

DIN Rail Power Supply

Product Introduction

The CliQ and CliQ II series DIN Rail Power Supply from one of the world's leading power supply companies, Delta Electronics Group, offer state-of-the-art designs made to withstand harsh industrial environments in accordance to ATEX requirements. The rugged metal or plastic case is both shock and vibration resistant according to IEC 60068-2. For more information or enquiries, please do not hesitate to contact your local Delta Electronics distributor or visit www.DeltaPSU.com.



Highlights & Features

- Universal AC input voltage without power de-rating
- Power Boost of 150% for:
 - CliQ: 3 seconds (24V/480W: 200% for 2 seconds)
 - CliQ II: 5 seconds (24V/480W: 200% for 2 seconds)
- Full corrosion resistant Aluminium chassis
- Conforms to harmonic current IEC/EN 61000-3-2, Class A
- Conformal coating on PCBA to protect against chemical and dust pollutants (Except DRP-24V48W1AZ and DRP024V060W1AZ)
- ATEX and Class I, Div 2 for selected models
- Extreme low temperature cold start at -40°C for CliQ II

Typical Applications



- Robotic arms
- Loom machines
- Air condition cleaning machines
- Hazardous locations
- Telecom POE applications
- CNC laser cutting machines
- Packing machines
- Building equipments
- Apparatus construction

Model Numbering

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

The Chrome DIN Rail Power Supply is designed for use in compact cabinets which are widely used in home automation and Food & Beverages industries. Current available specifications are with 12V and 24V output voltage for power ratings of 10W to 100W. The Chrome series features universal AC input range and is certified to international safety standard to Information Technology Equipment (ITE) and industrial Control Equipment (ICE).

CHROME



Highlights & Features

- Class II Double Isolation (No earth connection is required)
- Universal AC input voltage without power de-rating
- Can be installed in compact cabinets
- NEC Class 2 power supply and Limited Power Source (LPS) approvals
- Conforms to harmonic current IEC/EN 61000-3-2, Class A
- Safety approval according to IEC/EN/UL 60950-1 (ITE standard) and UL 508 (Industrial standard)

Typical Applications



- Door bell systems
- Household applications
- Gate remote control systems

- Espresso machines
- Traffic signals
- Automatic feeders

- Blending machines
- Pump control / Irrigation
- Intelligent foot switch

Model Numbering

DR	C –	XXV	XXW	1	A	Z
DIN Rail	Product Type C - Isolation Class II Power Supply	Output Voltage	Output Power	Phase Input 1 - Single Phase	No PFC	Delta Standard

DIN Rail Modules

Product Introduction

The CliQ II series DIN Rail Module from one of the world's leading power supply companies, Delta Electronics Group, offer state-of-the-art designs made to withstand harsh industrial environments in accordance to ATEX requirements. The rugged metal or plastic case is both shock and vibration resistant according to IEC 60068-2. For more information or enquiries, please do not hesitate to contact your local Delta Electronics distributor or visit www.DeltaPSU.com.



Redundancy Modules

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



DC-UPS Module

- Full corrosion resistant Aluminium chassis
- Maximum output current up to 40A for 24V application
- Wide operating temperature range from -20°C to +70°C
- High MTBF > 500,000 hrs per Telcordia SR-332
- Built-in battery polarity protection circuit
- Built-in relay contacts
- Conformal coating option on PCBA to protect against chemical and dust pollutants



Buffer Modules

- Minimum buffering time of:
 - 250ms @ 24V/20A for DRB-24V020AB
 - 200ms @ 24V/40A for DRB-24V040AB
- Flexible operating buffering voltage modes:
 - Fixed mode at 22Vdc
 - Dynamic mode for $V_{in} - 1V$
- Support parallel connection to extend buffering time
- Conformal coating option on PCBA to protect against chemical and dust pollutants
- Hazardous Locations approval to ATEX and Class I, Div 2

Redundancy Modules Model Numbering

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

DC-UPS and Buffer Modules Model Numbering

DR	–	24V	XXXA	B	
DIN Rail	Product Type U - DC-UPS Module B - Buffer Module	Output Voltage	Output Current	CliQ II Series	A - Metal Case, with Class I, Div 2 N - Metal Case, without Class I, Div 2

Product List



				
	12V Output Single Phase			
Model Name	DRP012V015W1A	DRP012V030W1A	DRP012V060W1AA	DRP012V100W1AA
Output Voltage Range	11-14V	11-14V	11-14V	11-14V
Output Current / Power	1.25A / 15W	2.50A / 30W	5.00A / 60W	8.33A / 100W
Input Voltage Range	85-264Vac (DC input range 120-375Vdc) ¹⁾			
Input Current	< 0.37A @ 115Vac, < 0.22A @ 230Vac	< 0.70A @ 115Vac, < 0.42A @ 230Vac	< 1.35A @ 115Vac, < 0.80A @ 230Vac	< 2.50A @ 115Vac, < 1.50A @ 230Vac
Operating Temperature	-20°C to +80°C			
Dimensions	100 x 32 x 100.6 mm	100 x 32 x 100.6 mm	121 x 32 x 120 mm	121 x 50 x 118.7 mm

						
	24V Output Single Phase					
Model Name	DRP-24V48W1AZ	DRP024V060W1AZ	DRP024V060W1AA	DRP024V120W1AA	DRP024V240W1AA	DRP024V480W1AA
Output Voltage Range	22-26V	22-28V	22-28V	22-28V	22-28V	22-28V
Output Current / Power	2.00A / 48W	2.50A / 60W	2.50A / 60W	5.00A / 120W	10.0A / 240W	20.0A / 480W
Input Voltage Range	85-264Vac (DC input range 120-375Vdc) ¹⁾					
Input Current	< 1.40A @ 115Vac, < 0.70A @ 230Vac	< 1.10A @ 115Vac, < 0.70A @ 230Vac	< 1.10A @ 115Vac, < 0.70A @ 230Vac	< 1.40A @ 115Vac, < 0.80A @ 230Vac	< 2.90A @ 115Vac, < 1.50A @ 230Vac	< 5.70A @ 115Vac, < 2.80A @ 230Vac
Operating Temperature	-20°C to +70°C		-20°C to +80°C			
Dimensions	100 x 32 x 100.6 mm	120.6 x 32 x 113 mm	121 x 32 x 120 mm	121 x 50 x 118.7 mm	121 x 85 x 118.5 mm	121 x 160 x 118.5 mm

*End-of-Life:
December 31, 2013

				
	24V Output Three Phase			
Model Name	DRP024V060W3AA*	DRP024V120W3AA	DRP024V240W3AA	DRP024V480W3AA
Output Voltage Range	22-28V	22-28V	22-28V	22-28V
Output Current / Power	2.50A / 60W	5.00A / 120W	10.0A / 240W	20.0A / 480W
Input Voltage Range	3 x 320-575Vac or 2 x 360-575Vac (DC input range 450-800Vdc) ¹⁾			3 x 320-575Vac (DC input range 450-800Vdc) ¹⁾
Input Current	< 0.30A/Phase @ 400Vac, < 0.20A/Phase @ 500Vac	< 0.50A/Phase @ 400Vac, < 0.40A/Phase @ 500Vac	< 0.80A/Phase @ 400Vac, < 0.70A/Phase @ 500Vac	< 1.60A/Phase @ 400Vac, < 1.10A/Phase @ 500Vac
Operating Temperature	-20°C to +80°C			
Dimensions	121 x 70 x 118.5 mm	121 x 70 x 118.4 mm	121 x 85 x 120.5 mm	121 x 160 x 118.5 mm

1) All models are certified for DC input except DRP-24V48W1AZ which still fulfills the test conditions.



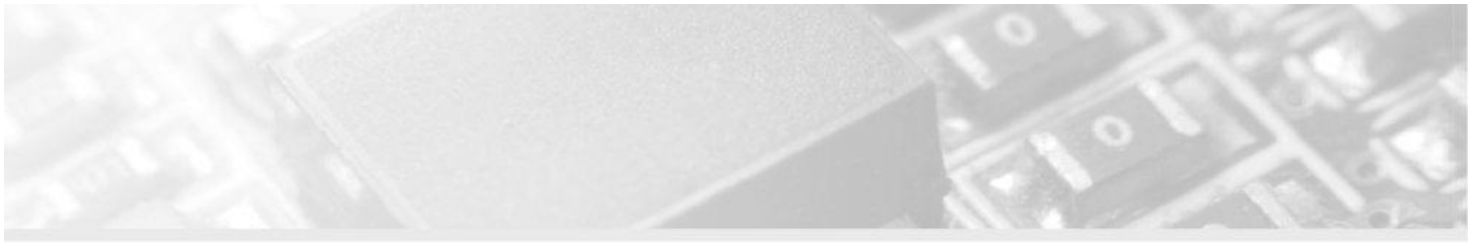
	Class 2				
					
	24V Output Single Phase				
Model Name	DRP024V060W1N	DRP024V060W1B	DRP024V120W1B	DRP024V240W1B	DRP024V480W1B
Output Voltage Range	24-28V	24-28V	24-28V	24-28V	24-28V
Output Current / Power	2.50A / 60W	2.50A / 60W	5.00A / 120W	10.0A / 240W	20.0A / 480W
Input Voltage Range	85-264Vac (DC input range 120-375Vdc) ²⁾				
Input Current	< 1.50A @ 115Vac, < 0.80A @ 230Vac	< 1.40A @ 115Vac, < 0.80A @ 230Vac	< 2.20A @ 115Vac, < 1.10A @ 230Vac	< 2.50A @ 115Vac, < 1.30A @ 230Vac	< 5.00A @ 115Vac, < 3.00A @ 230Vac
Operating Temperature	-25°C to +80°C				-25°C to +75°C
Dimensions	120.6 x 32 x 119.3 mm	121 x 32 x 125 mm	121 x 50 x 123.1 mm	121 x 85 x 124.1 mm	121 x 144 x 118.6 mm

	NEW				
					
	24V Output Three Phase				
Model Name	DRP024V060W3B	DRP024V120W3B	DRP024V240W3B	DRP024V480W3B	DRP024V960W3B
Output Voltage Range	24-28V	24-28V	24-28V	24-28V	24-28V
Output Current / Power	2.50A / 60W	5.00A / 120W	10.0A / 240W	20.0A / 480W	40.0A / 960W
Input Voltage Range	3 x 320-600Vac or 2 x 360-600Vac ³⁾ (DC input range 450-800Vdc) ²⁾				
Input Current	< 0.30A/Phase @ 400Vac, < 0.25A/Phase @ 500Vac	< 0.50A/Phase @ 400Vac, < 0.40A/Phase @ 500Vac	< 0.75A/Phase @ 400Vac, < 0.65A/Phase @ 500Vac	< 1.00A/Phase @ 400Vac, < 0.75A/Phase @ 500Vac	< 1.70A/Phase @ 400Vac, < 1.40A/Phase @ 500Vac
Operating Temperature	-25°C to +80°C				-25°C to +65°C
Dimensions	121 x 50 x 117.3 mm	121 x 50 x 117.3 mm	121 x 70 x 117.3 mm	121 x 140 x 117.3 mm	121 x 255 x 117.3 mm




	NEW			
				
	48V Output Single Phase			
Model Name	DRP048V060W1B	DRP048V120W1B	DRP048V240W1B	DRP048V480W1B
Output Voltage Range	48-56V	48-56V	48-56V	48-56V
Output Current / Power	1.25A / 60W	2.50A / 120W	5.00A / 240W	10.0A / 480W
Input Voltage Range	85-264Vac (DC input range 120-375Vdc) ²⁾			
Input Current	< 1.40A @ 115Vac, < 0.80A @ 230Vac	< 2.20A @ 115Vac, < 1.10A @ 230Vac	< 2.50A @ 115Vac, < 1.30A @ 230Vac	< 5.00A @ 115Vac, < 3.00A @ 230Vac
Operating Temperature	-25°C to +80°C			-25°C to +75°C
Dimensions	121 x 32 x 125 mm	121 x 50 x 123.1 mm	121 x 85 x 124.1 mm	121 x 144 x 118.6 mm

2) All models fulfill the test conditions except DRP024V060W1N, DRP024V480W3B and DRP024V960W3B which are certified for DC input.

3) For DRP024V060W3B, DRP024V120W3B and DRP024V240W3B, input voltage above 575Vac to 600Vac is not included in the safety approval. Additional testing might be necessary.



		PRELIMINARY	
		Buffer Modules	
			
Model Name	DRB-24V020AB	DRB-24V040AB	
Output Voltage	24Vdc typ. (Depends on V_{in})	24Vdc typ. (Depends on V_{in})	
Output Current	20.0A	40.0A	
Input Voltage Range	22.8-28.8Vdc		
Input Current	Charging Mode: < 0.6A Discharging Mode: < 20A	Charging Mode: < 0.6A Discharging Mode: < 40A	
Operating Temperature	-25°C to +75°C		
Dimensions	121 x 70 x 120.1 mm	121 x 70 x 120.1 mm	

		PRELIMINARY			
		Redundancy Modules		DC-UPS Module	
					
Model Name	DRR-20	DRR-40	Model Name	DRU-24V40AB	
Output Current (Nominal)	20.0A	40.0A	Output Voltage	24Vdc typ. (Depends on V_{in})	
Voltage Drop ($V_{in} - V_{out}$)	Typical 0.65V			Output Current	40.0A Max
Input Voltage Range	22-60Vdc			Input Voltage Range	24-28Vdc
Input Current (Nominal)	(1+1 Redundancy) = 2 x 12.5A (N+1 Redundancy) = 2 x 10A (Single use) = 20A	(1+1 Redundancy) = 2 x 25A (N+1 Redundancy) = 2 x 20A (Single use) = 40A		Input Current	Charging Mode: 20A ± 1A Discharging Mode: 40A Max
Operating Temperature	-40°C to +80°C			Operating Temperature	-20°C to +70°C
Dimensions	121 x 50 x 122.1 mm	121 x 50 x 122.1 mm	Dimensions	121 x 50 x 117.3 mm	

CHROME

	NEW	PRELIMINARY	NEW	NEW
	Class 2		Class 2	
				
	12V Output Single Phase		24V Output Single Phase	
Model Name	DRC-12V30W1AZ	DRC-12V60W1AZ	DRC-24V10W1AZ	DRC-24V100W1AZ
Output Voltage Range	11.5-14.5V	11.5-14.0V	24V	20-24.48V
Output Current / Power	2.10A / 30W	4.50A / 60W	0.42A / 10W	3.80A / 91.2W
Input Voltage Range	90-264Vac (DC input range 125-375Vdc) ⁴⁾			
Input Current	< 0.80A @ 115Vac, < 0.60A @ 230Vac	< 1.5A @ 115Vac, < 0.80A @ 230Vac	< 0.30A @ 115Vac, < 0.20A @ 230Vac	< 2.20A @ 115Vac, < 1.00A @ 230Vac
Operating Temperature	-25°C to +71°C			
Dimensions	91 x 53 x 55.6 mm	91 x 71 x 55.6 mm	91 x 18 x 55.6 mm	91 x 89.9 x 55.6 mm

4) All models fulfill the test conditions for DC Input.