

# LDX-D20

## Active ORing Controller

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  $\leq$  20 A.



### Key Features & Benefits

- Ultra Compact Redundancy Module
- Wide input voltage range: 12 – 85 VDC (on a single model)
- Out: 20 A Max
- Extremely low loss up to 99% efficiency
- Pluggable connectors
- Hot pluggable
- Up to 70°C operating temperature with no derating



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## 1. TECHNICAL SPECIFICATIONS

PARAMETER	DESCRIPTION / CONDITION	SPECIFICATION	
Input DC Voltage Range		12 - 85 VDC	
Maximum Input Current		20 A	
Output DC Voltage Range		12 - 85 VDC	
Maximum Continuous Output Current		20 A	
Peak Output Current		> 100 A	
Conduction Resistance		< 9 mΩ	
Maximum Dissipated Power		< 4 W	
No Load Input Power		< 0.2 W	
Status Signals	IN1 OK green LED IN2 OK green LED Redundancy IN1OK & IN2OK simultaneously Dry contact (1 A / 30 V)		
Input Protection	Overvoltage Reverse polarity connection	≥ 100 V	
Operating Temperature	No derating	- 40°C to 70°C	
Storage Temperature		- 40°C to +80°C	
Humidity	Non-condensing	5 - 95% r.H.	
Overvoltage Category		III	
Pollution Degree		2 (IEC664-1)	
Insulation Enclosure To Live Parts		0.75 kVDC	
Safety Standards	UL508 (reference) EN60950 (reference)		
EMC	Emission	EN55022:2010 (CISPR22)	Class A
		EN55011:2009 /A1:2010	Class A
	Immunity	EN61000-4-2:2008	Level 3
		EN61000-4-3:2006 /A2:2010	Level 3
		EN61000-4-4:2012	Level 3
		EN61000-4-5:2014	Level 1
	EN61000-4-11:2004 /A1:2010	Level 2	
Protection Degree	EN60529:1989 /A:2013	IP20	
Vibration Sinusoidal	IEC 60068-2-6:2007	5-17.8 Hz: ±1.6 mm; 17.8-500 Hz: 2g 2 Hours / axis (X,Y,Z)	
Shock	IEC 60068-2-27:2008	30 g 6 ms, 20g 11ms; 3 bumps / direction, 18 bumps total	

### NOTES:

- Technical parameters are typical, measured in laboratory environment at 25°C and 240 VDC.
- Power rating, losses, efficiency, ripple, thermal behaviour and start-up may change outside of the nominal rated input range. Contact factory for details.
- Data may change without prior notice in order to improve the product.

## 2. MECHANICAL SPECIFICATIONS

PARAMETER	DESCRIPTION / CONDITION	SPECIFICATION
Weight		250 g
Dimensions		35 x 103 x 104 mm
Mounting Rail		IEC 60715/H15/TH35-7.5(-15)
IN / OUT Connectors	Pluggable screw type (24 – 12 AWG), 6 poles	2.5 mm <sup>2</sup>
Dry Contact Connector	Pluggable screw type (24 – 12 AWG), 2 poles	2.5 mm <sup>2</sup>
Case Material	Aluminum	

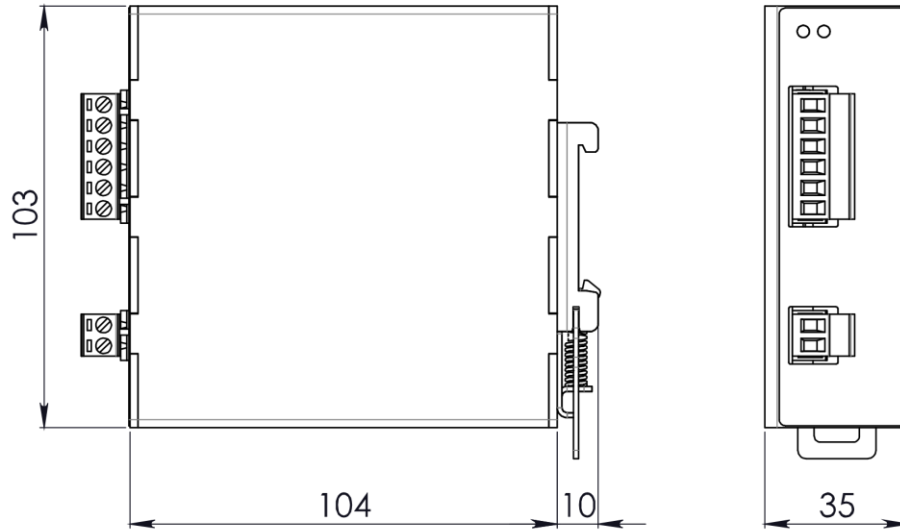


Figure 1. Mechanical Drawing

### 3. PIN LAYOUT & DESCRIPTION



- | INPUT CONNECTION   |
|--|
| <ul style="list-style-type: none"> <li>IN1 (+/-) = connect DC (+/-) power supply</li> <li>IN2 (+/-) = connect DC (+/-) power supply</li> </ul> |
| OUTPUT CONNECTION  |
| <ul style="list-style-type: none"> <li>OUT (+/-) = connect DC (+/-) Load</li> <li>Dry contact = NC</li> </ul>                                  |

For more information on these products consult: [tech.support@psbel.com](mailto:tech.support@psbel.com)

**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.



Asia-Pacific  
+86 755 298 85888

Europe, Middle East  
+353 61 225 977

North America  
+1 408 785 5200