

## SWD power supply for SWD modules and contactors

**Part no.** EU5C-SWD-PF2-1  
**116380**  
**EL Number** 4519781  
**(Norway)**

<b>General specifications</b>	
Product name	Eaton EU5C Accessory Power supply
Part no.	EU5C-SWD-PF2-1
EAN	4015081161102
Product Length/Depth	125 millimetre
Product height	90 millimetre
Product width	35 millimetre
Product weight	0.16 kilogram
Certifications	UL Category Control No.: NKCR CSA Class No.: 3211-07 CSA IEC/EN 61131-2 UL File No.: E29184 UL EN 50178 CSA File No.: 2324643
Product Tradename	EU5C
Product Type	Accessory
Product Sub Type	Power supply
Catalog Notes	SmartWire-DT power supply for SmartWire-DT modules and for additionally feeding the control voltage for motor starters and contactors, as well as for establishing emergency stop groups
<b>Features &amp; Functions</b>	
Electric connection type	Flat plug-in connection
Features	Fieldbus connection over separate bus coupler possible Overload proof
Fitted with:	Power supply module Potential separation
Functions	For additional control voltage feeder for the motor starter and contactors For the formation of emergency switching off groups for motor starters and contactors For feeding supply voltage in order to connect additional SmartWire-DT modules to the SmartWire-DT ribbon cable
<b>General information</b>	
Degree of protection	IP20
Overvoltage category	II
Pollution degree	2
Product category	SmartWire-DT accessories
Repetition rate	1 s
Residual ripple	≤ 5 % (input voltage)
Suitable as	Segment module
Terminal capacity	0.25 - 1.5 mm <sup>2</sup> , flexible with ferrule 24 - 16 AWG, solid or stranded 0.2 - 1.5 mm <sup>2</sup> , solid
Voltage type	DC
<b>Ambient conditions, mechanical</b>	
Constant acceleration	1 g, 8.4 - 150 Hz, according to IEC/EN 61131-2, Vibrations
Constant amplitude	3,5 mm, 5 - 8.4 Hz, according to IEC/EN 61131-2, Vibrations
Drop and topple	50 mm Drop height, Drop to IEC/EN 60068-2-31
Height of fall (IEC/EN 60068-2-32) - max	0.3 m
Mounting position	As required
Shock resistance	15 g, Mechanical, according to IEC/EN 60068-2-27, Half-sinusoidal shock 11 ms, 9 Impacts
<b>Climatic environmental conditions</b>	
Air pressure	795 - 1080 hPa (operation)

Ambient operating temperature - min		-25 °C
Ambient operating temperature - max		55 °C
Ambient storage temperature - min		-40 °C
Ambient storage temperature - max		70 °C
Climatic proofing		Damp heat, constant, to IEC 60068-2-3 Dry heat to IEC 60068-2-2
Environmental conditions		Condensation: prevent with appropriate measures
Operating temperature - min		-25 °C
Operating temperature - max		55 °C
Relative humidity		5 - 95 % (non-condensing, IEC/EN 60068-2-30)
<b>Electro magnetic compatibility</b>		
Air discharge		8 kV, according to IEC 61131-2, level 3, ESD
Burst impulse		2 kV, Supply cable, according to IEC/EN 61131-2, Level 3 1 kV, SmartWire-DT cable, according to IEC/EN 61131-2, Level 3
Contact discharge		4 kV, according to IEC/EN 61131-2, Level 2, ESD
Electromagnetic fields		3 V/m at 1.4 - 2 GHz (according to IEC/EN 61131-2:2008) 1 V/m at 2.0 - 2.7 GHz (according to IEC/EN 61131-2:2008) 10 V/m at 80 - 1000 MHz (according to IEC/EN 61131-2:2008)
Radiated RFI		10 V (IEC/EN 61131-2:2008, Level 3)
Radio interference class		Class A (EN 55011)
Surge rating		0.5 kV, Supply cables/CAN/DP bus cable, Surge power cables, Surge (IEC/EN 61131-2:2008, Level 1), EMC
Voltage dips		≤ 10 ms, Bridging voltage dips
<b>Electrical rating</b>		
Inrush current		12.5 A (for 6 ms)
Power loss		Normally 2.7 W
Rated control supply voltage		24 V DC (UPOW, -15 %/+20 %) 24 V DC (UAUX, -15 %/+20 %)
Rated operational current (I <sub>e</sub> ) - max		0.7 A
Rated operational voltage		Typically UAUX -0.2 V (for 24 V DC slaves) 14.5 V (± 3 % - SmartWire-DT)
Short-circuit protection		Yes, Short-circuit rating, SmartWire-DT supply voltage No, external fuse FAZ Z3, Supply voltage UAux
Supply current		0.7 A, I <sub>max</sub> , SmartWire-DT supply 3 A, I <sub>max</sub> , Supply voltage UAux
Supply voltage at AC, 50 Hz - min		0 V AC
Supply voltage at AC, 50 Hz - max		0 V AC
Supply voltage at DC - min		20.4 V DC
Supply voltage at DC - max		28.8 V DC
<b>Communication</b>		
Connection		2 x SmartWire-DT blade terminal SWD4-8MF2
Connection to SmartWire-DT		Yes
Connection type		SWD: 2 x plug, 8-pole Push in terminals, Supply voltage
LED indicator		Status indication of Supply voltage: LED
Protocol		Other bus systems
<b>Safety</b>		
Explosion safety category for dust		None
Explosion safety category for gas		None
Potential isolation		Between UPOW and 15 V SmartWire-DT supply voltage: yes
Protection against polarity reversal		Yes Yes, for supply voltage (Siemens MPI optional)
<b>Design verification</b>		
Equipment heat dissipation, current-dependent P <sub>vid</sub>		0 W
Heat dissipation capacity P <sub>diss</sub>		0 W
Heat dissipation per pole, current-dependent P <sub>vid</sub>		0 W
Rated operational current for specified heat dissipation (I <sub>n</sub> )		0 A
Static heat dissipation, non-current-dependent P <sub>vs</sub>		2.7 W
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 Resist. of insul. mat. to abnormal heat/fire by internal elect. 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		Meets the product standard's requirements.
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.
10.9.2 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.
10.12 Electromagnetic compatibility		Is the panel builder's responsibility.
10.13 Mechanical function		The device meets the requirements, provided the information in the instruction leaflet (IL) is observed.

## Technical data ETIM 9.0

Programmable logic controllers PLC (EG000024) / Fieldbus, decentr. periphery - power supply/segment module (EC001600)		
Electric engineering, automation, process control engineering / Control, Process Control System (PCS) / Field bus, decentralized peripheral / Field bus, decentralized peripheral - feed and segment module (ecl@ss13-27-24-26-10 [BAA071018])		
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 (supply voltage)		DC
Number of HW-interfaces industrial Ethernet		0
Number of 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 USB		0
Number of HW-interfaces other		1
With optical interface		No
Supporting protocol for EtherCAT		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		Flat plug-in connection
With potential separation		Yes
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 built-in possible		No
Rack-assembly possible		No
Suitable for safety functions		No
SIL according to IEC 61508		None
Performance level according 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
Certified for UL hazardous location class I		No
Certified for UL hazardous location class II		No
Certified for UL hazardous location class III		No
Certified for UL hazardous location division 1		No
Certified for UL hazardous location division 2		No
Certified for UL hazardous location group A (acetylene)		No
Certified for UL hazardous location group B (hydrogen)		No
Certified for UL hazardous location group C (ethylene)		No
Certified for UL hazardous location group D (propane)		No
Certified for UL hazardous location group E (metal dusts)		No
Certified for UL hazardous location group F (carbonaceous dusts)		No
Certified for UL hazardous location group G (non-conductive dusts)		No
Width	mm	35
Height	mm	90
Depth	mm	125