

**HAZARDOUS
(CLASSIFIED)
LOCATION**

**UNCLASSIFIED
LOCATION**

3DLevelScanner (S/M/MV)

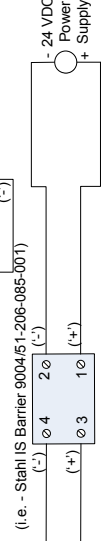
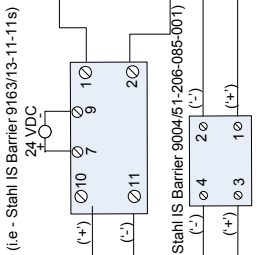
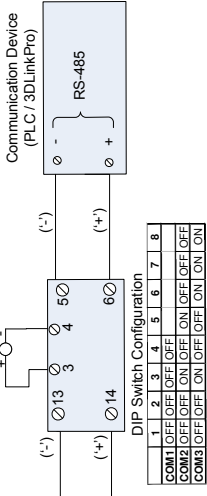
I.S. For CL I, II, DIV. 1, GP CDEFG Ta=-40°C...+85°C (-40°F...+185°F)

Entities:

RS485
 $V_{max}(U_i)=5V$
 $I_{max}(I_i)=500mA$
 $P_{max}(P_i)=625mW$
 $C_i=0F$; $L_i=0H$

4...20mA / HART
 $V_{max}(U_i)=10.5V$
 $I_{max}(I_i)=106mA$
 $P_{max}(P_i)=1.1W$
 $C_i=8nF$; $L_i=0H$

Power Supply
 $V_{max}(U_i)=24V$
 $I_{max}(I_i)=125mA$
 $P_{max}(P_i)=3W$
 $C_i=4nF$; $L_i=250uH$



UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES LIMITS ON FRACTIONS 21/64" DEC 45/100	SCALE - NONE	TITLE -	REV. 3
	DRAWN - Alexander Teryohin	Wiring drawing for intrinsically safe 3DLevelScanner (S/M/MV)	
CHECKED - Yossi Zlotnik	DATE - 22/11/2009	DRAWING NO. PM2000-010	PAGE 1/2
FINISH -		A.P.M. Automation Solutions Ltd.	

Notes:

1. Control equipment connected to Associated Apparatus must not use or generate more than 250V.
2. The Entity Concept allows interconnection of intrinsically safe apparatus with associated apparatus when the following is true:

V_{max} or $U_i \geq V_{oc}$, V_t or U_o ;

I_{max} or $I_i \geq I_{sc}$, I_t or I_o ;

P_{max} or $P_i \geq P_o$;


$C_a \geq C_i + C_{cable}$;

$L_a \geq L_i + L_{cable}$.

3. Resistance between Intrinsically Safe Ground and earth ground must be less than 1.0 Ohm.
4. Dust-Tight conduit seal must be used when installed in Class II and Class III environments.
5. Installation should be in accordance with ANSI/ISA RP12.06.01 "Installation of Intrinsically Safe Systems for Hazardous (Classified) Locations" and the National Electrical Code (ANSI/NFPA 70).
6. The associated apparatus must be a resistively limited single or multiple channel FM Approved barrier having parameters less than those quoted, and for which the output and the combinations of outputs is non-ignition capable for the Class, Division and Group of use.
7. The output of the associated apparatus is non-linear.
8. Connect the barriers individually using different cables.

WARNINGS:

1. Substitution of components may impair Intrinsic Safety.
2. To prevent ignition of flammable or combustible atmospheres, read, understand and adhere to the manufacturer's live maintenance procedures.

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES <small>LIMITS ON FRACTIONS 25/64" DEC 23/98</small>	SCALE- NONE	TITLE- Wiring drawing for intrinsically safe 3DLevelScanner (S/M/MV)			
	DRAWN- Alexander Teryohin				
	CHECKED- Yossi Zlotnik	A.P.M. Automation Solutions Ltd. 	DRAWING NO. PM2000-010	PAGE 2/2	REV. 3
	DATE- 1/07/2009				
	FINISH-				