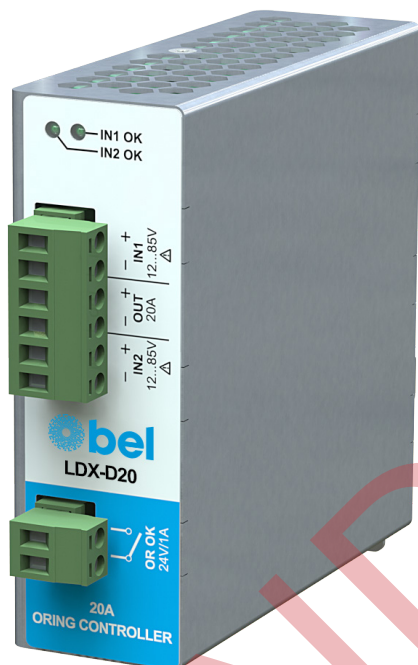


LDX-D20

20 A DIN Rail Active Redundancy (ORing) Module

LDX-D20 is a Universal Active ORing Controller used for redundant connection of two DIN rail DC power supplies of same rating, with any voltage in the range 12 – 85 VDC and Load Current ≤ 20 A.



FEATURES

- Wide input voltage range: 12 - 85 VDC
- Extremely low loss - up to 99% efficiency
- Output 20 A
- Pluggable connectors
- Up to 70°C operating temperature with no derating
- Ultra compact size in aluminum enclosure
- Dimensions: 35 x 103 x 104 mm



1. INPUT SPECIFICATIONS

PARAMETER	DESCRIPTION / CONDITIONS	SPECIFICATION
DC Input Voltage	Rated	12 - 85 VDC
DC Input Current	Rated	20 A
Standby Power		< 0.2 W
Input Protections	Overvoltage protection Reverse polarity connection	≥ 100 VDC

2. OUTPUT SPECIFICATIONS

PARAMETER	DESCRIPTION / CONDITIONS	SPECIFICATION
Output Voltage	Rated	12 - 85 VDC
Output Current (Continuous)		20 A
Output Current (Peak)		> 100 A
Conduction Resistance		< 9 mΩ

3. ENVIRONMENTAL, EMC & SAFETY SPECIFICATIONS

PARAMETER	DESCRIPTION / CONDITIONS	SPECIFICATION
Operating Temperature	Start-up type tested: - 40°C, possible at Vnom with load deration.	-40 to +70 °C
Storage Temperature		-40 to +80 °C
Derating	No derating	
Dissipated Power		< 4 W
Humidity	Non-condescending	5 - 95 % RH
Life Time Expectancy	Ta = 25°C, full load	354 655 (40.5) hrs (years)
MTBF	MIL-HDBK-217F at Ta = 25°C, full load	> 700 000 hrs
Overvoltage Category	EN 50178	I
Pollution Degree	IEC 60664-1	2
Cooling	Natural convection	
Isolation	Enclosure to live parts	0.75 kVDC
Safety Standards & Approvals	UL 508 (reference) IEC/EN 61010-1 IEC/EN 61010-2-201 IEC/EN 60950	
EMC Emissions	EN 55011 / CISPR 11 EN 55022 / CISPR 22	Class A Class A
EMC Immunity	EN 61000-4-2 EN 61000-4-3 EN 61000-4-4 EN 61000-4-5 EN 61000-4-11	Level 3 Level 3 Level 3 Level 1 Level 2
Protection Degree	EN 60529	IP20
Vibration Sinusoidal	IEC 60068-2-6	5-17.8 Hz: ±1.6 mm; 17.8-500 Hz: 2 g 2 Hours / axis (X,Y,Z)
Shock	IEC 60068-2-27	30 g 6 ms, 20 g 11 ms; 3 bumps / direction, 18 bumps total

4. USER INTERFACE

PARAMETER	DESCRIPTION / CONDITIONS
OvStatus Signals	IN1 OK - green LED IN2 OK - green LED Redundancy available when IN1 OK & IN2 OK simultaneously OR OK - dry contact (NO, 24 VDC / 1 A)

5. MECHANICAL SPECIFICATIONS

PARAMETER	DESCRIPTION / CONDITIONS	SPECIFICATION
Dimensions		35 x 103 x 104 mm 1.38 x 4.05 x 4.09 in
Weight		250 g
In/Out Connection Terminals	Screw type pluggable (24 - 12 AWG)	2.5 mm ²
Signal Connection Terminals	Screw type pluggable (24 - 12 AWG)	2.5 mm ²
Case Material	Aluminum	

6. PIN LAYOUT & DESCRIPTION



INPUT CONNECTION	IN1 + = Positive DC (Power Supply) IN1 - = Negative DC (Power Supply) IN2 + = Positive DC (Power Supply) IN2 - = Negative DC (Power Supply)
OUTPUT CONNECTION	OUT + = Positive DC (Load) OUT - = Negative DC (Load)
SIGNALING	OR OK: dry contact • NO • COM

7. MECHANICAL DRAWING

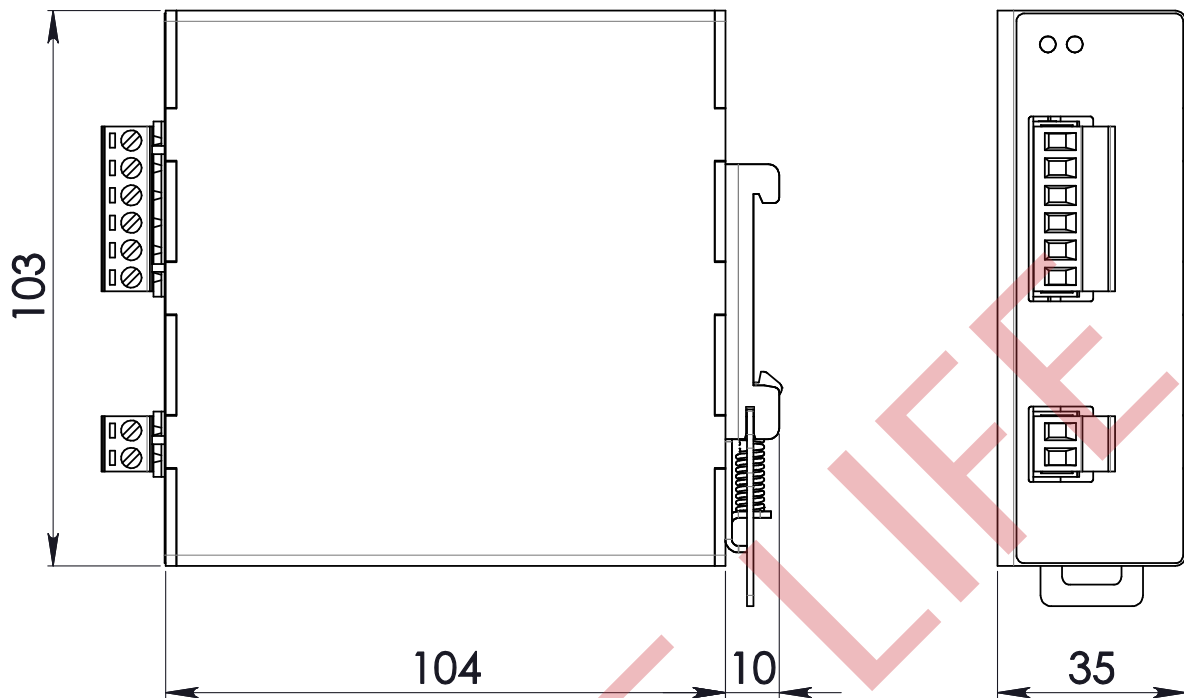


Figure 1. Mechanical Drawing

Notes:

Technical parameters are typical, measured in laboratory environment at 25°C and 24 VDC, at nominal values, after minimum 5 minutes of operation. Power rating, losses, efficiency, ripple, thermal behaviour and start-up may change outside of the nominal rated input range. Contact factory for details.

NUCLEAR AND MEDICAL APPLICATIONS - Products are not designed or intended for use as critical components in life support systems, equipment used in hazardous environments, or nuclear control systems.

TECHNICAL REVISIONS - The appearance of products, including safety agency certifications pictured on labels, may change depending on the date manufactured. Specifications are subject to change without notice.