



# EU-TYPE EXAMINATION CERTIFICATE

- Equipment or Protective System intended for use in potentially explosive atmospheres Directive 2014/34/EU

  Annex III MODULE B: EU-TYPE EXAMINATION
- [3] EU-type Examination Certificate number: IMQ 21 ATEX 044 X

[4] PRODUCT: Flame proof full control panel

Type/series: FCP \* \* \*

[5] MANUFACTURER: SHOMAL Engineering & Manufacturing Co.

[6] ADDRESS: Salmanshahr industrial estate, Mazandaran-Iran

[7] This equipment and any acceptable variation thereto are specified in the annex to this certificate and the documents therein referred to.

[8]

IMQ, notified body N° 0051, 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 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 Report No.: AT21-0066599-01

[9] Compliance with Essential Health and Safety Requirements, except in respect of those listed at item 18 of the annex, has been assured by compliance with:

# EN IEC 60079-0:2018; EN 60079-1:2014; EN 60079-31:2014

- [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 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 equipment or protective system shall include the following:

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II 2G Ex db IIB+H2 T6 or T5 or T4 Gb

II 2D Ex tb IIIC T85°C or T100°C or T135°C Db

This document is composed of 4 pages including 1 annex

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B.U. PRODUCT CONFORMITY ASSESSMENT CERTIFICATION SECTOR – MANAGER

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# [13] Annex

#### [14] EU-type Examination Certificate number: IMQ 21 ATEX 044 X

#### [15] Description of product:

This product is a full range of control panel with different box size with installed signal lamps with model CS.\*.\*.\*.\*, push button with model CP.\*.\*.\*.\*, stay put push button with model CSP.\*.\*.\*.\*, small rotary with model CSR.\*.\*.\*.\*, big rotary with model CBR.\*.\*.\*.\*, small window or framed window with model CSW and large window or framed window with model CLW, according to the manufacturer technical file description and drawings.

This product could be used for installation/housing of other electrical equipment for low voltage application switchgears, within its allowed electrical rating and power dissipation limits. These components are totally housed inside control panel.

The enclosure can be drilled according the schedule drawing of the manufacturer.

Body and cover made of Aluminum alloy the bolts and nuts and screws are in stainless steel.

#### [15.1] Models/Series Identification:

Tyroo	Overall Dimension(mm)			
Туре	Width	Length	Height	
FCP 90	220	320	204	
FCP 100	277	378	220	
FCP 110	382	382	228	
FCP 120	373	472	223	
FCP 240	483	689	224	
FCP 241	483	689	240	

# [15.2] **Ratings**:

Rated voltage: 630V ac; 750V dc Rated power: see table below

Rated current: 1200 A

# [15.3] Safety Ratings: -

# [15.4] Ambient temperature and temperature classes:

Ambient temperature range -20 to +40°C or -30 to +55°C.

Temperature classes T4/T5/T6 or T85°C/T100°C/T135°C, according to Table below:

	Tamb:		Tamb:			
Typo	-20°C to +40°C		-30°C to +55°C			
Туре	T4	T5	Т6	T4	T5	T6
	T135°C	T100°C	T85°C	T135°C	T100°C	T85°C
FCP 90	278 W	150 W	85 W	170 W	81 W	22 W
FCP 100	325 W	196 W	105 W	210 W	100 W	33 W
FCP 110	396 W	235 W	130 W	296 W	130 W	50 W
FCP 120	542 W	278 W	187 W	410 W	187 W	107 W
FCP 240	793 W	400 W	295 W	693 W	295 W	215 W
FCP 241						



PRD N° 005 B





# [13] Annex

#### [14] EU-type Examination Certificate number: IMQ 21 ATEX 044 X

#### [15.5] Degree of protection (IP code):

PAA

# [15.6] Warnings:

"DO NOT OPEN WHEN AN EXPLOSIVE ATMOSPHERE MAY BE PRESENT"

Warning label for cable entry point (when the temperature under rated condition is higher than 70  $^{\circ}$ C at the cable entry point or 80  $^{\circ}$ C at the branching point of the conductors): "USE CABLE SUITABLE WITH T..."

Warning label when fuses are installed: "DON'T OPEN WHEN ENERGIZED"

Warning label for fastener Indicating: "THE SCREWS USED FOR THE LID FASTENING MUST HAVE A TENSILE STRENGTH HIGHER OR EQUAL TO 700 N/MM<sup>2</sup> (GRADE A2-70)".

Warning label: "Potential electrostatic charging hazard - see instructions"

#### [16] **Report:** AT21-0066599-01

#### [16.1] Routine (factory) tests:

The manufacturer shall carry out the routine test prescribed at clauses 27 of the EN 60079-0. The manufacturer shall carry out the pressure test at 15 bar for 10 s according to the method in clause 15.2.3.2 of EN 60079-1.

#### [16.2] Conformity with the documentation:

The manufacturer shall carry out the verifications or tests necessary to ensure that the product complies with the documentation.

Marking the equipment in accordance with Clause 29 of EN 60079-0, the manufacturer attests on his own responsibility that:

- the equipment has been constructed in accordance with the applicable requirements of the relevant standards in safety matters;
- the routine verifications and routine tests in 28.1 of EN 60079-0 have been successfully completed with positive results.

# [16.3] Installation conditions:

Above referred equipment is foreseen to be installed in locations where there are environmental conditions, as clearly specified at clause 1, par. 2 of EN 60079-0.

Installation and use in atmospheric and environmental conditions that are out of above mentioned intervals request special considerations and additional measures by the side of installer or user.

These should be specified to the manufacturer by the user;

It is not a required by applicable standard listed in [9] that the certification body confirm suitability for the adverse conditions.

Installation of equipment has to proceed according to EN 60079-14.

# [17] Special Condition of use (X):

- In case of re-painted on enclosures, the thickness of paint is to be less than 0.2 mm for Group IIR+H2
- Special ambient temperature -30°C up to 55°C;
- The screws used for the lid fastening must have a tensile strength higher or equal to 700 N/mm
- Potential electrostatic charging hazard See instructions. Clean only with antistatic clothes.





# [13] Annex

- [14] EU-type Examination Certificate number: IMQ 21 ATEX 044 X
  - The components installed through enclosure walls can be only those specified in Manufacturer's documentation.

#### [18] Essential Health and safety Requirements:

This Certificate **does not** indicate compliance with electrical safety and performance requirements other than those expressly included in the Standards listed in [9].

This Certificate **does not** cover hazards coming from environmental conditions different from those clearly and precisely indicated and covered in clause 1 of EN 60079-0.

ESHR 1.2.7 According Annex VIII of the Directive

ESHR 1.4 Not verified.

ESHR 1.5 Not verified.

ESHR 3 Not applied.

In addition to the Essential Health and Safety Requirements (EHSRs) covered by the standards listed at [9], the following are considered relevant to this product, and conformity is demonstrated in the report: None

[19] **Descriptive documents**: DL-AT21-0066599-01, dated 2021-07-14.

# [20] Certification Validity Conditions:

The use of this Certificate is subject to the Certification Scheme and to the Regulation applicable to holders of IMQ Certificates.

The validity of this certificate is subject to the condition that the manufacturer complies with the results of the document review and of the pertinent requirement if any included, recorded in the relevant copy of documentation as per 19.

One copy of the mentioned documentation is kept in IMQ file.

# [21] Variations

First issue



