



■ 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

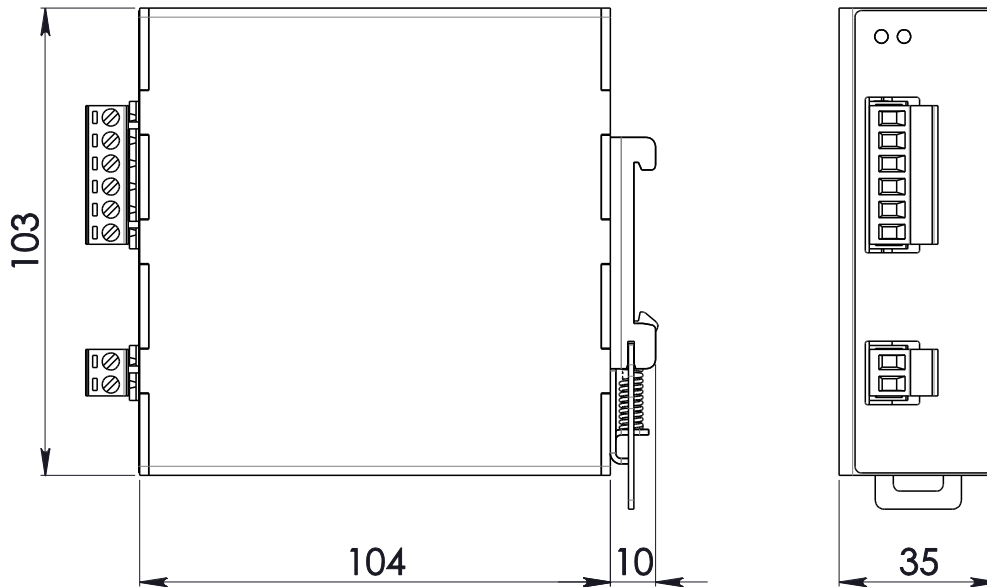
Model type	OR20	
OUTPUT DATA		
Rated voltage	12...85Vdc	
Continuous current	20A	
Peak output current	> 100A	
Conduction resistance	< 9mΩ	
INPUT DATA		
Input DC rated voltage	12...85Vdc	
Input DC rated current	20A	
Standby power	< 0.2W	
Input protections	<ul style="list-style-type: none"> ▪ Overvoltage ≥ 100Vdc ▪ Reverse polarity connection 	
USER INTERFACE		
Status Signals	<ul style="list-style-type: none"> ▪ IN1 OK - green LED ▪ IN2 OK - green LED ▪ Redundancy available when IN1 OK & IN2 OK simultaneously ▪ OR OK - dry contact (NO, 24Vdc / 1A) 	
GENERAL DATA		
Dissipated power	< 4W	
Operating temperature ¹	- 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"> ▪ MIL-HDBK-217F > 700'000h at 25°C ambient full load 	
Overvoltage category	▪ EN50178	I
Pollution degree	▪ IEC60664-1	2
Insulation enclosure to live parts	0.75kVdc	
Safety Standards	<ul style="list-style-type: none"> ▪ UL508 (reference) ▪ IEC/EN61010-1 ▪ IEC/EN61010-2-201 ▪ IEC/EN60950 	
EMC Emission	<ul style="list-style-type: none"> ▪ EN55011 (CISPR11) Class A ▪ EN55022 (CISPR22) Class A 	
EMC Immunity	<ul style="list-style-type: none"> ▪ EN61000-4-2 Level 3 ▪ EN61000-4-3 Level 3 ▪ EN61000-4-4 Level 3 ▪ EN61000-4-5 Level 1 ▪ EN61000-4-11 Level 2 	
Protection degree	▪ EN60529	IP20
Vibration sinusoidal	<ul style="list-style-type: none"> ▪ IEC 60068-2-6 (5-17.8Hz: ±1.6mm; 17.8-500Hz: 2g 2hours / axis (X,Y,Z) 	
Shock	<ul style="list-style-type: none"> ▪ IEC 60068-2-27 (30g 6ms, 20g 11ms; 3 bumps / direction, 18 bumps total) 	
Connection terminals Input/Output	2.5mm ² , screw type pluggable (24...12AWG)	
Connection dry contact signal	2.5mm ² , 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