



Model number

VAN-230/500AC-K24

AS-Interface power supply, data decoupling, 8 A

Features

- 8 A output load
- 200 ... 500 V_{AC}
- SELV
- LED operating display
- AS-Interface data decoupling
- Power factor correction

Function

The primarily pulsed power pack has been designed for field bus applications which transmit power and data via one single two-wire cable

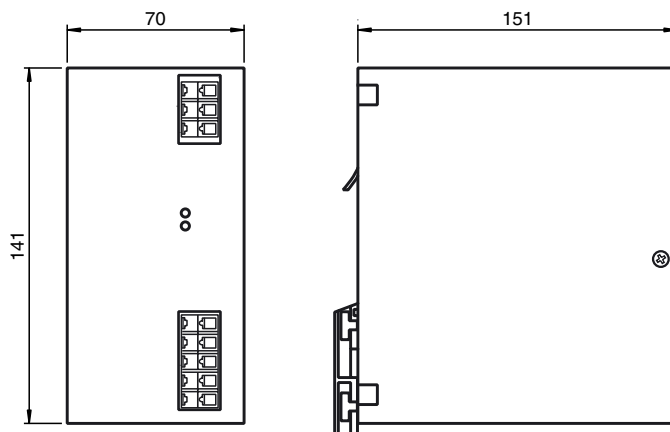
(AS-Interface concept). It supplies a fully extended AS-Interface system with a 8 A output current. Sinusoidal current drain from the mains avoids harmonics.

The power factor correction feature ensures that the current and the voltage are almost cophasal to avoid reactive power and provide a $\cos \varphi > 0.6$ power factor. The power pack makes available electric power. In addition to this, it provides for data isolation towards the power source and balancing of the two output lines (AS-Interface + and AS-Interface -) towards the reference potential of the machine (shield connection). Precise transformer coupling allows the use of unshielded load lines.

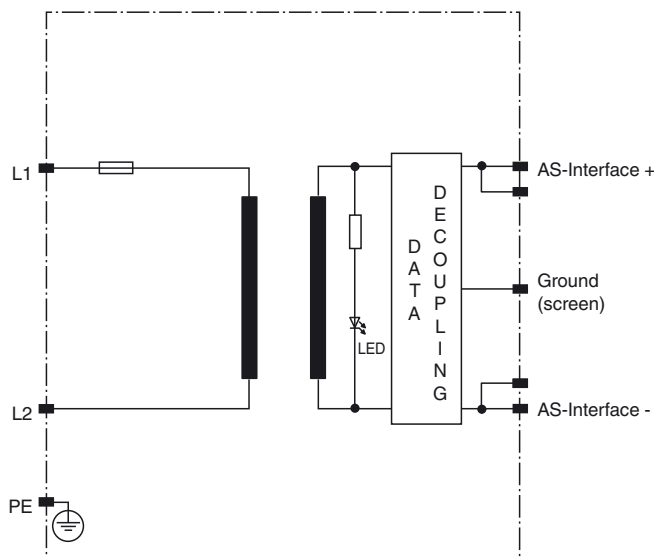
Fuses:

The power pack is electronically protected against external short circuits. In case of fault, the internal fusible link separates the power pack from the mains.

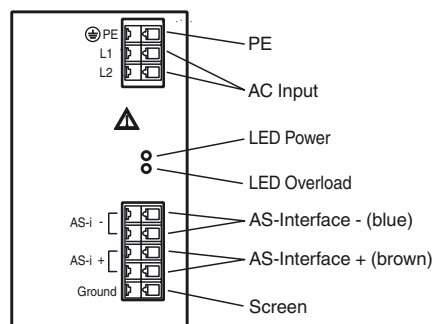
Dimensions



Electrical connection



Indicating / Operating means



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Technical data**Functional safety related parameters**

MTTF _d	40 a
Mission Time (T _M)	10 a
Diagnostic Coverage (DC)	0 %

Indicators/operating means

LED Overload	Red LED lights up for overload, flashes for hiccup mode
LED PWR	LED green

Electrical specifications

Fusing	3.15 AT (internal)
Capacity factor	0.7 Capacitive at 400 V _{AC}
Rated operating voltage	U _e 195 ... 500 V _{AC}
Rated operating current	I _e 1 A at 400 V _{AC}
Supply frequency	47 ... 63 Hz
Efficiency	87 %
Nominal voltage	230/400 V _{AC}
Peak inrush current	I _{2t} < 50 A

Output

Current limit	approx. 8.5 A
Voltage	31.2 V ±1 %
Current	8 A

Ambient conditions

Ambient temperature	-10 ... 40 °C (14 ... 104 °F)
Storage temperature	-25 ... 85 °C (-13 ... 185 °F)

Mechanical specifications

Degree of protection	IP20
Protection class	I, Protective conductor connection necessary
Connection	Connection terminals, max. conductor cross-section 0.5 to 2.5 mm ² Stripping length 5 to 6 mm
Mass	approx. 1200 g
Mounting	DIN mounting rail

Compliance with standards and directives

Directive conformity	
EMC Directive 2004/108/EC	EN 50083-2:2006
Standard conformity	
Noise immunity	EN 61000-6-1:2007, EN 61000-6-2:2005
AS-Interface	IEC 62026-2:2006
Standards	Harmonic waves: EN 61000-3-2 Class A Interference suppression: EN 55022, EN 55011 Class B Electrostatic discharge (ESD): IEC 61000-4-2 (8 kV contact discharge, 15 kV air discharge) Electromagnetic fields: IEC 61000-4-3 (EN 61000-4-3; 10 V/m) Burst: IEC 61000-4-4 (4 kV input, 2 kV output/capacitively coupled) Surge: IEC 61000-4-5 (4 kV asymmetrical, 4 kV symmetrical) Conducted interference: IEC 61000-4-6 (10 V, 150 kHz to 80 MHz)

Notes

The "GND" connection must be connected to the potential of the machine in any case.