

# Unicode™ 2 Series Aluminum Control Stations and Switches

## Increased Safety

**ATEX/IECEX:**  
Zone 1 and 2 – 21 and 22  
II 2 GD  
Ex de IIC/Ex demb IIC/ Ex tD A21  
IP66 – IK10

### Applications

- Local control stations and motor control stations for use in hazardous areas covering the broadest possible range of applications.
- Control of equipment at:
  - Power plants
  - Chemical and petrochemical plants
  - Petroleum refineries
  - Reverse osmosis plants
  - Pulp and paper processing plants
  - Various industrial applications
- Push buttons and selector switches are used in conjunction with contactors or magnetic starters for remote control of motors in hazardous locations. They provide circuit control and/or selection.
- Pilot lights provide visual assurance that an electrical function is being performed at a remote or hazardous location.
- For use in washdown areas.

### Features

- Employs Ex de method of protection which eliminates the need for external seals.
- Operators include push buttons, illuminated push buttons, selector switches, control and load break switches and LED pilot lights.
- Pilot light employs high intensity single LED with lifetime of 100,000 hours that can be used at:
  - 12 Vac to 254 Vac 50/60 Hz
  - 12 Vdc to 60 Vdc
- Up to 3 contact blocks per actuator can be used.
- Contact block technical data:
  - IEC rated operating voltage (Ue): 500 Vac – 110 Vdc
  - IEC switching capacity:
    - AC12: 16 Amp/400 Vac
    - AC14: 10 Amp/400 Vac
    - AC15: 6 Amp/500 Vac
    - DC13: 2 Amp/24 Vdc and 1 Amp/110 Vdc
  - NEMA switching capacity: A600: 10 Amp/600 Vac
- Selector switch technical data:
  - IEC rated operating voltage: 690 Vac
  - IEC rated operating current: maximum 16 Amp
  - IEC switching capacity:
    - AC1: 16 Amp/690 Vac
    - AC15: 16 Amp/415 Vac
    - AC3: 8 Amp/500 Vac
    - AC3: 4 Amp/690 Vac
    - AC3: 16 Amp/690 Vac
    - DC1: 10 Amp/24 Vdc
    - DC1: 6 Amp/60 Vdc
    - DC1: 6 Amp/110 Vdc (2 contacts wired in series)
    - DC1: 6 Amp/220 Vdc (3 contacts in series)
  - NEMA switching capacity: A600: 10 Amp/600 Vac
- Enclosures are rated for IP66 with firmly secured gasket.
- Operators and contact blocks are spaced for easy wiring.
- Wide selection of termination methods available.
- Choice of DIN rail mounted high performance contact block suitable for low intensity (less than 5 mA).
- TS35 rail mounted components are held securely in place during operation and easily removed for service.



U83W2 PRA5A9

- Brass Inserts are provided for TS35 DIN rails or mounting plates to be installed inside the enclosure.
- Captive, corrosion resistant stainless steel cover screws.

### Standard Materials

- Body and cover: aluminum with gray epoxy powder coating
- Cover screws: 304 stainless steel

### Accessories

- Key for changing actuator blocks.
- Guard for mushroom head actuator.
- Padlockable guard.
- M5 and M6 earth stud.
- Combination drain and breather available in brass, polyamide and stainless steel.

### Options

- Nameplates: Stainless Steel or Lamacoid with different color combinations.
- Padlocking facility at left, center, right or any position on selector switches.
- Padlocking facility for momentary and maintained push buttons.
- Special contact arrangements available, see *Unicode™ 2 Series Customized Control Stations*.

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Zone 1 and 2 – 21 and 22  
⊕ II 2 GD  
Ex de IIC/Ex demb IIC/ Ex tD A21  
IP66 – IK10

CONTROLS: NEC/CEC, ATEX/IECEX INCREASED SAFETY CONTROL STATIONS

### ATEX/IECEX Certification and Compliances

- Fiberglass Reinforced Polyester (FRP)
  - Certification Type CSPe
  - Gas: Zone 1 and 2
    - Conforming to ATEX 94/9/CE: ⊕ II 2 G
- Certification Type PCe
  - Gas: Zone 1 and 2
    - Conforming to ATEX 94/9/CE: ⊕ II 2 G
    - Type of Protection: Ex de IIC/Ex demb IIC
    - Temperature Class: T6
  - Dust: Zone 21 and 22
    - Conforming to ATEX 94/9/CE: ⊕ II 2 D
    - Type of Protection: Ex tD A21
  - Surface Temperature: T75 °C (T167 °F)
  - Ambient Temperature: -55 °C to +60 °C (-67 °F to +140 °F)  
(empty enclosure, temperature to be determine according actuator)
  - CE Declaration of Conformity: 50221
  - ATEX Certificate: LCIE 02 ATEX 6047
  - Index of Protection according EN/IEC 60529: IP66
  - Impact Resistance (shock): IK10

### EURASEC Certification

- Certification Type PCe
  - EURASEC RU C-FR Г505.В.00911

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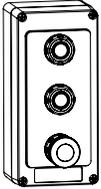
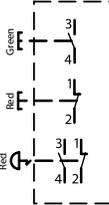
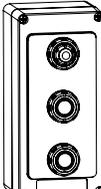
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### Size 3 Aluminum Control Station

Included: 1 white self-adhesive laminated plastic nameplate, 1 brass earth continuity plate ①, 1 blanking plug ②, 1 cable gland ②.

Description/Function	Diagram	Entry Location	Entry Size	Weight kg (lb)	Volume dm³ (in³)	Catalog Number
<b>Twin Push Buttons + Push-Pull Emergency Stop ③</b>						
 <p>1x green push button 'I' with 1NO contact                      1x red push button 'O' with 1NC contact                      momentary contacts                      1x red mushroom head push-pull emergency button with 1NO + 1NC maintained contacts</p>		Bottom	2 x M20	1.6 (3.53)	4.2 (256.30)	<b>U83W2A5A9D3</b>
		Bottom	2 x M25	1.6 (3.53)	4.2 (256.30)	<b>U83W4A5A9D3</b>
		Feed-Thru	1 x 3/4"	1.6 (3.53)	4.2 (256.30)	<b>U83Z3A5A9D3</b>
		Feed-Thru	2 x 3/4"	1.6 (3.53)	4.2 (256.30)	<b>U83X3A5A9D3</b>
<b>Pilot Light + Twin Push Buttons</b>						
 <p>1x green light ③                      1x green push button 'I' with 1NO contact                      1x red push button 'O' with 1NC contact                      momentary contacts</p> <p>1x red light ③                      1x green push button 'I' with 1NO contact                      1x red push button 'O' with 1NC contact                      momentary contacts</p> <p>1x green light ③                      1x green push button 'I' with 1NO + 1NC contact                      1x red push button 'O' with 1NO + 1NC contact                      momentary contacts</p> <p>1x red light ③                      1x green push button 'I' with 1NO + 1NC contact                      1x red push button 'O' with 1NO + 1NC contact                      momentary contacts</p>		Bottom	2 x M20	1.6 (3.53)	4.2 (256.30)	<b>U83W2PGA5A9</b>
		Bottom	2 x M25	1.6 (3.53)	4.2 (256.30)	<b>U83W4PGA5A9</b>
		Feed-Thru	1 x 3/4"	1.6 (3.53)	4.2 (256.30)	<b>U83Z3PGA5A9</b>
		Feed-Thru	2 x 3/4"	1.6 (3.53)	4.2 (256.30)	<b>U83X3PGA5A9</b>
		Bottom	2 x M20	1.6 (3.53)	4.2 (256.30)	<b>U83W2PRA5A9</b>
		Bottom	2 x M25	1.6 (3.53)	4.2 (256.30)	<b>U83W4PRA5A9</b>
		Feed-Thru	1 x 3/4"	1.6 (3.53)	4.2 (256.30)	<b>U83Z3PRA5A9</b>
		Feed-Thru	2 x 3/4"	1.6 (3.53)	4.2 (256.30)	<b>U83X3PRA5A9</b>
Bottom	2 x M20	1.6 (3.53)	4.2 (256.30)	<b>U83W2PGA3A3</b>		
Bottom	2 x M25	1.6 (3.53)	4.2 (256.30)	<b>U83W4PGA3A3</b>		
Feed-Thru	1 x 3/4"	1.6 (3.53)	4.2 (256.30)	<b>U83Z3PGA3A3</b>		
Feed-Thru	2 x 3/4"	1.6 (3.53)	4.2 (256.30)	<b>U83X3PGA3A3</b>		
Bottom	2 x M20	1.6 (3.53)	4.2 (256.30)	<b>U83W2PRA3A3</b>		
Bottom	2 x M25	1.6 (3.53)	4.2 (256.30)	<b>U83W4PRA3A3</b>		
Feed-Thru	1 x 3/4"	1.6 (3.53)	4.2 (256.30)	<b>U83Z3PRA3A3</b>		
Feed-Thru	2 x 3/4"	1.6 (3.53)	4.2 (256.30)	<b>U83X3PRA3A3</b>		

Additional combinations available, please refer to Unicode 2 Series - Customized Control Stations section.

① Not required for aluminum.

② Not included if NPT hubs are selected.

③ 12 Vac to 254 Vac 50/60 Hz - 12 Vdc to 60 Vdc.