



### ■ Main Features

- ⌋ Wide input voltage range: 12...85Vdc
- ⌋ Extremely low loss - up to 99% efficiency
- ⌋ Ultra compact
- ⌋ Pluggable connectors
- ⌋ Up to 70°C operating temperature with no derating

## TECHNICAL DATA

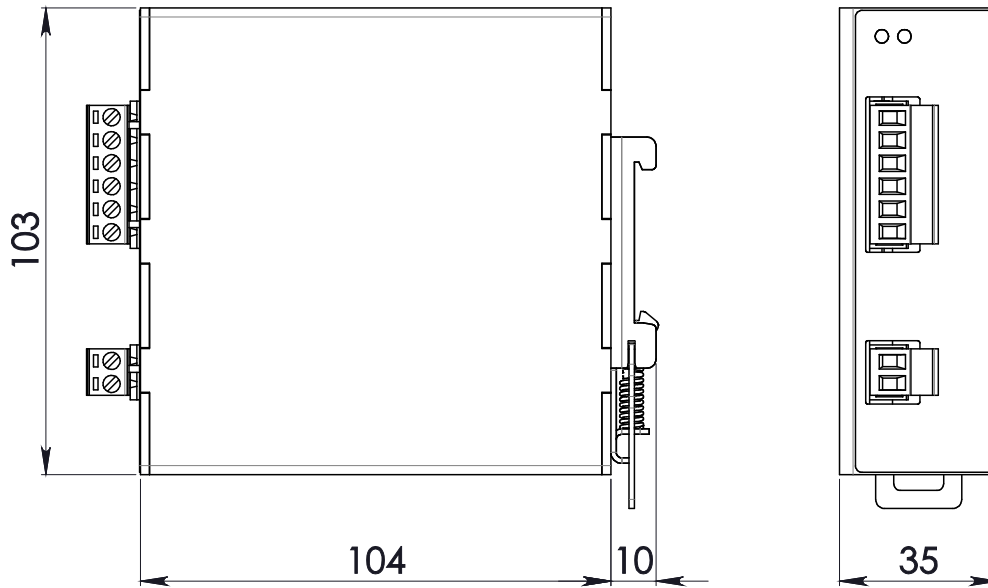
Model type	OR20	
<b>OUTPUT DATA</b>		
Rated voltage	12...85Vdc	
Continuous current	20A	
Peak output current	> 100A	
Conduction resistance	< 9mΩ	
<b>INPUT DATA</b>		
Input DC rated voltage	12...85Vdc	
Input DC rated current	20A	
Standby power	< 0.2W	
Input protections	<ul style="list-style-type: none"> <li>▪ Overvoltage <math>\geq 100Vdc</math></li> <li>▪ Reverse polarity connection</li> </ul>	
<b>USER INTERFACE</b>		
Status Signals	<ul style="list-style-type: none"> <li>▪ <b>IN1 OK</b> - green LED</li> <li>▪ <b>IN2 OK</b> - green LED</li> <li>▪ Redundancy available when <b>IN1 OK</b> &amp; <b>IN2 OK</b> simultaneously</li> <li>▪ <b>OR OK</b> - dry contact (NO, 24Vdc / 1A)</li> </ul>	
<b>GENERAL DATA</b>		
Dissipated power	< 4W	
Operating temperature <sup>1</sup>	- 40°C...+ 70°C	
Derating	No derating	
Storage temperature	- 40°C...+ 80°C	
Humidity	5...95% r.H. non condensing	
Cooling	Natural convection	
Life time expectation	354'655h (40.5 years) at 25°C ambient full load	
MTBF	<ul style="list-style-type: none"> <li>▪ MIL-HDBK-217F &gt; 700'000h at 25°C ambient full load</li> </ul>	
Overvoltage category	EN50178	1
Pollution degree	IEC60664-1	2
Insulation enclosure to live parts	0.75kVdc	
Safety Standards	<ul style="list-style-type: none"> <li>▪ UL508 (reference)</li> <li>▪ EN60950 (reference)</li> <li>▪ EN50178 (reference)</li> </ul>	
EMC Emission	<ul style="list-style-type: none"> <li>▪ EN55011 (CISPR11) Class A</li> <li>▪ EN55022 (CISPR22) Class A</li> </ul>	
EMC Immunity	<ul style="list-style-type: none"> <li>▪ EN61000-4-2 Level 3</li> <li>▪ EN61000-4-3 Level 3</li> <li>▪ EN61000-4-4 Level 3</li> <li>▪ EN61000-4-5 Level 1</li> <li>▪ EN61000-4-11 Level 2</li> </ul>	
Protection degree	EN60529	IP20
Vibration sinusoidal	<ul style="list-style-type: none"> <li>▪ IEC 60068-2-6 (5-17.8Hz: <math>\pm 1.6mm</math>; 17.8-500Hz: 2g 2hours / axis (X,Y,Z)</li> </ul>	
Shock	<ul style="list-style-type: none"> <li>▪ IEC 60068-2-27 (30g 6ms, 20g 11ms; 3 bumps / direction, 18 bumps total)</li> </ul>	
Connection terminals Input/Output	2.5mm <sup>2</sup> , screw type pluggable (24...12AWG)	
Connection dry contact signal	2.5mm <sup>2</sup> , screw type pluggable (24...12AWG)	
Case material	Aluminum	
Weight	0.25kg	
Size (W x H x D)	35.0 x 103.0 x 104.0mm	

1) Start-up type tested: - 40°C, possible at nominal voltage with load deration.

**Notes:**

- Technical parameters are typical, measured in laboratory environment at 25°C and 24Vdc, 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.
- Data may change without prior notice in order to improve the product.

## DIMENSIONS



## CONNECTION



## 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)

## Signalling:

- OR OK: dry contact
  - NO
  - COM