Dimensions in mm | Do Not Scale | Third Angle Projection

Iss	Date	Drn	Modification
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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
Certifying Authority: FM	Drn. Date 3.08	Sheet 1 of 3
Title: Control Drawing for MTL4850 HART Multiplexer		Drg. No. SCI-1040

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

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Luton, England

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

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