

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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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.B.00911

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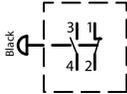
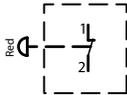
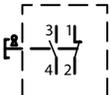
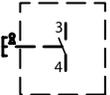
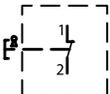
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CONTROLS: NEC/CEC, ATEX/IECEX INCREASED SAFETY CONTROL STATIONS

Size 1 Aluminum Control Station

Included: 1 white self-adhesive laminated plastic nameplate, 1 brass earth continuity plate ①, 1 blanking plug ②, 1 cable gland ③.

Description/Function	Diagram	Entry Location	Entry Size	Weight kg (lb)	Volume dm³ (in³)	Catalog Number	
Mushroom Head Push Button							
 Black mushroom head push button 1NO + 1NC momentary contact		Bottom	2 x M20	1.0 (2.20)	2.7 (164.80)	U81W2B3	
		Bottom	2 x M25	1.0 (2.20)	2.7 (164.80)	U81W4B3	
		1 x 3/4"	1.0 (2.20)	2.7 (164.80)	U81Z3B3		
	Feed-Thru	2 x 3/4"	1.0 (2.20)	2.7 (164.80)	U81X3B3		
	 Red mushroom head push button 1NC momentary contact		Bottom	2 x M20	1.0 (2.20)	2.7 (164.80)	U81W2R9
			Bottom	2 x M25	1.0 (2.20)	2.7 (164.80)	U81W4R9
1 x 3/4"			1.0 (2.20)	2.7 (164.80)	U81Z3R9		
Feed-Thru			2 x 3/4"	1.0 (2.20)	2.7 (164.80)	U81X3R9	
Key Push Button							
 With key removable in both positions 1NO + 1NC maintained contact		Bottom	2 x M20	1.0 (2.20)	2.7 (164.80)	U81W2E3	
		Bottom	2 x M25	1.0 (2.20)	2.7 (164.80)	U81W4E3	
		1 x 3/4"	1.0 (2.20)	2.7 (164.80)	U81Z3E3		
	Feed-Thru	2 x 3/4"	1.0 (2.20)	2.7 (164.80)	U81X3E3		
	 With key removable in both positions 1NO maintained contact		Bottom	2 x M20	1.0 (2.20)	2.7 (164.80)	U81W2E5
			Bottom	2 x M25	1.0 (2.20)	2.7 (164.80)	U81W4E5
1 x 3/4"			1.0 (2.20)	2.7 (164.80)	U81Z3E5		
Feed-Thru			2 x 3/4"	1.0 (2.20)	2.7 (164.80)	U81X3E5	
 With key removable in both positions 1NC maintained contact		Bottom	2 x M20	1.0 (2.20)	2.7 (164.80)	U81W2E9	
		Bottom	2 x M25	1.0 (2.20)	2.7 (164.80)	U81W4E9	
		1 x 3/4"	1.0 (2.20)	2.7 (164.80)	U81Z3E9		
		Feed-Thru	2 x 3/4"	1.0 (2.20)	2.7 (164.80)	U81X3E9	

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.