


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 23663X** **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 and EN 60079-31: 2014
- [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 GD Ex db mb IIC T6 Gb
Ex tb IIIC T85 °C Db**

Date of issue:
2020-12-03



Asle Kaastad
For DNV GL Presafe AS
The Certificate has been digitally signed.
See www.dnvgl.com/digitalsignatures for info

[13] **Schedule**

[14] **EU-Type Examination Certificate No:** Presafe 19 ATEX 23663X Issue 0

[15] **Description of Product**

These Solenoid Coil Enclosure of protection type 'Ex db, Ex mb, Ex tb". These are not portable equipments.

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 14L 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

M40

Electrical Data

Supply Details	Current in Amperes
24V AC, 50 / 60 Hz	815 mA
110V AC, 50 / 60 Hz	243 mA
230V AC, 50 / 60 Hz	160 mA
240V AC, 50 / 60 Hz	85 mA
12V DC	101 mA
24V DC	805 mA
110V DC	310 mA
220V DC	100 mA

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 9.20 bar 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 above 48V and 500V_{rms} for coil voltage up to 48V, 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.:** 2019-9418
Project No.: PRJC-582444-2018-PRC-IND

[17] **Specific Conditions of Use**

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.
2. The coil leads for connection of the Input supply has to be terminated within the flameproof terminal compartment.
3. 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/mm².
4. The painted enclosure may present a potential electrostatic charging hazard. See the manufacturer's instructions for further information.

[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-A2-11160.00.00.MK	Flameproof and Weatherproof Solenoid Coil Enclosure	0	02.09.2020
AVC-A4 11160.00.34	Name Plate Drawing	0	23.04.2020

[20] **Certificate History**

Issue	Description	Issue date	Report no.
0	Original issue	2020-12-03	2019-9418

END OF CERTIFICATE