



Member of the FM Global Group

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# CERTIFICATE OF COMPLIANCE

## HAZARDOUS (CLASSIFIED) LOCATION ELECTRICAL EQUIPMENT

This certificate is issued for the following equipment:

### **IS-mA1 Sounder**

IS / I / 1 / ABCD / T4 Ta = 60°C - Entity - D5035; IP65  
I / 0 / AEx ia / IIC / T4 Ta = 60°C - Entity - D5035; IP65

Entity parameters:

Terminals "+" and "-"

$U_i = 28\text{ V}$ ,  $I_i = 93\text{ mA}$ ,  $P_i = 660\text{ mW}$ ,  $C_i = 0$ ,  $L_i = 0$

Terminals "S2" and "S3"

$U_i = 28\text{ V}$ ,  $I_i = 0$ ,  $C_i = 0$

$U_o = 16.8\text{ V}$ ,  $I_o = 7.3\text{ mA}$ ,  $P_o = 31\text{ mW}$

### **IS-mA2 Sounder**

IS / I / 1 / ABCD / T4 Ta = 60°C - Entity - D5045; IP65  
I / 0 / AEx ia / IIC / T4 Ta = 60°C - Entity - D5045; IP65

Entity parameters:

Terminals "+" and "-"

$U_i = 28\text{ V}$ ,  $I_i = 93\text{ mA}$ ,  $P_i = 660\text{ mW}$ ,  $C_i = 0$ ,  $L_i = 0$

Terminals "S2" and "S3"

$U_i = 28\text{ V}$ ,  $I_i = 0$ ,  $C_i = 0$

$U_o = 16.8\text{ V}$ ,  $I_o = 7.3\text{ mA}$ ,  $P_o = 31\text{ mW}$

### **IS-mA3 Sounder**

IS / I / 1 / ABCD / T4 Ta = 60°C - Entity - D5046; IP65  
I / 0 / AEx ia / IIC / T4 Ta = 60°C - Entity - D5046; IP65

Entity parameters

Terminals "+" and "-" "S2" and "S3"

$U_i = 28\text{ V}$ ,  $I_i = 93\text{ mA}$ ,  $P_i = 660\text{ mW}$ ,  $C_i = 0$ ,  $L_i = 0$

### **IS-mB1 Beacon**

IS / I / 1 / ABCD / T4 Ta = 60°C - Entity - D5036; IP65  
I / 0 / AEx ia IIC T4 Ta = 60°C - Entity - D5036; IP65

Entity parameters

Terminals "+" and "-"

$U_i = 28\text{ V}$ ,  $I_i = 660\text{ mA}$ ,  $P_i = 1.2\text{ W}$ ,  $C_i = 0$ ,  $L_i = 0$

**IS-mC1 Combined Sounder / Beacon**

IS / I / 1 / ABCD / T4 Ta = 60°C - Entity - D5037; IP65  
I / 0 / AEx ia IIC T4 Ta = 60°C - Entity - D5037; IP65

Entity parameters

Sounder Terminals "+" and "-"

$U_i = 28V$   $I_i = 93mA$   $P_i = 660mW$   $C_i = 0$   $L_i = 0$

Sounder Terminals "S2" and "S3"

$U_i = 28V$   $I_i = 0$   $C_i = 0$

$U_o = 16.8V$   $I_o = 73mA$   $P_o = 31mW$

Beacon Terminals "+" and "-"

$U_i = 28V$   $I_i = 660mA$   $P_i = 1.2W$   $C_i = 0$   $L_i = 0$

**Special Conditions of Use**

1. To avoid a possible electrostatic charge only clean with a damp cloth

**Equipment Ratings:**

Intrinsically safe, with entity parameters, for use in Class I, Division 1, Groups A, B, C, D and Class I, Zone 0, Group IIC, in accordance with Control Drawing Nos. D5035, D5045, D5046, D5036 or D5037 Hazardous (Classified) Locations indoor/outdoor (IP65).

**FM Approved for:**

European Safety Systems Limited  
Acton, London United Kingdom

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

Class 3600	2011
Class 3610	2010
Class 3810	2005

Original Project ID: 0003029125

Approval Granted: April 11, 2007

**Subsequent Revision Reports / Date Approval Amended**

Report Number	Date	Report Number	Date
3054106	November 24, 2014		

**FM Approvals LLC**



J.E. Marquedant  
Manager of Electrical Systems

24 November 2014  
Date