

# EU-TYPE EXAMINATION CERTIFICATE

- [2] EQUIPMENT OR PROTECTIVE SYSTEM INTENDED FOR USE IN POTENTIALLY EXPLOSIVE ATMOSPHERES DIRECTIVE 2014/34/EU
- [3] EU-Type Examination Certificate Number: **Presafe 19 ATEX 23335X** **Issue 0**
- [4] Product: **Flameproof and Weatherproof Solenoid Coil Enclosure**
- [5] Manufacturer: **Avcon Controls Pvt. Ltd.**
- [6] Address: **Plot No. 65, Road No. 13, M.I.D.C ,  
Andheri (East), Mumbai- 400 093, INDIA.**
- [7] This product and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.
- [8] DNV GL Presafe AS, notified body number 2460, in accordance with Article 17 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres given in Annex II to the Directive.
- The examination and test results are recorded in confidential reports listed in section 16.
- [9] Compliance with the Essential Health and Safety Requirements has been assured by compliance with:  
**EN IEC 60079-0: 2018, EN 60079-1: 2014, EN 60079-18: 2015**
- [10] If the sign "X" is placed after the certificate number, it indicates that the product is subject to the Specific Conditions of Use specified in the schedule to this certificate.
- [11] This EU - TYPE EXAMINATION CERTIFICATE relates only to the design and construction of the specified product. Further requirements of the Directive apply to the manufacturing process and supply of this product. These are not covered by this certificate.
- [12] The marking of the product shall include the following:

 **II 2 G Ex db mb IIC T6 Gb**

Date of issue:  
2021-01-22



Asle Kaastad  
For DNV GL Presafe AS  
The Certificate has been digitally signed.  
See [www.dnvgl.com/digitalsignatures](http://www.dnvgl.com/digitalsignatures) for info

[13] **Schedule**

[14] **EU-Type Examination Certificate No:** Presafe 19 ATEX 23335X Issue 0

[15] **Description of Product**

Solenoid Coil Enclosure comprises a cast housing with an integral terminal enclosure and a cover. The enclosure constructed in aluminium cast alloy LM6, alternate material can be stainless steel casting CF8 or CF8M. The cover on the coil enclosure provides access to the terminal compartment and is fitted with an O ring to provide ingress protection IP67. The cover is secured on the integral terminal enclosure with 4 nos. of M6 X 16L socket head cap screws. A two-way terminal block is fitted within the terminal enclosure.

The coil enclosure has side cable entry. Coil is wound on a non-metallic bobbin and is fully encapsulated with a thermal fuse within a metallic case. Solenoid coil actuates a mechanical solenoid valve mechanism

**Type designation**

M36, M45, M50

**Electrical Data**

Model	Supply Details
M36	24 / 110 / 230V AC, 24 / 12 VDC (57 to 642 mA)
M45	24 / 48 / 110 / 230V AC, 24 / 48 / 220V DC (55 mA to 0.75 A)
M50	24 / 48 / 110 / 230V AC, 24 / 48 / 220V DC (100 mA to 1.5 A)

**Degrees of protection (IP Code)**

IP 67

**Ambient temperature:**

-20°C to +40°C

**Routine tests**

1. The integral terminal enclosure has not been subjected to 4 times overpressure test and hence manufacturer needs to conduct routine pressure test at 8.4 bar for M36 & 8.8 Bar for M45, M50 for period of 10 seconds on terminal enclosure of each Solenoid Enclosure.
2. Manufacturer should carry out visual inspections to ensure encapsulated coils are free from any damage such as cracks, flaking, swelling, inadmissible shrinkage, decomposition and failure in adhesion or softening.
3. An electric strength test of 2U+1000V, for coil voltage equal to and above 110 V and 500 Vrms (for coil voltage up to 24 V), shall be applied between the coil leads and casing for at least 1 second. Alternatively, 1.2 times this test voltage may be applied for at least 100ms. No breakdown shall occur.

[16] **Report No.:** 2019-9628  
**Project No.:** PRJC-582444-2018-PRC-IND

[17] **Specific Conditions of Use**

1. The coil leads for connection of the Input supply has to be terminated within the flameproof terminal compartment.
2. The fastening screws for the cover with spigot joint shall be carbon steel socket head cap screws of property class 8.8 and yield stress 640 N/mm<sup>2</sup>.

For M45 & M50: (Below Special Condition apply in addition to the above)

1. The manufacturer has maintained more flamepath length than required by the standard. The user must refer to the manufacturer before carrying out any repairs or refurbishment to the equipment.

[18] **Essential Health and Safety Requirements**

Essential Health and Safety Requirements (EHSRs) are covered by the standards listed at item 9

[19] **Drawings and documents**

Number	Title	Rev.	Date
AVC-A2- 11159.00.00.MK	Drawings for M36-RD-FLP-IIC-T6 Solenoid Coil Enclosure For AC/DC Voltages (1 Sheet)	01	19.11.2020
AVC-A4-11159.00.34	Nameplate Drawing for M36 Solenoid Coil (1 Sheet)	00	23.04.2020
AVC-A2- 11162.00.00.MK	Drawings for M45-1/6-RD-FLP-IIC-T6 Solenoid Coil Enclosure For AC/DC Voltages (1 Sheet)	01	17.11.2020
AVC-A4-11162.00.34	Nameplate Drawing for M45 Solenoid Coil (1 Sheet)	00	20.01.2019
AVC-A2- 11163.00.00.MK	Drawings for M50-RD-FLP-IIC-T6 Solenoid Coil Enclosure For AC/DC Voltages (1 Sheet)	01	17.11.2020
AVC-A4-11163.00.34	Nameplate Drawing for M50 Solenoid Coil (1 Sheet)	00	24.11.2018

[20] **Certificate History**

Issue	Description	Issue date	Report no.
0	Original issue	2021-01-22	2019-9628

END OF CERTIFICATE

