

(1) EU-Type-Examination Certificate

(2) Equipment and protective systems intended for use in potentially explosive atmospheres. Directive 2014/34/EU



Certificate Number

TÜV CY 18 ATEX 0206141 X

(4) for the equipment: Ethernet Couplers Model BAF and BXF

of the manufacturer: (5)

Solexy Srl

Address: (6)

Via Enrico Fermi, 2 I-25015 Desenzano del Garda (BS) - Italy

Order number:

0206141

Date of issue:

2018-12-18

- The design of this equipment or protective system and any acceptable variation thereto are specified in the schedule to this EU-Type-Examination Certificate and the documents therein referred to.
- TÜV CYPRUS Ltd, notified body No. 2261 in accordance with Article 17 of the Council Directive of 2014/34/EU of February 26, 2014, certifies that this equipment or protective system has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres given in Annex II to the Directive. The examination and test results are recorded in the confidential report No. 18 0206141.
- Compliance with the Essential Health and Safety Requirements has been assured by compliance

EN 60079-0:2012 /A11:2013

EN 60079-11:2012

EN 60079-1:2014

EN 60079-18:2015

- (10) If the sign "X" is placed after the certificate number, it indicates that the equipment or protective system is subject to special conditions for safe use specified in the schedule to this certificate.
- (11) This EU-Type-Examination Certificate relates only to the design, examination and tests of the specified equipment in accordance to the Directive 2014/34/EU. Further requirements of the Directive apply to the manufacturing process and supply of this equipment which are not covered by this certificate.
- (12) The marking of the equipment or protective system must include the following:

BAF Series: I (M1) [Ex ia Ma] I

II (1)G [Ex ia Ga] IIC

90dy II (1)D [Ex ia Da] IIIC

BXF Series: I M2(M1) Ex db mb [ia Ma] I Mb

II 2(1)G Ex db mb [ia Ga] IIC T5...T4 Gb

II 2(1)D Ex mb [ia Da] IIIC T100°C...T135°C Db

CYPRUS Ltd (TUV NORD Group),

notified body,

D. Demosthenous

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(13) SCHEDULE

(14) EU-Type-Examination Certificate No. TÜV CY 18 ATEX 0206141 X

(15) Description of equipment

The Solexy BAF and BXF series Ethernet Couplers are an integrated protection device that facilitates Ethernet cabling installation in hazardous areas making the signal intrinsically safe. The coupler incorporates limiting circuitry which protects the filed cabling from voltages and currents high enough to cause a spark ignition.

The BAF circuit is completely encapsulated and is housed in an aluminum or stainless-steel enclosure. The BAF itself is installed in a non-hazardous area, with only the energy limited Ethernet wiring entering the hazardous area for connection to another Ethernet coupler unit located elsewhere. The BXF circuit is also completely encapsulated and is housed in a stainless-steel enclosure. The BXF is installed in a threaded entry of a suitable enclosure utilizing one of the protection types listed in Clause 1 of EN 60079-0. As with the BAF, the BXF provide energy limited Ethernet wiring into the hazardous area for connection to another Ethernet coupler unit located elsewhere.

Type Key

XXX	x x	x		XX	xx	xx	xxx	-	xxxxx	
1	2	3		4	5	6	7		8	
1	Series		BXF		Explosion Proof Ethernet Barrier					
'			BAF		Intrinsically Safe Ethernet Barrier					
2	Thread		М		M25x1.5				P. (1)	
2			3		3/4" npt-m					
	Material		Α	Aluminium						
3			S		AISI 303					
3			C AISI 316							
			L		AISI 316L					
4	Housing Connector		01		M12 Female Receptacle					
5	Cable Connector		XX		2 digits for cable connector					
	Certification Marking		XX		2 digits for certification marking					
6			X0		European - IECEx					
6			N0		North American (USA and CANADA)					
			XN		European – IECEx – North American (double marking)					
7	Cable Length XXX				3 digits for cable length (inch)					
8	Special XXXXX				Up to 5 digits for special execution in terms of marking, labelling, instruction, packaging, etc					



Technical data:

Permissible range of ambient temperature:

-40°C to +85°C (corresponding temperature class T4)

-40°C to +60°C (corresponding temperature class T5)

Electrical parameter:

Rated Voltage

Um 250Vac / 48Vdc,

Uo = 3.4 V

 $Io = 701 \, mA$

 $Co = 100 \mu F$

 $Lo = 85 \mu H$

Warnings:

- See Installation Instruction Document

- (16) Test documents are listed in the test report No. 18 0206141
- (17) Special conditions for safe use

All Ethernet Coupler Models:

- 1. Because the Ethernet Coupler limitation circuitry is referenced to earth/case, it does not meet the dielectric strength requirement specified in Clause 6.3.13 of EN 60079-11. This must be considered during installation.
- 2. Installation of the Ethernet couplers shall be in accordance with the control drawings specified on the product label.

Model BAF Only:

3. The model BAF is an associated apparatus and shall only be installed in a non-hazardous location.

Model BXF only:

- 4. The free end of the cemented bushing and its associated integral cable shall be protected by a suitable enclosure utilizing one of the protection types listed in Clause 1 of EN 60079-0. The protection type utilized shall be applicable to the specific area of use (ie. Gas or Dust).
- 5. BXF models can withstand a maximum hydrostatic pressure of 30 bar without leakage
- 6. For Group M1 Only: In accordance with Clause 26.4.2 of EN 60079-0, the BXF have been tested corresponding to a low risk of mechanical danger for Group I hazardous locations. This must be considered during installation.
- (18) Essential Health and Safety Requirements

This certificate covers only the Essential Health and Safety Requirements related to the Directive 2014/34/EU