



**UNIDADES
DE PODER
INDUSTRIALES**



About Delta

Delta, founded in 1971, is a global leader in switching power supplies and thermal management products with a thriving portfolio of smart energy-saving systems and solutions in the fields of industrial automation, building automation, telecom power, data center infrastructure, EV charging, renewable energy, energy storage and display, to nurture the development of smart manufacturing and sustainable cities. As a world-class corporate citizen guided by its mission statement, "To provide innovative, clean and energy-efficient solutions for a better tomorrow," Delta leverages its core competence in high-efficiency power electronics and its ESG-embedded business model to address key environmental issues, such as climate change. Delta serves customers through its sales offices, R&D centers and manufacturing facilities spread over close to 200 locations across 5 continents.

Throughout its history, Delta has received various global awards and recognition for its business achievements, innovative technologies and dedication to ESG. Since 2011, Delta has been listed on the DJSI World Index of Dow Jones Sustainability™ Indices for 11 consecutive years. In 2021, Delta was also recognized by CDP with leadership level ratings for its substantial contribution to climate change and water security issues and named Supplier Engagement Leader for its continuous development of a sustainable value chain.

For detailed information about Delta, please visit: www.deltaww.com

Business Categories



Power Electronics

- Components
- Power and System
- Fan & Thermal Management
- Automotive Electronics

Innertek



Automation

- Industrial Automation
- Building Automation



Infrastructure

- ICT Infrastructure
- Energy Infrastructure & Industrial Solutions

vivitek
Vivid Color. Vivid Life.

About Power and System Business Group (PSBG)

- World's leading provider of power products and solutions
- First power product launched in 1983



Power Conversion



Smart Drive & Control



Battery Charger



Green Energy

Power to a Smart Future with High Energy Efficiency

PSBG offers cutting-edge power products and system to innovate cloud computing, network connectivity, client devices, industrial and medical industry, lighting, and appliances and e-mobility with global customers.





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| Delta Industrial Power Supplies

Delta standard industrial power supplies comprise of DIN rail, panel mount and open frame types. With over 40 years of experience in power technologies, Delta delivers an extensive range of industrial power supplies that meet IEC 60950-1, IEC 62368-1, IEC 61347-2-13, UL 8750, IEC 60335-1, IEC 61558-1, IEC 61558-2-16 and many other more standards.



DIN Rail

A wide range of DIN rail power supplies offering start-up at -40°C, Advanced Power Boost (CliQ M & CliQ VA), smart monitoring function (CliQ VA), ultra slim design (Force-GT and LYTE II) for demanding applications.



Panel Mount

The latest PMT2 series low profile design at competitive prices for general industrial applications. MEB series offer a wide range of high power models with industrial and medical certifications.



Open Frame

PJ series open frame power supplies offer wide range of output voltages with versatile configuration options. The latest PJJ series comes with lighting approvals such as UL 8750 and IEC 61347-2-13.



Modules

The DIN rail modules are useful accessories as part of the complete power management solution. They include DC-UPS, buffer and redundancy modules which are designed to work seamlessly with Delta DIN rail power supplies.



Adapter

The ADT adapter series offers efficiency up to 89% with extreme low no-load consumption below 0.15W. These adapters are also meet DoE Level VI and CoC Tier 2 efficiency standards.

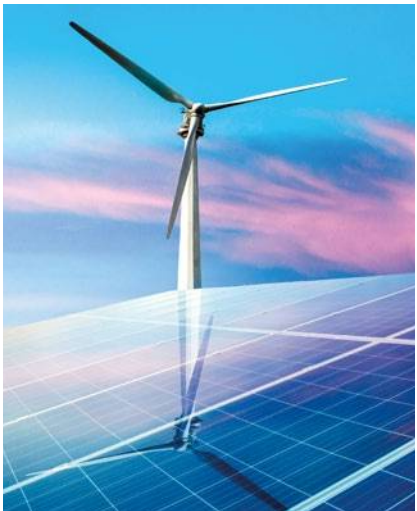
| Applications



Building Automation



Machine Automation



Renewable Energy



Process Automation



Test & Measurement



Medical Equipment



Factory Automation



LED Signage



Household Appliance

Product Selection Guide

New products are frequently introduced. Please visit www.DeltaPSU.com for latest product updates.

Product Type	Series	Model Name	Phase			PFC	Output Voltage	Output Current	Output Power	Input Voltage Range*	Page
			1	2	3						
DIN Rail Power Supplies	CliQ II - IP20 connector - Power Boost up to 5 s	DRP024V060W1B□	●				24 V	2.5 A	60 W	85-264 V _{AC} (DC input range 120-375 V _{DC})	15
		DRP024V120W1B□	●					5.0 A	120 W		
		DRP024V240W1B□	●			●		10.0 A	240 W		
		DRP024V480W1B□	●			●		20.0 A	480 W		
		DRP024V060W1N□	●				2.5 A	60 W	85-264 V _{AC} (DC input range 120-375 V _{DC})	16	
		DRP-24V100W1NN	●			●	3.8 A	91.2 W			
		DRP-24V120W2BN	●	●			5.0 A	120 W	2 × 180-550 V _{AC} or 180-305 V _{AC} (Single Phase) (DC input range 254-780 V _{DC})	17	
		DRP-24V240W2BN	●	●		●	10.0 A	240 W			
		DRP024V060W3B□		●	●		2.5 A	60 W	3 × 320-600 V _{AC} or 2 × 360-600 V _{AC} (DC input range 450-800 V _{DC})	18	
		DRP024V120W3B□		●	●		5.0 A	120 W			
		DRP024V240W3B□		●	●		10.0 A	240 W	For 960 W: 3 × 320-600 V _{AC} or 2 × 380-600 V _{AC} (DC input range 450-800 V _{DC})		
		DRP024V480W3B□		●	●	●	20.0 A	480 W			
		DRP024V960W3BN		●	●	●	40.0 A	960 W			
		DRP048V060W1B□	●				48 V	1.25 A	60 W	85-264 V _{AC} (DC input range 120-375 V _{DC})	19
		DRP048V120W1B□	●			●		2.5 A	120 W		
		DRP048V240W1B□	●			●		5.0 A	240 W		
		DRP048V480W1B□	●			●		10.0 A	480 W		
	CliQ III - Slim design with high power density - Power Boost up to 5 s	DRP-24V120W1CAN	●			●	24 V	5.0 A	120 W	88-264 V _{AC}	20
		DRP-24V120W1CBN	●			●		5.0 A	120 W		
		DRP-24V240W1CAN	●			●		10.0 A	240 W		
		DRP-24V240W1CBN	●			●		10.0 A	240 W		
		DRP-24V480W1CAN	●			●		20.0 A	480 W		
		DRP-24V480W1CBN	●			●		20.0 A	480 W		
	CliQ M - Slim design with high power density - Advanced Power Boost - Maritime approvals	DRM-24V80W1PN	●			●	24 V	3.4 A	81.6 W	85-276 V _{AC} (DC input range 88-375 V _{DC})	21
		DRM-24V120W1PN	●			●		5.0 A	120 W		
		DRM-24V240W1PN	●			●		10.0 A	240 W		
		DRM-24V480W1PN	●			●		20.0 A	480 W		
		DRM-24V960W1PN	●			●	40.0 A	960 W	85-264 V _{AC}		
		DRM-24V480W3PN		●	●	●	20.0 A	480 W			
		DRM-24V960W3PN		●	●	●	40.0 A	960 W	3 × 320-600 V _{AC} or 2 × 380-600 V _{AC}	22	
		DRM-24V480W1SN	●			●	20.0 A	480 W			85-276 V _{AC} (DC input range 88-375 V _{DC})

* DC input is certified for selected models

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 and ATEX approvals N - Metal case, without Class I, Div 2 and ATEX approvals Y - Plastic case, with Class I, Div 2 and ATEX approvals Z - Plastic case, without Class I, Div 2 and ATEX approvals
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 and ATEX approvals
DR	M –	XXV	XXXW	□	□	N
DIN Rail	Product Series M - CliQ M Series	Output Voltage	Output Power	Phase Input 1 - Single Phase 3 - Three Phase	P - Advanced Power Boost (APB) S - Advanced Power Boost (APB) with SIL3 approval	N - Metal case, without Class I, Div 2 and ATEX approvals

New products are frequently introduced. Please visit www.DeltaPSU.com for latest product updates.

Product Type	Series	Model Name	Phase			PFC	Output Voltage	Output Current	Output Power	Input Voltage Range*	Page
			1	2	3						
DIN Rail Power Supplies	CLIQ VA - Smart monitoring function - Advanced Power Boost	DRV-24V120W1PN	●			●	24 V	5.0 A	120 W	85-264 V _{AC} (DC input range 88-375 V _{DC})	24
		DRV-24V240W1PN	●			●		10.0 A	240 W	85-276 V _{AC} (DC input range 88-375 V _{DC})	
		DRV-24V480W1PN	●			●		20.0 A	480 W		
	Force-GT - Built-in constant current circuit for charging applications - Ultra slim design	NEW DRF-12V120W1GBA	●			●	12 V	10.0 A	120 W	90-264 V _{AC}	25
		NEW DRF-12V240W1GBA	●			●	20.0 A	240 W			
		NEW DRF-24V120W1GBA	●			●	24 V	5.0 A	120 W	90-264 V _{AC}	26
		NEW DRF-24V240W1GBA	●			●		10.0 A	240 W		
		NEW DRF-24V480W1GBA	●			●	20.0 A	480 W			
		NEW DRF-48V120W1GBA	●			●	48 V	2.5 A	120 W		
		NEW DRF-48V240W1GBA	●			●		5.0 A	240 W		
		NEW DRF-48V480W1GBA	●			●	10.0 A	480 W			
		NEW DRF-24V120W3GBA		●	●		24 V	5.0 A	120 W	3 x 320-575 V _{AC} (3-Phase) or 2 x 340-575 V _{AC} (2-Phase) (DC input range 450-800 V _{DC})	27
		NEW DRF-24V240W3GBA		●	●			10.0 A	240 W		
		NEW DRF-24V480W3GBA		●	●	●		20.0 A	480 W		
		NEW DRF-24V960W3GBA		●	●	●		40.0 A	960 W		
		LYTE - Competitively priced - Built-in constant current circuit	DRL-12V75W1AZ□	●				12 V	6.25 A	75 W	85-264 V _{AC}
	DRL-24V75W1AZ□		●				24 V	3.125 A	75 W		
	DRL-48V75W1AZ□		●				48 V	1.57 A	75.36 W		
	LYTE II - Extreme slim width - Reduced no-load power consumption - Wide operating temperature	DRL-12V120W1EN□	●				12 V	10.0 A	120 W	90-264 V _{AC}	29
		DRL-12V240W1EN□	●			●	20.0 A	240 W			
		DRL-24V120W1EN□	●				24 V	5.0 A	120 W		
		DRL-24V240W1EN□	●			●		10.0 A	240 W		
		NEW DRL-24V480W1EN□	●			●	20.0 A	480 W	90-264 V _{AC}	30	
		DRL-48V120W1EN□	●				48 V	2.5 A	120 W		
		DRL-48V240W1EN□	●			●		5.0 A	240 W		
		NEW DRL-48V480W1EN□	●			●	10.0 A	480 W			

* DC input is certified for selected models

Model Numbering

DR	V –	XXV	XXXW	1	P	N	
DIN Rail	Product Series V - CliQ VA Series	Output Voltage	Output Power	Phase Input 1 - Single Phase	P - Advanced Power Boost (APB)	N - Metal case, without Class I, Div 2 and ATEX approvals	
DR	F –	XXV	XXXW	□	G	B	A
DIN Rail	Product Series F - Force Series	Output Voltage	Output Power	Phase Input 1 - Single Phase 3 - Three Phase	G - General Type	B - Screw Terminal	A - Delta Standard
DR	L –	XXV	XXXW	1	A	Z	□
DIN Rail	Product Type L - LYTE Family	Output Voltage	Output Power	Phase Input 1 - Single Phase	A - LYTE Series with Standard Bracket	Z - Plastic case without DC OK Relay Contact	Blank - No coating R - With coating
DR	L –	XXV	XXXW	1	E	N	□
DIN Rail	Product Type L - LYTE Family	Output Voltage	Output Power	Phase Input 1 - Single Phase	E - LYTE II Series with Slim Design	N - No DC OK Relay Contact	Blank - No coating A - With coating

Product Selection Guide

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Product Type	Series	Model Name	Phase	PFC	Output Voltage	Output Current	Output Power	Input Voltage Range*	Page	
			1							
DIN Rail Power Supplies	CHROME • Compact • Class II double isolation • NEC Class 2	DRC-5V10W1A□	●		5 V	1.5 A	7.5 W	90-264 V _{AC}	31	
		DRC-12V10W1A□	●		12 V	0.83 A	10 W			
		DRC-12V30W1A□	●			2.1 A	25.2 W			
		DRC-12V60W1A□	●			4.5 A	54 W			
		DRC-12V60W1CZ	●			4.5 A	54 W			
		DRC-12V100W1AZ	●			6.0 A	72 W			
		DRC-24V10W1A□	●		24 V	0.42 A	10 W	90-264 V _{AC}	32	
		DRC-24V10W1HZ	●			0.42 A	10 W			
		DRC-24V30W1A□	●			1.25 A	30 W			
		DRC-24V60W1A□	●			2.5 A	60 W			
		DRC-24V100W1A□	●			3.8 A	91.2 W			
								90-264 V _{AC} (DC input range 125-375 V _{DC})		
	SYNC • Compact • NEC Class 2 • Competitively priced	DRS-5V30W1NZ	●		5 V	3.0 A	15 W	85-264 V _{AC} (DC input range 120-375 V _{DC})	33	
		DRS-5V50W1A□	●			6.0 A	30 W			
		DRS-5V50W1N□	●			5.0 A	25 W			
		DRS-12V50W1N□	●		12 V	4.0 A	48 W	85-264 V _{AC}	34	
		DRS-24V30W1AZ	●		24 V	1.25 A	30 W	85-264 V _{AC} (DC input range 120-375 V _{DC})		
		DRS-24V30W1NZ	●			1.25 A	30 W			
DRS-24V50W1N□		●			2.1 A	50 W				
DRS-24V100W1A□		●	●		4.0 A	96 W				
	DRS-24V100W1N□	●	●		3.8 A	91.2 W				

* DC input is certified for selected models

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 C - AC & DC Input, no PFC H - Household approval	Z - Black plastic case G - Grey plastic case C - Black plastic case, with conformal coating ¹⁾

1) Options for DRC-12V60W1A□, DRC-24V60W1A□ and DRC-24V100W1A□ only

DR	S –	XXV	XXXW	1	□	□
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

Product Type	Series	Model Name	Phase	PFC	Output Voltage	Output Current	Output Power	Input Voltage Range	Page
			1						
Panel Mount Power Supplies	PMT2 • IEC 60335, IEC 61558 approvals • Low profile 30mm height	PMT-12V35W2BA□	●		12 V	3.0 A	36 W	90-264 V _{AC}	37
		PMT-12V50W2BA□	●			4.2 A	50.4 W		
		PMT-12V75W2BA□	●			6.0 A	72 W		
		PMT-12V100W2BA□	●			8.5 A	102 W		
		PMT-12V150W2BA□	●			12.5 A	150 W	90-132V _{AC} , 180-264V _{AC} (Selectable by Switch)	38
		PMT-12V150W2CA□	●			12.5 A	150 W	90-264 V _{AC}	
		PMT-12V200W2BM□	●			17.0 A	204 W	90-132V _{AC} , 180-264V _{AC} (Selectable by Switch)	
		PMT-12V200W2BR□	●			17.0 A	204 W		
		PMT-12V350W2BM□	●			29.0 A	348 W		
		PMT-12V350W2BR□	●			29.0 A	348 W		
		PMT-15V35W2BA	●		15 V	2.4 A	36 W	90-264 V _{AC}	39
		PMT-15V50W2BA	●			3.4 A	51 W		
		PMT-15V75W2BA	●			5.0 A	75 W		
		PMT-15V100W2BA	●			7.0 A	105 W	90-264 V _{AC}	40
		PMT-15V150W2BA	●			10.0 A	150 W	90-132V _{AC} , 180-264V _{AC} (Selectable by Switch)	
		PMT-15V150W2CA	●			10.0 A	150 W	90-264 V _{AC}	

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Product Type	Series	Model Name	Phase	PFC	Output Voltage	Output Current	Output Power	Input Voltage Range	Page
			1						
Panel Mount Power Supplies	PMT2 - IEC 60335, IEC 61558 approvals - Low profile 30mm height	PMT-24V35W2BA□	●		24 V	1.5 A	36 W	90-264 V _{AC}	41
		PMT-24V50W2BA□	●			2.2 A	52.8 W		
		PMT-24V75W2BA□	●			3.2 A	76.8 W		
		PMT-24V100W2BA□	●			4.5 A	108 W		
		PMT-24V150W2BA□	●			6.25 A	150 W	90-132V _{AC} , 180-264V _{AC} (Selectable by Switch)	42
		PMT-24V150W2CA□	●			6.25 A	150 W	90-264 V _{AC}	
		PMT-24V200W2BM□	●			8.8 A	211.2 W	90-132V _{AC} , 180-264V _{AC} (Selectable by Switch)	
		PMT-24V200W2BR□	●			8.8 A	211.2 W		
		PMT-24V350W2BM□	●		14.6 A	350.4 W			
		PMT-24V350W2BR□	●		14.6 A	350.4 W			
		PMT-30V35W2BA	●		30 V	1.2 A	36 W		90-264 V _{AC}
		PMT-30V50W2BA	●			1.7 A	51 W		
		PMT-30V75W2BA	●			2.5 A	75 W		
		PMT-30V100W2BA	●			3.6 A	108 W	90-264 V _{AC}	44
		PMT-30V150W2BA	●			5.0 A	150 W	90-132V _{AC} , 180-264V _{AC} (Selectable by Switch)	
		PMT-30V150W2CA	●			5.0 A	150 W	90-264 V _{AC}	
		PMT-36V35W2BA	●		36 V	1.0 A	36 W	90-264 V _{AC}	45
		PMT-36V50W2BA	●			1.45 A	52.2 W		
		PMT-36V75W2BA	●			2.1 A	75.6 W		
		PMT-36V100W2BA	●			3.0 A	108 W		
		PMT-36V150W2BA	●			4.3 A	154.8 W	90-132V _{AC} , 180-264V _{AC} (Selectable by Switch)	46
		PMT-36V150W2CA	●			4.3 A	154.8 W	90-264 V _{AC}	
		PMT-36V200W2BM	●			5.9 A	212.4 W	90-132V _{AC} , 180-264V _{AC} (Selectable by Switch)	
		PMT-36V200W2BR	●			5.9 A	212.4 W		
		PMT-36V350W2BM	●		9.7 A	349.2 W			
		PMT-36V350W2BR	●		9.7 A	349.2 W			
		PMT-48V35W2BA	●		48 V	0.8 A	38.4 W		90-264 V _{AC}
		PMT-48V50W2BA	●			1.1 A	52.8 W		
		PMT-48V75W2BA	●			1.6 A	76.8 A		
		PMT-48V100W2BA	●			2.3 A	110.4 W		
		PMT-48V150W2BA	●			3.3 A	158.4 W	90-132V _{AC} , 180-264V _{AC} (Selectable by Switch)	48
		PMT-48V150W2CA	●			3.3 A	158.4 W	90-264 V _{AC}	
		PMT-48V200W2BM	●			4.4 A	211.2 W	90-132V _{AC} , 180-264V _{AC} (Selectable by Switch)	
		PMT-48V200W2BR	●			4.4 A	211.2 W		
		PMT-48V350W2BM	●		7.3 A	350.4 W			
		PMT-48V350W2BR	●		7.3 A	350.4 W			
		PMT-D1V75W2□A	●		5 V/12 V	5.0A/4.0A	73 W		90-264 V _{AC}
		PMT-D2V75W2□A	●		5 V/24 V	5.0A/2.1A	75.4 W		

Model Numbering

							CC Code
PM	T –	XXV	XXXW	2	□	□	□
Panel Mount	Product Type T - Enclosed	Output Voltage	Output Power	Single Phase with Low Profile	Family Code For 35-100 W B - No PFC, universal input voltage range For 150-350 W B - No PFC, input voltage selectable by switch C - No PFC, universal input voltage range	Connector Type Terminal Block A - With TUV, UL, CE, CCC, KC, EAC M - With UL, EAC R - With TUV, UL, CE, EAC	Blank - Without connector cover B - With conformal coating ¹⁾
PM	T –	XXV	XXXW	2	□	A	
Panel Mount	Product Type T - Enclosed	Output Voltage Dual Output D1 - 5 V / 12 V D2 - 5 V / 24 V	Output Power	Single Phase with Low Profile	Family Code B - No PFC, Non-Isolated C - No PFC, Isolated	Connector Type A - Terminal Block	

1) Options for 12 V and 24 V models only

Product Selection Guide

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Product Type	Series	Model Name	Phase	PFC	Output Voltage	Output Current	Output Power	Input Voltage Range*	Page
			1						
Panel Mount Power Supplies	PMC Universal AC input voltage	PMC-05V015W1AA	●		5 V	3.0 A	15 W	85-264 V _{AC} (DC input range 125-375 V _{DC})	50
		PMC-12V150W1B□	●	●	12 V	12.5 A	150 W	85-264 V _{AC} (DC input range 125-375 V _{DC})	
		PMC-12V600W1BA	●	●		50.0 A	600 W	85-264 V _{AC} (DC input range 120-370 V _{DC})	51
		PMC-24V150W1B□	●	●	24 V	6.25 A	150 W	85-264 V _{AC} (DC input range 125-375 V _{DC})	
		PMC-24V300W1BA	●	●		V1: 12.5 A V2 _{SB} : 0.5 A	300 W		
		PMC-24V600W1BA	●	●		25.0 A	600 W	85-264 V _{AC} (DC input range 120-370 V _{DC})	
		PMC-24V600W1RW	●	●		25.0 A	600 W	85-264 V _{AC}	
		PMC-48V150W1BA	●	●	48 V	3.125 A	150 W	85-264 V _{AC} (DC input range 125-375 V _{DC})	52
		PMC-48V600W1BA	●	●		12.5 A	600 W	85-264 V _{AC} (DC input range 120-370 V _{DC})	
		PMC-DSPV100W1A	●		24 V/5 V	2.7 A/7.0 A	100 W	85-264 V _{AC} (DC input range 125-375 V _{DC})	
	PMR - Thickness < 1U - Built-in PFC	PMR-4V320WC□A	●	●	4.2 V	60.0 A	252 W	88-264 V _{AC}	53
		PMR-4V320WDAA□	●	●		60.0 A	252 W		
		PMR-4V320WDGA	●	●		60.0 A	252 W		
		PMR-4V320WDBA	●	●		60.0 A	252 W		
		PMR-4V320WDCA	●	●		60.0 A	252 W		
		PMR-5V320WC□A	●	●	5 V	60.0 A	300 W	88-264 V _{AC}	54
		PMR-5V320WDAA	●	●		60.0 A	300 W		
		PMR-5V320WDGA	●	●		60.0 A	300 W		
		PMR-5V320WDBA	●	●		60.0 A	300 W		
		PMR-5V320WDCA	●	●		60.0 A	300 W		
		PMR-12V320W1AT	●	●	12 V	26.7 A	320.4 W	90-264 V _{AC}	55
		PMR-24V320W1AT	●	●	24 V	13.4 A	321.6 W		
		PMR-36V320W1AT	●	●	36 V	8.9 A	320.4 W	90-264 V _{AC}	56
		PMR-48V320W1AT	●	●	48 V	6.7 A	321.6 W		

* DC input is certified for selected models

Model Numbering

PM	C –	XXV	XXXW	1	□	□
Panel Mount	Product Type C - Enclosed	Output Voltage	Output Power	Phase Input 1 - Single Phase, Wide Range Input Voltage	A - No PFC B - With PFC R - With PFC, Remote ON/OFF, Remote Sense	Connector Type A - Terminal Block ¹⁾ J - IP20 Connector ²⁾ L - Front Face ²⁾ W - Front Face with conformal coating
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 1 - Single Phase	A - Delta Standard

1) For PMC-05V015W1AA and PMC-□V600W1BA, the connector type is a Front Face connector.
For PMC-24V300W1BA, the connector type is an IP20 connector.

2) Options

PM	R –	XXV	XXXW	□	□	A
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) ¹⁾ G - Front Face ²⁾ C - Front Face (Parallel Operation) ¹⁾	Variable A - With conformal coating

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

2) Options

PM	R –	XXV	XXXW	1	A	T
Panel Mount	Product Series R - Standard Rack Type Series (1U)	Output Voltage	Output Power	Phase Input 1 - Single Phase	Family Code A - Family A	Connector Type T - Terminal Block

New products are frequently introduced. Please visit www.DeltaPSU.com for latest product updates.

Product Type	Series	Model Name	Phase	PFC	Output Voltage	Output Current	Output Power	Input Voltage Range	Page
Panel Mount Power Supplies	PMF - Remote ON/OFF - Built-in PFC	PMF-4V320WC□□	●	●	4.2 V	55.0 A	231 W	88-264 V _{AC}	57
		PMF-5V320WC□□	●	●	5 V	55.0 A	275 W		
		PMF-24V240WC□□	●	●	24 V	10.0 A	240 W		
		PMF-24V320WC□□	●	●		13.3 A	320 W		
	PMU Power supply with integrated DC-UPS	PMU-13V155W□BA	●		13.8 V	V1: 9.5 A B+: 1.5 A	151 W	90-132 V _{AC} , 180-264 V _{AC} (Selectable by Switch)	58
		PMU-13V155W□CA	●				151 W		
		PMU-27V155W□BA	●		27.6 V	Enclosed V1: 4.0 A, B+: 1.5 A L Frame V1: 4.3 A, B+: 1.2 A	151 W		
		PMU-27V155W□CA	●				151 W		
	MEB Intelligent Fan Speed Control	MEB-750A12B AAA	●	●	12 V	58.4 A	750 W	85-264 V _{AC}	59
		MEB-750A12T AAA	●	●		58.4 A	750 W		
		MEB-500A24F AA	●	●	24 V	21.0 A	500 W	90-264 V _{AC}	
		MEB-750A24B AAA	●	●		31.25 A	750 W	85-264 V _{AC}	
		MEB-750A24T AAA	●	●		31.25 A	750 W		
		MEB-750A48B AAA	●	●	48 V	15.63 A	750 W		60
		MEB-750A48T AAA	●	●		15.63 A	750 W		
		MEB-1K2A24T ABA	●	●	24 V	50.0 A	1,200 W	85-264 V _{AC}	
		MEB-1K2A42T ABA	●	●	42 V	28.5 A	1,200 W		
		MEB-1K2A48T ABA	●	●	48 V	25.0 A	1,200 W		

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 ¹⁾	Variable B - No Remote ON/OFF R - With Remote ON/OFF ¹⁾

1) Options

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 ¹⁾	Signal B - Without Signal C - With Signal	Connector Type A - Terminal Block

1) Options

ME	B –	XXX	A	□	□	□□□
Delta Medical Power Supply	B - Enclosed	Max power wattage in the product series. May be lower at some conditions.	Family Code	Output Voltage	Input Connector Type	CC Code
		500 - 500 W	A - Family A	24 - 24 V	F - Front Face	AA - With Remote ON/OFF, with conformal coating
		750 - 750 W		12 - 12 V 24 - 24 V 48 - 48 V	B - C14 T - US Terminal	AAA - With Remote ON/OFF, with conformal coating
		1K2 - 1,200 W		24 - 24 V 42 - 42 V 48 - 48 V	T - US Terminal	ABA - With Remote ON/OFF, with conformal coating

Product Selection Guide

New products are frequently introduced. Please visit www.DeltaPSU.com for latest product updates.

Product Type	Series	Model Name	Phase	PFC	Output Voltage	Convection		Forced Air		Input Voltage Range	Page
			1			Output Current	Output Power	Output Current	Output Power		
Open Frame Power Supplies	PJT - High efficiency - Small footprint	PJT-12V40WBAA	●		12 V	3.33 A	40 W			90-264 V _{AC}	63
		PJT-12V65WBAA	●			5.0 A	60 W				
		PJT-12V100WBAA	●	●		8.33 A	100 W				
		PJT-12V100WBB	●			6.67 A	80 W	8.33 A	100 W		
		PJT-15V40WBAA	●		15 V	2.67 A	40 W			90-264 V _{AC}	64
		PJT-15V65WBAA	●			4.2 A	63 W				
		PJT-15V100WBAA	●	●		6.67 A	100 W				
		PJT-15V100WBB	●			5.33 A	80 W	6.67 A	100 W		
		PJT-18V40WBAA	●		18 V	2.22 A	40 W			90-264 V _{AC}	65
		PJT-18V65WBAA	●			3.61 A	65 W				
		PJT-18V100WBAA	●	●		5.55 A	100 W				
		PJT-18V100WBB	●			4.44 A	80 W	5.55 A	100 W		
		PJT-24V40WBAA	●		24 V	1.66 A	40 W			90-264 V _{AC}	66
		PJT-24V65WBAA	●			2.71 A	65 W				
		PJT-24V100WBAA	●	●		4.17 A	100 W				
		PJT-24V100WBB	●			3.33 A	80 W	4.17 A	100 W		
		PJT-27V150WBNA	●	●	V1: 27 V V _{SB} : 12 V	V1: 5.55 A V _{SB} : 0.5 A	150 W			85-264 V _{AC}	
	PJ - Built-in PFC - Versatile configurations - Conformal coating	PJ-5V15W□NA	●		5 V	3.0 A	15 W			85-264 V _{AC}	67
		PJ-12V15W□NA	●		12 V	1.3 A	15.6 W				
		PJ-12V30W□NA	●			2.5 A	30 W				
		PJ-12V50W□NA	●	●		4.3 A	51.6 W			85-264 V _{AC}	68
		PJ-12V100W□□A	●	●		8.5 A	102 W				
		PJ-12V150W□□A	●	●		12.5 A	150 W				
		PJ-24V30W□NA	●		24 V	1.25 A	31.2 W			85-264 V _{AC}	69
		PJ-24V50W□NA	●	●		2.1 A	50.4 W				
		PJ-24V100W□□A	●	●		4.3 A	103.2 W			85-264 V _{AC}	70
		PJ-24V150W□□A	●	●		6.3 A	150 W				
		PJ-48V50W□NA	●	●	48 V	1.1 A	52.8 W				
	PJB - Power Boost up to 10s - Conformal coating	PJB-24V100W□□A	●	●	24 V	4.3 A	103.2 W			85-264 V _{AC}	71
		PJB-24V150W□□A	●	●		6.3 A	151.2 W				
		PJB-24V240W□□□	●	●		10.0 A	240 W				
		PJB-24V300W□□□	●	●		12.5 A	300 W				

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 ¹⁾ C - JWT connector ¹⁾

1) Options

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

1) Options for 100 W and above

PJ	B –	XXV	XXXW	□	□	□
Open Frame	Product Series B - Power Boost Series	Output Voltage	Output Power	Package Type B - Open Frame L - L Frame C - Enclosed Green Mode ¹⁾ J - Open Frame H - L Frame G - Enclosed	Remote ON/OFF Function N - No Remote ON/OFF R - With Remote ON/OFF	Connector Type A - Harness J - IP20 ²⁾

1) Green Mode is available for 150 W only
2) For 240 W and 300 W only

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Product Type	Series	Model Name	Phase	PFC	Output Voltage	Output Current	Convection	Forced Air	Input Voltage Range	Page
			1				Output Power			
Open Frame Power Supplies	PJH Household and ITE safety approvals	PJH-24V300WBBA	●	●	V1: 24 V V _{SB} : 5 V	V1: 12.5 A V _{SB} : 1.2 A	240 W	300 W	90-264 V _{AC}	72
		PJH-24V300WBCA	●	●	V1: 24 V V _{SB} : 12 V	V1: 12.5 A V _{SB} : 0.5 A	240 W	300 W		
		PJH-36V300WBBA	●	●	V1: 36 V V _{SB} : 5 V	V1: 8.3 A V _{SB} : 1.2 A	240 W	300 W		
		PJH-36V300WBCA	●	●	V1: 36 V V _{SB} : 12 V	V1: 8.3 A V _{SB} : 0.5 A	240 W	300 W		
	PJU - Power supply with integrated DC-UPS - Compact size	PJU-13V60W□A□	●		V1: 13.8 V B+: 13.6 V	V1: 3.9 A B+: 0.4 A	60 W		90-264 V _{AC}	73
		PJU-13V60W□B□	●			V1: 3.9 A B+: 0.4 A	60 W			
		PJU-27V60W□A□	●		V1: 27.6 V B+: 12.4 V	V1: 1.75 A B+: 0.4 A	60 W			
		PJU-27V60W□B□	●			V1: 1.75 A B+: 0.4 A	60 W			
	PJL - UL 8750, IEC/UL 60950-1, IEC/UL 62368-1 approvals - Low inrush current - LED lighting power solution	PJL-48V200WBAA	●	●	48 V	4.17 A	150 W	200 W	85-305 V _{AC}	74
		PJL-48V400WBAA	●	●		8.33 A	200 W	400 W		
		PJL-48V600WLAA	●	●		12.5 A	300 W	600 W		

Model Numbering

PJ	H –	XXV	XXXW	B	□	A
Open Frame	Product Series H - Household Series	Output Voltage	Output Power	Package Type B - Open Frame	Voltage Standby B - 5 V ¹⁾ C - 12 V	Connector Type A - JST connector

1) Options

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

1) Options

PJ	L –	XXV	XXXW	□	A	A
Open Frame	Product Series L - Lighting Application Series	Output Voltage	Output Power	Package Type B - Open Frame L - L Frame	A - Active PFC	A - TE connector

| Product Selection Guide

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Product Type	Series	Model Name	Output Voltage	Output Current	Input Current	Input Voltage Range	Page
Redundancy Module	CliQ II	DRR-20A	22-60V	20.0 A	(1+1 Redundancy) = Nominal 2 × 12.5 A (N+1 Redundancy) = Nominal 2 × 10 A	22-60V _{DC}	77
		DRR-20N		20.0 A			
		DRR-40A		40.0 A	(1+1 Redundancy) = Nominal 2 × 25 A (N+1 Redundancy) = Nominal 2 × 20 A		
		DRR-40N		40.0 A			
Buffer Module	CliQ II	DRB-24V020AB□	24 V	20.0 A	Charging Mode: < 0.6 A	22.8-28.8 V _{DC}	78
		DRB-24V040ABN		40.0 A	Charging Mode: < 0.6 A		
DC-UPS Module	CliQ II	DRU-24V40ABN	24 V	40.0 A	Charging Mode: 2.0 A ± 1.0 A	24-28V _{DC}	79
	CHROME	DRU-24V10ACZ		10.0 A	Charging Mode: 0.5 A ± 0.1 A	24-28V _{DC}	80
	CliQ M	DRU-24V10AMN		10.0 A	0.5A, 1A, 1.5A, 2A (typ.) (constant current)	18-30V _{DC}	81
		DRU-24V20AMN		20.0 A	0.75A, 1.5A, 2.25A, 3A (typ.) (constant current)	18-30V _{DC}	
		DRU-24V40AMN		40.0 A	1A, 2A, 3A, 4A (typ.) (constant current)	18-30V _{DC}	

Product Type	Series	Model Name	Nominal Voltage	Charging Current	Discharging Current	Page
Battery Module	CliQ M	DRN-24V7AAEN	24 V	2.1 A Max	40.0 A Max	82

Model Numbering

DR	R –	XX	□
DIN Rail	Product Type R - Redundancy Module	Output Current 20 - 20 A 40 - 40 A	A - Metal Case, with Class I, Div 2 N - Metal Case, without Class I, Div 2

DR	□ –	24V	XXXXA	□	□
DIN Rail	Product Type B - Buffer Module U - DC-UPS Module	Output Voltage	Output Current	B - CliQ II Series C - CHROME Series M - CliQ M 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

DR	N –	24V	XA	A	E	N
DIN Rail	Product Type N - Battery Module (without Battery)	Input / Output Voltage	Capacity 7A - 7.2 AH	A - Metal Frame	E- Lead Acid Battery	N - Without Class I, Div 2

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Product Type	Series	Model Name	CC Code	Output Voltage	Output Current	Output Power	Page
Adapter	ADT - Compact size - DoE Level VI and CoC Tier 2	ADT-060A12AA	B-A	12 V	5.0 A	60 W	84
		ADT-060A12AB	B-A		5.0 A	60 W	
		ADT-150B12AA	J-A		12.5 A	150 W	
		ADT-060A15AA	B-A	15 V	4.0 A	60 W	
		ADT-060A15AB	B-A		4.0 A	60 W	
		ADT-060A19AA	B-A		3.2 A	60.8 W	
		ADT-060A19AB	B-A	19 V	3.2 A	60.8 W	85
		ADT-120A19AA	M-A		6.15 A	120 W	
		ADT-150A19AA	G-A		7.7 A	150 W	
		ADT-060A24AA	B-A		2.5 A	60 W	
		ADT-060A24AB	B-A	24 V	2.5 A	60 W	86
		ADT-090A24AA	F-A		3.75 A	90 W	
		ADT-120A24AA	F-A		5.0 A	120 W	
		ADT-150A24AA	H-A		6.25 A	150 W	
		ADT-150C24AC	K-A		6.25 A	150 W	

Model Numbering

CC Code						
ADT –	XXX	□	□	A	□	□- A
Delta AC-DC Adapter	Output Power 060 - 60 W 090 - 90 W 120 - 120 W 150 - 150 W	Family Code A B C	Output Voltage (Single Output) 12 - 12 V 15 - 15 V 19 - 19 V 24 - 24 V	Package Type A - Desktop Adapter	Input Connector Type A - C6 B - C8 C - C14	Output Connector B - Tuning fork, 5.5 × 2.1 × 10 mm, 180° F - Tuning fork, 5.5 × 2.5 × 11 mm, 90° G - Barrel, 6 × 3.5 × 11.5 mm, 90° H - Tuning fork, 5.5 × 2.5 × 11 mm, 90° J - Barrel, 7.4 × 5.1 × 11 mm, 90° K - 4 pin DIN, 180° Lockable M - Tuning fork, 5.5 × 1.7 × 11 mm, 90° A - Delta Standard

DIN Rail Power Supplies



CliQ II / CliQ III

CliQ II: Approvals for hazardous locations
CliQ III: Built-in constant current circuit for charging applications

Power Range: 60-960 W



CliQ M / CliQ VA

CliQ M: Approvals for maritime applications
CliQ VA: Integrated LCD display for outputs monitoring

Power Range: 80-960 W



Force-GT

Full load operating temperature up to 60°C

Power Range: 120-960 W



LYTE / LYTE II

Ultra slim form factor

Power Range: 75-480 W



CHROME / SYNC

CHROME: Class II Double Isolation
SYNC: Compact size

Power Range: 7.5-91.2 W

Applications



Building
Automation



Process
Automation



Factory
Automation



Machine
Automation



Renewable
Energy



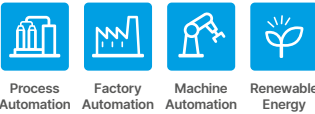
Test &
Measurement

CLiQ" (24 V)



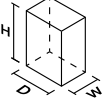
- Power will not de-rate for the entire input voltage range
- High Efficiency > 90.0% @ 230 V_{AC}
- Power Boost of 150% up to 5 s (480 W: 200% for 2 s)
- Full corrosion resistant aluminium casing
- Extreme low temperature cold start at -40°C
- Conformal coating on PCBAs to protect against common dust and pollutants
- Hazardous Locations approval to ATEX and Class I, Div 2

Applications



Output		DRP024V060W1B□	DRP024V120W1B□	DRP024V240W1B□	DRP024V480W1B□
Output Voltage		24 V	24 V	24 V	24 V
Output Voltage Range		24-28 V	24-28 V	24-28 V	24-28 V
Output Current		0-2.5 A	0-5.0 A	0-10.0 A	0-20.0 A
Output Power		60 W	120 W	240 W	480 W
PARD (20 MHz)		< 150 mVpp			
Hold-up Time	115 V _{AC}	> 20 ms		> 20 ms	
	230 V _{AC}	> 125 ms	> 115 ms		
Input					
Phase Input		Single Phase			
Input Voltage Range		85-264 V _{AC} (DC input range 120-375 V _{DC}) ¹⁾			
Input Frequency		47-63 Hz			
Input Current	115 V _{AC}	< 1.4 A	< 2.2 A	< 2.5 A	< 5.0 A
	230 V _{AC}	< 0.8 A	< 1.1 A	< 1.3 A	< 3.0 A
Efficiency ²⁾ at 100% Load	115 V _{AC}	> 90.0%	> 89.0%	> 90.0%	> 91.0%
	230 V _{AC}	> 90.0%	> 90.0%	> 92.0%	
Max Inrush Current (Cold Start)	115 V _{AC}	< 20 A	< 35 A		
	230 V _{AC}	< 35 A			
Power Factor	115 V _{AC}	Conform to EN 61000-3-2		> 0.96	> 0.96
	230 V _{AC}			> 0.90	> 0.95
Leakage Current	240 V _{AC}	< 1 mA			< 3 mA
Mechanical					
Case Cover / Chassis		Aluminium			
Dimensions (H × W × D)	mm	121 × 32 × 125	121 × 50 × 123.1	121 × 85 × 124.1	121 × 144 × 118.6
	inch	4.76 × 1.26 × 4.92	4.76 × 1.97 × 4.85	4.76 × 3.35 × 4.89	4.76 × 5.67 × 4.67
Unit Weight	kg	0.37	0.72	1.10	1.37
	lb	0.82	1.59	2.43	3.02
Cooling System		Convection			
MTBF ³⁾		> 800,000 hrs		> 500,000 hrs	
Environment					
Operating Temperature ⁴⁾		-25°C to +80°C			-25°C to +75°C
Storage Temperature		-40°C to +85°C			
Operating Humidity		5 to 95% RH (Non-Condensing)			
Operating Altitude		0 to 2,500 m (0 to 8,200 ft)			

Dimensions Reference



Notes

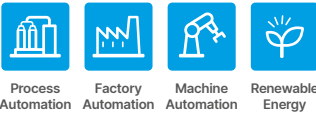
- 1) All models fulfill the test conditions for this range. DC input safety approval can be obtained upon request. While DRP024V060W1B□ is also certified for DC input.
- 2) At 25°C ambient temperature by vertical mounting orientation.
- 3) MTBF as per Telcordia SR-332 (Confidence level: 90%, I/P: 115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

CLiQ" (24 V)



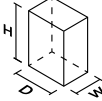
- Power will not de-rate for the entire input voltage range
- UL 1310 safety approval
- NEC Class 2 and Limited Power Source (LPS) approvals
- Conformal coating on PCBAs to protect against common dust and chemical pollutants
- Hazardous Locations approval to ATEX and Class I, Div 2 (DRP024V060W1NY)

Applications



Output		DRP024V060W1N□		DRP-24V100W1NN	
Output Voltage		24 V		24 V	
Output Voltage Range		22-28 V		22-24 V	
Output Current		0-2.5 A		0-3.8 A	
Output Power		60 W		91.2 W	
PARD (20 MHz)		< 240 mVpp		< 150 mVpp	
Hold-up Time	115 V _{AC}	> 20 ms		> 20 ms	
	230 V _{AC}	> 125 ms		> 30 ms	
Input					
Phase Input		Single Phase			
Input Voltage Range		85-264 V _{AC} (DC input range 120-375 V _{DC}) ¹⁾			
Input Frequency		47-63 Hz			
Input Current	115 V _{AC}	< 1.50 A		< 1.00 A	
	230 V _{AC}	< 0.80 A		< 0.53 A	
Efficiency ²⁾ at 100% Load	115 V _{AC}	> 89.0%		> 88.0%	
	230 V _{AC}			> 89.0%	
Max Inrush Current (Cold Start)	115 V _{AC}	< 40 A		< 30 A	
	230 V _{AC}	< 80 A		< 60 A	
Power Factor	115 V _{AC}	Conform to EN 61000-3-2		> 0.99	
	230 V _{AC}			> 0.94	
Leakage Current	240 V _{AC}	< 0.5 mA			
Mechanical					
Case Cover / Chassis		Plastic		Aluminium	
Dimensions (H × W × D)	mm	120.6 × 32 × 119.3		124 × 40 × 124	
	inch	4.75 × 1.26 × 4.70		4.88 × 1.57 × 4.88	
Unit Weight	kg	0.33		0.60	
	lb	0.73		1.32	
Cooling System		Convection			
MTBF ³⁾		> 800,000 hrs			
Environment					
Operating Temperature ⁴⁾		-25°C to +80°C			
Storage Temperature		-40°C to +85°C			
Operating Humidity		5 to 95% RH (Non-Condensing)			
Operating Altitude		0 to 2,500 m (0 to 8,200 ft)			

Dimensions Reference



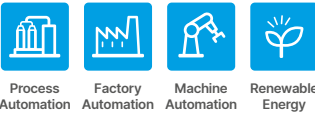
Notes

- 1) All models fulfill the test conditions for 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: 115 V_{AC}, O/P: 100% load) for vertical mounting orientation.
- 4) Refer power de-rating in the product datasheet.
- 5) All parameters are specified at 25°C ambient temperature unless otherwise indicated.



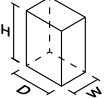
- Designed for single phase input 180-305 V_{AC} (L-N) or 2 of 3-Phase system 2 x 180-550 V_{AC} (L-L) or 254-780 V_{DC}
- Compact and corrosion resistant aluminium casing
- High Efficiency > 90.0%
- Wide operating temperature range from -30°C to +70°C
- Built-in DC OK contact
- Conformal coating on PCBAs to protect against common dust and pollutants

Applications



Output		DRP-24V120W2BN	DRP-24V240W2BN
Output Voltage		24 V	24 V
Output Voltage Range		24-28 V	24-28 V
Output Current		0-5.0 A	0-10.0 A
Output Power		120 W	240 W
PARD (20 MHz)		< 150 mVpp	< 150 mVpp @ -10°C and above < 200 mVpp @ below -10°C
Hold-up Time	2 × 230 V _{AC}	> 10 ms	> 18 ms
	2 × 400 V _{AC}	> 50 ms	> 30 ms
Input			
Phase Input		Single Phase or Two Phase	
Input Voltage Range		2 × 180-550 V _{AC} or 180-305 V _{AC} (Single Phase) (DC input range 254-780 V _{DC}) ¹⁾	
Input Frequency		47-63 Hz	
Input Current	2 × 230 V _{AC}	< 1.20 A	< 2.00 A
	2 × 400 V _{AC}	< 0.80 A	< 1.00 A
Efficiency ²⁾ at 100% Load	2 × 400 V _{AC}	> 90.0%	
Max Inrush Current (Cold Start)	2 × 200 V _{AC}	< 50 A	
	2 × 500 V _{AC}		
Power Factor	2 × 230 V _{AC} 2 × 400 V _{AC}	Conform to EN 61000-3-2	
Leakage Current	500 V _{AC}	< 1 mA	< 3.5 mA
Mechanical			
Case Cover / Chassis		Aluminium	
Dimensions (H × W × D)	mm	124 × 40 × 117	124 × 60 × 117
	inch	4.88 × 1.57 × 4.61	4.88 × 2.36 × 4.61
Unit Weight	kg	0.62	0.81
	lb	1.37	1.79
Cooling System		Convection	
MTBF ³⁾		> 800,000 hrs	> 500,000 hrs
Environment			
Operating Temperature ⁴⁾		-30°C to +70°C	
Storage Temperature		-40°C to +85°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)	

Dimensions Reference



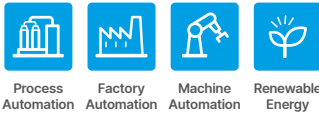
Notes

- 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: 2 × 200 V_{AC}, O/P: 100% load) for vertical mounting orientation.
- 4) Refer power de-rating in the product datasheet.
- 5) All parameters are specified at 25°C ambient temperature unless otherwise indicated.



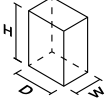
- Power will not de-rate for the entire input voltage range
- Power Boost of 150% up to 5 s (480 W: 200% for 2 s)
- Full corrosion resistant aluminium casing
- Extreme low temperature cold start at -40°C
- Conformal coating on PCBAs to protect against common dust and pollutants
- Hazardous Locations approval to ATEX and Class I, Div 2 (except DRP024V960W3BN)

Applications



Output		DRP024V060W3B□	DRP024V120W3B□	DRP024V240W3B□	DRP024V480W3B□	DRP024V960W3BN
Output Voltage		24 V	24 V	24 V	24 V	24 V
Output Voltage Range		24-28 V	24-28 V	24-28 V	24-28 V	24-28 V
Output Current		0-2.5 A	0-5.0 A	0-10.0 A	0-20.0 A	0-40.0 A
Output Power		60 W	120 W	240 W	480 W	960 W
PARD (20 MHz)		< 150 mVpp				< 240 mVpp
Hold-up Time	3 × 400V _{AC}	> 20 ms			> 20 ms	
	3 × 500V _{AC}	> 40 ms				
Input						
Phase Input		Two Phase or Three Phase				
Input Voltage Range (Does not exceed 600V _{AC})		3 × 320-600V _{AC} or 2 × 360-600V _{AC} (DC input range 450-800V _{DC}) ¹⁾				3 × 320-600V _{AC} or 2 × 380-600V _{AC} (DC input range 450-800V _{DC}) ¹⁾
Input Frequency		47-63 Hz				
Input Current	3 × 400V _{AC}	< 0.30 A	< 0.50 A	< 0.75 A	< 1.00 A	< 1.70 A
	3 × 500V _{AC}	< 0.25 A	< 0.40 A	< 0.65 A	< 0.75 A	< 1.40 A
Efficiency ²⁾ at 100% Load	3 × 400V _{AC} 3 × 500V _{AC}	> 86.0%	> 88.0%	> 91.0%		> 92.0%
Max Inrush Current (Cold Start) ³⁾	3 × 400V _{AC}	< 30 A		< 40 A	< 50 A	< 60 A
	3 × 500V _{AC}					
Power Factor	3 × 400V _{AC}	Conform to EN 61000-3-2			> 0.95	> 0.95
	3 × 500V _{AC}				> 0.94	> 0.94
Leakage Current	3 × 500V _{AC}	< 3.5 mA				
Mechanical						
Case Cover / Chassis		Aluminium				
Dimensions (H × W × D)	mm	121 × 50 × 117.3	121 × 50 × 117.3	121 × 70 × 117.3	121 × 140 × 117.3	121 × 255 × 117.3
	inch	4.76 × 1.97 × 4.62	4.76 × 1.97 × 4.62	4.76 × 2.76 × 4.62	4.76 × 5.51 × 4.62	4.76 × 10.0 × 4.62
Unit Weight	kg	0.66	0.66	0.89	1.35	2.60
	lb	1.46	1.46	1.96	2.98	5.73
Cooling System		Convection				
MTBF ⁴⁾		> 800,000 hrs		> 500,000 hrs		> 300,000 hrs
Environment						
Operating Temperature ⁵⁾		-25°C to +80°C				-25°C to +65°C
Storage Temperature		-40°C to +85°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)				

Dimensions Reference



Notes

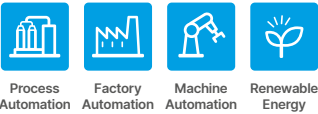
- 1) All models fulfill the test conditions for this range. DC input safety approval can be obtained upon request. While DRP024V480W3B□ and DRP024V960W3B□ are also certified for DC input.
- 2) At 25°C ambient temperature by vertical mounting orientation.
- 3) AC Source capability up to 3 kVA.
- 4) MTBF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

CliQ" (48 V)



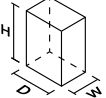
- Power will not de-rate for the entire input voltage range
- High Efficiency > 91.0% @ 230V_{AC}
- Power Boost of 150% up to 5 s
- Full corrosion resistant aluminium casing
- Extreme low temperature cold start at -40°C
- Conformal coating on PCBAs to protect against common dust and pollutants
- Hazardous Locations approval to ATEX and Class I, Div 2

Applications



Output		DRP048V060W1B□	DRP048V120W1B□	DRP048V240W1B□	DRP048V480W1B□
Output Voltage		48 V	48 V	48 V	48 V
Output Voltage Range		48-56 V	48-56 V	48-56 V	48-56 V
Output Current		0-1.25 A	0-2.5 A	0-5.0 A	0-10.0 A
Output Power		60 W	120 W	240 W	480 W
PARD (20 MHz)		< 200 mVpp			
Hold-up Time	115 V _{AC}	> 20 ms		> 20 ms	
	230 V _{AC}	> 125 ms	> 50 ms		
Input					
Phase Input		Single Phase			
Input Voltage Range		85-264 V _{AC} (DC input range 120-375 V _{DC}) ¹⁾			
Input Frequency		47-63 Hz			
Input Current	115 V _{AC}	< 1.4 A	< 2.2 A	< 2.5 A	< 5.0 A
	230 V _{AC}	< 0.8 A	< 1.1 A	< 1.3 A	< 3.0 A
Efficiency ²⁾ at 100% Load	115 V _{AC}	> 91.0%	> 90.0%		> 91.0%
	230 V _{AC}	> 92.0%	> 91.0%	> 92.0%	> 93.0%
Max Inrush Current (Cold Start)	115 V _{AC}	< 20 A	< 35 A		
	230 V _{AC}	< 35 A			
Power Factor	115 V _{AC}	Conform to EN 61000-3-2	> 0.99	> 0.96	
	230 V _{AC}		> 0.93	> 0.90	
Leakage Current	240 V _{AC}	< 1 mA			
		< 3 mA			
Mechanical					
Case Cover / Chassis		Aluminium			
Dimensions (H × W × D)	mm	121 × 32 × 125	121 × 50 × 123.1	121 × 85 × 124.1	121 × 144 × 118.6
	inch	4.76 × 1.26 × 4.92	4.76 × 1.97 × 4.85	4.76 × 3.35 × 4.86	4.76 × 5.67 × 4.67
Unit Weight	kg	0.38	0.72	0.96	1.37
	lb	0.84	1.59	2.12	3.02
Cooling System		Convection			
MTBF ³⁾		> 800,000 hrs		> 500,000 hrs	
Environment					
Operating Temperature ⁴⁾		-25°C to +80°C			
Storage Temperature		-40°C to +85°C			
Operating Humidity		5 to 95% RH (Non-Condensing)			
Operating Altitude		0 to 2,500 m (0 to 8,200 ft)			

Dimensions Reference



Notes

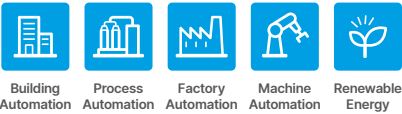
- 1) All models fulfill the test conditions for DC input. DC input safety approval can be obtained upon request.
- 2) At 25°C ambient temperature by vertical mounting orientation.
- 3) MTBF as per Telcordia SR-332 (Confidence level: 90%, I/P: 115 V_{AC}, O/P: 100% load) for vertical mounting orientation.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

CliQ" (24 V)



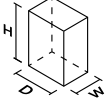
- Built-in constant current circuit for charging applications
- High efficiency of up to 94% at 230V_{AC}
- Power Boost of 150% up to 5 s
- SEMI F47 compliance at 120V_{AC}
- Extreme low temperature cold start at -40°C
- Built-in DC OK Contact and LED indicator for DC OK
- Conformal coating on PCBA to protect against common dust and pollutants

Applications



Output		DRP-24V120W1C□N		DRP-24V240W1C□N		DRP-24V480W1C□N	
Output Voltage		24 V		24 V		24 V	
Output Voltage Range		24-28 V		24-28 V		24-28 V	
Output Current		0-5.0 A		0-10.0 A		0-20.0 A	
Output Power		120 W		240 W		480 W	
PARD (20 MHz)				< 100 mVpp			
Hold-up Time	115 V _{AC}						
	230 V _{AC}	> 20 ms				> 15 ms	
Input							
Phase Input		Single Phase					
Input Voltage Range		DRP-24V□W1C□N: 88-264 V _{AC} DRP-24V□W1C□N: 88-264 V _{AC} (DC input range 88-375 V _{DC}) ¹⁾					
Input Frequency		47-63 Hz					
Input Current	115 V _{AC}	< 1.4 A	< 2.6 A	< 5.0 A			
	230 V _{AC}	< 0.7 A	< 1.3 A	< 2.5 A			
Efficiency ²⁾ at 100% Load	115 V _{AC}	> 89.5%	> 91.0%	> 93.0%			
	230 V _{AC}	> 91.0%					
Max Inrush Current (Cold Start)	115 V _{AC}	< 35 A	< 33 A	< 40 A			
	230 V _{AC}	< 70 A	< 65 A	< 80 A			
Power Factor	115 V _{AC}	> 0.96	> 0.99	> 0.99			
	230 V _{AC}	> 0.93	> 0.93	> 0.95			
Leakage Current (264 V _{AC} , 50Hz)	TT/TN	< 0.47 mA	< 0.74 mA	< 1.12 mA			
	IT	< 1.20 mA	< 2.00 mA	< 2.55 mA			
Mechanical							
Case Cover / Chassis		Aluminium					
Dimensions (H × W × D)	mm	124 × 40 × 117	124 × 60 × 117	124 × 82 × 127			
	inch	4.88 × 1.57 × 4.61	4.88 × 2.36 × 4.61	4.88 × 3.23 × 5.00			
Unit Weight	kg	0.58	0.84	1.20			
	lb	1.28	1.85	2.65			
Cooling System		Convection					
MTBF ³⁾		> 1,411,300 hrs	> 1,366,200 hrs	> 1,041,600 hrs			
Environment							
Operating Temperature ⁴⁾		-25°C to +70°C					
Storage Temperature		-40°C to +85°C					
Operating Humidity		5 to 95% RH (Non-Condensing)					
Operating Altitude		0 to 5,000 m (0 to 16,400 ft)					

Dimensions Reference



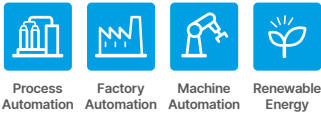
Notes

- 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: 115 V_{AC}, O/P: 100% load) for vertical mounting orientation.
- 4) Refer power de-rating in the product datasheet.
- 5) All parameters are specified at 25°C ambient temperature unless otherwise indicated.

CliQ^M (24 V)

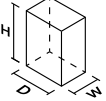
- High power density in corrosion resistant aluminium casing
- Power Boost of 150% up to 7 s
- Advanced Power Boost (APB)
- DNV GL and ABS approvals for maritime applications
- Extreme low temperature cold start at -40°C
- Built-in DC OK contact and LED indicator for DC OK/ Overload
- Conformal coating on PCBAs to protect against common dust and chemical pollutants

Applications



DRM-24V240W1PN		DRM-24V480W1PN		DRM-24V960W1PN	
24 V		24 V		24 V	
24-28 V		24-28 V		24-28 V	
10.0-9.0 A		20.0-17.0 A		40.0-34.3 A	
240 W		480 W		960 W	
		< 100 mVpp			
> 28 ms		> 30 ms		> 23 ms	
Single Phase					
85-276 V _{AC} (DC input range 88-375 V _{DC}) ¹⁾				85-264 V _{AC}	
47-63 Hz					
< 2.26 A		< 4.60 A		< 10.10 A	
< 1.25 A		< 2.50 A		< 6.00 A	
> 92.6%		> 92.2%		> 93.6%	
> 93.5%		> 93.4%		> 94.6%	
< 10 A		< 13 A		< 13 A	
				< 20 A	
> 0.98		> 0.92		> 0.97	
> 0.92		> 0.87		> 0.95	
< 0.74 mA		< 0.80 mA		< 1.18 mA	
< 1.29 mA		< 2.00 mA		< 2.82 mA	
Aluminium					
124 × 60 × 117		124 × 82 × 127		124 × 125 × 133.6	
4.88 × 2.36 × 4.61		4.88 × 3.23 × 5.00		4.88 × 4.92 × 5.26	
0.94		1.40		2.87	
2.07		3.09		6.33	
Convection					
> 1,400,000 hrs		> 778,800 hrs		> 513,800 hrs	
-25°C to +70°C					
-40°C to +85°C					
5 to 95% RH (Non-Condensing)					
0 to 5,400ft; IEC/EN 61558: 0 to 2,500 m (0 to 8,200 ft)					

Dimensions Reference



Notes

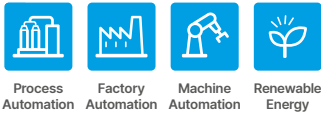
- 1) All models are certified for DC input. DC input is not applicable for DRM-24V960W1PN.
- 2) At 25°C ambient temperature by vertical mounting orientation.
- 3) MTBF as per Telcordia SR-332 (Confidence level: 90%, I/P: 100 V_{AC}, O/P: 100% load) for vertical mounting orientation.
- 4) Refer power de-rating in the product datasheet.
- 5) All parameters are specified at 25°C ambient temperature unless otherwise indicated.

CliQ^M (24 V)



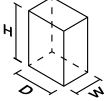
- Built-in constant current circuit for charging applications
- Full power from -25°C to +60°C @ 5,000 m (16,400 ft)
- Power Boost of 150% up to 7 s
- Advanced Power Boost (APB)
- DNV GL and ABS approvals for maritime applications
- Built-in DC OK Contact and LED indicator for DC OK/ Overload
- Conformal coating on PCBAs to protect against common dust and chemical pollutants

Applications



Output		DRM-24V480W3PN		DRM-24V960W3PN	
Output Voltage		24 V		24 V	
Output Voltage Range		24-28 V		24-28 V	
Output Current		20.0-17.1 A		40.0-34.3 A	
Output Power		480 W		960 W	
PARD (20 MHz)		< 100 mVpp		< 100 mVpp	
Hold-up Time	3 × 400V _{AC}	> 18 ms		> 20 ms	
	3 × 500V _{AC}				
Input					
Phase Input		Two or Three Phase			
Input Voltage Range		3 × 320-575 V _{AC} or 2 × 380-575 V _{AC} (DC input range 450-800 V _{DC}) ¹⁾			
Input Frequency		47-63 Hz			
Input Current	3 × 400V _{AC}	< 0.79 A	< 1.65 A		
	3 × 500V _{AC}	< 0.68 A	< 1.35 A		
Efficiency ²⁾ at 100% Load	3 × 400V _{AC}	> 95.0%	> 95.3%		
	3 × 500V _{AC}	> 94.8%	> 95.2%		
Max Inrush Current (Cold Start)	3 × 400V _{AC}	< 10 A		< 14.2 A	
	3 × 500V _{AC}			< 17.7 A	
Power Factor	3 × 400V _{AC}	> 0.93	> 0.90		
	3 × 500V _{AC}	> 0.88			
Leakage Current (3 × 528 V _{AC} , 60 Hz)	TT/TN	< 1.30 mA		< 0.95 mA	
	IT			< 1.20 mA	
Mechanical					
Case Cover / Chassis		Aluminium			
Dimensions (H × W × D)	mm	124 × 65 × 127.1		124 × 110 × 128.6	
	inch	4.88 × 2.56 × 5.00		4.88 × 4.33 × 5.06	
Unit Weight	kg	1.18		2.30	
	lb	2.60		5.07	
Cooling System		Convection			
MTBF ³⁾		> 750,000 hrs		> 568,300 hrs	
Environment					
Operating Temperature ⁴⁾		-25°C to +70°C			
Storage Temperature		-40°C to +85°C			
Operating Humidity		5 to 95% RH (Non-Condensing)			
Operating Altitude ⁵⁾		0 to 5,000 m (0 to 16,400 ft)			

Dimensions Reference



Notes

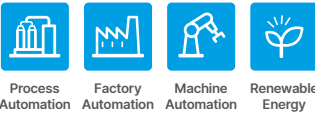
- 1) All models fulfill the test conditions for this range. DC input safety approval can be obtained upon request.
- 2) At 25°C ambient temperature by vertical mounting orientation.
- 3) MTBF as per Telcordia SR-332 (Confidence level: 90%, I/P: 3 × 400 V_{AC}, O/P: 100% load) for vertical mounting orientation.
- 4) Refer power de-rating in the product datasheet.
- 5) According to IEC/EN 62368-1, IEC/EN 61010.
- 6) All parameters are specified at 25°C ambient temperature unless otherwise indicated.

cliQ^M (24 V)



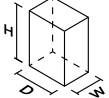
- SIL3 approval for SIS Functional Safety
- Droop method current sharing
- Active Redundant circuit O-Ring MOSFET
- Power Boost of 150% up to 5s
- Advanced Power Boost (APB)
- Built-in DC OK contact and LED indicator for DC OK/ Overload
- Conformal coating on PCBAs to protect against common dust and chemical pollutants

Applications



		COMING SOON
Output		DRM-24V480W1SN
Output Voltage		24 V
Output Voltage Range		24-28 V
Output Current		20.0-17.0 A
Output Power		480 W
PARD (20 MHz)		< 120 mVpp
Hold-up Time	120 V _{AC}	> 32 ms
	230 V _{AC}	
Input		
Phase Input		Single Phase
Input Voltage Range		85-276 V _{AC} (DC input range 88-375 V _{DC}) ¹⁾
Input Frequency		47-63 Hz
Input Current	120 V _{AC}	< 4.56 A
	230 V _{AC}	< 2.48 A
Efficiency ²⁾ at 100% Load	120 V _{AC}	> 92.4%
	230 V _{AC}	> 93.4%
Max Inrush Current (Cold Start)	120 V _{AC}	< 13 A
	230 V _{AC}	
Power Factor	120 V _{AC}	> 0.95
	230 V _{AC}	> 0.90
Leakage Current (264 V _{AC} , 50Hz)	TT/TN	< 1.10 mA
	IT	< 1.20 mA
Mechanical		
Case Cover / Chassis		Aluminium
Dimensions (H × W × D)	mm	124 × 82 × 127
	inch	4.88 × 3.23 × 5.00
Unit Weight	kg	1.40
	lb	3.09
Cooling System		Convection
MTBF ³⁾		> 864,600 hrs
Environment		
Operating Temperature ⁴⁾		-25°C to +70°C
Storage Temperature		-40°C to +85°C
Operating Humidity		5 to 95% RH (Non-Condensing)
Operating Altitude ⁵⁾		0 to 5,000 m (0 to 16,400 ft)

Dimensions Reference



Notes

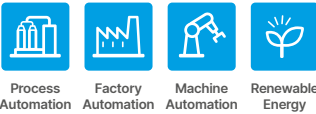
- 1) All models are certified for DC input.
- 2) At 25°C ambient temperature by vertical mounting orientation.
- 3) MTBF as per Telcordia SR-332 (Confidence level: 90%, I/P: 100 V_{AC}, O/P: 100% load) for vertical mounting orientation.
- 4) Refer power de-rating in the product datasheet.
- 5) According to IEC/EN 62368-1, IEC/EN 61010.
- 6) All parameters are specified at 25°C ambient temperature unless otherwise indicated.

cliQ^{VA} (24 V)



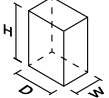
- LCD display monitoring the output current / voltage / peak current and temperature
- Life time expectancy alarm signal and monitoring
- Built-in active PFC with up to 94% efficiency
- Power Boost of 150% up to 7s
- Advanced Power Boost (APB)
- DC OK Contact and LED indicator for DC OK/ Overload
- Conformal coating on PCBAs to protect against common dust and chemical pollutants

Applications



Output		DRV-24V120W1PN	DRV-24V240W1PN	DRV-24V480W1PN
Output Voltage		24 V	24 V	24 V
Output Voltage Range		24-28 V	24-28 V	24-28 V
Output Current		5.0-4.28 A	10.0-8.57 A	20.0-17.0 A
Output Power		120 W	240 W	480 W
PARD (20 MHz)		< 50 mVpp	< 50 mVpp	< 100 mVpp
Hold-up Time	120 V _{AC}	> 34 ms	> 28 ms	> 30 ms
	230 V _{AC}	> 65 ms		
Input				
Phase Input		Single Phase		
Input Voltage Range		85-264 V _{AC} (DC input range 88-375 V _{DC}) ¹⁾	85-276 V _{AC} (DC input range 88-375 V _{DC}) ¹⁾	
Input Frequency		47-63 Hz		
Input Current	120 V _{AC}	< 1.13 A	< 2.22 A	< 4.60 A
	230 V _{AC}	< 0.63 A	< 1.21 A	< 2.50 A
Efficiency ²⁾ at 100% Load	120 V _{AC}	> 90.3%	> 92.6%	> 92.2%
	230 V _{AC}	> 91.2%	> 93.5%	> 93.4%
Max Inrush Current (Cold Start)	120 V _{AC}	< 15 A	< 10 A	< 13 A
	230 V _{AC}			
Power Factor	120 V _{AC}	> 0.99	> 0.98	> 0.92
	230 V _{AC}	> 0.91	> 0.92	> 0.87
Leakage Current (264 V _{AC} , 50 Hz)	TT/TN	< 0.45 mA	< 0.74 mA	< 0.80 mA
	IT	< 1.08 mA	< 2.10 mA	< 2.00 mA
Mechanical				
Case Cover / Chassis		Aluminium & Plastic / Aluminium		
Dimensions (H × W × D)	mm	124 × 60 × 139	124 × 60 × 139	124 × 82 × 149
	inch	4.88 × 2.36 × 5.47	4.88 × 2.36 × 5.47	4.88 × 3.23 × 5.87
Unit Weight	kg	0.75	1.02	1.45
	lb	1.65	2.25	3.20
Cooling System		Convection		
MTBF ³⁾		> 1,444,000 hrs	> 1,268,000 hrs	> 751,100 hrs
Environment				
Operating Temperature ⁴⁾		-25°C to +70°C		
Storage Temperature		-40°C to +85°C		
Operating Humidity		5 to 95% RH (Non-Condensing)		
Operating Altitude		0 to 5,000 m (0 to 16,400 ft)		

Dimensions Reference



Notes

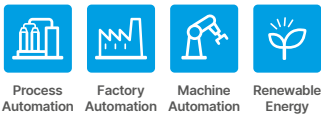
- 1) All models are certified for DC input.
- 2) At 25°C ambient temperature by vertical mounting orientation.
- 3) MTBF as per Telcordia SR-332 (Confidence level: 90%, I/P: 100 V_{AC}, O/P: 100% load) for vertical mounting orientation.
- 4) Refer power de-rating in the product datasheet.
- 5) All parameters are specified at 25°C ambient temperature unless otherwise indicated.

FORCE-GT (12V, 24V, 48V)



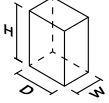
- Built-in constant current circuit for charging applications
- Full load operating temperature up to 60°C
- Cold start at -40°C
- Ultra-Slim design
- Long life electrolytic capacitor
- Built-in DC OK relay and LED indicator
- Conformal coating on PCBA's to protect against common dust and pollutants

Applications



		NEW	NEW	NEW	NEW	NEW	NEW	NEW	NEW
Output		DRF-12V120W1GBA	DRF-12V240W1GBA	DRF-24V120W1GBA	DRF-24V240W1GBA	DRF-24V480W1GBA	DRF-48V120W1GBA	DRF-48V240W1GBA	DRF-48V480W1GBA
Output Voltage		12 V	12 V	24 V	24 V	24 V	48 V	48 V	48 V
Output Voltage Range		12-14 V	12-14 V	24-28 V	24-28 V	24-28 V	48-55 V	48-55 V	48-55 V
Output Current		0-10.0 A	0-20.0 A	0-5.0 A	0-10.0 A	0-20.0 A	0-2.5 A	0-5.0 A	0-10.0 A
Output Power		120 W	240 W	120 W	240 W	480 W	120 W	240 W	480 W
PARD (20 MHz)		< 100 mVpp @ 0°C~70°C			< 100 mVpp @ 0°C~70°C		< 120 mVpp @ 0°C~70°C		150 mVpp typ. @ 0°C~70°C
		< 300 mVpp @ -30°C~0°C			< 300 mVpp @ -30°C~0°C		< 360 mVpp @ -30°C~0°C		450 mVpp typ. @ -30°C~0°C
Hold-up Time	115V _{AC}	35 ms typ.	30 ms typ.	35 ms typ.	30 ms typ.	25 ms typ.	35 ms typ.	30 ms typ.	25 ms typ.
	230 V _{AC}								
Input									
Phase Input		Single Phase					Single Phase		
Input Voltage Range		90-264 V _{AC}					90-264 V _{AC}		
Input Frequency		47-63 Hz					47-63 Hz		
Input Current	115V _{AC}	1.2 A typ.	2.5 A typ.	1.2 A typ.	2.5 A typ.	4.7 A typ.	1.2 A typ.	2.5 A typ.	4.7 A typ.
	230 V _{AC}	0.6 A typ.	1.3 A typ.	0.6 A typ.	1.3 A typ.	2.4 A typ.	0.6 A typ.	1.3 A typ.	2.4 A typ.
Efficiency ²⁾ at 100% Load	230V _{AC}	93.0% typ.	93.5% typ.		94.5% typ.		95.0% typ.	93.0% typ.	94.0% typ.
Max Inrush Current (Cold Start)	230 V _{AC}	40 A typ.					40 A typ.		
Power Factor	115V _{AC}	> 0.95	> 0.96	> 0.95	> 0.96		> 0.95	> 0.96	
	230 V _{AC}	> 0.92	> 0.93	> 0.92	> 0.93		> 0.92	> 0.93	
Leakage Current	240 V _{AC}	< 0.5 mA			< 0.5 mA		< 1.5 mA	< 0.5 mA	
Mechanical									
Case Cover / Chassis		Metal					Metal		
Dimensions (H × W × D)	mm	123.6 × 30 × 116.8	123.6 × 40 × 116.8	123.6 × 30 × 116.8	123.6 × 40 × 116.8	123.6 × 56 × 116.8	123.6 × 30 × 116.8	123.6 × 40 × 116.8	123.6 × 56 × 116.8
	inch	4.87 × 1.18 × 4.60	4.87 × 1.57 × 4.60	4.87 × 1.18 × 4.60	4.87 × 1.57 × 4.60	4.87 × 2.20 × 4.60	4.87 × 1.18 × 4.60	4.87 × 1.57 × 4.60	4.87 × 2.20 × 4.60
Unit Weight	kg	0.50	0.64	0.50	0.64	0.88	0.50	0.64	0.88
	lb	1.10	1.41	1.10	1.41	1.94	1.10	1.41	1.94
Cooling System		Convection					Convection		
MTBF ³⁾		> 700,000 hrs					> 700,000 hrs		
Environment									
Operating Temperature ⁴⁾		-30°C to +70°C					-30°C to +70°C		
Storage Temperature		-40°C to +85°C					-40°C to +85°C		
Operating Humidity		5 to 90% RH (Non-Condensing)					5 to 90% RH (Non-Condensing)		
Operating Altitude		0 to 5,000 m (0 to 16,400 ft)					0 to 5,000 m (0 to 16,400 ft)		

Dimensions Reference



Notes

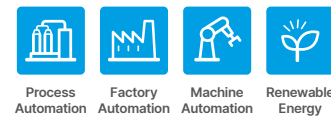
- 1) At 25°C ambient temperature by vertical mounting orientation.
- 2) MTBF as per Telcordia SR-332 (Confidence level: 90%, I/P: 115 V_{AC} & 230 V_{AC}, O/P: 100% load) for vertical mounting orientation.
- 3) Refer power de-rating in the product datasheet.
- 4) All parameters are specified at 25°C ambient temperature unless otherwise indicated.



FORCE-GT (24 V)

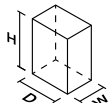
- Built-in constant current circuit for charging applications
- Full load operating temperature up to 55°C
- Cold start at -40°C
- Ultra-Slim design
- Reduced no-load power consumption
- Built-in DC OK relay and LED indicator
- Conformal coating on PCBAs to protect against common dust and pollutants

Applications



		NEW	NEW	NEW	NEW
Output		DRF-24V120W3GBA	DRF-24V240W3GBA	DRF-24V480W3GBA	DRF-24V960W3GBA
Output Voltage		24 V	24 V	24 V	24 V
Output Voltage Range		24-28 V	24-28 V	24-28 V	24-28 V
Output Current		0-5.0 A	0-10.0 A	0-20.0 A	0-40.0 A
Output Power		120 W	240 W	480 W	960 W
PARD (20 MHz)		< 100mVpp		< 150mVpp	< 200mVpp
Hold-up Time	3 × 400V _{AC}	20 ms typ.		20 ms typ.	
	3 × 500V _{AC}	40 ms typ.			
Input					
Phase Input		Two or Three Phase			
Input Voltage Range		3 x 320-575 V _{AC} (3-Phase) or 2 x 340-575 V _{AC} (2-Phase) ¹⁾			
Input Frequency		47-63 Hz			
Input Current	3 × 400V _{AC}	< 0.50 A	< 0.75 A	< 0.85 A	< 1.65 A
	3 × 500V _{AC}	< 0.40 A	< 0.65 A	< 0.73 A	< 1.35 A
Efficiency ²⁾ at 100% Load	3 × 400V _{AC} 3 × 500V _{AC}	87.5% typ.	89.5% typ.	94.0% typ.	94.5% typ.
Max Inrush Current (Cold Start)	3 × 400V _{AC}	20 A typ.		35 A typ.	
	3 × 500V _{AC}	25 A typ.			
Power Factor	3 × 400V _{AC}	> 0.45	> 0.50	> 0.90	> 0.90
	3 × 500V _{AC}	> 0.40		> 0.88	
Leakage Current	3 × 500V _{AC}	< 3.5 mA			
Mechanical					
Case Cover / Chassis		Aluminium			
Dimensions (H × W × D)	mm	124 × 38 × 125.3	124 × 50 × 125.3	124 × 65 × 127.3	124 × 110 × 128.7
	inch	4.88 × 1.50 × 4.93	4.88 × 1.97 × 4.93	4.88 × 2.56 × 5.01	4.88 × 4.33 × 5.07
Unit Weight	kg	0.54	0.84	1.20	2.26
	lb	1.19	1.85	2.65	4.98
Cooling System		Convection			
MTBF ³⁾		> 700,000 hrs		> 600,000 hrs	> 500,000 hrs
Environment					
Operating Temperature ⁴⁾		3-Phase: -25°C to +70°C / 2-Phase: -25°C to +60°C			
Storage Temperature		-40°C to +85°C			
Operating Humidity		5 to 95% RH (Non-Condensing)			
Operating Altitude ⁵⁾		0 to 5,000 m (0 to 16,400 ft)			

Dimensions Reference



Notes

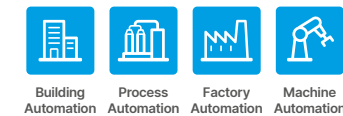
- 1) Power supply can operate at DC input.
- 2) At 25°C ambient temperature by vertical mounting orientation.
- 3) MTBF as per Telcordia SR-332 (Confidence level: 90%, I/P: 3 × 400 V_{AC} & 3 × 500 V_{AC}, O/P: 100% load) for vertical mounting orientation.
- 4) Refer power de-rating in the product datasheet.
- 5) According to IEC/EN 62368-1, IEC/EN 61010.
- 6) All parameters are specified at 25°C ambient temperature unless otherwise indicated.



LYTE (12 V, 24 V, 48 V)

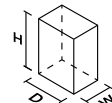
- Built-in constant current circuit for reactive loads
- Full power from -10°C to +50°C @ 230 V_{AC} with -30°C cold start
- Compliance to SEMI F47 @ 200 V_{AC}
- NEC Class 2 / Limited Power Source (LPS) certified (DRL-24V75W1AZ□ & DRL-48V75W1AZ□)

Applications



Output		DRL-12V75W1AZ□		DRL-24V75W1AZ□		DRL-48V75W1AZ□	
Output Voltage		12 V		24 V		48 V	
Output Voltage Range		10.8-13.2 V		21.6-26 V		43.2-52.8 V	
Output Current		6.25 A		3.125 A		1.57 A	
Output Power		75 W		75 W		75.36 W	
PARD (20 MHz)		< 120 mVpp @ > -10°C to +70°C < 360 mVpp @ ≤ -10°C to -30°C				< 240 mVpp @ > -10°C to +70°C < 480 mVpp @ ≤ -10°C to -30°C	
Hold-up Time	115 V _{AC}	16 ms typ.					
	230 V _{AC}	60 ms typ.					
Input							
Phase Input		Single Phase					
Input Voltage Range		85-264 V _{AC} (DC input range 120-375 V _{DC}) ¹⁾					
Input Frequency		47-63Hz					
Input Current	115 V _{AC}	1.4 A typ.		1.4 A typ.		1.4 A typ.	
	230 V _{AC}	0.9 A typ.		0.9 A typ.		0.9 A typ.	
Efficiency ²⁾ at 100% Load	230 V _{AC}	87.5% typ.		89.0% typ.		90.0% typ.	
Max Inrush Current (Cold Start)	230 V _{AC}	50 A typ.					
Power Factor	115 V _{AC}	NA					
	230 V _{AC}						
Leakage Current	240 V _{AC}	< 1 mA					
Mechanical							
Case Cover / Chassis		Plastic					
Dimensions (H × W × D)	mm	123.6 × 27 × 102		123.6 × 27 × 102		123.6 × 27 × 102	
	inch	4.87 × 1.06 × 4.02		4.87 × 1.06 × 4.02		4.87 × 1.06 × 4.02	
Unit Weight	kg	0.22		0.22		0.22	
	lb	0.49		0.49		0.49	
Cooling System		Convection					
MTBF ³⁾		> 700,000 hrs					
Environment							
Operating Temperature ⁴⁾		-20°C to +70°C					
Storage Temperature		-40°C to +85°C					
Operating Humidity		5 to 95% RH (Non-Condensing)					
Operating Altitude		0 to 5,000 m (0 to 16,400 ft)					

Dimensions Reference



Notes

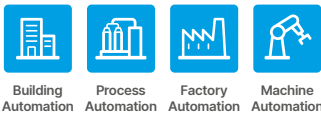
- 1) All models fulfill the test conditions for this range. DC input safety approval can be obtained upon request.
- 2) At 25°C ambient temperature by vertical mounting orientation.
- 3) MTBF as per Telcordia SR-332 (Confidence level: 90%, I/P: 100 V_{AC}, O/P: 100% load) for vertical mounting orientation.
- 4) Refer power de-rating in the product datasheet.
- 5) All parameters are specified at 25°C ambient temperature unless otherwise indicated.

LYTE II (12V, 24V, 48V)



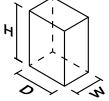
- Slim type design
- Built-in constant current circuit for reactive loads
- Operating from -30°C to +70°C with -40°C cold start
- Compliance with DOE VI energy standard (except 480 W)
- Reduced no-load power consumption
- Compliance to SEMI F47 @ 200 V_{AC}

Applications



					NEW				NEW
Output		DRL-12V120W1EN□	DRL-12V240W1EN□	DRL-24V120W1EN□	DRL-24V240W1EN□	DRL-24V480W1EN□	DRL-48V120W1EN□	DRL-48V240W1EN□	DRL-48V480W1EN□
Output Voltage		12 V	12 V	24V	24 V	24 V	48 V	48 V	48 V
Output Voltage Range		10.8-13.2 V	10.8-13.2 V	21.6-26.4 V	21.6-26.4 V	24-28 V	43.2-52.8 V	43.2-52.8 V	48-55 V
Output Current		10.0 A	20.0 A	5.0 A	10.0 A	0-20.0 A	2.5 A	5.0 A	0-10.0 A
Output Power		120 W	240 W	120 W	240 W	480 W	120 W	240 W	480 W
PARD (20 MHz)		< 120 mVpp @ 0°C to +70°C < 360 mVpp @ -30°C to 0°C		< 150 mVpp @ 0°C to +70°C < 450 mVpp @ -30°C to 0°C		< 150 mVpp @ 0°C to +70°C < 450 mVpp @ -30°C to 0°C	< 200 mVpp @ 0°C to +70°C < 600 mVpp @ -30°C to 0°C		
Hold-up Time	115 V _{AC}	10 ms typ.	20 ms typ.	10 ms typ.	20 ms typ.	25 ms typ.	10 ms typ.	20 ms typ.	25 ms typ.
	230 V _{AC}	16 ms typ.		16 ms typ.			16 ms typ.		
Input									
Phase Input		Single Phase					Single Phase		
Input Voltage Range		90-264 V _{AC}					90-264 V _{AC}		
Input Frequency		47-63 Hz					47-63 Hz		
Input Current	115 V _{AC}	2.1 A typ.	2.5 A typ.	2.1 A typ.	2.5 A typ.	4.7 A typ.	2.1 A typ.	2.5 A typ.	4.7 A typ.
	230 V _{AC}	1.3 A typ.	1.3 A typ.	1.3 A typ.	1.3 A typ.	2.4 A typ.	1.3 A typ.	1.3 A typ.	2.4 A typ.
Efficiency ¹⁾ at 100% Load		230 V _{AC}	86.0% typ.	86.5% typ.	88.5% typ.	86.5% typ.	93.0% typ.	89.5% typ.	90.5% typ.
Max Inrush Current (Cold Start)		230 V _{AC}	35 A typ.	40 A typ.	35 A typ.	40 A typ.	40 A typ.	35 A typ.	40 A typ.
Power Factor	115 V _{AC}	NA	> 0.95	NA	> 0.95	> 0.96	NA	> 0.95	> 0.96
	> 0.93					> 0.93			
Leakage Current	240 V _{AC}	< 0.5 mA	< 0.75 mA	< 0.5 mA	< 0.75 mA	< 1.5 mA	< 0.5 mA	< 0.75 mA	< 1.5 mA
Mechanical									
Case Cover / Chassis		SGCC / Aluminium					SGCC / Aluminium		
Dimensions (H × W × D)	mm	123.6 × 30 × 116.8	123.6 × 40 × 116.8	123.6 × 30 × 116.8	123.6 × 40 × 116.8	123.6 × 56 × 116.8	123.6 × 30 × 116.8	123.6 × 40 × 116.8	123.6 × 56 × 116.8
	inch	4.87 × 1.18 × 4.60	4.87 × 1.57 × 4.60	4.87 × 1.18 × 4.60	4.87 × 1.57 × 4.60	4.87 × 2.20 × 4.60	4.87 × 1.18 × 4.60	4.87 × 1.57 × 4.60	4.87 × 2.20 × 4.60
Unit Weight	kg	0.45	0.62	0.45	0.62	0.87	0.45	0.62	0.87
	lb	0.99	1.37	0.99	1.37	1.91	0.99	1.37	1.91
Cooling System		Convection					Convection		
MTBF ²⁾		> 700,000 hrs					> 700,000 hrs		
Environment									
Operating Temperature ³⁾		-30°C to +70°C					-30°C to +70°C		
Storage Temperature		-40°C to +85°C					-40°C to +85°C		
Operating Humidity		20 to 90% RH (Non-Condensing)					20 to 90% RH (Non-Condensing)		
Operating Altitude		0 to 5,000 m (0 to 16,400 ft)					0 to 5,000 m (0 to 16,400 ft)		

Dimensions Reference

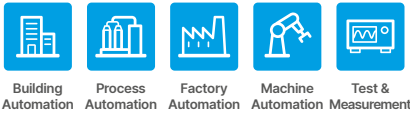


- Notes
- 1) At 25°C ambient temperature by vertical mounting orientation.
 - 2) MTBF as per Telcordia SR-332 (I/P: 115 V_{AC} & 230 V_{AC}, O/P: 100% load) for vertical mounting orientation.
 - 3) Refer power de-rating in the product datasheet.
 - 4) All parameters are specified at 25°C ambient temperature unless otherwise indicated.

CHROME (5V, 12V, 24V)

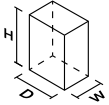
- Class II, Double Isolation
(No earth connection is required)
- Full power up to 55°C
- Power will not de-rate for the entire input voltage range
- Can be installed in compact cabinets
- NEC Class 2 and Limited Power Source (LPS) approvals
(except DRC-12V100W1AZ)
- Household appliance approvals IEC/EN 60335-1
(DRC-24V10W1HZ)

Applications



Output	DRC-5V10W1A□	DRC-12V10W1A□	DRC-12V30W1A□	DRC-12V60W1□□	DRC-12V100W1AZ	DRC-24V10W1A□	DRC-24V10W1HZ	DRC-24V30W1A□	DRC-24V60W1A□	DRC-24V100W1A□
Output Voltage	5 V	12 V	12 V	12 V	12 V	24 V	24 V	24 V	24 V	24 V
Output Voltage Range	5 V (No potentiometer)	12 V (No potentiometer)	11.5-14.5 V	11.5-14.0 V	12-14 V	24 V (No potentiometer)	24 V (No potentiometer)	23.52-24.48 V	24-28 V	22-24 V
Output Current	0-1.5 A	0-0.83 A	0-2.1 A	0-4.5 A	0-6.0 A	0-0.42 A	0-0.42 A	0-1.25 A	0-2.5 A	0-3.8 A
Output Power	7.5 W	9.96W	25 W	54 W	72 W	10 W	10 W	30W	60W	91.2 W
PARD (20 MHz)	< 100 mVpp							< 100 mVpp		
Hold-up Time	115 V _{AC}	> 10 ms	> 25 ms	> 16 ms	> 20 ms	> 10 ms		> 25 ms	> 16 ms	> 10 ms
	230 V _{AC}	> 60 ms			> 100 ms		> 60 ms			
Input										
Phase Input	Single Phase					Single Phase				
Input Voltage Range	90-264 V _{AC}			90-264 V _{AC} (DC input range 125-375 V _{DC}) ¹⁾	90-264 V _{AC}	90-264 V _{AC}			90-264 V _{AC} (DC input range 125-375 V _{DC}) ¹⁾	
Input Frequency	47-63Hz					47-63Hz				
Input Current	115 V _{AC}	< 0.3 A	< 0.3 A	< 0.8 A	< 1.5 A	< 1.5 A	< 0.3 A	< 0.8 A	< 1.5 A	< 2.2 A
	230 V _{AC}	< 0.2 A	< 0.2 A	< 0.6 A	< 1.0 A	< 0.9 A	< 0.2 A	< 0.6 A	< 1.0 A	
Efficiency ²⁾ at 100% Load	115 V _{AC}	> 77.0%	> 82.0%	> 85.0%	> 86.0%		> 80.0%	> 87.0%	> 88.0%	> 87.0%
	230 V _{AC}	> 76.0%	> 80.5%	> 86.0%		> 80.0%		> 87.0%	> 88.0%	> 89.0%
Max Inrush Current (Cold Start)	115 V _{AC}	< 15 A		< 25 A	< 30 A		< 15 A	< 25 A	< 30 A	
	230 V _{AC}	< 30 A		< 50 A	< 60 A	< 65 A	< 30 A	< 50 A	< 60 A	
Power Factor	Conform to EN 61000-3-2					Conform to EN 61000-3-2				
Leakage Current	240 V _{AC}	< 0.25 mA			-		< 0.25 mA			
	264 V _{AC}	-			< 0.25 mA		-			
Mechanical										
Case Cover / Chassis	Plastic					Plastic				
Dimensions (H × W × D)	mm	91 × 18 × 55.6	91 × 18 × 55.6	91 × 53 × 55.6	91 × 71 × 55.6	91 × 89.9 × 55.6	91 × 18 × 55.6	91 × 18 × 55.6	91 × 53 × 55.6	91 × 71 × 55.6
	inch	3.58 × 0.71 × 2.19	3.58 × 0.71 × 2.19	3.58 × 2.09 × 2.19	3.58 × 2.80 × 2.19	3.58 × 3.54 × 2.19	3.58 × 0.71 × 2.19	3.58 × 0.71 × 2.19	3.58 × 2.09 × 2.19	3.58 × 2.80 × 2.19
Unit Weight	kg	0.06	0.06	0.14	0.22	0.36	0.065	0.065	0.14	0.22
	lb	0.13	0.13	0.31	0.49	0.79	0.14	0.14	0.31	0.49
Cooling System	Convection					Convection				
MTBF ³⁾	> 500,000 hrs					> 500,000 hrs				
Environment										
Operating Temperature ⁴⁾	-25°C to +71°C					-25°C to +71°C				
Storage Temperature	-25°C to +85°C				-40°C to +85°C		-25°C to +85°C			
Operating Humidity	5 to 95% RH (Non-Condensing)					5 to 95% RH (Non-Condensing)				
Operating Altitude	0 to 2,000 m (0 to 6,560 ft)					0 to 2,000 m (0 to 6,560 ft)				

Dimensions Reference



Notes

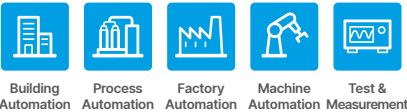
- 1) DRC-12V60W1CZ and DRC-24V100W1A□ are certified for DC input.
- 2) At 25°C ambient temperature by vertical mounting orientation.
- 3) MTBF as per Telcordia SR-332 (Confidence level: 90%, I/P: 100 V_{AC}, O/P: 100% load, Ta: 35°C) for vertical mounting orientation.
- 4) Refer power de-rating in the product datasheet.
- 5) All parameters are specified at 25°C ambient temperature unless otherwise indicated.

sync (5 V, 12 V, 24 V)



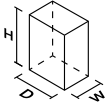
- Ultra-compact size and galvanic isolation up to 3.0 kV_{AC} between input to output and input to ground
- Full power from -10°C to +55°C operation
- Up to 90.0% efficiency
- Low earth leakage current < 0.5 mA @ 264 V_{AC}
- Built-in DC OK relay contact option available
- Extreme low temperature cold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

Applications



Output		DRS-5V30W1NZ	DRS-5V50W1A□	DRS-5V50W1N□	DRS-12V50W1N□	DRS-24V30W1AZ	DRS-24V30W1NZ	DRS-24V50W1N□	DRS-24V100W1A□	DRS-24V100W1N□
Output Voltage		5V	5V	5V	12V	24V	24V	24V	24V	24V
Output Voltage Range		5-5.5V	5-5.5V	5-5.5V	12-15V	21.6-26.4V	24-28V	24-28V	24-28V	22-24V
Output Current		0-3.0A	0-6.0A	0-5.0A	0-4.0A	0-1.25A	0-1.25A	0-2.1A	0-4.0A	0-3.8A
Output Power		15W	30W	25W	48W	30W	30W	50W	96W	91.2W
PARD (20MHz)		< 75mVpp @ > 0°C to 70°C < 150mVpp @ 0°C to -20°C		< 50mVpp @ > 0°C to 70°C < 100mVpp @ 0°C to -20°C		< 150mVpp @ > 0°C to 70°C < 500mVpp @ 0°C to -20°C		< 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	115V _{AC}	> 20ms				-		> 20ms		> 50ms
	230V _{AC}	> 100ms				> 20ms		> 100ms		
Input										
Phase Input		Single Phase					Single Phase			
Input Voltage Range		85-264V _{AC} (DC input range 120-375V _{DC}) ¹⁾					85-264V _{AC}		85-264V _{AC} (DC input range 120-375V _{DC}) ¹⁾	
Input Frequency		47-63Hz					47-63Hz			
Input Current	115V _{AC}	< 0.40A	< 0.60A	< 0.60A	< 0.90A	< 0.80A	< 0.55A	< 0.95A	< 1.20A	< 1.20A
	230V _{AC}	< 0.20A	< 0.40A	< 0.40A	< 0.55A	< 0.40A	< 0.35A	< 0.55A	< 0.60A	< 0.60A
Efficiency ²⁾ at 100% Load	115V _{AC}	> 79.0%	> 82.0%		> 88.0%	-	> 87.5%	> 89.0%	> 89.0%	
	230V _{AC}	> 89.0%			88.0% typ.		> 90.0%			
Max Inrush Current (Cold Start)	115V _{AC}	< 20A	< 30A		< 25A	< 30A	< 20A	< 30A	< 25A	
	230V _{AC}	< 40A	< 60A		< 50A	< 60A	< 40A	< 50A	< 40A	
Power Factor	115V _{AC}	Conform to EN 61000-3-2					Conform to EN 61000-3-2			> 0.97
	230V _{AC}									> 0.90
Leakage Current	240V _{AC}	-				< 0.5mA	-			
	264V _{AC}					< 0.5mA				
Mechanical										
Case Cover / Chassis		Plastic					Plastic			
Dimensions (H × W × D)	mm	75 × 21 × 89.5	75 × 30 × 89.5	75 × 30 × 89.5	75 × 30 × 89.5	75 × 21 × 89.5	75 × 21 × 89.5	75 × 30 × 89.5	75 × 45 × 100	75 × 45 × 100
	inch	2.95 × 0.83 × 3.52	2.95 × 1.18 × 3.52	2.95 × 1.18 × 3.52	2.95 × 1.18 × 3.52	2.95 × 0.83 × 3.52	2.95 × 0.83 × 3.52	2.95 × 1.18 × 3.52	2.95 × 1.77 × 3.94	2.95 × 1.77 × 3.94
Unit Weight	kg	0.11	0.16	0.16	0.18	0.10	0.11	0.18	0.325	0.325
	lb	0.24	0.35	0.35	0.40	0.22	0.24	0.40	0.72	0.72
Cooling System		Convection					Convection			
MTBF ³⁾		> 700,000hrs					> 700,000hrs			
Environment										
Operating Temperature ⁴⁾		-20°C to +70°C					-20°C to +70°C			
Storage Temperature		-40°C to +85°C					-40°C to +85°C			
Operating Humidity		5 to 95% RH (Non-Condensing)					5 to 95% RH (Non-Condensing)			
Operating Altitude		0 to 2,000m (0 to 6,560ft)					0 to 2,000m (0 to 6,560ft)			

Dimensions Reference



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) DRS-24V30W1AZ, MTBF as per Telcordia SR-332 (Confidence level: 90%, I/P: 100 V_{AC}, O/P: 100% load) for vertical mounting orientation. Other models, MTBF as per Telcordia SR-332 (Confidence level: 90%, I/P: 115 V_{AC} & 230 V_{AC}, O/P: 100% load) for vertical mounting orientation.
- 4) Refer power de-rating in the product datasheet.
- 5) All parameters are specified at 25°C ambient temperature unless otherwise indicated.

Panel Mount Power Supplies



PMT2
Low profile design with 30 mm height
Power Range: 36-350 W



PMC
Full corrosion resistant aluminium casing
Power Range: 15-600 W



PMR
Built-in active PFC with 1U low profile
Power Range: 252-321.6 W



PMF
Built-in active PFC
Power Range: 231-320 W



PMU
Power supply with DC-UPS function
Power Range: 151 W



MEB
High power output with built-in fan cooling
Power Range: 500-1,200 W

Applications

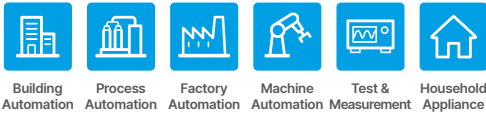
- Building Automation
- Process Automation
- Factory Automation
- Machine Automation
- Test & Measurement
- LED Lighting
- Renewable Energy
- Medical Equipment
- Household Appliance



PMT2 (12 V)

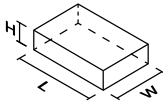
- Household appliance approvals to IEC/EN 60335-1, IEC/EN 61558-1 and IEC/EN 61558-2-16 (except 350 W)
- No load power consumption
- Low profile design: 30 mm height
- Over Voltage Category III, Pollution Degree 3 (except 350 W)
- Cold start at -40°C

Applications



Output		PMT-12V35W2BA□	PMT-12V50W2BA□	PMT-12V75W2BA□	PMT-12V100W2BA□	PMT-12V150W2BA□	PMT-12V150W2CA□	PMT-12V200W2B□□	PMT-12V350W2B□□	
Output Voltage		12 V	12 V	12 V	12 V	12 V	12 V	12 V	12 V	
Output Voltage Range		10.8-13.2 V	10.8-13.2 V	10.8-13.2 V	10.8-13.2 V	10.8-13.2 V	10.8-13.2 V	10.8-13.2 V	10.8-13.2 V	
Output Current		3.0 A	4.2 A	6.0 A	8.5 A	12.5 A	12.5 A	17.0 A	29.0 A (43.5 A for 1s) ²⁾	
Output Power		36 W	50.4 W	72 W	102 W	150 W	150 W	204 W	348 W (522 W for 1s) ²⁾	
PARD (20 MHz)		< 120 mVpp @ 0°C to 70°C, 360 mVpp typ. @ -30°C to 0°C						< 150 mVpp @ 0°C to 70°C, 450 mVpp typ. @ -30°C to 0°C		
Hold-up Time	115 V _{AC}	16 ms typ.	12 ms typ.	11 ms typ.	9 ms typ.	30 ms typ.	12 ms typ.	30 ms typ.	20 ms typ.	
	230 V _{AC}	70 ms typ.	60 ms typ.	52 ms typ.	42 ms typ.		55 ms typ.			
Input										
Phase Input		Single Phase						Single Phase		
Input Voltage Range		90-264 V _{AC}				90-132 V _{AC} , 180-264 V _{AC} (Selectable by Switch)		90-264 V _{AC}	90-132 V _{AC} , 180-264 V _{AC} (Selectable by Switch)	
Input Frequency		47-63 Hz				47-63 Hz				
Input Current	115 V _{AC}	0.7 A typ.	0.95 A typ.	1.4 A typ.	1.9 A typ.	3.0 A typ.	3.0 A typ.	4.0 A typ.	6.0 A typ.	
	230 V _{AC}	0.42 A typ.	0.6 A typ.	0.85 A typ.	1.2 A typ.	1.7 A typ.	1.7 A typ.	2.2 A typ.	3.4 A typ.	
Efficiency ¹⁾ at 100% Load	230 V _{AC}	86.0% typ.	85.0% typ.	87.0% typ.	87.5% typ.	87.5% typ.	88.0% typ.	88.5% typ.	84.5% typ.	
Max Inrush Current (Cold Start)	230 V _{AC}	45 A typ.		55 A typ.				60 A typ.		
Power Factor		NA						NA		
Leakage Current (50 Hz)	240 V _{AC}	< 0.5 mA						< 0.5 mA		
< 0.75 mA										
Mechanical										
Case Cover / Chassis		SGCC / Aluminium				SGCC / Aluminium				SGCC / SGCC
Dimensions (L × W × H)	mm	99 × 82 × 29	99 × 82 × 29	99 × 97 × 30	129 × 97 × 30	159 × 97 × 30	159 × 97 × 30	159 × 97 × 30	215 × 115 × 30	
	inch	3.90 × 3.23 × 1.14	3.90 × 3.23 × 1.14	3.90 × 3.82 × 1.18	5.08 × 3.82 × 1.18	6.26 × 3.82 × 1.18	6.26 × 3.82 × 1.18	6.26 × 3.82 × 1.18	8.46 × 4.53 × 1.18	
Unit Weight	kg	0.17	0.18	0.22	0.29	0.35	0.39	0.42	0.83	
	lb	0.36	0.39	0.48	0.63	0.78	0.86	0.93	1.84	
Cooling System		Convection				Convection				Forced Air (Built-in Fan)
MTBF ³⁾		> 700,000 hrs				> 700,000 hrs				
Environment										
Operating Temperature ⁴⁾		-30°C to +70°C				-30°C to +70°C				
Storage Temperature		-40°C to +85°C				-40°C to +85°C				
Operating Humidity		20 to 90% RH (Non-Condensing)				20 to 90% RH (Non-Condensing)				
Operating Altitude		0 to 5,000 m (0 to 16,400 ft)				0 to 5,000 m (0 to 16,400 ft)				

Dimensions Reference



Notes

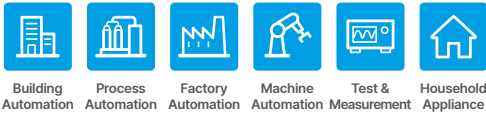
- At 25°C ambient temperature by horizontal mounting orientation.
- PMT-12V350W2B□□ models only.
- MTBF as per Telcordia SR-332 (Confidence level: 90%, I/P: 230 V_{AC}, O/P: 100% load).
- Refer power de-rating in the product datasheet.
- All parameters are specified at 25°C ambient temperature unless otherwise indicated.

PMT2 (15 V)



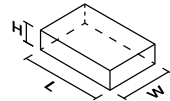
- Household appliance approvals to IEC/EN 60335-1, IEC/EN 61558-1 and IEC/EN 61558-2-16
- No load power consumption
- Low profile design: 30 mm height
- Over Voltage Category III, Pollution Degree 3
- Cold start at -40°C

Applications



Output		PMT-15V35W2BA	PMT-15V50W2BA	PMT-15V75W2BA	PMT-15V100W2BA	PMT-15V150W2BA	PMT-15V150W2CA
Output Voltage		15 V	15 V	15 V	15 V	15 V	15 V
Output Voltage Range		13.5-16.5 V	13.5-16.5 V	13.5-16.5 V	13.5-16.5 V	13.5-16.5 V	13.5-16.5 V
Output Current		2.4 A	3.4 A	5.0 A	7.0 A	10.0 A	10.0 A
Output Power		36 W	51 W	75 W	105 W	150 W	150 W
PARD (20MHz)		< 120 mVpp @ 0°C to 70°C, 360 mVpp typ. @ -30°C to 0°C			< 120 mVpp @ 0°C to 70°C, 360 mVpp typ. @ -30°C to 0°C	< 150 mVpp @ 0°C to 70°C, 450 mVpp typ. @ -30°C to 0°C	
Hold-up Time	115 V _{AC}	16 ms typ.	12 ms typ.	11 ms typ.	9 ms typ.	30 ms typ.	12 ms typ.
	230 V _{AC}	70 ms typ.	60 ms typ.	52 ms typ.	42 ms typ.		55 ms typ.
Input							
Phase Input		Single Phase					Single Phase
Input Voltage Range		90-264 V _{AC}			90-264 V _{AC}	90-132 V _{AC} , 180-264 V _{AC} (Selectable by Switch)	90-264 V _{AC}
Input Frequency		47-63 Hz				47-63 Hz	
Input Current	115 V _{AC}	0.7 A typ.	0.95 A typ.	1.4 A typ.	1.9 A typ.	3.0 A typ.	3.0 A typ.
	230 V _{AC}	0.42 A typ.	0.6 A typ.	0.85 A typ.	1.2 A typ.	1.7 A typ.	1.7 A typ.
Efficiency ¹⁾ at 100% Load	230 V _{AC}	87.0% typ.		88.0% typ.	88.0% typ.		89% typ.
Max Inrush Current (Cold Start)	230 V _{AC}	45 A typ.		55 A typ.	55 A typ.	60 A typ.	
Power Factor		NA				NA	
Leakage Current (50 Hz)	240 V _{AC}	< 0.5 mA					< 0.5 mA
Mechanical							
Case Cover / Chassis		SGCC / Aluminium				SGCC / Aluminium	
Dimensions (L × W × H)	mm	99 × 82 × 29	99 × 82 × 29	99 × 97 × 30	129 × 97 × 30	159 × 97 × 30	159 × 97 × 30
	inch	3.90 × 3.23 × 1.14	3.90 × 3.23 × 1.14	3.90 × 3.82 × 1.18	5.08 × 3.82 × 1.18	6.26 × 3.82 × 1.18	6.26 × 3.82 × 1.18
Unit Weight	kg	0.17	0.18	0.22	0.29	0.35	0.39
	lb	0.36	0.39	0.48	0.63	0.78	0.86
Cooling System		Convection				Convection	
MTBF ²⁾		> 700,000 hrs				> 700,000 hrs	
Environment							
Operating Temperature ³⁾		-30°C to +70°C				-30°C to +70°C	
Storage Temperature		-40°C to +85°C				-40°C to +85°C	
Operating Humidity		20 to 90% RH (Non-Condensing)				20 to 90% RH (Non-Condensing)	
Operating Altitude		0 to 5,000 m (0 to 16,400 ft)				0 to 5,000 m (0 to 16,400 ft)	

Dimensions Reference

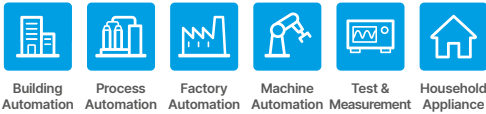


- Notes
- At 25°C ambient temperature by horizontal mounting orientation.
 - MTBF as per Telcordia SR-332 (Confidence level: 90%, I/P: 230 V_{AC}, O/P: 100% load).
 - Refer power de-rating in the product datasheet.
 - All parameters are specified at 25°C ambient temperature unless otherwise indicated.

PMT2 (24 V)

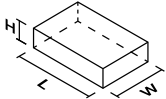
- Household appliance approvals to IEC/EN 60335-1, IEC/EN 61558-1 and IEC/EN 61558-2-16 (except 350 W)
- No load power consumption
- Low profile design: 30 mm height
- Over Voltage Category III, Pollution Degree 3 (except 350 W)
- Cold start at -40°C

Applications



Output		PMT-24V35W2BA	PMT-24V50W2BA	PMT-24V75W2BA□	PMT-24V100W2BA□	PMT-24V150W2BA□	PMT-24V150W2CA□	PMT-24V200W2B□□	PMT-24V350W2B□□
Output Voltage		24 V	24 V	24 V	24 V	24 V	24 V	24 V	24 V
Output Voltage Range		21.6-26.4 V	21.6-26.4 V	21.6-26.4 V	21.6-26.4 V	21.6-26.4 V	21.6-26.4 V	21.6-26.4 V	21.6-26.4 V
Output Current		1.5 A	2.2 A	3.2 A	4.5 A	6.25 A	6.5 A	8.8 A	14.6 A (21.9 A for 1s) ²⁾
Output Power		36 W	52.8 W	76.8 W	108 W	150 W	156 W	211.2 W	350.4 W (525.6 W for 1s) ²⁾
PARD (20 MHz)		< 150 mVpp @ 0°C to 70°C, 450 mVpp typ. @ -30°C to 0°C					< 200 mVpp @ 0°C to 70°C, 600 mVpp typ. @ -30°C to 0°C		< 150 mVpp @ 0°C to 70°C, 450 mVpp typ. @ -30°C to 0°C
Hold-up Time	115 V _{AC}	16 ms typ.	12 ms typ.	11 ms typ.	9 ms typ.	30 ms typ.	12 ms typ.	30 ms typ.	20 ms typ.
	230 V _{AC}	70 ms typ.	60 ms typ.	52 ms typ.	42 ms typ.		55 ms typ.		
Input									
Phase Input		Single Phase					Single Phase		
Input Voltage Range		90-264 V _{AC}				90-132 V _{AC} , 180-264 V _{AC} (Selectable by Switch)		90-264 V _{AC}	90-132 V _{AC} , 180-264 V _{AC} (Selectable by Switch)
Input Frequency		47-63 Hz					47-63 Hz		
Input Current	115 V _{AC}	0.7 A typ.	0.95 A typ.	1.4 A typ.	1.9 A typ.	3.0 A typ.	3.0 A typ.	4.0 A typ.	6.0 A typ.
	230 V _{AC}	0.42 A typ.	0.6 A typ.	0.85 A typ.	1.2 A typ.	1.7 A typ.	1.7 A typ.	2.2 A typ.	3.4 A typ.
Efficiency ¹⁾ at 100% Load	230 V _{AC}	88.5% typ.	88.0% typ.	89.5% typ.	90.0% typ.	89.0% typ.	90% typ.		87.0% typ.
Max Inrush Current (Cold Start)	230 V _{AC}	45 A typ.		55 A typ.				60 A typ.	
Power Factor		NA					NA		
Leakage Current (50 Hz)	240 V _{AC}	< 0.5 mA					< 0.5 mA		< 0.75 mA
Mechanical									
Case Cover / Chassis		SGCC / Aluminium					SGCC / Aluminium		SGCC / SGCC
Dimensions (L × W × H)	mm	99 × 82 × 29	99 × 82 × 29	99 × 97 × 30	129 × 97 × 30	159 × 97 × 30	159 × 97 × 30	159 × 97 × 30	215 × 115 × 30
	inch	3.90 × 3.23 × 1.14	3.90 × 3.23 × 1.14	3.90 × 3.82 × 1.18	5.08 × 3.82 × 1.18	6.26 × 3.82 × 1.18	6.26 × 3.82 × 1.18	6.26 × 3.82 × 1.18	8.46 × 4.53 × 1.18
Unit Weight	kg	0.17	0.18	0.22	0.29	0.35	0.39	0.42	0.83
	lb	0.36	0.39	0.48	0.63	0.78	0.86	0.93	1.84
Cooling System		Convection					Convection		Forced Air (Built-in Fan)
MTBF ³⁾		> 700,000 hrs					> 700,000 hrs		
Environment									
Operating Temperature ⁴⁾		-30°C to +70°C					-30°C to +70°C		
Storage Temperature		-40°C to +85°C					-40°C to +85°C		
Operating Humidity		20 to 90% RH (Non-Condensing)					20 to 90% RH (Non-Condensing)		
Operating Altitude		0 to 5,000 m (0 to 16,400 ft)					0 to 5,000 m (0 to 16,400 ft)		

Dimensions Reference



Notes

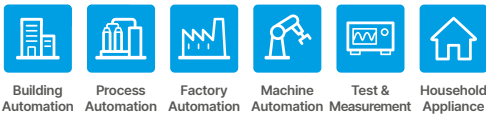
- At 25°C ambient temperature by horizontal mounting orientation.
- PMT-24V350W2BR□ models only.
- MTBF as per Telcordia SR-332 (Confidence level: 90%, I/P: 230 V_{AC}, O/P: 100% load).
- Refer power de-rating in the product datasheet.
- All parameters are specified at 25°C ambient temperature unless otherwise indicated.

PMT2 (30V)



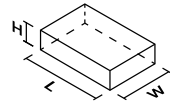
- Household appliance approvals to IEC/EN 60335-1, IEC/EN 61558-1 and IEC/EN 61558-2-16
- No load power consumption
- Low profile design: 30 mm height
- Over Voltage Category III, Pollution Degree 3
- Cold start at -40°C

Applications



Output		PMT-30V35W2BA	PMT-30V50W2BA	PMT-30V75W2BA	PMT-30V100W2BA	PMT-30V150W2BA	PMT-30V150W2CA
Output Voltage		30 V	30V	30 V	30V	30 V	30 V
Output Voltage Range		27-33 V	27-33 V	27-33 V	27-33 V	27-33 V	27.0-33.0 V
Output Current		1.2 A	1.7 A	2.5 A	3.6 A	5.0 A	5.0 A
Output Power		36 W	51W	75 W	108 W	150 W	150 W
PARD (20 MHz)		< 150 mVpp @ 0°C to 70°C, 450 mVpp typ. @ -30°C to 0°C			< 150 mVpp @ 0°C to 70°C, 450 mVpp typ. @ -30°C to 0°C	< 200 mVpp @ 0°C to 70°C, 600 mVpp typ. @ -30°C to 0°C	
Hold-up Time	115 V _{AC}	16 ms typ.	12 ms typ.	11 ms typ.	9 ms typ.	30 ms typ.	12 ms typ.
	230 V _{AC}	70 ms typ.	60 ms typ.	52 ms typ.	42 ms typ.		55 ms typ.
Input							
Phase Input		Single Phase				Single Phase	
Input Voltage Range		90-264 V _{AC}				90-132 V _{AC} , 180-264 V _{AC} (Selectable by Switch)	90-264 V _{AC}
Input Frequency		47-63 Hz				47-63 Hz	
Input Current	115 V _{AC}	0.70 A typ.	0.95 A typ.	1.4 A typ.	1.9 A typ.	3.0 A typ.	3.0 A typ.
	230 V _{AC}	0.42 A typ.	0.60 A typ.	0.85 A typ.	1.2 A typ.	1.7 A typ.	1.7 A typ.
Efficiency ¹⁾ at 100% Load	230 V _{AC}	87.5% typ.	88.0% typ.	89.5% typ.	90.0% typ.	89.0% typ.	90% typ.
Max Inrush Current (Cold Start)	230 V _{AC}	45 A typ.		55 A typ.	55 A typ.	60 A typ.	
Power Factor		NA				NA	
Leakage Current (50 Hz)	240 V _{AC}	< 0.5 mA				< 0.5 mA	
Mechanical							
Case Cover / Chassis		SGCC / Aluminium				SGCC / Aluminium	
Dimensions (L × W × H)	mm	99 × 82 × 29	99 × 82 × 29	99 × 97 × 30	129 × 97 × 30	159 × 97 × 30	159 × 97 × 30
	inch	3.90 × 3.23 × 1.14	3.90 × 3.23 × 1.14	3.90 × 3.82 × 1.18	5.08 × 3.82 × 1.18	6.26 × 3.82 × 1.18	6.26 × 3.82 × 1.18
Unit Weight	kg	0.17	0.18	0.22	0.29	0.35	0.39
	lb	0.36	0.39	0.48	0.63	0.78	0.86
Cooling System		Convection				Convection	
MTBF ²⁾		> 700,000 hrs				> 700,000 hrs	
Environment							
Operating Temperature ³⁾		-30°C to +70°C				-30°C to +70°C	
Storage Temperature		-40°C to +85°C				-40°C to +85°C	
Operating Humidity		20 to 90% RH (Non-Condensing)				20 to 90% RH (Non-Condensing)	
Operating Altitude		0 to 5,000 m (0 to 16,400 ft)				0 to 5,000 m (0 to 16,400 ft)	

Dimensions Reference

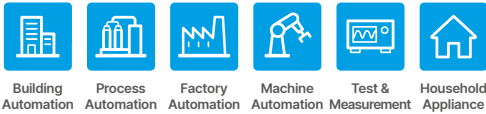


- Notes
- At 25°C ambient temperature by horizontal mounting orientation.
 - MTBF as per Telcordia SR-332 (Confidence level: 90%, I/P: 230 V_{AC}, O/P: 100% load).
 - Refer power de-rating in the product datasheet.
 - All parameters are specified at 25°C ambient temperature unless otherwise indicated.

PMT2 (36 V)

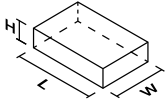
- Household appliance approvals to IEC/EN 60335-1, IEC/EN 61558-1 and IEC/EN 61558-2-16 (except 350 W)
- No load power consumption
- Low profile design: 30 mm height
- Over Voltage Category III, Pollution Degree 3 (except 350 W)
- Cold start at -40°C

Applications



Output		PMT-36V35W2BA	PMT-36V50W2BA	PMT-36V75W2BA	PMT-36V100W2BA	PMT-36V150W2BA	PMT-36V150W2CA	PMT-36V200W2B□	PMT-36V350W2B□
Output Voltage		36 V	36 V	36 V	36 V	36 V	36 V	36 V	36 V
Output Voltage Range		32.4-39.6 V	32.4-39.6 V	32.4-39.6 V	32.4-39.6 V	32.4-39.6 V	32.4-39.6 V	32.4-39.6 V	32.4-39.6 V
Output Current		1 A	1.45 A	2.1 A	3 A	4.3 A	4.3 A	5.9 A	9.7 A (14.55 A for 1s) ²⁾
Output Power		36 W	52.2 W	75.6 W	108 W	154.8 W	154.8 W	212.4 W	349.2 W (523.8 W for 1s) ²⁾
PARD (20 MHz)		< 200 mVpp @ 0°C to 70°C, 600 mVpp typ. @ -30°C to 0°C						< 200 mVpp @ 0°C to 70°C, 600 mVpp typ. @ -30°C to 0°C	
Hold-up Time	115 V _{AC}	16 ms typ.	12 ms typ.	11 ms typ.	9 ms typ.	30 ms typ.	12 ms typ.	30 ms typ.	20 ms typ.
	230 V _{AC}	70 ms typ.	60 ms typ.	52 ms typ.	42 ms typ.		55 ms typ.		
Input									
Phase Input		Single Phase						Single Phase	
Input Voltage Range		90-264 V _{AC}				90-132 V _{AC} , 180-264 V _{AC} (Selectable by Switch)	90-264 V _{AC}	90-132 V _{AC} , 180-264 V _{AC} (Selectable by Switch)	
Input Frequency		47-63 Hz						47-63 Hz	
Input Current	115 V _{AC}	0.7 A typ.	0.95 A typ.	1.4 A typ.	1.9 A typ.	3.0 A typ.	3.0 A typ.	4.0 A typ.	6.0 A typ.
	230 V _{AC}	0.42 A typ.	0.6 A typ.	0.85 A typ.	1.2 A typ.	1.7 A typ.	1.7 A typ.	2.2 A typ.	3.4 A typ.
Efficiency ¹⁾ at 100% Load	230 V _{AC}	89.0% typ.		90.5% typ.	91.0% typ.	89.5% typ.	90% typ.		88.0% typ.
Max Inrush Current (Cold Start)	230 V _{AC}	45 A typ.		55 A typ.				60 A typ.	
Power Factor		NA						NA	
Leakage Current (50 Hz)	240 V _{AC}	< 0.5 mA						< 0.5 mA	
Mechanical									
Case Cover / Chassis		SGCC / Aluminium						SGCC / Aluminium	
Dimensions (L × W × H)	mm	99 × 82 × 29	99 × 82 × 29	99 × 97 × 30	129 × 97 × 30	159 × 97 × 30	159 × 97 × 30	159 × 97 × 30	215 × 115 × 30
	inch	3.90 × 3.23 × 1.14	3.90 × 3.23 × 1.14	3.90 × 3.82 × 1.18	5.08 × 3.82 × 1.18	6.26 × 3.82 × 1.18	6.26 × 3.82 × 1.18	6.26 × 3.82 × 1.18	8.46 × 4.53 × 1.18
Unit Weight	kg	0.17	0.18	0.22	0.29	0.35	0.39	0.42	0.83
	lb	0.36	0.39	0.48	0.63	0.78	0.86	0.93	1.84
Cooling System		Convection						Convection	
MTBF ³⁾		> 700,000 hrs						> 700,000 hrs	
Environment									
Operating Temperature ⁴⁾		-30°C to +70°C						-30°C to +70°C	
Storage Temperature		-40°C to +85°C						-40°C to +85°C	
Operating Humidity		20 to 90% RH (Non-Condensing)						20 to 90% RH (Non-Condensing)	
Operating Altitude		0 to 5,000 m (0 to 16,400 ft)						0 to 5,000 m (0 to 16,400 ft)	

Dimensions Reference



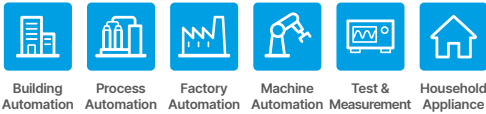
Notes

- At 25°C ambient temperature by horizontal mounting orientation.
- PMT-36V350W2BR model only.
- MTBF as per Telcordia SR-332 (Confidence level: 90%, I/P: 230 V_{AC}, O/P: 100% load).
- Refer power de-rating in the product datasheet.
- All parameters are specified at 25°C ambient temperature unless otherwise indicated.

PMT2 (48 V)

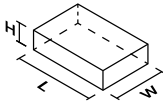
- Household appliance approvals to IEC/EN 60335-1, IEC/EN 61558-1 and IEC/EN 61558-2-16 (except 350 W)
- No load power consumption
- Low profile design: 30 mm height
- Over Voltage Category III, Pollution Degree 3 (except 350 W)
- Cold start at -40°C

Applications



Output		PMT-48V35W2BA	PMT-48V50W2BA	PMT-48V75W2BA	PMT-48V100W2BA	PMT-48V150W2BA	PMT-48V150W2CA	PMT-48V200W2B□	PMT-48V350W2B□
Output Voltage		48 V	48 V	48 V	48 V	48 V	48 V	48 V	48 V
Output Voltage Range		43.2-52.8 V	43.2-52.8 V	43.2-52.8 V	43.2-52.8 V	43.2-52.8 V	43.2-52.8 V	43.2-52.8 V	43.2-52.8 V
Output Current		0.8 A	1.1 A	1.6 A	2.3 A	3.3 A	3.3 A	4.4 A	7.3 A (10.95 A for 1s) ²⁾
Output Power		38.4 W	52.8 W	76.8 W	110.4 W	158.4 W	158.4 W	211.2 W	350.4 W (525.6 W for 1s) ²⁾
PARD (20 MHz)		< 200 mVpp @ 0°C to 70°C, 600 mVpp typ. @ -30°C to 0°C						< 200 mVpp @ 0°C to 70°C, 600 mVpp typ. @ -30°C to 0°C	
Hold-up Time	115 V _{AC}	16 ms typ.	12 ms typ.	11 ms typ.	9 ms typ.	30 ms typ.	12 ms typ.	30 ms typ.	20 ms typ.
	230 V _{AC}	70 ms typ.	60 ms typ.	52 ms typ.	42 ms typ.		55 ms typ.		
Input									
Phase Input		Single Phase						Single Phase	
Input Voltage Range		90-264 V _{AC}				90-132 V _{AC} , 180-264 V _{AC} (Selectable by Switch)		90-264 V _{AC}	90-132 V _{AC} , 180-264 V _{AC} (Selectable by Switch)
Input Frequency		47-63 Hz						47-63 Hz	
Input Current	115 V _{AC}	0.7 A typ.	0.95 A typ.	1.4 A typ.	1.9 A typ.	3.0 A typ.	3.0 A typ.	4.0 A typ.	6.0 A typ.
	230 V _{AC}	0.42 A typ.	0.6 A typ.	0.85 A typ.	1.2 A typ.	1.7 A typ.	1.7 A typ.	2.2 A typ.	3.4 A typ.
Efficiency ¹⁾ at 100% Load	230 V _{AC}	89.5% typ.	88.5% typ.	90.0% typ.	91.5% typ.	91.0% typ.			88.0% typ.
Max Inrush Current (Cold Start)	230 V _{AC}	45 A typ.		55 A typ.				60 A typ.	
Power Factor		NA						NA	
Leakage Current (50 Hz)	240 V _{AC}	< 0.5 mA						< 0.5 mA	
< 0.75 mA									
Mechanical									
Case Cover / Chassis		SGCC / Aluminium						SGCC / Aluminium	
Dimensions (L × W × H)	mm	99 × 82 × 29	99 × 82 × 29	99 × 97 × 30	129 × 97 × 30	159 × 97 × 30	159 × 97 × 30	159 × 97 × 30	215 × 115 × 30
	inch	3.90 × 3.23 × 1.14	3.90 × 3.23 × 1.14	3.90 × 3.82 × 1.18	5.08 × 3.82 × 1.18	6.26 × 3.82 × 1.18	6.26 × 3.82 × 1.18	6.26 × 3.82 × 1.18	8.46 × 4.53 × 1.18
Unit Weight	kg	0.17	0.18	0.22	0.29	0.35	0.39	0.42	0.83
	lb	0.36	0.39	0.48	0.63	0.78	0.86	0.93	1.84
Cooling System		Convection						Convection	
MTBF ³⁾		> 700,000 hrs						> 700,000 hrs	
Environment									
Operating Temperature ⁴⁾		-30°C to +70°C						-30°C to +70°C	
Storage Temperature		-40°C to +85°C						-40°C to +85°C	
Operating Humidity		20 to 90% RH (Non-Condensing)						20 to 90% RH (Non-Condensing)	
Operating Altitude		0 to 5,000 m (0 to 16,400 ft)						0 to 5,000 m (0 to 16,400 ft)	

Dimensions Reference



Notes

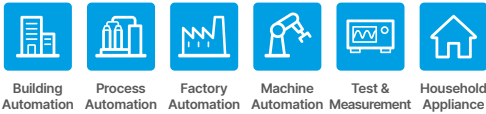
- At 25°C ambient temperature by horizontal mounting orientation.
- PMT-48V350W2BR model only.
- MTBF as per Telcordia SR-332 (Confidence level: 90%, I/P: 230 V_{AC}, O/P: 100% load).
- Refer power de-rating in the product datasheet.
- All parameters are specified at 25°C ambient temperature unless otherwise indicated.

PMT2 (Dual)

- Isolated & non-isolated Output & Ground for CH1 & CH2
- Household appliance approvals to IEC/EN 60335-1, IEC/EN 61558-1 and IEC/EN 61558-2-16
- No load power consumption
- Low profile design: 30 mm height
- Over Voltage Category III, Pollution Degree 3
- Cold start at -40°C

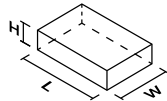


Applications



Output		PMT-D1V75W2□A	PMT-D2V75W2□A
Output Voltage		V1: 5 V, V2: 12 V	V1: 5 V, V2: 24 V
Output Voltage Range		V1: Fixed, V2: 10.8-13.2 V	V1: Fixed, V2: 21.6-26.4 V
Output Current		V1: 0-5.0 A, V2: 0.3-4.0 A	V1: 0-5.0 A, V2: 0.2-2.1 A
Output Power		73 W	75.4 W
PARD (20 MHz)		V1: < 100 mVpp, V2: < 120 mVpp @ 0°C to 70°C V1: 300 mVpp, V2: 360 mVpp typ. @ -30°C to 0°C	V1: < 100 mVpp, V2: < 150 mVpp @ 0°C to 70°C V1: 300 mVpp, V2: 450 mVpp typ @ -30°C to 0°C
Hold-up Time	115 V _{AC}	10 ms typ.	
	230 V _{AC}	50 ms typ.	
Input			
Phase Input		Single Phase	
Input Voltage Range		90-264 V _{AC}	
Input Frequency		47-63 Hz	
Input Current	115 V _{AC}	1.4 A typ.	1.4 A typ.
	230 V _{AC}	0.85 A typ.	0.85 A typ.
Efficiency ¹⁾ at 100% Load	230 V _{AC}	83.0% typ.	85.0% typ.
Max Inrush Current (Cold Start)	230 V _{AC}	55 A typ.	
Power Factor		NA	
Leakage Current (50 Hz)	240 V _{AC}	< 0.5 mA	
Mechanical			
Case Cover / Chassis		SGCC / Aluminium	
Dimensions (L × W × H)	mm	129 × 97 × 30	129 × 97 × 30
	inch	5.08 × 3.82 × 1.18	5.08 × 3.82 × 1.18
Unit Weight	kg	0.28	0.28
	lb	0.61	0.61
Cooling System		Convection	
MTBF ²⁾		> 700,000 hrs	
Environment			
Operating Temperature ³⁾		-30°C to +70°C	
Storage Temperature		-40°C to +85°C	
Operating Humidity		20 to 90% RH (Non-Condensing)	
Operating Altitude		0 to 5,000 m (0 to 16,400 ft)	

Dimensions Reference



Notes

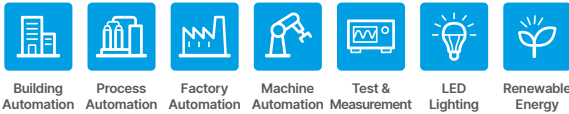
- 1) At 25°C ambient temperature by horizontal mounting orientation.
- 2) MTBF as per Telcordia SR-332 (Confidence level: 90%, I/P: 230 V_{AC}, O/P: 100% load).
- 3) Refer power de-rating in the product datasheet.
- 4) All parameters are specified at 25°C ambient temperature unless otherwise indicated.

PMC (5 V, 12 V)

- Power will not de-rate for the entire input voltage range (except 600 W)
- Full corrosion resistant aluminium casing (PMC-12V150W1B□)
- High MTBF > 700,000 hrs per Telcordia SR-332
- Overvoltage / Overcurrent / Over Temperature / Short Circuit Protections

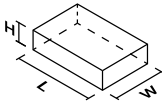


Applications



Output		PMC-05V015W1AA	PMC-12V150W1B□	PMC-12V600W1BA
Output Voltage		5 V	12 V	12 V
Output Voltage Range		4.75-5.50 V	11-14 V	10.8-13.2 V
Output Current		0-3.0 A	0-12.5 A	0-50 A
Output Power		15 W	150 W	600 W
PARD (20 MHz)		< 70 mVpp	< 100 mVpp	< 240 mVpp
Hold-up Time	115 V _{AC}	> 15 ms	> 30 ms	> 20 ms
	230 V _{AC}	> 80 ms		
Input				
Phase Input		Single Phase		
Input Voltage Range		85-264 V _{AC} (DC input range 125-375 V _{DC}) ¹⁾		85-264 V _{AC} (DC input range 120-375 V _{DC}) ¹⁾
Input Frequency		47-63 Hz		
Input Current	115 V _{AC}	< 0.40 A	< 1.70 A	< 6.5 A
	230 V _{AC}	< 0.22 A	< 1.00 A	< 3.2 A
Efficiency ²⁾ at 100% Load	115 V _{AC}	> 80.0%	> 87.0%	> 85.5%
	230 V _{AC}		> 88.0%	> 89.0%
Max Inrush Current (Cold Start)	115 V _{AC}	< 30 A	< 60 A	< 10 A
	230 V _{AC}	< 65 A	< 120 A	< 20 A
Power Factor	115 V _{AC}	Conform to EN 61000-3-2	> 0.99	> 0.98
	230 V _{AC}		> 0.90	> 0.95
Leakage Current	240 V _{AC}	< 1mA		-
	264 V _{AC}	-		< 1.5 mA
Mechanical				
Case Cover / Chassis		SECC Steel	Aluminium	SECC Steel
Dimensions (L × W × H)	mm	77 × 51 × 28	178 × 97 × 38	215 × 120 × 61
	inch	3.03 × 2.01 × 1.10	7.01 × 3.82 × 1.50	8.46 × 4.72 × 2.40
Unit Weight	kg	0.16	0.54	1.51
	lb	0.35	1.19	3.33
Cooling System		Convection		Forced Air (Built-in Fan)
MTBF ³⁾		> 700,000 hrs		
Environment				
Operating Temperature ⁴⁾		-10°C to +70°C		-20°C to +70°C
Storage Temperature		-25°C to +85°C		-40°C to +75°C
Operating Humidity		5 to 95% RH (Non-Condensing)		
Operating Altitude		0 to 3,000 m (0 to 9,840 ft)		

Dimensions Reference



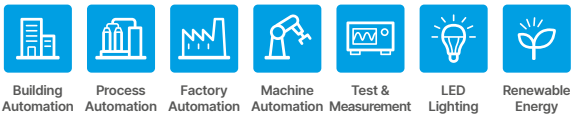
Notes

- 1) All models fulfill the test conditions for 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: 115 V_{AC}, O/P: 100% load) for vertical mounting orientation. For PMC-12V600W1BA, MTBF calculations do not include fan life time.
- 4) Refer power de-rating in the product datasheet.
- 5) All parameters are specified at 25°C ambient temperature unless otherwise indicated.

PMC (24 V, 48 V)

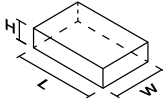
- Power will not de-rate for the entire input voltage range (except 600 W)
- Full corrosion resistant aluminium casing (except 600 W)
- Active PFC with high PF value (except dual output)
- Built-in fan speed control and fan lock protection (only 600 W)
- High MTBF > 700,000 hrs per Telcordia SR-332 (except PMC-24V600W1BA)
- Overvoltage / Overcurrent / Over Temperature / Short Circuit Protections

Applications



Output		PMC-24V150W1B□	PMC-24V300W1BA	PMC-24V600W1BA	PMC-24V600W1RW	PMC-48V150W1BA	PMC-48V600W1BA	PMC-DSPV100W1A
Output Voltage		24 V	V1: 24 V, V2 SB: 12 V	24 V	24 V	48 V	48 V	V1: 24 V, V2: 5 V
Output Voltage Range		22-28 V	V1: 22-28 V	21.6-26.4 V	21.6-27.6 V	44-53 V	43.2-52.8 V	V1: 22.8-26.4 V
Output Current		0-6.25 A	V1: 12.5 A (0-12.5 A) V2 SB: 0.5 A (0-0.5 A)	0-25.0 A (50.0 A for 5 s)	25.0 A	0-3.125 A	0-12.5 A	V1: 2.7 A (0.3-4.0 A) V2: 7.0 A (0.8-7.0 A)
Output Power		150 W	300 W	600 W (1,200 W for 5 s)	600 W	150 W	600 W	100 W
PARD (20 MHz)		< 100 mVpp	V1: < 100 mVpp V2: < 200 mVpp	< 180 mVpp @ 0°C to 50°C, < 240 mVpp @ -20°C to 0°C	< 150 mVpp @ 0°C to 70°C, 180 mVpp typ. @ -20°C to 0°C	< 200 mVpp	< 300 mVpp	V1: < 200 mVpp, V2: < 80 mVpp
Hold-up Time	115 V _{AC}	> 30 ms	> 15 ms @ nominal input, 100% load	> 20 ms	20 ms typ.	> 30 ms	> 20 ms	> 15 ms > 80 ms
	230 V _{AC}							
Input								
Phase Input		Single Phase				Single Phase		
Input Voltage Range		85-264 V _{AC} (DC input range 125-375 V _{DC}) ¹⁾		85-264 V _{AC} (DC input range 120-370 V _{DC}) ¹⁾	85-264 V _{AC}	85-264 V _{AC} (DC input range 125-375 V _{DC}) ¹⁾	85-264 V _{AC} (DC input range 120-370 V _{DC}) ¹⁾	85-264 V _{AC} (DC input range 125-375 V _{DC}) ¹⁾
Input Frequency		47-63 Hz				47-63 Hz		
Input Current	115 V _{AC}	< 1.7 A	< 4.0 A	< 6.5 A	6 A typ.	< 1.7 A	< 6.5 A	< 2.0 A
	230 V _{AC}	< 1.0 A	< 2.0 A	< 3.2 A	3 A typ.	< 1.0 A	< 3.2 A	< 1.1 A
Efficiency ²⁾ at 100% Load	115 V _{AC}	> 89.0%	> 86.0%	> 86.0%	90.0% typ.	> 89.0%	> 87.0%	> 84.0%
	230 V _{AC}	> 91.0%	> 88.0%	> 89.0%	92.0% typ.	> 91.0%	> 90.0%	> 86.0%
Max Inrush Current (Cold Start)	115 V _{AC}	< 60 A	< 35 A	< 20 A	-	< 20 A	< 20 A	< 50 A
	230 V _{AC}	< 120 A	< 70 A	< 40 A	40 A typ.	< 40 A	< 40 A	< 100 A
Power Factor	115 V _{AC}	> 0.99			0.99 typ.	> 0.99	> 0.98	Conform to EN 61000-3-2
	230 V _{AC}	> 0.90	> 0.97	> 0.94	0.97 typ.	> 0.92	> 0.96	
Leakage Current	240 V _{AC}	< 1 mA		< 1.5 mA	< 0.75 mA	< 1.5 mA	-	< 1 mA
	264 V _{AC}			-	-	-	TT/TN: < 3 mA, IT: < 4 mA	-
Mechanical								
Case Cover / Chassis		Aluminium		SECC Steel	SGCC	Aluminium	SECC Steel	Aluminium
Dimensions (L × W × H)	mm	178 × 97 × 38	199 × 105 × 41	215 × 120 × 61	190 × 120 × 61	178 × 97 × 38	215 × 120 × 61	178 × 97 × 38
	inch	7.01 × 3.82 × 1.50	7.83 × 4.13 × 1.61	8.46 × 4.72 × 2.40	7.48 × 4.72 × 2.40	7.01 × 3.82 × 1.50	8.46 × 4.72 × 2.40	7.01 × 3.82 × 1.50
Unit Weight	kg	0.54	0.82	1.60	1.40	0.53	1.54	0.52
	lb	1.19	1.81	3.53	3.10	1.17	3.40	1.15
Cooling System		Convection	Forced Air (Built-in Fan)			Convection	Forced Air (Built-in Fan)	Convection
MTBF ³⁾		> 700,000 hrs		> 300,000 hrs	> 700,000 hrs	> 700,000 hrs		
Environment								
Operating Temperature ⁴⁾		-10°C to +70°C		-20°C to +70°C		-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	-30°C to +75°C	-25°C to +85°C	-40°C to +85°C	-25°C to +85°C
Operating Humidity		5 to 95% RH (Non-Condensing)			20 to 95% RH (Non-Condensing)	5 to 95% RH (Non-Condensing)		
Operating Altitude		0 to 5,000 m (0 to 16,400 ft)	0 to 3,000 m (0 to 9,840 ft)		0 to 5,000 m (0 to 16,400 ft)	0 to 5,000 m (0 to 16,400 ft)	0 to 3,000 m (0 to 9,840 ft)	

Dimensions Reference



Notes

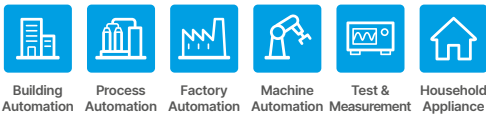
- 1) All models fulfill the test conditions for this range. DC input safety approval can be obtained upon request.
- 2) At 25°C ambient temperature by vertical mounting orientation.
- 3) MTBF as per Telcordia SR-332 (Confidence level: 90%, I/P: 115 V_{AC}, O/P: 100% load) for vertical mounting orientation.
For PMC-24V300W1BA, PMC-24V600W1BA and PMC-48V600W1BA, MTBF calculations do not include fan life time.
- 4) Refer power de-rating in the product datasheet.
- 5) All parameters are specified at 25°C ambient temperature unless otherwise indicated.

PMR (4.2 V, 5 V)



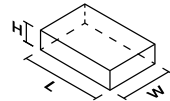
- Full corrosion resistant aluminium casing
- Built-in active PFC and conforms to harmonic current IEC/EN 61000-3-2, Class A and Class D
- Low profile design for 1U installation
- Built-in DC OK relay contact and redundancy operation (PMR-□V320WDBA and PMR-□V320WDCA)

Applications



Output		PMR-4V320WC□A	PMR-4V320WDAA	PMR-4V320WDGA	PMR-4V320WDBA	PMR-4V320WDCA	PMR-5V320WC□A	PMR-5V320WDAA	PMR-5V320WDGA	PMR-5V320WDBA	PMR-5V320WDCA
Output Voltage		4.2 V	4.2 V	4.2 V	4.2 V	4.2 V	5 V	5 V	5 V	5 V	5 V
Output Voltage Range		3.78-4.62 V	3.78-4.62 V	3.78-4.62 V	3.99-4.51V (No potentiometer)	3.99-4.51V (No potentiometer)	4.50-5.50 V	4.50-5.50 V	4.50-5.50 V	4.75-5.25 V (No potentiometer)	4.75-5.25 V (No potentiometer)
Output Current		60.0 A	60.0 A	60.0 A	60.0 A	60.0 A	60.0 A	60.0 A	60.0 A	60.0 A	60.0 A
Output Power		252 W	252 W	252 W	252 W	252 W	300 W	300 W	300 W	300 W	300 W
PARD (20 MHz)		< 150 mVpp							< 150 mVpp		
Hold-up Time	115 V _{AC}	8 ms typ.							8 ms typ.		
	230 V _{AC}										
Input											
Phase Input		Single Phase							Single Phase		
Input Voltage Range		88-264 V _{AC}							88-264 V _{AC}		
Input Frequency		47-63 Hz							47-63 Hz		
Input Current	115 V _{AC}	3.0 A typ.	4.5 A typ.	4.5 A typ.	4.5 A typ.	4.5 A typ.	4.5 A typ.	5.0 A typ.	5.0 A typ.	5.0 A typ.	5.0 A typ.
	230 V _{AC}	1.5 A typ.	2.5 A typ.	2.5 A typ.	2.5 A typ.	2.5 A typ.	2.5 A typ.	2.5 A typ.	2.5 A typ.	2.5 A typ.	2.5 A typ.
Efficiency ¹⁾ at 100% Load	115 V _{AC}	80.5% typ.	84.5% typ.		84.0% typ.		81.0% typ.	86.0% typ.		85.0% typ.	
	230 V _{AC}	83.5% typ.	86.5% typ.		86.0% typ.		84.0% typ.	88.0% typ.		87.0% typ.	
Max Inrush Current (Cold Start)	115 V _{AC}	20 A typ.							20 A typ.		
	230 V _{AC}	40 A typ.							40 A typ.		
Power Factor	115 V _{AC}	0.98 typ.							0.98 typ.		
	230 V _{AC}	0.95 typ.							0.95 typ.		
Leakage Current	240 V _{AC}	< 0.5 mA	< 1 mA				< 0.5 mA	< 1 mA			
Mechanical											
Case Cover / Chassis		Aluminium							Aluminium		
Dimensions (L × W × H)	mm	215 × 115 × 30	215 × 115 × 30	215 × 115 × 30	215 × 115 × 30	215 × 115 × 30	215 × 115 × 30	215 × 115 × 30	215 × 115 × 30	215 × 115 × 30	215 × 115 × 30
	inch	8.46 × 4.53 × 1.18	8.46 × 4.53 × 1.18	8.46 × 4.53 × 1.18	8.46 × 4.53 × 1.18	8.46 × 4.53 × 1.18	8.46 × 4.53 × 1.18	8.46 × 4.53 × 1.18	8.46 × 4.53 × 1.18	8.46 × 4.53 × 1.18	8.46 × 4.53 × 1.18
Unit Weight	kg	0.76	0.86	0.86	0.86	0.86	0.76	0.86	0.86	0.86	0.86
	lb	1.68	1.90	1.90	1.90	1.90	1.68	1.90	1.90	1.90	1.90
Cooling System		Forced Air (Built-in Fan)	Convection				Forced Air (Built-in Fan)		Convection		
MTBF ²⁾		> 700,000 hrs							> 700,000 hrs		
Environment											
Operating Temperature ³⁾		-10°C to +70°C	-20°C to +70°C				-10°C to +70°C		-20°C to +70°C		
Storage Temperature		-40°C to +85°C							-40°C to +85°C		
Operating Humidity		5 to 95% RH (Non-Condensing)							5 to 95% RH (Non-Condensing)		
Operating Altitude		0 to 5,000 m (0 to 16,400 ft)							0 to 5,000 m (0 to 16,400 ft)		

Dimensions Reference



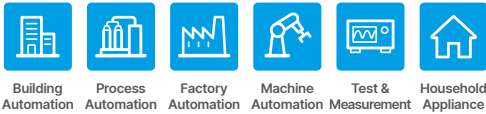
- Notes
- 1) At 25°C ambient temperature by vertical mounting orientation.
- 2) MTBF as per Telcordia SR-332 (Confidence level: 90%, I/P: 100 V_{AC}, O/P: 100% load, Ta: 35°C).
For PMR-4V320WC□A and PMR-5V320WC□A, MTBF calculation does not include fan life time.
- 3) Refer power de-rating in the product datasheet.
- 4) All parameters are specified at 25°C ambient temperature unless otherwise indicated.

PMR (12 V, 24 V, 36 V, 48 V)



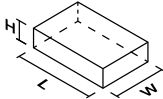
- Built-in active PFC circuit
- No load power consumption < 0.5 W
- 30 mm height low profile design
- IEC/EN 60335-1, IEC/EN 61558-1, and IEC/EN 61558-2-16 household appliance standards
- Wide operating temperature -30°C ~70°C (-40°C cold start)

Applications



		NEW		NEW		NEW		NEW	
Output		PMR-12V320W1AT		PMR-24V320W1AT		PMR-36V320W1AT		PMR-48V320W1AT	
Output Voltage		12 V		24 V		36 V		48 V	
Output Voltage Range		10.8-13.2 V		21.6-26.4 V		32.4-39.6 V		43.2-52.8 V	
Output Current		26.7 A		13.4 A		8.9 A		6.7 A	
Output Power		320.4 W		321.6 W		320.4 W		321.6 W	
PARD (20 MHz)		< 150 mVpp @ 0°C to 70°C 450 mVpp typ. @ -30°C to 0°C					< 200 mVpp @ 0°C to 70°C 600 mVpp typ. @ -30°C to 0°C		
Hold-up Time	115 V _{AC}	16 ms typ.					16 ms typ.		
	230 V _{AC}								
Input									
Phase Input		Single Phase					Single Phase		
Input Voltage Range		90-264 V _{AC}					90-264 V _{AC}		
Input Frequency		47-63 Hz					47-63 Hz		
Input Current	115 V _{AC}	3.8 A typ.	3.8 A typ.	3.8 A typ.			3.8 A typ.		
	230 V _{AC}	1.8 A typ.	1.8 A typ.	1.8 A typ.			1.8 A typ.		
Efficiency ¹⁾ at 100% Load	230 V _{AC}	90.5% typ.	91.0% typ.	91.5% typ.			92.0% typ.		
Max Inrush Current (Cold Start)	230 V _{AC}	50 A typ.					50 A typ.		
Power Factor	115 V _{AC}	> 0.96					> 0.96		
	230 V _{AC}	> 0.93					> 0.93		
Leakage Current	240 V _{AC}	< 0.75 mA					< 0.75 mA		
Mechanical									
Case Cover / Chassis		SGCC / Aluminium					SGCC / Aluminium		
Dimensions (L × W × H)	mm	215 × 115 × 30	215 × 115 × 30	215 × 115 × 30			215 × 115 × 30		
	inch	8.46 × 4.53 × 1.18	8.46 × 4.53 × 1.18	8.46 × 4.53 × 1.18			8.46 × 4.53 × 1.18		
Unit Weight	kg	0.64	0.64	0.64			0.64		
	lb	1.42	1.42	1.42			1.42		
Cooling System		Forced Air (Built-in Fan)					Forced Air (Built-in Fan)		
MTBF ²⁾		> 700,000 hrs					> 700,000 hrs		
Environment									
Operating Temperature ³⁾		-30°C to +70°C					-30°C to +70°C		
Storage Temperature		-40°C to +85°C					-40°C to +85°C		
Operating Humidity		20 to 90% (Non-Condensing)					20 to 90% (Non-Condensing)		
Operating Altitude		0 to 5,000 m (0 to 16,400 ft)					0 to 5,000 m (0 to 16,400 ft)		

Dimensions Reference



Notes

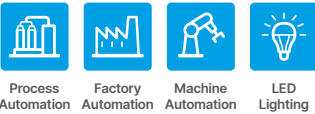
- 1) At 25°C ambient temperature by vertical mounting orientation.
- 2) MTBF as per Telcordia SR-332 (I/P: 230 V_{AC}, O/P: 100% load, Ta: 25°C). MTBF calculation does not include fan life time.
- 3) Refer power de-rating in the product datasheet.
- 4) All parameters are specified at 25°C ambient temperature unless otherwise indicated.

PMF (4.2 V, 5 V, 24 V)



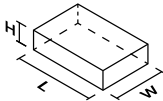
- Built-in active PFC and automatic fan speed control
- Full corrosion resistant aluminium casing
- Remote ON/OFF is available as an option
- Overvoltage / Overcurrent / Over Temperature / Short Circuit Protections

Applications



Output		PMF-4V320WC□□	PMF-5V320WC□□	PMF-24V240WC□□	PMF-24V320WC□□
Output Voltage		4.2 V	5 V	24 V	24 V
Output Voltage Range		3.78-4.62 V	4.50-5.50 V	21.6-26.4 V	21.6-26.4 V
Output Current		55.0 A	55.0 A	10.0 A	13.3 A
Output Power		231 W	275 W	240 W	320 W
PARD (20 MHz)		< 150 mVpp			
Hold-up Time	115 V _{AC}	16 ms typ.		20 ms typ.	
	230 V _{AC}				
Input					
Phase Input		Single Phase			
Input Voltage Range		85-264 V _{AC}			
Input Frequency		47-63 Hz			
Input Current	115 V _{AC}	5.0 A typ.	5.0 A typ.	3.6 A typ.	5.0 A typ.
	230 V _{AC}	2.5 A typ.	2.5 A typ.	1.8 A typ.	2.5 A typ.
Efficiency ¹⁾ at 100% Load	230 V _{AC}	76.5% typ.	78.5% typ.	87.0% typ.	
Max Inrush Current (Cold Start)	115 V _{AC}	20 A typ.	30 A typ.	35 A typ.	20 A typ.
	230 V _{AC}	40 A typ.	50 A typ.	60 A typ.	40 A typ.
Power Factor	115 V _{AC}	0.97 typ.	0.98 typ.	0.99 typ.	0.98 typ.
	230 V _{AC}	0.94 typ.	0.95 typ.	0.95 typ.	0.95 typ.
Leakage Current	240 V _{AC}	< 1 mA		< 0.6 mA	< 1 mA
Mechanical					
Case Cover / Chassis		Aluminium			
Dimensions (L × W × H)	mm	215 × 115 × 50	215 × 115 × 50	190 × 93 × 50	215 × 115 × 50
	inch	8.46 × 4.53 × 1.97	8.46 × 4.53 × 1.97	7.48 × 3.66 × 1.97	8.46 × 4.53 × 1.97
Unit Weight	kg	0.86	0.86	0.66	0.84
	lb	1.90	1.90	1.46	1.85
Cooling System		Forced Air (Built-in Fan)			
MTBF ²⁾		> 700,000 hrs			
Environment					
Operating Temperature ³⁾		-10°C to +70°C			
Storage Temperature		-20°C to +85°C			
Operating Humidity		5 to 95% RH (Non-Condensing)			
Operating Altitude		0 to 5,000 m (0 to 16,400 ft)			

Dimensions Reference



Notes

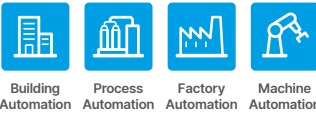
- 1) At 25°C ambient temperature by vertical mounting orientation.
- 2) MTBF as per Telcordia SR-332 (Confidence level: 90%, I/P: 100 V_{AC}, O/P: 100% load, Ta: 35°C). MTBF calculations do not include fan life time.
- 3) Refer power de-rating in the product datasheet.
- 4) All parameters are specified at 25°C ambient temperature unless otherwise indicated.

PMU (13.8 V, 27.6 V)



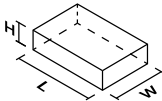
- AC input voltage range selectable by switch
- LED indicators for DC OK (Green) and Battery Reverse Polarity Connection (Red)
- Zero switch over time from loss of AC to battery operation
- Monitoring signals for AC OK, DC OK and Battery Low indication
- Overvoltage / Overcurrent / Over Temperature / Short Circuit Protections

Applications



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

Dimensions Reference



Notes

- 1) At 25°C ambient temperature by vertical mounting orientation.
- 2) MTBF as per Telcordia SR-332 (Confidence level: 90%, I/P: 115 V_{AC}, O/P: 100% load) for vertical mounting orientation.
- 3) Refer power de-rating in the product datasheet.
- 4) All parameters are specified at 25°C ambient temperature unless otherwise indicated.

MEB (12 V, 24 V, 48 V)



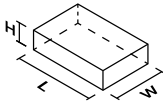
- High Power Density
- 2 × MOPP Isolation
- Safety Approvals to IEC 60601-1 Ed. 2 & 3.1
- Suitable for Type BF Medical Products
- Full Power up to 50°C Ambient
- Class B Conducted and Radiated EMI

Applications



		NEW			
Output		MEB-750A12□ AAA	MEB-500A24F AA	MEB-750A24□ AAA	MEB-750A48□ AAA
Output Voltage		12 V	24 V	24 V	48 V
Output Current (Max)		58.4 A	21.0 A	31.25 A	15.63 A
Output Power		700 W	504 W	750 W	750 W
Load Regulation		< 2%	< 150mV	< 2%	
Ripple & Noise		1% pk-pk Vrated @ rated load	< 300mVpp @ 0°C to +50°C	1% pk-pk Vrated @ rated load	
Input					
Input Voltage Range		85-264 V _{AC}	90-264 V _{AC}	85-264 V _{AC}	
Input Frequency		47-63 Hz			
Efficiency	230 V _{AC} (50 Hz)	90.5% typ.	92.0% typ.	94.0% typ.	
Leakage Current ¹⁾	264 V _{AC}	Input-PE: 0.3 mA typ. @ NC, 1 mA typ. @ SFC Output-PE: 0.1 mA typ. @ NC, 0.5 mA typ. @ SFC	Input-PE: < 0.1 mA @ NC, < 0.3 mA @ SFC Output-PE: < 0.1 mA @ NC, < 0.5 mA @ SFC	Input-PE: 0.3 mA typ. @ NC, 1 mA typ. @ SFC Output-PE: 0.1 mA typ. @ NC, 0.5 mA typ. @ SFC	
Mechanical					
Dimensions (L × W × H)	mm	177.8 × 101.6 × 40	165.3 × 85.2 × 41	177.8 × 101.6 × 40	177.8 × 101.6 × 40
	inch	7.00 × 4.00 × 1.57	6.50 × 3.35 × 1.61	7.00 × 4.00 × 1.57	7.00 × 4.00 × 1.57
Unit Weight	kg	1.10	0.66	1.10	1.10
	lb	2.43	1.46	2.43	2.43
MTBF ²⁾		> 500,000 hrs	> 700,000 hrs	> 500,000 hrs	
EMC & Emissions		EN 55011, EN 55032, FCC Title 47: Class B	EN 55011 & Compliant with EN 55032, FCC Title 47: Class B	EN 55011, EN 55032, FCC Title 47: Class B	
Environment					
Operating Temperature ³⁾		-20°C to +70°C			
Storage Temperature		-40°C to +85°C	-30°C to +80°C	-40°C to +85°C	
Operating Humidity		5 to 95% RH (Non-Condensing)	20 to 90% RH (Non-Condensing)	5 to 95% RH (Non-Condensing)	
Operating Altitude		0 to 5,000 m (0 to 16,400 ft)	IEC 60601-1: 0 to 3,000 m (0 to 9,840 ft) IEC 60950-1 & IEC 62368-1: 0 to 5,000 m (0 to 16,400 ft)	0 to 5,000 m (0 to 16,400 ft)	
Medical Rating					
Float Rating		BF			
MOPP		2 × MOPP			

Dimensions Reference



Notes

- 1) NC: normal condition, SFC: single fault condition.
- 2) MEB-500A24F, MTBF as per Telcordia SR-332 (: I/P: 115 V_{AC}, O/P: 100% load, Ta: 25°C).
MEB-750A12□, MEB-750A24□ and MEB-750A48□, MTBF as per Telcordia SR-332 (I/P: 115 V_{AC}, O/P: 100% load, Ta: 35°C).
- 3) Refer power de-rating in the product datasheet.

MEB (24 V, 42 V, 48 V)



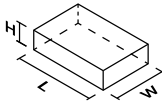
- Up to 1200W in 5" × 8.03" × 1.59" package
- Full power from 90 V_{AC} to 264 V_{AC}, up to 50°C ambient
- 2 × MOPP isolation, Suitable for type BF medical products
- Current sharing and 5V/2A standby output
- Class B Conducted and Radiated EMI
- PMBus Ver 1.3 supported
- Intelligent fan speed control

Applications



Output		MEB-1K2A24T ABA	MEB-1K2A42T ABA	MEB-1K2A48T ABA
Output Voltage		24 V	42 V	48 V
Output Current (Max)		50.0 A	28.5 A	25.0 A
Output Power		1200 W	1200 W	1200 W
Load Regulation		2%		
Ripple & Noise		1% typ. pk-pk Vrated @ rated load		
Input				
Input Voltage Range		85-264 V _{AC}		
Input Frequency		47-63 Hz		
Efficiency	115 V _{AC} (60 Hz)	90.0% typ.	90.9% typ.	91.5% typ.
	230 V _{AC} (50 Hz)	93.0% typ.	93.2% typ.	94.0% typ.
Leakage Current ¹⁾	264 V _{AC}	Input-PE: < 0.3 mA @ NC, < 1 mA @ SFC Output-PE: < 0.1 mA @ NC, < 0.5 mA @ SFC		
Mechanical				
Dimensions (L × W × H)	mm	204 × 127 × 40.5	204 × 127 × 40.5	204 × 127 × 40.5
	inch	8.03 × 5.0 × 1.59	8.03 × 5.0 × 1.59	8.03 × 5.0 × 1.59
Unit Weight	kg	1.50	1.50	1.50
	lb	3.30	3.30	3.30
MTBF ²⁾		> 500,000 hrs		
EMC & Emissions		EN 55011/EN 55032, FCC Title 47: Class B		
Environment				
Operating Temperature ³⁾		-20°C to +70°C		
Storage Temperature		-40°C to +85°C		
Operating Humidity		5 to 95% RH (Non-Condensing)		
Operating Altitude		0 to 5,000 m (0 to 16,400 ft)		
Medical Rating				
Float Rating		BF		
MOPP		2 × MOPP		

Dimensions Reference



Notes

- 1) NC: normal condition, SFC: single fault condition.
- 2) MTBF as per Telcordia SR-332 (I/P: 115 V_{AC}, O/P: 100% load, Ta: 35°C).
- 3) Refer power de-rating in the product datasheet.

Open Frame Power Supplies



PJT

Standard industrial footprint
Power Range: 40-150 W



PJ

Low inrush current / low leakage current
Power Range: 15-150 W



PJB

Power Boost of 200% for 10 seconds
Power Range: 103.2-300 W



PJH

Power supply with household approvals
Power Range: 300 W



PJU

Power supply with DC-UPS function
Power Range: 60 W



PJL

Power supply with lighting approvals
Power Range: 200-600 W

Applications



Building Automation



Factory Automation



Machine Automation



Test & Measurement



LED Lighting



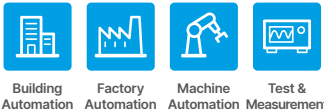
Household Appliance

PJT (12 V, 15 V)

- Small standard footprint
- Low Leakage Current < 0.1mA
- High MTBF > 700,000 hrs as per Telcordia SR-332
- Overvoltage / Overcurrent / Over Temperature / Short Circuit Protections

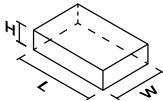


Applications



Output		PJT-12V40WBA□	PJT-12V65WBA□	PJT-12V100WBA□	PJT-12V100WBB□	PJT-15V40WBA□	PJT-15V65WBA□	PJT-15V100WBA□	PJT-15V100WBB□
Output Voltage		12 V	12 V	12 V	12 V	15 V	15 V	15 V	15 V
Output Current		3.33 A	5.0 A	8.33 A	6.67 A (Convection) 8.33 A (Forced Air)	2.67 A	4.2 A	6.67 A	5.33 A (Convection) 6.67 A (Forced Air)
Output Power		40 W	60 W	100 W	80 W (Convection) 100 W (Forced Air)	40 W	63 W	100 W	80 W (Convection) 100 W (Forced Air)
PARD (20 MHz)		< 120 mVpp					< 150 mVpp		
Hold-up Time	115 V _{AC}	18 ms typ.	16 ms typ.	20 ms typ.	10 ms typ.	18 ms typ.	16 ms typ.	20 ms typ.	10 ms typ.
	230 V _{AC}	90 ms typ.	80 ms typ.			90 ms typ.	80 ms typ.		
Input									
Phase Input		Single Phase						Single Phase	
Input Voltage Range		90-264 V _{AC}						90-264 V _{AC}	
Input Frequency		47-63 Hz						47-63 Hz	
Input Current	115 V _{AC}	0.85 A typ.	1.50 A typ.	1.50 A typ.	2.50 A typ.	0.85 A typ.	1.50 A typ.	1.50 A typ.	2.50 A typ.
Efficiency ¹⁾ at 100% Load	115 V _{AC}	85.0% typ.	86.0% typ.	86.5% typ.	86.0% typ.	86.0% typ.	87.0% typ.	87.5% typ.	87.0% typ.
	230 V _{AC}	86.0% typ.	86.5% typ.			88.0% typ.	87.0% typ.		
Max Inrush Current (Cold Start)	115 V _{AC}	30 A typ.						30 A typ.	
	230 V _{AC}	60 A typ.						60 A typ.	
Power Factor		Conform to EN 61000-3-2						Conform to EN 61000-3-2	
Leakage Current	240 V _{AC}	< 0.1 mA						< 0.1 mA	
Mechanical									
Case Cover / Chassis		-						-	
Dimensions (L × W × H)	mm	76.2 × 50.8 × 22.9	101.6 × 50.8 × 30	127 × 76.2 × 31	101.6 × 50.8 × 31.8	76.2 × 50.8 × 22.9	101.6 × 50.8 × 30	127 × 76.2 × 31	101.6 × 50.8 × 31.8
	inch	3.00 × 2.00 × 0.90	4.00 × 2.00 × 1.18	5.00 × 3.00 × 1.22	4.00 × 2.00 × 1.25	3.00 × 2.00 × 0.90	4.00 × 2.00 × 1.18	5.00 × 3.00 × 1.22	4.00 × 2.00 × 1.25
Unit Weight	kg	0.08	0.13	0.21	0.15	0.08	0.13	0.21	0.15
	lb	0.18	0.29	0.46	0.33	0.18	0.29	0.46	0.33
Cooling System		Convection			Convection / Forced Air			Convection	
MTBF ²⁾		> 700,000 hrs						> 700,000 hrs	
Environment									
Operating Temperature ³⁾		-10°C to +70°C						-10°C to +70°C	
Storage Temperature		-40°C to +85°C						-40°C to +85°C	
Operating Humidity		10 to 95% RH (Non-Condensing)						10 to 95% RH (Non-Condensing)	
Operating Altitude		0 to 5,000 m (0 to 16,400 ft)						0 to 5,000 m (0 to 16,400 ft)	

Dimensions Reference



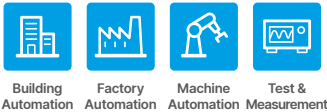
Notes

- 1) At 25°C ambient temperature.
- 2) MTBF as per Telcordia SR-332 (I/P: 115 V_{AC}, O/P: 100% load).
- 3) Refer power de-rating in the product datasheet.
- 4) All parameters are specified at 25°C ambient temperature unless otherwise indicated.

PJT (18 V, 24 V, 27 V)

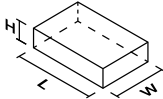
- Small standard footprint
- Low Leakage Current
- High MTBF > 700,000 hrs as per Telcordia SR-332
- Overvoltage / Overcurrent / Over Temperature / Short Circuit Protections

Applications



Output		PJT-18V40WBA□	PJT-18V65WBA□	PJT-18V100WBA□	PJT-18V100WBB□	PJT-24V40WBA□	PJT-24V65WBA□	PJT-24V100WBA□	PJT-24V100WBB□	PJT-27V150WBNA
Output Voltage		18 V	18 V	18 V	18 V	24 V	24 V	24 V	24 V	V1: 27 V, V _{SB} : 12 V
Output Current		2.22 A	3.61 A	5.55 A	4.44 A (Convection) 5.55 A (Forced Air)	1.66 A	2.71 A	4.17 A	3.33 A (Convection) 4.17 A (Forced Air)	V1: 5.55 A V _{SB} : 0.5 A
Output Power		40 W	65 W	100 W	80 W (Convection) 100 W (Forced Air)	40 W	65 W	100 W	80 W (Convection) 100 W (Forced Air)	V1: 150 W V _{SB} : 6 W
PARD (20MHz)		< 180 mVpp					< 240 mVpp			V1: < 150 mVpp, V _{SB} : < 75 mVpp
Hold-up Time	115 V _{AC}	18 ms typ.	16 ms typ.	20 ms typ.	10 ms typ.	18 ms typ.	16 ms typ.	20 ms typ.	10 ms typ.	> 40 ms
	230 V _{AC}	90 ms typ.	80 ms typ.			90 ms typ.	80 ms typ.			
Input										
Phase Input		Single Phase					Single Phase			
Input Voltage Range		90-264 V _{AC}					90-264 V _{AC}			85-264 V _{AC}
Input Frequency		47-63 Hz					47-63 Hz			
Input Current	115 V _{AC}	0.85 A typ.	1.50 A typ.	1.50 A typ.	2.50 A typ.	0.85 A typ.	1.50 A typ.	1.50 A typ.	2.50 A typ.	< 1.80 A
	230 V _{AC}	-	-	-	-	-	-	-	-	< 0.90 A
Efficiency ¹⁾ at 100% Load	115 V _{AC}	86.0% typ.	87.0% typ.	87.5% typ.	87.0% typ.	86.0% typ.	87.0% typ.	88.0% typ.	88.0% typ.	> 88.5%
	230 V _{AC}		88.0% typ.		89.0% typ.	87.0% typ.			89.0% typ.	> 89.5%
Max Inrush Current (Cold Start)	115 V _{AC}	30 A typ.	30 A typ.	30 A typ.	30 A typ.	30 A typ.				< 50 A
	230 V _{AC}	60 A typ.	60 A typ.	60 A typ.	60 A typ.	60 A typ.				< 100 A
Power Factor	115 V _{AC}	Conform to EN 61000-3-2					Conform to EN 61000-3-2			> 0.99
	230 V _{AC}									> 0.93
Leakage Current	240 V _{AC}	< 0.1 mA					< 0.1 mA			-
	264 V _{AC}	-					-			< 0.25 mA
Mechanical										
Case Cover / Chassis		-					-			
Dimensions (L × W × H)	mm	76.2 × 50.8 × 22.9	101.6 × 50.8 × 30	127 × 76.2 × 31	101.6 × 50.8 × 31.8	76.2 × 50.8 × 22.9	101.6 × 50.8 × 30	127 × 76.2 × 31	101.6 × 50.8 × 31.8	127 × 76.2 × 36.5
	inch	3.00 × 2.00 × 0.90	4.00 × 2.00 × 1.18	5.00 × 3.00 × 1.22	4.00 × 2.00 × 1.25	3.00 × 2.00 × 0.90	4.00 × 2.00 × 1.18	5.00 × 3.00 × 1.22	4.00 × 2.00 × 1.25	5.00 × 3.00 × 1.44
Unit Weight	kg	0.08	0.13	0.21	0.15	0.08	0.13	0.21	0.15	0.37
	lb	0.18	0.29	0.46	0.33	0.18	0.29	0.46	0.33	0.82
Cooling System		Convection			Convection / Forced Air		Convection		Convection / Forced Air	Convection
MTBF ²⁾		> 700,000 hrs					> 700,000 hrs			
Environment										
Operating Temperature ³⁾		-10°C to +70°C					-10°C to +70°C			
Storage Temperature		-40°C to +85°C					-40°C to +85°C			
Operating Humidity		10 to 95% RH (Non-Condensing)					10 to 95% RH (Non-Condensing)			5 to 95% RH (Non-Condensing)
Operating Altitude		0 to 5,000 m (0 to 16,400 ft)					0 to 5,000 m (0 to 16,400 ft)			

Dimensions Reference



Notes

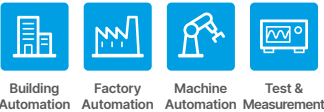
- 1) At 25°C ambient temperature.
- 2) MTBF as per Telcordia SR-332 (I/P: 115 V_{AC}, O/P: 100% load).
- 3) Refer power de-rating in the product datasheet.
- 4) All parameters are specified at 25°C ambient temperature unless otherwise indicated.

PJ (5 V, 12 V)



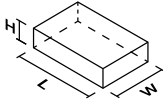
- High PF > 0.97 (for 50 W and above)
- Low Inrush Current / Low Leakage Current
- Conforms to harmonic current IEC/EN 61000-3-2, Class A; Class A and Class D for 50 W and above
- Conformal coating on PCBAs to protect against common dust and chemical pollutants
- Versatile configuration options: Open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

Applications



Output		PJ-5V15W□□A		PJ-12V15W□□A		PJ-12V30W□□A		PJ-12V50W□□A		PJ-12V100W□□A		PJ-12V150W□□A	
Output Voltage		5 V		12 V		12 V		12 V		12 V		12 V	
Output Voltage Range		4.50-5.50 V		10.8-13.2 V		10.8-13.2 V		10.8-13.2 V		10.8-13.2 V		10.8-13.2 V	
Output Current		3.0 A		1.3 A		2.5 A		4.3 A		8.5 A		12.5 A	
Output Power		15 W		15.6 W		30 W		51.6 W		102 W		150 W	
PARD (20 MHz)		< 120 mVpp		< 150 mVpp		< 150 mVpp		< 150 mVpp		< 150 mVpp		< 150 mVpp	
Hold-up Time	100 V _{AC}			20 ms typ.								20 ms typ.	
Input													
Phase Input		Single Phase								Single Phase			
Input Voltage Range		85-264 V _{AC}								85-264 V _{AC}			
Input Frequency		47-63 Hz								47-63 Hz			
Input Current	100 V _{AC}	0.35 A typ.		0.35 A typ.		0.65 A typ.		0.65 A typ.		1.30 A typ.		1.90 A typ.	
	200 V _{AC}	0.20 A typ.		0.20 A typ.		0.35 A typ.		0.35 A typ.		0.65 A typ.		0.95 A typ.	
Efficiency ¹⁾ at 100% Load	100 V _{AC}	78.0% typ.		81.0% typ.		83.0% typ.		83.0% typ.		85.0% typ.		88.0% typ.	
	200 V _{AC}	79.5% typ.		82.5% typ.		85.0% typ.		85.0% typ.		87.5% typ.		91.0% typ.	
Max Inrush Current (Cold Start)	100 V _{AC}	15 A typ.								15 A typ.			
	200 V _{AC}	30 A typ.								30 A typ.			
Power Factor	100 V _{AC}	Conform to EN 61000-3-2						0.98 typ.		0.99 typ.			
	200 V _{AC}							0.97 typ.		0.98 typ.		0.97 typ.	
Leakage Current	100 V _{AC}	< 0.1 mA						< 0.1 mA		< 0.2 mA			
	240 V _{AC}	< 0.2 mA						< 0.2 mA		< 0.4 mA			
Mechanical													
Case Cover / Chassis		SGCC								SGCC			
Dimensions ²⁾ (L × W × H)	mm	87.5 × 50 × 22		87.5 × 50 × 22		105 × 50 × 25.6		132 × 50 × 26.6		155 × 62 × 33.5		160 × 75 × 37	
	inch	3.44 × 1.97 × 0.87		3.44 × 1.97 × 0.87		4.13 × 1.97 × 1.01		5.20 × 1.97 × 1.05		6.10 × 2.44 × 1.32		6.30 × 2.95 × 1.46	
Unit Weight ²⁾	kg	0.06		0.06		0.11		0.16		0.26		0.30	
	lb	0.13		0.13		0.24		0.35		0.57		0.66	
Cooling System		Convection								Convection			
MTBF ³⁾		> 200,000 hrs								> 200,000 hrs			
Environment													
Operating Temperature ⁴⁾		-10°C to +70°C								-10°C to +70°C			
Storage Temperature		-25°C to +75°C								-25°C to +75°C			
Operating Humidity		5 to 95% RH (Non-Condensing)								5 to 95% RH (Non-Condensing)			
Operating Altitude		0 to 5,000 m (0 to 16,400 ft)								0 to 5,000 m (0 to 16,400 ft)			

Dimensions Reference



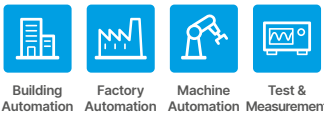
Notes

- 1) At 25°C ambient temperature.
- 2) Open Frame (without chassis and cover).
- 3) MTBF as per JEITA RCR-9102B.
- 4) Refer power de-rating in the product datasheet.
- 5) All parameters are specified at 25°C ambient temperature unless otherwise indicated.

PJ (24 V, 48 V)

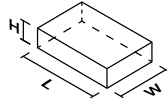
- High PF > 0.97 (for 50 W and above)
- Low Inrush Current / Low Leakage Current
- Conforms to harmonic current IEC/EN 61000-3-2, Class A; Class A and Class D for 50 W and above
- Conformal coating on PCBAs to protect against common dust and chemical pollutants
- Versatile configuration options: Open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

Applications



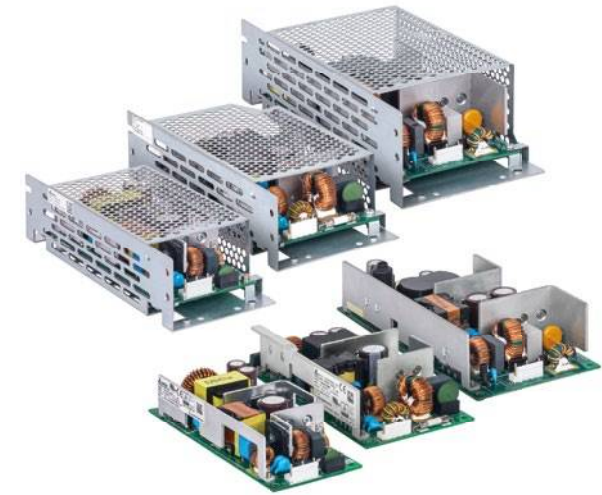
Output		PJ-24V30W□□NA		PJ-24V50W□□NA		PJ-24V100W□□□A		PJ-24V150W□□□A		PJ-48V50W□□NA	
Output Voltage		24 V		24 V		24 V		24 V		48 V	
Output Voltage Range		21.6-26.4 V		21.6-26.4 V		21.6-26.4 V		21.6-26.4 V		43.2-52.8 V	
Output Current		1.3 A		2.1 A		4.3 A		6.3 A		1.1 A	
Output Power		31.2 W		50.4 W		103.2 W		150 W		52.8 W	
PARD (20 MHz)				< 150 mVpp				< 150 mVpp		< 250 mVpp	
Hold-up Time	100 V _{AC}	20 ms typ.								20 ms typ.	
Input											
Phase Input		Single Phase						Single Phase			
Input Voltage Range		85-264 V _{AC}						85-264 V _{AC}			
Input Frequency		47-63 Hz						47-63 Hz			
Input Current	100 V _{AC}	0.65 A typ.				1.30 A typ.		1.90 A typ.		0.65 A typ.	
	200 V _{AC}	0.35 A typ.				0.65 A typ.		0.95 A typ.		0.35 A typ.	
Efficiency ¹⁾ at 100% Load	100 V _{AC}	85.0% typ.		84.5% typ.		86.0% typ.		88.0% typ.		83.0% typ.	
	200 V _{AC}	86.0% typ.		87.0% typ.		89.0% typ.		91.0% typ.		85.0% typ.	
Max Inrush Current (Cold Start)	100 V _{AC}	15 A typ.						15 A typ.			
	200 V _{AC}	30 A typ.						30 A typ.			
Power Factor	100 V _{AC}	Conform to EN 61000-3-2		0.98 typ.				0.99 typ.		0.98 typ.	
	200 V _{AC}			0.97 typ.		0.98 typ.		0.97 typ.			
Leakage Current	100 V _{AC}	< 0.1 mA						< 0.2 mA		< 0.1 mA	
	240 V _{AC}	< 0.2 mA						< 0.4 mA		< 0.2 mA	
Mechanical											
Case Cover / Chassis		SGCC						SGCC			
Dimensions ²⁾ (L × W × H)	mm	105 × 50 × 25.6		132 × 50 × 26.6		155 × 62 × 33.5		160 × 75 × 37		132 × 50 × 26.6	
	inch	4.13 × 1.97 × 1.01		5.20 × 1.97 × 1.05		6.10 × 2.44 × 1.32		6.30 × 2.95 × 1.46		5.20 × 1.97 × 1.05	
Unit Weight ²⁾	kg	0.11		0.16		0.26		0.29		0.16	
	lb	0.24		0.35		0.57		0.64		0.35	
Cooling System		Convection						Convection			
MTBF ³⁾		> 200,000 hrs						> 200,000 hrs			
Environment											
Operating Temperature ⁴⁾		-10°C to +70°C				-10°C to +70°C					
Storage Temperature		-25°C to +75°C				-25°C to +75°C					
Operating Humidity		5 to 95% RH (Non-Condensing)				5 to 95% RH (Non-Condensing)					
Operating Altitude		0 to 5,000 m (0 to 16,400 ft)				0 to 5,000 m (0 to 16,400 ft)					

Dimensions Reference



Notes

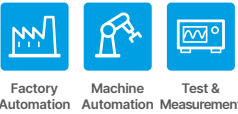
- 1) At 25°C ambient temperature.
- 2) Open Frame (without chassis and cover).
- 3) MTBF as per JEITA RCR-9102B.
- 4) Refer power de-rating in the product datasheet.
- 5) All parameters are specified at 25°C ambient temperature unless otherwise indicated.



PJB (24 V)

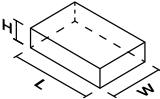
- Power Boost of 200% for 10 seconds
- High PF > 0.97
- Low Inrush Current / Low Leakage Current
- Conformal coating on PCBAs to protect against common dust and chemical pollutants
- Versatile configuration options: Open Frame, L Frame, Enclosed
- Remote ON/OFF option for selected models
- Design compliant with Japan PSE (DENAN) for 150 W - 300 W

Applications



Output		PJB-24V100W□□□A	PJB-24V150W□□□A	PJB-24V240W□□□□	PJB-24V300W□□□□
Output Voltage		24 V	24 V	24 V	24 V
Output Voltage Range		21.6-26.4 V	21.6-26.4 V	21.6-26.4 V	21.6-26.4 V
Output Current		4.3 A (8.6 A for 10s)	6.3 A (12.6 A for 10s)	10.0 A (20.0 A for 10s)	12.5 A (22.5 A for 10s)
Output Power		103.2 W (206.4 W for 10s)	151.2 W (302.4 W for 10s)	240 W (480 W for 10s)	300 W (600 W for 10s)
PARD (20 MHz)		< 150 mVpp			
Hold-up Time	100 V _{AC}	20 ms typ.			
Input					
Phase Input		Single Phase			
Input Voltage Range		85-264 V _{AC}			
Input Frequency		47-63 Hz			
Input Current	100 V _{AC}	1.30 A typ.	1.90 A typ.	2.80 A typ.	4.10 A typ.
	200 V _{AC}	0.65 A typ.	0.95 A typ.	1.50 A typ.	2.00 A typ.
Efficiency ¹⁾ at 100% Load	100 V _{AC}	86.5% typ.	88.0% typ.	91.0% typ.	
	200 V _{AC}	89.0% typ.	90.5% typ.	92.5% typ.	93.5% typ.
Max Inrush Current (Cold Start)	100 V _{AC}	15 A typ.			
	200 V _{AC}	30 A typ.			
Power Factor	100 V _{AC}	0.98 typ.			0.99 typ.
	200 V _{AC}	0.97 typ.	0.95 typ.	0.97 typ.	0.95 typ.
Leakage Current	100 V _{AC}	< 0.2 mA			
	240 V _{AC}	< 0.4 mA			
Mechanical					
Case Cover / Chassis		SGCC			
Dimensions ²⁾ (L × W × H)	mm	155 × 62 × 33.5	160 × 75 × 37	180 × 84 × 42	222 × 95 × 53.6
	inch	6.10 × 2.44 × 1.32	6.30 × 2.95 × 1.46	7.09 × 3.31 × 1.65	8.74 × 3.74 × 2.11
Unit Weight ²⁾	kg	0.26	0.31	0.44	0.64
	lb	0.57	0.68	0.97	1.41
Cooling System		Convection			
MTBF ³⁾		> 200,000 hrs			
Environment					
Operating Temperature ⁴⁾		-10°C to +70°C			
Storage Temperature		-25°C to +75°C		-25°C to +80°C	
Operating Humidity		5 to 90% 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)	0 to 5,000 m (0 to 16,400 ft)

Dimensions Reference



Notes

- 1) At 25°C ambient temperature.
- 2) Open Frame (without chassis and cover).
- 3) MTBF as per JEITA RCR-9102B.
- 4) Refer power de-rating in the product datasheet.
- 5) All parameters are specified at 25°C ambient temperature unless otherwise indicated.



PJH (24 V, 36 V)

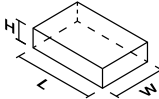
- Household approval to IEC/EN 60335-1
- Available for Class I or Class II (double isolation) configuration
- 300 W with fan cooled and up to 240 W convection cooled
- Standard industrial footprint of 3" × 5"
- Built-in active PFC, remote ON/OFF, remote sense, power good signal
- No load input power consumption < 0.5 W and low earth leakage current < 0.75 mA

Applications



Output		PJH-24V300WBBA	PJH-24V300WBCA	PJH-36V300WBBA	PJH-36V300WBCA
Output Voltage		V1: 24 V, V _{SB} : 5 V	V1: 24 V, V _{SB} : 12 V	V1: 36 V, V _{SB} : 5 V	V1: 36V, V _{SB} : 12 V
Output Voltage Range		V1: 22.8-25.2 V, V _{SB} : Fixed	V1: 22.8-25.2 V, V _{SB} : Fixed	V1: 34.2-37.8 V, V _{SB} : Fixed	V1: 34.2-37.8 V, V _{SB} : Fixed
Output Current		V1: 0-12.5 A V _{SB} : 0-1.2 A	V1: 0-12.5 A V _{SB} : 0-0.5 A	V1: 0-8.3 A V _{SB} : 0-1.2 A	V1: 0-8.3 A V _{SB} : 0-0.5 A
Output Power		240 W (Convection) 300 W (with 10 CFM Forced Air)	240 W (Convection) 300 W (with 10 CFM Forced Air)	240 W (Convection) 300 W (with 10 CFM Forced Air)	240 W (Convection) 300 W (with 10 CFM Forced Air)
PARD (20 MHz)		V1: < 240 mVpp, V _{SB} : < 120 mVpp			V1: < 360 mVpp, V _{SB} : < 120 mVpp
Hold-up Time	115 V _{AC}	> 12 ms (240 W)			
	230 V _{AC}	> 10 ms (300 W)			
Input					
Phase Input		Single Phase			
Input Voltage Range		90-264 V _{AC}			
Input Frequency		47-63 Hz			
Input Current	115 V _{AC}	< 4.0 A	< 4.0 A	< 4.0 A	< 4.0 A
	230 V _{AC}	< 2.0 A	< 2.0 A	< 2.0 A	< 2.0 A
Efficiency ¹⁾ at 100% Load	115 V _{AC}	> 93.0%			
	230 V _{AC}	> 94.0%			
Max Inrush Current (Cold Start)	115 V _{AC}	< 20 A			
	230 V _{AC}	< 40 A			
Power Factor	115 V _{AC}	> 0.95			
	230 V _{AC}	> 0.95			
Leakage Current		240 V _{AC}	< 0.75 mA		
Mechanical					
Case Cover / Chassis		-			
Dimensions (L × W × H)	mm	127 × 76.2 × 35.8	127 × 76.2 × 35.8	127 × 76.2 × 35.8	127 × 76.2 × 35.8
	inch	5.00 × 3.00 × 1.41	5.00 × 3.00 × 1.41	5.00 × 3.00 × 1.41	5.00 × 3.00 × 1.41
Unit Weight	kg	0.45	0.45	0.45	0.45
	lb	0.99	0.99	0.99	0.99
Cooling System		Convection / Forced Air			
MTBF ²⁾		> 700,000 hrs			
Environment					
Operating Temperature ³⁾		-25°C to +70°C			
Storage Temperature		-40°C to +85°C			
Operating Humidity		5 to 95% RH (Non-Condensing)			
Operating Altitude		PD3: 0 to 5,000 m (0 to 16,400 ft) PD2: 0 to 3,000 m (0 to 9,840 ft)			

Dimensions Reference



Notes

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

PJU (13.8V, 27.6V)



- 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

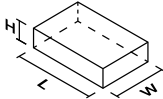
Applications



Building Automation

Output		PJU-13V60W□A□	PJU-13V60W□B□	PJU-27V60W□A□	PJU-27V60W□B□
Output Voltage		V1: 13.8 V, B+: 13.6 V	V1: 13.8 V, B+: 13.6 V	V1: 27.6 V, B+: 27.4 V	V1: 27.6 V, B+: 27.4 V
Output Voltage Range		V1: 13.52-14.00 V	V1: 13.52-14.00 V	V1: 27.04-28.00 V	V1: 27.04-28.00 V
Output Current		V1: 3.9 A, B+: 0.4 A	V1: 3.9 A, B+: 0.4 A	V1: 1.75 A, B+: 0.4 A	V1: 1.75 A, B+: 0.4 A
Output Power		60 W	60 W	60 W	60 W
PARD (20 MHz)		< 100 mVpp			
Hold-up Time (100% Load)	115 V _{AC}	> 10 ms	> 10 ms	> 10 ms	> 10 ms
Input					
Phase Input		Single Phase			
Input Voltage Range		90-264 V _{AC}			
Input Frequency		47-63 Hz			
Input Current	115 V _{AC}	< 1.2 A	< 1.2 A	< 1.2 A	< 1.2 A
	230 V _{AC}	< 0.8 A	< 0.8 A	< 0.8 A	< 0.8 A
Efficiency ¹⁾ at 100% Load	115 V _{AC}	> 85.0%		> 88.0%	
	230 V _{AC}	> 86.0%		> 89.0%	
Max Inrush Current (Cold Start)	115 V _{AC}	< 60 A			
	230 V _{AC}				
Power Factor		Conform to EN 61000-3-2			
Leakage Current (264 V _{AC})	TT/TN	< 0.5 mA			
	IT	< 1.0 mA			
Mechanical					
Case Cover / Chassis		SECC Steel			
Dimensions ²⁾ (L × W × H)	mm	101.6 × 50.8 × 30.6	101.6 × 50.8 × 30.6	101.6 × 50.8 × 30.6	101.6 × 50.8 × 30.6
	inch	4.00 × 2.00 × 1.20	4.00 × 2.00 × 1.20	4.00 × 2.00 × 1.20	4.00 × 2.00 × 1.20
Unit Weight ²⁾	kg	0.12	0.12	0.12	0.12
	lb	0.26	0.26	0.26	0.26
Cooling System		Convection			
MTBF ³⁾		> 350,000 hrs			
Environment					
Operating Temperature ⁴⁾		-20°C to +70°C			
Storage Temperature		-40°C to +85°C			
Operating Humidity		5 to 95% RH (Non-Condensing)			
Operating Altitude		0 to 5,000 m (0 to 16,400 ft)			

Dimensions Reference



Notes

- 1) At 25°C ambient temperature.
- 2) Open frame (without chassis and cover).
- 3) MTBF as per Telcordia SR-332 (I/P: 115 V_{AC} & 230 V_{AC}, O/P: 100% load).
- 4) Refer power de-rating in the product datasheet.
- 5) All parameters are specified at 25°C ambient temperature unless otherwise indicated.

PJL (48V)



- Lighting approvals to UL 8750, IEC 61347-2-13
- Low inrush current < 20 A
- Up to 90.0% efficiency
- Low earth leakage current < 500 μA
- Extreme low temperature operation at -40°C

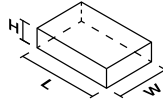
Applications



LED Lighting

Output		PJL-48V200WBAA	PJL-48V400WBAA	PJL-48V600WLAA
Output Voltage		48 V	48 V	48 V
Output Voltage Range		48-50 Vdc	48-50 Vdc	48-50 Vdc
Output Current		0-4.17 A	0-8.33 A	0-12.5 A
Output Power		150 W (Convection) 200 W (with 400 LFM Forced Air)	200 W (Convection) 400 W (with 400 LFM Forced Air)	300 W (Convection) 600 W (with 600 LFM Forced Air)
PARD (20 MHz) ¹⁾		< 480 mVpp	< 680 mVpp	< 880 mVpp
Hold-up Time (100% Load)	115 V _{AC}	> 5 ms		> 16 ms
	230 V _{AC}			
Input				
Phase Input		Single Phase		
Input Voltage Range		85-305 V _{AC}		
Input Frequency		47-63 Hz		
Input Current	115 V _{AC}	< 2.20 A	< 4.74 A	< 6.5 A
Efficiency at 100% Load ²⁾	230 V _{AC}	> 85.0%		> 87.5%
	230 V _{AC}	> 90.0%		
Max Inrush Current (Cold Start)	230 V _{AC}	< 20 A		< 12 A
Power Factor	115 V _{AC}	> 0.95		
	230 V _{AC}			
Leakage Current		< 500 μA		
Mechanical				
Case Cover / Chassis		-		
Dimensions (L x W x H)	mm	127.6 × 76.2 × 34.8	127 × 76.6 × 40.8	177.8 × 101.6 × 41.0
	inch	5.02 × 3.00 × 1.38	5.00 × 3.02 × 1.61	7.00 × 4.00 × 1.61
Unit Weight	kg	0.42	0.44	0.82
	lb	0.93	0.97	1.80
Cooling System		Convection / Forced Air		
MTBF ³⁾		> 500,000 hrs		
Environment				
Operating Temperature ⁴⁾		-40°C to +70°C	-40°C to +80°C	
Storage Temperature		-40°C to +85°C		
Operating Humidity		5 to 95% RH (Non-Condensing)		
Operating Altitude		0 to 5,000 m (0 to 16,400 ft)		

Dimensions Reference



Notes

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

DIN Rail Modules



Redundancy Module

N+1 redundancy allows a system to continue operating when one power supply unit fails unexpectedly

Current Range: 20-40 A



Buffer Module

Allows a system to continue operating during power disruptions lasting from milliseconds to seconds

Current Range: 20-40 A



DC-UPS Module

Allows a system to continue operating during power failures lasting from minutes to hours

Current Range: 10-40 A



Battery Module

Designed to support 2 x 12 V 7.2 AH lead-acid battery in series for 24 V system

Applications



Building Automation



Process Automation



Factory Automation



Machine Automation



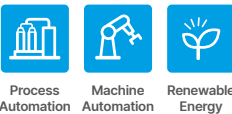
Renewable Energy

CliQ" Redundancy Module



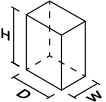
- Wide input and output range of 22-60 V_{DC}
- Very wide operating temperature from -40°C to +80°C
- Built-in 2 channel DC OK signal and alarm relay contact
- Support N+1 Redundancy connection
- Conformal coating on PCBAs to protect against common dust and chemical pollutants
- Hazardous Locations approval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

Applications



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

Dimensions Reference



Notes

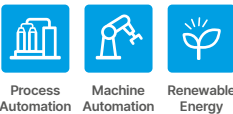
- 1) MTBF as per Telcordia SR-332 (Confidence level: 90%, I/P: 24 V_{DC}, O/P: 100% load) for vertical mounting orientation.
- 2) Refer power de-rating in the product datasheet.
- 3) All parameters are specified at 25°C ambient temperature unless otherwise indicated.

CliQ" Buffer Module



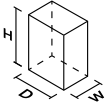
- Minimum buffering time of:
 - 250 ms @ 24 V / 20 A for DRB-24V020AB□
 - 200 ms @ 24 V / 40 A for DRB-24V040ABN
- Flexible operating buffering voltage modes:
Fixed mode at 22 V_{DC}; Dynamic mode for Vin-1 V
- Support parallel connection to extend buffering time
- Conformal coating on PCBAs to protect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

Applications



Output		DRB-24V020AB□	DRB-24V040ABN
Output Voltage		24 V _{DC} typ. (Depends on V _{in})	24 V _{DC} typ. (Depends on V _{in})
Output Voltage Range		22-28 V (Switch = "Fix 22 V" buffering starts if terminal voltage falls below 22 V) (Switch = "V _{in} - 1 V" buffering starts if terminal voltage is decreased by more than 1 V)	
Output Current		20.0 A Max	40.0 A Max
PARD (20 MHz)		< 200 mVpp, Buffering Mode	< 350 mVpp, Buffering Mode
Buffer Time		250 ms Min @ 24 V / 20 A load, 5 s Min @ 24 V / 1 A load	200 ms Min @ 24 V / 40 A load, 8 s Min @ 24 V / 1 A load
Input			
Input Voltage Range		22.8-28.8 V _{DC}	
Input Current		Charging Mode: < 0.6 A	Charging Mode: < 0.6 A
Input Power		2.5 W average (Standby Mode)	
Charging Time		< 30 s	< 40 s
Polarity Protection		Yes	Yes
Mechanical			
Case Cover / Chassis		Aluminium	
Dimensions (H x W x D)	mm	121 x 70 x 120.1	121 x 70 x 120.1
	inch	4.76 x 2.76 x 4.73	4.76 x 2.76 x 4.73
Unit Weight	kg	0.76	0.90
	lb	1.68	1.98
Cooling System		Convection	
LED Indicators		Green LED	
MTBF ¹⁾		> 800,000 hrs	> 800,000 hrs
Environment			
Operating Temperature ²⁾		-25°C to +75°C	
Storage Temperature		-25°C to +85°C	
Operating Humidity		5 to 95% RH (Non-Condensing)	
Operating Altitude		0 to 2,500 m (0 to 8,200 ft)	

Dimensions Reference



Notes

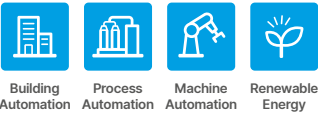
- 1) MTBF as per Telcordia SR-332 (Confidence level: 90%, I/P: 24 V_{DC}, O/P: 100% load) for vertical mounting orientation.
- 2) Refer power de-rating in the product datasheet.
- 3) All parameters are specified at 25°C ambient temperature unless otherwise indicated.

cliq" DC-UPS Module



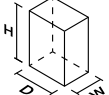
- Full corrosion resistant aluminium casing
- Suitable for 24 V system up to 40 A
- Built-in diagnostic monitoring for DC OK, Discharge and Battery Fail by relay contacts
- LED indicator for DC OK, Battery Charging, Battery Discharging, Battery Fail and Battery Reverse Polarity
- High MTBF > 500,000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

Applications



Output		DRU-24V40ABN
Output Voltage Range		23-28 V _{DC}
Output Current		40.0 A Max
Output Power		960 W Max
Input		
Input Voltage Range		24-28 V _{DC}
Input Current		Charging Mode: 2.0 A ± 1.0 A
Charging Time		< 3 hr ± 1 hr (for battery 24 V / 15 AH)
Efficiency		Charging Mode: > 70.0% Buffering Mode: > 99.0%
Mechanical		
Case Cover / Chassis		Aluminium
Dimensions (H × W × D)	mm	121 × 50 × 117.3
	inch	4.76 × 1.97 × 4.62
Unit Weight	kg	0.60
	lb	1.32
Cooling System		Convection
LED Indicators		Green LED Orange LED Red LED
MTBF ¹⁾		> 500,000 hrs
Environment		
Operating Temperature ²⁾		-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)

Dimensions Reference



Notes

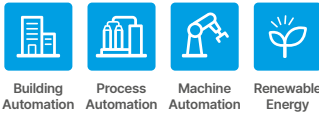
- 1) MTBF as per Telcordia SR-332 (Confidence level: 90%, I/P: 24 V_{DC}, O/P: 100% load) for vertical mounting orientation.
- 2) Refer power de-rating in the product datasheet.
- 3) All parameters are specified at 25°C ambient temperature unless otherwise indicated.

CHROME DC-UPS Module



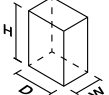
- Suitable for 24 V system up to 10 A
- Zero switch over time from loss of DC input to battery operation
- Built-in diagnostic monitoring for DC OK, Discharge and Battery Fail by relay contacts
- Full power for the entire temperature range from -20°C to +60°C
- LED indicator for DC OK, Battery Charging,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

Applications



Output		DRU-24V10ACZ
Output Voltage Range		23-28 V _{DC}
Output Current		10.0 A Max
Output Power		240 W Max
Input		
Input Voltage Range		24-28 V _{DC}
Input Current		Charging Mode: 0.5 A ± 0.1 A
Charging Time		< 30 hr ± 5 hr (for battery 24 V / 12 AH)
Efficiency		Charging Mode: > 80.0% Buffering Mode: > 99.0%
Mechanical		
Case Cover / Chassis		Plastic
Dimensions (H × W × D)	mm	91 × 71 × 55.6
	inch	3.58 × 2.80 × 2.19
Unit Weight	kg	0.14
	lb	0.31
Cooling System		Convection
LED Indicators		Green LED Orange LED Red LED
MTBF ¹⁾		> 500,000 hrs
Environment		
Operating Temperature ²⁾		-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)

Dimensions Reference



Notes

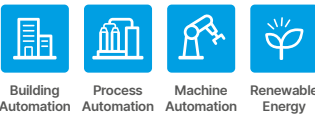
- 1) MTBF as per Telcordia SR-332 (Confidence level: 90%, I/P: 24 V_{DC}, O/P: 100% load) for vertical mounting orientation.
- 2) Refer power de-rating in the product datasheet.
- 3) All parameters are specified at 25°C ambient temperature unless otherwise indicated.

CliQ^M DC-UPS Module



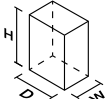
- Full corrosion resistant aluminium casing
- Selectable Charging Current
- Selectable Buffering Time to prevent battery over discharge
- Battery temperature protection to extend battery life
- Conformal coating on PCBAs to protect against common dust and chemical pollutants

Applications



	NEW		NEW	NEW
Output	DRU-24V10AMN		DRU-24V20AMN	DRU-24V40AMN
Output Voltage Range	17.5-29.5 V _{DC}		17.5-29.5 V _{DC}	17.5-29.5 V _{DC}
Output Current	10.0 A Max		20.0 A Max	40.0 A Max
Output Power	240 W Max		480 W Max	960 W Max
Input				
Input Voltage Range	18-30 V _{DC}			
Input Current	0.5 A, 1 A, 1.5 A, 2 A (typ.) (constant current)		0.75 A, 1.5 A, 2.25 A, 3 A (typ.) (constant current)	1 A, 2 A, 3 A, 4 A (typ.) (constant current)
Charging Time	< 9 hr ± 1 hr (2 A charging current for 24 V/12 AH battery)		< 6 hr ± 1 hr (3 A charging current for 24 V/12 AH battery)	< 4.5 hr ± 1 hr (4 A charging current for 24 V/12 AH battery)
Efficiency	Normal Operation: 98% typ.			
Mechanical				
Case Cover / Chassis		Aluminium		
Dimensions (H × W × D)	mm	124 × 38 × 117	124 × 38 × 117	124 × 50 × 117
	inch	4.88 × 1.50 × 4.61	4.88 × 1.50 × 4.61	4.88 × 1.97 × 4.61
Unit Weight	kg	0.52	0.53	0.66
	lb	1.15	1.17	1.46
Cooling System		Convection		
LED Indicators ¹⁾		Green LED Red LED Orange LED		
MTBF ²⁾		> 500,000 hrs		
Environment				
Operating Temperature ¹⁾		-30°C to +70°C		
Storage Temperature		-40°C to +85°C		
Operating Humidity		5 to 95% RH (Non-Condensing)		
Operating Altitude ³⁾		0 to 6,000 m (0 to 19,680 ft)		

Dimensions Reference



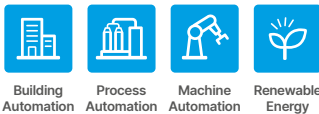
- Notes
- 1) Refer LED indicator status and power de-rating in the product datasheet.
 - 2) MTBF as per Telcordia SR-332.
 - 3) Approvals apply only up to 5,000 m (16,400 ft).
 - 4) All parameters are specified at 25°C ambient temperature unless otherwise indicated.

CliQ^M Battery Module



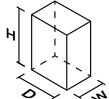
- Anti-corrosion powder coated chassis
- Suitable for 7.2 AH Lead-Acid battery
- Built-in battery voltage LED indicator
- Built-in battery over temperature protection (need to be used with the CliQ M DC-UPS modules)

Applications



		NEW
Battery		DRN-24V7AAEN
Nominal Battery Voltage		24 V _{DC} , SLA Sealed lead acid battery 2 x 12 V _{DC} , SLA Sealed lead acid battery
Battery Capability		7.2 AH lead-acid battery
Recommended Charging Voltage		27.6 V _{DC}
Battery Current		
Charging Current ¹⁾		2.1 A Max
Discharging Current		40 A Max
Battery Fuse		2 pcs in parallel
Mechanical		
Case Chassis		Metal
Dimensions (H × W × D)	mm	211.5 × 148 × 109.2
	inch	8.33 × 5.83 × 4.30
Unit Weight	kg	1.40
	lb	3.09
Cooling System		Convection
LED Indicators		Green LED
Environment		
Operating Temperature	Charging	0°C to +40°C
	Discharging	-10°C to +50°C
Storage Temperature		-15°C to +40°C
Operating Humidity		5 to 95% RH (Non-Condensing)
Operating Altitude		0 to 6,000 m (0 to 19,680 ft)

Dimensions Reference



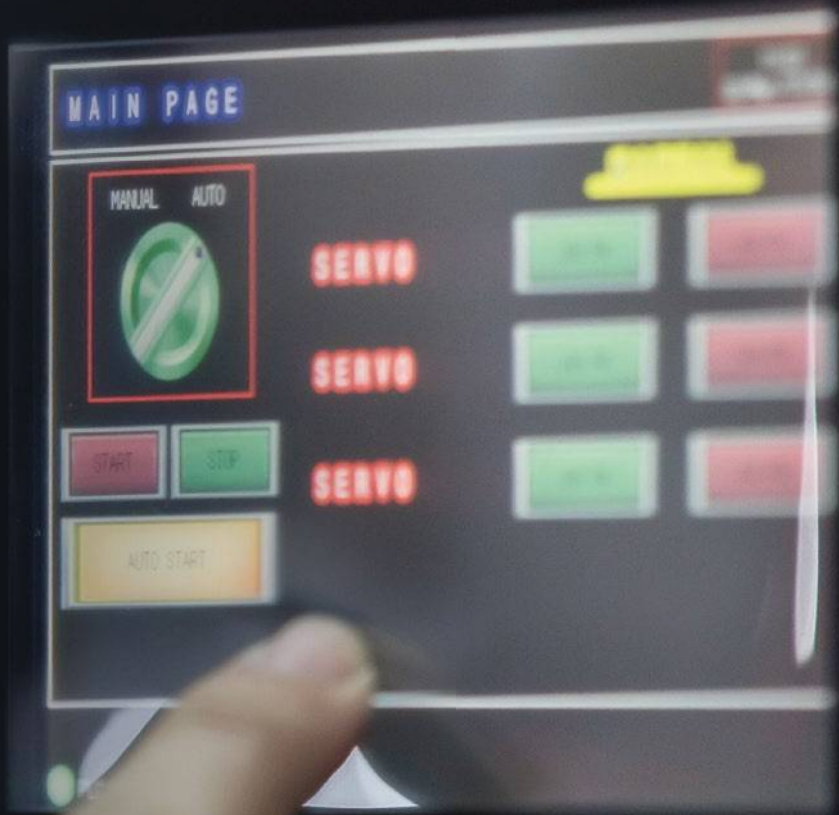
- Notes
- 1) Cannot exceed max charging current limitation of battery specification.
 - 2) All parameters are specified at 25°C ambient temperature unless otherwise indicated.

Adapter



ADT

Meet efficiency DoE Level VI & CoC Tier 2
Power Range: 60-150W



Applications



Test & Measurement

ADT (12 V, 15 V)

- Meet efficiency DoE Level VI
- Meet CoC Tier 2 (150W model)
- No load power consumption < 0.15W
- Fully enclosed plastic case
- Protection: short circuit / over voltage / overload / over temperature



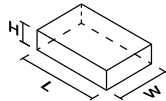
Applications



Test & Measurement

Output		ADT-060A12A□		ADT-150B12AA		ADT-060A15A□	
Output Voltage		12 V		12 V		15 V	
Output Current (Max)		5.0 A		12.5 A		4.0 A	
Output Power		60 W		150 W		60 W	
PARD (20 MHz)		< 240 mVpp @ 0°C to +40°C, < 480 mVpp @ -10°C to 0°C		< 240 mVpp @ 0°C to +40°C, < 480 mVpp @ -10°C to 0°C		< 300 mVpp @ 0°C to +40°C, < 600 mVpp @ -10°C to 0°C	
Hold-up Time	115 V _{AC}	12 ms typ.		40 ms typ.		12 ms typ.	
	230 V _{AC}	60 ms typ.		-		60 ms typ.	
Input							
Input Voltage Range		85-264 V _{AC}		90-264 V _{AC}		85-264 V _{AC}	
Input Frequency				47-63 Hz			
Input Current	115 V _{AC}	< 1.4 A		< 2.0 A		< 1.4 A	
	230 V _{AC}	< 1.0 A		< 1.0 A		< 1.0 A	
Efficiency at 100% Load	115 V _{AC}	87.6% typ.		89.0% typ.		87.9% typ.	
	230 V _{AC}	90.2% typ.				90.0% typ.	
Max Inrush Current (Cold Start)				No damage			
Power Factor	230 V _{AC}	-		> 0.90		-	
Leakage Current	240 V _{AC}			< 0.1 mA			
Mechanical							
Dimensions (L × W × H)	mm	108 × 46 × 29.5		155 × 76 × 30		108 × 46 × 29.5	
	inch	4.25 × 1.81 × 1.16		6.10 × 3.00 × 1.20		4.25 × 1.81 × 1.16	
Unit Weight	kg	0.18		0.54		0.18	
	lb	0.40		1.19		0.40	
Connector Type				ADT-060A□AA: Input: C6; Output: Tuning fork ADT-060A□AB: Input: C8; Output: Tuning fork ADT-150B12AA: Input: C6; Output: Barrel type			
Cooling System				Convection			
MTBF ¹⁾		> 700,000 hrs		> 300,000 hrs		> 700,000 hrs	
Environment							
Operating Temperature ²⁾				-10°C to +60°C			
Storage Temperature				-40°C to +85°C			
Operating Humidity				5 to 95% RH (Non-Condensing)			
Operating Altitude				0 to 5,000 m (0 to 16,400 ft)			
Protection Against Shock		Class II		Class I		Class II	

Dimensions Reference



- Notes
- 1) ADT-060A12A and ADT-060A15A, MTBF as per Telcordia SR-332 (I/P: 115 V_{AC}, O/P: 100% load).
 - ADT-150B12AA, MTBF as per Telcordia SR-332 (I/P: 100 V_{AC}, O/P: 100% load).
 - 2) Refer power de-rating in the product datasheet.
 - 3) All parameters are specified at 25°C ambient temperature unless otherwise indicated.

ADT (19 V, 24 V)

- Meet efficiency DoE Level VI
- Meet CoC Tier 2 (150W models)
- No load power consumption < 0.15 W
- Fully enclosed plastic case
- Protection: short circuit / over voltage / overload / over temperature

Applications

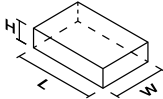


Test & Measurement



Output		ADT-060A19A□	ADT-120A19AA	ADT-150A19AA	ADT-060A24A□	ADT-090A24AA	ADT-120A24AA	ADT-150A24AA	ADT-150C24AC
Output Voltage		19 V	19.5 V	19.5 V	24 V	24 V	24 V	24 V	24 V
Output Current (Max)		3.2 A	6.15 A	7.7 A	2.5 A	3.75 A	5.0 A	6.25 A	6.25 A
Output Power		60.8 W	120 W	150 W	60 W	90 W	120 W	150 W	150 W
PARD (20 MHz)		< 380 mVpp @ 0°C to +40°C, < 760 mVpp @ -10°C to 0°C			< 480 mVpp @ 0°C to +40°C, < 960 mVpp @ -10°C to 0°C		< 240 mVpp @ 0°C to +40°C, < 480 mVpp @ -10°C to 0°C		
Hold-up Time	115 V _{AC}	12 ms typ.	> 20 ms	> 16 ms	12 ms typ.	40 ms typ.		30 ms typ.	16 ms typ.
	230 V _{AC}	60 ms typ.			60 ms typ.	-			
Input									
Input Voltage Range		85-264 V _{AC}		90-264 V _{AC}		85-264 V _{AC}		90-264 V _{AC}	
Input Frequency		47-63 Hz				47-63 Hz			
Input Current	115 V _{AC}	< 1.4 A	< 1.4 A	< 1.8 A	< 1.4 A	< 1.3 A	< 1.85 A	< 1.85 A	< 1.85 A
	230 V _{AC}	< 1.0 A	< 0.7 A	< 0.9 A	< 1.0 A	< 0.6 A	< 1.0 A	< 1.0 A	< 1.0 A
Efficiency at 100% Load	115 V _{AC}	88.1% typ.	90.0% typ.		88.8% typ.	90.0% typ.	91.0% typ.		90.0% typ.
	230 V _{AC}	90.3% typ.	91.5% typ.		90.1% typ.	91.5% typ.	92.0% typ.		91.0% typ.
Max Inrush Current (Cold Start)		No damage				No damage			
Power Factor	230 V _{AC}	-	> 0.9		-	> 0.9		> 0.9	
Leakage Current	240 V _{AC}	< 0.1 mA		< 0.25 mA	< 0.1 mA		< 250 μA		
Mechanical									
Dimensions (L × W × H)	mm	108 × 46 × 29.5	138 × 68.5 × 24.5	160 × 76.2 × 25.8	108 × 46 × 29.5	126 × 51 × 30	138 × 68.5 × 24.5	160 × 76.2 × 25.8	165.1 × 76.1 × 31.5
	inch	4.25 × 1.81 × 1.16	5.43 × 2.70 × 0.96	6.30 × 3.00 × 1.02	4.25 × 1.81 × 1.16	4.96 × 2.00 × 1.18	5.43 × 2.70 × 0.96	6.30 × 3.00 × 1.02	6.50 × 3.00 × 1.24
Unit Weight	kg	0.18	0.34	0.41	0.18	0.18	0.34	0.41	0.47
	lb	0.40	0.75	0.90	0.40	0.40	0.75	0.90	1.04
Connector Type		ADT-060A19AA, ADT-120A19AA: Input: C6; Output: Tuning fork ADT-060A19AB: Input: C8; Output: Tuning fork ADT-150A19AA: Input: C6; Output: Barrel type				ADT-060A24AA, ADT-120A24AA: Input: C6; Output: Tuning fork ADT-090A24AA: Input: C6; Output: Barrel type ADT-060A24AB: Input: C8; Output: Tuning fork ADT-150A24AA: Input: C6, Output: Tuning fork ADT-150C24AC: Input: C14, Output: 4-pin DIN			
Cooling System		Convection				Convection			
MTBF ¹⁾		> 700,000 hrs	> 300,000 hrs		> 700,000 hrs		> 300,000 hrs		
Environment									
Operating Temperature ²⁾		-10°C to +60°C				-10°C to +60°C			
Storage Temperature		-40°C to +85°C				-40°C to +85°C			
Operating Humidity		5 to 95% RH (Non-Condensing)				5 to 95% RH (Non-Condensing)			
Operating Altitude		0 to 5,000 m (0 to 16,400 ft)				0 to 5,000 m (0 to 16,400 ft)			
Protection Against Shock		Class II	Class I		Class II		Class I		

Dimensions Reference



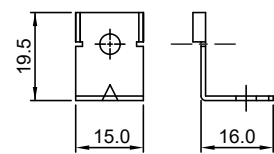
Notes

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

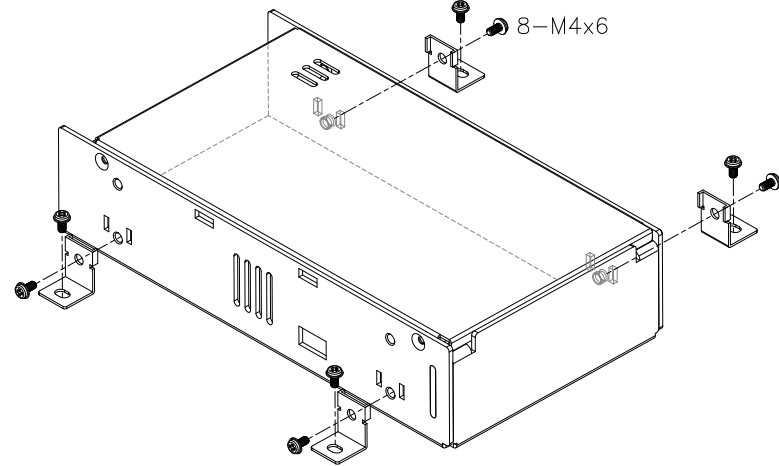
Accessories

Panel Mount Accessories

• LM-01



Accessories Assembly



Model Information

Item	Model Number	Compatible Models
	LM-01	PMT-12V350W2B□□ PMT-24V350W2B□□ PMT-36V350W2B□□ PMT-48V350W2B□□ PMF-4V320WC□□□ PMF-5V320WC□□□ PMF-24V240WC□□□, PMF-24V320WC□□□ PMR-4V320WC□□A, PMR-4V320WD□□A PMR-5V320WC□□A, PMR-5V320WD□□A

Contact Us

For more information, find us at:

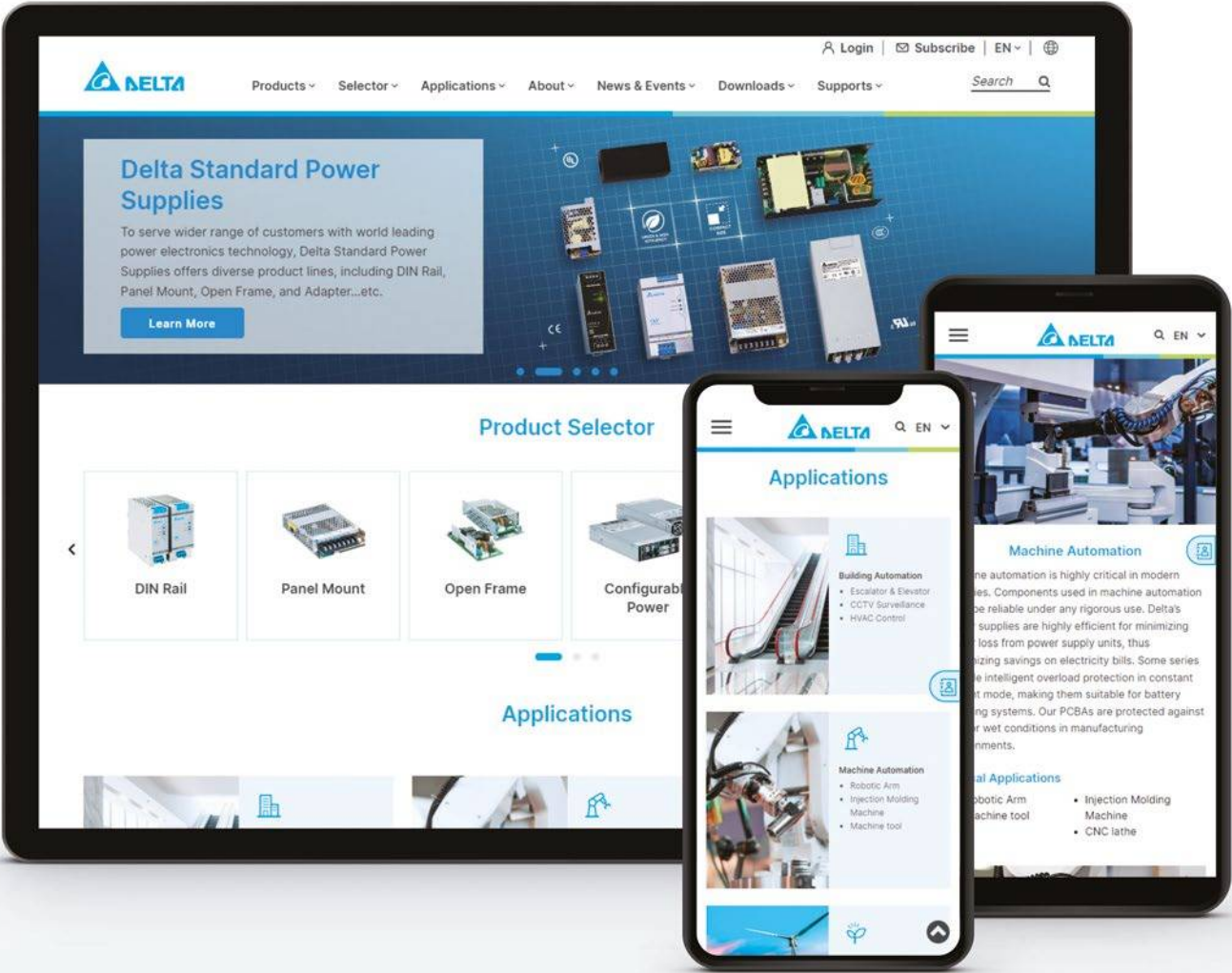
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FAQs

- 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)?**

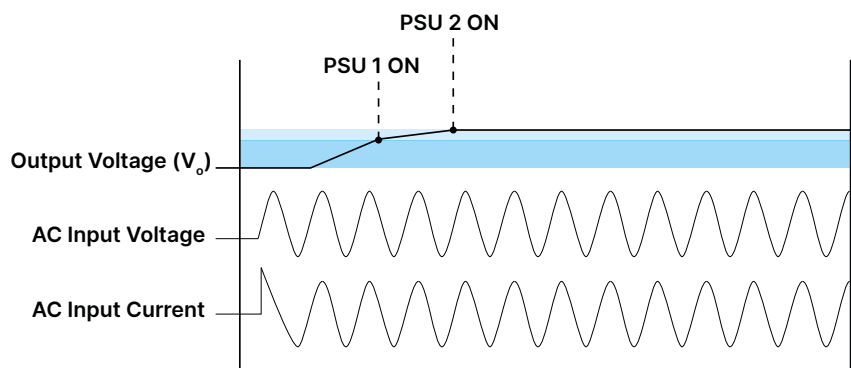
 - Input Type (Single Phase or 3 Phase)
 - Output Power
 - Efficiency and Reliability

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 Force-GT DIN rail power supply easily give our users a substantial efficiency of up to 95%. 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.



Notes

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 provides all information in the catalog and datasheets on an "AS IS" basis and does not offer any kind of warranty through the information for using the product. In the event of any discrepancy between the information in the catalog and datasheets, the datasheets shall prevail (please refer to www.DeltaPSU.com for the latest datasheets information). Delta shall have no liability of indemnification for any claim or action arising from any error for the provided information in the catalog and datasheets. Customer shall take its responsibility for evaluation of using the product before placing an order with Delta.

Delta reserves the right to make changes to the information described in the catalog and datasheets without notice.

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 back 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.

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