

IPC6 UKEX/ATEX/IECEX Intrinsically Safe Installation Schematic Drawing

NOTES:

1. NON-HAZARDOUS (SAFE) AREA APPARATUS. - UNSPECIFIED EXCEPT THAT IT SHALL NOT BE POWERED FROM NOR CONTAIN UNDER NORMAL OR ABNORMAL CIRCUMSTANCES A SOURCE OF POTENTIAL WITH RESPECT TO EARTH GREATER THAN 250V AC RMS OR DC.
2. CONVERTOR PARAMETERS ARE AS SHOWN:
 $U_{max}[U_i] = 28V$ $L_{eq}[L_i] = 0$
 $I_{max}[I_i] = 93mA$ $C_{eq}[C_i] = 0$
 $W_{max}[P_i] = 0.65 W$
3. THE IPC6 SERIES OF CONVERTORS MAY BE CONNECTED TO ANY SINGLE CHANNEL POSITIVE POLARITY SHUNT ZENER DIODE BARRIER (OR OPTIONALLY A DIODE RETURN BARRIER) CERTIFIED BY AN EC REGISTERED TEST HOUSE TO A CENELEC STANDARD, WITH THE CODING 'Ex ia IIC'. THE BARRIER SHALL HAVE THE FOLLOWING MAXIMUM OUTPUT PARAMETERS:
 $U_o(U_z) \leq U_i(U_{max})$ $C_o \geq C_{cable} + C_{eq}$
 $I_o(I_k) \leq I_i(I_{max})$ $L_o \geq L_{cable} + L_{eq}$
4. THE ELECTRICAL CIRCUIT IN THE HAZARDOUS AREA MUST BE CAPABLE OF WITHSTANDING AN A.C. TEST VOLTAGE OF 500 VOLTS RMS TO EARTH OR FRAME OF THE APPARATUS FOR ONE MINUTE.
5. INSTALL CONVERTOR PER INSTALLATION MANUAL.
6. WIRING & INSTALLATION SHALL COMPLY WITH EN 60079-14 IEC 60079-14 AND RELEVANT APPARATUS CERTIFICATES.
7. WARNING - THE APPARATUS ENCLOSURE CONTAINS ALUMINUM AND IS CONSIDERED TO CONSTITUTE A POTENTIAL RISK OF IGNITION BY IMPACT OR FRICTION. CARE MUST BE TAKEN INTO ACCOUNT DURING INSTALLATION AND USE TO PREVENT IMPACT OR FRICTION.
8. Entity Installation Requirements:
 $V_{max} \text{ or } U_i \geq V_{oc} \text{ or } U_o$
 $I_{max} \text{ or } I_i \geq I_{sc} \text{ or } I_o$
 $P_{max} \text{ or } P_i \geq P_o$
 $C_i + C_{cable} \leq C_o$
 $L_i + L_{cable} \leq L_o$

