



SWD feeder module, 24 V DC

Part no. SWIRE-PF
Article no. 107029
Catalog No. SWIRE-PF

Delivery program

Subrange		Module
Basic function		Connection system SmartWire
Description		Power module for supplying the control voltage. - Connection on SmartWire Gateway as interactive station (no address).
Notes		
Max. 4 power modules per SmartWire chain.		

Technical data

General

Standards			
General			IEC/EN 60947 EN 55011 EN 55022 IEC/EN 61000-4 IEC/EN 60068-2-27
Mounting			Top-hat rail IEC/EN 60715 (35mm) or screw fixing with fixing brackets ZB4-101-GF1 (accessories)
Dimensions (W x H x D)		mm	35 x 90 x 74
Weight		kg	0.1

Terminal capacities

Solid		mm ²	0.34...1.5
Flexible with ferrule		mm ²	0.34...1.5
Solid or stranded		AWG	22...16
Standard screwdriver		mm	3.5 x 0.8
Max. tightening torque		Nm	0.6

Climatic environmental conditions

Ambient temperature			
Operation		°C	-25 - +55
Storage		°C	- 25 - + 70
Condensation			Take appropriate measures to prevent condensation
Relative humidity, non-condensing (IEC/EN 60068-2-30)		%	5 - 95
Air pressure (operation)		hPa	795 - 1080

Ambient conditions, mechanical

Protection type (IEC/EN 60529, EN50178, VBG 4)			IP20
Overvoltage category/pollution degree			2
Mounting position			Vertical

Electromagnetic compatibility (EMC)

Electrostatic discharge (IEC/EN 61000-4-2, Level 3, ESD)		kV	
Air discharge		kV	8
Electromagnetic fields (IEC/EN 61000-4-3, RFI)	V/m		10
Radio interference suppression EN 55011, EN 55022			Class A
Burst Impulse (IEC/EN 61000-4-4, Level 3)			
Supply cable		kV	2
Signal lines		kV	2
power pulses (surge) (IEC/EN 61000-4-5, level 2)		kV	0.5 (supply cables, symmetrical)
Immunity to line-conducted interference to (IEC/EN 61000-4-6)		V	10

Insulation resistance

Clearance in air and creepage distances			EN 50178, EN 60947-1, UL 508, CSA C22.2 No 142
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Insulation resistance			EN 50178, EN 60947-1
Voltage supply, Gateway electronic and SmartWire station electronics U_{Gateway}			
Admissible range			20.4...28.8
Heat dissipation at 24 V DC		W	typically 1
Power supply U_{AUX} (power supply for switching SmartWire elements e.g. contactor coils)			
Rated operational voltage U_{Aux}		V DC	24, -15 %, +20 % (Derating from > 40 °C)
Admissible range		V DC	20.4...28.8, at 45 °C: 21...28.8, at 50 °C: 21.6...28.8, at 55 °C: 22.2...27.6
Input current U_{AUX} bei 24 V DC		A	Normally 3
Residual ripple		%	≤ 5
Voltage dips (IEC/EN 61131-2)		ms	10
Voltage	U_s	V	Yes
Short-circuit protection, SmartWire side			no, external fuse 3 A or FAZ-Z3

LEDs

Power supply SmartWire contactors			U_{AUX} : green
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MODBUS

Potential isolation			
To SmartWire			to supply voltage U_{AUX} : no to supply voltage U_{Gateway} : no

SmartWire

Connection types			Plug, 6-pole
Data/power cable			6 core flat-band cable
maximum cable length System SmartWire		m	4
Bus termination			Connector plug
Station address			keine
Station			Max. 4 SmartWire modules per rung.
Address allocation			none
Function			none SmartWire module

Relay outputs

Overvoltage category/pollution degree			II/2
Conventional thermal current	I_{th}	A	4

Design verification as per IEC/EN 61439

Technical data for design verification			
Rated operational current for specified heat dissipation	I_n	A	0
Heat dissipation per pole, current-dependent	P_{vid}	W	0
Equipment heat dissipation, current-dependent	P_{vid}	W	0
Static heat dissipation, non-current-dependent	P_{vs}	W	1
Heat dissipation capacity	P_{diss}	W	0
Operating ambient temperature min.		°C	-25
Operating ambient temperature max.		°C	55
IEC/EN 61439 design verification			
10.2 Strength of materials and parts			
10.2.2 Corrosion resistance			Meets the product standard's requirements.
10.2.3.1 Verification of thermal stability of enclosures			Meets the product standard's requirements.
10.2.3.2 Verification of resistance of insulating materials to normal heat			Meets the product standard's requirements.
10.2.3.3 Verification of resistance of insulating materials to abnormal heat and fire due to internal electric effects			Meets the product standard's requirements.
10.2.4 Resistance to ultra-violet (UV) radiation			Meets the product standard's requirements.
10.2.5 Lifting			Does not apply, since the entire switchgear needs to be evaluated.
10.2.6 Mechanical impact			Does not apply, since the entire switchgear needs to be evaluated.
10.2.7 Inscriptions			Meets the product standard's requirements.
10.3 Degree of protection of ASSEMBLIES			Does not apply, since the entire switchgear needs to be evaluated.
10.4 Clearances and creepage distances			Meets the product standard's requirements.
10.5 Protection against electric shock			Does not apply, since the entire switchgear needs to be evaluated.
10.6 Incorporation of switching devices and components			Does not apply, since the entire switchgear needs to be evaluated.
10.7 Internal electrical circuits and connections			Is the panel builder's responsibility.

10.8 Connections for external conductors		Is the panel builder's responsibility.
10.9 Insulation properties		
10.9.2 Power-frequency electric strength		Is the panel builder's responsibility.
10.9.3 Impulse withstand voltage		Is the panel builder's responsibility.
10.9.4 Testing of enclosures made of insulating material		Is the panel builder's responsibility.
10.10 Temperature rise		The panel builder is responsible for the temperature rise calculation. Eaton will provide heat dissipation data for the devices.
10.11 Short-circuit rating		Is the panel builder's responsibility. The specifications for the switchgear must be observed.
10.12 Electromagnetic compatibility		Is the panel builder's responsibility. The specifications for the switchgear must be observed.
10.13 Mechanical function		The device meets the requirements, provided the information in the instruction leaflet (IL) is observed.

Technical data ETIM 6.0

PLC's (EG000024) / Fieldbus, decenter. periphery - power supply/segment module (EC001600)

Electric engineering, automation, process control engineering / Control / Field bus, decentralized peripheral / Field bus, decentralized peripheral - feed and segment module (ec1@ss8.1-27-24-26-10 [BAA071010])

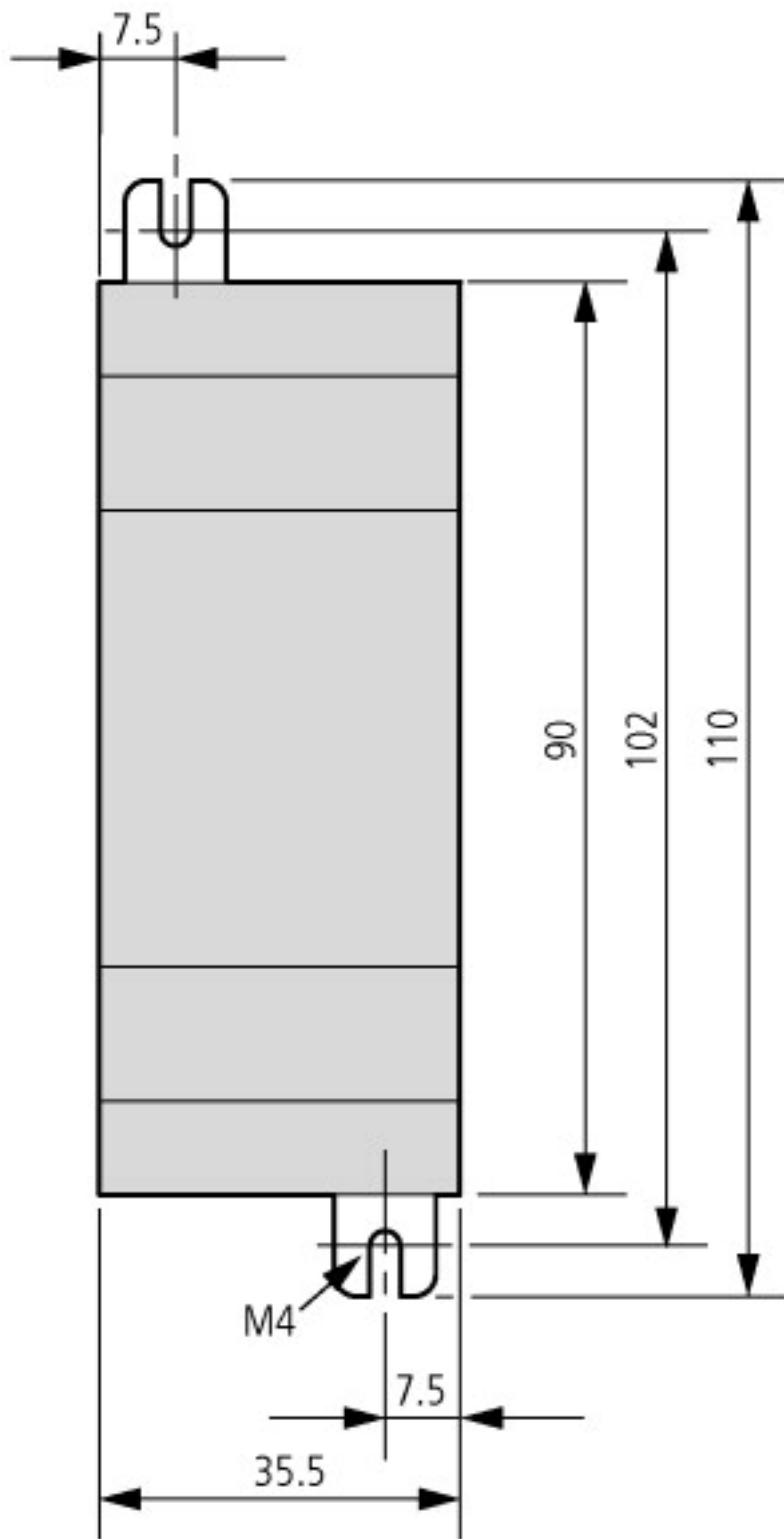
Supply voltage AC 50 Hz	V	0 - 0
Supply voltage AC 60 Hz	V	0 - 0
Supply voltage DC	V	20.4 - 28.8
Voltage type of supply voltage		DC
Number of HW-interfaces industrial Ethernet		0
Number of HW-interfaces PROFINET		0
Number of HW-interfaces RS-232		0
Number of HW-interfaces RS-422		0
Number of HW-interfaces RS-485		0
Number of HW-interfaces serial TTY		0
Number of HW-interfaces parallel		0
Number of HW-interfaces Wireless		0
Number of HW-interfaces other		2
With optical interface		No
Supporting protocol for TCP/IP		No
Supporting protocol for PROFIBUS		No
Supporting protocol for CAN		No
Supporting protocol for INTERBUS		No
Supporting protocol for ASI		No
Supporting protocol for KNX		No
Supporting protocol for MODBUS		No
Supporting protocol for Data-Highway		No
Supporting protocol for DeviceNet		No
Supporting protocol for SUCONET		No
Supporting protocol for LON		No
Supporting protocol for PROFINET IO		No
Supporting protocol for PROFINET CBA		No
Supporting protocol for SERCOS		No
Supporting protocol for Foundation Fieldbus		No
Supporting protocol for EtherNet/IP		No
Supporting protocol for AS-Interface Safety at Work		No
Supporting protocol for DeviceNet Safety		No
Supporting protocol for INTERBUS-Safety		No
Supporting protocol for PROFIsafe		No
Supporting protocol for SafetyBUS p		No
Supporting protocol for other bus systems		Yes
Radio standard Bluetooth		No
Radio standard WLAN 802.11		No
Radio standard GPRS		No

Radio standard GSM			No
Radio standard UMTS			No
System accessory			Yes
Degree of protection (IP)			IP20
Type of electric connection			Screw connection
With potential separation			No
With power supply module			Yes
Suitable as segment module			Yes
Remote module			No
Fieldbus connection over separate bus coupler possible			Yes
Bus diagnosis possible			No
Rail mounting possible			Yes
Wall mounting/direct mounting			Yes
Front build in possible			No
Rack-assembly possible			No
Suitable for safety functions			Yes
Category according to EN 954-1			4
SIL according to IEC 61508			None
Performance level acc. to EN ISO 13849-1			None
Appendant operation agent (Ex ia)			No
Appendant operation agent (Ex ib)			No
Explosion safety category for gas			None
Explosion safety category for dust			None
Width		mm	35
Height		mm	90
Depth		mm	74

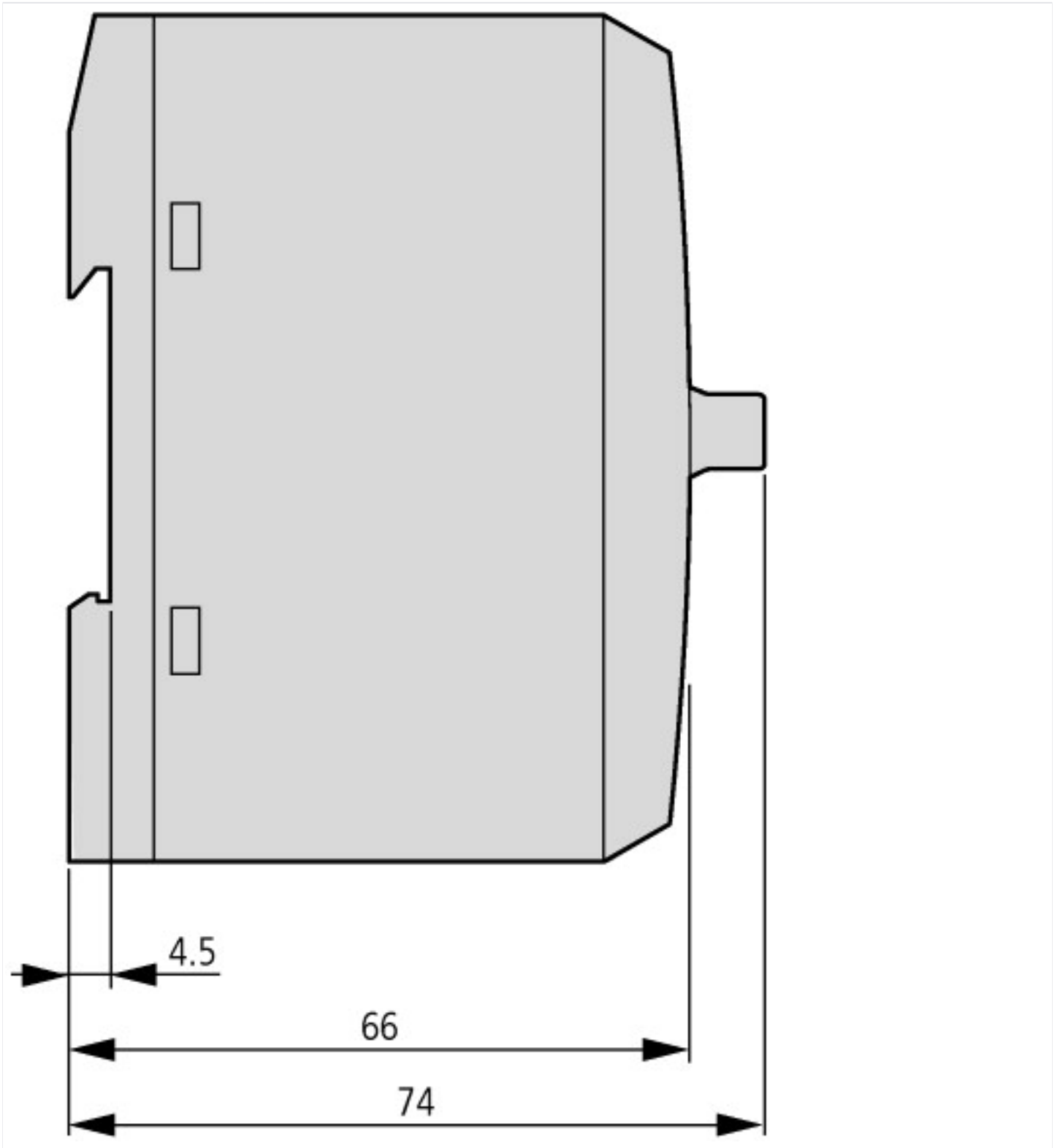
Approvals

Product Standards			IEC/EN 60947-4-1; UL 508; CSA-C22.2 No. 14-05; CE marking
UL File No.			E29184
UL Category Control No.			NKCR
CSA File No.			012528
CSA Class No.			2252-01
North America Certification			UL listed, CSA certified

Dimensions



SWIRE-PF



Additional product information (links)

IL03407145Z (AWA1210+1251-2359) Connection system SmartWire

IL03407145Z (AWA1210+1251-2359) Connection system SmartWire ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL03407145Z2011_06.pdf

MN03402001Z (AWB1210+1251-1587/-1591) Connection system SmartWire, module

MN03402001Z (AWB1210+1251-1587/-1591) Verbindungssystem SmartWire, Module - Deutsch ftp://ftp.moeller.net/DOCUMENTATION/AWB_MANUALS/MN03402001Z_DE.pdf

MN03402001Z (AWB1210+1251-1587/-1591) Connection system SmartWire, module - English ftp://ftp.moeller.net/DOCUMENTATION/AWB_MANUALS/MN03402001Z_EN.pdf

MN03402001Z (AWB1210+1251-1587/-1591) système de connexion SmartWire, Modules - français ftp://ftp.moeller.net/DOCUMENTATION/AWB_MANUALS/MN03402001Z_FR.pdf

MN03402001Z (AWB1210+1251-1587/-1591) Sistema di collegamento SmartWire, ModuliAWB - italiano ftp://ftp.moeller.net/DOCUMENTATION/AWB_MANUALS/MN03402001Z_IT.pdf

