

EU-Type Examination Certificate

- [2] COMPONENT INTENDED FOR USE ON/IN AN EQUIPMENT OR PROTECTIVE SYSTEM INTENDED FOR USE IN POTENTIALLY EXPLOSIVE ATMOSPHERES DIRECTIVE 2014/34/EU
- [3] EU-Type Examination Certificate Number: Presafe 16 ATEX 8629U Issue 0
- [4] Product: Explosion-proof electric apparatus module Z0512 series
- [5] Manufacturer: INDEX ELEKTRO BV
- [6] Address: Harregatplein 15
3214 VP Zuidland
Netherlands
- [7] This product and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.
- [8] DNV Nemko 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 60079-0:2012, EN 60079-1:2014 and EN 60079-7:2015.
- [10] The sign "U" is placed after the certificate number. It indicates that this certificate must not be mistaken for a certificate intended for an equipment or protective system. This partial certification may be used as a basis for certification of an equipment or protective system.
- [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 G Ex db eb IIC Gb (Tamb: -20 °C to +60 °C) or
Ex db eb IIB Gb (Tamb: -40 °C to +60 °C)


Bjørn Spongsveen
For DNV Nemko Presafe AS
Information on electronic signature www.presafe.com



Date of issue: 2016-09-15

This certificate replaces
previous certificate
issued by DNV.



This certificate may only be reproduced in its entirety and without any change, schedule included.

[13]

Schedule

[14] EU-TYPE EXAMINATION CERTIFICATE No.:

Presafe 16 ATEX 8629U

Issue 0

[15] Description of Product

Z0512 series explosion-proof electric apparatus modules cover following seven categories: explosion-proof AC contactor module, reversible explosion-proof AC contactor module, explosion-proof magnetic starter module (AC contactor + thermorelay), explosion-proof thermorelay module, explosion-proof time relay module, explosion-proof miniature relay module and explosion-proof motor protection switches module. The structure of the seven explosion-proof electrical apparatus modules are flameproof type and their built-in terminals are the increased safety type.

Type designation

Z	05	12	-	□	/	□	/	□	/	□	/	□	/	U	-	□	
																	Auxiliary contact (No matching not noted): 0: 1NO+1NC 1: 2NC 2: 2NO
																	With undervoltage auto trip (No matching not noted)
																	Time of time relay (No matching not noted)
																	Coil service voltage (No matching not noted)
																	Coil operation current (No matching not noted): AC, DC
																	Rated current (No matching not noted)
																	Type of product: BDI: Explosion-proof AC contactor module BDIN: Explosion-proof reversible type AC contactor module BZC: Explosion-proof thermorelay module BZCI: Explosion-proof magnetic starter module (AC contactor+thermorelay) BPK: Explosion-proof motor protection switch module BH3: Explosion-proof time relay module BMY: Explosion-proof miniature relay module
																	Design code of product
																	Year number of design and development of product
																	Abbreviation code of manufacturer name

Electrical Data

BDI Explosion-proof AC contactor module, BDIN Explosion-proof reversible type AC contactor module:

Rated voltage: up to 690V,
Rated current: up to 38A
On-off capacity: up to 18.5 kW
Coil voltage: up to 440V
Rated voltage of auxiliary contact: up to 690V
Rated current of auxiliary contact: 10A
Connection type: main contacts 1~10mm² (6~10mm² used in conjunction with compression lug)
auxiliary contacts 1~2.5mm²

BZCI Explosion-proof magnetic starter module (AC contactor+ thermorelay)

Rated voltage: up to 690V
Rated current: up to 38A
On-off capacity: up to 18.5 kW
Coil voltage: up to 440V
Rated voltage of auxiliary contact: up to 690V
Rated current of auxiliary contact 95/96 NC、97/98 NO: 5A
Rated current of auxiliary contact 13/14 NO、21/22 NC: 10 A
Connection type: main contacts 1~10mm² (6~10mm² used in conjunction with compression lug)
auxiliary contacts 1~2.5mm²

BZC Explosion-proof thermorelay module

Rated voltage: up to 690V
Setting range of over load trip: up to 38A
Rated voltage of auxiliary contact: up to 690V
Rated current of auxiliary contact: 5A
Connection type: main contacts 1~10mm² (6~10mm² used in conjunction with compression lug)
auxiliary contacts 1~2.5mm²

BH3 Explosion-proof time relay module

Service power supply voltage: up to 230V (DC power supply can be provided)
Range: 0.04 S~10h
Work module: Switch on and time relay action when required
Contact capacity: AC 220V, 5A (Resistance load)
Connection type: 1~2.5mm²

BMV Explosion-proof miniature relay module

Service power supply voltage: up to 240V (DC power supply can be provided)
Contact capacity: 5A 220V AC, 5A 24V DC
Connection type: 1~2.5mm²

BPK Explosion-proof motor protection switches module

Rated voltage: up to 440V
Setting range of over load trip: 0.1~25A
AC3 on-off capacity: High up to 440V/25A
Rated on-off capacity: High up to 65kA
Capacity of auxiliary contact: AC15 1A/230V
Voltage trip (Under voltage): 230V/50Hz
Connection type: main contacts 1~10mm² (6~10mm² used in conjunction with compression lug)
auxiliary contacts 1~2.5mm²

Ambient temperature range

-20°C to +60°C (Ex db eb IIC Gb)

-40°C to +60°C (Ex db eb IIB Gb)

Service temperature range

-20°C / -40°C to +110°C

Routine tests

- A dielectric strength test shall be carried out at 1500/1880/2500 V a.c. (depending of rated voltage) for at least 1 min. according to requirements of clause 7.1 (6.1) of EN 60079-7:2015 on all modules.
- A routine overpressure test according to clause 16 of EN 60079-1:2014 shall be carried out on each circuit breaker:

For type BZCI and BDIN: the static overpressure test is not less than 11 bar;

For type BPK, BDI and BZC: the static overpressure test is not less than 10 bar;

For type BMY and BH3, the static overpressure test is not less than 10 bar;

[16] Report No.: 2011-3013, Rev.01

Project No.: PRJC-242107-2010-PRC-CHN

[17] Schedule of Limitations

- The products shall be installed inside an Ex approved enclosure which is suitable for the intended area of installation, and which provides an ingress protection rating of at least IP54.

[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

As listed in confidential report 2011-3013.

[20] Certificate History

Issue	Description	Issue date	Report no.
0	Original issue (Replaces DNV 10 ATEX 87339U)	2016-09-15	2011-3013, Rev.01

END OF CERTIFICATE