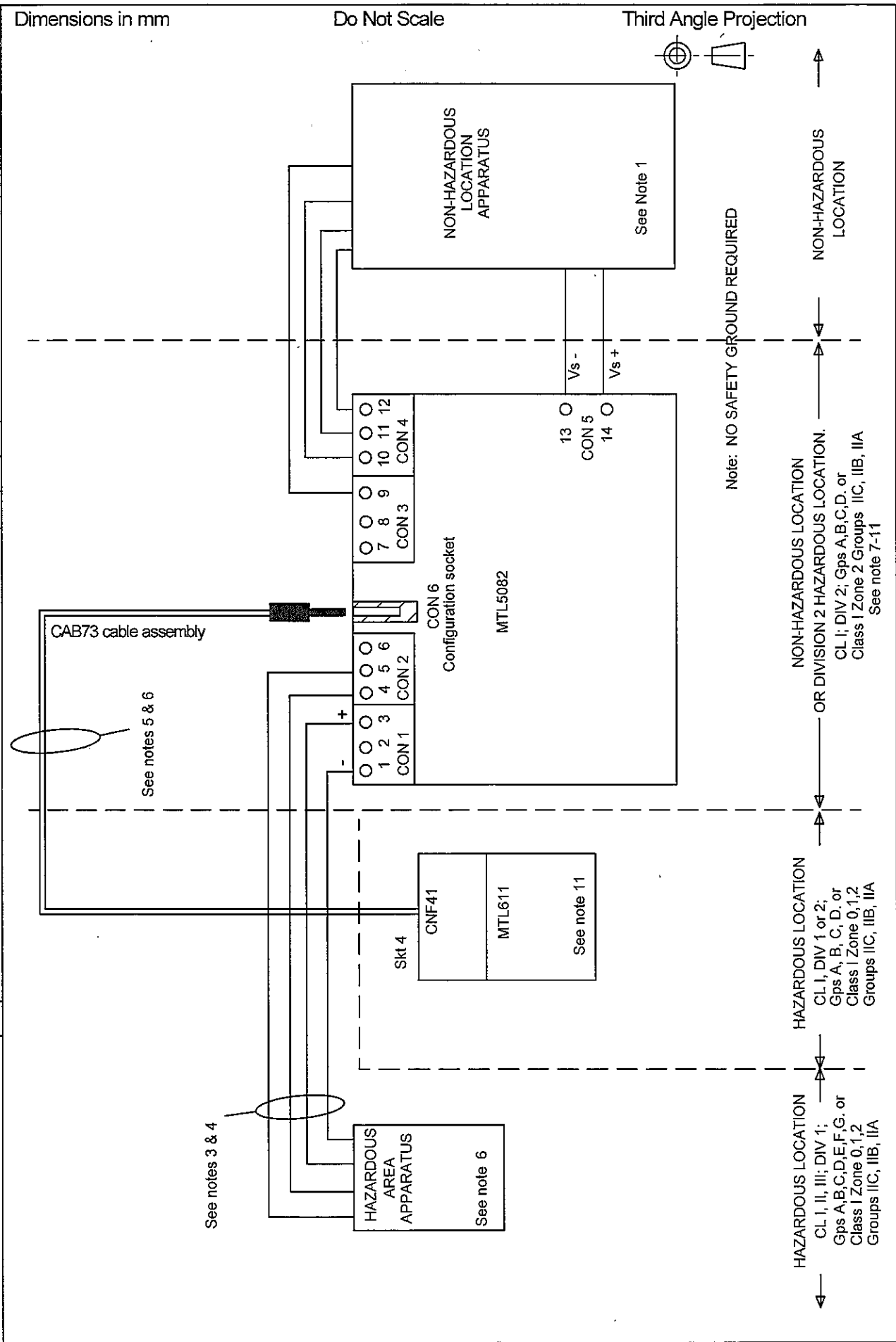
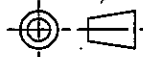


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Iss	Date	Drn	Modification	Chd





System Certificate No: N/A		Scale	N/A
Certifying Authority: CSA		Sheet	1 of 3
Title Installation drawing for the MTL5082 Resistance Isolator		Drng. No.	SCI-864

Chd		Dimensions in mm	Do Not Scale	Third Angle Projection																											
Modification		<p><u>NOTE 1</u></p> <p>Non-Hazardous Location Apparatus - unspecified except that it must not be supplied from nor contain under normal or abnormal conditions, a source of potential with respect to ground in excess of 60V rms or 60V dc.</p> <p><u>NOTE 2</u></p> <p>The Installation in general should comply with the relevant requirements of the Canadian Electrical Code, Part 1, in particular the recommendations of Appendix F.</p> <p><u>NOTE 3</u></p> <p>The MTL5082 may be installed as part of a system containing Intrinsically Safe Apparatus which has CSA Entity certification, in which case the parameters listed below apply:-</p> <p>a) Terminals 1 to 6</p> <p style="text-align:center;">$U_o \leq 7.8V, I_o \leq 25.5mA, P_o \leq 40mW$</p> <p>Note that U_o and I_o cannot occur simultaneously. U_o represents the highest voltage from the series combination of terminals and I_o the highest current from a parallel combination of terminals.</p> <table border="1" style="margin-left:auto; margin-right:auto;"> <tr> <td>Group IIC (A and B)</td> <td>$C_o \leq 9 \mu F$</td> <td>$L_o \leq 52mH$</td> </tr> <tr> <td>Group IIB (C and E)</td> <td>$C_o \leq 27 \mu F$</td> <td>$L_o \leq 184mH$</td> </tr> <tr> <td>Group IIA (D,F and G)</td> <td>$C_o \leq 72 \mu F$</td> <td>$L_o \leq 450mH$</td> </tr> </table> <p>b) Terminals 1 & 3 only</p> <p style="text-align:center;">$U_o \leq 1.2V, I_o \leq 3.8mA, P_o \leq 1mW$</p> <table border="1" style="margin-left:auto; margin-right:auto;"> <tr> <td>Group IIC (A and B)</td> <td>$C_o \leq 1000 \mu F$</td> <td>$L_o \leq 1000mH$</td> </tr> <tr> <td>Group IIB (C and E)</td> <td>$C_o \leq 1000 \mu F$</td> <td>$L_o \leq 1000mH$</td> </tr> <tr> <td>Group IIA (D,F and G)</td> <td>$C_o \leq 1000 \mu F$</td> <td>$L_o \leq 1000mH$</td> </tr> </table> <p>c) The parameters of the complete installation must meet the following criteria :-</p> <p style="text-align:center;">$U_o \leq V_{max} \text{ or } U_i, I_o \leq I_{max} \text{ or } I_i$</p> <p style="text-align:center;">$C_o \geq C_i + C_{cable}, L_o \geq L_i + L_{cable}$</p> <p><u>NOTE 4</u></p> <p>The following cable parameters apply when the MTL5082 and the MTL611/CNF41 are interconnected, as shown on sheet 1 of this drawing.</p> <table border="1" style="margin-left:auto; margin-right:auto;"> <tr> <td>Group IIC (A and B)</td> <td>$C_o \leq 0.6 \mu F$</td> <td>$L_o \leq 66mH$</td> </tr> <tr> <td>Group IIB (C and E)</td> <td>$C_o \leq 1.8 \mu F$</td> <td>$L_o \leq 233mH$</td> </tr> <tr> <td>Group IIA (D,F and G)</td> <td>$C_o \leq 4.8 \mu F$</td> <td>$L_o \leq 575mH$</td> </tr> </table> <p><u>NOTE 5</u></p> <p>IF ENTITY-CERTIFIED INTRINSICALLY SAFE APPARATUS IS NOT AVAILABLE, then the installation must be made in accordance with the details given in Notes 6,7 & 8.</p> <p><u>NOTE 6</u></p> <p>Hazardous Location Apparatus - switches, thermocouples or non-inductive resistance devices, or CSA - Certified Apparatus when connected in accordance with the manufacturer's installation instructions.</p>			Group IIC (A and B)	$C_o \leq 9 \mu F$	$L_o \leq 52mH$	Group IIB (C and E)	$C_o \leq 27 \mu F$	$L_o \leq 184mH$	Group IIA (D,F and G)	$C_o \leq 72 \mu F$	$L_o \leq 450mH$	Group IIC (A and B)	$C_o \leq 1000 \mu F$	$L_o \leq 1000mH$	Group IIB (C and E)	$C_o \leq 1000 \mu F$	$L_o \leq 1000mH$	Group IIA (D,F and G)	$C_o \leq 1000 \mu F$	$L_o \leq 1000mH$	Group IIC (A and B)	$C_o \leq 0.6 \mu F$	$L_o \leq 66mH$	Group IIB (C and E)	$C_o \leq 1.8 \mu F$	$L_o \leq 233mH$	Group IIA (D,F and G)	$C_o \leq 4.8 \mu F$	$L_o \leq 575mH$
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Cnd		Dimensions in mm	Do Not Scale	Third Angle Projection
Modification		<p>NOTE 7</p> <p>For intrinsic safety purposes, terminals 1to 6 of the MTL5082 are considered to be a source of power with a maximum open circuit voltage of 7.8V(all terminals in series) and a maximum short circuit current of 25.5mA (all terminals in parallel).</p> <p>Similarly, terminals 1 and 3 ONLY, represent a power source with a maximum open circuit voltage of 1.2V and a maximum short circuit current of 3.8mA.</p> <p>NOTE 8</p> <p>The parameters of loads/cables connected to terminals 1 to 6, or to terminals 1 and 3 ONLY, of the MTL5082 must comply with the recommendations given in Section F6, Appendix F, Canadian Electrical Code, Part 1.</p> <p>NOTE 9</p> <p>The MTL5082 is " ASSOCIATED APPARATUS" / "APPAREILLAGE CONNEXE" [Ex ia] and when mounted in the appropriate enclosure is suitable for installation in Class 1, Division 2, Groups A, B, C & D Hazardous Locations.</p> <p>NOTE 10</p> <p>WARNING : Substitution of components may impair intrinsic safety.</p> <p>AVERTISSEMENT : La substitution de composants peut compromettre la securite intrinseque.</p> <p>NOTE 11</p> <p>WARNING : EXPLOSION HAZARD - Substitution of components may impair suitability for Class 1, Division 2.</p> <p>WARNING : EXPLOSION HAZARD - Do not disconnect equipment unless power has been switched off or the area is known to be Non-Hazardous.</p>		
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Date		Certifying Authority: CSA		Sheet 3 of 3
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