

### INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.: IECEx IMQ 14.0003X Issue No: 2 Certificate history:

Issue No. 2 (2018-11-19)

Status: Current Issue No. 1 (2016-10-26)
Page 1 of 4 Issue No. 0 (2014-05-06)

Date of Issue: 2018-11-19

Applicant: Bimed Teknik Aletler San. Ve Tic. A.Ş.

S.S Bakır ve Pirinç Sanayi Sitesi Leylak Caddesi No:15 Beylikdüzü

Istanbul **Turkey** 

Equipment: Drain plug and ventilation plug

Optional accessory: Series: BDRV...; \*BBVP...

Type of Protection: Ex eb; Ex tb

Marking:

Ex eb IIC Gb Ex tb III C Db

Approved for issue on behalf of the IECEx Mr. Mauro CASARI

Certification Body:

Position: IMQ ExCB Manager

Signature:

(for printed version)

Date:

- 1. This certificate and schedule may only be reproduced in full.
- 2. This certificate is not transferable and remains the property of the issuing body.
- 3. The Status and authenticity of this certificate may be verified by visiting the Official IECEx Website.

Certificate issued by:

Istituto Italiano del Marchio di Qualità S.p.A Via Quintiliano 43 20138 Milano Italy





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Manufacturer: Bimed Teknik Aletler San. Ve Tic. A.Ş.

S.S Bakır ve Pirinç Sanayi Sitesi Leylak Caddesi No:15 Beylikdüzü

Istanbul Turkey

Additional Manufacturing location(s):

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended.

#### STANDARDS:

The apparatus and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards:

IEC 60079-0 : 2011 Explosive atmospheres - Part 0: General requirements

Edition:6.0

IEC 60079-31 : 2013 Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"

Edition:2

IEC 60079-7: 2015 Explosive atmospheres – Part 7: Equipment protection by increased safety "e"

Edition:5.0

This Certificate does not indicate compliance with electrical safety and performance requirements other than those expressly included in the

Standards listed above.

#### **TEST & ASSESSMENT REPORTS:**

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in

Test Report:

IT/IMQ/ExTR14.0003/02

**Quality Assessment Report:** 

IT/CES/QAR12.0003/04 IT/CES/QAR12.0003/05



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Schedule

#### **EQUIPMENT:**

Equipment and systems covered by this certificate are as follows:

Drain plug BDRV... is a device intended for use to evacuate the water generated because of condensation inside the enclosure. Due to the fact that water is accumulated in bottom part of the enclosure, "drain plug" is assembled in the lowest part of the enclosure. As a principle, no extra pressure is needed to drain the water out of the enclosure. Water will come out with the presence of drain plug device. Drain plug membrane is manufactured from sintered material: only brass can be used as raw material. The drain plug body is generally made in brass or, as alternative, in stainless steel (in case of ambient temperature below -30°C, must be used austenitic steels or brass).

Ventilation plug \*BBVP... adjusts the inner pressure of sealed equipment of type of protection "e" and "tb" to the ambient pressure. It consist of a body with cap of stainless steel and a pressed in membrane. Degree of ingress protection of ventilation plug is detailed in below membrane specification table.

Further details are included in Annex.

#### SPECIFIC CONDITIONS OF USE: YES as shown below:

The interfaces between the valve and associated enclosures is made by threaded joint: it is the user's responsibility to ensure that the appropriate ingress protection degree is maintained, carrying out the installation according to safety manufacturer instructions.

Plain holes shall be no larger than 0,7 mm above the major diameter of the plug thread and the device shall be secured with a locknut.

The temperature class will be dependent on the enclosure into which it is installed, taking into account that at their point of mounting, these devices are approved for use at the following working temperature:

-60 ÷ 85 °C (drain plug)

-40 ÷ 100 °C (ventilation plug)



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#### DETAILS OF CERTIFICATE CHANGES (for issues 1 and above):

Issue 1:

New standard applied, below mechanical change of product:

- •The hole on the side of the cap is removed, and moved to the side, and the hole diameter is smaller.
- •The name of the product is changed in "drain plug" instead "drain valve"
- •Change from "U" to "X"

Issue 2:

Ventilation plug type \*BBVP... has been added.

Annex:

IECEx IMQ 14.0003 X issue No. 2 Annex.pdf

Annex to: IECEx IMQ 14.0003X issue No. 2

Applicant: Bimed Teknik Aletler San. Ve Tic. A.Ş.

Apparatus: Drain plug BDRV...

Ventilation plug \*BBVP...



#### **General description**

Drain plug BDRV... is a device intended for use to evacuate the water generated because of condensation inside the enclosure.

Due to the fact that water is accumulated in bottom part of the enclosure, "drain plug" is assembled in the lowest part of the enclosure. As a principle, no extra pressure is needed to drain the water out of the enclosure. Water will come out with the presence of drain plug device. Drain plug membrane is manufactured from sintered material: only brass can be used as raw material.

The drain plug body is generally made in brass or, as alternative, in stainless steel (in case of ambient temperature below -30°C, must be used austenitic steels or brass).

Ventilation plug \*BBVP... adjusts the inner pressure of sealed equipment of type of protection "e" and "tb" to the ambient pressure. It consist of a body with cap of stainless steel and a pressed in membrane.

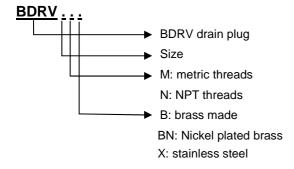
Degree of ingress protection of ventilation plug is detailed in below membrane specification table.

Membrane Specification				
Membrane Type	S	М	Н	UH
Description (µm)	0,45	0,8	3	5
Protection Class	IP66, IP68	IP66, IP68	IP66, IP68	IP64
Water Intrusion Pressure bar	0,9	0,5	0,2	-
Average Air flow rate (lt/h) for Δp=70mB	16	25	120	300

#### Design options and Key code

#### Drain plug:

Material	BDRV	Stainless steel or brass for body silicone for o-ring brass for membrane
Service temperature	-60°C ÷ +85°C	
Thursday to a se	N – NPT	
Threads types	M - ISO pitch 1,5 (EN 60423)	



Annex to: IECEx IMQ 14.0003X issue No. 2

Applicant: Bimed Teknik Aletler San. Ve Tic. A.Ş.

Apparatus: Drain plug BDRV...

Ventilation plug \*BBVP...



#### Ventilation plug:

Material	*BBVP	Stainless steel	
Service temperature	-40°C ÷ +100°C		
	N – NPT		
Threads types	M - ISO pitch 1,5 (EN 60423)		
	P – PG DIN 40430		

Membrane type options	Product type		Size	Thread type options
S	BBVP	=.	X01	M :Metric
M		•		P : PG
Н				N : NPT
UH				

#### Specific conditions of Use:

- The interfaces between the valve and associated enclosures is made by threaded joint: it is the user's responsibility to ensure that the appropriate ingress protection degree is maintained, carrying out the installation according to safety manufacturer instructions.
- Plain holes shall be no larger than 0,7 mm above the major diameter of the plug thread and the device shall be secured with a locknut.
- The temperature class will be dependent on the enclosure into which it is installed, taking into account that at their point of mounting, these devices are approved for use at the following working temperature:

-60 ÷ 85 °C (drain plug) -40 ÷ 100 °C (ventilation plug)

### Manufacturer's documentation:

Safety, maintenance and mounting instructions code MI-DV dated 2018-05-17.

#### **Models sizes**

#### Drain plug:

Туре	Model
BDRV	BDRV 1 M . (M20)
	BDRV 1 N . (1/2")
	BDRV 2 M . (M25)
	BDRV 2 N . (3/4")

#### Ventilation plug:

Туре	Model
*BBVP	*BBVP-X01M (M12)
	*BBVP-X01P (PG7)
	*BBVP-X01N (1/4")

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