

Unicode™ 2 Series Stainless Steel Control Stations and Switches

Increased Safety

NEC:
Class I, Division 2, Groups A, B, C, D
Class II, Groups E, F, G
Class III
Ex de IIC/DIP A21
IP66, Type 4X①

CEC:
Class I, Division 2, Groups A, B, C, D
Class II, Groups F, G
Class III; Type 4X①
Class I, Zone 1, AEx de IIC/ AEx tD 21
IP66

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.



U62W2PRA5A9

- 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: 316L stainless steel with natural finish
- 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*.

① Overall hazardous location and ingress protection rating depends on the rating of the optional certified components used.

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ATEX/IECEx:

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

NEC/CEC Certifications and Compliances

- Certification Type JBe
 - Temperature Class: T6 (at +40°C) or T5 (at +55°C)
 - Surface Temperature: T80 °C (at +40°C) to T95 °C (at +55°C) (T176 °F to T203 °F)
 - Ambient Temperature: -40 °C to +55 °C (-40 °F to +131°F)
 - CAN/CSA Standard: C22.2 No. O-M91, No. 25-M66, No. 213-M1987, No. 60079-0:07, No. 60529-2005, E60079-7-2003
 - UL Standard: 60079-0, 60079-7
 - Other Standards: ANSI/IEC60529-2004, ANSI/ISA 12.12.01-2011
 - cCSAus Certificate: 2356734

ATEX/IECEx Certification and Compliances

- Certification Type JBe
 - 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: T5 to T6
 - Dust: Zone 21 and 22
 - Conforming to ATEX 94/9/CE: ⊕ II 2 D
 - Type of Protection: Ex tD A21
 - Surface Temperature: T80 °C to T95 °C (T176 °F to T203 °F)
 - Ambient Temperature: -50 °C to +70 °C (-58 °F to +158 °F) (empty enclosure, temperature to be determined according to actuator)
 - CE Declaration of Conformity: 50232
 - ATEX Certificate: LCIE 02 ATEX 6118X
 - IECEx Certificate: LCI 11.0008X
 - Index of Protection according EN/IEC 60529: IP66
 - Impact Resistance (shock): IK10

EURASEC Certification

- Certification Type JBe
 - EURASEC RU C-FR Г505.B.00911

Other Certification ^②

- Certification Type JBe
 - INMETRO Certificate: BVC 11.0418-X

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^② INMETRO certification available on special request only. Contact your local sales representative for more information.

Unicode™ 2 Series Stainless Steel Control Stations and Switches

Increased Safety

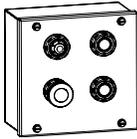
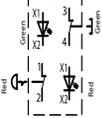
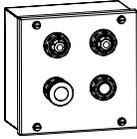
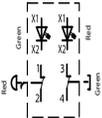
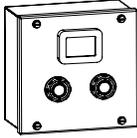
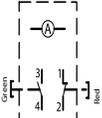
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Size 3 Stainless Steel Control Station

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

Description/Function	Diagram	Entry Location	Entry Size	Weight kg (lb)	Volume dm ³ (in ³)	Catalog Number
Pilot Light + Twin Push Buttons + Push-Pull Emergency Stop						
 <p>1x green light 1x green push button 'I' with 1NO contact 1x red push button 'O' with 1NC contact momentary contacts 1x red mushroom head push-pull with 1x NC maintained contact</p>		Bottom	2 x M20	2.1 (4.63)	10.5 (640.70)	U63W2PGA5A9D9
		Bottom	2 x M25	2.1 (4.63)	10.5 (640.70)	U63W4PGA5A9D9
			1 x 3/4"	2.1 (4.63)	10.5 (640.70)	U63Z3PGA5A9D9
		Feed-Thru	2 x 3/4"	2.1 (4.63)	10.5 (640.70)	U63X3PGA5A9D9
Twin Pilot Lights + Push-Pull Emergency Stop + Push Button ③						
 <p>1x green light + 1x red light ③ 1x red mushroom head push-pull with 1x NC maintained contact 1x green push button 'I' with 1NO momentary contact</p>		Bottom	2 x M20	2.1 (4.63)	10.5 (640.70)	U63W2PGPRD9A5
		Bottom	2 x M25	2.1 (4.63)	10.5 (640.70)	U63W4PGPRD9A5
			1 x 3/4"	2.1 (4.63)	10.5 (640.70)	U63Z3PGPRD9A5
		Feed-Thru	2 x 3/4"	2.1 (4.63)	10.5 (640.70)	U63X3PGPRD9A5
Ammeter + Twin Push Buttons ⑤						
 <p>1x ammeter 48 x 48 mm, 1A C.T., 3 F.L.C., with 0 - 1 - 3 scale 1x green push button 'I' with 1NO contact 1x red push button 'O' with 1NC contact momentary contacts</p>		Bottom	2 x M20	2.1 (4.63)	10.5 (640.70)	U63W2VA13A5A9
		Bottom	2 x M25	2.1 (4.63)	10.5 (640.70)	U63W4VA13A5A9
			1 x 3/4"	2.1 (4.63)	10.5 (640.70)	U63Z3VA13A5A9
		Feed-Thru	2 x 3/4"	2.1 (4.63)	10.5 (640.70)	U63X3VA13A5A9

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

- ① Overall hazardous location and ingress protection rating depends on the rating of the optional certified components used.
- ② Not required for stainless steel.
- ③ Not included if NPT hubs are selected.
- ④ 12 Vac to 254 Vac 50/60 Hz - 12 Vdc to 60 Vdc.
- ⑤ Certified for ATEX/IECEX only.

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Increased Safety

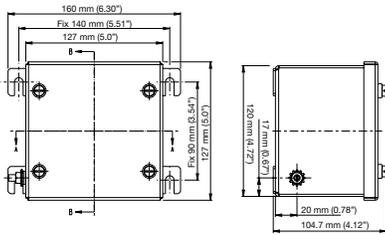
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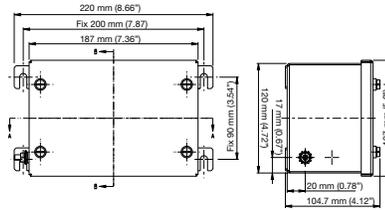
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CONTROLS: NEC/CEC, ATEX/IECEX INCREASED SAFETY CONTROL STATIONS

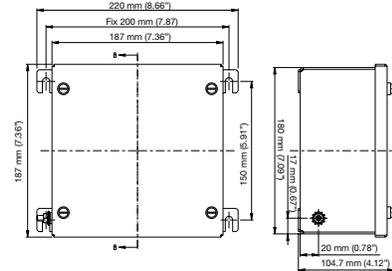
Dimensions in Millimeters (Inches)



Size 1 Box



Size 2 Box



Size 3 Box

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Unicode™ 2 Series Customized Control Station Functions

Increased Safety

Polyamide, Fiberglass Reinforced Polyester, 316L Stainless Steel, Aluminum

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ATEX/IECEx:

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IP66 – IK10

Devices	
Push Buttons, Momentary Contacts (3 maximum)	
With 2 NO momentary contacts	A1
With 2 NC momentary contacts	A2
With 1 NO + 1 NC momentary contacts	A3
With 2 NO + 1 NC momentary contacts	A4
With 1 NO momentary contact	A5
With 1 NO + 2 NC momentary contacts	A6
With 3 NO momentary contacts	A7
With 3 NC momentary contacts	A8
With 1 NC momentary contact	A9
Guard and Padlocking Devices	
Guard for mushroom head push button	1
Padlocking device for push button and rotary actuator	2
Padlocking device for mushroom head push button	3
Inserts for Push Buttons and Illuminated Push Buttons	
Green (unmarked)	G
Red (unmarked)	R
Yellow (unmarked)	Y
White (unmarked)	W
Blue (unmarked)	B
Black (unmarked)	N
ON (green)	01
OFF (red)	02
START (green)	03
STOP (red)	04
MARCHE (green)	05
ARRET (red)	06
I (green)	07
O (red)	08

Legend Plates		
Legend Plates for Push Buttons and Pilot Lights <i>(Located Above Device)</i>		
Text	Small	Large
Blank	SA00	LA00
ON	SA01	LA01
OFF	SA02	LA02
FORWARD	SA03	LA03
REVERSE	SA04	LA04
JOG	SA05	LA05
RUN	SA06	LA06
START	SA07	LA07
STOP	SA08	LA08
UP	SA09	LA09
DOWN	SA10	LA10
FAST	SA11	LA11
SLOW	SA12	LA12
RAISE	SA13	LA13
LOWER	SA14	LA14
OPEN	SA15	LA15
CLOSE	SA16	LA16
LOW	SA17	LA17
HIGH	SA18	LA18
TEST	SA19	LA19
RESET	SA20	LA20

Legend Plates (Continued)		
Legend Plates for Push Buttons and Pilot Lights <i>(Located Above Device)</i>		
EMERGENCY STOP	SA21	LA21
MARCHE	SA22	LA22
ARRET	SA23	LA23
ARRET D'URGENCE	SA24	LA24
HAUT	SA25	LA25
BAS	SA26	LA26

Devices	
Illuminated Push Buttons, Momentary Contacts (2 maximum)	
Green with 2 NO momentary contacts	LG1
Green with 2 NC momentary contacts	LG2
Green with 1 NO + 1 NC momentary contacts	LG3
Green with 1 NO momentary contacts	LG5
Green with 1 NC momentary contacts	LG9
Red with 2 NO momentary contacts	LR1
Red with 2 NC momentary contacts	LR2
Red with 1 NO + 1 NC momentary contacts	LR3
Red with 1 NO momentary contacts	LR5
Red with 1 NC momentary contacts	LR9
<i>For other colors replace 2nd letter to B for Blue, W for White and Y for Yellow. Example: Blue – LB1</i>	

Device Options	
Push buttons complete with key removable in both positions (2 contacts maximum)	
With 2 NO contacts	E1
With 2 NC contacts	E2
With 1 NO + 1 NC contacts	E3
With 1 NO contact	E5
With 1 NC contact	E9
Push buttons complete with key removable in ON position (2 contacts maximum)	
With 2 NO contacts	F1
With 2 NC contacts	F2
With 1 NO + 1 NC contacts	F3
With 1 NO contact	F5
With 1 NC contact	F9
Push buttons complete with key removable in OFF position (2 contacts maximum)	
With 2 NO contacts	G1
With 2 NC contacts	G2
With 1 NO + 1 NC contacts	G3
With 1 NO contact	G5
With 1 NC contact	G9

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

Appleton

Device Options	
Black Mushroom Head Push Buttons, Momentary Contacts (3 maximum)	
With 2 NO momentary contacts	B1
With 2 NC momentary contacts	B2
With 1 NO + 1 NC momentary contacts	B3
With 2 NO + 1 NC momentary contacts	B4
With 1 NO momentary contact	B5
With 1 NO + 2 NC momentary contacts	B6
With 3 NO momentary contacts	B7
With 3 NC momentary contacts	B8
With 1 NC momentary contact	B9

Devices	
Red Mushroom Head Push Buttons, Momentary Contacts (3 maximum)	
With 2 NO momentary contacts	R1
With 2 NC momentary contacts	R2
With 1 NO + 1 NC momentary contacts	R3
With 2 NO + 1 NC momentary contacts	R4
With 1 NO momentary contact	R5
With 1 NO + 2 NC momentary contacts	R6
With 3 NO momentary contacts	R7
With 3 NC momentary contacts	R8
With 1 NC momentary contact	R9

Red Mushroom Head Emergency Stop Buttons, Maintained (3 contacts maximum)	
Push-pull version with 2 NO maintained contacts	D1
Push-pull version with 2 NC maintained contacts	D2
Push-pull version with 1 NO + 1 NC maintained contacts	D3
Push-pull version with 2 NO + 1 NC maintained contacts	D4
Push-pull version with 1 NO maintained contact	D5
Push-pull version with 1 NO + 2 NC maintained contacts	D6
Push-pull version with 3 NO maintained contacts	D7
Push-pull version with 3 NC maintained contacts	D8
Push-pull version with 1 NC maintained contact	D9

Red Mushroom Head Emergency Stop Buttons, Maintained Contacts (2 maximum)	
Key to release with 2 NO maintained contacts	C1
Key to release with 2 NC maintained contacts	C2
Key to release with 1 NO + 1 NC maintained contacts	C3
Key to release with 1 NO maintained contact	C5
Key to release with 1 NC maintained contact	C9

LED Pilot Lights	
Blue color	PB
Green color	PG
Red color	PR
White color	PW
Yellow color	PY

Devices	
2 Positions O-I Rotary Actuator (O and I Maintained)	
With 2 NO maintained contacts	H1
With 2 NC maintained contacts	H2
With 1 NO + 1 NC maintained contacts	H3
With 2 NO + 1 NC maintained contacts	H4
With 1 NO maintained contact	H5
With 1 NO + 2 NC maintained contacts	H6
With 3 NO maintained contacts	H7
With 3 NC maintained contacts	H8
With 1 NC maintained contact	H9

Legend Plates for 2-Position Selector Switches (Located Above Device)			
Text	Small	Large	
O-I	SH01	LH01	
ON-OFF	SH02	LH02	
START-STOP	SH03	LH03	
STOP-START	SH04	LH04	
HAND-AUTO	SH05	LH05	
MANU-AUTO	SH06	LH06	
FORWARD-REVERSE	SH07	LH07	
REMOTE-LOCAL	SH08	LH08	
MARCHE-ARRET	SH09	LH09	

3 Positions I-O-II Rotary Actuator (I and II maintained)	
With 2 NO maintained contacts	J1
With 2 NC maintained contacts	J2
With 1 NO + 1 NC maintained contacts	J3
With 2 NO + 1 NC maintained contacts	J4
With 1 NO + 2 NC maintained contacts	J6
With 3 NO maintained contacts	J7
With 3 NC maintained contacts	J8

3 Positions I-O-II Rotary Actuator (I and II spring-return to O)	
With 2 NO contacts	K1
With 2 NC contacts	K2
With 1 NO + 1 NC contacts	K3
With 2 NO + 1 NC contacts	K4
With 1 NO + 2 NC contacts	K6
With 3 NO contacts	K7
With 3 NC contacts	K8

3 Positions I-O-II Rotary Actuator (I Maintained and II Spring-Return to O)	
With 2 NO contacts	M1
With 2 NC contacts	M2
With 1 NO + 1 NC contacts	M3
With 2 NO + 1 NC contacts	M4
With 1 NO + 2 NC contacts	M6
With 3 NO contacts	M7
With 3 NC contacts	M8

3 Positions I-O-II Rotary Actuator (I Spring-Return to O + II Maintained)	
With 2 NO contacts	N1
With 2 NC contacts	N2
With 1 NO + 1 NC contacts	N3
With 2 NO + 1 NC contacts	N4
With 1 NO + 2 NC contacts	N6
With 3 NO contacts	N7
With 3 NC contacts	N8

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