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Eurofins Product Testing Italy S.r.l. - Via Cuorgnè, 21 - 10156 Turin - ITALY
Notified Body n. 0477

[1] SUPPLEMENT N.2 EC TYPE EXAMINATION CERTIFICATE

[2] **Equipment intended for use in potentially explosive atmospheres Directive 94/9/EC**

[3] Number of EC Type Examination Certificate:

EUT 14 ATEX 1161 X

[4] Equipment: **Limit Switch Box**

Series: : **ASB**

[5] Manufacturer: **DVG Automation S.p.A.**

[6] Address: **Via Rossetti, n. 2 - 29016 Cortemaggiore (PC)**

[7] No changes

[8] Eurofins Product Testing Italy S.r.l., Notified Body n. *0477* in accordance with Article 9 of the Council Directive 94/9/CE of 23th March 1994, certifies that this equipment have been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment intended for use in potentially explosive atmospheres given in Annex II of the Directive.
The examination and test results are recorded in the confidential report n.EPT.15.REL.02/53411

[9] Compliance with the essential health and safety is assured by compliance with:

EN 60079-0:2012; EN 60079-1:2007; EN 60079-31:2009; EN 60079-11:2012

[10] No changes

[11] No changes

[12] The equipment must include the symbol Ⓔx and at least one of the following strings:

II 2G Ex d IIC TX Gb	**-XX°C ≤ Ta ≤ +XX°C**
II 2D Ex tb IIIC TX°C Db	**-XX°C ≤ Ta ≤ +XX°C**
II 1G Ex ia IIC T4 Ga	**-XX°C ≤ Ta ≤ +XX°C**
II 1D Ex ia IIIC T135°C Da	**-XX°C ≤ Ta ≤ +XX°C**
II 2G Ex ib IIC T4 Gb	**-XX°C ≤ Ta ≤ +XX°C**
II 2D Ex ib IIIC T135°C Db	**-XX°C ≤ Ta ≤ +XX°C**

Turin, 11 December 2015

CE

Dionisio Bucchieri
Directive Responsible

Paolo Trisoglio
Managing Director

Eurofins Product Testing Italy
eurofins
Notified Body N. 0477

ACCREDIA
L'ENTE ITALIANO DI ACCREDITAMENTO

PRD N° 119B
ISP N° 030E
Membro degli Accordi di Mutuo Riconoscimento EA, IAF e ILAC
Signatory of EA, IAF and ILAC Mutual Recognition Agreements

[13] **ANNEX**

[14] **SUPPLEMENT N.2 EC TYPE EXAMINATION CERTIFICATE N. EUT 14 ATEX 1161 X**

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[15] **Equipment description**

This point [15] replace the point [15] of the Supplement n.1 to EC TYPE examination Certificate n. EUT 14 ATEX 1161 of 23-06-2015.

ASB Series Limit Switch Box provides limit switch facility, along with 4÷20mA / position transmitter 4÷20mA / HART position transmitter and/or Partial Stroke Test capability.

The version with position transmitter is called "ASBE4AV0001".
The equipment can be made made of aluminium or stainless steel (the paint used has a maximum thickness of 100 µm).
The equipment is suitable for group IIC and group IIIC has respectively the type of protection "Ex d", "Ex t" and "Ex i".
For type of protection "i", each switch have to be connected to an already ATEX certified intrinsically safe barrier.

The equipment can be equipped with:

- maximum 6 separated mechanical SPDT limit switches manufactured by ITW or;
- maximum 6 separated DPDT model 22-304 limit switches manufactured by ITW or;
- maximum 6 separated magnetic limit switches manufactured by BDC or;
- maximum 3 separated inductive limit switches (Namur) model NJ2-12GK-SN manufactured by PEPPERL+FUCHS or;
- maximum 3 separated inductive limit switches (Namur) manufactured by BDC or;
- maximum 3 separated magnetic limit switches manufactured by SOLDO model Nova V3 or;
- maximum 3 separated limit go switches model 11, 21, 31 or 81 manufactured by Emerson;

The accessories used for cable entries and for unused holes have to be subjected of a separate certification according to the applicable standards.
Degree of protection: IP 68 (2h submersed at a depth of 1m).

Electrical characteristics

In case of equipment with types of protection "Ex d" and "Ex tb":

Maximum voltage:	250 Vac/Vdc
Maximum Limit Switch current:	16 A
Maximum power dissipation:	720 mW

In case of equipment with types of protection "Ex i", the safe input parameters are:
Ui=30V; Ii=120 mA; Pi=0.9W; Li≈0 µH; Ci≈0µF

[13] **ANNEX**

[14] **SUPPLEMENT N.2 EC TYPE EXAMINATION CERTIFICATE N. EUT 14 ATEX 1161 X**

Temperature Class and Maximum surface temperature for types of protection "Ex d" and "Ex t":

Tamb	Temperature Class and Maximum surface temperature	Version	Gaskets
-20°C + 85°C	T5 and T85°C	Standard	NBR
-20°C + 80°C	T6 and T80°C	Standard	NBR
-60°C + 85°C	T5 and T85°C	Standard	Fluorosilicone
-60°C + 80°C	T6 and T80°C	Standard	Fluorosilicone
-20°C + 65°C	T5 and T85°C	ASBE4AV0001	NBR
-20°C + 60°C	T6 and T80°C	ASBE4AV0001	NBR
-25°C + 65°C	T5 and T85°C	ASBE4AV0001	Fluorosilicone
-25°C + 60°C	T6 and T80°C	ASBE4AV0001	Fluorosilicone

For the type of protection "Ex i", the ranges of ambient temperature can be -20°C≤Tamb≤ +85°C or -60°C≤Tamb≤ +85°C.

The used screws comply with quality A4-70.

Warning label

WARNING – Do not open in presence of explosive atmosphere.
WARNING – Do not open while energized
WARNING – Potential electrostatic charging hazard - clean with dump cloth or antistatic products

[16] **Special condition for a safe use**

Each switch have to be supplied from an already IEC Ex certified intrinsically safe barrier with suitable output parameters.
Aluminum equipment, where installed in zone 0, have to be installed in such way that it is eliminated the danger of ignition due to impact or friction.

[17] **Assessment Report n° EPT.15.REL.02/53473**

This EC Type Examination Certificate is released after the positive result of the conformity assessment of the Council Directive 94/9/CE, and to harmonized technical standards EN 60079-0:2012; EN 60079-1:2007; EN 60079-31:2009; EN 60079-11:2012performed by the Notified Body Eurofins Product Testing Italy S.r.l., and reported in the Assessment Report above cited.

Individual tests

No changes

[13] **ANNEX**

[14] **SUPPLEMENT N.2 EC TYPE EXAMINATION CERTIFICATE N. EUT 14 ATEX 1161 X**

[18] **Descriptive documents**

This point [18] integrate the point [18] of the Supplement n.1 to EC TYPE examination Certificate n. EUT 14 ATEX 1161 of 23-06-2015.

The equipment object of this certificate are described by the following documents.
Scheduled documents are indicated with the symbol "Y" and can not be modified without the explicit authorization of the notified body:

Document	Name	Rev.	Date	Scheduled
Marking label	DTRG00000505	1	2015/10/22	Y
Marking label	DTRG00000615	0	2015/12/03	Y
Drawing of pcb	LSB2	0	2015/11/01	Y
Drawing of pcb	LSB4	0	2015/11/01	Y
Drawing of pcb	LSB5	0	2015/11/01	Y
Drawing of pcb	LSB6	0	2015/11/01	Y
Drawing of pcb	ITW22PCB	0	2015/11/01	Y
Safety instructions – ASB Series	SM-ASB-ENG-01	3	2015/10/22	-
Safety instructions - ASBE4AV0001	SM-ASB-ENG-02	2	2015/10/29	-

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

No changes

[20] **Supplement History**

This Supplement is at its first issue.
It intervenes as a result of an evaluation for the intrinsic safety type of protection as an alternative type of protection.
The evaluation is contained in the Assessment report n. EPT.15.REL.02/53411.

[21] **Terms and conditions**

No changes