## Gateway, SmartWire-DT, 99 SWD modules at CANopen



Part no. EU5C-SWD-CAN

116307

**EL Number** 4519724

(Norway)

(Norway)	
General specifications	
Product name	Eaton EU5C Communication module
Part no.	EU5C-SWD-CAN
EAN	4015081160471
Product Length/Depth	127 millimetre
Product height	90 millimetre
Product width	35 millimetre
Product weight	0.159 kilogram
Certifications	UL File No.: E29184 UL CSA File No.: 2324643 CSA IEC/EN 61131-2 CSA Class No.: 3211-07 UL Category Control No.: NKCR EN 50178
Product Tradename	EU5C
Product Type	Communication module
Product Sub Type	None
Catalog Notes	If contactors with a total current consumption > 3 A are connected, a power feede module EU5C-SWD-PF1/2 has to be used.  If SWD modules with a total current consumption > 0.7 A are connected, a power feeder module EU5C-SWD-PF2 has to be used.  The gateway is equipped with a separate serial diagnostics interface (RJ45).
Features & Functions	
Features	Potential isolation (Fieldbus Interface) Overload proof
Functions	For connection to CANopen® field bus
Operating mode	Address allocation via DIP switch
General information	
Degree of protection	IP20
Overvoltage category	II II
Pollution degree	2
Product category	SmartWire-DT coordinators
Repetition rate	1 s
Residual ripple	≤ 5 % (input voltage)
Suitable for	Safety functions
Terminal capacity	0.25 - 1.5 mm², flexible with ferrule 0.2 - 1.5 mm², solid 24 - 16 AWG, solid or stranded
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 storage temperature - min	-40 °C
Ambient storage temperature - max	70 °C
Climatic proofing	In accordance with IEC 60068-2
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	1 kV, SmartWire-DT cable, according to IEC/EN 61131-2, Level 3 2 kV, Supply cable, according to IEC/EN 61131-2, Level 3 1 kV
Contact discharge	4 kV, according to IEC/EN 61131-2, Level 2, ESD
Electromagnetic fields	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) 3 V/m at 1.4 - 2 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 cable, Surge (IEC/EN 61131-2:2008, Level 1), EMC
Voltage dips	≤ 10 ms, Bridging voltage dips
Electrical rating	
Inrush current	12.5 A (for 6 ms)
Power loss	Normally 1 W
Rated control supply voltage	24 V DC (UAUX, -15 %/+20 %) 24 V DC (UPOW, -15 %/+20 %)
Rated operational current (Ie)	0.6 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 - max	0.7 mA
Supply voltage at AC, 50 Hz - min	0 V
Supply voltage at AC, 50 Hz - max	0 V
Supply voltage at DC - min	20.4 V
Supply voltage at DC - max	28.8 V
Communication	
Addressing	Address set automatically Address range: 1 - 32
Connection	SmartWire-DT blade terminal SWD4-8MF2 The connection to CANopen® is carried out via the 9 pole SUB-D plug as slave. Used to connect the SmartWire-DT communication system to industrial field bus systems. Powers SmartWire-DT modules and switchgear SmartWire-DT gateway for connecting up to 99 SmartWire-DT modules to the field bus and for powering the SmartWire-DT modules and switchgear.
Connection type	1 x SUB-D plug, 9-pole, Field bus interface Push in terminals, Supply voltage SWD: Plug, 8-pole
Data transfer rate	125 kBit/s, SmartWire-DT 250 kBit/s, SmartWire-DT Up to 1 MBit/s, Fieldbus interface 128 Byte, Fieldbus interface, Output data, max. 128 Byte, Fieldbus interface, Input data, max. Automatic baud rate detection for rates ranging from 10 kBit/s to 1 Mbit/s.
Interfaces	Module type: CANopen® slave Status display fieldbus interface for CAN with Multi color LED Terminating resistor switchable via DIP switches
LED indicator	Status indication of SmartWire-DT network: Configurable green or red LED Status indication of SmartWire-DT master: Green and red LEDs Status indication of Supply voltage: LED
Number of modules	99 (SmartWire-DT)
Protocol	CANopen®
Station	2 - 32, Station address, Fieldbus interface
Safety	SmartWire-DT master, SmartWire-DT network
Explosion safety category for dust	None
Explosion safety category for gas	None

Potential isolation	Between UPow and 15 V SmartWire-DT supply voltage: no Supply voltage UAUX: no
Protection against polarity reversal	Yes Yes, for supply voltage (Siemens MPI optional)
Design verification	
Equipment heat dissipation, current-dependent Pvid	3.8 W
Heat dissipation capacity Pdiss	0 W
Heat dissipation per pole, current-dependent Pvid	0 W
Rated operational current for specified heat dissipation (In)	0 A
Static heat dissipation, non-current-dependent Pvs	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.
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**

16Cililical uata ETTIVI 3.0			
Programmable logic controllers PLC (EG000024) / Fieldbus, decentr. periphery - communication module (EC001604)			
Electric engineering, automation, process control engineering / Control, Process Control System (PCS) / Field bus, decentralized peripheral / Field bus, decentralized peripheral - communications module (ecl@ss13-27-24-26-08 [BAA073018])			
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 CAN		1	
Number of HW-interfaces industrial Ethernet		0	
Number of interfaces PROFINET		0	
Number of HW-interfaces RS-232		1	
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 USB		0	
Number of HW-interfaces parallel		0	
Number of HW-interfaces wireless		0	
Number of HW-interfaces other		0	
Supporting protocol for EtherCAT		No	
Supporting protocol for TCP/IP		No	
Supporting protocol for PROFIBUS		No	
Supporting protocol for CAN		No	

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Supporting protocol for EMMINDED         No           Supporting protocol for AS-Interface of Poter ASIA Safety         No           Supporting protocol for PMTRBUS Safety         No           Supporting protocol for PMTRBUS Safety         No           Supporting protocol for PMTRBUS Safety         No           Supporting protocol for other bus systems         No           Supporting protocol for other bus systems         No           Radio canadard Blustoch         No           Radio canadard GMM MBZ1         No           Radio canadard GMM MBZ1         No           Radio canadard GMS         No           Radio canadard LMTS         No           Use can protection UP         Yes           User was function UP         Yes           User was function UP         Yes           User was function up as generate bus coupler possible         No           Rail mounting possible         No           Value mounting finet trouving         Yes           Value as a canadard possible         No           Salae - as a canadard possible			
Supporting protocol for AS-Interface Sufery at Work         No           Supporting protocol for Device New Safery         No           Supporting protocol for PROFIsale         No           Supporting protocol for PROFIsale         No           Supporting protocol for PROFIsale         No           Radio standard GRUHAD WARD         No           Radio standard WANA WELT         No           Radio standard WANA WELT         No           Radio standard SBM         No           Radio standard SBM         No           Radio standard SBM         No           Radio standard UTE			
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Supporting pretocol for other bus systems         No           Radio standard Bluetooth         No           Radio standard WLAN 8211         No           Radio standard GPPS         No           Radio standard GPRS         No           Radio standard GRMS         No           Radio standard UMTS         No           Radio standard UMTS         No           I Dink master         No           System accessory         Yes           Degree of protection (IP)         IP2           With proteinal separation         No           Fieldbus sonnection over separate bus coupler possible         No           Wall mounting possible         Yes           Wall mounting possible         Yes           Wall mounting possible         Yes           Suitable for select yunctions         Yes           Sill according to IEC (ISB)         No           Suitable for select yunctions         Yes           Sill according to IEC (ISB)         No           Performance level according to IEC (ISB)         No           September of specific protection class II         No           Certified for U. Il hazardous location class II         No           Certified for U. Il hazardous location class II         No			
Radio standard WLAN 802.11         No           Radio standard SPRS         No           Radio standard GPRS         No           Radio standard GPRS         No           Radio standard GPRS         No           Radio standard UTF         No           Radio standard UTS         No           10 link master         No           10 link master         No           10 link master         No           Degree of protection IUF         1P20           Will potential sagnation         No           Radious connection over separate bus coupler possible         No           Radious connection over separate bus coupler possible         No           Wall mourting possible         Yes           Wall mourting possible         No           Rack- assembly possible         No           Suitable for safety functions         Yes           Suitable for safety functions         Yes           Suitable for safety functions gent (Exia)         None           Appendant operation agent (Exia)         None           Appendant operation agent (Exia)         No           Appendant operation agent (Exia)         No           Certified for Ut huzardous location class II         No           Certif			
Radio standard WIAN 802.11         No           Radio standard GPRS         No           Radio standard GPRS         No           Radio standard GRM         No           Radio standard LETE         No           Radio standard LTE         No           System accessory         Yes           Degree of protection (P)         1920           With potantial separation         1920           Rall mounting possible         No           Wall mounting possible         Yes           Wall mounting possible         No           Sit Leace assembly possible         No			
Radio standard GFRS         No           Radio standard GFRS         No           Radio standard GSM         No           Radio standard GSM         No           Radio standard UTE         No           Radio standard UMTS         No           10 Ink mester         No           Opere of protection (IP)         IP20           Outper of protection (IP)         IP20           With potential separation         No           Rail mounting possible         No           Rail mounting possible         No           Princt bulk-in possible         No           Reck assembly possible         No           Statable for safety functions         Yes           Statable for safety functions         No           Statable for safety faction agent [Exil)         No           Appendant operation agent [Exil)         No           Explosion safety catagony for dust         No			
Redio standard GNR         No           Redio standard SLM         No           Redio standard LTE         No           Redio standard LTE         No           10 link master         No           10 link master         No           System accessory         Yes           Degree of protection IP?         IP20           With potential saparation         No           Fieldbus connection over separate bus coupler possible         No           Rail mounting possible         Yes           Wall mounting obsesible         No           Front built-in possible         No           Rack-assembly possible         Yes           Sutable for safety functions         Yes           Sutable for safety functions         Yes           Sutable for safety functions         None           Performance level according to EIC 51508         None           Performance level according to EIC 51508         None           Performance level according to EIC 51508         None           Explosion safety category for gas         No           Explosion safety category for dust         No           Certified for UL hazardous location class II         No           Certified for UL hazardous location class II         No			
Radio standard GSM         No           Radio standard LTE         No           Radio standard LMTS         No           Clink master         No           System accessory         Yes           Degree of protection (IP)         IP20           With potential separation         No           Fall mounting possible         Yes           Rall mounting possible         Yes           Wall mounting direct mounting         Yes           Valuable for safety functions         No           Six Late cording to IEC 81508         No           Rull mounting of IEC 81508         Yes           Six Laceording to IEC 81508         No           Performance level according to EN ISO 13849-1         No           Appendant operation agent (Ex is)         No           Curfield for UL heardous location class I         No           Curfield for UL heardous location class I         No           Curfield for UL heardous location class II         No           Curfield for UL heardous location division 1         No           Curfield for UL heardous location division			
Radio standard URTS         No           Radio standard UMTS         No           Unlike master         No           System accessory         Yes           Degree of protection (IP)         IP20           With potential separation         No           Find thus connection over separate bus coupler possible         No           Rail mounting possible         Yes           Wall mounting possible         No           Wall mounting possible         No           Rack-assembly possible         No           Rack-assembly possible         No           Professor         No           Suitable or safety functions         Yes           SL according to ELES 588         No           Performance lovel according to ENISO 1884-1         No           Appendant operation agent (Ex is)         No           Appendant operation agent (Ex is)         No           Explosion safety category for gas         No           Explosion safety category for dast         No           Curflied for UL hazardous location class II         No           Curflied for UL hazardous location class II         No           Curflied for UL hazardous location division 1         No           Curflied for UL hazardous location division 1			
Radio standard UMTS         No           10 link master         No           System accessory         Yes           Degree of protection (IP)         P20           With potential spanration         No           Fieldbus connection over separate bus coupler possible         No           Rall mounting possible         Yes           Wall mounting divined mounting         Yes           Trent built-in-possible         No           Rack-assembly possible         No           Still according to EC 81908         Yes           Still according to EC 81908         No           Performance level according to EN ISO 13849-1         No           Appendant operation agent (Ex ia)         No           Appendant operation agent (Ex ia)         No           Appendant operation agent (Ex ia)         No           Explosion safety category for gas         No           Explosion safety category for gas         No           Explosion for UL hazardous location class II         No           Certified for UL hazardous location class II         No           Certified for UL hazardous location division 1         No           Certified for UL hazardous location division 1         No           Certified for UL hazardous location division 1         No <td></td> <td></td> <td></td>			
Disk master			
System accessory  Degree of protection (IP)  With potential separation Finithus connection over separate bus coupler possible Rail mounting possible Rail mounti			
Degree of protection (IP)         IP20           With potential separation         No           Fieldbus connection over separate bus coupler possible         No           Rail mounting possible         Yes           Wall mounting forest mounting         No           Print bulli-in possible         No           Rack-assambly possible         No           Rack-assambly possible         No           Suitable for safety functions         Yes           Sill according to IEC 61508         None           Performance level according to ENISO 13849-1         None           Appendant operation agent (Ex. in)         No           Appendant operation agent (Ex. in)         None           Explosion safety category for gas         None           Explosion safety category for dust         None           Certified for UL hazardous location class II         None           Certified for UL hazardous location class II         No           Certified for UL hazardous location division 1         No           Certified for UL hazardous location division 2         No           Certified for UL hazardous location division 1         No           Certified for UL hazardous location division 2         No           Certified for UL hazardous location group A (acctylene)         No			
With potential separation Fieldbus connection over separate bus coupler possible Rail mounting possible Wall mounting direct mounting Front built-in possible Rack-assembly possible Ra			
Fieldbus connection over separate bus coupler possible  Rail mounting possible  Wall mounting / Yes  Front built-in possible  No  Rack-assembly possible  No  Rack-assembly possible  No  Suitable for safety functions  Suitable for safety functions  Suitable for safety functions  Suitable for safety functions  None  Performance level according to EIC 61508  None  Performance level according to EIC 1301349-1  Appendant operation agent (Ex ia)  Appendant operation agent (Ex ib)  Ropendant operation agent (Ex ib)  Ropendant operation safety category for gas  Explosion safety category for dust  Certified for UL hazardous location class II  Certified for UL hazardous location class III  Certified for UL hazardous location division 1  Certified for UL hazardous location division 2  Certified for UL hazardous location group A (acetylene)  Certified for UL hazardous location group A (acetylene)  Certified for UL hazardous location group D (propane)  Certified for UL hazardous location group D (propane)  Certified for UL hazardous location group D (propane)  Certified for UL hazardous location group E (metal dusts)  Certified for UL hazardous location group E (metal dusts)  Certified for UL hazardous location group E (metal dusts)  Certified for UL hazardous location group E (metal dusts)  Certified for UL hazardous location group E (metal dusts)  Certified for UL hazardous location group E (metal dusts)  Certified for UL hazardous location group E (metal dusts)  Certified for UL hazardous location group E (metal dusts)  Certified for UL hazardous location group E (metal dusts)  Certified for UL hazardous location group E (metal dusts)  Certified for UL hazardous location group E (metal dusts)  Certified for UL hazardous location group E (metal dusts)  Certified for UL hazardous location group E (metal dusts)  Certified for UL hazardous location group E (metal dusts)			
Rail mounting possible  Wall mounting/direct mounting  Front built-in possible  Rack-assembly possible  Routhale for safety functions  Suitable for safety functions  SIL according to IEC 61508  SIL according to EN ISO 13849-1  Appendant operation agent (Ex ia)  Certified for UL hazardous location class II  Certified for UL hazardous location class III  Certified for UL hazardous location division 1  Certified for UL hazardous location division 1  Certified for UL hazardous location division 2  Certified for UL hazardous location group A (acceptency  Certified for UL hazardous location division 2  Certified for UL hazardous location group D (propane)  Certified for UL hazardous location group D (propane)  Certified for UL hazardous location group E (tertylene)  Certified for UL			
Wall mounting/direct mounting Fromt built-in possible Rack-assembly possible Rack-assembly possible Rock-assembly	·		
Front built-in possible Rack-assembly possible No Suitable for safety functions Suitable for safety functions SIL according to IEC 61508 Performance level according to EN ISO 13849-1 Appendant operation agent (Ex ia) Appendant operation agent (Ex ib) Appendant operation agent (			
Rack-assembly possible  Suitable for safety functions  SIL according to IEC 61508  Performance level according to EN ISO 13849-1  Appendant operation agent (Ex ia)  Appendant operation agent (Ex ia)  Appendant operation agent (Ex ib)  Explosion safety category for gas  Explosion safety category for dust  Certified for UL hazardous location class I  Certified for UL hazardous location division 1  Certified for UL hazardous location division 2  Certified for UL hazardous location group A (seetylene)  Certified for UL hazardous location group C (ethylene)  Certified for UL hazardous location group C (ethylene)  Certified for UL hazardous location group C (ethylene)  Certified for UL hazardous location group F (nathonaceous dusts)  Certified for UL hazardous location group F (carbonaceous dusts)  Certified for UL hazardous location group F (carbonaceous dusts)  Certified for UL hazardous location group G (non-conductive dusts)  Certified for UL hazardous location group G (non-conductive dusts)  Certified for UL hazardous location group G (non-conductive dusts)  Certified for UL hazardous location group G (non-conductive dusts)  Certified for UL hazardous location group G (non-conductive dusts)  Certified for UL hazardous location group G (non-conductive dusts)  Certified for UL hazardous location group G (non-conductive dusts)  Certified for UL hazardous location group G (non-conductive dusts)	· · ·		
Suitable for safety functions       Yes         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 division 1       No         Certified for UL hazardous location division 2       No         Certified for UL hazardous location group A (seetylene)       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 C (ethylene)       No         Certified for UL hazardous location group E (netal dusts)       No         Certified for UL hazardous location group E (metal dusts)       No         Certified for UL hazardous location group E (metal dusts)       No         Certified for UL hazardous location group E (metal dusts)       No         Certified for UL hazardous location group E (metal dusts)       No         Certified for UL hazardous locat			
SIL according to IEC 61508  Performance level according to EN ISO 13849-1  Appendant operation agent (Ex ia)  Appendant operation agent (Ex ib)  Explosion safety category for gas  Explosion safety category for dust  Certified for UL hazardous location class II  Certified for UL hazardous location class III  Certified for UL hazardous location division 1  Certified for UL hazardous location division 1  Certified for UL hazardous location group A (acetylene)  Certified for UL hazardous location group B (hydrogen)  Certified for UL hazardous location group D (propane)  Certified for UL hazardous location group E (metal dusts)  Certified for UL hazardous location group F (azerbonaceous dusts)  Certified for UL hazardous location group F (azerbonaceous dusts)  Certified for UL hazardous location group F (azerbonaceous dusts)  Certified for UL hazardous location group F (azerbonaceous dusts)  Certified for UL hazardous location group F (azerbonaceous dusts)  Certified for UL hazardous location group F (azerbonaceous dusts)  Certified for UL hazardous location group F (azerbonaceous dusts)  Certified for UL hazardous location group F (azerbonaceous dusts)  Certified for UL hazardous location group F (azerbonaceous dusts)  Certified for UL hazardous location group F (azerbonaceous dusts)  Certified for UL hazardous location group G (non-conductive dusts)  Certified for UL hazardous location group G (non-conductive dusts)			
Performance level according to EN ISO 13849-1  Appendant operation agent (Ex ia)  Appendant operation agent (Ex ib)  Explosion safety category for gas  Explosion safety category for dust  Certified for UL hazardous location class I  Certified for UL hazardous location division 1  Certified for UL hazardous location division 1  Certified for UL hazardous location group A (acetylene)  Certified for UL hazardous location group E (tertylene)  Certified for UL hazardous location group E (metal dusts)  Certified for UL hazardous location group F (carbonaceous dusts)  Certified for UL hazardous location group G (non-conductive dusts)  None  None  No  No  No  No  No  Certified for UL hazardous location group E (metal dusts)  No  Certified for UL hazardous location group F (carbonaceous dusts)  Certified for UL hazardous location group G (non-conductive dusts)  No  Certified for UL hazardous location group G (non-conductive dusts)  No  Certified for UL hazardous location group G (non-conductive dusts)	·		
Appendant operation agent (Ex ia) Appendant operation agent (Ex ib) Append			
Appendant operation agent (Ex ib)  Explosion safety category for gas  Explosion safety category for dust  Certified for UL hazardous location class I  Certified for UL hazardous location class II  Certified for UL hazardous location class II  Certified for UL hazardous location division 1  Certified for UL hazardous location division 1  Certified for UL hazardous location division 2  Certified for UL hazardous location group A (acetylene)  Certified for UL hazardous location group B (hydrogen)  Certified for UL hazardous location group D (propane)  Certified for UL hazardous location group E (metal dusts)  Certified for UL hazardous location group F (carbonaceous dusts)  Certified for UL hazardous location group G (non-conductive dusts)  No  Certified for UL hazardous location group G (non-conductive dusts)  No			
Explosion safety category for gas  Explosion safety category for dust  Certified for UL hazardous location class I  Certified for UL hazardous location class II  Certified for UL hazardous location class III  Certified for UL hazardous location division 1  Certified for UL hazardous location division 2  Certified for UL hazardous location group A (acetylene)  Certified for UL hazardous location group B (hydrogen)  Certified for UL hazardous location group C (ethylene)  Certified for UL hazardous location group D (propane)  Certified for UL hazardous location group E (metal dusts)  Certified for UL hazardous location group F (carbonaceous dusts)  No  Certified for UL hazardous location group G (non-conductive dusts)  No  Certified for UL hazardous location group G (non-conductive dusts)  No			
Explosion safety category for dust Certified for UL hazardous location class I Certified for UL hazardous location class II No Certified for UL hazardous location class III No Certified for UL hazardous location division 1 Certified for UL hazardous location division 2 Certified for UL hazardous location group A (acetylene) Certified for UL hazardous location group B (hydrogen) Certified for UL hazardous location group B (hydrogen) Certified for UL hazardous location group D (propane) Certified for UL hazardous location group E (metal dusts) Certified for UL hazardous location group F (carbonaceous dusts) No Certified for UL hazardous location group F (carbonaceous dusts) No Certified for UL hazardous location group F (carbonaceous dusts) 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 1  No Certified for UL hazardous location group A (acetylene)  Certified for UL hazardous location group B (hydrogen)  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			
Certified for UL hazardous location class III  No Certified for UL hazardous location division 1  No Certified for UL hazardous location division 2  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			
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			
Certified for UL hazardous location division 1  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			
Certified for UL hazardous location group A (acetylene)  Certified for UL hazardous location group B (hydrogen)  Certified for UL hazardous location group B (hydrogen)  Certified for UL hazardous location group C (ethylene)  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			
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			
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			
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			
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			
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			
Certified for UL hazardous location group F (carbonaceous dusts)  No  Certified for UL hazardous location group G (non-conductive dusts)  No			No
Certified for UL hazardous location group G (non-conductive dusts)  No			
			No
Width mm 35			No
	Width	mm	35

Height	mm	90
Depth	mm	127