264Vac			
<b>MECHANICAL</b>				
Case Cover / Chassis	SGCC / Aluminium			
Dimensions (L x W x D)	178 x 97 x 38 mm (7.01" x 3.82" x 1.50")	178 x 97 x 38 mm (7.01" x 3.82" x 1.50")	178 x 97 x 38 mm (7.01" x 3.82" x 1.50")	178 x 97 x 38 mm (7.01" x 3.82" x 1.50")
Unit Weight	0.59 kg (1.30 lb)	0.60 kg (1.32 lb)	0.59 kg (1.30 lb)	0.60 kg (1.32 lb)
Cooling System	Convection			
MTBF <sup>2)</sup>	> 700,000 hrs	> 700,000 hrs	> 700,000 hrs	> 700,000 hrs
<b>ENVIRONMENT</b>				
Operating Temperature	-20°C to +70°C			
Storage Temperature	-40°C to +85°C			
Power De-rating	90-132Vac: < 0°C to -20°C (2.25% / °C), > 50°C (2.25% / °C) 180-264Vac: < 0°C to -20°C (2.5% / °C), > 50°C (2.5% / °C)			
Operating Humidity	5 to 95% RH (Non-Condensing)			
Operating Altitude	0 to 5,000 m (0 to 16,400 ft)			

### Notes

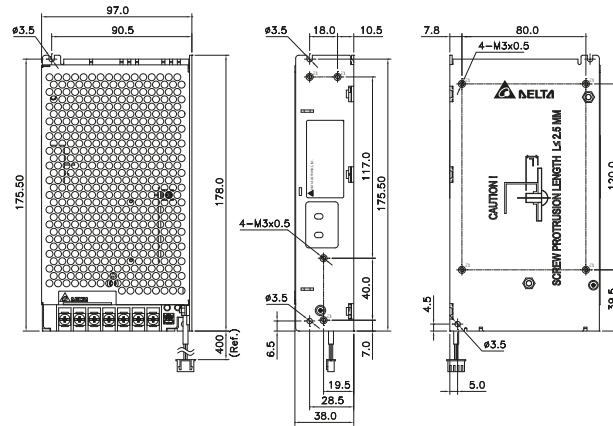
- 1) At 25°C ambient temperature by vertical mounting orientation.
- 2) MTBF as per Telcordia SR-332 (Confidence level: 90%, I/P: 115Vac, O/P: 100% load) for vertical mounting orientation.
- 3) All parameters are specified at 25°C ambient temperature unless otherwise indicated.

## MECHANICAL DRAWINGS

PMU-13V155W□BA, PMU-27V155W□BA



PMU-13V155W□CA, PMU-27V155W□CA



\*Units in mm

	PMU-13V155W□BA	PMU-13V155W□CA	PMU-27V155W□BA	PMU-27V155W□CA
Input / Output Terminal	M3.5 x 7 Pins (Rated 300V/15A)	M3.5 x 7 Pins (Rated 300V/15A)	M3.5 x 7 Pins (Rated 300V/15A)	M3.5 x 7 Pins (Rated 300V/15A)
Input / Output Wire	AWG 16-14	AWG 16-14	AWG 16-14	AWG 16-14
Signal Connector	-	(JST): XHP-4 4 Pins Female connector with wire length 400 mm	-	(JST): XHP-4 4 Pins Female connector with wire length 400 mm

# PMR Panel Mount Power Supply

## 4.2V Output



# PMR

### HIGHLIGHTS & FEATURES

- Universal AC input voltage range
- Full corrosion resistant aluminium casing
- Built-in active PFC and conforms to harmonic current IEC/EN 61000-3-2, Class A and Class D
- Low profile design for 1U installation
- Built-in DC OK relay contact and redundancy operation (PMR-4V320WDBA and PMR-4V320WDCA)

### GENERAL SPECIFICATIONS

OUTPUT	PMR-4V320WC□A	PMR-4V320WDAA	PMR-4V320WDGA	PMR-4V320WDBA	PMR-4V320WDCA
Output Voltage	4.2V	4.2V	4.2V	4.2V	4.2V
Output Voltage Range	3.78-4.62V	3.78-4.62V	3.78-4.62V	3.99-4.51V (No potentiometer)	3.99-4.51V (No potentiometer)
Output Current	60.0A	60.0A	60.0A	60.0A	60.0A
Output Power	252W	252W	252W	252W	252W
Line Regulation	< 0.5%				
Load Regulation	< 1.0%			NA	
PARD (20MHz)	< 150mVpp				
Hold-up Time	8ms typ.				
<b>INPUT</b>					
Phase Input	Single Phase				
Input Voltage Range	88-264Vac				
Input Frequency	47-63Hz				
Input Current	3.0A typ. @ 115Vac, 1.5A typ. @ 230Vac		4.5A typ. @ 115Vac, 2.5A typ. @ 230Vac		
Efficiency <sup>1)</sup> at 100% Load	80.5% typ. @ 115Vac, 83.5% typ. @ 230Vac		84.5% typ. @ 115Vac, 86.5% typ. @ 230Vac		84.0% typ. @ 115Vac, 86.0% typ. @ 230Vac
Max Inrush Current (Cold Start)	20A typ. @ 115Vac, 40A typ. @ 230Vac				
Power Factor	0.98 typ. @ 115Vac, 0.95 typ. @ 230Vac				
Leakage Current	< 0.5mA @ 240Vac		< 1mA @ 240Vac		
<b>MECHANICAL</b>					
Case Cover / Chassis	Aluminium				
Dimensions (L x W x D)	215 x 115 x 30 mm (8.46" x 4.53" x 1.18")	215 x 115 x 30 mm (8.46" x 4.53" x 1.18")	215 x 115 x 30 mm (8.46" x 4.53" x 1.18")	215 x 115 x 30 mm (8.46" x 4.53" x 1.18")	215 x 115 x 30 mm (8.46" x 4.53" x 1.18")
Unit Weight	0.76 kg (1.68 lb)	0.86 kg (1.90 lb)	0.86 kg (1.90 lb)	0.86 kg (1.90 lb)	0.86 kg (1.90 lb)
Cooling System	Forced Cooling	Convection			
MTBF <sup>2)</sup>	> 700,000 hrs	> 700,000 hrs	> 700,000 hrs	> 700,000 hrs	> 700,000 hrs
<b>ENVIRONMENT</b>					
Operating Temperature	-10°C to +70°C		-20°C to +70°C		
Storage Temperature	-40°C to +85°C				
Power De-rating	> 50°C (2.5% / °C)		> 40°C (1% / °C), > 50°C (1.5% / °C)		
Operating Humidity	5 to 95% RH (Non-Condensing)				
Operating Altitude	0 to 5,000 m (0 to 16,400 ft)				

#### Notes

1) At 25°C ambient temperature by vertical mounting orientation.

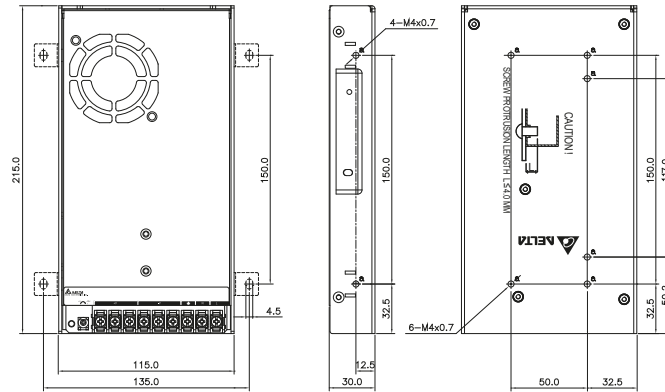
2) MTBF as per Telcordia SR-332 (Confidence level: 90%, I/P: 100Vac, O/P: 100% load, Ta: 35°C). For PMR-4V320WC□A, MTBF calculation does not include fan life time.

3) All parameters are specified at 25°C ambient temperature unless otherwise indicated.

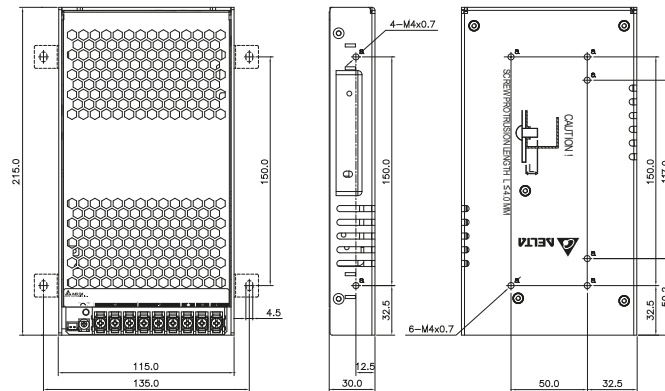


## MECHANICAL DRAWINGS

PMR-4V320WC□□



PMR-4V320WD□□



\*Units in mm

	PMR-4V320WC□□	PMR-4V320WD□□
Input / Output Terminal	<ul style="list-style-type: none"> <li>PMR-4V320WCAA: M3.5 x 9 Pins (Rated 300V/15A)</li> <li>PMR-4V320WCGA: M3.5 x 9 Pins (Rated 300V/20A)</li> </ul>	<ul style="list-style-type: none"> <li>PMR-4V320WDAA, PMR-4V320WDBA: M3.5 x 9 Pins (Rated 300V/15A)</li> <li>PMR-4V320WDGA, PMR-4V320WDCA: M3.5 x 9 Pins (Rated 300V/20A)</li> </ul>
Input / Output Wire	<ul style="list-style-type: none"> <li>PMR-4V320WCAA: AWG 14-12**</li> <li>PMR-4V320WCGA: AWG 14-12**</li> </ul>	<ul style="list-style-type: none"> <li>PMR-4V320WDAA, PMR-4V320WDBA: AWG 14-12**</li> <li>PMR-4V320WDGA, PMR-4V320WDCA: AWG 14-12**</li> </ul>

\*\*Only use wire that can withstand operating temperature of more than 125°C.

# PMR Panel Mount Power Supply

## 5V Output



# PMR

### HIGHLIGHTS & FEATURES

- Universal AC input voltage range
- Full corrosion resistant aluminium casing
- Built-in active PFC and conforms to harmonic current IEC/EN 61000-3-2, Class A and Class D
- Low profile design for 1U installation
- Built-in DC OK relay contact and redundancy operation (PMR-5V320WDBA and PMR-5V320WDCA)

### GENERAL SPECIFICATIONS

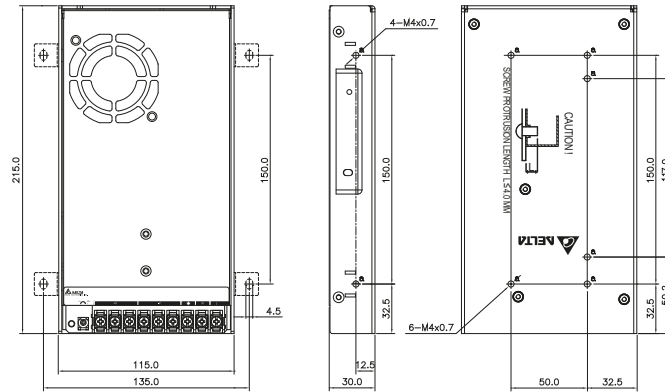
OUTPUT	PMR-5V320WC□A	PMR-5V320WDAA	PMR-5V320WDGA	PMR-5V320WDBA	PMR-5V320WDCA
Output Voltage	5V	5V	5V	5V	5V
Output Voltage Range	4.50-5.50V	4.50-5.50V	4.50V-5.50V	4.75-5.25V (No potentiometer)	4.75-5.25V (No potentiometer)
Output Current	60.0A	60.0A	60.0A	60.0A	60.0A
Output Power	300W	300W	300W	300W	300W
Line Regulation	< 0.5%				
Load Regulation	< 1.0%			NA	
PARD (20MHz)	< 150mVpp				
Hold-up Time	8ms typ.				
<b>INPUT</b>					
Phase Input	Single Phase				
Input Voltage Range	88-264Vac				
Input Frequency	47-63Hz				
Input Current	4.5A typ. @ 115Vac, 2.5A typ. @ 230Vac		5.0A typ. @ 115Vac, 2.5A typ. @ 230Vac		
Efficiency <sup>1)</sup> at 100% Load	81.0% typ. @ 115Vac, 84.0% typ. @ 230Vac		86.0% typ. @ 115Vac, 88.0% typ. @ 230Vac		85.0% typ. @ 115Vac, 87.0% typ. @ 230Vac
Max Inrush Current (Cold Start)	20A typ. @ 115Vac, 40A typ. @ 230Vac				
Power Factor	0.98 typ. @ 115Vac, 0.95 typ. @ 230Vac				
Leakage Current	< 0.5mA @ 240Vac		< 1mA @ 240Vac		
<b>MECHANICAL</b>					
Case Cover / Chassis	Aluminium				
Dimensions (L x W x D)	215 x 115 x 30 mm (8.46" x 4.53" x 1.18")	215 x 115 x 30 mm (8.46" x 4.53" x 1.18")	215 x 115 x 30 mm (8.46" x 4.53" x 1.18")	215 x 115 x 30 mm (8.46" x 4.53" x 1.18")	215 x 115 x 30 mm (8.46" x 4.53" x 1.18")
Unit Weight	0.76 kg (1.68 lb)	0.86 kg (1.90 lb)	0.86 kg (1.90 lb)	0.86 kg (1.90 lb)	0.86 kg (1.90 lb)
Cooling System	Forced Cooling		Convection		
MTBF <sup>2)</sup>	> 700,000 hrs	> 700,000 hrs	> 700,000 hrs	> 700,000 hrs	> 700,000 hrs
<b>ENVIRONMENT</b>					
Operating Temperature	-10°C to +70°C		-20°C to +70°C		
Storage Temperature	-40°C to +85°C				
Power De-rating	> 50°C (2.5% / °C)		> 40°C (1% / °C), > 50°C (1.5% / °C)		
Operating Humidity	5 to 95% RH (Non-Condensing)				
Operating Altitude	0 to 5,000 m (0 to 16,400 ft)				

#### Notes

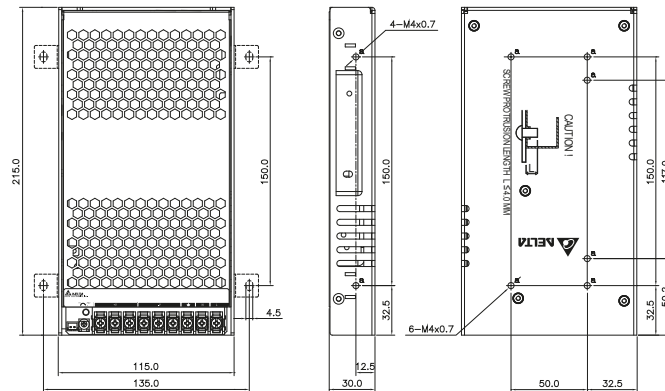
- 1) At 25°C ambient temperature by vertical mounting orientation.
- 2) MTBF as per Telcordia SR-332 (Confidence level: 90%, I/P: 100Vac, O/P: 100% load, Ta: 35°C). For PMR-5V320WC□A, MTBF calculation does not include fan life time.
- 3) All parameters are specified at 25°C ambient temperature unless otherwise indicated.

## MECHANICAL DRAWINGS

PMR-5V320WC□□



PMR-5V320WD□□



\*Units in mm

	PMR-5V320WC□□	PMR-5V320WD□□
Input / Output Terminal	<ul style="list-style-type: none"> <li>PMR-5V320WCAA: M3.5 x 9 Pins (Rated 300V/15A)</li> <li>PMR-5V320WCGA: M3.5 x 9 Pins (Rated 300V/20A)</li> </ul>	<ul style="list-style-type: none"> <li>PMR-5V320WDA A, PMR-5V320WDBA: M3.5 x 9 Pins (Rated 300V/15A)</li> <li>PMR-5V320WDGA, PMR-5V320WDCA: M3.5 x 9 Pins (Rated 300V/20A)</li> </ul>
Input / Output Wire	<ul style="list-style-type: none"> <li>PMR-5V320WCAA: AWG 14-12**</li> <li>PMR-5V320WCGA: AWG 14-12**</li> </ul>	<ul style="list-style-type: none"> <li>PMR-5V320WDA A, PMR-5V320WDBA: AWG 14-12**</li> <li>PMR-5V320WDGA, PMR-5V320WDCA: AWG 14-12**</li> </ul>

\*\*Only use wire that can withstand operating temperature of more than 125°C.

# PMT Panel Mount Power Supply

## 4.2V, 5V Output



# PMT

### HIGHLIGHTS & FEATURES

- AC input voltage range selectable by switch (Universal AC input voltage range for selected models)
- Conforms to harmonic current IEC/EN 61000-3-2, Class A for selected models
- High MTBF > 700,000 hrs per Telcordia SR-332
- Short Circuit / Overvoltage / Overload / Over Temperature Protections
- Versatile configuration options (for 35W and 50W):
  - L Frame
  - Enclosed

### GENERAL SPECIFICATIONS

OUTPUT	PMT-4V350W1A□	PM□-5V35W1A□	PM□-5V50W1A□	PMT-5V350W1A□
Output Voltage	4.2V	5V	5V	5V
Output Voltage Range	3.78-4.70V	4.50-5.50V	4.50-5.50V	4.50-5.50V
Output Current	60.0A	7.0A	10.0A	60.0A
Output Power	252W	35W	50W	300W
Line Regulation	< 0.5%			
Load Regulation	< 2.5%	< 1.0%		< 2.5%
PARD (20MHz)	< 150mVpp	< 80mVpp		< 150mVpp
Hold-up Time	16ms typ. @ 115Vac, 20ms typ. @ 230Vac	20ms typ. @ 115Vac, 100ms typ. @ 230Vac		16ms typ. @ 115Vac, 20ms typ. @ 230Vac
<b>INPUT</b>				
Phase Input	Single Phase			
Input Voltage Range	90-132Vac, 180-264Vac (Selectable by Switch)	85-264Vac		90-132Vac, 180-264Vac (Selectable by Switch)
Input Frequency	47-63Hz			
Input Current	7.00A typ. @ 115Vac, 4.00A typ. @ 230Vac	0.75A typ. @ 115Vac, 0.50A typ. @ 230Vac	1.10A typ. @ 115Vac, 0.65A typ. @ 230Vac	7.00A typ. @ 115Vac, 4.00A typ. @ 230Vac
Efficiency <sup>1)</sup> at 100% Load	76.0% typ. @ 230Vac	81.0% typ. @ 230Vac	82.0% typ. @ 230Vac	78.0% typ. @ 230Vac
Max Inrush Current (Cold Start)	40A typ. @ 115Vac, 60A typ. @ 230Vac	45A typ. @ 230Vac		40A typ. @ 115Vac, 60A typ. @ 230Vac
Power Factor	NA	Conform to EN 61000-3-2		NA
Leakage Current	< 1mA @ 240Vac	< 0.5mA @ 240Vac	< 1mA @ 240Vac	
<b>MECHANICAL</b>				
Case Cover / Chassis	Aluminium	SGCC / Aluminium		Aluminium
Dimensions (L x W x D)	215 x 115 x 50 mm (8.46" x 4.53" x 1.97")	98 x 98 x 38 mm (3.86" x 3.86" x 1.50")	98 x 98 x 38 mm (3.86" x 3.86" x 1.50")	215 x 115 x 50 mm (8.46" x 4.53" x 1.97")
Unit Weight	0.81 kg (1.79 lb)	0.23 kg (0.51 lb)	0.23 kg (0.51 lb)	0.81 kg (1.79 lb)
Cooling System	Forced Cooling	Convection		Forced Cooling
MTBF <sup>2)</sup>	> 700,000 hrs	> 700,000 hrs	> 700,000 hrs	> 700,000 hrs
<b>ENVIRONMENT</b>				
Operating Temperature	-10°C to +70°C			
Storage Temperature	-25°C to +85°C			
Power De-rating	> 50°C (4% / °C), > 60°C (1% / °C)	> 50°C (2.5% / °C)		> 50°C (4% / °C), > 60°C (1% / °C)
Operating Humidity	5 to 95% RH (Non-Condensing)			
Operating Altitude	0 to 5,000 m (0 to 16,400 ft)			

#### Notes

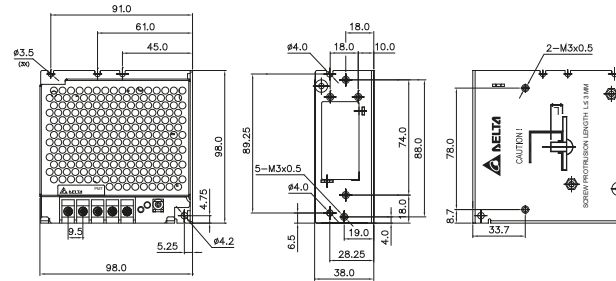
1) At 25°C ambient temperature by vertical mounting orientation.

2) MTBF as per Telcordia SR-332 (Confidence level: 90%, I/P: 100Vac, O/P: 100% load, Ta: 35°C). For PMT-4V350W1A□ and PMT-5V350W1A□ models, MTBF calculations do not include fan life time.

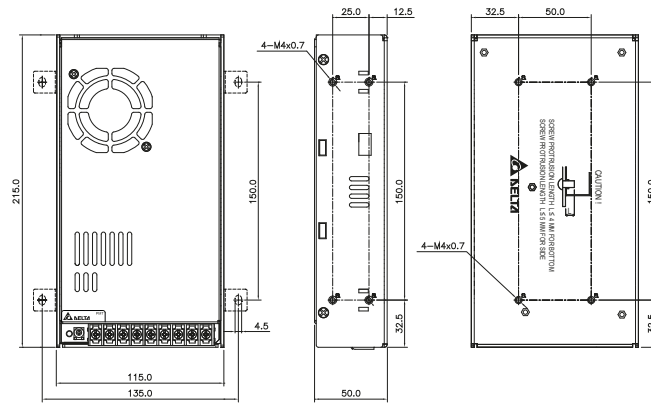
3) All parameters are specified at 25°C ambient temperature unless otherwise indicated.

## MECHANICAL DRAWINGS

### PM□-5V35W1A□, PM□-5V50W1A□



### PMT-4V350W1A□, PMT-5V350W1A□



\*Units in mm

	PMT-4V350W1A□	PM□-5V35W1A□	PM□-5V50W1A□	PMT-5V350W1A□
Input / Output Terminal	<ul style="list-style-type: none"> <li>PMT-4V350W1AM: M3.5 x 9 Pins (Rated 300V/15A)</li> <li>PMT-4V350W1AN: M3.5 x 9 Pins (Rated 300V/20A)</li> </ul>	<ul style="list-style-type: none"> <li>PM□-5V35W1AA: M3.5 x 5 Pins (Rated 300V/15A)</li> <li>PM□-5V35W1AG: M3.5 x 5 Pins (Rated 300V/20A)</li> <li>PM□-5V35W1AH: - I/P (JST): B3P5-VH(LF)(SN), - O/P (JST): B2P3-VH (LF)(SN)</li> </ul>	<ul style="list-style-type: none"> <li>PM□-5V50W1AA: M3.5 x 5 Pins (Rated 300V/15A)</li> <li>PM□-5V50W1AG: M3.5 x 5 Pins (Rated 300V/20A)</li> </ul>	<ul style="list-style-type: none"> <li>PMT-5V350W1AM: M3.5 x 9 Pins (Rated 300V/15A)</li> <li>PMT-5V350W1AN: M3.5 x 9 Pins (Rated 300V/20A)</li> </ul>
Input / Output Wire	AWG 14-12**	<ul style="list-style-type: none"> <li>PM□-5V35W1AA: AWG 18-12</li> <li>PM□-5V35W1AG: AWG 18-12</li> <li>PM□-5V35W1AH: AWG 18</li> </ul>	<ul style="list-style-type: none"> <li>PM□-5V50W1AA: AWG 14-12</li> <li>PM□-5V50W1AG: AWG 14-12</li> </ul>	AWG 14-12**

\*\*Only use wire that can withstand operating temperature of more than 125°C.

# PMT Panel Mount Power Supply

## 12V Output



# PMT

### HIGHLIGHTS & FEATURES

- AC input voltage range selectable by switch (Universal AC input voltage range for selected models)
- Conforms to harmonic current IEC/EN 61000-3-2, Class A
- High MTBF > 700,000 hrs per Telcordia SR-332
- Short Circuit / Overvoltage / Overload / Over Temperature Protections
- Versatile configuration options (for 150W and below):
  - Open Frame (35W and 50W)
  - L Frame
  - Enclosed

### GENERAL SPECIFICATIONS

OUTPUT	PM□-12V35W1A□	PM□-12V50W1A□	PM□-12V100W1A□	PM□-12V150W1A□	PMT-12V350W1A□
Output Voltage	12V	12V	12V	12V	12V
Output Voltage Range	11-14V	11-14V	11.4-13.2V	11.4-13.5V	10.8-13.2V
Output Current	2.92A	4.17A	8.5A	12.5A	29.0A
Output Power	35W	50W	102W	150W	348W
Line Regulation	< 0.5%				± 0.5% typ.
Load Regulation	< 1.0%		< 0.5%		± 1.0% typ.
PARD (20MHz)	< 100mVpp		< 120mVpp		< 150mVpp
Hold-up Time	16.7ms typ. @ 115Vac		25ms typ. @ 115Vac, 30ms typ. @ 230Vac	20ms typ. @ 115Vac, 24ms typ. @ 230Vac	12ms typ. @ 115Vac, 16ms typ. @ 230Vac
<b>INPUT</b>					
Phase Input	Single Phase				
Input Voltage Range	90-264Vac		90-132Vac, 180-264Vac (Selectable by Switch)		
Input Frequency	47-63Hz				
Input Current	0.75A typ. @ 115Vac, 0.50A typ. @ 230Vac	1.10A typ. @ 115Vac, 0.70A typ. @ 230Vac	2.00A typ. @ 115Vac, 1.20A typ. @ 230Vac	3.00A typ. @ 115Vac, 2.00A typ. @ 230Vac	7.00A typ. @ 115Vac, 4.00A typ. @ 230Vac
Efficiency <sup>1)</sup> at 100% Load	84.0% typ. @ 115Vac & 230Vac	83.0% typ. @ 115Vac & 230Vac	87.5% typ. @ 230Vac	86.0% typ. @ 230Vac	84.0% typ. @ 230Vac
Max Inrush Current (Cold Start)	30A typ. @ 115Vac, 60A typ. @ 230Vac	30A typ. @ 115Vac, 65A typ. @ 230Vac	36A typ. @ 230Vac	45A typ. @ 230Vac	50A typ. @ 115Vac, 60A typ. @ 230Vac
Power Factor	Conform to EN 61000-3-2				
Leakage Current	< 1mA @ 240Vac		< 0.5mA @ 240Vac		< 3.5mA @ 240Vac
<b>MECHANICAL</b>					
Case Cover / Chassis	SGCC / Aluminium				
Dimensions (L x W x D)	98 x 98 x 38 mm (3.86" x 3.86" x 1.50")	98 x 98 x 38 mm (3.86" x 3.86" x 1.50")	158 x 97 x 38 mm (6.22" x 3.82" x 1.50")	178 x 97 x 38 mm (7.01" x 3.82" x 1.50")	215 x 115 x 50 mm (8.46" x 4.53" x 1.97")
Unit Weight	0.22 kg (0.49 lb)	0.23 kg (0.51 lb)	0.36 kg (0.79 lb)	0.48 kg (1.06 lb)	0.82 kg (1.81 lb)
Cooling System	Convection				Forced Cooling
MTBF <sup>2)</sup>	> 700,000 hrs	> 700,000 hrs	> 700,000 hrs	> 700,000 hrs	> 700,000 hrs
<b>ENVIRONMENT</b>					
Operating Temperature	-10°C to +70°C				
Storage Temperature	-25°C to +85°C				
Power De-rating	> 50°C (2.5% / °C)				
Operating Humidity	5 to 95% RH (Non-Condensing)				
Operating Altitude	0 to 5,000 m (0 to 16,400 ft)				

#### Notes

1) At 25°C ambient temperature by vertical mounting orientation.

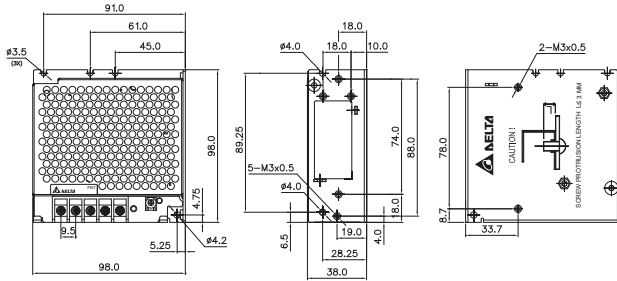
2) MTBF as per Telcordia SR-332 (Confidence level: 90%, I/P: 100Vac, O/P: 100% load, Ta: 35°C). For PMT-12V350W1A□ models, MTBF calculations do not include fan life time.

3) All parameters are specified at 25°C ambient temperature unless otherwise indicated.

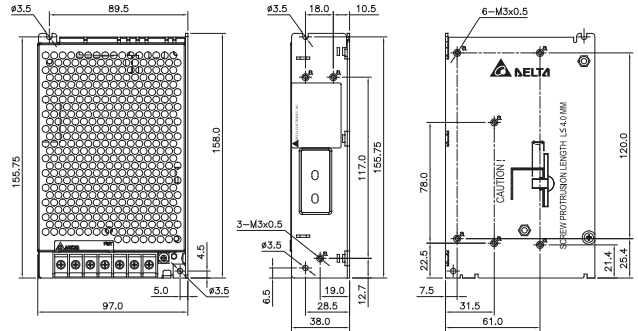


## MECHANICAL DRAWINGS

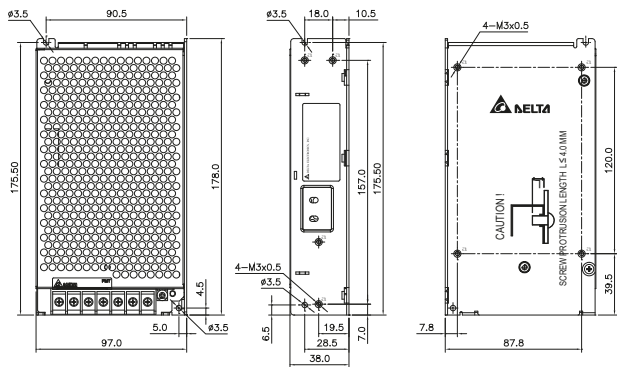
PM□-12V35W1A□, PM□-12V50W1A□



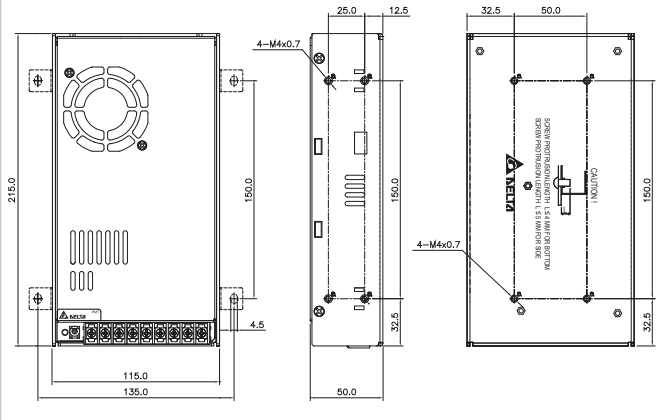
PM□-12V100W1A□



PM□-12V150W1A□



PMT-12V350W1A□



\*Units in mm

	PM□-12V35W1A□	PM□-12V50W1A□	PM□-12V100W1A□	PM□-12V150W1A□	PMT-12V350W1A□
Input / Output Terminal	<ul style="list-style-type: none"> <li>PM□-12V35W1AA: M3.5 x 5 Pins (Rated 300V/15A)</li> <li>PM□-12V35W1AG: M3.5 x 5 Pins (Rated 300V/20A)</li> <li>PM□-12V35W1AH: I/P (JST): B3P5-VH(LF)(SN), O/P (JST): B2P3-VH(LF)(SN)</li> </ul>	<ul style="list-style-type: none"> <li>PM□-12V50W1AA: M3.5 x 5 Pins (Rated 300V/15A)</li> <li>PM□-12V50W1AG: M3.5 x 5 Pins (Rated 300V/20A)</li> <li>PM□-12V50W1AH: I/P (JST): B3P5-VH(LF)(SN), O/P (JST): B2P3-VH(LF)(SN)</li> </ul>	<ul style="list-style-type: none"> <li>PM□-12V100W1AA: M3.5 x 7 Pins (Rated 300V/15A)</li> <li>PM□-12V100W1AG: M3.5 x 7 Pins (Rated 300V/20A)</li> <li>PM□-12V100W1AH: I/P (JWT): A3963WV2-5P-A, O/P (JWT): A3963WV2-7P-U</li> </ul>	<ul style="list-style-type: none"> <li>PM□-12V150W1AA: M3.5 x 7 Pins (Rated 300V/15A)</li> <li>PM□-12V150W1AG: M3.5 x 7 Pins (Rated 300V/20A)</li> <li>PM□-12V150W1AH: I/P (JWT): A3963WV2-5P-A, O/P (JWT): A3963WV2-7P-U</li> </ul>	<ul style="list-style-type: none"> <li>PMT-12V350W1AR: M3.5 x 9 Pins (Rated 300V/15A)</li> <li>PMT-12V350W1AK: M3.5 x 9 Pins (Rated 300V/20A)</li> </ul>
Input / Output Wire	<ul style="list-style-type: none"> <li>PM□-12V35W1AA: AWG 22-12</li> <li>PM□-12V35W1AG: AWG 22-12</li> <li>PM□-12V35W1AH: AWG 22-18</li> </ul>	<ul style="list-style-type: none"> <li>PM□-12V50W1AA: AWG 20-12</li> <li>PM□-12V50W1AG: AWG 20-12</li> <li>PM□-12V50W1AH: AWG 20-18</li> </ul>	<ul style="list-style-type: none"> <li>PM□-12V100W1AA: AWG 20-12</li> <li>PM□-12V100W1AG: AWG 20-12</li> <li>PM□-12V100W1AH: AWG 20-18</li> </ul>	<ul style="list-style-type: none"> <li>PM□-12V150W1AA: AWG 18-12</li> <li>PM□-12V150W1AG: AWG 18-12</li> <li>PM□-12V150W1AH: AWG 18</li> </ul>	AWG 16-12

# PMT Panel Mount Power Supply

## 15V, 24V Output



# PMT

### HIGHLIGHTS & FEATURES

- AC input voltage range selectable by switch (Universal AC input voltage range for selected models)
- Conforms to harmonic current IEC/EN 61000-3-2, Class A
- High MTBF > 700,000 hrs per Telcordia SR-332
- Short Circuit / Overvoltage / Overload / Over Temperature Protections
- Versatile configuration options:
  - Open Frame (35W and 50W, except PM□-15V50W1A□)
  - L Frame
  - Enclosed

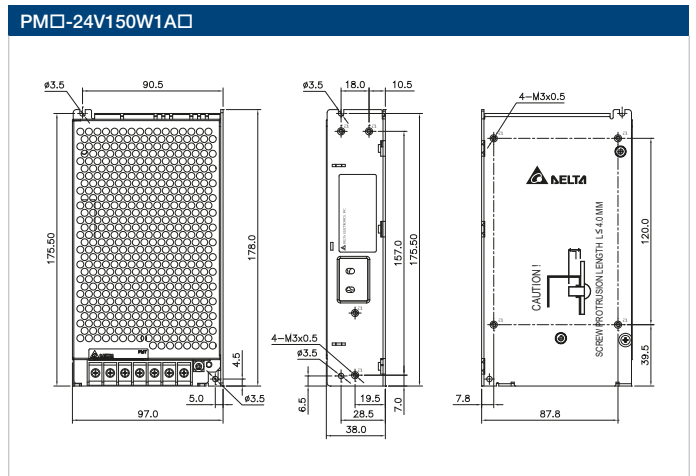
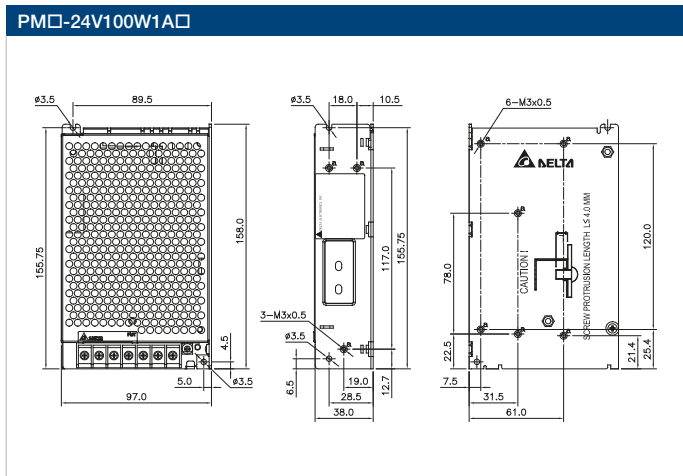
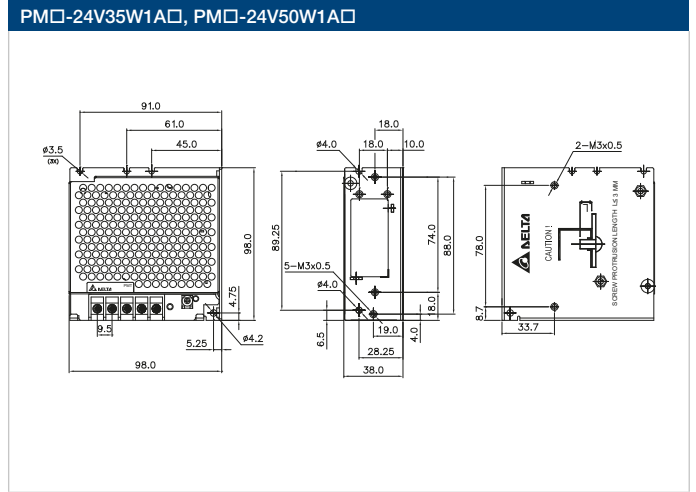
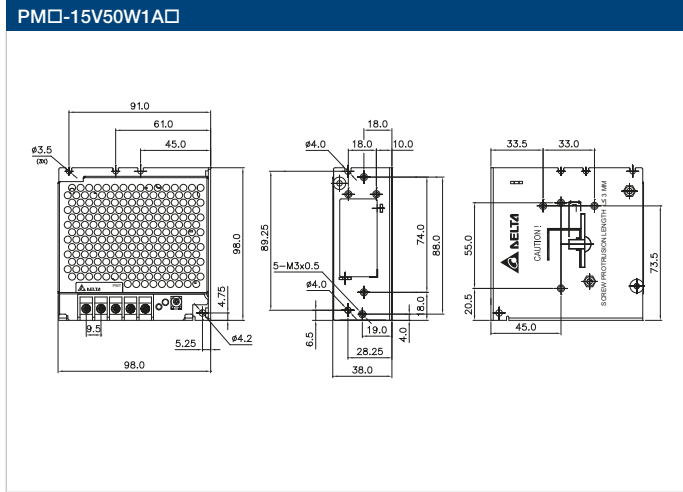
### GENERAL SPECIFICATIONS

OUTPUT	PM□-15V50W1A□	PM□-24V35W1A□	PM□-24V50W1A□	PM□-24V100W1A□	PM□-24V150W1A□
Output Voltage	15V	24V	24V	24V	24V
Output Voltage Range	13.5-16.5V	22-28V	22-28V	22.8-26.4V	22.8-27.6V
Output Current	3.4A	1.46A	2.1A	4.5A	6.5A
Output Power	51W	35W	50W	108W	156W
Line Regulation	< 0.5%				
Load Regulation	< 0.5%	< 1.0%		< 0.5%	
PARD (20MHz)	< 150mVpp	< 100mVpp		< 120mVpp	
Hold-up Time	20ms typ. @115Vac, 100ms typ. @ 230Vac	16.7ms typ. @ 115Vac		25ms typ. @ 115Vac, 30ms typ. @ 230Vac	20ms typ. @ 115Vac, 24ms typ. @ 230Vac
<b>INPUT</b>					
Phase Input	Single Phase				
Input Voltage Range	85-264Vac	90-264Vac		90-132Vac, 180-264Vac (Selectable by Switch)	
Input Frequency	47-63Hz				
Input Current	1.10A typ. @ 115Vac, 0.65A typ. @ 230Vac	0.75A typ. @ 115Vac, 0.50A typ. @ 230Vac	1.10A typ. @ 115Vac, 0.65A typ. @ 230Vac	2.00A typ. @ 115Vac, 1.20A typ. @ 230Vac	3.00A typ. @ 115Vac, 2.00A typ. @ 230Vac
Efficiency <sup>1)</sup> at 100% Load	85.5% typ. @ 230Vac	85.0% typ. @ 115Vac & 230Vac	86.0% typ. @ 115Vac & 230Vac	89.0% typ. @ 230Vac	
Max Inrush Current (Cold Start)	45A typ. @ 230Vac	30A typ. @ 115Vac, 60A typ. @ 230Vac		36A typ. @ 230Vac	45A typ. @ 230Vac
Power Factor	Conform to EN 61000-3-2				
Leakage Current	< 0.5mA @ 240Vac	< 1mA @ 240Vac		< 0.5mA @ 240Vac	
<b>MECHANICAL</b>					
Case Cover / Chassis	SGCC / Aluminium				
Dimensions (L x W x D)	98 x 98 x 38 mm (3.86" x 3.86" x 1.50")	98 x 98 x 38 mm (3.86" x 3.86" x 1.50")	98 x 98 x 38 mm (3.86" x 3.86" x 1.50")	158 x 97 x 38 mm (6.22" x 3.82" x 1.50")	178 x 97 x 38 mm (7.01" x 3.82" x 1.50")
Unit Weight	0.23 kg (0.51 lb)	0.22 kg (0.49 lb)	0.24 kg (0.53 lb)	0.36 kg (0.79 lb)	0.48 kg (1.06 lb)
Cooling System	Convection				
MTBF <sup>2)</sup>	> 700,000 hrs	> 700,000 hrs	> 700,000 hrs	> 700,000 hrs	> 700,000 hrs
<b>ENVIRONMENT</b>					
Operating Temperature	-10°C to +70°C				
Storage Temperature	-25°C to +85°C				
Power De-rating	> 50°C (2.5% / °C)				
Operating Humidity	5 to 95% RH (Non-Condensing)				
Operating Altitude	0 to 5,000 m (0 to 16,400 ft)				

**Notes**

- 1) At 25°C ambient temperature by vertical mounting orientation.
- 2) MTBF as per Telcordia SR-332 (Confidence level: 90%, I/P: 100Vac, O/P: 100% load, Ta: 35°C).
- 3) All parameters are specified at 25°C ambient temperature unless otherwise indicated.

## MECHANICAL DRAWINGS



\*Units in mm

	PM□-15V50W1A□	PM□-24V35W1A□	PM□-24V50W1A□	PM□-24V100W1A□	PM□-24V150W1A□
Input / Output Terminal	<ul style="list-style-type: none"> <li>PM□-15V50W1AA: M3.5 x 5 Pins (Rated 300V/15A)</li> <li>PM□-15V50W1AG: M3.5 x 5 Pins (Rated 300V/20A)</li> <li>PM□-15V50W1AH: I/P (JST): B3P5-VH(LF)(SN), O/P (JST): B2P3-VH(LF)(SN)</li> </ul>	<ul style="list-style-type: none"> <li>PM□-24V35W1AA: M3.5 x 5 Pins (Rated 300V/15A)</li> <li>PM□-24V35W1AG: M3.5 x 5 Pins (Rated 300V/20A)</li> <li>PM□-24V35W1AH: I/P (JST): B3P5-VH(LF)(SN), O/P (JST): B2P3-VH(LF)(SN)</li> </ul>	<ul style="list-style-type: none"> <li>PM□-24V50W1AA: M3.5 x 5 Pins (Rated 300V/15A)</li> <li>PM□-24V50W1AG: M3.5 x 5 Pins (Rated 300V/20A)</li> <li>PM□-24V50W1AH: I/P (JST): B3P5-VH(LF)(SN), O/P (JST): B2P3-VH(LF)(SN)</li> </ul>	<ul style="list-style-type: none"> <li>PM□-24V100W1AA: M3.5 x 7 Pins (Rated 300V/15A)</li> <li>PM□-24V100W1AG: M3.5 x 7 Pins (Rated 300V/20A)</li> <li>PM□-24V100W1AH: I/P (JWT): A3963WV2-5P-A, O/P (JWT): A3963WV2-7P-U</li> </ul>	<ul style="list-style-type: none"> <li>PM□-24V150W1AA: M3.5 x 7 Pins (Rated 300V/15A)</li> <li>PM□-24V150W1AG: M3.5 x 7 Pins (Rated 300V/20A)</li> <li>PM□-24V150W1AH: I/P (JWT): A3963WV2-5P-A, O/P (JWT): A3963WV2-7P-U</li> </ul>
Input / Output Wire	<ul style="list-style-type: none"> <li>PM□-15V50W1AA: AWG 22-12</li> <li>PM□-15V50W1AG: AWG 22-12</li> <li>PM□-15V50W1AH: AWG 22-18</li> </ul>	<ul style="list-style-type: none"> <li>PM□-24V35W1AA: AWG 22-12</li> <li>PM□-24V35W1AG: AWG 22-12</li> <li>PM□-24V35W1AH: AWG 22-18</li> </ul>	<ul style="list-style-type: none"> <li>PM□-24V50W1AA: AWG 22-12</li> <li>PM□-24V50W1AG: AWG 22-12</li> <li>PM□-24V50W1AH: AWG 22-18</li> </ul>	<ul style="list-style-type: none"> <li>PM□-24V100W1AA: AWG 22-12</li> <li>PM□-24V100W1AG: AWG 22-12</li> <li>PM□-24V100W1AH: AWG 22-18</li> </ul>	<ul style="list-style-type: none"> <li>PM□-24V150W1AA: AWG 22-12</li> <li>PM□-24V150W1AG: AWG 22-12</li> <li>PM□-24V150W1AH: AWG 22-18</li> </ul>

# PMT Panel Mount Power Supply

## 24V Output



## PMT

### HIGHLIGHTS & FEATURES

- AC input voltage range selectable by switch
- Full corrosion resistant aluminium casing
- High Efficiency > 87.0% @ 230Vac
- High MTBF > 700,000 hrs per Telcordia SR-332
- Short Circuit / Overvoltage / Overload / Over Temperature Protections
- Versatile configuration options (for 200W):
  - L Frame
  - Enclosed

### GENERAL SPECIFICATIONS

OUTPUT	PM□-24V200W1A□	PMT-24V350W1AG	PMT-24V350W1AM	PMT-24V350W1AK	PMT-24V350W1AR
Output Voltage	24V	24V	24V	24V	24V
Output Voltage Range	21.6-26.4V	20.0-26.4V	20.0-26.4V	20.0-26.4V	20.0-26.4V
Output Current	8.8A	14.6A	14.6A	14.6A	14.6A
Output Power	211.2W	350.4W	350.4W	350.4W	350.4W
Line Regulation	< 0.5%				
Load Regulation	< 0.5%				
PARD (20MHz)	< 150mVpp				
Hold-up Time	20ms typ. @ 115Vac, 24ms typ. @ 230Vac	16ms typ. @ 115Vac, 20ms typ. @ 230Vac			
<b>INPUT</b>					
Phase Input	Single Phase				
Input Voltage Range	90-132Vac, 180-264Vac (Selectable by Switch)				
Input Frequency	47-63Hz				
Input Current	4.5A typ. @ 115Vac, 2.5A typ. @ 230Vac	7.0A typ. @ 115Vac, 4.0A typ. @ 230Vac	7.0A typ. @ 115Vac, 4.0A typ. @ 230Vac	7.0A typ. @ 115Vac, 4.0A typ. @ 230Vac	7.0A typ. @ 115Vac, 4.0A typ. @ 230Vac
Efficiency <sup>1)</sup> at 100% Load	88.5% typ. @ 230Vac	87.0% typ. @ 230Vac			
Max Inrush Current (Cold Start)	55A typ. @ 230Vac	50A typ. @ 115Vac, 60A typ. @ 230Vac			
Power Factor	NA				
Leakage Current	< 0.25mA @ 240Vac	< 3.5mA @ 240Vac			
<b>MECHANICAL</b>					
Case Cover / Chassis	Aluminium				
Dimensions (L x W x D)	215 x 115 x 50 mm (8.46" x 4.53" x 1.97")	215 x 115 x 50 mm (8.46" x 4.53" x 1.97")	215 x 115 x 50 mm (8.46" x 4.53" x 1.97")	215 x 115 x 50 mm (8.46" x 4.53" x 1.97")	215 x 115 x 50 mm (8.46" x 4.53" x 1.97")
Unit Weight	0.63 kg (1.39 lb)	0.82 kg (1.81 lb)	0.82 kg (1.81 lb)	0.82 kg (1.81 lb)	0.82 kg (1.81 lb)
Cooling System	Convection	Forced Cooling			
MTBF <sup>2)</sup>	> 700,000 hrs	> 700,000 hrs	> 700,000 hrs	> 700,000 hrs	> 700,000 hrs
<b>ENVIRONMENT</b>					
Operating Temperature	-10°C to +60°C	-10°C to +70°C			
Storage Temperature	-25°C to +85°C				
Power De-rating	> 40°C (2.5% / °C)	> 50°C (2.5% / °C)			
Operating Humidity	5 to 95% RH (Non-Condensing)				
Operating Altitude	0 to 5,000 m (0 to 16,400 ft)				

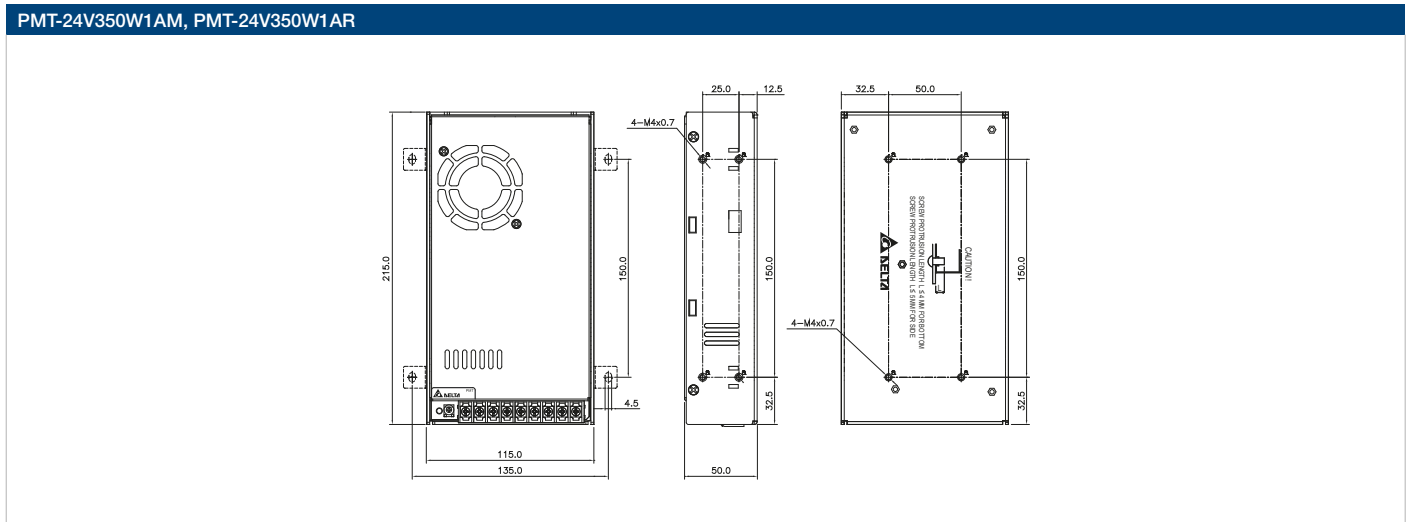
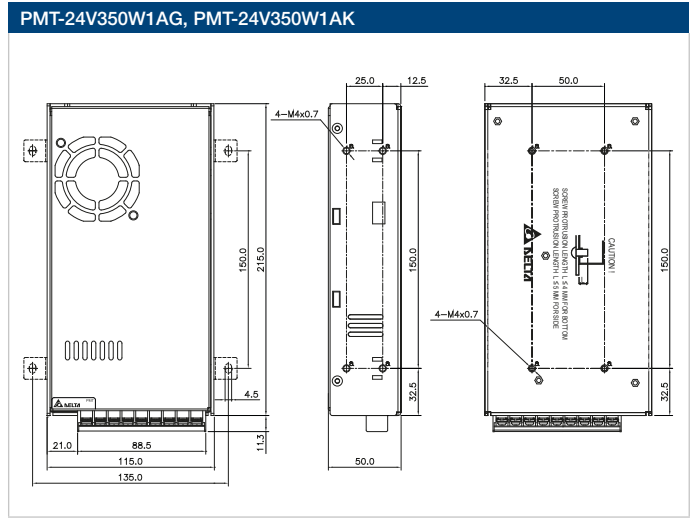
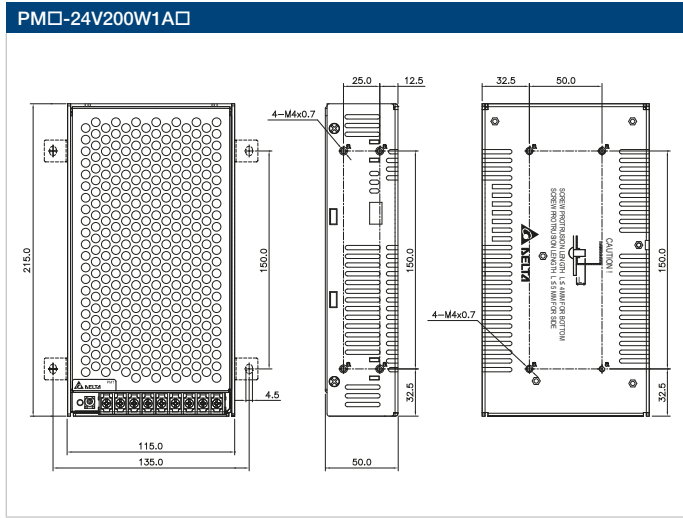
#### Notes

1) At 25°C ambient temperature by vertical mounting orientation.

2) MTBF as per Telcordia SR-332 (Confidence level: 90%, I/P: 100Vac, O/P: 100% load, Ta: 35°C). For PMT-24V350W1A□ models, MTBF calculations do not include fan life time.

3) All parameters are specified at 25°C ambient temperature unless otherwise indicated.

## MECHANICAL DRAWINGS



\*Units in mm

	PM□-24V200W1A□	PMT-24V350W1AG	PMT-24V350W1AM	PMT-24V350W1AK	PMT-24V350W1AR
Input / Output Terminal	<ul style="list-style-type: none"> <li>PM□-24V200W1AM: M3.5 x 9 Pins (Rated 300V/15A)</li> <li>PM□-24V200W1AN: M3.5 x 9 Pins (Rated 300V/20A)</li> </ul>	M3.5 x 9 Pins (Rated 300V/20A)	M3.5 x 9 Pins (Rated 300V/15A)	M3.5 x 9 Pins (Rated 300V/20A)	M3.5 x 9 Pins (Rated 300V/15A)
Input / Output Wire	AWG 22-12	AWG 20-12	AWG 20-12	AWG 20-12	AWG 20-12



# PMT Panel Mount Power Supply

## 36V, 48V, Dual Output



# PMT

### HIGHLIGHTS & FEATURES

- AC input voltage range selectable by switch
- Conforms to harmonic current IEC/EN 61000-3-2, Class A for selected models
- High MTBF > 700,000 hrs per Telcordia SR-332
- Short Circuit / Overvoltage / Overload / Over Temperature Protections
- Versatile configuration options:
  - L Frame
  - Enclosed

### GENERAL SPECIFICATIONS

OUTPUT	PMT-36V350W1A□	PM□-48V150W1A□	PMT-48V350W1A□	PM□-D1V100W1A□	PM□-D2V100W1A□
Output Voltage	36V	48V	48V	V1: 12V, V2: 5V	V1: 24V, V2: 5V
Output Voltage Range	32.4-39.6V	45.6-52.8V	43.2-52.8V	V1: 10.8-13.2V	V1: 21.6-26.4V
Output Current	9.7A	3.3A	7.3A	V1: 7.0A, V2: 3.0A	V1: 3.5A, V2: 3.0A
Output Power	349.2W	158.4W	350W	V1: 84W, V2: 15W	V1: 84W, V2: 15W
Line Regulation	< 0.5%				
Load Regulation	< 1.0%	< 0.5 %	< 1.0%	V1: < 1.0%, V2: < 2.0%	V1: < 1.0%, V2: < 2.0%
PARD (20MHz)	< 240mVpp	< 200mVpp	< 240mVpp	V1: 120mVpp, V2: 80mVpp	V1: 120mVpp, V2: 80mVpp
Hold-up Time	16ms typ. @ 115Vac, 20ms typ. @ 230Vac	20ms typ. @ 115Vac, 24ms typ. @ 230Vac	16ms typ. @ 115Vac, 20ms typ. @ 230Vac	20ms typ. @ 115Vac, 25ms typ. @ 230Vac	
<b>INPUT</b>					
Phase Input	Single Phase				
Input Voltage Range	90-132Vac, 180-264Vac (Selectable by Switch)			88-132Vac, 176-264Vac (Selectable by Switch)	
Input Frequency	47-63Hz				
Input Current	7.0A typ. @ 115Vac, 4.0A typ. @ 230Vac	3.0A typ. @ 115Vac, 2.0A typ. @ 230Vac	7.0A typ. @ 115Vac, 4.0A typ. @ 230Vac	2.0A typ. @ 115Vac, 1.2A typ. @ 230Vac	2.0A typ. @ 115Vac, 1.2A typ. @ 230Vac
Efficiency <sup>1)</sup> at 100% Load	87.5% typ. @ 230Vac	89.0% typ. @ 230Vac	87.5% typ. @ 230Vac	82.0% typ. @ 230Vac	84.0% @ 230Vac
Max Inrush Current (Cold Start)	40A typ. @ 115Vac, 60A typ. @ 230Vac	45A typ. @ 230Vac	40A typ. @ 115Vac, 60A typ. @ 230Vac	45A typ. @ 230Vac	
Power Factor	NA	Conform to EN 61000-3-2	NA	Conform to EN 61000-3-2	
Leakage Current	< 3.5mA @ 240Vac	< 0.5mA @ 240Vac	< 3.5mA @ 240Vac	< 0.25mA @ 240Vac	
<b>MECHANICAL</b>					
Case Cover / Chassis	Aluminium	SGCC / Aluminium	Aluminium	SGCC / Aluminium	SGCC / Aluminium
Dimensions (L x W x D)	215 x 115 x 50 mm (8.46" x 4.53" x 1.97")	178 x 97 x 38 mm (7.01" x 3.82" x 1.50")	215 x 115 x 50 mm (8.46" x 4.53" x 1.97")	178 x 97 x 38 mm (7.01" x 3.82" x 1.50")	178 x 97 x 38 mm (7.01" x 3.82" x 1.50")
Unit Weight	0.83 kg (1.83 lb)	0.48 kg (1.06 lb)	0.83 kg (1.83 lb)	0.45 kg (0.99 lb)	0.42 kg (0.93 lb)
Cooling System	Forced Cooling	Convection	Forced Cooling	Convection	
MTBF <sup>2)</sup>	> 700,000 hrs	> 700,000 hrs	> 700,000 hrs	> 700,000 hrs	> 700,000 hrs
<b>ENVIRONMENT</b>					
Operating Temperature	-10°C to +70°C				
Storage Temperature	-25°C to +85°C				
Power De-rating	> 50°C (2.5% / °C)				
Operating Humidity	5 to 95% RH (Non-Condensing)				
Operating Altitude	0 to 5,000 m (0 to 16,400 ft)				

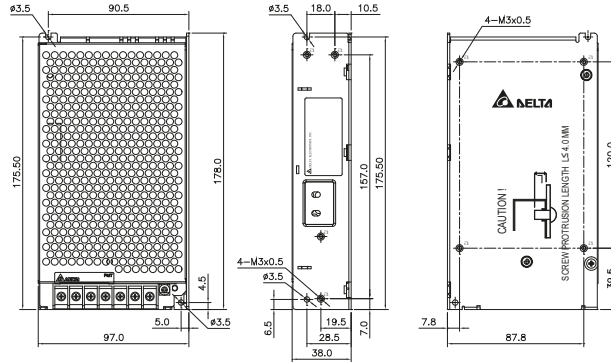
#### Notes

- 1) At 25°C ambient temperature by vertical mounting orientation.
- 2) MTBF as per Telcordia SR-332 (Confidence level: 90%, I/P: 100Vac, O/P: 100% load, Ta: 35°C). For PMT-36V350W1A□ and PMT-48V350W1A□ models, MTBF calculations does not include fan life time.
- 3) All parameters are specified at 25°C ambient temperature unless otherwise indicated.

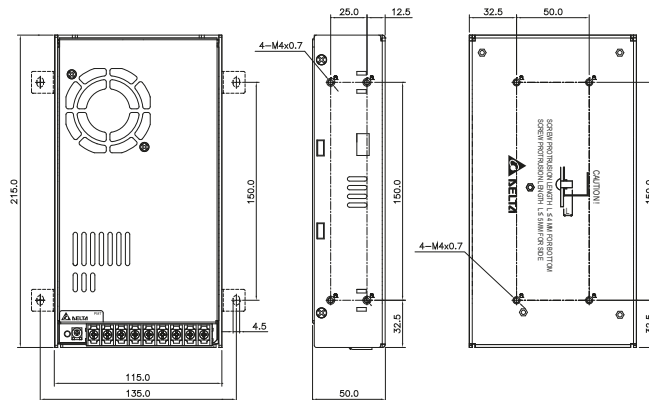


## MECHANICAL DRAWINGS

PM□-48V150W1A□, PM□-D1V100W1A□, PM□-D2V100W1A□



PMT-36V350W1A□, PMT-48V350W1A□



\*Units in mm

	PMT-36V350W1A□	PM□-48V150W1A□	PMT-48V350W1A□	PM□-D1V100W1A□	PM□-D2V100W1A□
Input / Output Terminal	<ul style="list-style-type: none"> <li>PMT-36V350W1A□R: M3.5 x 9 Pins (Rated 300V/15A)</li> <li>PMT-36V350W1A□K: M3.5 x 9 Pins (Rated 300V/20A)</li> </ul>	<ul style="list-style-type: none"> <li>PM□-48V150W1A□A: M3.5 x 7 Pins (Rated 300V/15A)</li> <li>PM□-48V150W1A□G: M3.5 x 7 Pins (Rated 300V/20A)</li> <li>PM□-48V150W1A□H: I/P (JWT): A3963WV2-5P-A, O/P (JWT): A3963WV2-7P-U</li> </ul>	<ul style="list-style-type: none"> <li>PMT-48V350W1A□R: M3.5 x 9 Pins (Rated 300V/15A)</li> <li>PMT-48V350W1A□K: M3.5 x 9 Pins (Rated 300V/20A)</li> </ul>	<ul style="list-style-type: none"> <li>PM□-D1V100W1A□A: M3.5 x 7 Pins (Rated 300V/15A)</li> <li>PM□-D1V100W1A□G: M3.5 x 7 Pins (Rated 300V/20A)</li> <li>PM□-D1V100W1A□H: I/P (JWT): A3963WV2-5P-A, O/P (JWT): A3963WV2-7P-U</li> </ul>	<ul style="list-style-type: none"> <li>PM□-D2V100W1A□A: M3.5 x 7 Pins (Rated 300V/15A)</li> <li>PM□-D2V100W1A□G: M3.5 x 7 Pins (Rated 300V/20A)</li> <li>PM□-D2V100W1A□H: I/P (JWT): A3963WV2-5P-A, O/P (JWT): A3963WV2-7P-U</li> </ul>
Input / Output Wire	AWG 22-12	<ul style="list-style-type: none"> <li>PM□-48V150W1A□A: AWG 22-12</li> <li>PM□-48V150W1A□G: AWG 22-12</li> <li>PM□-48V150W1A□H: AWG 22-18</li> </ul>	AWG 22-12	<ul style="list-style-type: none"> <li>PM□-D1V100W1A□A: AWG 22-12</li> <li>PM□-D1V100W1A□G: AWG 22-12</li> <li>PM□-D1V100W1A□H: AWG 22-18</li> </ul>	<ul style="list-style-type: none"> <li>PM□-D1V100W1A□A: AWG 22-12</li> <li>PM□-D1V100W1A□G: AWG 22-12</li> <li>PM□-D1V100W1A□H: AWG 22-18</li> </ul>

# Standard Products

## Open Frame Power Supply

### PJ



AR

The PJ open frame power supply series offers the most widely used output voltages of 5V, 12V, 24V and 48V with power ratings from 15W to 150W. These power supplies come with universal AC input from 85Vac to 264Vac and wide operating temperature range of -10°C to +70°C. The features include low leakage and low inrush current while the conformal coating on the PCBAs provides protection against common dust and chemical pollutants. The products are certified to EMI standards according to EN 55032 for Information Technology Equipment (ITE) radio-frequency equipment; EMS according to EN 55024. In order to ensure the highest standard of reliability, only recognized Japanese connectors and capacitors are used and options for metal chassis and case cover are available for different installation preferences. The remote ON/OFF feature is available for output power at 100W and above.

#### Typical Applications



### PJB



AR

The PJB open frame power supply series is designed for applications demanding low leakage current, low inrush current, high power factor value and high efficiency. The PJB series comes with universal AC input voltage range at 85Vac to 264Vac and bears superior features like built-in Power Boost of 200% for 10 seconds which will enable reserved power to be always available during startup of loads with high inrush current, thus, eliminating the need of a more expensive power supply with higher power rating while saving more space for installation. Like its predecessor, the PJB series has conformal coating applied on the PCBAs to protect against common dust and chemical pollutants. This enables the products to be used in harsh industrial environments and only recognized Japanese capacitors are used. Metal chassis and case cover are available as options for different installation preferences. The PJB series is certified for EMI standards according to EN 55032 and EMS according to EN 55024. The products also conform to major international safety standards according to IEC/EN/UL 60950-1 standards.

#### Typical Applications



### PJT



AR

The PJT open frame power supply series offers nominal output voltages of 12V, 15V, 18V, 24V and 27V. The PJT series comes with open frame standard footprint of 2" x 3", 2" x 4" and 3" x 5" with universal AC input voltage range at 90Vac to 264Vac. The product features low earth leakage current and built-in active PFC circuit for lower energy consumption. Delta PJT series of open frame power supplies can meet the price demand of cost competitive markets without compromising the quality of the components. The series is certified for EMI standards according to EN 55032 and conforms to major international safety standards according to IEC/EN/UL 60950-1 standards.

#### Typical Applications



# PJU

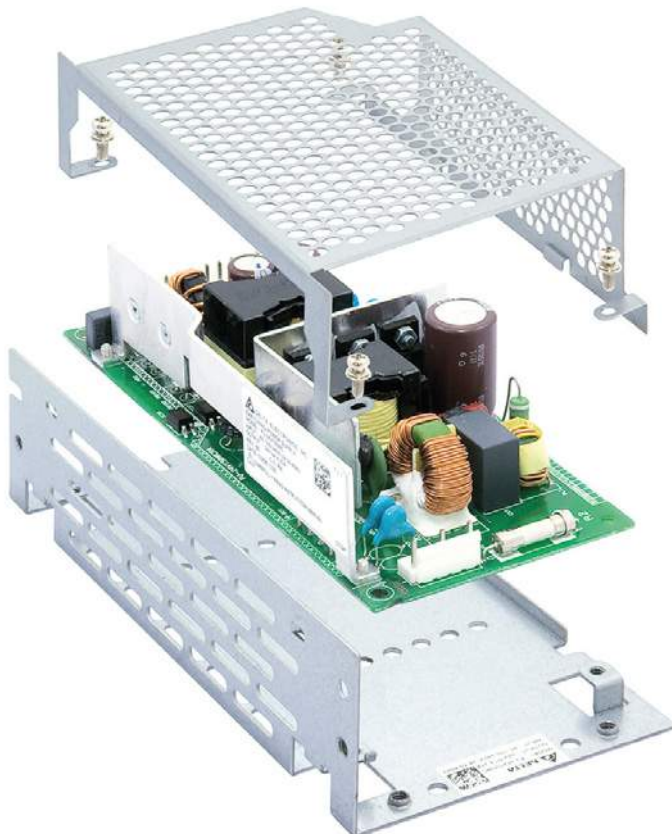


Delta PJU series of open frame power supply comes with integrated DC-UPS function. The PJU models will switch to battery operation (batteries not included) without interruption to prevent end-product downtime for the customer in the event of power disruption or unexpected loss of AC input power. Consequently, the PJU series can increase the operational reliability of a critical operation. Convection cooling is applied for the single phase design with wide operating temperature range from -20°C to +70°C. The diagnostic monitoring signals for AC OK and Battery Low status will alert the user of any failure through TTL open collector. Metal chassis with case cover is available as option for different installation preferences.

## Typical Applications



## Configuration Options



For the PJ series and PJB series, metal chassis and case cover are available as options for different installation preferences.

- • Enclosed
- • Open Frame
- • L Frame

All Delta power supplies are fully compliant with RoHS Directive 2011/65/EU for environmental protection. For more information or enquiries, please do not hesitate to contact your local Delta Electronics distributor or visit [www.DeltaPSU.com](http://www.DeltaPSU.com).

# PJ Open Frame Power Supply

## 12V Output



# PJ

### HIGHLIGHTS & FEATURES

- Universal AC input voltage range
- High PF > 0.97 (for 50W and above)
- Low Inrush Current / Low Leakage Current
- Conforms to harmonic current IEC/EN 61000-3-2, Class A; Class A and Class D for 50W and above
- Conformal coating on PCBAs to protect against common dust and chemical pollutants
- Versatile configuration options: Open Frame, L Frame, Enclosed
- Remote ON/OFF option for selected models
- Long life capacitors

### GENERAL SPECIFICATIONS

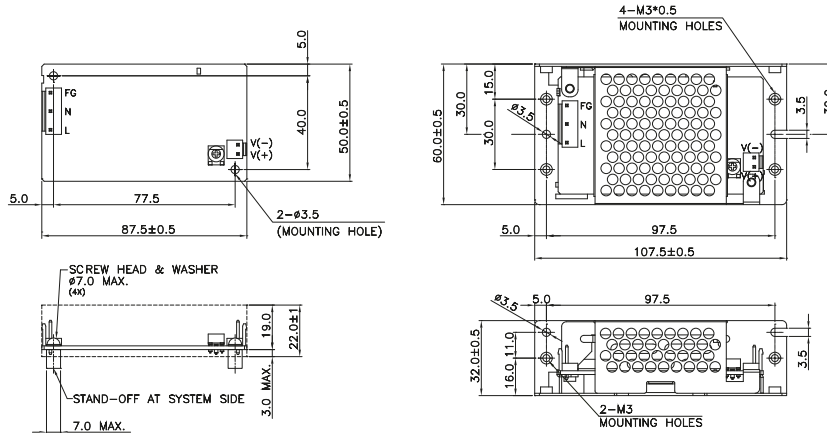
OUTPUT	PJ-12V15W□□A	PJ-12V30W□□A	PJ-12V50W□□A	PJ-12V100W□□A	PJ-12V150W□□A
Output Voltage	12V	12V	12V	12V	12V
Output Voltage Range	10.8-13.2V	10.8-13.2V	10.8-13.2V	10.8-13.2V	10.8-13.2V
Output Current	1.3A	2.5A	4.3A	8.5A	12.5A
Output Power	15.6W	30W	51.6W	102W	150W
Line Regulation	< 48mV				
Load Regulation	< 100mV				
PARD (20MHz)	< 150mVpp				
Hold-up Time	20ms typ. @ 100Vac				
<b>INPUT</b>					
Phase Input	Single Phase				
Input Voltage Range	85-264Vac				
Input Frequency	47-63Hz				
Input Current	0.35A typ. @ 100Vac, 0.20A typ. @ 200Vac	0.65A typ. @ 100Vac, 0.35A typ. @ 200Vac	0.65A typ. @ 100Vac, 0.35A typ. @ 200Vac	1.30A typ. @ 100Vac, 0.65A typ. @ 200Vac	1.90A typ. @ 100Vac, 0.95A typ. @ 200Vac
Efficiency <sup>1)</sup> at 100% Load	81.0% typ. @ 100Vac, 82.5% typ. @ 200Vac	83.0% typ. @ 100Vac, 85.0% typ. @ 200Vac	83.0% typ. @ 100Vac, 85.0% typ. @ 200Vac	85.0% typ. @ 100Vac, 87.5% typ. @ 200Vac	88.0% typ. @ 100Vac, 91.0% typ. @ 200Vac
Max Inrush Current (Cold Start)	15A typ. @ 100Vac, 30A typ. @ 200Vac				
Power Factor	Conform to EN 61000-3-2		0.98 typ. @ 100Vac, 0.97 typ. @ 200Vac	0.99 typ. @ 100Vac, 0.98 typ. @ 200Vac	0.99 typ. @ 100Vac, 0.97 typ. @ 200Vac
Leakage Current	< 0.1mA @ 100Vac, < 0.2mA @ 240Vac			< 0.2mA @ 100Vac, < 0.4mA @ 240Vac	
<b>MECHANICAL</b>					
Case Cover / Chassis	SGCC				
Dimensions (L x W x D) <sup>2)</sup>	87.5 x 50 x 22 mm (3.44" x 1.97" x 0.87")	105 x 50 x 25.6 mm (4.13" x 1.97" x 1.01")	132 x 50 x 26.6 mm (5.20" x 1.97" x 1.05")	155 x 62 x 33.5 mm (6.10" x 2.44" x 1.32")	160 x 75 x 37 mm (6.30" x 2.95" x 1.46")
Unit Weight <sup>2)</sup>	0.06 kg (0.13 lb)	0.11 kg (0.24 lb)	0.16 kg (0.35 lb)	0.26 kg (0.57 lb)	0.30 kg (0.66 lb)
Cooling System	Convection				
Input Terminal	(JST): B3P5-VH(LF)(SN)				
Output Terminal	(JST): B2P-VH(LF)(SN)	(JST): B4P-VH(LF)(SN)		(JST): B8P-VH(LF)(SN)	V- (JST): B7P-VH(LF)(SN), V+ (JST): B6P-VH(LF)(SN)
Input / Output Wire	AWG 22-18	AWG 22-18	AWG 22-18	AWG 22-18	AWG 22-18
MTBF <sup>3)</sup>	> 200,000 hrs	> 200,000 hrs	> 200,000 hrs	> 200,000 hrs	> 200,000 hrs
<b>ENVIRONMENT</b>					
Operating Temperature	-10°C to +70°C				
Storage Temperature	-25°C to +75°C				
Power De-rating <sup>2)</sup>	> 50°C (2.5% / °C)				> 50°C (2% / °C)
Operating Humidity	5 to 95% RH (Non-Condensing)				
Operating Altitude	0 to 5,000 m (0 to 16,400 ft)				

#### Notes

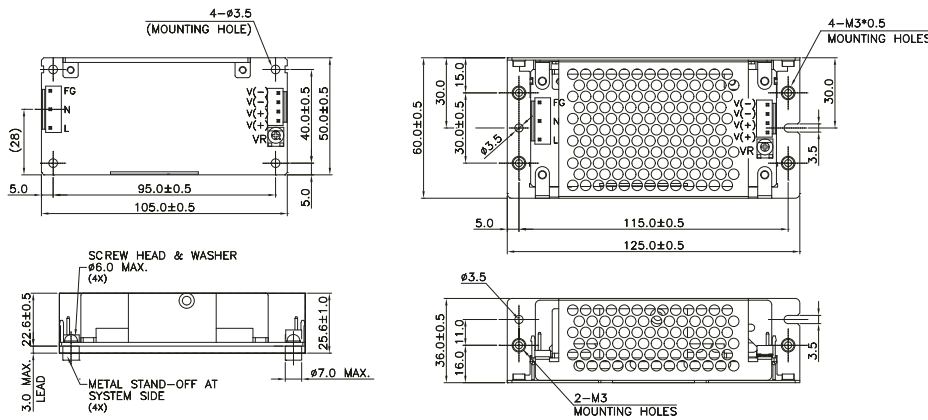
- 1) At 25°C ambient temperature.
- 2) Open Frame (without chassis and cover).
- 3) MTBF as per JEITA RCR-9102B.
- 4) All parameters are specified at 25°C ambient temperature unless otherwise indicated.

# MECHANICAL DRAWINGS

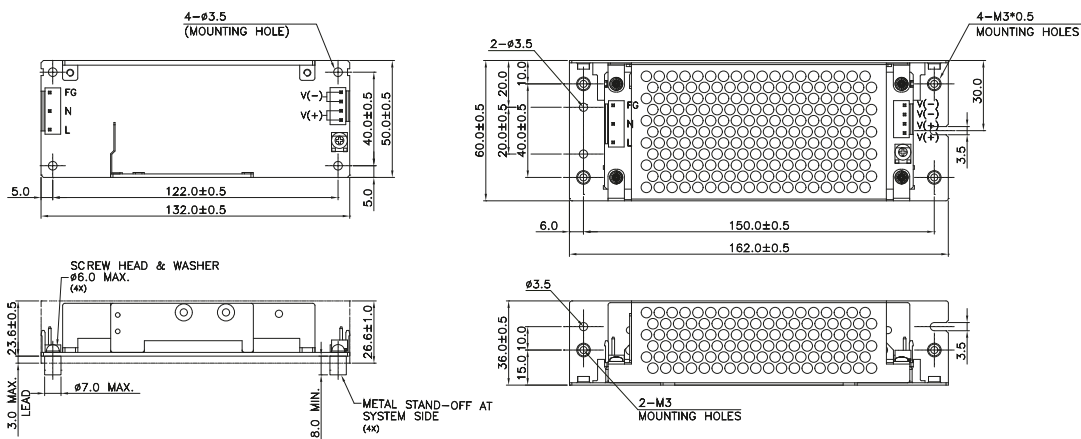
## PJ-12V15W□NA



## PJ-12V30W□NA



## PJ-12V50W□NA

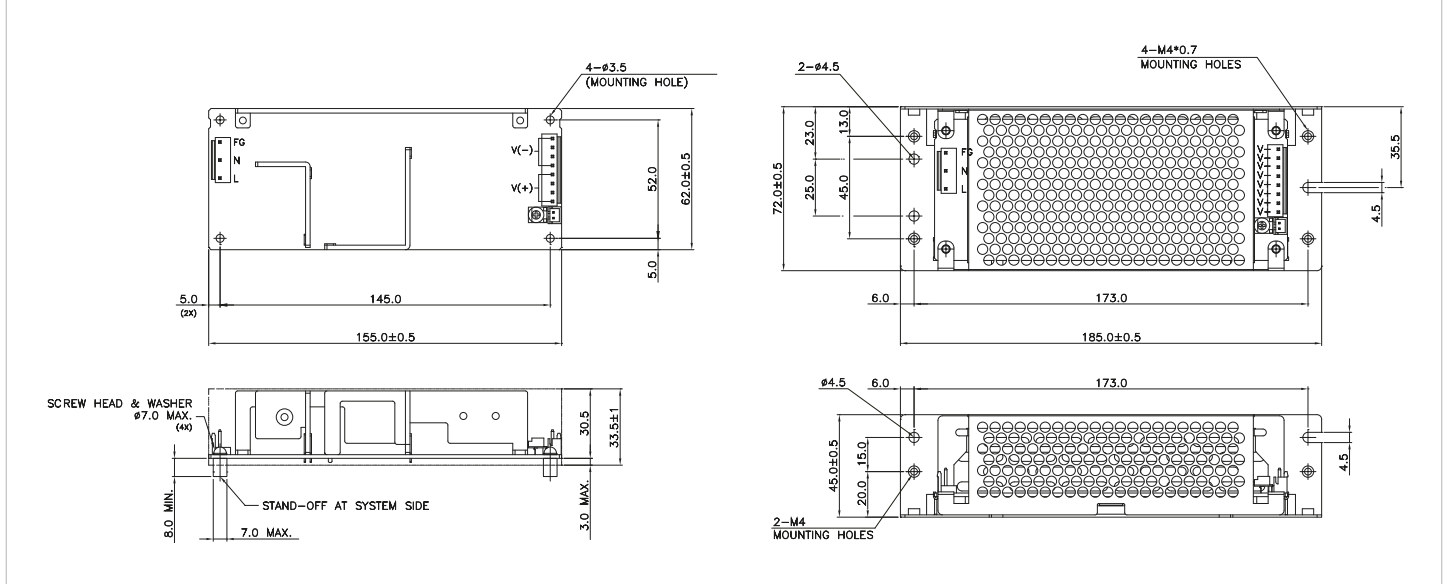


\*Units in mm

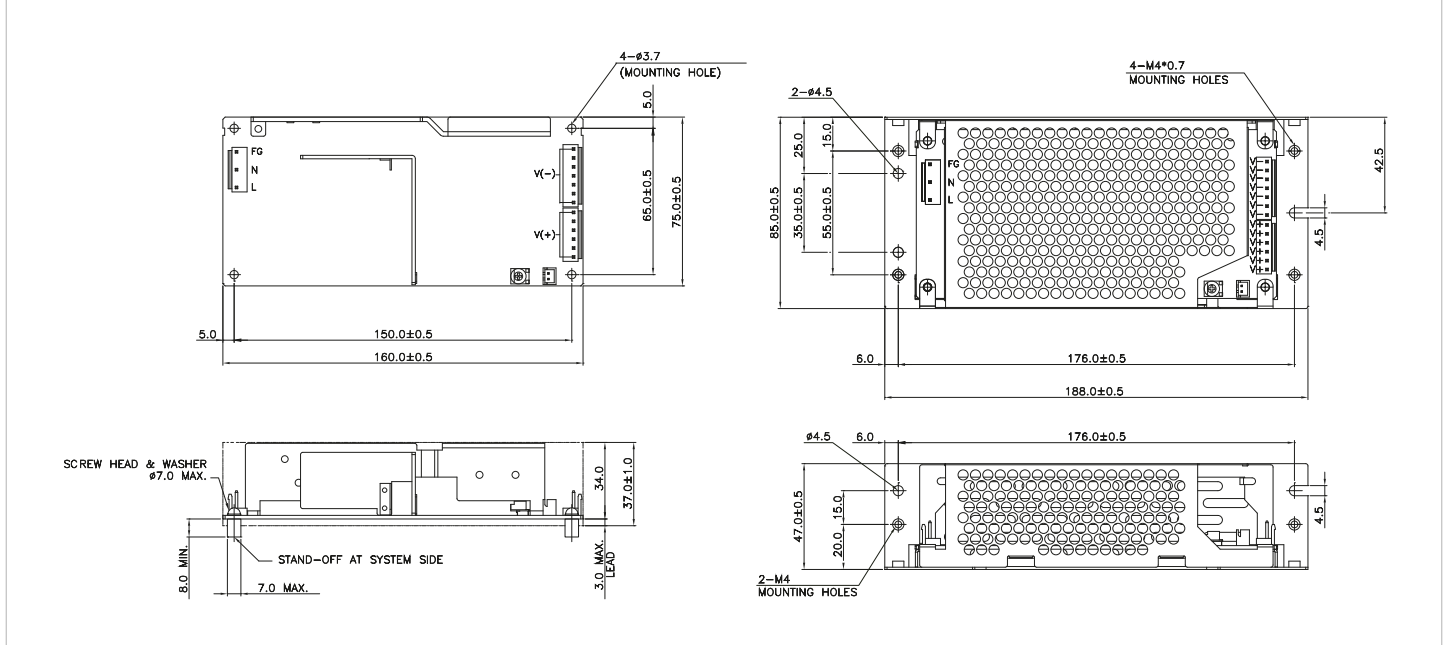


# MECHANICAL DRAWINGS

PJ-12V100W□□A



PJ-12V150W□□A



\*Units in mm



# PJ Open Frame Power Supply

## 24V Output



# PJ

### HIGHLIGHTS & FEATURES

- Universal AC input voltage range
- High PF > 0.97 (for 50W and above)
- Low Inrush Current / Low Leakage Current
- Conforms to harmonic current IEC/EN 61000-3-2, Class A; Class A and Class D for 50W and above
- Conformal coating on PCBAs to protect against common dust and chemical pollutants
- Versatile configuration options: Open Frame, L Frame, Enclosed
- Remote ON/OFF option for selected models
- Long life capacitors



### GENERAL SPECIFICATIONS

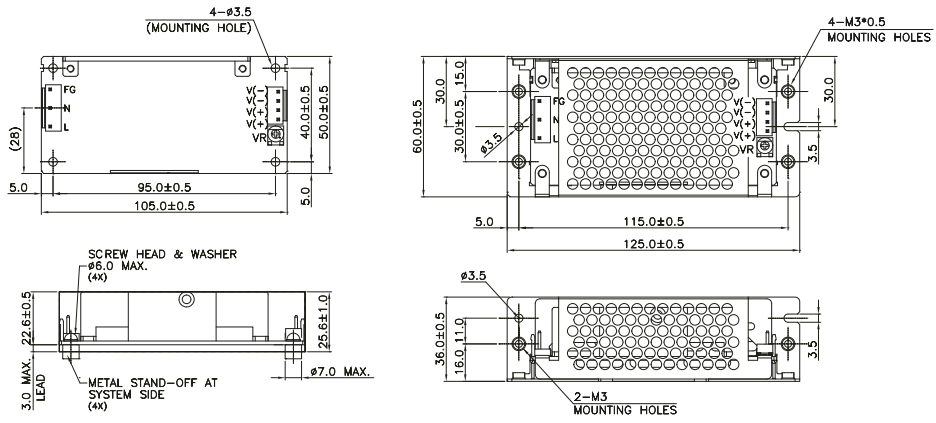
OUTPUT	PJ-24V30W□□A	PJ-24V50W□□A	PJ-24V100W□□A	PJ-24V150W□□A
Output Voltage	24V	24V	24V	24V
Output Voltage Range	21.6-26.4V	21.6-26.4V	21.6-26.4V	21.6-26.4V
Output Current	1.3A	2.1A	4.3A	6.3A
Output Power	31.2W	50.4W	103.2W	150W
Line Regulation	< 96mV			
Load Regulation	< 150mV			
PARD (20MHz)	< 150mVpp			
Hold-up Time	20ms typ. @ 100Vac			
<b>INPUT</b>				
Phase Input	Single Phase			
Input Voltage Range	85-264Vac			
Input Frequency	47-63Hz			
Input Current	0.65A typ. @ 100Vac, 0.35A typ. @ 200Vac	0.65A typ. @ 100Vac, 0.35A typ. @ 200Vac	1.30A typ. @ 100Vac, 0.65A typ. @ 200Vac	1.90A typ. @ 100Vac, 0.95A typ. @ 200Vac
Efficiency <sup>1)</sup> at 100% Load	85.0% typ. @ 100Vac, 86.0% typ. @ 200Vac	84.5% typ. @ 100Vac, 87.0% typ. @ 200Vac	86.0% typ. @ 100Vac, 89.0% typ. @ 200Vac	88.0% typ. @ 100Vac, 91.0% typ. @ 200Vac
Max Inrush Current (Cold Start)	15A typ. @ 100Vac, 30A typ. @ 200Vac			
Power Factor	Conform to EN 61000-3-2	0.98 typ. @ 100Vac, 0.97 typ. @ 200Vac	0.99 typ. @ 100Vac, 0.98 typ. @ 200Vac	0.99 typ. @ 100Vac, 0.97 typ. @ 200Vac
Leakage Current	< 0.1mA @ 100Vac, < 0.2mA @ 240Vac		< 0.2mA @ 100Vac, < 0.4mA @ 240Vac	
<b>MECHANICAL</b>				
Case Cover / Chassis	SGCC			
Dimensions (L x W x D) <sup>2)</sup>	105 x 50 x 25.6 mm (4.13" x 1.97" x 1.01")	132 x 50 x 26.6 mm (5.20" x 1.97" x 1.05")	155 x 62 x 33.5 mm (6.10" x 2.44" x 1.32")	160 x 75 x 37 mm (6.30" x 2.95" x 1.46")
Unit Weight <sup>2)</sup>	0.11 kg (0.24 lb)	0.16 kg (0.35 lb)	0.26 kg (0.57 lb)	0.29 kg (0.64 lb)
Cooling System	Convection			
Input Terminal	(JST): B3P5-VH(LF)(SN)			
Output Terminal	(JST): B4P-VH(LF)(SN)		(JST): B8P-VH(LF)(SN)	
Input / Output Wire	AWG 22-18	AWG 22-18	AWG 22-18	AWG 22-18
MTBF <sup>3)</sup>	> 200,000 hrs	> 200,000 hrs	> 200,000 hrs	> 200,000 hrs
<b>ENVIRONMENT</b>				
Operating Temperature	-10°C to +70°C			
Storage Temperature	-25°C to +75°C			
Power De-rating <sup>2)</sup>	> 50°C (2.5% / °C)			> 50°C (2% / °C)
Operating Humidity	5 to 95% RH (Non-Condensing)			
Operating Altitude	0 to 5,000 m (0 to 16,400 ft)			

#### Notes

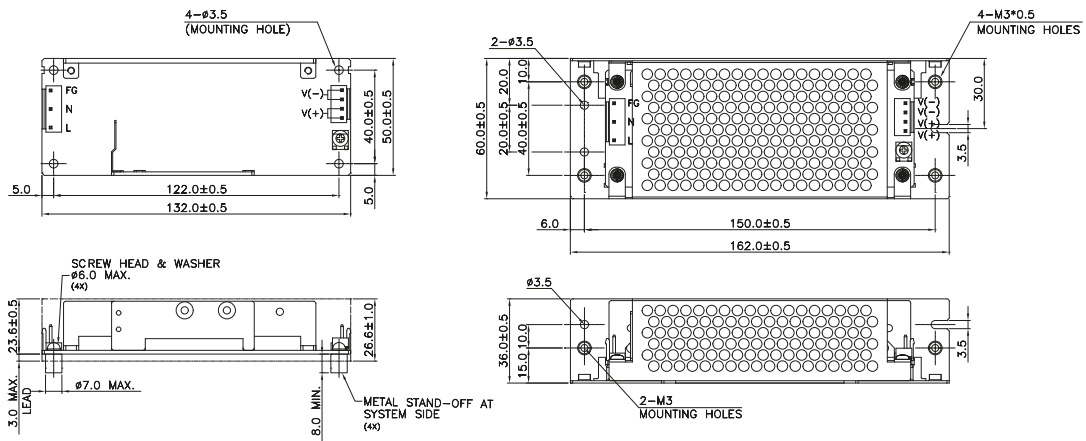
- 1) At 25°C ambient temperature.
- 2) Open Frame (without chassis and cover).
- 3) MTBF as per JEITA RCR-9102B.
- 4) All parameters are specified at 25°C ambient temperature unless otherwise indicated.

## MECHANICAL DRAWINGS

### PJ-24V30W□NA

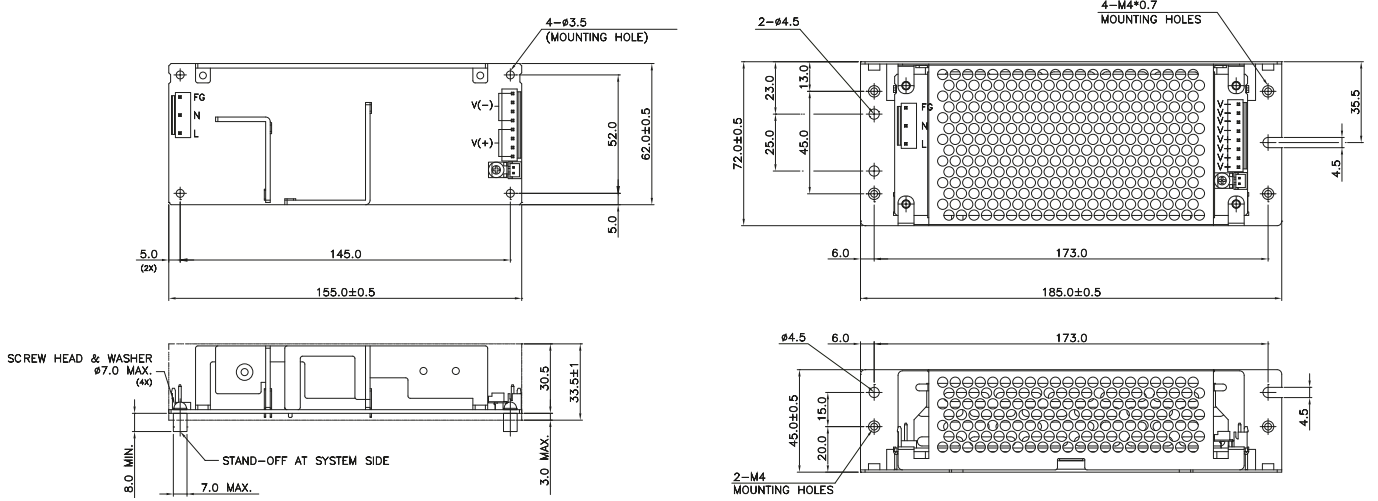


### PJ-24V50W□NA

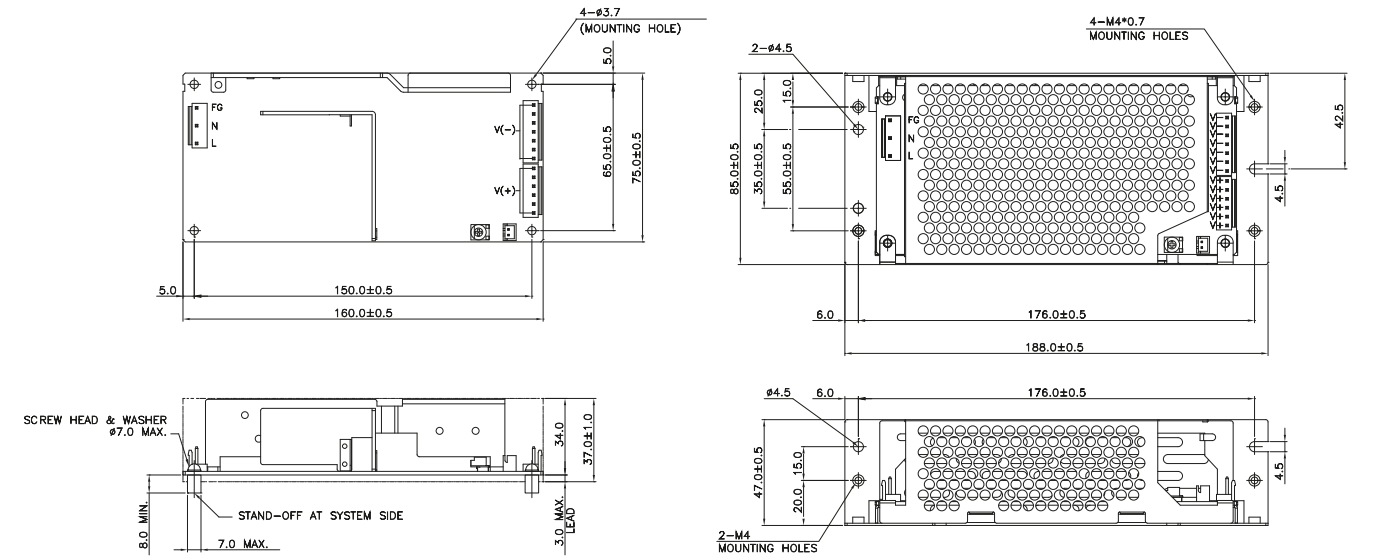


\*Units in mm

PJ-24V100W□□A



PJ-24V150W□□A



\*Units in mm

# PJ Open Frame Power Supply

## 5V, 48V Output



# PJ

### HIGHLIGHTS & FEATURES

- Universal AC input voltage range
- High PF > 0.97 (for 50W)
- Low Inrush Current / Low Leakage Current
- Conforms to harmonic current IEC/EN 61000-3-2, Class A; Class A and Class D for 50W
- Conformal coating on PCBAs to protect against common dust and chemical pollutants
- Versatile configuration options: Open Frame, L Frame, Enclosed
- Long life capacitors

### GENERAL SPECIFICATIONS

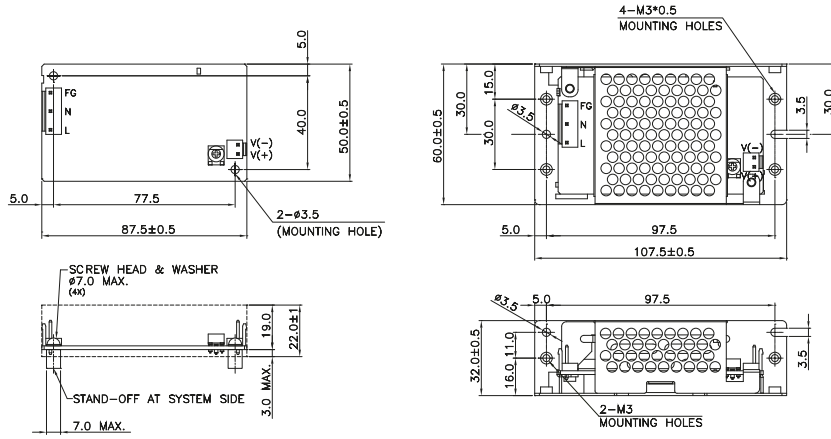
OUTPUT	PJ-5V15W□□A	PJ-48V50W□□A
Output Voltage	5V	48V
Output Voltage Range	4.50-5.50V	43.2-52.8V
Output Current	3.0A	1.1A
Output Power	15W	52.8W
Line Regulation	< 20mV	< 192mV
Load Regulation	< 40mV	< 240mV
PARD (20MHz)	< 120mVpp	< 250mVpp
Hold-up Time	20ms typ. @ 100Vac	
<b>INPUT</b>		
Phase Input	Single Phase	
Input Voltage Range	85-264Vac	
Input Frequency	47-63Hz	
Input Current	0.35A typ. @ 100Vac, 0.20A typ. @ 200Vac	0.65A typ. @ 100Vac, 0.35A typ. @ 200Vac
Efficiency <sup>1)</sup> at 100% Load	78.0% typ. @ 100Vac, 79.5% typ. @ 200Vac	83.0% typ. @ 100Vac, 85.0% typ. @ 200Vac
Max Inrush Current (Cold Start)	15A typ. @ 100Vac, 30A typ. @ 200Vac	
Power Factor	Conform to EN 61000-3-2	0.98 typ. @ 100Vac, 0.97 typ. @ 200Vac
Leakage Current	< 0.1mA @ 100Vac, < 0.2mA @ 240Vac	
<b>MECHANICAL</b>		
Case Cover / Chassis	SGCC	
Dimensions (L x W x D) <sup>2)</sup>	87.5 x 50 x 22 mm (3.44" x 1.97" x 0.87")	132 x 50 x 26.6 mm (5.20" x 1.97" x 1.05")
Unit Weight <sup>2)</sup>	0.06 kg (0.13 lb)	0.16 kg (0.35 lb)
Cooling System	Convection	
Input Terminal	(JST): B3P5-VH(LF)(SN)	
Output Terminal	(JST): B2P-VH(LF)(SN)	(JST): B4P-VH(LF)(SN)
Input / Output Wire	AWG 22-18	AWG 22-18
MTBF <sup>3)</sup>	> 200,000 hrs	> 200,000 hrs
<b>ENVIRONMENT</b>		
Operating Temperature	-10°C to +70°C	
Storage Temperature	-25°C to +75°C	
Power De-rating <sup>2)</sup>	> 50°C (2.5% / °C)	
Operating Humidity	5 to 95% RH (Non-Condensing)	
Operating Altitude	0 to 5,000 m (0 tp 16,400 ft)	

#### Notes

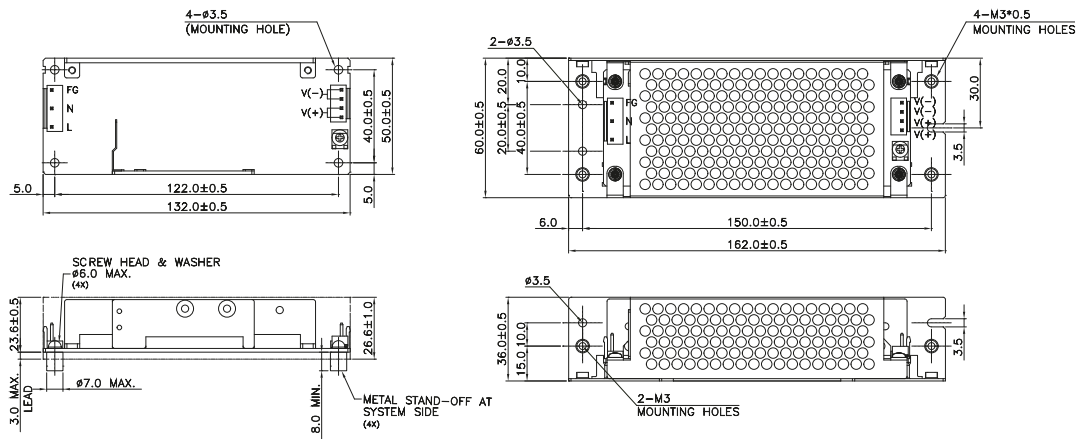
- 1) At 25°C ambient temperature.
- 2) Open Frame (without chassis and cover).
- 3) MTBF as per JEITA RCR-9102B.
- 4) All parameters are specified at 25°C ambient temperature unless otherwise indicated.

## MECHANICAL DRAWINGS

PJ-5V15W□NA



PJ-48V50W□NA



\*Units in mm

# PJB Open Frame Power Supply

## 24V Output



# PJB

### HIGHLIGHTS & FEATURES

- Universal AC input voltage range
- Power Boost of 200% for 10 seconds
- High PF > 0.97
- Low Inrush Current / Low Leakage Current
- Conforms to harmonic current IEC/EN 61000-3-2, Class A
- Conformal coating on PCBAs to protect against common dust and chemical pollutants
- Versatile configuration options: Open Frame, L Frame, Enclosed
- Remote ON/OFF option for selected models

### GENERAL SPECIFICATIONS

OUTPUT	PJB-24V100W□□□A	PJB-24V150W□□□A	PJB-24V240W□□□A
Output Voltage	24V	24V	24V
Output Voltage Range	21.6-26.4V	21.6-26.4V	21.6-26.4V
Output Current	4.3A (8.6A for 10s)	6.3A (12.6A for 10s)	10.0A (20.0A for 10s)
Output Power	103.2W (206.4W for 10s)	151.2W (302.4W for 10s)	240W (480W for 10s)
Line Regulation	< 96mV		
Load Regulation	< 150mV		
PARD (20MHz)	< 150mVpp		
Hold-up Time	20ms typ. @ 100Vac		
<b>INPUT</b>			
Phase Input	Single Phase		
Input Voltage Range	85-264Vac		
Input Frequency	47-63Hz		
Input Current	1.30A typ. @ 100Vac, 0.65A typ. @ 200Vac	1.90A typ. @ 100Vac, 0.95A typ. @ 200Vac	2.80A typ. @ 100Vac, 1.50A typ. @ 200Vac
Efficiency <sup>1)</sup> at 100% Load	86.5% typ. @ 100Vac, 89.0% typ. @ 200Vac	88.0% typ. @ 100Vac, 90.5% typ. @ 200Vac	91.0% typ. @ 100Vac, 92.5% typ. @ 200Vac
Max Inrush Current (Cold Start)	15A typ. @ 100Vac, 30A typ. @ 200Vac		
Power Factor	0.98 typ. @ 100Vac, 0.97 typ. @ 200Vac	0.98 typ. @ 100Vac, 0.95 typ. @ 200Vac	0.98 typ. @ 100Vac, 0.97 typ. @ 200Vac
Leakage Current	< 0.2mA @ 100Vac, < 0.4mA @ 240Vac		
<b>MECHANICAL</b>			
Case Cover / Chassis	SGCC		
Dimensions (L x W x D) <sup>2)</sup>	155 x 62 x 33.5 mm (6.10" x 2.44" x 1.32")	160 x 75 x 37 mm (6.30" x 2.95" x 1.46")	180 x 84 x 42 mm (7.09" x 3.31" x 1.65")
Unit Weight <sup>2)</sup>	0.26 kg (0.57 lb)	0.31 kg (0.68 lb)	0.44 kg (0.97 lb)
Cooling System	Convection		
Input Terminal	(JST): B3P5-VH(LF)(SN)		
Output Terminal	(JST): B8P-VH(LF)(SN)	V- (JST): B7P-VH(LF)(SN), V+ (JST): B6P-VH(LF)(SN)	
Input / Output Wire	AWG 22-18	AWG 22-18	AWG 22-18
MTBF <sup>3)</sup>	> 200,000 hrs	> 200,000 hrs	> 200,000 hrs
<b>ENVIRONMENT</b>			
Operating Temperature	-10°C to +70°C		
Storage Temperature	-25°C to +75°C		
Power De-rating <sup>2)</sup>	> 50°C (2.5% / °C)	> 50°C (2% / °C)	
Operating Humidity	5 to 95% RH (Non-Condensing)		
Operating Altitude	0 to 5,000 m (0 to 16,400 ft)		ITE Application: 0 to 5,000 m (0 to 16,400 ft) PSE Class 1: 0 to 2,000 m (0 to 6,560 ft)

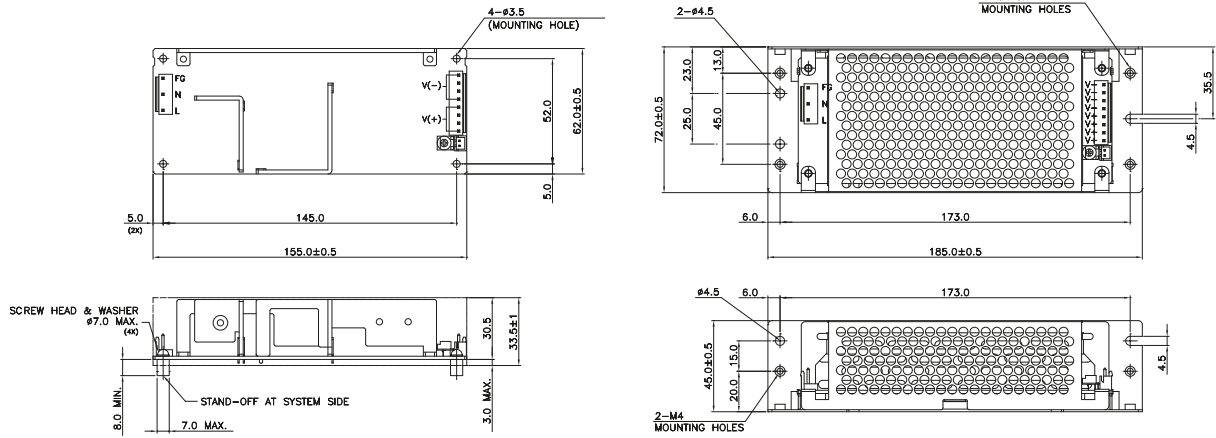
#### Notes

- 1) At 25°C ambient temperature.
- 2) Open Frame (without chassis and cover).
- 3) MTBF as per JEITA RCR-9102B.
- 4) All parameters are specified at 25°C ambient temperature unless otherwise indicated.

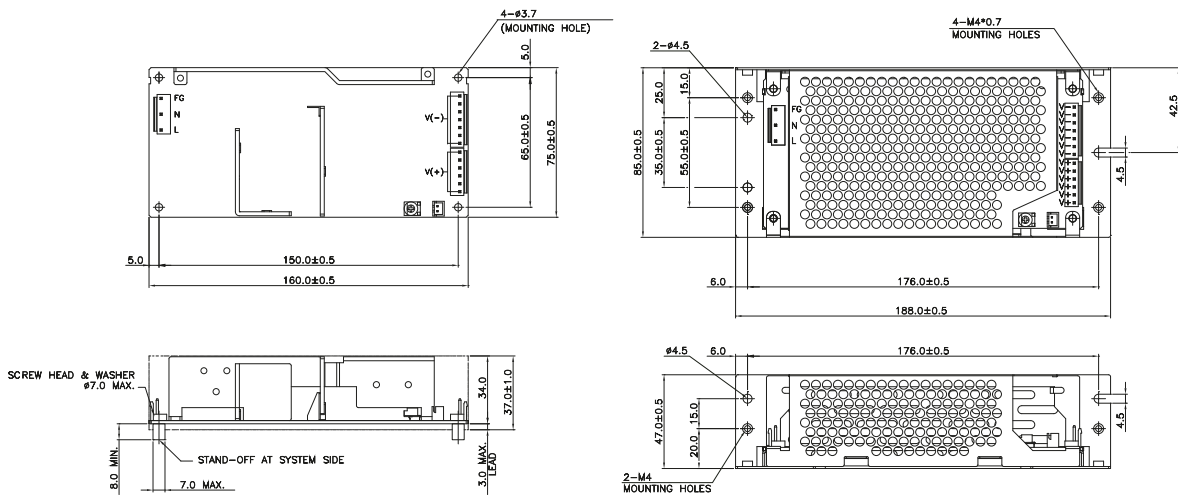


## MECHANICAL DRAWINGS

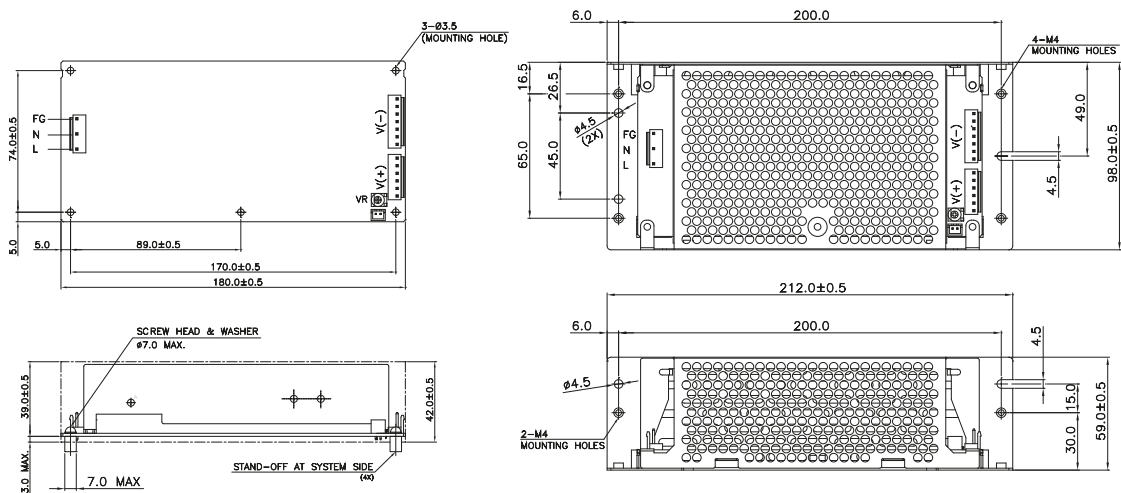
PJB-24V100W□□□



PJB-24V150W□□□



PJB-24V240W□□□



\*Units in mm

# PJT Open Frame Power Supply

## 12V Output

# PJT

### HIGHLIGHTS & FEATURES

- Universal AC input voltage range
- Small standard footprint
- Low Leakage Current < 0.1mA
- Conforms to harmonic current IEC/EN 61000-3-2, Class A
- High MTBF > 700,000 hrs. as per Telcordia SR-332
- Short Circuit / Overvoltage / Overcurrent / Over Temperature Protections



### GENERAL SPECIFICATIONS

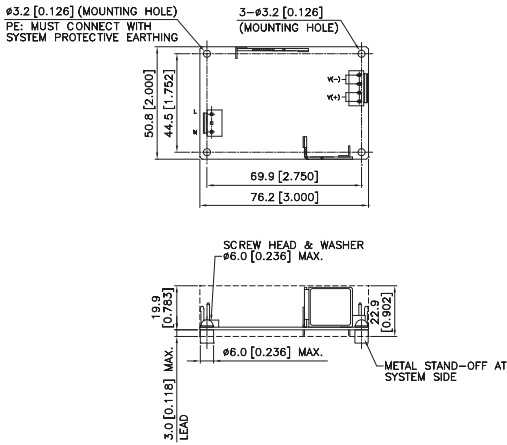
OUTPUT	PJT-12V40WBA□	PJT-12V65WBA□	PJT-12V100WBA□	PJT-12V100WBB□
Output Voltage	12V	12V	12V	12V
Output Current	3.33A	5.0A	8.33A	6.67A (Convection) 8.33A (Forced Cooling)
Output Power	40W	60W	100W	80W (Convection) 100W (Forced Cooling)
Line Regulation	< 0.5%			
Load Regulation	< 1.0%			
PARD (20MHz)	< 120mVpp			
Hold-up Time	18ms typ. @ 115Vac, 90ms typ. @ 230Vac	16ms typ. @ 115Vac, 80ms typ. @ 230Vac	20ms typ. @ 115Vac & 230Vac	10ms typ. @ 115Vac % 230Vac
<b>INPUT</b>				
Phase Input	Single Phase			
Input Voltage Range	90-264Vac			
Input Frequency	47-63Hz			
Input Current	0.85A typ. @ 115Vac	1.50A typ. @ 115Vac		2.50A typ. @ 115Vac
Efficiency <sup>1)</sup> at 100% Load	85.0% typ. @ 115Vac, 86.0% typ. @ 230Vac	86.0% typ. @ 115Vac, 86.5% typ. @ 230Vac	86.5% typ. @ 115Vac & 230Vac	86.0% typ. @ 115Vac, 88.0% typ. @ 230Vac
Max Inrush Current (Cold Start)	30A typ. @ 115Vac, 60A typ. @ 230Vac			
Power Factor	Conform to EN 61000-3-2			
Leakage Current	< 0.1mA @ 240Vac			
<b>MECHANICAL</b>				
Case Cover / Chassis	-			
Dimensions (L x W x D)	76.2 x 50.8 x 22.9 mm (3.00" x 2.00" x 0.90")	101.6 x 50.8 x 30 mm (4.00" x 2.00" x 1.18")	127 x 76.2 x 31 mm (5.00" x 3.00" x 1.22")	101.6 x 50.8 x 31.8 mm (4.00" x 2.00" x 1.25")
Unit Weight	0.08 kg (0.18 lb)	0.13 kg (0.29 lb)	0.21 kg (0.46 lb)	0.15 kg (0.33 lb)
Cooling System	Convection			Convection / Forced Cooling
Input Terminal	(JST): B2P3-VH(LF)(SN)			
Output Terminal	(JST): B4P-VH(LF)(SN)		(JST): B8P-VH(LF)(SN)	(JST): B4P-VH(LF)(SN)
Input / Output Wire	AWG 22-18	AWG 22-18	AWG 22-18	AWG 20-18
MTBF <sup>2)</sup>	> 700,000 hrs	> 700,000 hrs	> 700,000 hrs	> 700,000 hrs
<b>ENVIRONMENT</b>				
Operating Temperature	-10°C to +70°C			
Storage Temperature	-40°C to +85°C			
Power De-rating	> 50°C (2.5% / °C)			Convection: > 50°C (2% / °C) Forced Cooling: > 50°C (2.5% / °C)
Operating Humidity	10 to 95% RH (Non-Condensing)			
Operating Altitude	0 to 5,000 m (0 to 16,400 ft)			

#### Notes

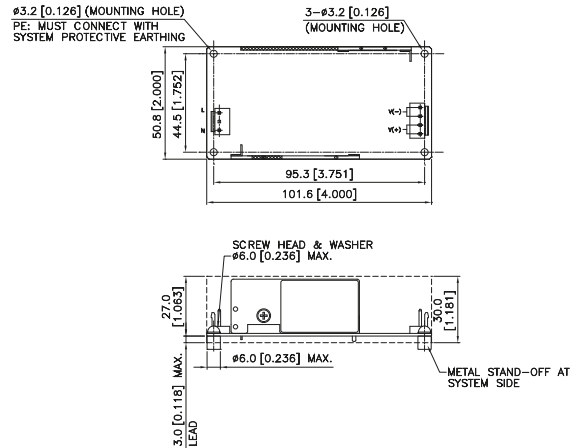
- 1) At 25°C ambient temperature.
- 2) MTBF as per Telcordia SR-332 (I/P: 115Vac, O/P: 100% load).
- 3) All parameters are specified at 25°C ambient temperature unless otherwise indicated.

## MECHANICAL DRAWINGS

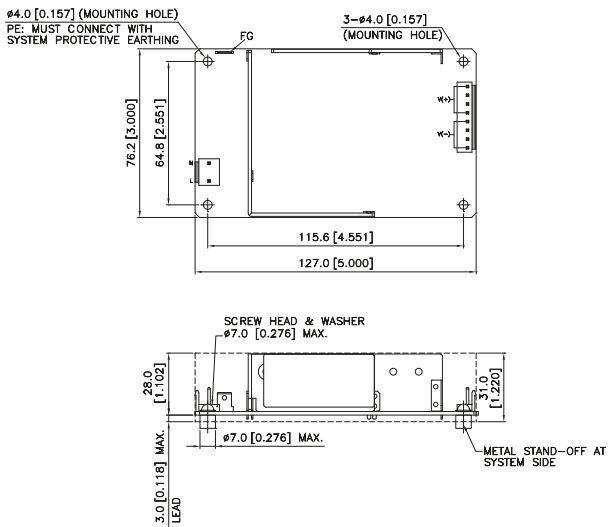
PJT-12V40WBA□



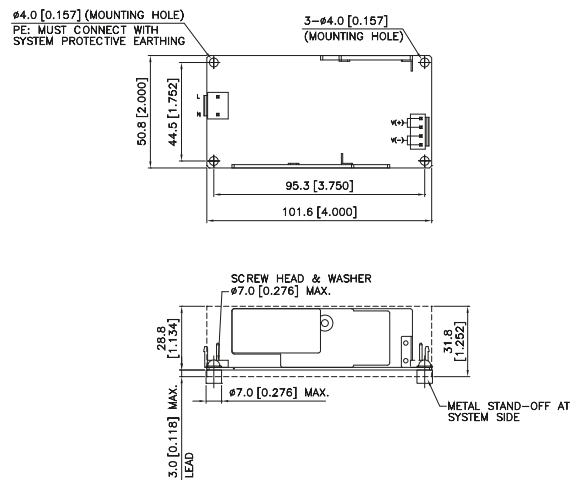
PJT-12V65WBA□



PJT-12V100WBA□



PJT-12V100WBB□



\*Units in mm [inch]

# PJT Open Frame Power Supply

## 15V Output

# PJT

### HIGHLIGHTS & FEATURES

- Universal AC input voltage range
- Small standard footprint
- Low Leakage Current < 0.1mA
- Conforms to harmonic current IEC/EN 61000-3-2, Class A
- High MTBF > 700,000 hrs. as per Telcordia SR-332
- Short Circuit / Overvoltage / Overcurrent / Over Temperature Protections



### GENERAL SPECIFICATIONS

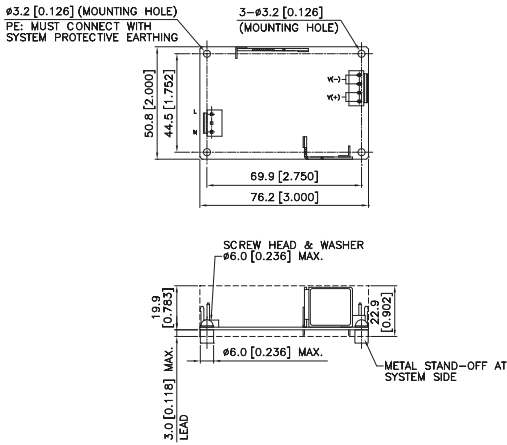
OUTPUT	PJT-15V40WBA□	PJT-15V65WBA□	PJT-15V100WBA□	PJT-15V100WBB□
Output Voltage	15V	15V	15V	15V
Output Current	2.67A	4.2A	6.67A	5.33A (Convection) 6.67A (Forced Cooling)
Output Power	40W	63W	100W	80W (Convection) 100W (Forced Cooling)
Line Regulation	< 0.5%			
Load Regulation	< 1.0%			
PARD (20MHz)	< 150mVpp			
Hold-up Time	18ms typ. @ 115Vac, 90ms typ. @ 230Vac	16ms typ. @ 115Vac, 80ms typ. @ 230Vac	20ms typ. @ 115Vac % 230Vac	10ms typ. @ 115Vac & 230Vac
<b>INPUT</b>				
Phase Input	Single Phase			
Input Voltage Range	90-264Vac			
Input Frequency	47-63Hz			
Input Current	0.85A typ. @ 115Vac	1.50A typ. @ 115Vac		2.50A typ. @ 115Vac
Efficiency <sup>1)</sup> at 100% Load	86.0% typ. @ 115Vac, 87.0% typ. @ 230Vac	87.0% typ. @ 115Vac, 88.5% typ. @ 230Vac	87.5% typ. @ 115Vac & 230Vac	87.0% typ. @ 115Vac, 89.0% typ. @ 230Vac
Max Inrush Current (Cold Start)	30A typ. @ 115Vac, 60A typ. @ 230Vac			
Power Factor	Conform to EN 61000-3-2			
Leakage Current	< 0.1mA @ 240Vac			
<b>MECHANICAL</b>				
Case Cover / Chassis	-			
Dimensions (L x W x D)	76.2 x 50.8 x 22.9 mm (3.00" x 2.00" x 0.90")	101.6 x 50.8 x 30 mm (4.00" x 2.00" x 1.18")	127 x 76.2 x 31 mm (5.00" x 3.00" x 1.22")	101.6 x 50.8 x 31.8 mm (4.00" x 2.00" x 1.25")
Unit Weight	0.08 kg (0.18 lb)	0.13 kg (0.29 lb)	0.21 kg (0.46 lb)	0.15 kg (0.33 lb)
Cooling System	Convection			Convection / Forced Cooling
Input Terminal	(JST): B2P3-VH(LF)(SN)			
Output Terminal	(JST): B4P-VH(LF)(SN)		(JST): B8P-VH(LF)(SN)	(JST): B4P-VH(LF)(SN)
Input / Output Wire	AWG 22-18	AWG 22-18	AWG 22-18	AWG 20-18
MTBF <sup>2)</sup>	> 700,000 hrs	> 700,000 hrs	> 700,000 hrs	> 700,000 hrs
<b>ENVIRONMENT</b>				
Operating Temperature	-10°C to +70°C			
Storage Temperature	-40°C to +85°C			
Power De-rating	> 50°C (2.5% / °C)			Convection: > 50°C (2% / °C) Forced Cooling: > 50°C (2.5% / °C)
Operating Humidity	10 to 95% RH (Non-Condensing)			
Operating Altitude	0 to 5,000 m (0 to 16,400 ft)			

#### Notes

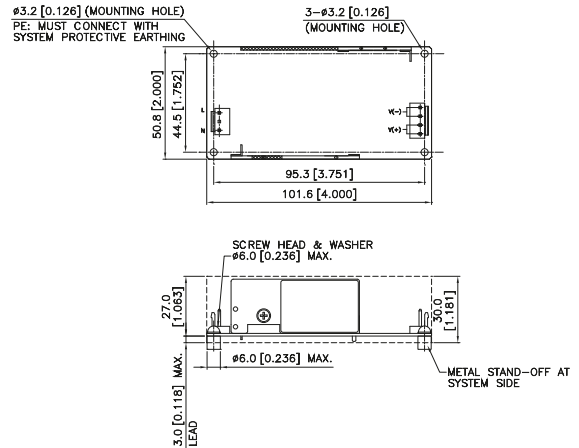
- 1) At 25°C ambient temperature.
- 2) MTBF as per Telcordia SR-332 (I/P: 115Vac, O/P: 100% load).
- 3) All parameters are specified at 25°C ambient temperature unless otherwise indicated.

## MECHANICAL DRAWINGS

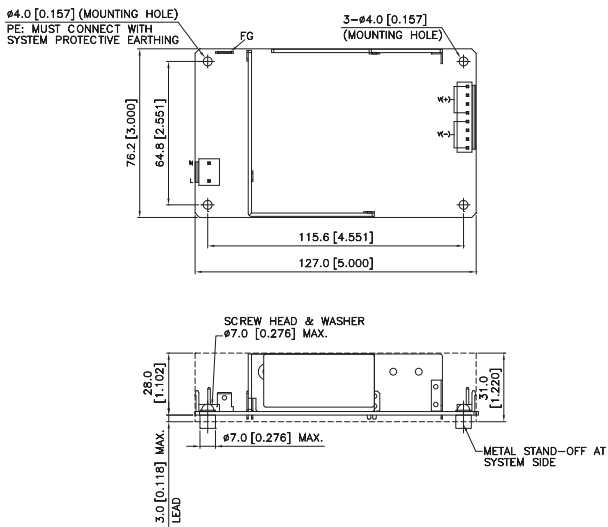
PJT-15V40WBA□



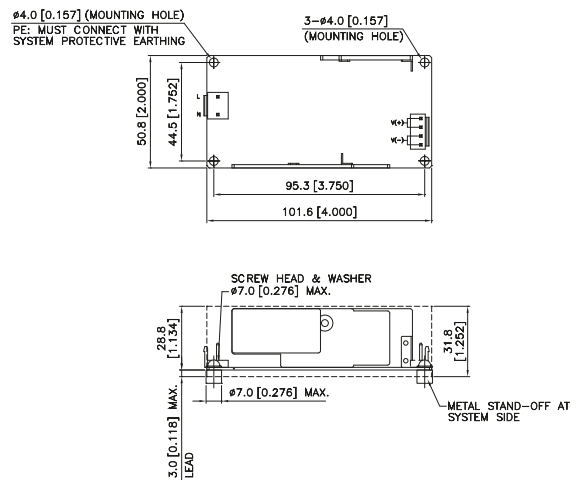
PJT-15V65WBA□



PJT-15V100WBA□



PJT-15V100WBB□



\*Units in mm [inch]

# PJT Open Frame Power Supply

## 18V Output

# PJT

### HIGHLIGHTS & FEATURES

- Universal AC input voltage range
- Small standard footprint
- Low Leakage Current < 0.1mA
- Conforms to harmonic current IEC/EN 61000-3-2, Class A
- High MTBF > 700,000 hrs. as per Telcordia SR-332
- Short Circuit / Overvoltage / Overcurrent / Over Temperature Protections



### GENERAL SPECIFICATIONS

OUTPUT	PJT-18V40WBA□	PJT-18V65WBA□	PJT-18V100WBA□	PJT-18V100WBB□
Output Voltage	18V	18V	18V	18V
Output Current	2.22A	3.61A	5.55A	4.44A (Convection) 5.55A (Forced Cooling)
Output Power	40W	65W	100W	80W (Convection) 100W (Forced Cooling)
Line Regulation	< 0.5%			
Load Regulation	< 1.0%			
PARD (20MHz)	< 180mVpp			
Hold-up Time	18ms typ. @ 115Vac, 90ms typ. @ 230Vac	16ms typ. @ 115Vac, 80ms typ. @ 230Vac	20ms typ. @ 115Vac & 230Vac	10ms typ. @ 115Vac & 230Vac
<b>INPUT</b>				
Phase Input	Single Phase			
Input Voltage Range	90-264Vac			
Input Frequency	47-63Hz			
Input Current	0.85A typ. @ 115Vac	1.50A typ. @ 115Vac		2.50A typ. @ 115Vac
Efficiency <sup>1)</sup> at 100% Load	86.0% typ. @ 115Vac & 230Vac	87.0% typ. @ 115Vac, 88.0% typ. @ 230Vac	87.5% typ. @ 115Vac & 230Vac	87.0% typ. @ 115Vac, 89.0% typ. @ 230Vac
Max Inrush Current (Cold Start)	30A typ. @ 115Vac, 60A typ. @ 230Vac			
Power Factor	Conform to EN 61000-3-2			
Leakage Current	< 0.1mA @ 240Vac			
<b>MECHANICAL</b>				
Case Cover / Chassis	-			
Dimensions (L x W x D)	76.2 x 50.8 x 22.9 mm (3.00" x 2.00" x 0.90")	101.6 x 50.8 x 30 mm (4.00" x 2.00" x 1.18")	127 x 76.2 x 31 mm (5.00" x 3.00" x 1.22")	101.6 x 50.8 x 31.8 mm (4.00" x 2.00" x 1.25")
Unit Weight	0.08 kg (0.18 lb)	0.13 kg (0.29 lb)	0.21 kg (0.46 lb)	0.15 kg (0.33 lb)
Cooling System	Convection			Convection / Forced Cooling
Input Terminal	(JST): B2P3-VH(LF)(SN)			
Output Terminal	(JST): B4P-VH(LF)(SN)		(JST): B8P-VH(LF)(SN)	(JST): B4P-VH(LF)(SN)
Input / Output Wire	AWG 22-18	AWG 22-18	AWG 22-18	AWG 20-18
MTBF <sup>2)</sup>	> 700,000 hrs	> 700,000 hrs	> 700,000 hrs	> 700,000 hrs
<b>ENVIRONMENT</b>				
Operating Temperature	-10°C to +70°C			
Storage Temperature	-40°C to +85°C			
Power De-rating	> 50°C (2.5% / °C)			Convection: > 50°C (2% / °C) Forced Cooling: > 50°C (2.5% / °C)
Operating Humidity	10 to 95% RH (Non-Condensing)			
Operating Altitude	0 to 5,000 m (0 to 16,400 ft)			

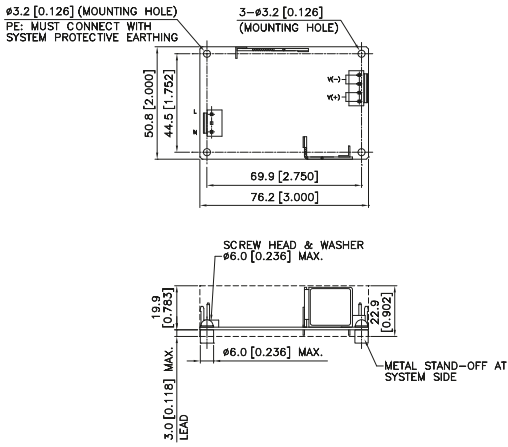
#### Notes

- 1) At 25°C ambient temperature.
- 2) MTBF as per Telcordia SR-332 (I/P: 115Vac, O/P: 100% load).
- 3) All parameters are specified at 25°C ambient temperature unless otherwise indicated.

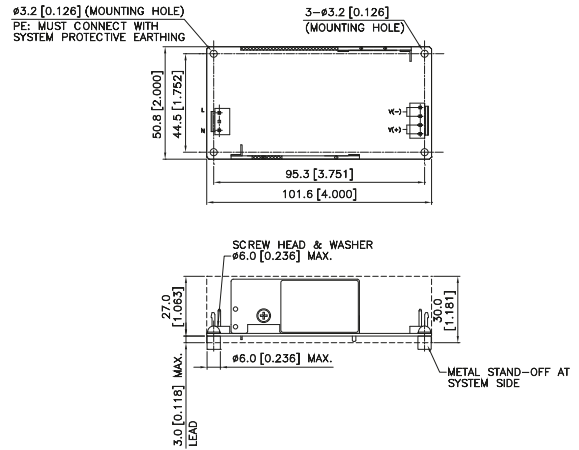


## MECHANICAL DRAWINGS

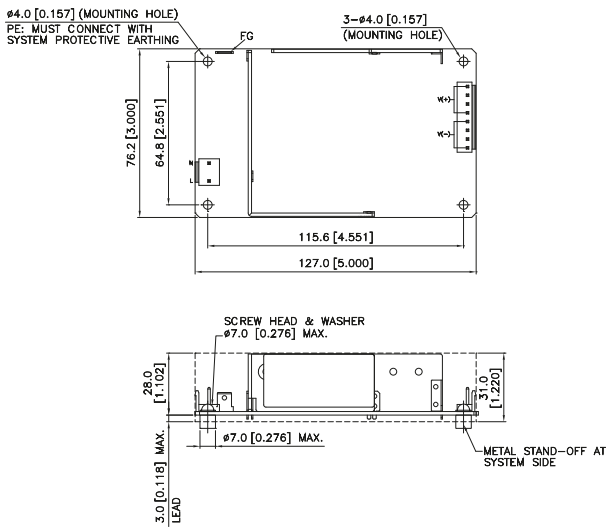
PJT-18V40WBA□



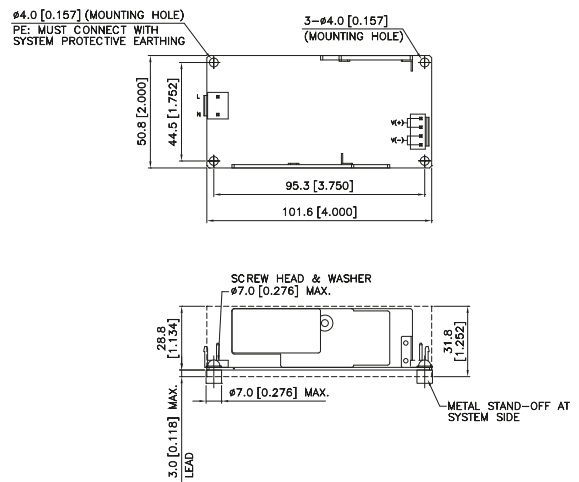
PJT-18V65WBA□



PJT-18V100WBA□



PJT-18V100WBB□



\*Units in mm [inch]

# PJT Open Frame Power Supply

## 24V, 27V Output

# PJT



### HIGHLIGHTS & FEATURES

- Universal AC input voltage range
- Small standard footprint
- Low Leakage Current
- Conforms to harmonic current IEC/EN 61000-3-2, Class A
- High MTBF > 700,000 hrs. as per Telcordia SR-332
- Short Circuit / Overvoltage / Overcurrent / Over Temperature Protections

### GENERAL SPECIFICATIONS

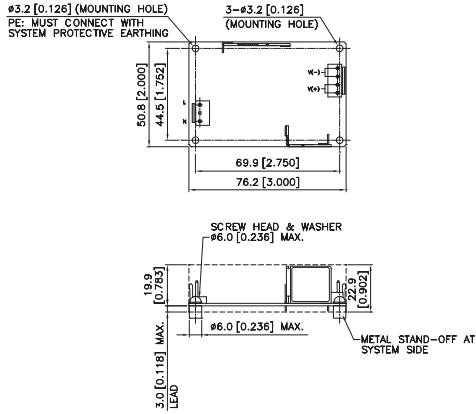
OUTPUT	PJT-24V40WBA□	PJT-24V65WBA□	PJT-24V100WBA□	PJT-24V100WBB□	PJT-27V150WBNA
Output Voltage	24V	24V	24V	24V	V1: 27V, V <sub>SB</sub> : 12V
Output Current	1.66A	2.71A	4.17A	3.33A (Convection) 4.17A (Forced Cooling)	V1: 5.55A V <sub>SB</sub> : 0.5A
Output Power	40W	65W	100W	80W (Convection) 100W (Forced Cooling)	V1: 150W V <sub>SB</sub> : 6W
Line Regulation	< 0.5%				< 0.5% (@ 90-264Vac input, 100% load)
Load Regulation	< 1.0%				< 1.0% (@ 90-264Vac input, 0-100% load)
PARD (20MHz)	< 240mVpp				V1: < 150mVpp, V <sub>SB</sub> : < 75mVpp
Hold-up Time	18ms typ. @ 115Vac, 90ms typ. @ 230Vac	16ms typ. @ 115Vac, 80ms typ. @ 230Vac	20ms typ. @ 115Vac & 230Vac	10ms typ. @ 115Vac & 230Vac	> 40ms @ 115Vac & 230Vac
<b>INPUT</b>					
Phase Input	Single Phase				
Input Voltage Range	90-264Vac				85-264Vac
Input Frequency	47-63Hz				
Input Current	0.85A typ. @ 115Vac	1.50A typ. @ 115Vac		2.50A typ. @ 115Vac	< 1.80A @ 115Vac, < 0.90A @ 230Vac
Efficiency <sup>1)</sup> at 100% Load	86.0% typ. @ 115Vac, 87.0% typ. @ 230Vac	87.0% typ. @ 115Vac & 230Vac	88.0% typ. @ 115Vac & 230Vac	88.0% typ. @ 115Vac, 89.0% typ. @ 230Vac	> 88.5% @ 115Vac, > 89.5% @ 230Vac
Max Inrush Current (Cold Start)	30A typ. @ 115Vac, 60A typ. @ 230Vac				< 50A @ 115Vac, < 100A @ 230Vac
Power Factor	Conform to EN 61000-3-2				> 0.99 @ 115Vac, > 0.93 @ 230Vac
Leakage Current	< 0.1mA @ 240Vac				< 0.25mA @ 264Vac
<b>MECHANICAL</b>					
Case Cover / Chassis	-				
Dimensions (L x W x D)	76.2 x 50.8 x 22.9 mm (3.00" x 2.00" x 0.90")	101.6 x 50.8 x 30 mm (4.00" x 2.00" x 1.18")	127 x 76.2 x 31 mm (5.00" x 3.00" x 1.22")	101.6 x 50.8 x 31.8 mm (4.00" x 2.00" x 1.25")	127 x 76.2 x 36.5 mm (5.00" x 3.00" x 1.44")
Unit Weight	0.08 kg (0.18 lb)	0.13 kg (0.29 lb)	0.21 kg (0.46 lb)	0.15 kg (0.33 lb)	0.37 kg (0.82 lb)
Cooling System	Convection			Convection / Forced Cooling	Convection
Input Terminal	(JST): B2P3-VH(LF)(SN)				(JST): B3P5-VH(LF)(SN)
Output Terminal	(JST): B4P-VH(LF)(SN)		(JST): B8P-VH(LF)(SN)	(JST): B4P-VH(LF)(SN)	27V (JST): B4P-VH(LF)(SN) 12V (JST): B2B-XH-A(LF)(SN)
Input / Output Wire	AWG 22-18	AWG 22-18	AWG 22-18	AWG 20-18	I/P & 27V O/P: AWG 22-18 12V O/P: AWG 28-22
MTBF <sup>2)</sup>	> 700,000 hrs	> 700,000 hrs	> 700,000 hrs	> 700,000 hrs	> 700,000 hrs
<b>ENVIRONMENT</b>					
Operating Temperature	-10°C to +70°C				
Storage Temperature	-40°C to +85°C				
Power De-rating	PJT-24V40WBA□, PJT-24V65WBA□, PJT-24V100WBA□, PJT-27V150WBNA□: > 50°C (2.5% / °C) PJT-24V100WBB□: Convection: > 50°C (2% / °C); Forced Cooling: > 50°C (2.5% / °C)				
Operating Humidity	10 to 95% RH (Non-Condensing); PJT-27V150WBNA: 5 to 95% RH (Non-Condensing)				
Operating Altitude	0 to 5,000 m (0 to 16,400 ft)				

#### Notes

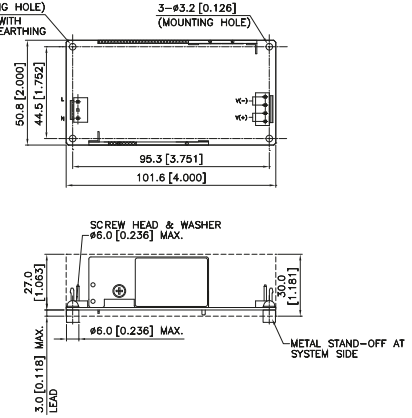
- 1) At 25°C ambient temperature.
- 2) MTBF as per Telcordia SR-332 (I/P: 115Vac, O/P: 100% load).
- 3) All parameters are specified at 25°C ambient temperature unless otherwise indicated.

## MECHANICAL DRAWINGS

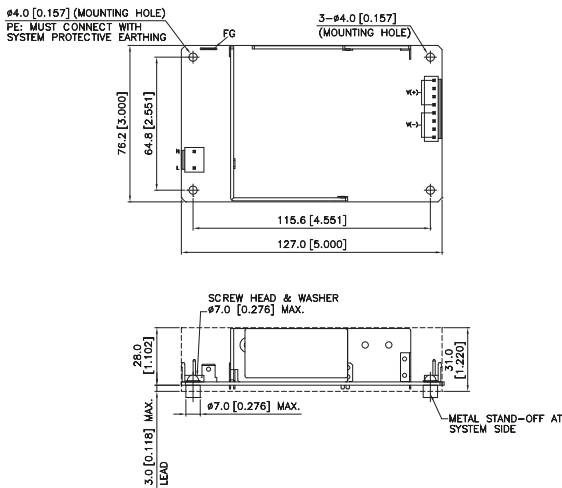
PJT-24V40WBA□



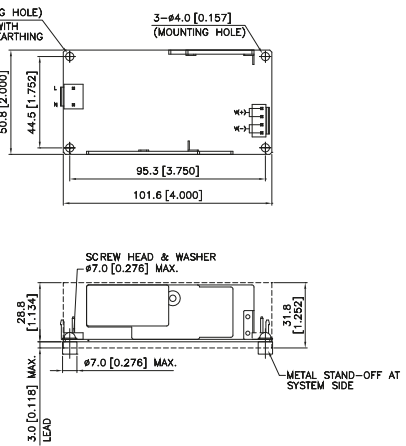
PJT-24V65WBA□



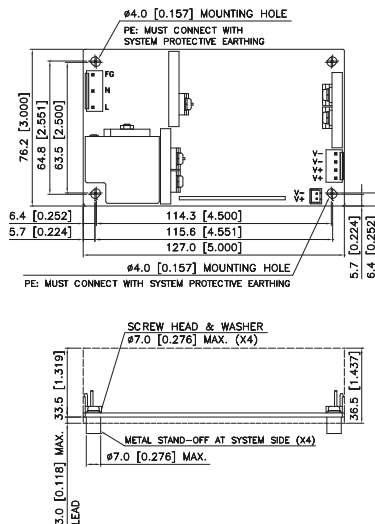
PJT-24V100WBA□



PJT-24V100WBB□



PJT-27V150WBNA



\*Units in mm [inch]

# PJU Open Frame Power Supply

## 27V Output

# PJU

### HIGHLIGHTS & FEATURES

- Universal AC Input voltage range
- Zero switch over time from loss of AC to battery operation
- Protection against reverse polarity battery connection
- Built-in diagnostic monitoring for AC OK and Battery Low status
- Overvoltage / Overcurrent / Over Temperature / Short Circuit Protections
- Built-in over current and short circuit protection in Buffering (battery discharging) mode operation



### GENERAL SPECIFICATIONS

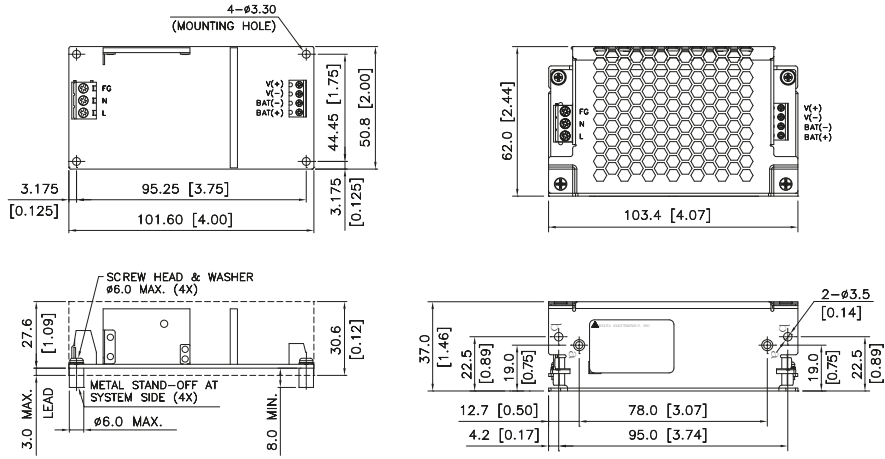
	COMING SOON	COMING SOON
OUTPUT	PJU-27V60W□□□	PJU-27V60W□B□
Output Voltage	27.6V	27.6V
Output Voltage Range	24V-28V	24V-28V
Output Current	0-2.15A	0-2.15A
Output Power	60W	60W
Line Regulation	± 0.5%	
Load Regulation	± 1.0%	
PARD (20MHz)	< 240mVpp	
Hold-up Time	10ms typ. @115Vac, 50ms typ. @ 230Vac	
INPUT		
Phase Input	Single Phase	
Input Voltage Range	90-264Vac	
Input Frequency	47-63Hz	
Input Current	< 1.2A @ 115Vac, < 0.7A @ 230Vac	
Efficiency <sup>1)</sup> at 100% Load	> 88.0% @ 115Vac, > 89.0% @ 230Vac	
Max Inrush Current (Cold Start)	< 30A @ 115Vac, < 60A @ 230Vac	
Power Factor	Conform to EN 61000-3-2	
Leakage Current	< 1mA @ 240Vac	
MECHANICAL		
Case Cover / Chassis	SECC Steel	
Dimensions (L x W x D) <sup>2)</sup>	101.6 x 50.8 x 30.6 mm (4.00" x 2.00" x 1.20")	101.6 x 50.8 x 30.6 mm (4.00" x 2.00" x 1.20")
Unit Weight <sup>2)</sup>	0.12 kg (0.26 lb)	0.12 kg (0.26 lb)
Cooling System	Convection	
Input Terminal	Terminal Block (DECA): 3 Pins (Rated 300V/16A)	
Output Terminal	Terminal Block (DECA): 4 Pins (Rated 300V/8A)	Terminal Block (DECA): 6 Pins (Rated 300V/8A)
Input / Output Wire	I/P: AWG 26-12; O/P: AWG 26-16	I/P: AWG 26-12; O/P: AWG 26-16
MTBF <sup>3)</sup>	> 700,000 hrs	
ENVIRONMENT		
Operating Temperature	-20°C to +70°C	
Storage Temperature	-40°C to +85°C	
Power De-rating	> 40°C (1% / °C)	
Operating Humidity	5 to 95% RH (Non-Condensing)	
Operating Altitude	0 to 5,000 m (0 to 16,400 ft)	

#### Notes

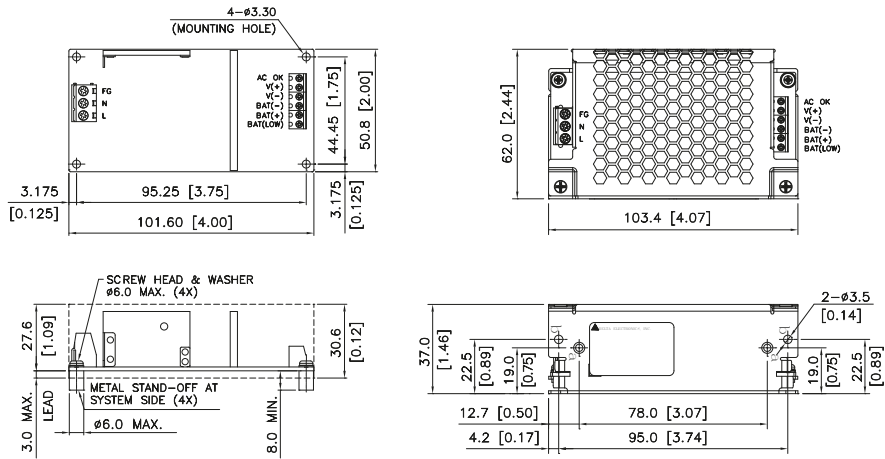
- 1) At 25°C ambient temperature.
- 2) Open frame (without chassis and cover).
- 3) MTBF as per Telcordia SR-332 (I/P: 115Vac, O/P: 100% load).
- 4) All parameters are specified at 25°C ambient temperature unless otherwise indicated.

## MECHANICAL DRAWINGS

PJU-27V60W□A□



PJU-27V60W□B□



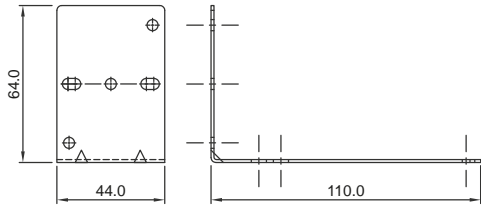
\*Units in mm [inch]

# Accessories

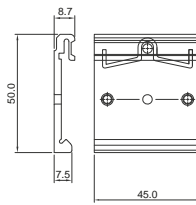
## L-01, L-02, L-03A, P-03

### DIN Rail Accessories

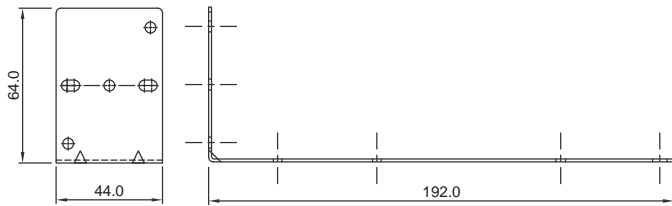
#### L-01



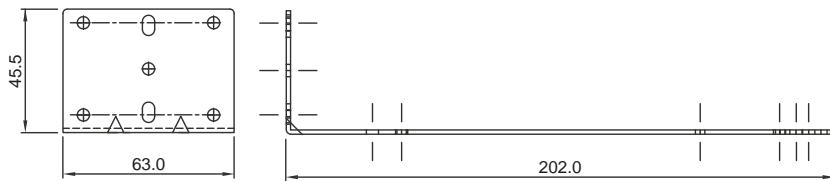
#### P-03



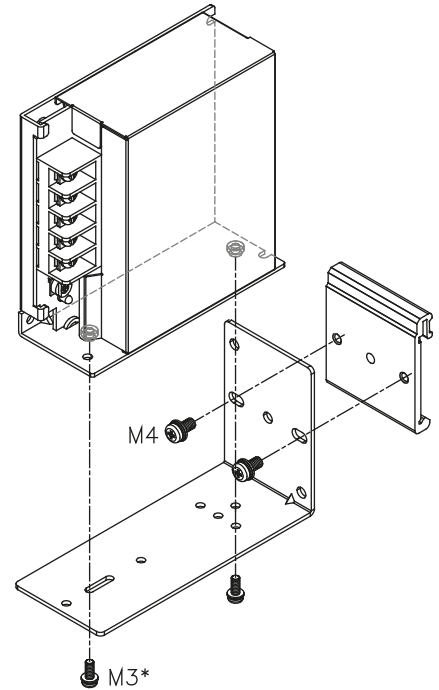
#### L-02



#### L-03A

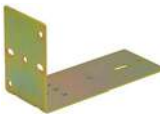





### Accessories Assembly



\*Except PMC-24V300W1BA. Please use M4 screws only.

### Model Information

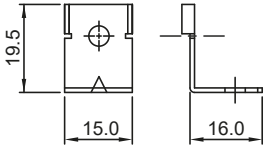
Item	Model Number	Compatible Models
	L-01	PMC-05V015W1AA, PMC-05V035W1AA, PMC-05V050W1AA PMC-12V035W1AA, PMC-12V050W1AA, PMC-12V060W1NA PMC-24V035W1A□, PMC-24V050W1A□, PMC-24V075W1A□ PMH-12V100WCL□ PMH-24V50WCA□, PMH-24V100WCL□, PMH-24V100WCM□ PMT-5V35W1A□, PML-5V35W1A□, PMT-5V50W1A□, PML-5V50W1A□ PMT-15V50W1A□, PML-15V50W1A□ PMT-12V35W1A□, PML-12V35W1A□, PMT-12V50W1A□, PML-12V50W1A□ PMT-24V35W1A□, PML-24V35W1A□, PMT-24V50W1A□, PML-24V50W1A□
	L-02	PMC-12V100W1AA, PMC-12V150W1B□ PMC-24V100W1A□, PMC-24V150W1A□, PMC-24V150W1B□, PMC-24V150W2AA, PMC-DSPV100W1A PMC-48V150W1B□ PMH-24V100WCA□, PMH-24V100WCC□, PMH-24V100WCN□, PMH-24V150WCB□, PMH-24V150WCD□, PMH-24V150WCL□ PMU-13V155W□□A, PMU-27V155W□□A PMT-12V100W1A□, PML-12V100W1A□, PMT-12V150W1A□, PML-12V150W1A□ PMT-24V100W1A□, PML-24V100W1A□, PMT-24V150W1A□, PML-24V150W1A□ PMT-48V150W1A□, PML-48V150W1A□ PMT-D1V100W1A□, PML-D1V100W1A□, PMT-D2V100W1A□, PML-D2V100W1A□
	L-03A	PMC-24V300W1BA PMF-24V200WC□□, PMF-24V240WC□□
	P-03	All models *P-03 must be used with L-01, L-02 or L-03A



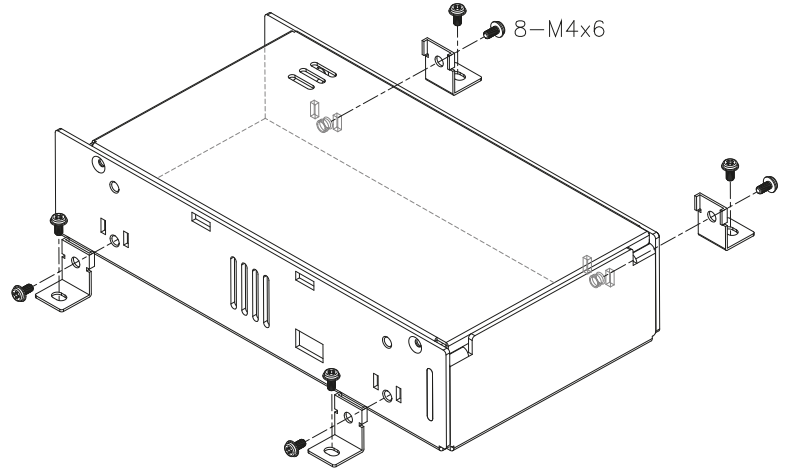
# LM-01

## Panel Mount Accessories


### ■ LM-01



### Accessories Assembly



## Model Information

Item	Model Number	Compatible Models
	LM-01	PMT-4V350W1A□ PMT-5V350W1A□ PMT-12V350W1A□ PMT-24V200W1A□, PML-24V200W1A□, PMT-24V350W1A□ PMT-36V350W1A□ PMT-48V350W1A□ PMF-4V320WC□□ PMF-5V320WC□□ PMF-24V200WC□□, PMF-24V240WC□□, PMF-24V320WC□□ PMR-4V320WC□A, PMR-4V320WD□A PMR-5V320WC□A, PMR-5V320WD□A

# Standards & Approvals

## Delta Standard Power Supplies

	CE	CB Scheme to IEC 60950-1	SIQ or TUV or NEMKO to EN 60950-1	UL 60950-1	UL 508	UL 1310	NEC Class 2	CSA C22.2 No. 107.1-01	CSA C22.2 No. 60950-1	ATEX EN 60079-15	CSA C22.2 No. 213 and ANSI/ISA-12.12.09	EAC (Eurasian Customs Union)	CCC (China)	RoHS Directive 2011/65/EU	SEMI F47	EN 61204-3	EN 61000-3-2 (PFC)	EN 61000-3-3 (Flicker)	EN 61000-6-1 (Immunity)	EN 61000-6-2 (Immunity)	EN 55024 (Immunity)	EN 55011 Class B (Emissions)	EN 55032 Class B (Emissions)
DIN Rail Power Supply																							
DRP012V015W1AY	●	●	●	●	●			●		●	●	●		●			●	●	●	●	●	●	●
DRP012V015W1AZ	●	●	●	●	●			●		●	●	●		●			●	●	●	●	●	●	●
DRP012V030W1AY	●	●	●	●	●			●		●	●	●		●			●	●	●	●	●	●	●
DRP012V030W1AZ	●	●	●	●	●			●		●	●	●		●			●	●	●	●	●	●	●
DRP012V060W1AA	●	●	●	●	●			●		●	●	●		●			●	●	●	●	●	●	●
DRP012V100W1AA	●	●	●	●	●			●		●	●	●		●			●	●	●	●	●	●	●
DRP-24V48W1AZ	●	●	●	●	●			●		●	●	●		●			●	●	●	●	●	●	●
DRP024V060W1AZ	●	●	●	●	●			●	●	●	●	●		●			●	●	●	●	●	●	●
DRP024V060W1AA	●	●	●	●	●			●	●	●	●	●		●	●		●	●	●	●	●	●	●
DRP024V120W1AA	●	●	●	●	●			●		●	●	●		●			●	●	●	●	●	●	●
DRP024V240W1AA	●	●	●	●	●			●		●	●	●		●	●		●	●	●	●	●	●	●
DRP024V480W1AA	●	●	●	●	●			●	●	●	●	●		●	●		●	●	●	●	●	●	●
DRP024V060W1BA	●	●	●	●	●			●		●	●	●		●			●	●	●	●	●	●	●
DRP024V060W1BN	●	●	●	●	●			●		●	●	●		●			●	●	●	●	●	●	●
DRP024V120W1BA	●	●	●	●	●			●		●	●	●	●	●			●	●	●	●	●	●	●
DRP024V120W1BN	●	●	●	●	●			●		●	●	●	●	●			●	●	●	●	●	●	●
DRP024V240W1BA	●	●	●	●	●			●		●	●	●		●			●	●	●	●	●	●	●
DRP024V240W1BN	●	●	●	●	●			●		●	●	●		●			●	●	●	●	●	●	●
DRP024V480W1BA	●	●	●	●	●			●		●	●	●		●			●	●	●	●	●	●	●
DRP024V480W1BN	●	●	●	●	●			●		●	●	●		●			●	●	●	●	●	●	●
DRP024V060W1NY	●	●	●	●	●	●	●	●		●	●	●		●			●	●	●	●	●	●	●
DRP024V060W1NZ	●	●	●	●	●	●	●	●		●	●	●		●			●	●	●	●	●	●	●
DRP-24V100W1NN	●	●	●	●	●	●	●	●		●	●	●		●			●	●	●	●	●	●	●
DRP-24V120W2BN	●	●	●	●	●			●		●	●	●		●			●	●	●	●	●	●	●
DRP-24V240W2BN	●	●	●	●	●			●		●	●	●		●			●	●	●	●	●	●	●
DRP024V060W3BA	●	●	●	●	●			●		●	●	●		●			●	●	●	●	●	●	●
DRP024V060W3BN	●	●	●	●	●			●		●	●	●		●			●	●	●	●	●	●	●
DRP024V120W3BA	●	●	●	●	●			●		●	●	●		●			●	●	●	●	●	●	●
DRP024V120W3BN	●	●	●	●	●			●		●	●	●		●			●	●	●	●	●	●	●
DRP024V240W3BA	●	●	●	●	●			●		●	●	●		●			●	●	●	●	●	●	●
DRP024V240W3BN	●	●	●	●	●			●		●	●	●		●			●	●	●	●	●	●	●
DRP024V480W3BA	●	●	●	●	●			●		●	●	●		●			●	●	●	●	●	●	●
DRP024V480W3BN	●	●	●	●	●			●		●	●	●		●			●	●	●	●	●	●	●
DRP024V960W3BN	●	●	●	●	●			●		●	●	●		●			●	●	●	●	●	●	●
DRP048V060W1BA	●	●	●	●	●			●		●	●	●		●			●	●	●	●	●	●	●
DRP048V060W1BN	●	●	●	●	●			●		●	●	●		●			●	●	●	●	●	●	●
DRP048V120W1BA	●	●	●	●	●			●		●	●	●	●	●			●	●	●	●	●	●	●
DRP048V120W1BN	●	●	●	●	●			●		●	●	●	●	●			●	●	●	●	●	●	●
DRP048V240W1BA	●	●	●	●	●			●		●	●	●	●	●			●	●	●	●	●	●	●
DRP048V240W1BN	●	●	●	●	●			●		●	●	●	●	●			●	●	●	●	●	●	●
DRP048V480W1BA	●	●	●	●	●			●		●	●	●		●			●	●	●	●	●	●	●
DRP048V480W1BN	●	●	●	●	●			●		●	●	●		●			●	●	●	●	●	●	●

	CE	CB Scheme to IEC 60950-1	CB Scheme to IEC 61558-1, IEC 61558-2-16, IEC 61010-1	CB Scheme to IEC 60335-1	SIQ or TUV or NEMKO to EN 60950-1	SIQ to EN 61558-1, EN 61558-2-16, EN 61010-1	TUV to EN 60335-1	UL 60950-1	UL 508	NEC Class 2	CSA C22.2 No. 107.1-01	EAC (Eurasian Customs Union)	CCC (China)	DNV GL (Maritime)	ABS	RoHS Directive 2011/65/EU	SEMI F47	EN 61204-3	EN 61000-3-2 (PFC)	EN 61000-3-3 (Flicker)	EN 61000-6-1 (Immunity)	EN 61000-6-2 (Immunity)	EN 55014-2 (Immunity)	EN 55024 (Immunity)	EN 55011 Class B (Emissions)	EN 55014-1 (Emissions)	EN 55032 Class A (Emissions)	EN 55032 Class B (Emissions)	EN 61000-6-3 (Emissions)	EN 61000-6-4 (Emissions)		
DIN Rail Power Supply																																
DRP-24V120W1CAN	○	○			○			○	○		○	○				○	△	○	○	○		○		○							○	
DRP-24V120W1CBN	○	○			○			○	○		○	○				○	△	○	○	○		○		○							○	
DRP-24V240W1CAN	●	●			●			●	●		●	●				●	△	●	●	●		●		●							●	
DRP-24V240W1CBN	●	●			●			●	●		●	●				●	△	●	●	●		●		●							●	
DRP-24V480W1CAN	●	●			●			●	●		●	●				●	△	●	●	●		●		●							●	
DRP-24V480W1CBN	●	●			●			●	●		●	●				●	△	●	●	●		●		●							●	
DRM-24V80W1PN	●	●	●		●	●		●	●		●	●		●	●	●	△	●	●	●		●		●						●	●	
DRM-24V120W1PN	●	●	●		●	●		●	●		●	●		●	●	●	△	●	●	●		●		●						●	●	
DRM-24V240W1PN	●	●	●		●	●		●	●		●	●		●	●	●	△	●	●	●		●		●						●	●	
DRM-24V480W1PN	●	●	●		●	●		●	●		●	●		●	●	●	△	●	●	●		●		●						●	●	
DRM-24V960W1PN	●	●	●		●	●		●	●		●	●		●	●	●	△	●	●	●		●		●						●	●	
DRL-24V120W1A□	●	●			●			●	●		●	●	●			●	△	●	●	●	●	●		●						●	●	●
DRL-24V240W1A□	●	●			●			●	●		●	●	●			●	△	●	●	●	●	●		●						●	●	●
DRL-24V480W1A□	●	●			●			●	●		●	●	●			●	△	●	●	●	●	●		●						●	●	●
DRL-48V120W1A□	●	●			●			●	●		●	●	●			●	△	●	●	●	●	●		●						●	●	●
DRC-5V10W1A□	●	●			●			●	●	●	●	●				●			●	●	●		●							●	●	
DRC-12V10W1A□	●	●			●			●	●	●	●	●				●			●	●	●		●							●	●	
DRC-12V30W1A□	●	●			●			●	●	●	●	●				●			●	●	●		●							●	●	
DRC-12V60W1A□	●	●			●			●	●	●	●	●				●			●	●	●		●							●	●	
DRC-12V100W1A□	●	●			●			●	●	●	●	●				●			●	●	●		●							●	●	
DRC-24V10W1A□	●	●			●			●	●	●	●	●				●			●	●	●		●							●	●	
DRC-24V10W1HZ	●	●		●			●	●	●	●	●	●				●			●	●	●	●	●			●				●	●	
DRC-24V30W1A□	●	●			●			●	●	●	●	●				●			●	●	●		●							●	●	
DRC-24V60W1A□	●	●			●			●	●	●	●	●				●			●	●	●		●							●	●	
DRC-24V100W1A□	●	●			●			●	●	●	●	●				●			●	●	●		●							●	●	
DRS-5V30W1NZ	●	●			●			●	●	●	●	●				●			●	●	●	●	●							●	●	●
DRS-5V50W1A□	●	●			●			●	●	●	●	●				●			●	●	●	●	●							●	●	●
DRS-5V50W1N□	●	●			●			●	●	●	●	●				●			●	●	●	●	●							●	●	●
DRS-12V50W1N□	●	●			●			●	●	●	●	●				●			●	●	●	●	●							●	●	●
DRS-24V30W1AZ	●	●			●			●	●	●	●	●	●		●				●	●	●	●	●							●	●	●
DRS-24V30W1NZ	●	●			●			●	●	●	●	●				●			●	●	●	●	●							●	●	●
DRS-24V50W1N□	●	●			●			●	●	●	●	●				●			●	●	●	●	●							●	●	●
DRS-24V100W1A□	●	●			●			●	●	●	●	●				●			●	●	●	●	●							●	●	●
DRS-24V100W1N□	●	●			●			●	●	●	●	●				●			●	●	●	●	●							●	●	●

○ Pending  
△ Compliant

# Standards & Approvals

## Delta Standard Power Supplies

	CE	CB Scheme to IEC 60950-1	SIG or TUV or NEMKO to EN 60950-1	UL 60950-1	UL 508	NEC Class 2	CSA C22.2 No. 107.1-01	ATEX EN 60079-15	CSA C22.2 No. 213 and ANSI/ISA-12.12.09	EAC (Eurasian Customs Union)	CCC (China)	RoHS Directive 2011/65/EU	EN 61204-3	EN 61000-3-2 (PFC)	EN 61000-3-3 (Flicker)	EN 61000-6-1 (Immunity)	EN 61000-6-2 (Immunity)	EN 55024 (Immunity)	EN 55011 (Emissions)	EN 55032 Class B (Emissions)
<b>DIN Rail Modules</b>																				
DRR-20A	●	●	●	●	●			●	●	●		●				●	●		●	●
DRR-20N	●	●	●	●	●					●		●				●	●		●	●
DRR-40A	●	●	●	●	●			●	●	●		●				●	●		●	●
DRR-40N	●	●	●	●	●					●		●				●	●		●	●
DRB-24V020ABA	●	●	●	●	●		●			●		●	●				●		●	●
DRB-24V020ABN	●	●	●	●	●		●	●	●	●		●	●	●	●		●		●	●
DRB-24V040ABN	●	●	●	●	●		●			●		●	●	●	●		●		●	●
DRU-24V40ABN	●	●	●	●	●		●			●		●	●	●	●		●		●	●
DRU-24V10ACZ	○	○	○	○	○		○			○		○	○				○		○	○
<b>Panel Mount Power Supply</b>																				
PMC-05V015W1AA	●	●	●	●						●	●	●		●	●			●		●
PMC-05V035W1A□	●	●	●	●						●	●	●		●	●			●		●
PMC-05V050W1AA	●	●	●	●						●	●	●		●	●			●		●
PMC-12V035W1A□	●	●	●	●						●	●	●		●	●			●		●
PMC-12V050W1A□	●	●	●	●						●	●	●		●	●			●		●
PMC-12V060W1NA	●	●	●	●		●				●		●		●	●			●		●
PMC-12V100W1AA	●	●	●	●						●	●	●		●	●			●		●
PMC-12V150W1A□	●	●	●	●						●	●	●		●	●			●		●
PMC-24V035W1A□	●	●	●	●						●	●	●		●	●			●		●
PMC-24V050W1A□	●	●	●	●						●	●	●		●	●			●		●
PMC-24V075W1A□	●	●	●	●						●	●	●		●	●			●		●
PMC-24V100W1A□	●	●	●	●						●	●	●		●	●			●		●
PMC-24V150W1A□	●	●	●	●						●	●	●		●	●			●		●
PMC-24V150W2AA	●	●	●	●						●	●	●		●	●			●		●
PMC-24V150W1B□	●	●	●	●						●	●	●		●	●			●		●
PMC-24V300W1BA	●	●	●	●						●	●	●		●	●			●		●
PMC-24V600W1BA	●	●	●	●						●	●	●		●	●		●	●	●	●
PMC-DSPV100W1A	●	●	●	●						●	●	●		●	●		●		●	●
PMC-48V150W1BA	●	●	●	●						●	●	●		●	●			●		●

○ Pending

	CE	CB Scheme to IEC 60950-1	CB Scheme to IEC 60335-1, IEC 61558-1, IEC 61558-2-16	SIQ or TUV or NEMKO to EN 60950-1	SIQ to EN 60335-1, EN 61558-1, EN 61558-2-16	UL 60950-1	NEC Class 2	EAC (Eurasian Customs Union)	CCC (China)	RoHS Directive 2011/65/EU	EN 61000-3-2 (PFC)	EN 61000-3-3 (Flicker)	EN 61000-6-1 (Immunity)	EN 61000-6-2 (Immunity)	EN 55014-2 (Immunity)	EN 55024 (Immunity)	EN 55011 Class B (Emissions)	EN 55032 Class A (Emissions)	EN 55032 Class B (Emissions)	EN 55014-1 (Emissions)	EN 61000-6-3 (Emissions)
Panel Mount Power Supply																					
PMF-4V320WC□□	●	●		●		●			●	●	●	●				●			●		
PMF-5V320WC□□	●	●		●		●			●	●	●	●				●			●		
PMF-24V200WCA□	●	●		●		●			●	●	●	●				●			●		
PMF-24V200WCG□	●	●		●		●			●	●	●	●				●			●		
PMF-24V240WCA□	●	●		●		●			●	●	●	●				●			●		
PMF-24V240WCG□	●	●		●		●			●	●	●	●				●			●		
PMF-24V320WCA□	●	●		●		●			●	●	●	●				●			●		
PMF-24V320WCG□	●	●		●		●			●	●	●	●				●			●		
PMH-24V50WCA□	●	●	●	●	●	●		●		●	●	●	●		●	●			●	●	●
PMH-24V100WCA□	●	●	●	●	●	●		●		●	●	●	●		●	●			●	●	●
PMH-24V100WCC□	●	●	●	●	●	●		●		●	●	●	●		●	●			●	●	●
PMH-24V100WCN□	●	●	●	●	●	●	●	●		●	●	●	●		●	●			●	●	●
PMH-24V150WCB□	●	●	●	●	●	●		●		●	●	●	●		●	●			●	●	●
PMH-24V150WCD□	●	●	●	●	●	●		●		●	●	●	●		●	●			●	●	●
PMH-24V200WCB□	●	●	●	●	●	●		●		●	●	●	●		●	●			●	●	●
PMH-12V100WC□□	○	○	○	○	○	○		○		○	○	○	○		○	○			○	○	○
PMH-24V100WC□□	○	○	○	○	○	○		○		○	○	○	○		○	○			○	○	○
PMH-24V100WCM□	○	○	○	○	○	○	○	○		○	○	○	○		○	○			○	○	○
PMH-24V150WC□□	●	●	●	●	●	●		●		●	●	●	●		●	●			●	●	●
PMU-13V155W□□A	●	●		●		●			●	●	●	●				●			●		
PMU-27V155W□□A	●	●		●		●			●	●	●	●				●			●		
PMR-4V320WC□A	●	●		●		●			●	●	●	●				●			●		
PMR-4V320WD□A	●	●		●		●			●	●	●	●				●			●		
PMR-5V320WC□A	●	●		●		●			●	●	●	●				●			●		
PMR-5V320WD□A	●	●		●		●			●	●	●	●				●			●		

○ Pending

# Standards & Approvals

## Delta Standard Power Supplies

	CE	CB Scheme to IEC 60950-1	CB Scheme to IEC 60335-1, IEC 61558-1, IEC 61558-2-16	SIQ or TUV or NEMKO to EN 60950-1	SIQ to EN 60335-1, EN 61558-1, EN 61558-2-16	UL 60950-1	NEC Class 2	EAC (Eurasian Customs Union)	CCC (China)	RoHS Directive 2011/65/EU	EN 61000-3-2 (PFC)	EN 61000-3-3 (Flicker)	EN 61000-6-1 (Immunity)	EN 61000-6-2 (Immunity)	EN 55014-2 (Immunity)	EN 55024 (Immunity)	EN 55011 Class B (Emissions)	EN 55032 Class A (Emissions)	EN 55032 Class B (Emissions)	EN 55014-1 (Emissions)	EN 61000-6-3 (Emissions)
Panel Mount Power Supply																					
PMT-4V350W1A□		●				●				●											
PML-5V35W1A□	●	●		●		●			●	●	●	●				●				●	
PMT-5V35W1A□	●	●		●		●			●	●	●	●				●				●	
PML-5V50W1A□	●	●		●		●			●	●	●	●				●				●	
PMT-5V50W1A□	●	●		●		●			●	●	●	●				●				●	
PMT-5V350W1A□		●				●				●											
PMB-12V35W1A□	●	●		●		●			●	●	●	●				●				●	
PML-12V35W1A□	●	●		●		●			●	●	●	●				●				●	
PMT-12V35W1A□	●	●		●		●			●	●	●	●				●				●	
PMB-12V50W1A□	●	●		●		●			●	●	●	●				●				●	
PML-12V50W1A□	●	●		●		●			●	●	●	●				●				●	
PMT-12V50W1A□	●	●		●		●			●	●	●	●				●				●	
PML-12V100W1A□	●	●		●		●			●	●	●	●				●				●	
PMT-12V100W1A□	●	●		●		●			●	●	●	●				●				●	
PML-12V150W1A□	●	●		●		●			●	●	●	●				●				●	
PMT-12V150W1A□	●	●		●		●			●	●	●	●				●				●	
PMT-12V350W1A□	●	●		●		●			●	●	●	●				●				●	
PML-15V50W1A□	●	●		●		●			●	●	●	●				●				●	
PMT-15V50W1A□	●	●		●		●			●	●	●	●				●				●	
PMB-24V35W1A□	●	●		●		●			●	●	●	●				●				●	
PML-24V35W1A□	●	●		●		●			●	●	●	●				●				●	
PMT-24V35W1A□	●	●		●		●			●	●	●	●				●				●	
PMB-24V50W1A□	●	●		●		●			●	●	●	●				●				●	
PML-24V50W1A□	●	●		●		●			●	●	●	●				●				●	
PMT-24V50W1A□	●	●		●		●			●	●	●	●				●				●	
PML-24V100W1A□	●	●		●		●			●	●	●	●				●				●	
PMT-24V100W1A□	●	●		●		●			●	●	●	●				●				●	
PML-24V150W1A□	●	●		●		●			●	●	●	●				●				●	
PMT-24V150W1A□	●	●		●		●			●	●	●	●				●				●	
PML-24V200W1A□		●				●				●											
PMT-24V200W1A□		●				●				●											
PMT-24V350W1AG		●				●				●											
PMT-24V350W1AM		●				●				●											
PMT-24V350W1AK	●	●		●		●				●					●		●			●	
PMT-24V350W1AR	●	●		●		●				●					●		●			●	
PMT-36V350W1A□	●	●		●		●				●					●					●	
PML-48V150W1A□	●	●		●		●			●	●	●	●				●				●	
PMT-48V150W1A□	●	●		●		●			●	●	●	●				●				●	
PMT-48V350W1A□	●	●		●		●			●	●	●	●				●				●	
PML-D1V100W1A□	●	●		●		●			●	●	●	●				●				●	
PMT-D1V100W1A□	●	●		●		●			●	●	●	●				●				●	
PML-D2V100W1A□	●	●		●		●			●	●	●	●				●				●	
PMT-D2V100W1A□	●	●		●		●			●	●	●	●				●				●	



	CE	CB Scheme to IEC 60950-1	CB Scheme to IEC 62368-1	SIC or TUV or NEMKO to EN 60950-1	UL 60950-1	UL 508	CSA C22.2 No. 107.1-01	CSA C22.2 No. 60950-1	EAC (Eurasian Customs Union)	CCC (China)	RoHS Directive 2011/65/EU	SEMI F47	EN 61000-3-2 (PFC)	EN 61000-3-3 (Flicker)	EN 61000-6-1 (Immunity)	EN 61000-6-2 (Immunity)	EN 55024 (Immunity)	EN 55011 Class B (Emissions)	EN 55032 Class A (Emissions)	EN 55032 Class B (Emissions)
Open Frame Power Supply																				
PJ-12V15W□NA	●	●		●	●						●		●	●			●			●
PJ-12V30W□NA	●	●		●	●						●		●	●			●			●
PJ-12V50W□NA	●	●		●	●						●		●	●			●			●
PJ-12V100W□□A	●	●		●	●						●		●	●			●			●
PJ-12V150W□□A	●	●		●	●						●		●	●			●			●
PJ-24V30W□NA	●	●		●	●						●		●	●			●			●
PJ-24V50W□NA	●	●		●	●						●		●	●			●			●
PJ-24V100W□□A	●	●		●	●						●		●	●			●			●
PJ-24V150W□□A	●	●		●	●						●		●	●			●			●
PJ-5V15W□NA	●	●		●	●						●		●	●			●			●
PJ-48V50W□NA	●	●		●	●						●		●	●			●			●
PJB-24V100W□□A	●	●		●	●						●		●	●			●			●
PJB-24V150W□□A	●	●		●	●						●		●	●			●			●
PJB-24V240W□□A	●	●		●	●						●		●	●			●			●
PJT-12V40WBA□	●	●		●	●						●		●	●			●			●
PJT-12V65WBA□	●	●	●	●	●						●		●	●			●			●
PJT-12V100WBA□	●	●		●	●						●		●	●			●			●
PJT-12V100WBB□	●	●		●	●						●		●	●			●			●
PJT-15V40WBA□	●	●		●	●						●		●	●			●			●
PJT-15V65WBA□	●	●	●	●	●						●		●	●			●			●
PJT-15V100WBA□	●	●		●	●						●		●	●			●			●
PJT-15V100WBB□	●	●		●	●						●		●	●			●			●
PJT-18V40WBA□	●	●		●	●						●		●	●			●			●
PJT-18V65WBA□	●	●	●	●	●						●		●	●			●			●
PJT-18V100WBA□	●	●		●	●						●		●	●			●			●
PJT-18V100WBB□	●	●		●	●						●		●	●			●			●
PJT-24V40WBA□	●	●		●	●						●		●	●			●			●
PJT-24V65WBA□	●	●	●	●	●						●		●	●			●			●
PJT-24V100WBA□	●	●		●	●						●		●	●			●			●
PJT-24V100WBB□	●	●		●	●						●		●	●			●			●
PJT-27V150WBNA	●	●		●	●				●		●		●	●			●			●
PJU-27V60W□A□	○	○		○	○					○	○		○	○			○			○
PJU-27V60W□B□	○	○		○	○					○	○		○	○			○			○

○ Pending

# Standard Products

## LED Driver

### LNE / LNV



Delta LED drivers features adjustable output voltage and current level. All the models come in full corrosion resistance aluminum casing and major international safety certifications. The product offers the capability to achieve different level of LED brightness via built-in dimming function to meet various application and energy optimization needs. The products are designed and rigorously tested to work with various indoor and outdoor LED lighting conditions. Featuring high surge immunity (CM: 6KV, DM: 4KV) and complying to IP65/IP67 make Delta LED drivers an essential part of an energy efficient LED lighting power solution for both indoor and outdoor applications.

#### Typical Applications



More series will be introduced soon. For a complete list of Delta LED drivers, please visit:

- [www.deltapsu.com/products/index](http://www.deltapsu.com/products/index) for product details
- [www.deltapsu.com/marketing-resources](http://www.deltapsu.com/marketing-resources) for online catalog

### Package Types

#### 1 IP65 Protection



#### LNE-0V0W0A0A, LNV-0V0WAAA

- With potentiometers to adjust output voltage and constant current level



100-185W



320W

#### 2 IP67 Protection



#### LNE-0V0W0B0A, LNV-0V0WBAA

- Without dimming cable and potentiometers



320W

#### LNE-0V0W0D0A, LNV-0V0WDAA

- With dimming cable to adjust constant current level



100-185W



320W

All Delta LED drivers are fully compliant with RoHS Directive 2011/65/EU for environmental protection. For more information or enquiries, please do not hesitate to contact your local Delta Electronics distributor or visit [www.DeltaPSU.com](http://www.DeltaPSU.com).

# Medical Power Supplies

## MDS



Delta MDS series of medical power supplies offers a wide range of power supplies for healthcare and medical applications. The fast growing range of standard products includes Open Frame, Enclosed, ATX and AC Adaptor model for many applications requiring high reliability and performance. The MDS series come with both medical and ITE safety approvals including UL/cUL/CCC/CE and CB certification and are fully compliant with RoHS Directive 2011/65/EU for environmental protection.

### Typical Applications



More series will be introduced soon. For a complete list of Delta medical power supplies, please visit:

- [www.deltapsu.com/products/index](http://www.deltapsu.com/products/index) for product details
- [www.deltapsu.com/marketing-resources](http://www.deltapsu.com/marketing-resources) for online catalog

## Product Types

### 1 Open Frame

The MDS open frame series provides high performance and reliable solution for internal power supply in a medical equipment or system.



### 2 Enclosed

Most of the MDS series of enclosed power supplies are certified with both medical and ITE safety approvals. Encased in strong metal casing, the series of versatile products can be used in a variety of equipment for medical and ITE applications.



### 3 ATX

Highly reliable design with ATX standard form factor and output cable pin-outs. Certified with medical standards and suitable for use in medical devices with Type BF classification.



### 4 Adapter

The MDS adapters series rides on Delta's market leading adapter technology to provide the same high quality external power supplies for medical systems and equipments.



All Delta medical power supplies are fully compliant with RoHS Directive 2011/65/EU for environmental protection. For more information or enquiries, please do not hesitate to contact your local Delta Electronics distributor or visit [www.DeltaPSU.com](http://www.DeltaPSU.com).



## What is Power Boost?

It is the reserve power available constantly that allows reliable startup of loads with high outrush current.



## Why is Power Boost beneficial?

Such feature is especially useful for applications where loads are active; the high surge current can cause the power supply unit (PSU) output to dip down if the PSU does not have the capability to withstand this surge current. Consequently, this could reset the system and result in system downtime.



## What is Advanced Power Boost (APB)?

Within a multiple loads connection, Advanced Power Boost (APB) can detect a faulty current path and provide a large outrush current to trip the circuit breaker connected to the faulty path. This prevents the system from shutting down while the other connected current paths continue to operate without interruption.



## What should I consider when selecting a power supply unit (PSU)?

- Input Type (Single Phase or 3 Phase)
- Output Power
- Efficiency and Reliability

Efficiency and Reliability are the two most important factors to consider in selecting a PSU.

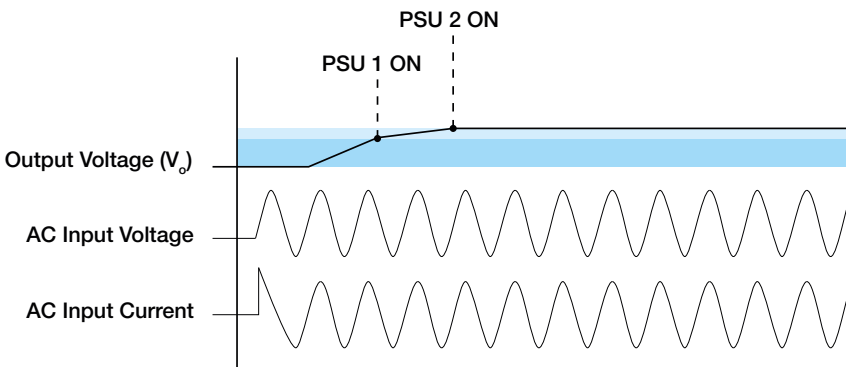
The best way to ensure the reliability of the PSU is to choose one that provides a maximum of 30% more output than your actual total requirement. For example, if your system has a 90W power requirement, you should choose a PSU with at least 120W power output rating. By doing so, you are boosting the reliability of the PSU as well as prolonging the entire system life.

An efficient PSU will thus ensure that power loss is minimized and will greatly help to lower your operating costs in the long run. By choosing a cheaper, but less efficient PSU will just mean that you are paying for it through your monthly electric bills. Delta's CliQ DIN rail power supply easily give our users a substantial efficiency of up to 87% or more even when operating at <100% load. Other factors to consider include the operating conditions, types of safety certifications, PSU protection and application functions. Please contact your nearest Delta sales representative for a recommendation based on your requirements.



## What critical parameters do I have to watch out for when connecting the power supplies in series?

The turn ON would be non-monotonic as the power supply with the fastest startup time and rise time will turn on first. As a result, the startup waveform with 2 power supplies connected in series would see a step.



## Warranty

Delta warrants that the products (“Products”) sold in this catalog will be free of defects in material and workmanship within the warranty period. The warranty does not apply to Products which have been subjected to abuse, misuse, accident, neglect, unauthorized and/or improper installation, operation, use, maintenance, repair or alteration, or accident of unusual deterioration or degradation of the Products or parts thereof due to physical environment beyond the requirements of the Product specifications.

## Attention

- Delta will do our utmost in ensuring the accuracy of all information provided in the catalog and datasheets that are officially released and published. However, there may be instance where discrepancy occurs between the catalog and the datasheets. When such case happens, kindly refer to **www.DeltaPSU.com** for the latest catalog and datasheets or the datasheets shall take precedence over the catalog information.
- In our constant pursuit for product and quality excellence to fulfill market and customer demands, Delta shall reserve the rights to revise and update any information in this catalog without prior notification.

## EMC Directives

At Delta, all of our products are designed to meet the highest quality standards. All national and international safety certifications including EMC directives are conducted by qualified and independent laboratories. For EMC directives’ compliance, the power supplies are tested to ensure compliance as a stand-alone product. Power supplies like the panel mount and open frame types are typically considered component power supply. Therefore, Delta cannot guarantee the system which is installed with Delta’s component power supply can meet the related EMC directives. Customers are advised to contact the system manufacturer for confirmation.

## Availability

Products with “New” tab are slated for official release with immediate effect, while products with “Coming Soon” tab will be available within the next two months from this catalog’s publication month (Refer to cover page). Kindly contact your local Delta distributor for availability, ordering and delivery details. You may also get in touch with us via the Feedback Form on **www.deltapsu.com/feedback**.





# More Information

## Delta Standard Power Supplies

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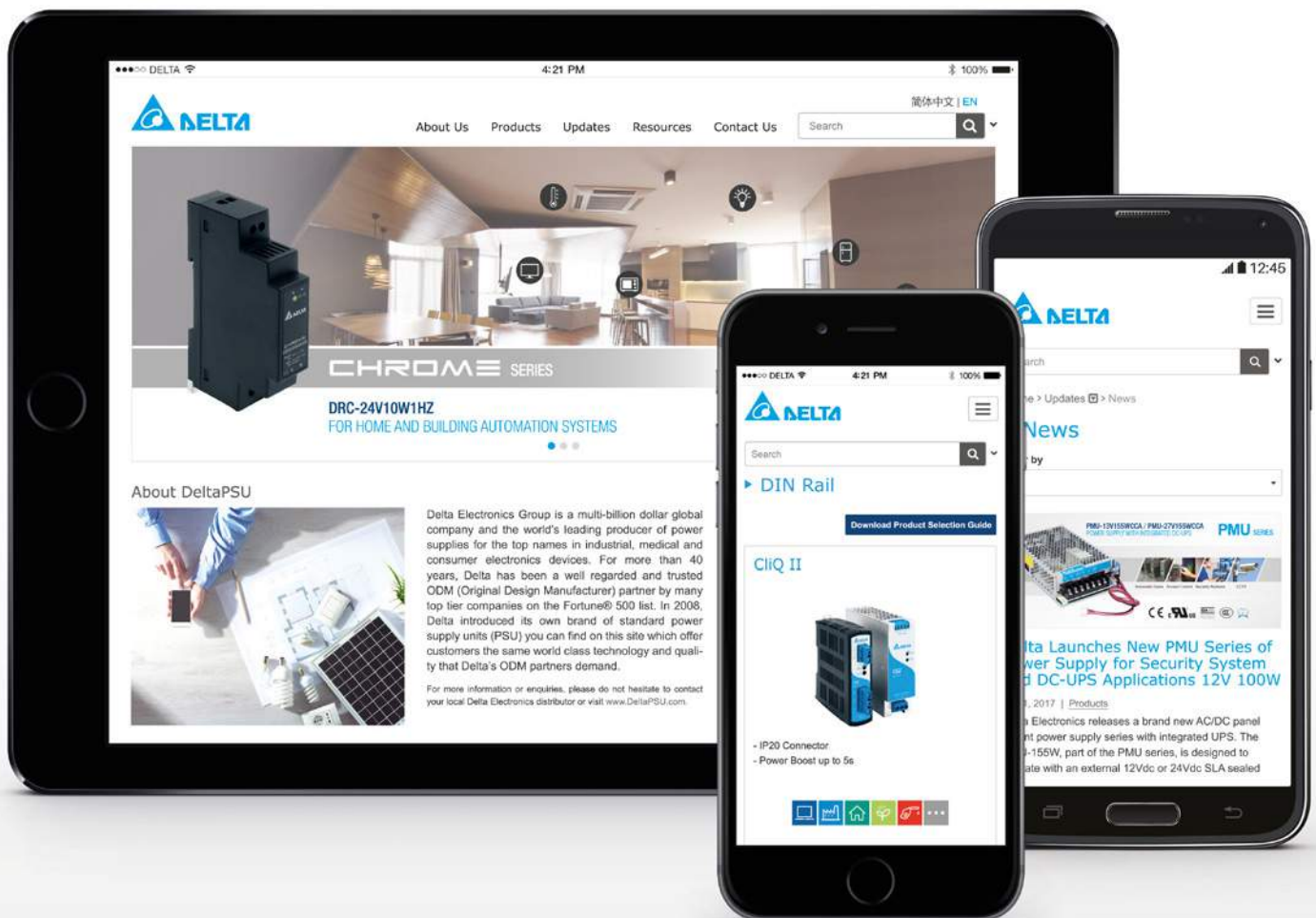
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October 2017 - All information and specifications are subjected to change without prior notice.