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Division 2 or Zone 2 Hazardous Location

Notes.

1. The multi-pin connector of the MTL4850 either plugs directly into the Trident backplane or via a Triconix Caddy system into the Tricon Interface card. The functions of all connections are defined in Table One on Sheet 2.
2. In Zone 2 installations, the MTL4850 shall be mounted within an enclosure which meets the requirements of IEC 60079-0 and IEC 60079-15 and is capable of being installed in accordance with IEC 60079-14. Where installed in outdoor or potentially wet locations, the enclosure shall, at a minimum, meet the requirements of IP54. Where installed in locations providing adequate protection against the entry of solid foreign objects or water capable of impairing safety, the enclosure shall, at a minimum, meet the requirements of IP4X.
 In Class 1, Division 2 installations, the MTL4850 shall be mounted within a tool-secured enclosure installed in accordance with the enclosure, mounting, spacing, and segregation requirements of the ultimate application which is capable of accepting one or more of the Class 1, Division 2 wiring methods specified in the National Electrical Code ANSI/NFPA 70 Article 500.
3. The input voltage for the MTL4850 shall be limited to 18Vdc to 35Vdc.
4. The MTL4850 is approved by FM for mounting in a Class 1, Division 2, Groups A, B, C or D Hazardous (Classified) Location. The MTL4850 is certified by FM under the requirements of the IECEx scheme for mounting in a Zone 2, Group IIC Hazardous Location.
5. The Temperature Class is T4 over a temperature range of -40°C to +70°C.

System Certificate No:	Drn. By	CMB	Scale	N/A
	Drn. Date	3.08	Sheet	1 of 3
Certifying Authority: FM				
Title			Drg. No.	
Control Drawing for MTL4850 HART Multiplexer			SCI-1040	

Dimensions in mm			Do Not Scale	Third Angle Projection
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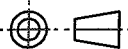
Table One

1	0V	51	0V
2	0V	52	0V
3	CH1+	53	CH3+
4	CH2+	54	CH4+
5	CH5+	55	CH7+
6	CH6+	56	CH8+
7	CH9+	57	CH11+
8	CH10+	58	CH12+
9	CH13+	59	CH15+
10	CH14+	60	CH16+
11	CH1-	61	CH3-
12	CH2-	62	CH4-
13	CH5-	63	CH7-
14	CH6-	64	CH8-
15	CH9-	65	CH11-
16	CH10-	66	CH12-
17	CH13-	67	CH15-
18	CH14-	68	CH16-
19	0V	69	0V_I
20	0V	70	0V_I
21	P0 ISOL	71	P2 ISOL
22	P1 ISOL	72	P3 ISOL
23	P4 ISOL	73	P6 ISOL
24	P5 ISOL	74	P7 ISOL
25	SCLK	75	MOSI
26	MISO	76	SS_L
27	VIN+	77	VIN+
28	VIN+	78	VIN+
29	CH17+	79	CH19+
30	CH18+	80	CH20+
31	CH21+	81	CH23+
32	CH22+	82	CH24+
33	CH25+	83	CH27+
34	CH26+	84	CH28+
35	CH29+	85	CH31+
36	CH30+	86	CH32+
37	CH17-	87	CH19-
38	CH18-	88	CH20-
39	CH21-	89	CH23-
40	CH22-	90	CH24-
41	CH25-	91	CH27-
42	CH26-	92	CH28-
43	CH29-	93	CH31-
44	CH30-	94	CH32-
45	ALARM ISOL	95	ALARMCLEAR ISOL
46		96	
47	0VISOL	97	RS485A
48	RS485B	98	
49	0V	99	0V
50	0V	100	0V

In summary:

- | | |
|-------------------------------|--------------------------|
| 64x loop connections | (CHx+/CHx-) |
| 4x VIN+ | (24VDC) |
| 10x VIN- | (0V) |
| 8x parallel address interface | (P0_ISOL...P7_ISOL) |
| 1x Alarm output | (ALARM_ISOL) |
| 1x Alarm Clear input | (ALARMCLEAR_ISOL) |
| 2x Internal module 0V | (0V_I) |
| 4x SPI (referenced to 0V_I) | (SCLK, MISO, MOSI, SS_L) |
| 3x RS485 | (RS485A, RS485B, 0VISOL) |
| (3 spare) | |

System Certificate No: Certifying Authority: FM	Drn. By	CMB	Scale	N/A
	Drn. Date	3.08	Sheet	2 of 3
Title Control Drawing for MTL4850 HART Multiplexer			Drg. No. SCI-1040	

Dimensions in mm			Do Not Scale	Third Angle Projection	
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Documentation required by IEC 60079-0:2007 Clauses 24 and 30

1. The IECEx marking on the MTL4850 that has not previously been stated in this document is as follows:-

Ex nA IIC T4 IECEx FME 08.0001X
 Made in Luton, England by Measurement Technology Ltd



The input voltage range and ambient temperature range is listed previously in this document.

2. Instructions for safety

The MTL4850 must be installed and used according to the requirements of the standards previously defined in this document for Zone 2 installations, and in the IECEx certificate.

No assembly or dismantling of the MTL4850 is possible or necessary.
 The product is not user-serviceable.

3. Special Conditions of Use

The MTL4850 must be mounted in an enclosure which meets the requirement for Zone 2 installations as previously defined.



System Certificate No:	Dm. By CMB	Scale N/A
Certifying Authority: FM	Dm. Date 3.08	Sheet 3 of 3
Title Control Drawing for MTL4850 HART Multiplexer		Drg. No. SCI-1040