

No.: 2024312304001888

**Applicant and address** 

CORTEM S.p.A.

Via Aquileia 10, I - 34070 Villesse (GO), Italy

Manufacturer and address

CORTEM S.p.A.

Via Aquileia 10, I - 34070 Villesse (GO), Italy

Factory and address

CORTEM S.p.A.

Via Aquileia 10, I - 34070 Villesse (GO), Italy

Product, series, specification and model

Signal and Control Operators

M-0\*\*\*\* M-0\*\*\*

Ex db IIC Gb, Ex tb IIIC Db

**Standards** 

GB/T3836.1-2021, GB/T3836.2-2021, GB/T3836.31-2021

This product(s)complies with the requirements of CNCA-C23-01: 2019
China Compulsory Certification Implementation Rule on Explosion
Protected Electrical Product.

Issue date: 2024-02-03 Valid to: 2029-02-02

Detailed information and status of this certificate is available by using the QR code, visiting CNEx's website or CNCA's website: www.cnca.gov.cn.

This translated document has no legal effect and shall not be used alone.



CNEX



Director:

isero

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#### **Product information:**

#### 1. This certificate covers the following models:

- M-0\*\*\*\* Identification of Signal operators,

M-0\*\*\* Identification of Control operators

Type Designation: M-0\*\*\*\*

M-0	Code identifying the series:			
IVI-U	M-0: Signal and control operators			
	Code identifying the model (see table 1.)			
*	Lens or button colour:			
	R: Red			
	V: Green			
	I: Colourless			
	G: Yellow			
	B: Blue			
	BI: White			
	: other colours available			
	Nominal voltage AC/DC (for pilot lights only):			
	12: 12 V			
*	24:24 V			
	110:110 V			
	230 : 230 V			
	: other voltages available			
*	Manufacturing material:			
	Blank: aluminium alloy body (polycarbonate lens for pilot lights only)			
	IN: stainless steel body			

Type Designation: M-0\*\*\*

M-0	Code identifying the series: M-0: Signal and control operators			
*	Code identifying the model(see table 1.)			
*	Length of shaft (for switches, key handles and emergency buttons only): F: for fixed length (standard) V: for variable length			
*	Manufacturing material: Blank: aluminium alloy body IN: stainless steel body			



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Annex: Page 2 of 4 other suffix can be added on the code for particular configuration, type of external handles or internal lever.

Electrical characteristics:

Signal and Control operators series M-0...

Nominal voltage: 250 V ac/dc for pilot lights;

240 V ac/dc for led pilot lights;

600 V for switches and buttons;

Frequency: 50/60 Hz:

Nominal current: 10 A for push buttons;

1000 A for selector switches;

Power consumption: max 3 W for incandescent lamps;

max 1.5 W for led lamps.

Types of Control operators are listed on the following Table 1:

	Signal and	control operators series N	<b>/</b> 1-0
Model	Component description	Typical associated equipment, switchgear or lamp	Electrical characteristics of standard equipment
M-0	Operators with handle for switches	Rotary switches, Isolators/circuit breakers.	16A - 1000V
M-0428	Signalling button	BA9 incandescent, LED,Contact blocks.	Lamp: 3W - 6/250V Contacts: 10A -600V
M-0429	Pushbuttons	Contact blocks.	10A - 600V
M-0430	Emergency button	Contact blocks.	10A - 600V
M-0445	Emergency button	Contact blocks.	10A - 600V
M-0457	Signalling lights	BA9 incandescent, LED.	3W - 6/250V BA9 incandescent lamp or 1,5W - 6/250V LED
M-0427	Double pushbutton	Contact blocks.	10A - 600V
M-093	Key switch operator	Rotary switches.	16A - 600V
M-0	Emergency stop	Contact blocks, Rotary	Contacts: 10A - 600V



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	pushbutton	switches.	Switches: 16A - 600V
M-0557	Potentiometer	Rotary potentiometer.	16A - 600V

Ex marking: Ex db IIC Gb, Ex tb IIIC Db

 Manufacturer should organize production in accordance with the technical documents approved by the certification body.

#### 2. Specific conditions of use:

- The Signal and Control operators series M-0.. should be assembled on the cover or walls of metallic Ex-db enclosures with minimum thickness 8mm, minimum 5 threads engaged and locked with a blocking system against accidental rotation and loosening. The enclosures should be IECEx certified, for Group I (mine), Group II (gas) and Group III (dust) with suitable degree of protection IP.
- The coupling of the Signal and Control operators with the enclosures shall be made as indicated by the manufacturer in the documents annexed to this certificate in order to respect the type of protection of the electrical apparatus on which they are mounted.
- The Signal and Control operators series M-0.. shall be installed in such a way that the temperature at the mounting point will remain within the service temperature ranges below:

from -40°C up to +100°C for Signal operators type M-0457 with Polycarbonate lenses only;

from -60°C up to +100°C for Signal operators types M-0457AL, M-0457IN and for all other Signal and Control operators;

- +70°C for all other operating equipment.
- The IP 66 mechanical protection of the Signal and Control operators is obtained by inserting an O-ring made of silicon rubber in-between the mounting body and the command rod and furthermore when the mounting body is completely screwed and sealed as shown into the mounting instruction.
- It is the final assemblers/user's responsibility to ensure the threaded joint between the Signal and Control operators and the associated enclosure meets all the requirements of the applicable standards for the assembly.



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See instruction manual for other information.

3. Certificate related report(s):

Type test report: CQST2401C026

4. Certificate change information: none.



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