# MIKE-X

## HAZARDOUS AREAS
## PENDANT CONTROL STATION

The **Mike-X** explosion proof pendant control station is certified for use in ATEX & IEC Ex zones 1, 2, 21 & 22. It is certified for Class 1 Div 1 hazardous locations. The **Mike-X** can be fitted with 4-16 operators using 2 speed switches with either NO or NC contacts. Consult factory for 10 button - 16 button part numbers.

### 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: IP65.
- Extreme temperature resistance: -20°C to +60°C.
- It features solid but light weight body made of powder epoxy painted aluminum or stainless steel AISI 316 (optional), 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.
- 2 speed switches with NO contacts or 1 speed switches with NC contacts.
- Mechanical interlock to prevent simultaneous operation of opposite functions.
- Connecting bridges 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 IEC Ex Standards IEC 60079-0:2012, IEC 60079-1:2014, IEC 60079-31:2013.

*Fill-in the "request form" for a custom product configuration*

# SPECIFICATIONS FOR MIKE-X PENDANT STATION

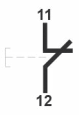
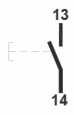
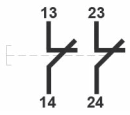
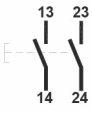
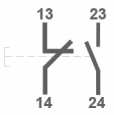
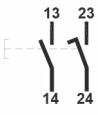
## Certifications

| | |
|---|---|
| **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 IECx 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: -4°F / +140°F (-20°C / +60°C) |
| **Markings and Homologations** | CE Ex IEC IECEx |

## General Technical Specifications

| | |
|---|---|
| **Operational ambient temperature** | -4°F / +140°F (-20°C / +60°C) |
| **IP protection degree** | IP 66 / IP 67 / IP 69K |
| **Cable entry*** | IK 09 |

## Technical Specifications the Switches

| | | | | | | |
|---|---|---|---|---|---|---|
| **Rated operational current** | Maz 250 Vdc / 1.1 A | | | | | |
| **Rated frequency** | Max 240 Vac / 3 A | | | | | |
| **Wires** | 50/60 Hz | | | | | |
| **Anti-moisture heater (optional)** | Min 0.75 mm² - Max 2 mm² (ATEX and IEC Ex) | | | | | |
| **MIcroswitch Type** | 1 speed | 1 speed | 1 speed | 1 speed | 1 speed | 2 speeds |
| **Contacts** | 1NC (positive opening operation NC contacts ⊖) | 1NO | 2NC (positive opening operation NC contacts ⊖) | 2NO | 1NO+1NC (positive opening operation NC contacts ⊖) | 2NO |
| **Scheme** |   |   |   |   |   |   |
| **Markings and Homologations** | CE | | | | | |

## Optionals

| |
|---|
| Anti-concensation heater |
| Stainless steel AISI 316 version |


Springer Controls Company • 96074 Chester Road, Yulee, FL 32097 • (904) 225-0575 • **springercontrols.com**

## CONFIGURATIONS FOR MIKE-X PENDANT STATION

### 4 Operator Configurations

| SCC Part No. → EXTA4M2 | | |
|---|---|---|
| Operator Type | Symbol | Note |
| Keyed Selector Switch | Off-On | |
| Mushroom Head E-stop | Maintained | 1 NC |
| Momentary Button |  | |
| Momentary Button |  | |

| SCC Part No. → EXTA4M2A | | |
|---|---|---|
| Operator Type | Symbol | Note |
| Momentary Start |  | |
| Mushroom Head E-stop | Maintained | 1 NC |
| Blank | | |
| Blank | | |

| SCC Part No. → EXTA4M2B | | |
|---|---|---|
| Operator Type | Symbol | Note |
| Momentary Start |  | |
| Mushroom Head E-stop | Maintained | 1 NC |
| Momentary Button |  | |
| Momentary Button |  | |

| SCC Part No. → EXTA4M2C | | |
|---|---|---|
| Operator Type | Symbol | Note |
| Button Start |  | |
| Mushroom Head E-stop | Maintained | 1 NC |
| Momentary Button |  | |
| Momentary Button |  | |

| SCC Part No. → EXTA4M2D | | |
|---|---|---|
| Operator Type | Symbol | Note |
| Blank | | |
| Mushroom Head E-stop | Maintained | 1 NC |
| Momentary Button |  | |
| Momentary Button |  | |

| SCC Part No. → EXTA4M2C | | |
|---|---|---|
| Operator Type | Symbol | Note |
| Keyed Selector Switch | Off-On | |
| Mushroom Head E-stop | Maintained | 2 contacts NC simultaneous |
| Momentary Button |  | |
| Momentary Button |  | |

| SCC Part No. → EXTA4M2F | | |
|---|---|---|
| Operator Type | Symbol | Note |
| Momentary Button **Start** |  | |
| Momentary Stop |  | 1 NC |
| Momentary Button |  | |
| Momentary Button |  | |

### 6 Operator Configurations

| SCC Part No. → EXTA6M3 | | |
|---|---|---|
| Operator Type | Symbol | Note |
| Keyed Selector Switch | Off-On | |
| Mushroom Head E-stop | Maintained | 1 NC |
| Momentary Button |  | |
| Momentary Button |  | |
| Momentary Button |  | |
| Momentary Button |  | |

| SCC Part No. → EXTA6M3A | | |
|---|---|---|
| Operator Type | Symbol | Note |
| Momentary Start |  | |
| Mushroom Head E-stop | Maintained | 1 NC |
| Momentary Button |  | |
| Momentary Button |  | |
| Momentary Button |  | |
| Momentary Button |  | |

## CONFIGURATIONS FOR MIKE-X PENDANT STATION

### 6 Operator Configurations

| SCC Part No. → EXTA6M3A | | |
|---|---|---|
| Operator Type | Symbol | Note |
| Momentary Start | | |
| Mushroom Head E-stop | Maintained | 1 NC |
| Momentary Button | | |
| Momentary Button | | |
| Momentary Button | | |
| Momentary Button | | |

| SCC Part No. → EXTA6M3B | | |
|---|---|---|
| Operator Type | Symbol | Note |
| Blank | | |
| Mushroom Head E-stop | Maintained | 1 NC |
| Momentary Button | | |
| Momentary Button | | |
| Momentary Start | | |
| Momentary Stop | | |

| SCC Part No. → EXTA6M3C | | |
|---|---|---|
| Operator Type | Symbol | Note |
| Keyed Selector Switch | Off-On | 2 NO |
| Mushroom Head E-stop | Maintained | 2 NC |
| Momentary Button | | |
| Momentary Button | | |
| Momentary Button | | |
| Momentary Button | | |

| SCC Part No. → EXTA6M3D | | |
|---|---|---|
| Operator Type | Symbol | Note |
| Keyed Selector Switch | Off-On | |
| Mushroom Head E-stop | Maintained | 1 NC |
| Momentary Button | | |
| Momentary Button | | |
| Momentary Start | | |
| Momentary Stop | | |

| SCC Part No. → EXTA6M3E | | |
|---|---|---|
| Operator Type | Symbol | Note |
| Blank | | |
| Mushroom Head E-stop | Maintained | 1 NC |
| Momentary Button | | |
| Momentary Button | | |
| Momentary Button | | |
| Momentary Button | | |

| SCC Part No. → EXTA6M3F | | |
|---|---|---|
| Operator Type | Symbol | Note |
| Blank | | |
| Mushroom Head E-stop | Maintained | 1 NC |
| Momentary Button | | |
| Momentary Button | | |
| Momentary Start | | |
| Momentary Stop | | |

| SCC Part No. → EXTA6M3G | | |
|---|---|---|
| Operator Type | Symbol | Note |
| Momentary Start | | |
| Mushroom Head E-stop | Maintained | 1 NC |
| Momentary Button | | |
| Momentary Button | | |
| Momentary Button | | |
| Momentary Button | | |

| SCC Part No. → EXTA6M3H | | |
|---|---|---|
| Operator Type | Symbol | Note |
| Keyed Selector Switch | Off-On | |
| Mushroom Head E-stop | Maintained | 1 NC |
| Momentary Button | | |
| omentary Button | | |
| Momentary Start | | |
| Momentary Stop | | |

| SCC Part No. → EXTA6M3I | | |
|---|---|---|
| Operator Type | Symbol | Note |
| Momentary Start | | |
| Mushroom Head E-stop | Maintained | 1 NC |
| Momentary Button | | |
| Momentary Button | | |
| Momentary Button | | |
| Momentary Button | | |

| SCC Part No. → EXTA6M3L | | |
|---|---|---|
| Operator Type | Symbol | Note |
| Momentary Start | Off-On | |
| Mushroom Head E-stop | Maintained | 1 NC |
| Momentary Button | | |
| Momentary Button | | |
| Momentary Start | | |
| Momentary Stop | | |


Springer Controls Company • 96074 Chester Road, Yulee, FL 32097 • (904) 225-0575 • springercontrols.com

## CONFIGURATIONS FOR MIKE-X PENDANT STATION

### 6 Operator Configurations

| SCC Part No. → EXTA6M3M | | |
|---|---|---|
| Operator Type | Symbol | Note |
| Blank | | |
| Mushroom Head E-stop | Maintained | 1 NC |
| Momentary Button |  | |
| Momentary Button |  | |
| Momentary Button |  | |
| Momentary Button |  | |

| SCC Part No. → EXTA6M3N | | |
|---|---|---|
| Operator Type | Symbol | Note |
| Momentary Start |  | |
| Mushroom Head E-stop | Maintained | 1 NC |
| Momentary Button |  | |
| Momentary Button |  | |
| Keyed Selector Switch | Off-On | |
| Keyed Selector Switch | Off-On | |

### 8 Operator Configurations

| SCC Part No. → EXTA8M3 | | |
|---|---|---|
| Operator Type | Symbol | Note |
| Key Selector Switch | Off-On | |
| Mushroom Head E-stop | Maintained | 1 NC |
| Momentary Button |  | |
| Momentary Button |  | |
| Momentary Button |  | |
| Momentary Button |  | |
| Momentary Button |  | |
| Momentary Button |  | |

| SCC Part No. → EXTA8M3A | | |
|---|---|---|
| Operator Type | Symbol | Note |
| Momentary Start |  | 1 NO |
| Mushroom Head E-stop | Maintained | 1 NC |
| Momentary Button |  | 2 NO |
| Momentary Button |  | 2 NO |
| Momentary Button |  | 2 NO |
| Momentary Button |  | 2 NO |
| Momentary Button |  | 2 NO |
| Momentary Button |  | 2 NO |

| SCC Part No. → EXTA8M3B | | |
|---|---|---|
| Operator Type | Symbol | Note |
| Momentary Start |  | 2 NO |
| Mushroom Head E-stop | Maintained | 1 NC |
| Momentary Button |  | |
| Momentary Button |  | |
| Momentary Button |  | |
| Momentary Button |  | |
| Momentary Button |  | |
| Momentary Button |  | |

| SCC Part No. → EXTA8M3C | | |
|---|---|---|
| Operator Type | Symbol | Note |
| Blank | | |
| Mushroom Head E-stop | Maintained | 1 NC |
| Momentary Button |  | 2 NO |
| Momentary Button |  | 2 NO |
| Momentary Button |  | 2 NO |
| Momentary Button |  | 2 NO |
| Momentary Button |  | 2 NO |
| Momentary Button |  | 2 NO |

| SCC Part No. → EXTA8M3D | | |
|---|---|---|
| Operator Type | Symbol | Note |
| zmomentary Start |  | |
| Mushroom Head E-stop | Maintained | 1 NC |
| Momentary Button |  | |
| Momentary Button |  | |
| Momentary Button |  | |
| Momentary Button |  | |
| Momentary Button |  | |
| Momentary Button |  | |

| SCC Part No. → EXTA8M3E | | |
|---|---|---|
| Operator Type | Symbol | Note |
| Momentary Start |  | |
| Mushroom Head E-stop | Maintained | 1 NC |
| Momentary Button |  | |
| Momentary Button |  | |
| Momentary Start |  | 1 NO |
| Momentary Stop |  | 1 NC |
| Momentary Button |  | 1 NO |
| Momentary Button |  | 1 NC |

## CONFIGURATIONS FOR MIKE-X PENDANT STATION

### 8 Operator Configurations

| SCC Part No. → EXTA8M3F | | |
|---|---|---|
| Operator Type | Symbol | Note |
| Key Selector Switch | Off-On | |
| Mushroom Head E-stop | Maintained | 1 NC |
| Momentary Button |  | |
| Momentary Button |  | |
| Momentary Button |  | |
| Momentary Button |  | |
| Momentary Button |  | |
| Momentary Button |  | |

| SCC Part No. → EXTA8M3G | | |
|---|---|---|
| Operator Type | Symbol | Note |
| Mushroom Head E-stop | Maintained | 1 NC |
| Momentary Start/Horn |  | |
| Momentary Button |  | |
| Momentary Button |  | |
| Momentary Button |  | |
| Momentary Button |  | |
| Momentary Button |  | |
| Momentary Button |  | |

| SCC Part No. → EXTA8M3H | | |
|---|---|---|
| Operator Type | Symbol | Note |
| Momentary Start |  | 2 NO |
| Mushroom Head E-stop | Maintained | 1 NC |
| Momentary Button |  | |
| Momentary Button |  | |
| Momentary Button |  | |
| Momentary Button |  | |
| Momentary Button |  | |
| Momentary Button |  | |

| SCC Part No. → EXTA8M3I | | |
|---|---|---|
| Operator Type | Symbol | Note |
| Blank | | |
| Mushroom Head E-stop | Maintained | 1 NC |
| Momentary Button |  | |
| Momentary Button |  | |
| Momentary Button |  | |
| Momentary Button |  | |
| Momentary Button |  | |
| Momentary Button |  | |

| SCC Part No. → EXTA8M3L | | |
|---|---|---|
| Operator Type | Symbol | Note |
| Momentary Horn |  | |
| Mushroom Head E-stop | Maintained | 1 NC |
| Momentary Button |  | |
| Momentary Button |  | |
| Momentary Button |  | |
| Momentary Button |  | |
| Momentary Button |  | |
| Momentary Button |  | |

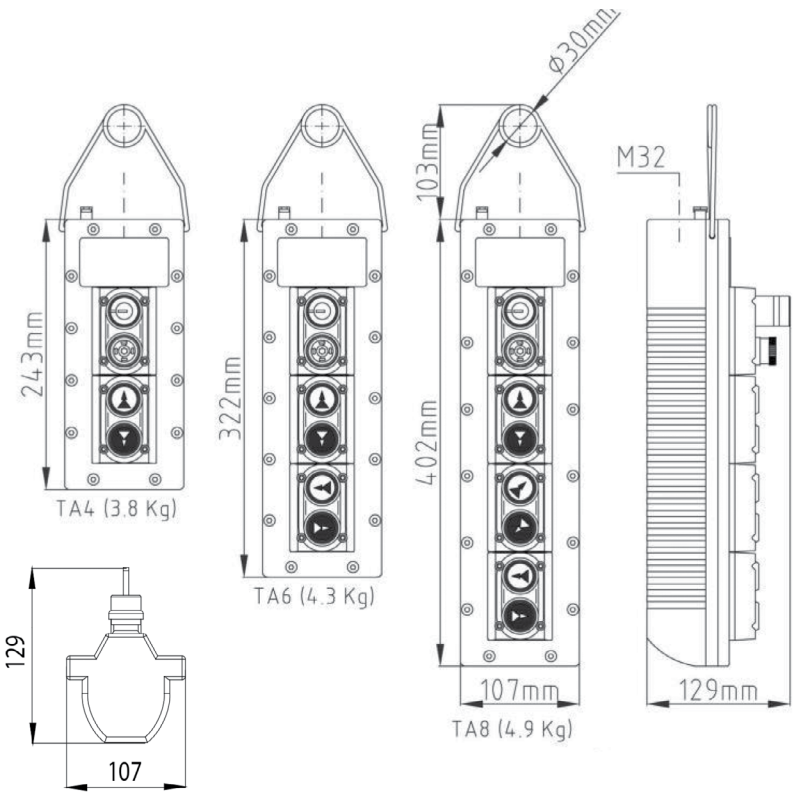
| SCC Part No. → EXTA8M3M | | |
|---|---|---|
| Operator Type | Symbol | Note |
| Key Selector Switch | Off-On | |
| Mushroom Head E-stop | Maintained | 2 contacts NC simultaneous |
| Momentary Button |  | |
| Momentary Button |  | |
| Momentary Button |  | |
| Momentary Button |  | |
| Momentary Button |  | |
| Momentary Button |  | |



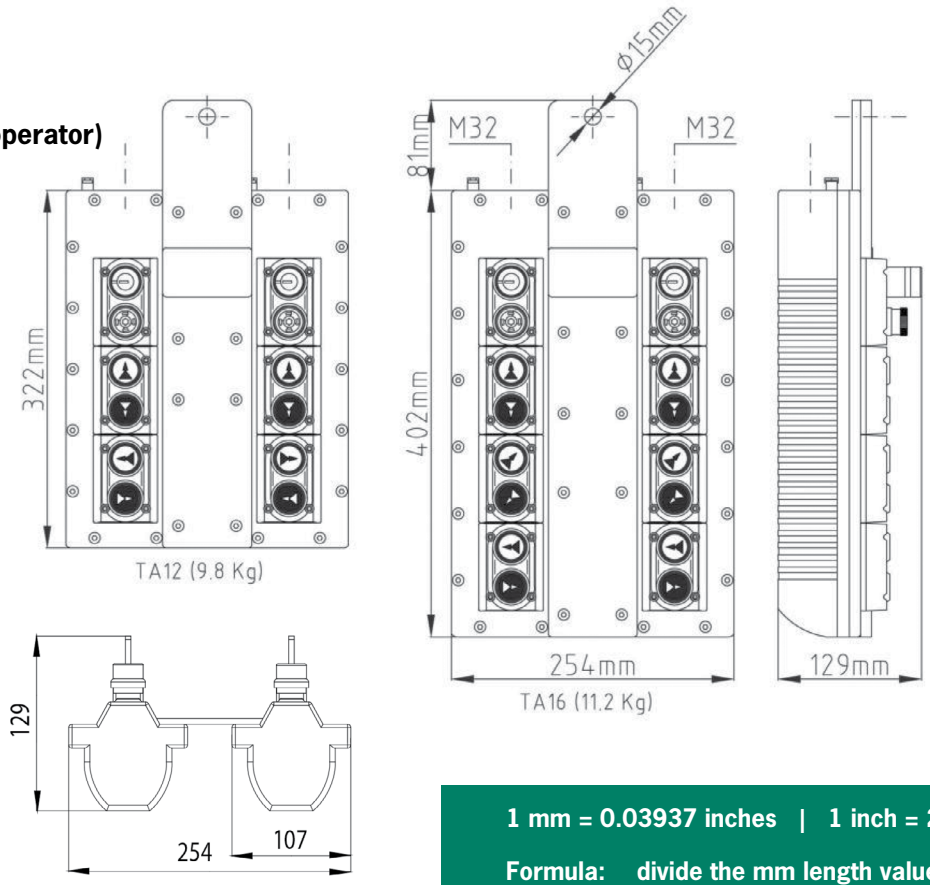
Springer Controls Company • 96074 Chester Road, Yulee, FL 32097 • (904) 225-0575 • **springercontrols.com**

## MIKE-X PENDANT - OVERALL DIMENSIONS (mm)

**Single Column**
**(4, 6, 8 operator)**




**Double Column**
**(10, 12, 14, 16 operator)**




**1 mm = 0.03937 inches | 1 inch = 25.4 mm**

**Formula: divide the mm length value by 25.4**
**multiply the inch length value by 25.4**

# MIKE-X PENDANT - REQUEST FORM FOR CONTROL STATION

## Instructions

Fill in the chart according to the following instructions:

1. **Protection:** tick the box to accept the type of protection provided.
2. **Control station:** tick the box corresponding to the type of control station required (simple or double).
3. **Control elements**: enter in the broken-line box the number corresponding to the control element required (from 1 to 25) according to the legend.

   If you choose **buttons with arrows**, mark the direction of the arrow into the corresponding box. Eg. ↗

   ATTENTION: opposite functions (eg. up /down) must be vertically coupled in columns and they are provided with mechanical interlock.
4. **Switches**: ienter the number corresponding to the switch required (from 30 to 35) according to the legend.
5. **Cable entry:** tick the box corresponding to type of cable entry required.
6. **Optionals:** tick the box corresponding to the eventual optionals required.

## Protection 1

☐ Tick the box to accept the type of protection provided.

| | |
|---|---|
| ATEX | II 2 G Ex db IIC T6 Gb<br>II 2 D Ex tb IIIC T85°C Db |
| IECEx | Ex db IIC T6 Gb<br>Ex tb IIIC T85°C Db |

## Control station 2

☐ 4 - 8 actuators: simple control station

☐ 12 - 16 actuators: double control station

## Control elements 3

☐ 1 Emergency stop mushroom pushbutton

☐ 2 Selector switch - 2 maintained positions 0/1

☐ 3 Key selector switch - 3 positions 1/0/2
(1/0 maintained - 0/2 spring return)


## Switches 4

| | |
|---|---|
| ☐ 30 1NC - 1 speed | ☐ 33 2NO - 1 speed |
| ☐ 31 1NO - 1 speed | ☐ 34 1NO+1NC - 1 speed |
| ☐ 32 2NC - 1 speed | ☐ 35 2NO - 2 speeds |

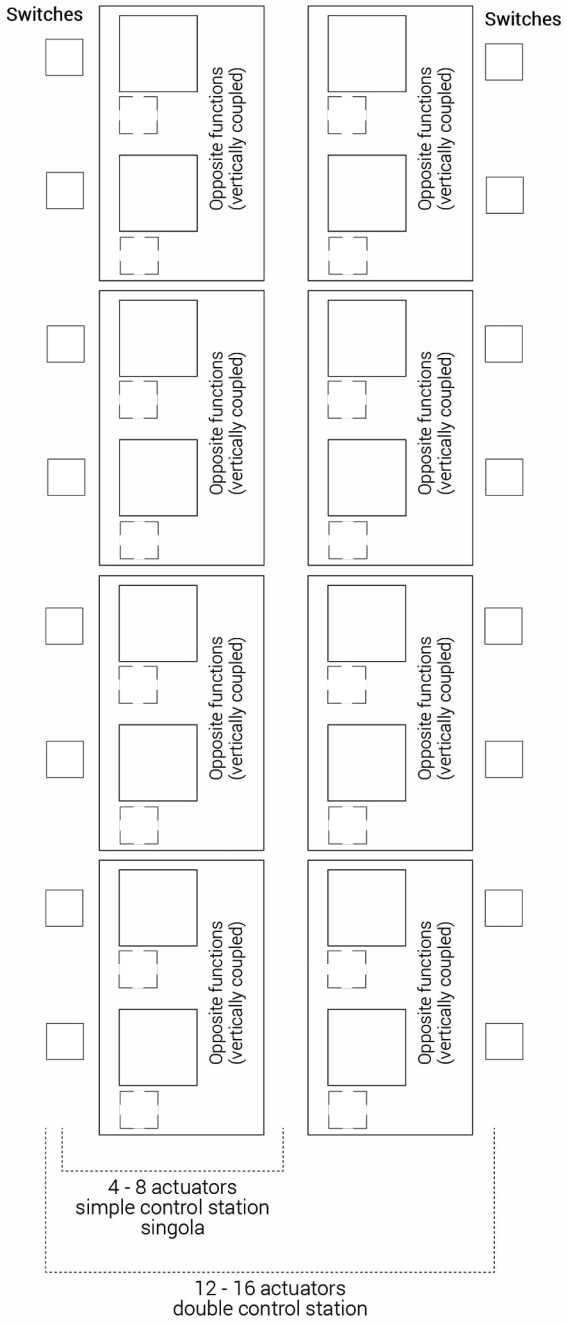
## Cable entry 5

☐ M25 x 1,5 ☐ M32 x 1,5

## Optionals 6

☐ Anti-condensation heater

☐ Stainless steel AISI 316 version






Springer Controls Company • 96074 Chester Road, Yulee, FL 32097 • (904) 225-0575 • **springercontrols.com**