



**Model number**

**VAN-24DC-K6**

AS-Interface power supply

**Features**

- Output current 3 A
- PELV
- Input voltage 24 V DC
- LED operating display
- 88 % efficiency level

**Function**

The VAN-24DC-K6 DC/DC transducer was designed for field bus applications, which transmit both energy and data via a two-wire cable (AS-Interface design). It powers a fully loaded AS-Interface system with a maximum output current of 30.55 V and 3 A.

In this case, the DC/DC transducer provides the energy, decouples data of the power source and balances the two output cables (AS-Interface + and AS-Interface -) in relation to ground (screen connection).

The precise and transformer coupling permits the use of unshielded load lines.

The PELV output circuit is electronically protected against overload and continuous short circuit.

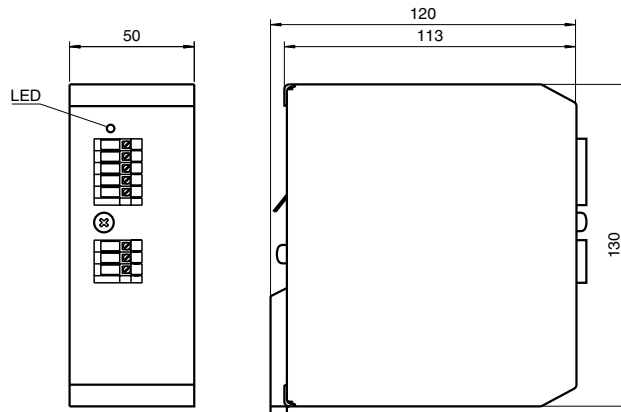
**Fuse:**

The DC/DC transducer is electronically protected against continuous short circuit. In case of a defect, the internal fuse disconnects the DC/DC transducer from the power supply.

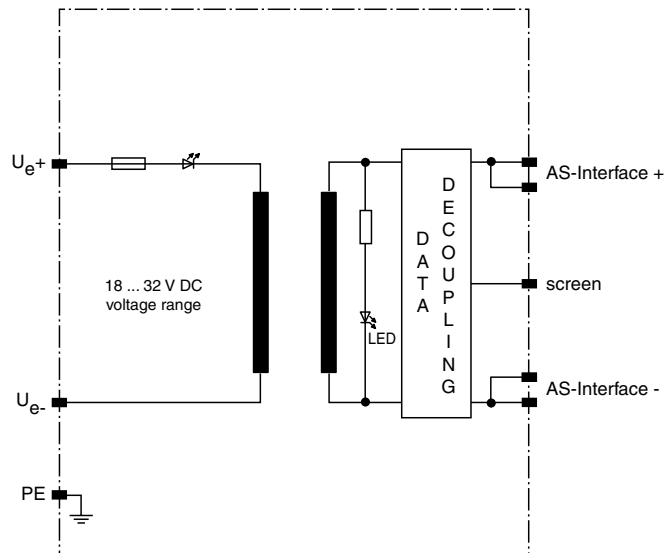
**Note:**

Do not remove any screws from the housing without consulting us, since internal protective earthing connections might disconnect!

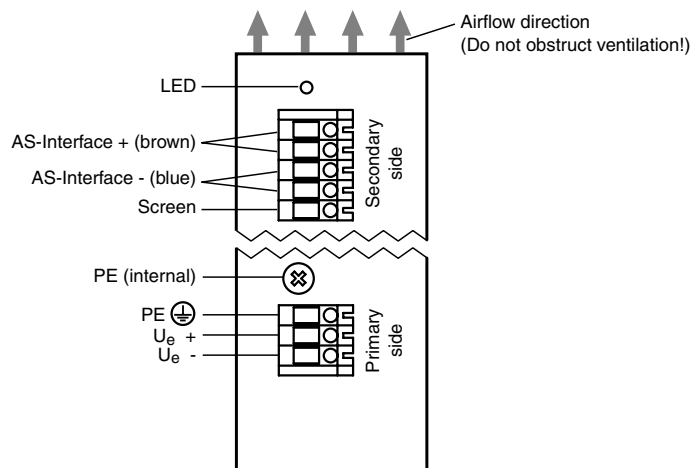
**Dimensions**



**Electrical connection**



**Indicating / Operating means**



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**Technical data****General specifications**

UL File Number	E223176
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**Functional safety related parameters**

MTTF <sub>d</sub>	200 a
Mission Time (T <sub>M</sub> )	10 a
Diagnostic Coverage (DC)	0 %

**Indicators/operating means**

LED U AS-i	AS-Interface voltage; LED green
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**Electrical specifications**

Rated operating voltage	U <sub>e</sub>	24 V DC
		18 ... 32 V DC (with full data content)
		16 ... 40 V DC (short-time, under 18 V no start-up)
Rated operating current	I <sub>e</sub>	6 A at 24 V DC

**Output**

Short-circuit protection/overload	max. 5 A
Current limit	3.15 ... 3.6 A
Current	3 A
Voltage	29.5 ... 31.6 V DC

**Ambient conditions**

Ambient temperature	-10 ... 70 °C (14 ... 158 °F)
Storage temperature	-20 ... 80 °C (-4 ... 176 °F)

**Mechanical specifications**

Protection degree	IP20 according to EN 60529
Connection	min. 0.5 mm <sup>2</sup> , max. 4 mm <sup>2</sup> (rigid wire) min. 0.5 mm <sup>2</sup> , max. 2.5 mm <sup>2</sup> (strand) wire min. 9 mm, max. 15 mm separation
Mass	approx. 550 g

**Compliance with standards and directives**

Directive conformity	
EMC Directive 2004/108/EC	EN 55011:2009, EN 61000-6-2:2001, EN 61000-6-3:2001 EN 55022:2006

## Standard conformity

Noise immunity	EN 61000-6-2:2001
Emitted interference	EN 55022:2006, EN 55011:2009 Class B EN 61000-6-3:2001

**Accessories****AS-Interface Power Calculator**

AS-Interface Power supply and network checking utility