CROUSE-HINDS SERIES

ATEX Category 3 Certificate

Certificate of Conformity for Group II Category 3 G equipment in accordance with Directive 2014/34/EU.

Certificate relating to the following products:-

SUM5™ Universal Isolator range

MTL4-ADIO	**Universal analogue/digital interface module**
MTL4-BSIS	**IS Screw terminal module base**
MTL4-BSGP	**GP Screw terminal module base**
MTL4-SD	**Plug-in surge module**
MTL4-ZS16	**16ch carrier, screw terminal, 1 alarm position**
MTL4-ZSHUIO	**Honeywell C300 carrier**
MTL4-DMA	**Diagnostic module alarm**
MTL4-DMR	**Diagnostic module relay alarm**

This equipment fulfils all the requirements for Group II, Category 3 G equipment in accordance with Directive 2014/34/EU when installed according to the Special Conditions of Safe Use listed below. The design complies with EN IEC 60079-0:2018 and EN IEC 60079-7:2015+A1:2018. The analysis is fully documented in Technical File TF_SUM5.

The equipment in normal operation is incapable of producing arcs, sparks or hot surfaces which may cause ignition and is designed to be installed and used in accordance with EN 60079-14:2014. Note Special Conditions of Safe Use below.

The required marking of the apparatus is as specified in the Technical File referenced above and includes the distinctive community mark:

In addition, the marking will include the CENELEC codes:

Ex ec nC IIC T4 Gc

Eaton Electric Limited
Luton, Bedfordshire, UK, LU2 8DL
Telephone +44 1582 723633
Fax +44 1582 422283
Email mtlenquiry@eaton.com
Website www.mtl-inst.com

Powering Business Worldwide

The equipment is incapable in normal operation of producing sparks or hot surfaces that may cause ignition.

The ambient temperature limitation for the equipment is -40°C to +70°C.

The apparatus meets the ATEX Directive requirements for electromagnetic radiation by complying with the EMC Directive 2014/30/EU.

The standards published in the Official Journal of the European Commission with reference to the Low Voltage Directive 2014/35/EU have been used to fulfil the requirements of 1.2.7 of Annex II of directive 2014/34/EU to avoid electrical risks.

If the sign "X" is placed after the certificate number, it indicates that the equipment is subject to Special Conditions of Safe Use specified elsewhere in this certificate.

Special Conditions of Safe Use

a) The equipment must be installed in an area of Pollution Degree 2 or better, as defined in IEC 60664-1, and in an enclosure that provides a degree of protection of at least IP54 and meets the relevant requirements of EN IEC 60079-0 and EN IEC 60079-7.

b) The ambient temperature stated on this certificate refers to the temperature within the enclosure into which it must be installed in accordance with condition number 1).

c) The equipment is marked with a temperature classification of T4 in a maximum ambient temperature of 70°C. When the equipment is installed in its enclosure, the maximum ambient temperature of the equipment inside the enclosure must not exceed the maximum ambient temperature.

d) When fitted with the optional surge module the equipment is not capable of withstanding the 500V dielectric strength test in accordance with clause 7.1 of EN IEC 60079-7. This must be taken into account during installation.

e) All connections to, and between the modules forming the equipment the must not be inserted or removed unless either the area in which the equipment is installed is known to be non-hazardous, or the circuit to which it is connected has been de-energised.

Carrier Input & Output Parameters – MTL4-ZS16

Power Supply Input POWER V1, V2, 0V, 0V (CON27), Terminals 1 to 4

Maximum Rated Supply Voltage = 30V

The power supply input terminals POWER V1, V2, 0V & 0V pins 1 to 4 are designed to operate from a d.c. supply voltage of 20 to 30Vd.c.supplied from either safety extra low-voltage (SELV) or protective extra low-voltage circuits; for example, equipment complying with the requirements of either the IEC 60950 series, IEC 61010-1 or a technically equivalent standard.

Group Alarm Connections ALARM 1A & 1B and ALARM 2A & 2B (CON28), Terminals 1 to 4
Maximum Rated Voltage per alarm = 32V
Maximum Rated Current per alarm = 250mA

Channel Alarm Connections on MTL4-DMR 34-way header, Channels 1-16 (CON6)
Maximum Rated Voltage per channel = 32V
Maximum Rated Current per channel = 250mA

Isolator DCS Connections, Terminals A, B & C of Slots 1 to 16 (CON18 to CON26)
Terminal Parameters (all positions):

Terminal No.	DCS Connection Description	Terminal No.	DCS Connection Description
A1	VOUT Isolator Slot 1	A9	VOUT Isolator Slot 9
B1	VIN Isolator Slot 1	B9	VIN Isolator Slot 9
C1	0V Isolator Slot 1	C9	0V Isolator Slot 9
A2	VOUT Isolator Slot 2	A10	VOUT Isolator Slot 10
B2	VIN Isolator Slot 2	B10	VIN Isolator Slot 10
C2	0V Isolator Slot 2	C10	0V Isolator Slot 10
A3	VOUT Isolator Slot 3	A11	VOUT Isolator Slot 11
B3	VIN Isolator Slot 3	B11	VIN Isolator Slot 11
C3	0V Isolator Slot 3	C11	0V Isolator Slot 11
A4	VOUT Isolator Slot 4	A12	VOUT Isolator Slot 12
B4	VIN Isolator Slot 4	B12	VIN Isolator Slot 12
C4	0V Isolator Slot 4	C12	0V Isolator Slot 12
A5	VOUT Isolator Slot 5	A13	VOUT Isolator Slot 13
B5	VIN Isolator Slot 5	B13	VIN Isolator Slot 13
C5	0V Isolator Slot 5	C13	0V Isolator Slot 13
A6	VOUT Isolator Slot 6	A14	VOUT Isolator Slot 14
B6	VIN Isolator Slot 6	B14	VIN Isolator Slot 14
C6	0V Isolator Slot 6	C14	0V Isolator Slot 14
A7	VOUT Isolator Slot 7	A15	VOUT Isolator Slot 15
B7	VIN Isolator Slot 7	B15	VIN Isolator Slot 15
C7	0V Isolator Slot 7	C15	0V Isolator Slot 15
A8	VOUT Isolator Slot 8	A16	VOUT Isolator Slot 16
B8	VIN Isolator Slot 8	B16	VIN Isolator Slot 16
C8	0V Isolator Slot 8	C16	0V Isolator Slot 16

Maximum Rated Voltage = 32V
Maximum Rated Current = 300mA

Carrier Input & Output Parameters – MTL4-ZSHUIO

Power Supply Input POWER V1, V2, 0V, 0V (CON20), Terminals 1 to 4

Maximum Rated Supply Voltage = 30V

The power supply input terminals POWER V1, V2, 0V & 0V, pins 1 to 4 are designed to operate from a d.c. supply voltage of 20 to 30Vd.c.supplied from either safety extra low-voltage (SELV) or protective extra low-voltage circuits; for example, equipment complying with the requirements of either the IEC 60950 series, IEC 61010-1 or a technically equivalent standard.

Group Alarm Connections ALARM 1A & 1B and ALARM 2A & 2B (CON28), Terminals 1 to 4
Maximum Rated Voltage per alarm = 32V
Maximum Rated Current per alarm = 250mA

Channel Alarm Connections on MTL4-DMR 34-way header, Channels 1-16 (CON6)
Maximum Rated Voltage per channel = 32V
Maximum Rated Current per channel = 250mA

Isolator DCS Connections, VIN & 0V, Slots 1-16 (CON18)

Terminal No.	DCS Connection Description	Terminal No.	DCS Connection Description
1	VIN Isolator Slot 1	20	0V Isolator Slot 1
2	VIN Isolator Slot 2	21	0V Isolator Slot 2
3	VIN Isolator Slot 3	22	0V Isolator Slot 3
4	VIN Isolator Slot 4	23	0V Isolator Slot 4
5	VIN Isolator Slot 5	24	0V Isolator Slot 5
6	VIN Isolator Slot 6	25	0V Isolator Slot 6
7	VIN Isolator Slot 7	26	0V Isolator Slot 7
8	VIN Isolator Slot 8	27	0V Isolator Slot 8
9	VIN Isolator Slot 9	28	0V Isolator Slot 9
10	VIN Isolator Slot 10	29	0V Isolator Slot 10
11	VIN Isolator Slot 11	30	0V Isolator Slot 11
12	VIN Isolator Slot 12	31	0V Isolator Slot 12
13	VIN Isolator Slot 13	32	0V Isolator Slot 13
14	VIN Isolator Slot 14	33	0V Isolator Slot 14
15	VIN Isolator Slot 15	34	0V Isolator Slot 15
16	VIN Isolator Slot 16	35	0V Isolator Slot 16
17	Unused	36	Unused
18	Unused	37	Unused
19	Unused		

Terminal Parameters (all isolator slots above):

Maximum Rated Voltage = 32V
Maximum Rated Current = 300mA

Isolator Input & Output Parameters -

Hazardous Area Terminals - MTL4-BSIS IS Module Base & MTL4-ADIO Interface Module
If the hazardous area terminals are being connected to certified intrinsically safe equipment located in either Zone 0 & Zone 1 hazardous area, the maximum values for the intrinsically safe circuits and associated load parameters have to be taken from IECEx Certificate No. IECEx BAS 19.0018X.

The following I/O parameters are for the connection of certified Zone 2 mounted equipment:

Hazardous Area Terminals 4 w.r.t. 3, 4 w.r.t 2, 2 w.r.t 3, 1 w.r.t. 2, and 2 & 4 w.r.t 3:

Maximum Rated Voltage = 32V
Maximum Rated Current = 300mA

Ratings are irrespective of Isolator and Base configuration (Analogue or Digital, O/P or I/P, IS Power Jumper Link fitted or not fitted).

Hazardous Area Terminals - MTL4-BSGP General Purpose Module Base & MTL4-ADIO Interface Module (Zone 2 connection only)

The following I/O parameters are for the connection of certified Zone 2 mounted equipment:

Hazardous Area Terminals 4 w.r.t. 3, 4 w.r.t 2, 2 w.r.t 3, 1 w.r.t. 2, and 2 & 4 w.r.t 3:

Maximum Rated Voltage = 32V
Maximum Rated Current = 300mA

Ratings are irrespective of Isolator and Base configuration (Analogue or Digital, O/P or I/P).

Powering Business Worldwide

Stewart Parfitt
Engineering Director
9th November 2020
Luton