





# EU Type Examination Certificate CML 17ATEX3111U Issue 1

1 Equipment intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU

2 Component Signal and Control Operators, series M-0... for dust atmospheres

3 Manufacturer

Cortem S.p.A.

4 Address

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34070 Villesse

Gorizia

Italy

- 5 The component is specified in the description of this certificate and the documents to which it refers.
- Certification Management Limited, Unit 1 Newport Business Park, New Port Road, Ellesmere Port CH65 4LZ, UK, Notified Body Number 2503, 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 component 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 The 'U' suffix after the certificate number indicates that the component is subject to conditions of safe use (affecting correct installation or safe use). These are specified in Section 14.
- 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 60079-0:2012+A11:2013

EN 60079-31:2014

10 The equipment shall be marked with the following:



Ex tb IIIC Db

48-

A C Smith Technical Operations Director





### 11 Description

The Signal and Control Operators, series M-0... for dust are a range of component certified command and signalling actuators comprising the following models:

Model number	Function
M-0634	Operator with handle for switches, MCCB's and MCB's
M-0635	Selector
M-0636	Signalling light
M-0637	Illuminated push button
M-0638	Emergency push button
M-0639	Push button

All types are intended to be mounted on the wall of a suitably certified enclosure and incorporated into equipment requiring type of protection "tb" for use in area requiring Equipment Protection Level "Db", with a service temperature range of -40°C to +90°C.

#### M-0634

The M-0634 is an operator handle for use with rotary actuated devices. It is constructed with an aluminium alloy or stainless steel body and handle. The rear of the operator is an M16x1.5 or M20x1.5 metric threaded sleeve for mounting through an enclosure wall of thicknesses in the range of 1-10 mm. Retention in the wall is with the use of a locknut. Sealing through moving parts and at the interface is achieved with silicone O-ring seal.

## M-0635

The M-0635 is a selector switch operator for use with rotary actuated devices. It is constructed with an aluminium alloy or stainless steel body and knob. The rear of the operator is an M32x1.5 metric threaded sleeve for mounting through an enclosure wall of thicknesses in the range of 1-10 mm. Retention in the wall is with the use of a locknut. Sealing through moving parts and at the interface is achieved with silicone O-ring seal.

#### M-0636

The M-0636 is a signalling light lens for use with a lamp module. It is constructed with an aluminium alloy or stainless steel body and plastic lens which are threaded together with an M27x1 thread. The rear of the lens is an M32x1.5 metric threaded sleeve for mounting through an enclosure wall of thicknesses in the range of 1-10 mm. Retention in the wall is with the use of a locknut. Sealing at the interface is achieved with silicone O-ring seal.

## M-0637

The M-0637 is an illuminated pushbutton operator for use with an illuminated pushbutton module. It is constructed with an aluminium alloy or stainless steel body and plastic lens which are threaded together with an M30x1 thread. The rear of the lens is an M32x1.5 metric threaded sleeve for mounting through an enclosure wall of thicknesses in the range of 1-10 mm. Retention in the wall is





with the use of a locknut. Sealing through moving parts and at the interface is achieved with silicone O-ring seal.

#### M-0638

The M-0638 is an emergency stop pushbutton for use with linear actuated devices. It is constructed with an aluminium alloy or stainless steel body and plastic mushroom head. The rear of the operator is an M32x1.5 metric threaded sleeve for mounting through an enclosure wall of thicknesses in the range of 1-10 mm. Retention in the wall is with the use of a locknut. Sealing through moving parts and at the interface is achieved with silicone O-ring seal. The emergency stop is pull-to-release type and is available with or without key release.

#### M-0639

The M-0639 is a spring-return pushbutton for use with linear actuated devices. It is constructed with an aluminium alloy or stainless steel body and plastic cap head. The rear of the operator is an M32x1.5 metric threaded sleeve for mounting through an enclosure wall of thicknesses in the range of 1-10 mm. Retention in the wall is with the use of a locknut. Sealing through moving parts and at the interface is achieved with silicone O-ring seal.

#### Variation 1

This variation introduces the following modification to the Signal and Control Operators, series M-0... for dust atmospheres:

i. The removal of the electrical ratings from the signal and control operator descriptions

## 12 Certificate history and evaluation reports

Issue	Date	Associated report	Notes  Report for the prime certificate issue.	
0	01 Jun 2017	R1962A/00		
1	22/05/2018	R11780A/00	The issue of Variation 1	

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

# 13 Conditions of manufacture

None

# 14 Schedule of limitations

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

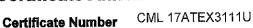
- 14.1 The rated service temperature range of the components is -40°C to +90°C.
- The devices must be assembled on the cover or walls of suitably certified enclosures with suitable ingress protection.
- The devices must be mounted on enclosure walls with a thickness between 1 mm and 10 mm and with hole diameters of 16.5 mm, 20.5 mm, or 32.5 mm, as applicable to the particular model.





When the devices are mounted on the electrical apparatus, the service temperature at the mounting location shall be established and this shall not exceed the service temperature range.

# **Certificate Annex**



**Equipment** Signal and Control Operators, series M-0... for dust

atmospheres

Manufacturer Cortem S.p.A.

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

## Issue 0

Drawing No	Sheets	Rev	Approved date	Title
A2-6455	1 to 2	0	01 Jun 2017	Operating and signalling equipment series M-0
A4-6456	1 to 3	0	01 Jun 2017	Technical note A4-6456

## Issue 1

No additional documents required for this variation

