

AS-Interface power supply VAN-115/230AC-K27

- Up to 4 A output load
- LED operating display
- 100 V AC up to 240 V AC
- Earth fault detection
- AS-Interface data decoupling

AS-Interface power supply, data decoupling, 4 A



Function

The primary switched-mode power supply was designed for fieldbus applications that transfer energy and data together via a two-wire cable (AS-Interface concept). It supplies a fully extended AS-Interface system with a maximum output current of 4.0 A. Due to the sinusoidal current consumption of the network, harmonics are avoided. The power supply assumes the function of supplying power, data decoupling for the power source and balancing both output lines (AS-Interface + and AS-Interface -) with respect to the machine ground (shielded connection). The transformer allows the use of unshielded load cables. The power supply is protected by an internal fuse that eliminates the need for additional device protection measures.

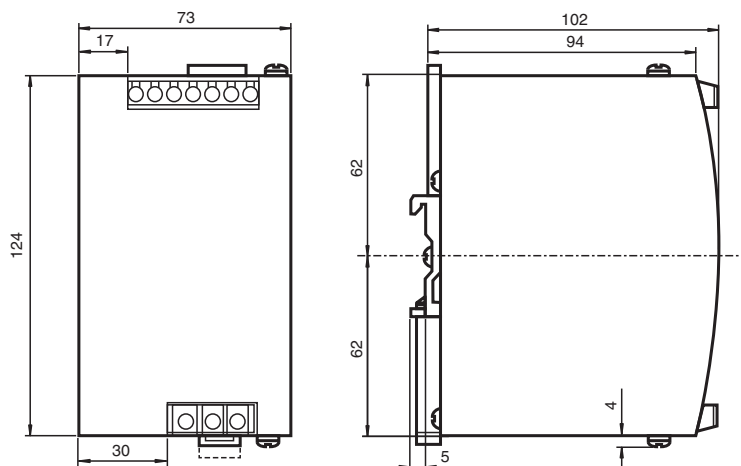
Ground fault monitor GF:

The switch output of the ground fault monitor evaluates any short circuits detected in the AS-Interface system. With the potential-free transistor output, the system can be shut down using the control program. The output is normally closed, but opens when a ground fault is detected. The "GF" LED also signals the presence of a ground fault. This output will close when the power supply is restarted or the reset button is pressed for (> 2 seconds). It is essential to connect the shield to PE or the machine ground to guarantee proper operation.

Checking the ground fault monitor:

Pressing the reset button briefly (< 2 seconds) simulates a ground fault in the device. Detection, evaluation and signaling of a ground fault and the switch output can be tested at suitable intervals. A ground fault generated in this way can be reset by pressing the reset button for (> 2 seconds).

Dimensions



Technical Data

General specifications

UL File Number	E223176
MTBF	100 a

Indicators/operating means

Release date: 2026-07-22 Date of issue: 2026-07-22 Filename: 238626_eng.pdf

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

Pepperl+Fuchs Group
www.pepperl-fuchs.com

USA: +1 330 486 0001
fa-info@us.pepperl-fuchs.com

Germany: +49 621 776 1111
fa-info@de.pepperl-fuchs.com

Singapore: +65 6779 9091
fa-info@sg.pepperl-fuchs.com

PEPPERL+FUCHS

Technical Data

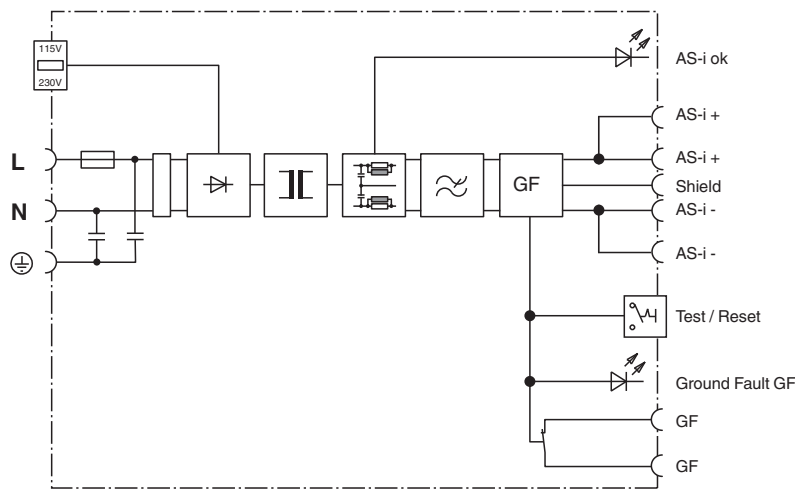
Reset push-button switch		earth fault simulation/reset of earth fault display
LED EFD		earth fault display; LED red
LED AS-i ok		LED green: ON: AS-Interface voltage OK OFF: overload or no supply voltage
Electrical specifications		
Fusing		T3A 15/250 V HBC (not accessible)
Rated operating voltage	U_e	85 ... 132 V _{AC} 184 ... 264 V _{AC} 240 ... 300 V _{DC}
Rated operating current	I_e	2.7 A at 115 V _{AC} 1.3 A at 230 V _{AC}
Supply frequency		47 ... 63 Hz (alternatively, DC possible)
Efficiency		typ. 90 % (230 V _{AC} , 4 A)
Galvanic isolation		SELV/PELV
Peak inrush current	I^2t	< 3.7 A ² s (120 V _{AC}) < 4.6 A ² s (132 V _{AC}) < 2.5 A ² s (230 V _{AC}) < 3.3 A ² s (264 V _{AC})
Output		
Short-circuit protection/overload		> 4.2 A < 6.5 A
Current limit		starts at > 4.2 A
Voltage		30.5 V _{DC} ±3 % fixed setting
Current		4 A
Residual ripple		< 50 mV _{SS} (500 kHz bandwidth, 50 Ω measurement, with resistive load)
Voltage limitation		limited to max. 55 V
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
Galvanic isolation		IEC 60364-4-41:2005 (PELV) IEC 60950:1999 (SELV)
Degree of protection		IEC 60529:2001
Pollution degree		EN 50178:1997
Mech. capacity		EN 60068-2-6:2008 (Sinus) EN 60068-2-64:2009 (Random)
Shock and impact resistance		EN 60068-2-27:1995
Ambient conditions		
Ambient temperature		-10 ... 70 °C (14 ... 158 °F) note derating
Storage temperature		-25 ... 85 °C (-13 ... 185 °F)
Shock and impact resistance		15g/6 ms 10g/11 ms
Vibration resistance		Sine 2 - 17.8 Hz: ± 1.6 mm Sine 17.8 ... 500 Hz: 2 g Random 2 ... 500 Hz: 0.5 m ² (s ³)
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 ² Rigid cable: 0.5 ... 6 mm ² Stripping length 7 mm
Mass		650 g

Release date: 2026-07-22 Date of issue: 2026-07-22 Filename: 238626_eng.pdf

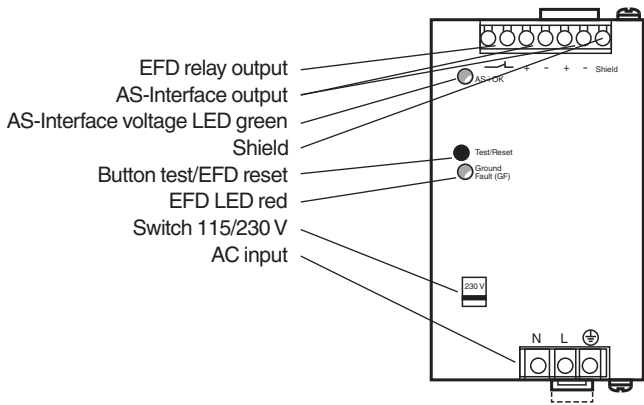
Technical Data

Dimensions	
Height	124 mm
Width	73 mm
Length	102 mm
Mounting	DIN mounting rail

Wiring Diagram

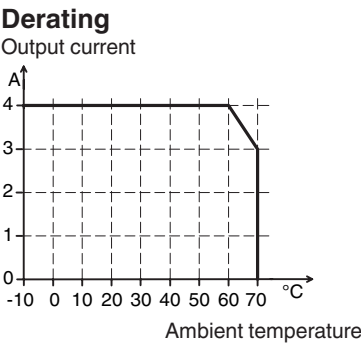


Assembly



Release date: 2026-07-22 Date of issue: 2026-07-22 Filename: 238626_eng.pdf

Characteristic Curve



Release date: 2026-07-22 Date of issue: 2026-07-22 Filename: 238626_eng.pdf

Connection

In an AS-Interface network only one device can be operated earth fault detection. If there are many devices in an AS-Interface network, this can lead to the earth fault monitoring response threshold becoming less sensitive.

Release date: 2026-07-22 Date of issue: 2026-07-22 Filename: 238626_eng.pdf

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

Pepperl+Fuchs Group
www.pepperl-fuchs.com

USA: +1 330 486 0001
fa-info@us.pepperl-fuchs.com

Germany: +49 621 776 1111
fa-info@de.pepperl-fuchs.com

Singapore: +65 6779 9091
fa-info@sg.pepperl-fuchs.com

 **PEPPERL+FUCHS**