Unicode® 2 Series Stainless steel Control Stations and Switches

Increased Safety
316L Stainless Steel

Zone 1 and 2 – 21 and 22
Gas (G) and Dust (D)

Controls

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
- 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)
- Enclosures are rated for IP66 with firmly secured gasket.
- Operators and contact blocks are spaced so as to have easy and ample space for wiring.
- Wide selection of termination methods available.
- Choice of DIN rail mounted high performance contact block suitable for low intensity (less than 5mA).
- TS35 rail mounted components held securely in place during operation and easily removed for service.
- Brass Inserts are provided for TS35 DIN rails or mounting plate to be installed inside the enclosure.
- Captive, corrosion resistant stainless steel cover screws.

U62W2 PRA5A9
316 Stainless Steel

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*.

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Certification and Compliances

♦ATEX or IECEx Certification

- **Certification Type JBe (Stainless Steel)**
    — Gas: Zone 1 and 2
        — Conforming to ATEX 94/9/CE: ⟨Ex⟩ II2 G
        — Type of Protection: Ex de IIC or Ex demb IIC (depending of the actuator)
        — Temperature Class: T5 to T6
    — Dust: Zone 21 and 22
        — Conforming to ATEX 94/9/CE: ⟨Ex⟩ II2 D
        — Type of Protection: Ex tD A21
        — Surface Temperature: T80 °C to T95 °C
    — Ambient Temperature: -50 °C to +70 °C (empty enclosure)
    -20°C or -25°C to +55°C or +60°C depending of the 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
    — EURASEC RU C-FR ГБ05.В.00911

♦Others Certification ①
    —INMETRO Certificate: BVC 11.0418-X

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① *Inmetro certification available on special request only. Contact your local sales for more information.*

Unicode® 2 Series Stainless steel Control Stations and Switches
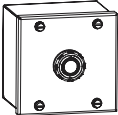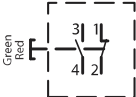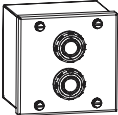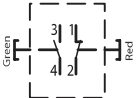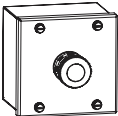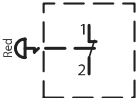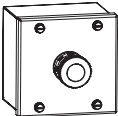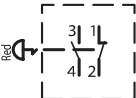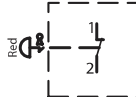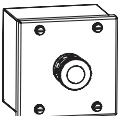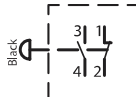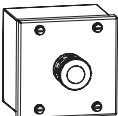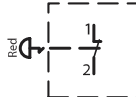
Increased Safety
316L Stainless Steel

Zone 1 and 2 – 21 and 22
Gas (G) and Dust (D)

Size 1 316 L Control Station
Included: 1 white self-adhesive laminated plastic nameplate, 2x M20 bottom clearance entries, 1 blanking plug, 1 cable gland in polyamide, 2 locknuts.

Description/Function	Diagram	Bottom Entry	Weight kg	Volume dm³	Catalog Number
Momentary Push Button					
Green insert 'I' + red insert 'O' with 1NO + 1NC momentary contact		2 x M20	1.2	4.3	**U61W2A3**
Twin Momentary Push Buttons					
1x green push button 'I' with 1NO contact 1x red push button 'O' with 1NC contact Momentary contacts		2 x M20	1.3	4.3	**U61W2A5A9**
Emergency Stop					
Red mushroom head push-pull 1NC maintained contact		2 x M20	1.2	4.3	**U61W2D9**
Red mushroom head push-pull 1NO + 1NC maintained contact		2 x M20	1.2	4.3	**U61W2D3**
Emergency Stop					
Red mushroom head key release 1NC maintained contact		2 x M20	1.2	4.3	**U61W2C9**
Mushroom Head Push Button					
Black mushroom head push button 1NO+1NC momentary contacts		2 x M20	1.2	4.3	**U61W2B3**
Red mushroom head push button 1NC momentary contact		2 x M20	1.2	4.3	**U61W2R9**

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

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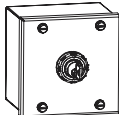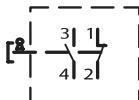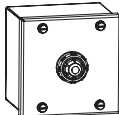# Unicode® 2 Series Stainless steel Control Stations and Switches
Increased Safety
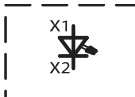### 316L Stainless Steel
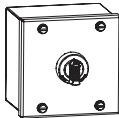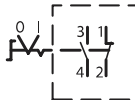
Zone 1 and 2 – 21 and 22
Gas (G) and Dust (D)

Size 1 316L Control Station
Included: 1 white self-adhesive laminated plastic nameplate, 2x M20 bottom clearance entries, 1 blanking plug, 1 cable gland in polyamide, 2 locknuts.

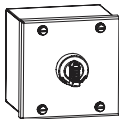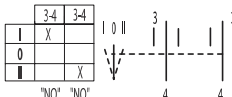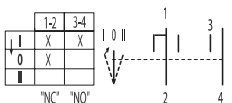| Description/Function	Diagram	Bottom Entry	Weight kg	Volume dm³	Catalog Number
Key Push Button					
With key removable in both positions 1NO+1NC maintained contact		2 x M20	1.0	4.0	**U61W2E3**
Pilot Light					
1x red pilot light ①		2 x M20	1.2	4.3	**U61W2PR**
1x green pilot light ①		2 x M20	1.2	4.3	**U61W2PG**
1x blue pilot light ①		2 x M20	1.2	4.3	**U61W2PB**
1x yellow pilot light ①		2 x M20	1.2	4.3	**U61W2PY**
1x white pilot light ①		2 x M20	1.2	4.3	**U61W2PW**
2-Position Selector Switch					
2 fixed positions '0 - I' 1NO + 1 NC contacts		2 x M20	1.2	4.3	**U61W2H3**
3-Position Selector Switch					
3 fixed positions 'I - 0 - II' 2NO contacts		2 x M20	1.2	4.3	**U61W2J1**
3 fixed positions 'I - 0 - II' With spring return from I to 0 1NO + 1NC contacts		2 x M20	1.2	4.3	**U61W2N3**
3 positions 'I - 0 - II' With spring return from II to 0 1NO + 1NC contacts		2 x M20	1.2	4.3	**U61W2M3**

Additional combinations available, please refer to Unicode 2 Series - Customized Control Stations section.
① 12 Vac to 254 Vac 50/60 Hz - 12 Vdc to 60 Vdc

Controls

CONTROL STATIONS AND SWITCHES - INCREASED SAFETY

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Unicode® 2 Series Stainless steel Control Stations and Switches
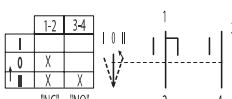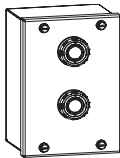## Increased Safety
316L Stainless Steel
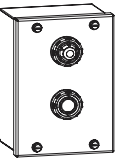
Zone 1 and 2 – 21 and 22
Gas (G) and Dust (D)

Size 2 316L Control Station
Included: 1 white self-adhesive laminated plastic nameplate, 2x M20 bottom clearance entries, 1 blanking plug, 1 cable gland in polyamide, 2 locknuts.

Description/Function	Diagram	Bottom Entry	Weight kg	Volume dm³	Catalog Number
Twin Push Button					
1 x green push button 'I' with 1NO contact 1 x red push button 'O' with 1NC contact Momentary contacts		2 x M20	1.8	4.3	**U62W2A5A9**
Push Button + Push-Pull Emergency Stop					
1 x green push button 'I' with 1NO momentary contact 1 x red mushroom head push-pull emergency button with 1NC maintained contact		2 x M20	1.8	4.3	**U62W2A5D9**
Pilot Light + Push Button					
1 x green light ① 1 x green push button 'I' with 1NO momentary contact		2 x M20	1.8	4.3	**U62W2PGA5**
1 x red light ① 1 x red push button 'O' with 1NC momentary contact		2 x M20	1.8	4.3	**U62W2PRA9**
Ammeter + 3-Position Selector Switch					
1 x ammeter 48 x 48 mm, 1A C.T., 3 F.L.C., with 0-1-3 scale 1 x 3-position selector switch 'I - O - II' With spring return from II to 0 1NO + 1NC contacts		2 x M20	1.8	4.3	**U62W2VA13M3**

Additional combinations available, please refer to Unicode 2 Series - Customized Control Stations section.
① 12 Vac to 254 Vac 50/60 Hz - 12 Vdc to 60 Vdc

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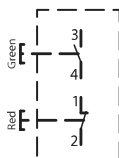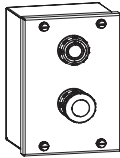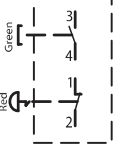# Unicode® 2 Series Stainless steel Control Stations and Switches

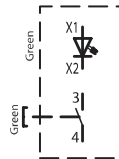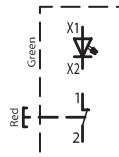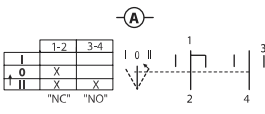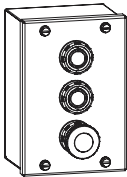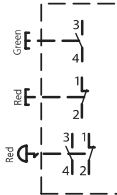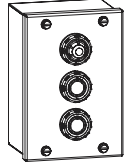## Increased Safety
316L Stainless Steel
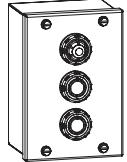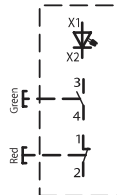
Zone 1 and 2 – 21 and 22
Gas (G) and Dust (D)

Size 2 316L Control Station
Included: 1 white self-adhesive laminated plastic nameplate, 2x M20 bottom clearance entries, 1 blanking plug, 1 cable gland in polyamide, 2 locknuts.

Description/Function	Diagram	Bottom Entry	Weight kg	Volume dm³	Catalog Number
Twin Push Buttons + Push-Pull Emercency Stop					
1 x green push button 'I' with 1NO contact 1 x red push button 'O' with 1NC contact Momentary contacts 1 x red mushroom head push-pull emergency button with 1NO + 1NC contacts		2 x M20	1.8	4.3	**U62W2A5A9D3**
Pilot Light + Twin Push Buttons					
1x green pilot light ① 1 x green push button 'I' with 1NO contact 1 x red push button 'O' with 1NC contact Momentary contacts		2 x M20	1.8	4.3	**U62W2PGA5A9**
1 x red pilot light ① 1 x green push button 'I' with 1NO contact 1 x red push button 'O' with 1NC contact Momentary contact		2 x M20	1.8	4.3	**U62W2PRA5A9**
1 x green pilot light ① 1 x green push button 'I' with 1NO + 1NC contacts 1 x red push button 'O' with 1NO + 1NC contacts Momentary contacts		2 x M20	1.8	4.3	**U62W2PGA3A3**
1x red pilot light ① 1 x green push button 'I' with 1NO + 1NC contacts 1 x red push button 'O' with 1NO + 1NC contacts Momentary contacts		2 x M20	1.8	4.3	**U62W2PRA3A3**

Additional combinations available, please refer to Unicode 2 Series - Customized Control Stations section.
① 12 Vac to 254 Vac 50/60 Hz - 12 Vdc to 60 Vdc.

Controls

CONTROL STATIONS AND SWITCHES - INCREASED SAFETY

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Unicode® 2 Series Stainless steel Control Stations and Switches

Increased Safety
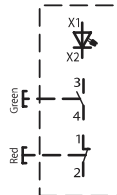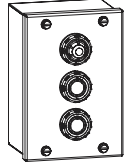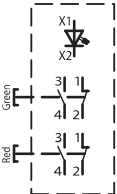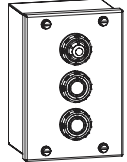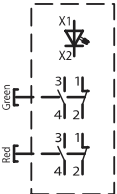316L Stainless Steel

Zone 1 and 2 – 21 and 22
Gas (G) and Dust (D)

Size 3 316L Control Station
Included: 1 white self-adhesive laminated plastic nameplate, 2x M20 bottom clearance entries, 1 blanking plug, 1 cable gland in polyamide, 2 locknuts.

Description/Function	Diagram	Bottom Entry	Weight kg	Volume dm³	Catalog Number
Twin Pilot Lights + Twin Push Buttons					
1 x green pilot light ① 1 x red pilot light ① 1 x green push button 'I' with 1NO contact 1 x red push button 'O' with 1NC contact Momentary contacts		2 x M20	2.1	10.5	**U63W2PGPRA5A9**
		2 x M25	2.1	10.5	**U63W4PGPRA5A9**

Additional combinations available, please refer to Unicode 2 Series - Customized Control Stations section
① 12 Vac to 254 Vac 50/60 Hz - 12 Vdc to 60 Vdc.

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Controls

CONTROL STATIONS AND SWITCHES - INCREASED SAFETY
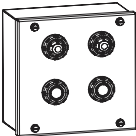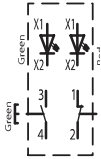
Unicode® 2 Series Stainless steel Control Stations and Switches
Increased Safety
316L Stainless Steel

Zone 1 and 2 – 21 and 22
Gas (G) and Dust (D)

Nameplates — Set of 10
Blank self-adhesive, laminated plastic 58 mm x 18 mm.

Color	Catalog Number
White (black letters)	UNPW
Yellow (black letters)	UNPY
Red (white letters)	UNPR
Blue (white letters)	UNPB
Black (white letters)	UNPN
Green (white letters)	UNPG

Inserts for Push Button — Set of 5

	Marking	Color	Catalog Number
	(unmarked)	Green	UIAG
	(unmarked)	Red	UIAR
	(unmarked)	Yellow	UIAY
	(unmarked)	White	UIAW
	(unmarked)	Blue	UIAB
	(unmarked)	Black	UIAN
	ON	Green	UIA01
	OFF	Red	UIA02
	START	Green	UIA03
	STOP	Red	UIA04
	MARCHE	Green	UIA05
	ARRET	Red	UIA06
	I	Green	UIA07
	O	Red	UIA08

Inserts for Illuminated Push Button — Set of 5

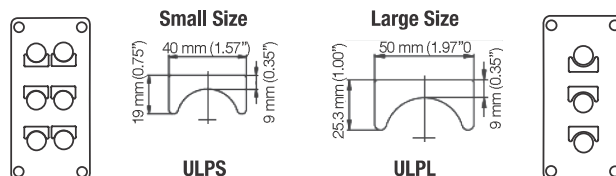|	Marking	Color	Catalog Number
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	(unmarked)	Red	UILR
	(unmarked)	Yellow	UILY
	(unmarked)	White	UILW
	(unmarked)	Blue	UILB
	ON	Green	UIL01
	OFF	Red	UIL02
	START	Green	UIL03
	STOP	Red	UIL04
	MARCHE	Green	UIL05
	ARRET	Red	UIL06
	I	Green	UIL07
	O	Red	UIL08

Spare Key
For all key-operated buttons.

Description	Catalog Number
Spare key type 4 A 185	SK4A185

Standard Legend Plates
Two sizes available. Self-adhesive yellow laminated plastic (black lettering).

Small Size — 40 mm (1.57") — 19 mm (0.75") — 9 mm (0.35") — ULPS

Large Size — 50 mm (1.97"0) — 25.3 mm (1.00") — 9 mm (0.35") — ULPL

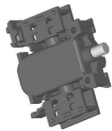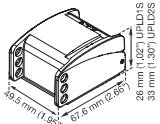|	Catalog Number	
Text	Small	Large
Blank (set of 10)	ULPS	ULPL
ON	ULPSA01	ULPLA01
OFF	ULPSA02	ULPLA02
FORWARD	ULPSA03	ULPLA03
REVERSE	ULPSA04	ULPLA04
JOG	ULPSA05	ULPLA05
RUN	ULPSA06	ULPLA06
START	ULPSA07	ULPLA07
STOP	ULPSA08	ULPLA08
UP	ULPSA09	ULPLA09
DOWN	ULPSA10	ULPLA10
FAST	ULPSA11	ULPLA11
SLOW	ULPSA12	ULPLA12
RAISE	ULPSA13	ULPLA13
LOWER	ULPSA14	ULPLA14
OPEN	ULPSA15	ULPLA15
CLOSE	ULPSA16	ULPLA16
LOW	ULPSA17	ULPLA17
HIGH	ULPSA18	ULPLA18
TEST	ULPSA19	ULPLA19
RESET	ULPSA20	ULPLA20
EMERGENCY STOP	ULPSA21	ULPLA21
MARCHE	ULPSA22	ULPLA22
ARRET	ULPSA23	ULPLA23
ARRET D'URGENCE	ULPSA24	ULPLA24
HAUT	ULPSA25	ULPLA25
BAS	ULPSA26	ULPLA26
O—I	ULPSH01	ULPLH01
ON—OFF	ULPSH02	ULPLH02
START—STOP	ULPSH03	ULPLH03
STOP—START	ULPSH04	ULPLH04
HAND—AUTO	ULPSH05	ULPLH05
MANU—AUTO	ULPSH06	ULPLH06
FORWARD—REVERSE	ULPSH07	ULPLH07
REMOTE—LOCAL	ULPSH08	ULPLH08
MARCHE—ARRET	ULPSH09	ULPLH09
I—O—II	ULPSJ01	ULPLJ01
OFF—O—ON	ULPSJ02	ULPLJ02
START—NORMAL—STOP	ULPSJ03	ULPLJ03
HAND—OFF—AUTO	ULPSJ04	ULPLJ04
MANU—O—AUTO	ULPSJ05	ULPLJ05
FORWARD—OFF—REVERSE	ULPSJ06	ULPLJ06
LOCAL—REMOTE—AUTO	ULPSJ07	ULPLJ07
LOCAL—O—REMOTE	ULPSJ08	ULPLJ08
MARCHE—NORMAL—ARRET	ULPSJ09	ULPLJ09

Controls

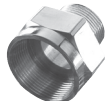CONTROL STATIONS AND SWITCHES - INCREASED SAFETY

®Appleton

Unicode® 2 Series Stainless steel Control Stations and Switches
Increased Safety
316L Stainless Steel

Zone 1 and 2 – 21 and 22
Gas (G) and Dust (D)

Description	Catalog Number
Additional Contacts	
Each actuator is capable of activating 3 contacts. *Exception: Illuminated push button and all actuators with key: 2 contacts maximum*	
1NO contact	UCB5R
1NC contact	UCB9R
Yellow Guard	
Mushroom head protection for emergency stop	098657
Padlockable Guard	
Stainless steel and plastic cover, capacity: 3 padlocks diameter 6 mm maximum (not supplied)	
For push button and rotary actuator	UPLD1S
For mushroom head actuator	UPLD2S
Cable Gland Exe	
For unarmored cable Exe - IP66 - in polyamide entry thread seal	
M20 (capacity 6.5-14.5 mm)	095605
For armored cable Exe/Exd - IP66 - in nickel plated brass (without entry thread seal)	
Braid and Tape type:	
M20 (inner: 6.4-14.0/outer: 12.5-20.9 mm)	20E1FX5
Single Wired Armor (SWA):	
M20 (inner: 6.4-14.0/outer: 12.5-20.9 mm)	20E1FW5
Adaptors	
Exd/Exe - IP66 in nickel plated brass (without entry thread seal)	
Male M20 - Female 1/2" NPT	737DM2T15
Male M20 - Female 3/4" NPT	737DM2T25
Entry Thread Seal	
M20 (in white nylon)	20ETS2
Combination Drain and Breather	
Exe - IP66 - supplied with entry thread seal and locknut	
M20 male thread in Polyamide	DBE20P
M20 male thread in Brass	DBE20B
M20 male thread in Stainless Steel	DBE20S
Feed-Thru Earth Stud Terminal	
Exe - IP66 – supplied with weatherproof seal and green/yellow earth conductor — 300 mm length	
M20 with M5 earth and 2.5 mm² conductor	PREESTM20

Shaded catalog numbers are normally stocked items. All other items are made to order.

Dimensions (near padlockable guard image): 49.5 mm (1.95") · 67.6 mm (2.66") · 26 mm (1.02") UPLD1S · 33 mm (1.30") UPLD2S

Unicode® 2 Series Stainless steel Control Stations and Switches
Increased Safety
316L Stainless Steel

Zone 1 and 2 – 21 and 22
Gas (G) and Dust (D)

Dimensions in Millimeters

Size 1 Box	**Size 2 Box**	**Size 3 Box**

Size 1 Box dimensions: 89 mm (3.50"), 117 mm (4.61"), 97 mm (93.82"), (2) Ø 8 mm (0.31"), 160 mm (6.30"), 140 mm (5.51"), 88 mm (3.46"), 127 mm (5.00"), 127 mm (5.00")

Size 2 Box dimensions: 89 mm (3.50"), 177 mm (6.97"), 97 mm (3.82"), (2) Ø 8 mm (0.31"), 220 mm (8.66"), 200 mm (7.87"), 48 mm (5.83"), 187 mm (7.36"), 127 mm (5.00")

Size 3 Box dimensions: 89 mm (3.50"), 104 mm (4.09"), (2) Ø 8 mm (0.31"), 220 mm (8.66"), 200 mm (7.87"), 48 mm (5.83"), 187 mm (7.36"), 187 mm (7.36")

⚙ Appleton®

Controls

CONTROL STATIONS AND SWITCHES - INCREASED SAFETY