## Model Number

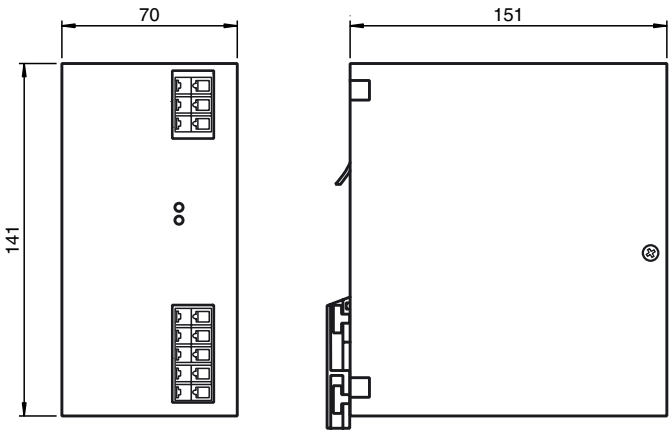
**VAN-115/230AC-K24**

AS-Interface power supply

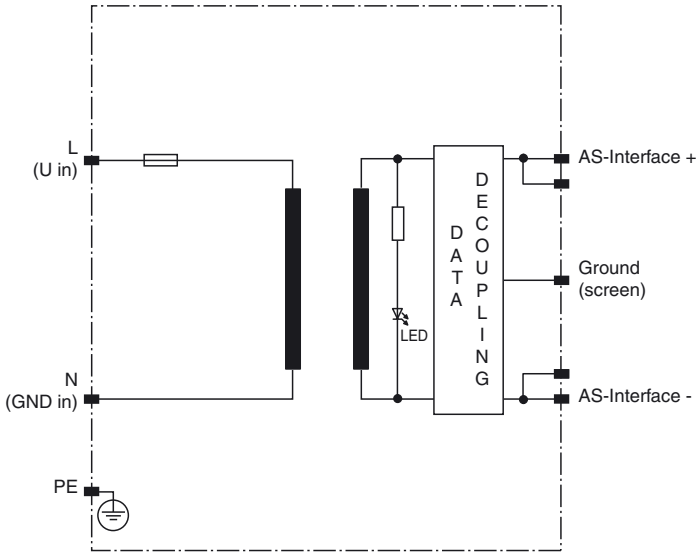
## Features

- 8 A output load
- 115 V AC / 230 V AC switchable
- SELV
- LED operating display
- AS-Interface data decoupling
- Power factor correction
- Electronic overload protection and display

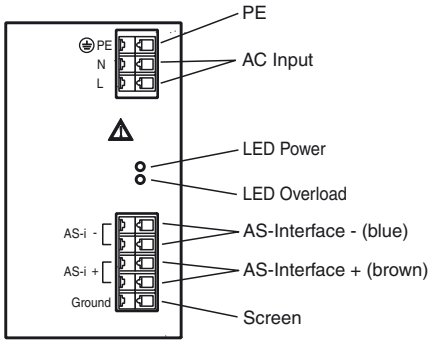
## Dimensions




## Electrical connection




## Indicators / Operating means

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## Technical data

| | | |
|---|---|---|
| **General specifications** | | |
| UL File Number | | E223176 |
| **Functional safety related parameters** | | |
| $MTTF_d$ | | 40 a |
| Mission Time ($T_M$) | | 10 a |
| Diagnostic Coverage (DC) | | 0 % |
| **Indicators/operating means** | | |
| Mains power selection switch | | changeover switch for 115 V AC/230 V AC |
| LED Overload | | Red LED, flashing |
| LED PWR | | LED green |
| **Electrical specifications** | | |
| Fusing | | 6.3 AT |
| Capacity factor | | approx. 0.62 (Depending on input voltage) |
| Mains frequency | | 47 ... 63 Hz |
| Efficiency | | approx. 87 % |
| Rated operational voltage | $U_e$ | Nominal: 115 V AC/230 V AC (selectable on front)<br>Permitted: 90 to 132 V AC/190 to 265 V AC |
| Rated operational current | $I_e$ | 4.0 A (115 V switch position)<br>1.9 A (230 V switch position) |
| **Output** | | |
| Current limit | | approx. 8.5 A |
| Current | | 8 A |
| Voltage | | 29.5 ... 31.6 V DC |
| **Standard conformity** | | |
| Electromagnetic compatibility | | EN 55011, EN 50082-1, EN 61000-6-2 |
| AS-Interface | | EN 50295 |
| Standards | | Harmonic waves: EN 61000-3-2 Class A<br>Interference suppression: EN 55022, EN 55011 Class B<br>Electrostatic discharge (ESD): IEC 61000-4-2 (8 kV contact discharge, 15 kV air discharge)<br>Electromagnetic fields: IEC 61000-4-3 (EN 61000-4-3)<br>Burst: IEC 61000-4-4 (4 kV input, 2 kV output/capacitively coupled)<br>Surge: IEC 61000-4-5 (4 kV asymmetrical, 4 kV symmetrical)<br>Conducted interference: IEC 61000-4-6 (10 V, 150 kHz to 80 MHz) |
| **Ambient conditions** | | |
| Ambient temperature | | -10 ... 55 °C (263 ... 328 K) with free convection |
| Storage temperature | | -25 ... 85 °C (248 ... 358 K) |
| **Mechanical specifications** | | |
| Protection degree | | IP20 |
| Protection class | | I, Protective conductor connection necessary |
| Connection | | Connection terminals, max. conductor cross-section 0.5 to 2.5 $mm^2$<br>Stripping length 5 to 6 mm |
| Mass | | approx. 1200 g |
| Mounting | | DIN rail |

## Notes

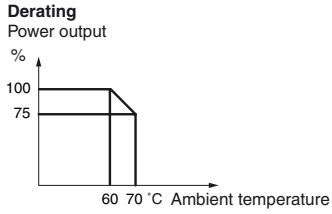
The "GND" connection must be connected to the potential of the machine in any case.

## Function

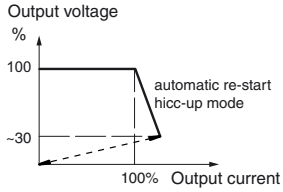
The primarily pulsed power pack has been designed for field bus applications which transmit power and data via one single two-wire cable (AS-Interface concept). It supplies a fully extended AS-Interface system with a 8 A output current. Sinusoidal current drain from the mains avoids harmonics. The power factor correction feature ensures that the current and the voltage are almost cophasal to avoid reactive power and provide a cos φ > 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.

**Derating**




**Output characteristic**

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