







Dimensions in mm			Do Not Scale		Third Angle Projection												
Iss	Date	Modification	MEASUREMENT TECHNOLOGY LTD Luton, England Copyright Reserved - Written Permission to Copy Should be Obtained														
1	3.06																
<p>Notes:</p> <ol style="list-style-type: none"> 1. The unclassified location equipment connected to the associated nonincendive field wiring apparatus must not use or generate more than 250V rms or 250V dc. 2. Nonincendive field wiring installations shall be in accordance with the National Electrical Code ANSI/NFPA 70. The Nonincendive Field Wiring concept allows interconnection of Nonincendive Field Wiring Apparatus with Associated Nonincendive Field Wiring Apparatus using any of the wiring methods permitted for unclassified locations. 3. FM Approved MTL5051 Serial-Data Communications Isolator installed in the unclassified location. 4. FM Approved MTL5025 Solenoid / Alarm Driver installed in the unclassified location. 5. Apparatus connected to the alarm contacts shall be FM Approved as Associated Nonincendive Field Wiring Apparatus and shall comply with the following requirements: <table style="margin-left: auto; margin-right: auto; border: none;"> <tr> <td style="padding: 0 10px;">Voc</td> <td style="padding: 0 10px;">equal to or less than</td> <td style="padding: 0 10px;">Vmax</td> </tr> <tr> <td style="padding: 0 10px;">La</td> <td style="padding: 0 10px;">equal to or greater than</td> <td style="padding: 0 10px;">Lcable + Li</td> </tr> <tr> <td style="padding: 0 10px;">Ca</td> <td style="padding: 0 10px;">equal to or greater than</td> <td style="padding: 0 10px;">Ccable + Ci</td> </tr> </table> 6. Terminals S1 to S7 shall be connected to simple apparatus or volt free contacts of FM Approved Nonincendive Field Wiring Apparatus or FM Approved Associated Nonincendive Field Wiring Apparatus installed using Division 2 wiring methods. 7. To maintain IP66 protection between the MTL646 and the mounting panel: <div style="margin-left: 40px;"> <p>Four panel mounting clips should be used</p> <p>Minimum panel thickness should be 2mm (0.08inches) Steel 3mm (0.12inches) Aluminium</p> <p>Outside panel finish should be smooth, free from particle inclusions, runs or build-up around cut-out.</p> <p>Panel cut-out should be 66.2 x 136.0mm -0.0 +0.5 (2.60 x 5.35 inches -0.00 +0.02)</p> <p>Edges of panel cut-out should be deburred and clean</p> <p>Each panel mounting clip should be tightened to between: 20 and 22cNm (1.77 to 1.95 inLb)</p> </div> 									Voc	equal to or less than	Vmax	La	equal to or greater than	Lcable + Li	Ca	equal to or greater than	Ccable + Ci
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<p>This Certification Document must not be modified without reference to the certifying authority.</p>																	
System Certificate No:			Drn. By CMB		Scale N/A												
Certifying Authority: Factory Mutual			Drn. Date 3.06		Sheet 4 of 5												
Title FM Approvals Control Drawing for the Nonincendive MTL646 and 647 Serial Text Displays					Drng. No. SCI-1011		Iss. 1										

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<div style="display: flex; justify-content: space-between;"> <div style="width: 15%;"> <div style="border: 1px solid black; width: 30px; height: 30px; margin-bottom: 10px; display: flex; align-items: center; justify-content: center;">X</div> <div style="border: 1px solid black; width: 30px; height: 30px; margin-bottom: 10px; display: flex; align-items: center; justify-content: center;">X</div> </div> <div style="width: 85%;"> <p>8. When installed in a hazardous (classified) location the MTL647 Serial Text Display shall be fitted with cable glands / conduit hubs selected from the following table.</p> <p>Metallic glands and hubs must be grounded - see note 9.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 20%;">Class</th> <th>Permitted gland or conduit hub</th> </tr> </thead> <tbody> <tr> <td>Class I</td> <td>Any metallic or plastic cable gland or conduit hub that provides the required environmental protection.</td> </tr> <tr> <td>Class II and III</td> <td> Crouse - Hinds Myler hubs SSTG-1 STG-1 STAG-1 MHUB-1 O-Z / Gedrey hub CHMG-50DT REMKE hub WH-1-G Killark Glands CMCXAA050 MCR050 MCX050 </td> </tr> </tbody> </table> <p>9. In addition to the supplied bonding plate, when 2 or 3 metallic glands or conduit hubs are fitted to a MTL647 Fieldbus Display, all metallic glands or conduit hubs must be connected together and grounded.</p> <p>10. CAUTION: The MTL647 and MTL646 Serial Text Display enclosures are manufactured from conductive plastic per Article 250 of the National Electrical Code the enclosures shall be grounded using the 'E' terminal on the terminal block.</p> <p>11. Up to two MTL647 and/or MTL646 Serial Text Displays may be connected to one system.</p> <p>12. Up to four MTL647 and/or MTL646 Serial Text Displays may be connected to one system.</p> </div> </div>							Class	Permitted gland or conduit hub	Class I	Any metallic or plastic cable gland or conduit hub that provides the required environmental protection.	Class II and III	Crouse - Hinds Myler hubs SSTG-1 STG-1 STAG-1 MHUB-1 O-Z / Gedrey hub CHMG-50DT REMKE hub WH-1-G Killark Glands CMCXAA050 MCR050 MCX050
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