

CliQ II DIN Rail Modules

Redundancy Modules



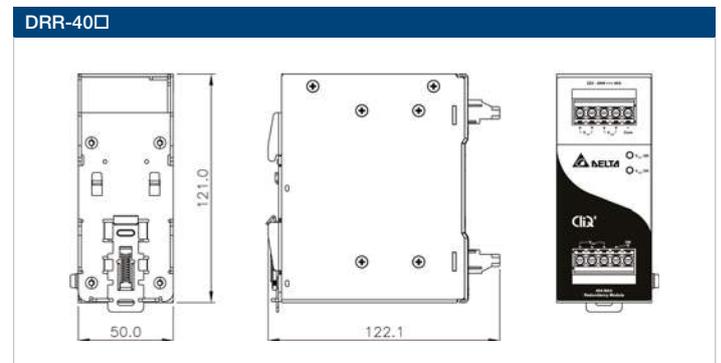
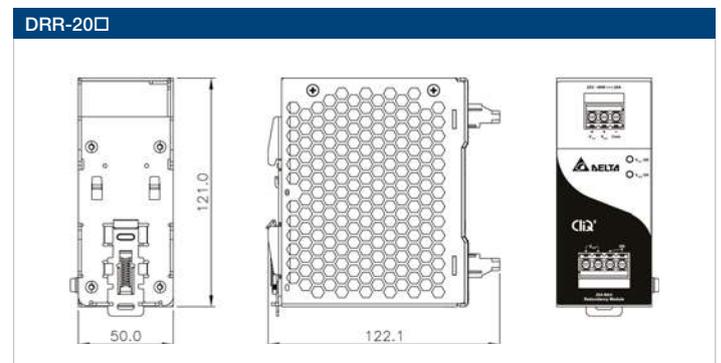
HIGHLIGHTS & FEATURES

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

GENERAL SPECIFICATIONS

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

MECHANICAL DRAWINGS



*Units in mm

Notes

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

DC-UPS Module



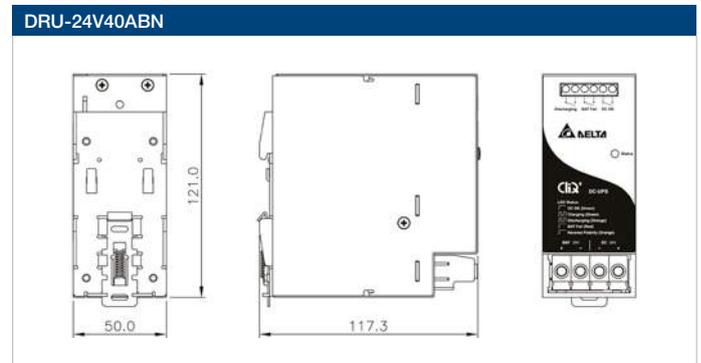
HIGHLIGHTS & FEATURES

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

GENERAL SPECIFICATIONS

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

MECHANICAL DRAWINGS



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CliQ II DIN Rail Modules

Buffer Modules



HIGHLIGHTS & FEATURES

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

GENERAL SPECIFICATIONS

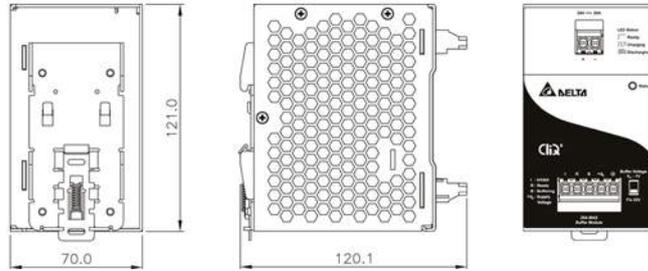
OUTPUT	DRB-24V020AB□	DRB-24V040ABN
Output Voltage	24Vdc typ. (Depends on V_{in})	24Vdc typ. (Depends on V_{in})
Output Voltage Range	22-28V (Switch = "Fix 22V" buffering starts if terminal voltage falls below 22V) (Switch = " $V_{in} - 1V$ " buffering starts if terminal voltage is decreased by more than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

Notes

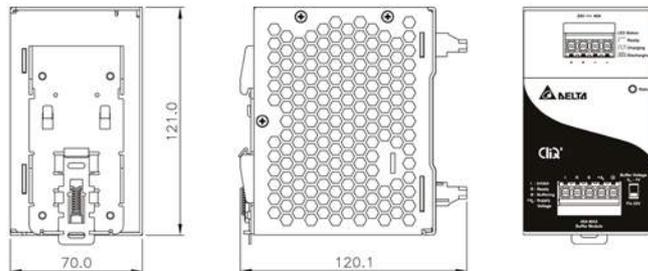
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MECHANICAL DRAWINGS

DRB-24V020AB□



DRB-24V040ABN



*Units in mm