

VP8&(\$!%/\$&(

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■ Main Features

- ⌋ High efficiency and compact size
- ⌋ Isolated topology
- ⌋ Wide input voltage range
- ⌋ Overload 150%
- ⌋ Excellent field reliability record

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TECHNICAL DATA

Model type	VPD240-11024	
Rated voltage	24Vdc	
Adj. output voltage range	23...27.5Vdc	
Continuous current	10A	
Overload limit	15A	
Short circuit peak current	21A	
Load regulation	≤ 1.5%	
Ripple & Noise ¹	≤ 50mVpp	
Hold up time	≥ 10ms	
Protections	<ul style="list-style-type: none"> ▪ Overload/short circuit: Hiccup mode ▪ Thermal protection ▪ Output overvoltage 	
Output overvoltage protection	≥ 33Vdc	
Status Signals	<ul style="list-style-type: none"> ▪ DC OK - green LED ▪ OVERLOAD - red LED ▪ DC OK - dry contact (NO, 24Vdc / 1A) 	
Parallel connection	Possible for power or redundancy (includes internal ORing circuit)	
INPUT DATA		
Input DC rated voltage	Nominal: 110Vdc Range: 90...148Vdc	
Input DC rated current		
Vin min.	3.6A	
Vin max.	2.6A	
Input overvoltage protection (active)	> 150Vdc	
Internal protection fuse	Fuse 5AT (not user replaceable)	
Recommended external protection (use DC rated devices)	MCB 6A C curve	
GENERAL DATA		
Efficiency	> 88%	
Dissipated power	< 31W	
Operating temperature ²	- 40°C...+ 70°C	
Derating	- 3W/°C over 50°C	
Storage temperature	- 40°C...+ 80°C	
Humidity	5...95% r.H. non condensing	
Life time expectation	64'000h (7.3 years) at 25°C ambient full load	
MTBF	<ul style="list-style-type: none"> ▪ MIL-HDBK-217F > 500'000h at 25°C ambient full load 	
Overvoltage category	<ul style="list-style-type: none"> ▪ EN50178 I 	
Pollution degree	<ul style="list-style-type: none"> ▪ IEC60664-1 2 	
Protection Class	<ul style="list-style-type: none"> ▪ Class I 	
Input / output isolation	2.1kVdc	
Input / ground isolation	1.41kVdc	
Output / ground isolation	0.75kVdc	
Safety Standards	<ul style="list-style-type: none"> ▪ UL508 (reference) ▪ EN60950 (reference) ▪ EN50178 (reference) 	
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 2 ▪ EN61000-4-5 Level 2 ▪ EN61000-4-11 Level 2 	
Protection degree	<ul style="list-style-type: none"> ▪ 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	2.5mm ² , screw type pluggable (24...12AWG)	
Case material	Aluminum	
Weight	0.80kg	
Size (W x H x D)	69.0 x 115.0 x 110.0mm	

1) Ripple and Noise are measured with 20MHz bandwidth, probe terminated with a 0.1µF MKP parallel capacitor.

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

Notes:

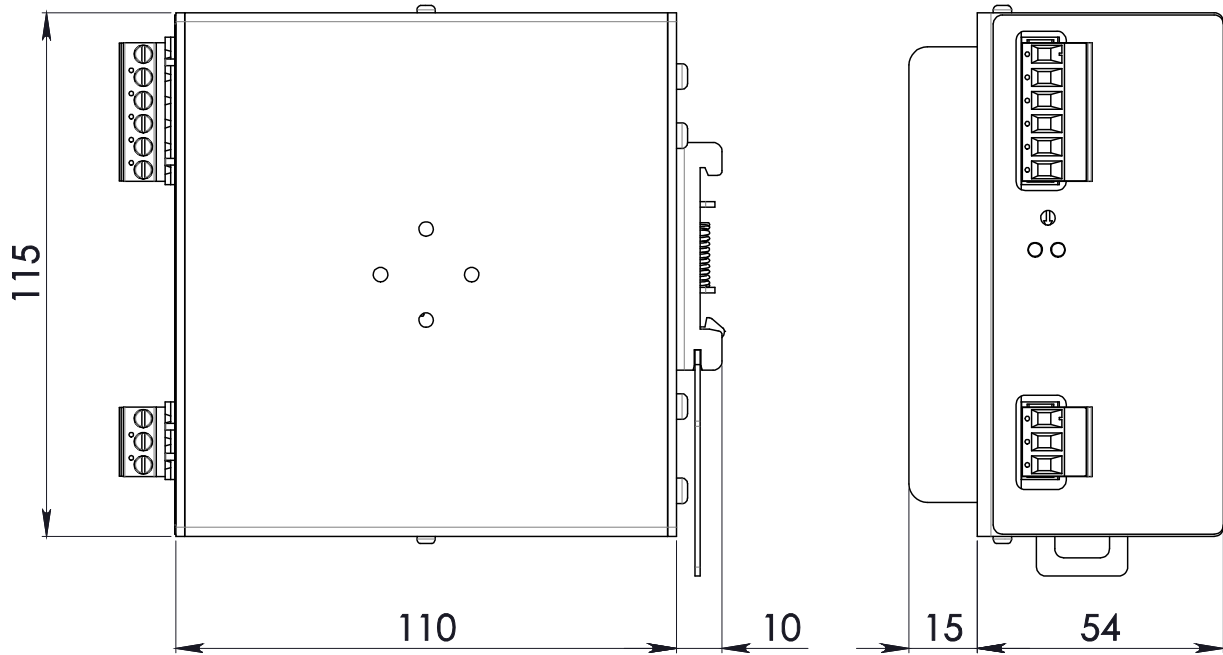
- Technical parameters are typical, measured in laboratory environment at 25°C at 110Vdc and nominal values, after minimum 5 minutes of operation.
- Power rating, losses, efficiency, ripple, thermal behaviour and start-up may change outside of the nominal rated input range. Contact factory for details.
- Data may change without prior notice in order to improve the product.



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DIMENSIONS



CONNECTION



Input Connection:

- + = Positive DC
- - = Negative DC
- | = Earth ground

Output Connection:

- + = Positive DC
- - = Negative DC

Signalling:

- DC OK (dry contact)
- NO
- COM