Unicode 2 Series: Polyamide Control Stations



U41W2 D9



U42W2 A5A9



U43W2 VA13A5A9



U43W2 PGA5A9

Compliance Data:

ATEX - IECEx:







Zone 1 & 2 – 21 & 22	ATEX	II 2 GD	IEC	CE
Ex de IIC / Ex demb IIC	T6	Ex tD A21	T75°C	IP66 – IK09

Voltage and Amperage:

Voltage	Amperage	Pilot Light Voltage
Up to 500 V	16 A	12 Vac to 254 Vac 50/60 Hz and 12 Vdc to 60 Vdc

Operating Temperature:

-20°C to +55°C

Unicode 2 Series: Polyamide Control Stations

Zone 1 & 2 - 21 & 22 II 2 GD ATEX / IECEX 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 and 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 wash down areas.

Features - Polyamide:

- Employs Ex de (factory sealed) operators including push buttons, illuminated push buttons, selector switches, control and load break switches, contact blocks, pilot lights (LED), and terminal blocks.
- 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
- 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 cable glands, union adapter entries at top and bottom locations.

- 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.

Standard Material of Fixtures:

- · Polyamide, black finish.
- · Stainless steel cover screws.
- · Polyamide cable gland and blanking plug.

Accessories:

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

Options:

- Nameplates: Lamacoid with different color combinations. Stainless steel.
- Padlocking facility at left, center, right or any position on selector switches.
- Padlocking facility for momentary and maintained push buttons.
- Special contact arrangements available upon request, see options for details.

Ordering Information:

Size 1 Polyamide Control Station:

Standard equipment: 1 white self-adhesive laminated plastic nameplate, 2 x M20 bottom clearance entries, 1 blanking plug, 1 cable gland in polyamide (Ø 6.5 to 14.5 mm), 2 locknuts.



Version	Description/ Function	Diagram	Bottom Entries	Catalog Number	Weight (kg)	Volume (dm³)
Impulse Push Button	Green insert 'I' + red insert 'O' with 1NO + 1NC momentary contacts	§ 2	2 x M20	U41W2 A3	0.48	2.5
	1x green push button "I" with 1NO momentary contact	$\begin{bmatrix} - & - & \\ - & 3 & \\ - & 4 & \\ - & - & - \end{bmatrix}$	2 x M20	U41W2 A5	0.48	2.5
	1x red push button "O" with 1NC momentary contact		2 x M20	U41W2 A9	0.48	2.5
Emergency Stop	Red mushroom head push-pull 1NC maintained contact	ZO+ - 1L	2 x M20	U41W2 D9	0.48	2.5
	Red mushroom head push-pull 1NO + 1NC maintained contacts	20 3 1	2 x M20	U41W2 D3	0.48	2.5
	Red mushroom head key release 1NC maintained contact	208 - 1 2 - 1	2 x M20	U41W2 C9	0.48	2.5
	Red mushroom head key release 1NO + 1NC maintained contacts	₹ 18 31 1L 4 2	2 x M20	U41W2 C3	0.48	2.5



Unicode 2 Series: Polyamide Control Stations

Zone 1 & 2 - 21 & 22 II 2 GD ATEX / IECEx IP66 - IK10

Ordering Information - Continued:

Size 1 Polyamide Control Station:

Standard equipment: 1 white self-adhesive laminated plastic nameplate, 2 x M20 bottom clearance entries, 1 blanking plug, 1 cable gland in polyamide (Ø 6.5 to 14.5 mm), 2 locknu



Version	Description/ Function	Diagram	Bottom Entries	Catalog Number	Weight (kg)	Volume (dm³)
Mushroom Head P	ush Button					, ,
	Black mushroom head push button 1NO + 1NC momentary contacts	3 1 	2 x M20	U41W2 B3	0.48	2.5
	Red mushroom head push button 1NC momentary contact		2 x M20	U41W2 R9	0.48	2.5
Key Push Button						
	With key removable in both positions 1NO + 1NC maintained contacts	[8 3 1 1 4 2 4 2 1	2 x M20	U41W2 E3	0.48	2.5
Pilot Light						
	1x red pilot light (1)		2 x M20	U41W2 PR	0.48	2.5
	1x green pilot light (1)	r	2 x M20	U41W2 PG	0.48	2.5
	1x blue pilot light (1)	X1 X1	2 x M20	U41W2 PB	0.48	2.5
	1x yellow pilot light (1)	i i	2 x M20	U41W2 PY	0.48	2.5
	1x white pilot light (1)		2 x M20	U41W2 PW	0.48	2.5
	(1) 12 Vac to 254 Vac 50/60 Hz - 12 Vdc to 60 Vdc					
2-Position Selector	Switch					
	2 fixed positions ' 0 - I ' 1NO + 1NC contacts		2 x M20	U41W2 H3	0.48	2.5
3-Position Selector	Switch					
	3 fixed positions 'I - 0 - II '	0 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2 x M20	U41W2 J1	0.48	2.5
	3 positions 'I - 0 - II' With spring return from I to 0 1NO + 1NC contacts "NC" "NO"		2 x M20	U41W2 N3	0.48	2.5
	3 positions 'I - 0 - II ' With spring return from II to 0 1NO + 1NC contacts		2 x M20	U41W2 M3	0.48	2.5

Unicode 2 Series: Polyamide Control Stations

Zone 1 & 2 - 21 & 22 II 2 GD ATEX / IECEX IP66 - IK10

Ordering Information - Continued:

Size 2 Polyamide Control Station:

Standard equipment: 1 white self-adhesive laminated plastic nameplate, 2 x M20 bottom clearance entries, 1 blanking plug, 1 cable gland in polyamide (Ø 6.5 to 14.5 mm), 2 locknuts



Version	Description/ Function	Diagram	Bottom Entries	Catalog Number	Weight (kg)	Volume (dm³)
win Push Buttons						
		₹ + -3				
	1x green push button 'I' with 1NO contact	4	2 x M20	U42W2 A5A9	0.62	2.5
	1x red push button 'O' with 1NC contact	i 1				
	Momentary contacts					
	1x green push button 'I' with	3 1	2 x M20	U42W2 A3A3	0.62	2.5
	1NO + 1NC contacts	§H-\-\-\-				
	1x red push button 'O' with	31.11				
	1NO + 1NC contacts					
	Momentary contacts	4 2				
ush Button + Push-P	Pull Emergency Stop					
	4., and an arrial britain (1)	- I 3	0 1400	HAOWO AFDO	0.00	0.5
	1x green push button 'l'		2 x M20	U42W2 A5D9	0.62	2.5
	with 1NO momentary contact	1 1				
	1x red mushroom head push-pull with 1NC maintained contact	30- - 7				
	with the maintained contact	<u></u>				
	1x green push button 'l']	2 x M20	U42W2 A3D3	0.62	2.5
	with 1NO + 1NC momentary contacts					
	1x red mushroom head push-pull	41 21				
	with 1NO + 1NC maintained contacts	30-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1				
		_ 4l 2l				
ilot Light + Push But	ton					
		X1				
	1x green light (1)		2 x M20	U42W2 PGA5	0.62	2.5
	1x green push button 'I' with 1NO	ε ι 3				
	Momentary contact					
		<u> </u>				
	1x green light (1)		2 x M20	U42W2 PGA3	0.62	2.5
	1x green push button 'l' with 1NO + 1NC	X21 X21				
	Momentary contacts					
		1				
	1x red light (1)	21 47 1	2 x M20	U42W2 PRA9	0.62	2.5
	1x red push button 'O' with 1NC	Σ X2				
	Momentary contact	_r 1 _L				
	1x red light (1)	i xil	2 x M20	U42W2 PRA3	0.62	2.5
	1x red push button 'O' with 1NO + 1NC	₽ X2				
	Momentary contacts	_ 3 1 _ 3 1				
	(1) 12 Vac to 254 Vac 50/60 Hz - 12 Vdc to 60 Vdc	<u></u>				
	(., .= 10 20 . 100 00, 00 1.12 12 100 10 00 100					



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

2.5

2.5

Control Stations & Switches: Control Stations – Increased Safety

Unicode 2 Series: Polyamide Control Stations

Zone 1 & 2 - 21 & 22 II 2 GD ATEX / IECEx IP66 - IK10

Ordering Information - Continued:



Version	Description/ Function	Diagram	Bottom Entries	Catalog Number	Weight (kg)	Volume (dm³)
Ammeter	1x ammeter 48 x 48 mm, 1A C.T., 3 F.L.C., with 0 - 1 - 3 scale		2 x M20	U42W2 VA13	0.56	2.5

Size 3 Polyamide Control Station:

Standard equipment: 1 white self-adhesive laminated plastic nameplate, 2 x M20 bottom clearance entries, 1 blanking plug, 1 cable gland in polyamide (\emptyset 6.5 to 14.5 mm), 2 locknuts.

Description/



Bottom

2 x M20

2 x M20

Catalog

U43W2 PGA5A9

U43W2 PRA5A9

Weight

0.78

0.78

Volume

Version	Function	Diagram	Entries	Number	(kg)	(dm³)
Twin Push Buttons +	Push-Pull Emergency Stop 1x green push button 'I' with 1NO contact 1x red push button 'O' with 1NC contact Momentary contacts	□ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □	2 x M20	U43W2 A5A9D3	0.78	2.5
	1x red mushroom head push-pull emergency button with 1NO + 1NC maintained contacts	21 31 1L 4 2				
	1x green push button 'I' with 1NO + 1NC contacts 1x red push button 'O' with 1NO + 1NC contacts Momentary contacts 1x red mushroom head push-pull emergency button with 1NO + 1NC maintained contacts	31 11 31 11 31 12 31 12 31 12 31 12 31 12 31 12	2 x M20	U43W2 A3A3D3	0.78	2.5

Pilot Light + Twin Push Buttons



1x green push button 'I' with 1NO contact 1x red push button 'O' with 1NC contact Momentary contacts

1x green light (1)

1x red light (1)
1x green push button 'I' with 1NO contact
1x red push button 'O' with 1NO contact
Momentary contacts

1x green light (1)
1x green push button 'I' with 1NO + 1NC contacts
1x red push button 'O' with 1NO + 1NC contacts
Momentary contacts

1x red light (1)
1x green push button 'I' with 1NO + 1NC contacts
1x red push button 'O' with 1NO + 1NC contacts
Momentary contacts

(1) 12 Vac to 254 Vac 50/60 Hz - 12 Vdc to 60 Vdc

ts	X1	2 x M20	U43W2 PGA3A3	0.78	2.5
3	3 1 1 4 2 1	2 x M20	U43W2 PRA3A3	0.78	2.5

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



Unicode 2 Series: Polyamide Control Stations

Zone 1 & 2 - 21 & 22 II 2 GD ATEX / IECEx IP66 - IK10

Ordering Information - Continued:

Size 3 Polyamide Control Station:

Standard equipment: 1 white self-adhesive laminated plastic nameplate, 2 x M20 bottom clearance entries, 1 blanking plug, 1 cable gland in polyamide (Ø 6.5 to 14.5 mm), 2 locknuts.



Version Description/ Function	Diagram	Bottom Entries	Catalog Number	Weight (kg)	Volume (dm³)
Ammeter + Twin Push Buttons 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	\$\begin{align*} & & & & & & & & -	2 x M20	U43W2 VA13A5A9	0.80	2.5

Ammeter + 3-Position Selector Switch



1x ammeter 48 x 48 mm, 1A C.T.,

3 F.L.C., with 0 - 1 - 3 scale

1x 3-position selector switch 'I - 0 - II'

with spring return from II to 0

1NO + 1NC contacts

2 x M20

U43W2 VA13M3

0.80

2.5

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

Special Accessories for Polyamide Enclosure:

Brass Earthing Plate for 2 x M20



Equipped with 2 earth connections

098661

Tube or Fame Fixing



FOR SIZE 1 ONLY For all tube (diameter ≥ 80 mm) Using a metal strip (not supplied) maximum width 22 mm 098656



Unicode 2 Series: Polyamide Control Stations

Zone 1 & 2 - 21 & 22 (a) II 2 GD ATEX / IECEx IP66 - IK10

Accessories:

Description		Catalog Number	
Nameplates (set of 10)	Color		Pack
Blank self-adhesive, laminated plastic 58 x 18 mm	White (black letters)	UNPW	1
,	Yellow (black letters)	UNPY	1
	Red (white letters)	UNPR	1
	Blue (white letters)	UNPB	1
	Black (white letters)	UNPN	1
	Green (white letters)	UNPG	1

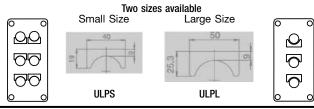
Standard Legend Plates:

Self-adhesive yellow laminated plastic (black lettering)

Text	Small	Large	Pack
Blank (set of 10)	ULPS	ULPL	1
ON	ULPSA 01	ULPLA 01	1
OFF	ULPSA 02	ULPLA 02	1
FORWARD	ULPSA 03	ULPLA 03	1
REVERSE	ULPSA 04	ULPLA 04	1
JOG	ULPSA 05	ULPLA 05	1
RUN	ULPSA 06	ULPLA 06	1
START	ULPSA 07	ULPLA 07	1
STOP	ULPSA 08	ULPLA 08	1
UP	ULPSA 09	ULPLA 09	1
DOWN	ULPSA 10	ULPLA 10	1
FAST	ULPSA 11	ULPLA 11	1
SLOW	ULPSA 12	ULPLA 12	1
RAISE	ULPSA 13	ULPLA 13	1
LOWER	ULPSA 14	ULPLA 14	1
OPEN	ULPSA 15	ULPLA 15	1
CLOSE	ULPSA 16	ULPLA 16	1
LOW	ULPSA 17	ULPLA 17	1
HIGH	ULPSA 18	ULPLA 18	1
TEST	ULPSA 19	ULPLA 19	1
RESET	ULPSA 20	ULPLA 20	1
EMERGENCY STOP	ULPSA 21	ULPLA 21	1
MARCHE	ULPSA 22	ULPLA 22	1
ARRET	ULPSA 23	ULPLA 23	1
ARRET D'URGENCE	ULPSA 24	ULPLA 24	1
HAUT	ULPSA 25	ULPLA 25	1
BAS	ULPSA 26	ULPLA 26	1

Inserts for Push button (set of 5):

Marking	Color	Catalog Number	Pack
(unmarked)	Green	UIA G	1
(unmarked)	Red	UIA R	1
(unmarked)	Yellow	UIA Y	1
(unmarked)	White	UIA W	1
(unmarked)	Blue	UIA B	1
(unmarked)	Black	UIA N	1
ÒN	Green	UIA 01	1
OFF	Red	UIA 02	1
START	Green	UIA 03	1
STOP	Red	UIA 04	1
MARCHE	Green	UIA 05	1
ARRET	Red	UIA 06	1
I	Green	UIA 07	1
0	Red	UIA 08	1



Text	Small	Large	Pack
0 - 1	ULPSH 01	ULPLH 01	1
ON - OFF	ULPSH 02	ULPLH 02	1
START - STOP	ULPSH 03	ULPLH 03	1
STOP - START	ULPSH 04	ULPLH 04	1
HAND - AUTO	ULPSH 05	ULPLH 05	1
MANU - AUTO	ULPSH 06	ULPLH 06	1
FORWARD - REVERSE	ULPSH 07	ULPLH 07	1
REMOTE - LOCAL	ULPSH 08	ULPLH 08	1
MARCHE - ARRET	ULPSH 09	ULPLH 09	1

Text	Small	Large	Pack
I - O - II	ULPSJ 01	ULPLJ 01	1
OFF - O -ON	ULPSJ 02	ULPLJ 02	1
START - NORMAL - STOP	ULPSJ 03	ULPLJ 03	1
HAND - OFF - AUTO	ULPSJ 04	ULPLJ 04	1
MANU - O - AUTO	ULPSJ 05	ULPLJ 05	1
FORWARD - OFF - REVERSE	ULPSJ 06	ULPLJ 06	1
LOCAL - REMOTE - AUTO	ULPSJ 07	ULPLJ 07	1
LOCAL - O - REMOTE	ULPSJ 08	ULPLJ 08	1
MARCHE - NORMAL - ARRET	ULPSJ 09	ULPLJ 09	1

Inserts for Illuminated Push button (set of 5):

Marking	Color	Catalog Number	Pack
(unmarked)	Green	UIL G	1
(unmarked)	Red	UIL R	1
(unmarked)	Yellow	UIL Y	1
(unmarked)	White	UIL W	1
(unmarked)	Blue	UIL B	1
ON S	Green	UIL 01	1
OFF	Red	UIL 02	1
START	Green	UIL 03	1
STOP	Red	UIL 04	1
MARCHE	Green	UIL 05	1
ARRET	Red	UIL 06	1
I	Green	UIL 07	1
Ο	Red	UIL 08	1

For all key-operated buttons.

Description	Catalog Number	Pack
Spare key type 4 A 185	SK4A185	1



Unicode 2 Series: Polyamide Control Stations

Zone 1 & 2 - 21 & 22 Il 2 GD ATEX / IECEX IP66 - IK10

1	:	Cont	لممنيما	
Access	mes -	· Gom	mueo	•

ccessories - Continued:		
	Description	Catalog Number
To the same of the	Additional Contacts Each actuator is capable of activating 3 contacts. Exception: Illuminated push button and all actuators with key: 2 contacts maximum	
7	1NO contact 1NC contact	UCB5R UCB9R
	Yellow Guard Mushroom head protection for emergency stop	098657
199	Padlockable Guard Stainless steel and plastic cover, capacity: 3 padlocks dia. 6 mm maximum (not supplied)	
26 (UPLD):	For push button and rotary actuator	UPLD1S
195 0 616	For mushroom head actuator	UPLD2S
	Cable Gland Exe For unarmored cable Exe - IP66 - in polyamide entry thread seal	
V Company	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 Male M20 - Female 3/4" NPT	737DM2T15 737DM2T25
	Entry Thread Seal	
	M20 (in black neoprene)	20ETS
	M20 (in white nylon)	20ETS2
	Combination Drain and Breather Exe - IP66 - supplied with entry thread seal and locknut	
	M20 male thread in Polyamide M20 male thread in Brass M20 male thread in Stainless Steel	DBE20P DBE20B DBE20S
•	Feedthrough Earth Stud Terminal Exe - IP66 – supplied with weatherproof seal and green/yellow earth conductor (length 300 n	nm)
	M20 with M5 earth and 2.5 mm ² conductor	PREESTM20

Unicode 2 Series: Polyamide Control Stations

Zone 1 & 2 - 21 & 22 II 2 GD ATEX / IECEX IP66 - IK10

Compliances:

Hazardous Area	Gas	Dust
Certified Type	PCe	
Zones	1–2	21–22
Conforming to ATEX 94/9/CE	CE 0081 € II 2 G	CE 0081 🚱 II2 D
Symbol of Protection ATEX	Ex de IIC / Ex demb IIC	Ex tD A21
Symbol of Protection IEC		EX ID AZ I
T Rating	T6	N.A.
Surface Temperature	N.A.	T75°C
Ambient Temperature	-20°C to +55°C	
CE Declaration of Conformity	50221	
ATEX Certificate	LCIE 00 ATEX 6047	
IEC Certificate	LCIE Ex 00.017	
Other Certifications	GOST	
Index of Protection (solid and liquid)	IP66	
Impact Resistance (shock)	IK09	

Standards:

Ex Standards	EN / IEC 60079-0; 60079-1; 60079-7; 60079-18; 61241-0; 61241-1
Product Standards	EN / IEC 60947-1; 60947-5
EMC Standards	-
Other Standards	EN / IEC 60529 (IP); 62262 (IK)

Dimensions (mm):

