

SWD power supply for powering contactors

Part no. EU5C-SWD-PF1-1
116309
EL Number 4519782
(Norway)

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| General specifications | | |
| Product name | | Eaton EU5C Accessory Power supply |
| Part no. | | EU5C-SWD-PF1-1 |
| EAN | | 4015081160495 |
| Product Length/Depth | | 125 millimetre |
| Product height | | 90 millimetre |
| Product width | | 35 millimetre |
| Product weight | | 0.109 kilogram |
| Certifications | | CSA CSA File No.: 2324643 UL File No.: E29184 EN 50178 CSA Class No.: 3211-07 UL UL Category Control No.: NKCR IEC/EN 61131-2 |
| Product Tradename | | EU5C |
| Product Type | | Accessory |
| Product Sub Type | | Power supply |
| Catalog Notes | | SmartWire-DT power supply for additionally feeding the control voltage for motor starters and contactors, as well as for establishing emergency stop groups |
| Features & Functions | | |
| Electric connection type | | Flat plug-in connection |
| Features | | Fieldbus connection over separate bus coupler possible |
| Fitted with: | | Power supply module |
| Functions | | For feeding control voltage in order to connect additional motor starters and contactors to the SmartWire-DT ribbon cable For the formation of emergency switching off groups for motor starters and contactors |
| General information | | |
| Degree of protection | | IP20 |
| Overvoltage category | | II |
| Pollution degree | | 2 |
| Product category | | SmartWire-DT accessories |
| Residual ripple | | ≤ 5 % (input voltage) |
| Suitable as | | Segment module |
| Terminal capacity | | 0.2 - 1.5 mm ² , solid 24 - 16 AWG, solid or stranded 0.25 - 1.5 mm ² , flexible with ferrule |
| Voltage type | | DC |
| Ambient conditions, mechanical | | |
| 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 |
| Climatic environmental conditions | | |
| Air pressure | | 795 - 1080 hPa (operation) |
| Ambient operating temperature - min | | -25 °C |
| Ambient operating temperature - max | | 55 °C |
| Ambient storage temperature - min | | -40 °C |

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| Ambient storage temperature - max | | 70 °C |
| Climatic proofing | | Dry heat to IEC 60068-2-2 Damp heat, constant, to IEC 60068-2-3 |
| 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) |
| Electro magnetic compatibility | | |
| 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) 10 V/m at 80 - 1000 MHz (according to IEC/EN 61131-2:2008) 1 V/m at 2.0 - 2.7 GHz (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 |
| Electrical rating | | |
| Power loss | | Normally 1 W |
| Rated control supply voltage | | 24 V DC (UAUX, -15 %/+20 %) |
| Rated operational voltage | | Typically UAUX -0.2 V (for 24 V DC slaves) |
| Short-circuit protection | | No, external fuse FAZ Z3, Supply voltage UAux |
| Supply current | | 3 A, I _{max} , 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 |
| Communication | | |
| 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 |
| Protocol | | Other bus systems |
| Safety | | |
| Explosion safety category for dust | | None |
| Explosion safety category for gas | | None |
| Potential isolation | | Supply voltage UAUX: no |
| Protection against polarity reversal | | Yes Yes, for supply voltage (Siemens MPI optional) |
| Design verification | | |
| Equipment heat dissipation, current-dependent P _{vid} | | 0 W |
| Heat dissipation capacity P _{diss} | | 0 W |
| Heat dissipation per pole, current-dependent P _{vid} | | 0 W |
| Rated operational current for specified heat dissipation (I _n) | | 0 A |
| Static heat dissipation, non-current-dependent P _{vs} | | 1 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. |

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| 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

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| 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 (ec1@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 |

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| 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 | | | 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 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 |