



**Model number**

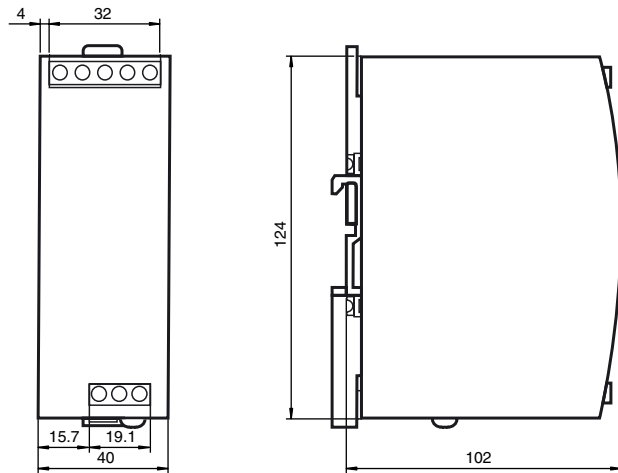
**VAN-24DC-K28**

AS-Interface power supply, data decoupling, 4 A, 24 V DC input voltage

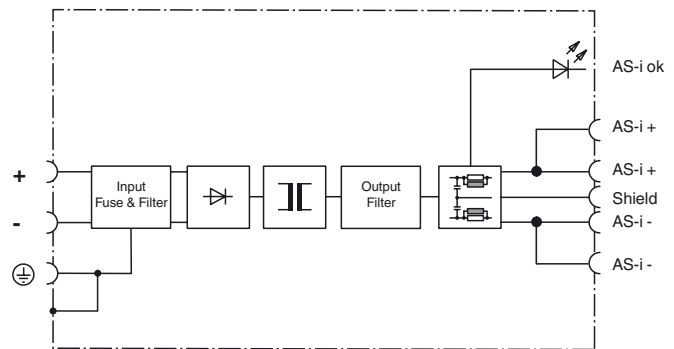
**Features**

- Output current max. 4 A
- PELV
- Input voltage 24 V DC
- LED operating display
- 90.5 % efficiency level

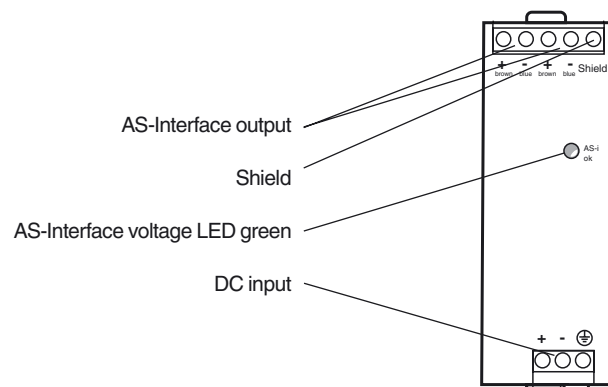
**Dimensions**



**Electrical connection**



**Indicating / Operating means**



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Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

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

UL File Number	E223176
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**Indicators/operating means**

LED AS-i ok	LED green: ON: AS-Interface voltage OK OFF: overload or no supply voltage
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**Electrical specifications**

Fusing	T10A HBC (not accessible)
Rated operating voltage	$U_e$ 24 V <sub>DC</sub> 18 ... 32,4 V <sub>DC</sub> (continuous operation) 14 ... 18 V <sub>DC</sub> (max. 60 s or with derating) max. 36 V <sub>DC</sub> (max. continuous input voltage with no damage to the DC/DC converter)
Rated operating current	$I_e$ 5.6 A at 24 V <sub>DC</sub>
Efficiency	typ. 90.5 % (24 V <sub>DC</sub> , 4 A)

**Output**

Short-circuit protection/overload	> 5 A < 9 A
Current limit	> 4.4 A
Current	4 A
Voltage	30.55 V <sub>DC</sub> ±3 % fixed
Residual ripple	< 50 mV <sub>SS</sub> (500 kHz bandwidth, 50 Ω measurement, with resistive load)
Overvoltage protected	max. 36 V

**Ambient conditions**

Ambient temperature	-25 ... 70 °C (-13 ... 158 °F) Note derating
Storage temperature	-40 ... 85 °C (-40 ... 185 °F)
Shock and impact resistance	30g/6 ms 20g/11 ms
Vibration resistance	Sine 2 – 17.8 Hz: ± 1.6 mm Sine 17.8 ... 500 Hz : 2 g
Pollution Degree	2

**Mechanical specifications**

Degree of protection	IP20
Protection class	1 (IEC 60536); Protective conductor connection necessary
Connection	Connection terminals, max. conductor cross-section Flexible cable: 0.5 ... 4 mm <sup>2</sup> Rigid cable: 0.5 ... 6 mm <sup>2</sup> Stripping length 7 mm
Mass	approx. 500 g
Mounting	DIN mounting rail

**Compliance with standards and directives**

Directive conformity	
EMC Directive 2004/108/EC	EN 55022:2006, EN 55011:2009 Class B EN 61000-6-3:2001, EN 61204-3:2001
Standard conformity	
Noise immunity	EN 61000-6-2:2005
Emitted interference	EN 61000-6-3:2007 EN 61000-3-2:2010 EN 61000-3-3:2009
Electrical isolation	IEC 60364-4-41:2005 (PELV) IEC 60950:1999 (SELV)
Degree of protection	IEC 60529:2001
Pollution Degree	EN 60950-1:2006
Shock and impact resistance	EN 60068-2-27:1995
Vibration resistance	EN 60068-2-6:2008

**Function**

The VAN-24DC-K28 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 4 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.

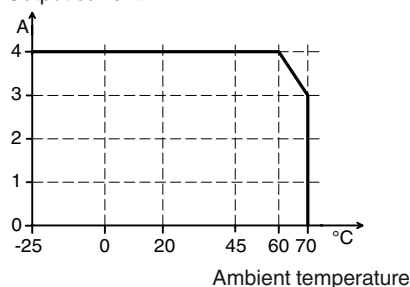
The PELV output circuit is electronically protected against overload and continuous short circuit.

**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.

**Derating**

Output current

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

AS-Interface Power supply and network checking utility