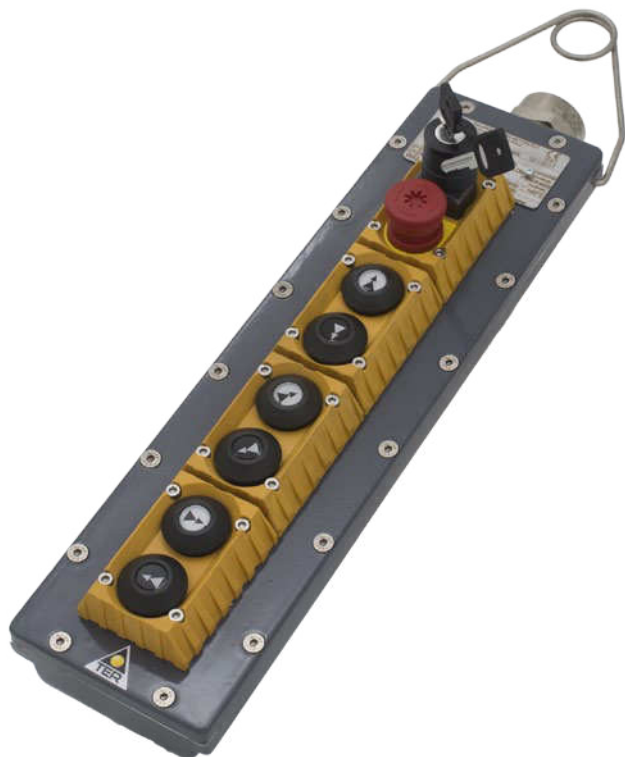


MIKE-X

HAZARDOUS AREAS

Pendant control station



Explosion proof pendant control station for auxiliary control, rugged, sturdy and easy to handle, designed for heavy industry in potentially explosive areas.

FEATURES

- Pendant control station for use in industrial areas and hazardous locations for ATEX and IECEx zones 1, 2, 21, 22.
- Reduced installation and wiring time and costs: the optimized internal space enables easy and quick connections.
- Positive opening NC contacts for safety functions.
- IP protection degree: Mike-X is classified IP65.
- Extreme temperature resistance: -20°C to +60°C.
- It features solid but light weight body made of epoxy painted aluminum or steel, resistant to temperature changes.
- All materials and components used are shock and wear resistant and guarantee protection of the unit against water, dust and oils.

OPTIONS


- Available in configurations from 4 to 16 actuators.
- Two speed switches with NO or NC contacts.
- Wide range of actuators: two speed pushbuttons and key-selector switches in various operations configurations.
- Mechanical interlock to prevent simultaneous operation of opposite functions..
- Connecting bridges available on request to reduce wiring time.
- It can be equipped with thermal protectors and resistances as anti-condensation heaters (max. power 24W).

CERTIFICATIONS

- CE marking.
- Conformity to ATEX Standards EN 60079-0:2012, EN 60079-1:2014, EN 60079-31:2014.
- Conformity to IECEx Standards IEC 60079-0:2012, IEC 60079-1:2014, IEC 60079-31:2013.

Fill in the request form to configure properly the product.


CERTIFICATIONS

Conformity to Atex Standards	EN 60079-0:2012 Explosive atmospheres – Equipment – General requirements
	EN 60079-1:2014 Explosive atmospheres – Equipment protection by flameproof enclosures “d”
	EN 60079-31:2014 Explosive atmospheres – Equipment dust ignition protection by enclosures “t”
Conformity to IECEx Standards	IEC 60079-0:2012 Explosive atmospheres – Equipment – General requirements
	IEC 60079-1:2014 Explosive atmospheres – Equipment protection by flameproof enclosures “d”
	IEC 60079-31:2013 Explosive atmospheres – Equipment dust ignition protection by enclosures “t”
Atex Certification	ITS16ATEX101535X
IECEx Certification	ITS 16.0070X
Atex Protection Type	II 2 G Ex db IIC T6 Gb
	II 2 D Ex tb IIIC T85°C Db
	Tamb: -20°C to +60°C
IECEx Protection Type	Ex db IIC T6 Gb
	Ex tb IIIC T85°C Db
	Tamb: -20°C to +60°C
Markings and homologations	CE  IEC IECEx

GENERAL TECHNICAL SPECIFICATIONS

Operational ambient temperature	-20°C/+60°C
Protection degree	IP 65
Cable entry*	1 NPT ANSI/ASME B1.20.01
	Cable camp M20x1.5 or M25x1.5 or M32x1.5, tolerance medium 6H/6g, complying with Standards ISO 965-3 and ISO 965-1
	Cable camps complying with Standards IEC 60079-0, EN 60079-1, (Ex-d); EN 60079-31: 2009 (Tb version)

TECHNICAL SPECIFICATIONS OF THE MICROSWITCHES

Rated operational current	Max 250 Vdc / 1.1 A
	Max 240 Vac / 3 A
Rated frequency	50/60 Hz
Microswitch type	Two speed switches with NO or NC contacts (All NC contacts are of the positive opening operation type )
Wires	Min 0.75 mm ² - Max 2 mm ² (ATEX and IEC Ex)
Anti-moisture heater (optional)	Maximum power 24W
Markings and homologations	CE

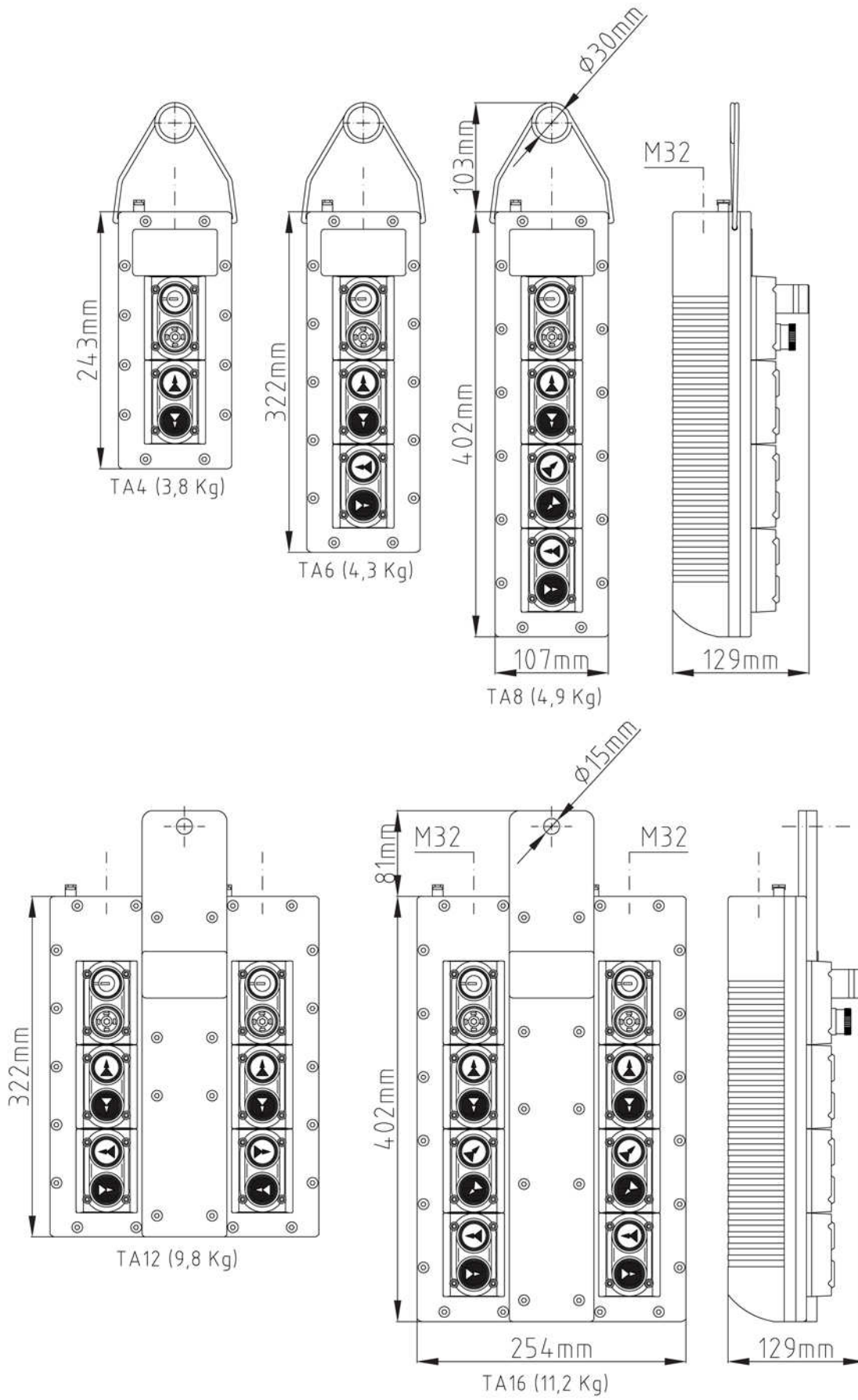
OPTIONAL

Optional	Anti-condensation heater
	Green start button
	Special painting
	Connecting bridges

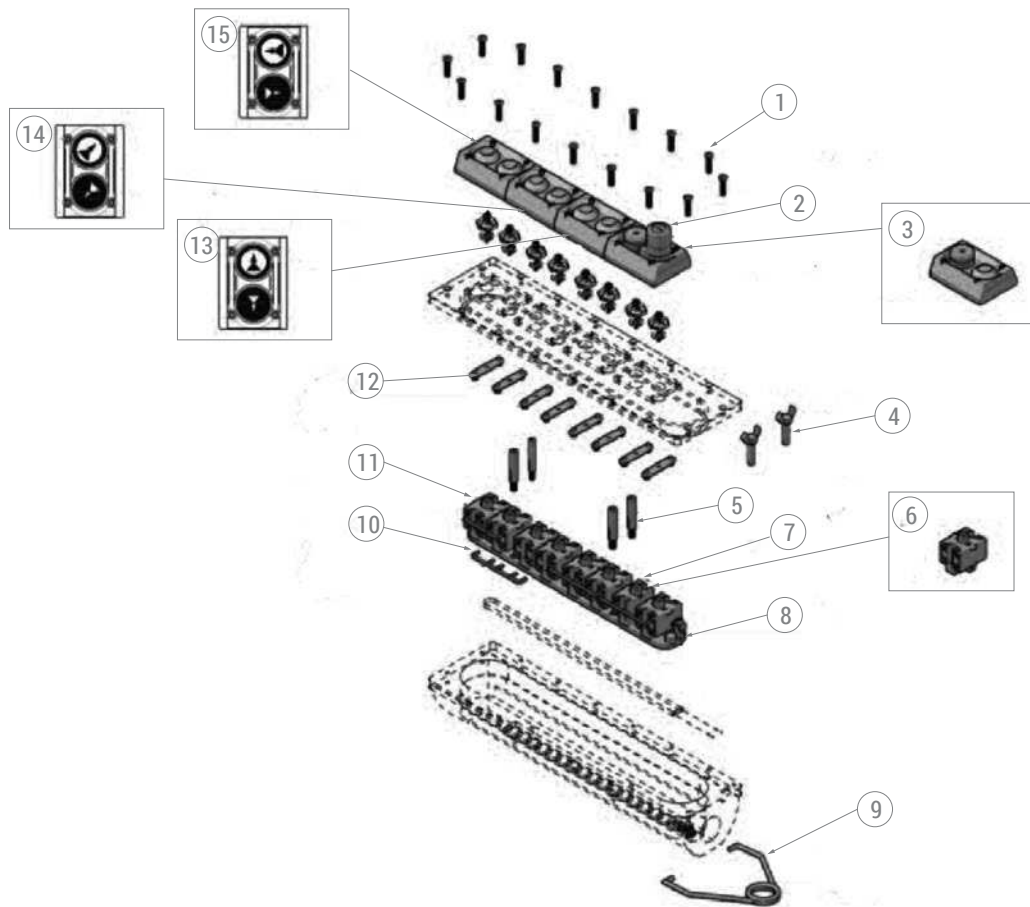
* Threading must guarantee minimum 5 complete threads.

All the devices for cable entry (conduits, cable gland, adapters) must be certified with minimum certification level as per valid certification of the pendant station.

OVERALL DIMENSIONS (mm)



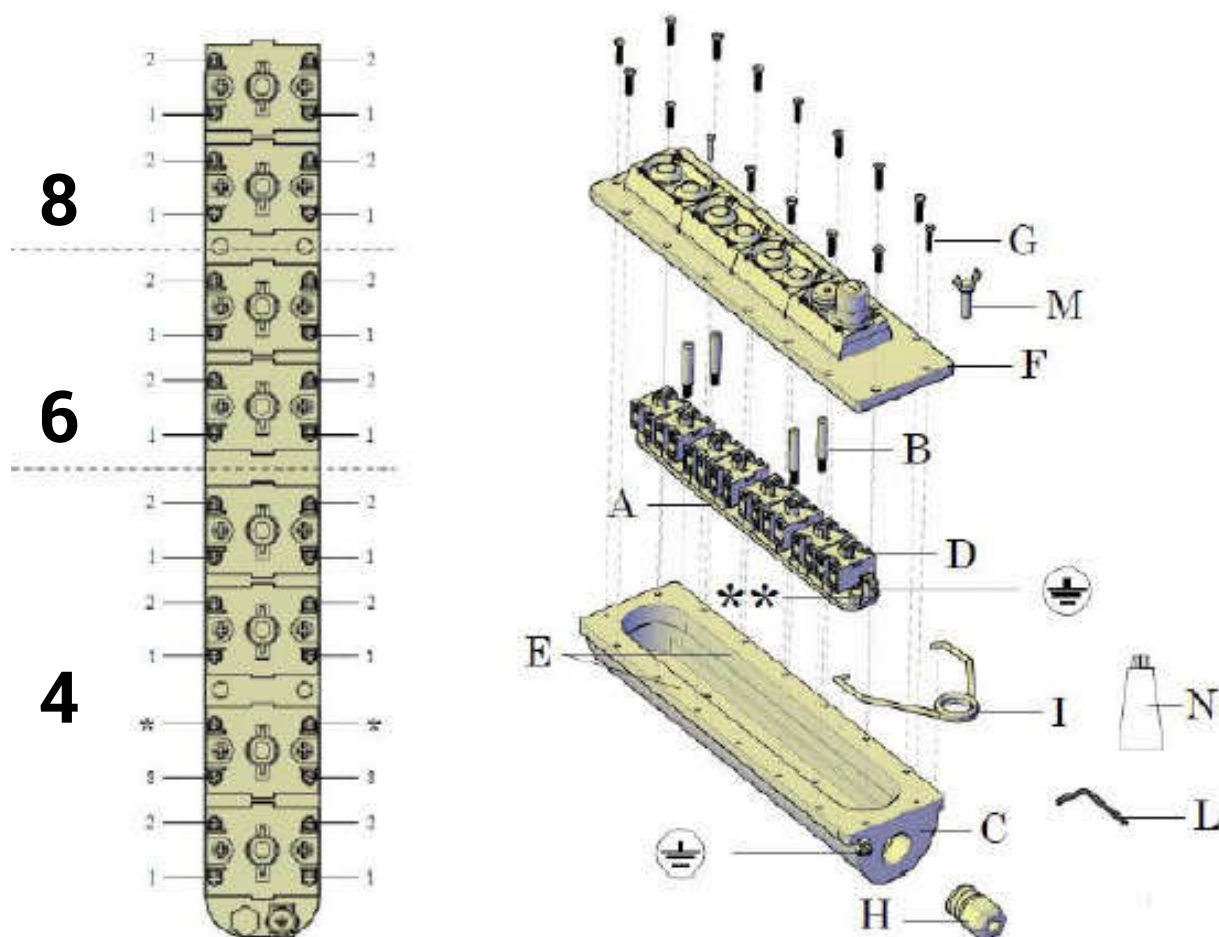
EXPLODED DRAWING



COMPONENTS

Ref.	Description
1	Locking screws
2	Key selector switch
3	Section with Start and Emergency pushbuttons
4	Wing screws
5	Switch layer locking pins
6 - 7	NO switch with heater
8	Switch layer
9	Hook
10	Connecting bridges
11	NO switch
12	Silicon locked pins
13 - 14 - 15	Section with two pushbuttons

INSTALLATION INSTRUCTIONS - SINGLE ROW UNIT



Description

Code EXTA4M2 = 2 double speed pushbuttons + 1 key selector switch + 1 emergency pushbutton.
 Code EXTA6M3 = 4 double speed pushbuttons + 1 key selector switch + 1 emergency pushbutton.
 Code EXTA8M3 = 6 double speed pushbuttons + 1 key selector switch + 1 emergency pushbutton.

Contacts 1 and 2 are NO.

Contact 1 is activated by the first step of the pushbutton.

Contact 2 is activated by the second step of the pushbutton.

Contact 3 is NC.

* Terminals without switches to be used to connect the anti-condensation heater (if equipped). Tightening torque: 1 Nm.

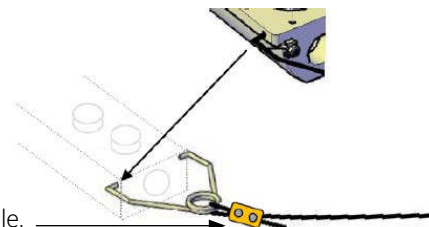
** Thermal protector PTO to prevent overheating of anti-condensation heater (if equipped).

Installation

- Loosen screws M to open cover F.
- Use the key L supplied with the pendant station to unscrew pins B.
- Extract the switch layer A.
- Insert the cable through the conduit or cable clamp H (not supplied) and through hole C.
- Connect the wires to switches D and tighten the screws with a torque of 1 Nm.
- Fix back the switch layer A into the enclosure and tighten pins B with a torque of 4,5 Nm.
- Put the lithium grease N on the lamination junction of enclosure E.
- Place back cover F.
- Close by tightening screws G with a torque of 6.3 Nm.
- Assemble hook I onto the enclosure.
- Connect the external ground terminal.
- Fix the steel holding cable to the hook.***

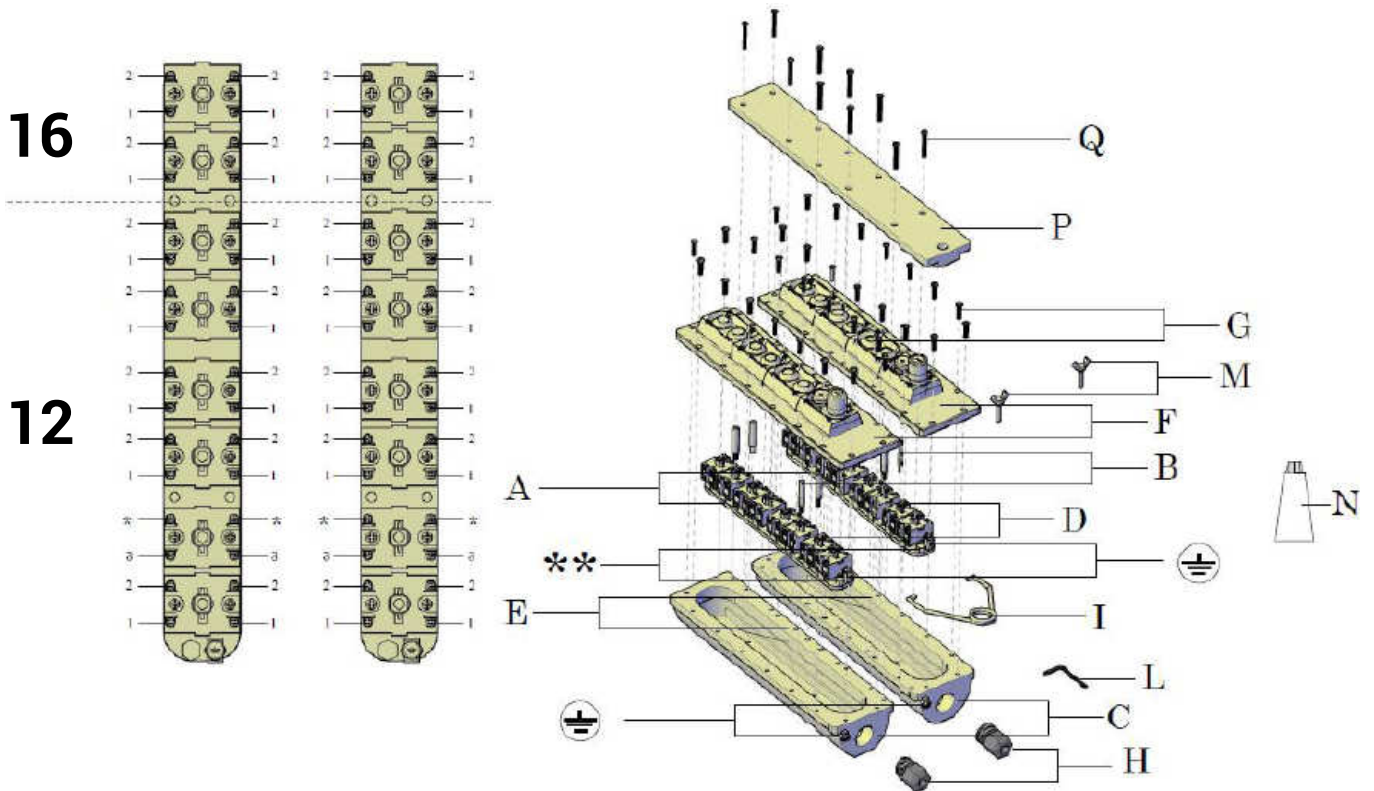
Note: for wiring of cETLus versions, follow the NFPA70 art. 500 and subsequent articles. "Cord-connected equipment employing a packing gland requiring dismantling during cord replacement shall be marked or provided with instructions regarding its installation and replacement."

*** The holding cable must be 5 cm shorter than the power supply cable in order to avoid stress on the cable.
 The weight of the pendant station must be supported by the steel holding cable only.



Use a metal clamp to lock the steel cable.

INSTALLATION INSTRUCTIONS - DOUBLE ROW UNIT



Description

Code EXTA12M3 = 8 double speed pushbuttons + 2 key selector switches + 2 emergency pushbuttons.

Code EXTA16M3 = 12 double speed pushbuttons + 2 key selector switches + 2 emergency pushbuttons.

Contacts 1 and 2 are NO.

Contact 1 is activated by the first step of the pushbutton.

Contact 2 is activated by the second step of the pushbutton.

Contact 3 is NC.

* Terminals without switches to be used to connect the anti-condensation heater (if equipped). Tightening torque: 1 Nm.

** Thermal protector PTO to prevent overheating of anti-condensation heater (if equipped).

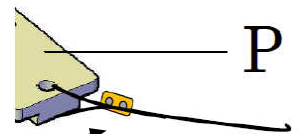
Installation

- Loosen screws Q and remove the junction plate P.
- Loosen screws M to open covers F.
- Use the key L supplied with the pendant station to unscrew pins B.
- Extract the switch layers A.
- Insert the cable through the conduit or cable clamp H (not supplied) and through hole C.
- Connect the wires to switches D and tighten the screws with a torque of 1 Nm.
- Fix back the switch layers A into the enclosure and tighten pins B with a torque of 4,5 Nm.
- Put the lithium grease N on the lamination junction of enclosures E.
- Place back covers F and junction plate P.
- Close by tightening screws G and Q with a torque of 6.3 Nm.
- Assemble hook I onto the enclosure.
- Connect the external ground terminal.
- Fix the steel holding cable to the holding hole on plate P***

Note: for wiring of cETLus versions, follow the NFPA70 art. 500 and subsequent articles. "Cord-connected equipment employing a packing gland requiring dismantling during cord replacement shall be marked or provided with instructions regarding its installation and replacement."

*** The holding cable must be 5 cm shorter than the power supply cable in order to avoid stress on the cable.

The weight of the pendant station must be supported by the steel holding cable only.



Use a metal clamp to lock the steel cable.

MIKE-X - REQUEST FORM FOR PENDANT STATION

Protection type

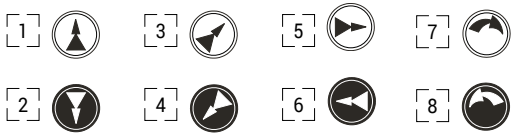
ATEX II 2 G Ex db IIC T6 Gb
 II 2 D Ex tb IIIC T85°C Db
 IECEX Ex db IIC T6 Gb
 Ex tb IIIC T85°C Db

Please, tick the box to accept the protection type provided

Pendant station model

4 - 8 actuators: simple pendant station
 12 - 16 actuators: double pendant station

Symbols



Optional

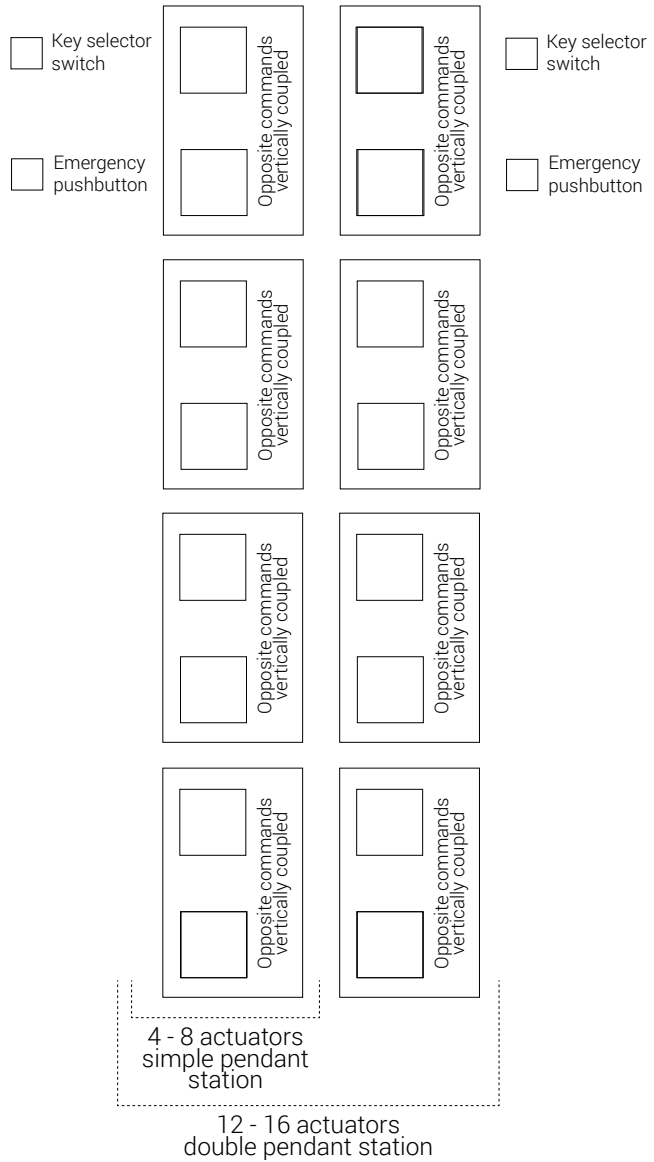
Anti-condensation heater
 Green start button
 Special painting
 Connecting bridges

Instructions

- Tick the box to accept the protection type provided.
- Tick the box corresponding to the pendant control station model required: 4 - 8 actuators (simple pendant station), 12 - 16 actuators (double pendant station).
- Enter the number corresponding to the symbol required for each control element.
 If the key selector switch and the emergency pushbutton are required, tick the box corresponding to the right position.
- When the pendant control station is the double row model, complete both the columns.
- **Attention: opposite commands (i.e: up – down) are vertically coupled on columns.**
- Tick the box corresponding to the optional required.

Attention: Only two speeds pushbuttons provided.

Remarks



Simple pendant station
4 - 8 actuators

Double pendant station
12 - 16 actuators

