



EU Type Examination Certificate CML 17ATEX2046X Issue 2

- 1 Equipment intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU
- 2 Equipment **Solenoid Assembly Type EP000/ia**
- 3 Manufacturer **Pneumatrol Limited**
- 4 Address **West End Business Park,
Blackburn Road,
Oswaldtwistle, Nr Accrington,
Lancashire, BB5 4WZ
United Kingdom**
- 5 The equipment is specified in the description of this certificate and the documents to which it refers.
- 6 CML B.V., Chamber of Commerce No 6738671, Koopvaardijweg 32, 4906CV Oosterhout, The Netherlands, Notified Body Number 2776, 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 equipment has 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 to the Directive.

The examination and test results are recorded in the confidential reports listed in Section 12.
- 7 If an 'X' suffix appears after the certificate number, it indicates that the equipment is subject to conditions of safe use (affecting correct installation or safe use). These are specified in Section 14.
- 8 This EU Type Examination certificate relates only to the design and construction of the specified equipment or component. Further requirements of Directive 2014/34/EU Article 13 apply to the manufacture of the equipment or component and are separately certified.
- 9 Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the confidential report, has been demonstrated through compliance with the following documents:

EN IEC 60079-0:2018

EN 60079-11:2012

- 10 The equipment shall be marked with the following:



II 1 G

Ex ia IIC T6...T5 Ga

Tamb: See Description



II 1 D

Ex ia IIIB T135°C T₅₀₀ 175°C Da

Tamb: -40°C to +65°C

Tamb: -55°C to +65°C (TB / S02 type*)

* Refer to nomenclature for model numbers

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CML 17ATEX2046X
Issue 2

11 Description

The Solenoid Assembly Type EP000/ia is designed as an electro-magnetic actuator for a control valve. The coil is mounted on a glass filled nylon former and two shunt connected diodes or a bridge rectifier are fitted to a printed circuit board beneath the terminal block.

The unit is contained in an enclosure of steel, stainless steel or aluminium and the coil and diodes are encapsulated to a depth of 1mm. External connection may be to a terminal block contained within the enclosure, to a plug and socket, or via a flying lead.

The equipment may be marked with alternative model names as described in the table below:

Nomenclature:

Solenoid Assembly Type EP000/ia/xx

Alternative model name

Where xx represents the connection type:

FL	- 2 x 22 AWG 230 mm Flying Leads	S06
TB	- 2-Pole Terminal Block 90° Conduit Entry	S02
IL	- 2-Pole Terminal Block, In-Line Conduit Entry	S05
PS	- 2 Pin Plug (with accompanying 2 -pin socket) with gasket	S04
SS	- Stainless Steel Case	S03

Ratings:

Group II:

Ui = 31 V
Ii = 0.67 A

Pi =	T-Class	Pi = 1 W	Pi = 2.98 W
	T5	Tamb: -40°C to +65°C Tamb: -55°C to +65°C (TB/S02 type)	Tamb: -40°C to +65°C Tamb: -55°C to +65°C (TB/S02 type)
	T6	Tamb: -40°C to +65°C Tamb: -55°C to +65°C (TB/S02 type)	Tamb: -40°C to +50°C Tamb: -55°C to +50°C (TB/S02 type)

Ci = 0
Li = 0

Group III:

Ui = 31 V
Ii = 0.67 A
Pi = 2.98 W
Ci = 0
Li = 0



**CML 17ATEX2046X
Issue 2**

Variation 1:

This variation introduces the following modifications:

- i. Transfer of certificate from CML UK to CML B.V.
- ii. Minor change to the label drawing relating to the marking of the NB (Notified Body) number.

Variation 2:

This variation introduces the following modifications:

- i. To reduce the minimum operating temperature of the 'TB' (/S02) model to -55°C.
- ii. Update of standard to EN IEC 60079-0:2018.
- iii. The introduction of alternative model names.

12 Certificate history and evaluation reports

Issue	Date	Associated report	Notes
0	14/07/2017	R2012A	Initial Issue
1	30 Jan 2019	R12212A/00	Introduction of Variation 1
2	29 Oct 2020	R13540A/00	Introduction of Variation 2

Note: Drawings that describe the equipment or component are listed in the Annex.

13 Conditions of Manufacture

The following conditions are required of the manufacturing process for compliance with the certification.

- i. Where the product incorporates certified parts or safety critical components, the manufacturer shall ensure that any changes to those parts or components do not affect the compliance of the certified product that is the subject of this certificate.
- ii. The equipment shall be subjected to routine tests in accordance with the requirement of EN 60079-11, Clause 6.3.13 Dielectric strength. The insulation between the intrinsically safe circuit and the frame of the electrical equipment or parts which may be earthed shall be capable of complying with the test described in 10.3 at an r.m.s. a.c. test voltage of 500 V r.m.s. for at least 60 s. No breakdown shall occur.



**CML 17ATEX2046X
Issue 2**

14 Specific Conditions of Use (Special Conditions)

The following conditions relate to safe installation and/or use of the equipment.

- i. The enclosure is manufactured from Aluminium. In rare cases, ignition sources due to impact and friction sparks could occur. This shall be considered during installation, particularly if the equipment is installed in a Zone 0 or 20 location.
- ii. Under certain extreme circumstances, the non-metallic parts incorporated in the enclosure of this equipment may generate an ignition-capable level of electrostatic charge. Therefore, the equipment shall not be installed in a location where the external conditions are conducive to the build-up of electrostatic charge on these surfaces, such as Steam generation or blown/fast moving dust. This is particularly important if the equipment is installed in a Zone 0 or 20 location. In addition, the equipment shall only be cleaned with a damp cloth.
- iii. Full Temperature Class/Ambient Temperature Range information is not present on the equipment marking label, refer to the Description for full equipment marking details.

Certificate Annex

Certificate Number CML 17ATEX2046X
Equipment Solenoid Assembly Type EP000/ia
Manufacturer Pneumatrol Limited



The following documents describe the equipment or component defined in this certificate:

Issue 0

Drawing No	Sheets	Rev	Approved date	Title
CV5004	1 of 1	8	14/07/2017	EP000/ia & Variant Coil Assembly
V6207G2S	1 of 1	2	14/07/2017	ATEX/IECEX Label for EP000/ia

Issue 1

Drawing No	Sheets	Rev	Approved date	Title
V6207G2S	1 of 1	3	29 Jan 2019	ATEX/IECEX Label for EP000/ia

Issue 2

Drawing No	Sheets	Rev	Approved date	Title
V5004	1 of 1	9	23 Oct 2020	EP000/IA & Variants coil assembly
V6405-#	1 of 1	0	23 Oct 2020	ATEX/IECEX Label for Ex ia solenoids

Festo / (Ross) Pneumatrol cross reference					
Festo part number	Festo description	(Ross) Pneumatrol Type	(Ross) Pneumatrol new part number	(Ross) Pneumatrol old part number	(Ross) Pneumatrol Description
535614	MGXIAH-3/2-0.8-24DC-EX	EP000/ia/TB -20 Screw Driver	SV3016-SAS1	E13AXCAS0BA072	Cnomo Solenoid Aluminium, Mazak Housed Exia Solenoid 24vdc Screw driver MO, Festo Grey -20 ATEX/IECEX
535615	MGXDH-3/2-1.2-24DC-EX	EP000/d/TB -20 Screw Driver	SV3015-SAS-24VDC	E13AXCDS0BA072	Cnomo Solenoid Aluminium, Stainless Steel Exd Solenoid 24vdc Screw driver MO, Festo Grey -20 ATEX/IECEX
535616	MGXDH-3/2-1.2-110AC-EX	EP000/d/TB -20 Screw Driver	SV3015-SAS-110VAC	E13AXCDS0TA072	Cnomo Solenoid Aluminium, Stainless Steel Exd Solenoid 110vAc Screw driver MO, Festo Grey -20 ATEX/IECEX
535617	MGXDH-3/2-1.2-230AC-EX	EP000/d/TB -20 Screw Driver	SV3015-SAS-230VAC	E13AXCDS0UA072	Cnomo Solenoid Aluminium, Stainless SteelExd Solenoid 230vAc Screw driver MO, Festo Grey -20 ATEX/IECEX
8118341	MGXIAH-3/2-0.8-24DC-KS	EP000/ia/TB -20 Screw Driver	SV3016-SKS1	E13AXCAS0BA072	Cnomo Solenoid Aluminium, Mazak Housed Exia Solenoid 24vdc Screw driver MO, Festo Grey -20 KCS Approval
8118342	MGXDH-3/2-1.2-24DC-KS	EP000/d/TB -20 Screw Driver	SV3015-SKS-24VDC	E13AXCDS0BA072	Cnomo Solenoid Aluminium, Stainless Steel Exd Solenoid 24vdc Screw driver MO, Festo Grey -20 KCS Approval
8118343	MGXDH-3/2-1.2-110AC-KS	EP000/d/TB -20 Screw Driver	SV3015-SKS-110VAC	E13AXCDS0TA072	Cnomo Solenoid Aluminium, Stainless Steel Exd Solenoid 110vdc Screw driver MO, Festo Grey -20 KCS Approval
8118344	MGXDH-3/2-1.2-230AC-KS	EP000/d/TB -20 Screw Driver	SV3015-SKS-230VAC	E13AXCDS0UA072	Cnomo Solenoid Aluminium, Stainless Steel ExdSolenoid 230vdc Screw driver MO, Festo Grey -20 KCS Approval
8118345	MGXDH-3/2-H-T-1.2-24DC-EX	EP000/d/TB -65 Push button	SV3015-LAP-24VDC	E13AXCDS0BA077	Cnomo Solenoid Aluminium, Stainless Steel Exd Solenoid 24vdc Push button MO, Low Temp Festo Grey -65 ATEX/IECEX
8118346	MGXDH-3/2-H-T- 1.2-110DC-EX	EP000/d/TB -65 Push button	SV3015-LAP-110VDC	E13AXCDD0DA077	Cnomo Solenoid Aluminium, Stainless Steel Exd Solenoid 110vdc Push Button MO, Low temp Festo Grey -65 ATEX/IECEX
8118347	MGXIAH-3/2-H-T-0.8-24DC-EX	EP000/ia/TB -55 Push button	SV3016-LAP1		Cnomo Solenoid Aluminium, Mazak Housed Exia Solenoid 24vdc, Push button MO, Low temp Festo Grey -55c ATEX/IECEX
8157305	MGXDH-3/2-H-T-1.2-230AC-EX	EP000/d/TB -65 Push button	SV3015-LAP-230VAC		Cnomo Solenoid Aluminium, Stainless Steel Exd Solenoid 230vac Push Button MO, Low Temp Festo Grey -65 ATEX/IECEX

Sollten Sie weitere Dokumente oder Zertifikate benötigen, gehen Sie bitte auf die homepage von Ross Pneumatrol Limited, oder kontaktieren Sie den Support von Ross Pneumatrol Limited:
 If you need further documents oder certificates, please visit hompage of Ross Pneumatrol Limited, or contact Ross Pneumatrol Limited support:

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