



Member of the FM Global Group

FM Approvals  
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# CERTIFICATE OF COMPLIANCE

## HAZARDOUS (CLASSIFIED) LOCATION ELECTRICAL EQUIPMENT

This certificate is issued for the following equipment:

### **SP2-ab-c SmartPurge2 Purge Control Unit**

I/1/AEx e ib mb [p] IIC T4 -20°C ≤ Ta ≤ 60°C; - SD8112; Entity; IP64

21/AEx tb [pD] IIIC T135°C -20°C ≤ Ta ≤ 60°C; - SD8112; Entity; IP64

a = P or F, System type

b = M or L, Supply voltage

c = ss or al, Enclosure material

#### Entity parameters

	Terminal TB1	U <sub>0</sub> (Vdc)	I <sub>0</sub> (mA)	C <sub>0</sub> (μF)	L <sub>0</sub> (mH)	P <sub>0</sub> (W)
SOV	1,2	23.58	165.5	0.091	2.9	0.975
IP	3,4	23.58	165.5	0.091	2.9	0.975
Remote Output	9,10,11,12	8.465	405.1	5.145	0.48	0.857
External alarm	5,6	5.88	5.9	Negligible	0	0.009
Over-ride	7,8	5.88	5.9	Negligible	0	0.009

**SP2-RP SmartPurge2 Remote Control Terminal**

I/1/AEx ib IIC T4 -20°C ≤ Ta ≤ 60°C; - SD8112; Entity

## Entity parameters

Ui (Vdc)	Ii(mA)	Ci (μF)	Li (mH)	Pi (W)
8.465	405.1	5.145	0.48	0.857

## Equipment Ratings:

The SmartPurge2 Purge Control Unit is FM Approved for Class I, Zone 1, AEx e ib mb [p] IIC and Zone 21, AEx tb[pd] IIIC hazardous (classified) locations. (indoors/outdoors; IP64) for the United States when installed as per control drawing SD8112. The SmartPurge2 Remote Control Terminal is FM Approved for Class I, Zone 1, AEx ib IIC T4 Hazardous (Classified) Locations. (indoors/outdoors; IP64) for the United States when installed as per control drawing SD8112.

## FM Approved for:

Expo Technologies Ltd  
Sunbury on Thames, Surrey United Kingdom



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This certifies that the equipment described has been found to comply with the following Approval Standards and other documents:

Class 3620	2011
Class 3810	2005
ANSI/ISA 61010-1	2004
ANSI/IEC 60529	2004
ANSI/ISA 60079-0	2009
ANSI/ISA 60079-2	2010
ANSI/ISA 60079-7	2008
ANSI/ISA 60079-11	2009
ANSI/ISA 60079-18	2009
ANSI/ISA 60079-31	2009

Original Project ID: 3047764

Approval Granted: January 10, 2014

Subsequent Revision Reports / Date Approval Amended

Report Number	Date	Report Number	Date
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FM Approvals LLC

J.E. Marquedant  
Group Manager, Electrical

10 January 2014

Date