

ALPHA



ALPHA PENDANT CONTROL STATION



— The Alpha Pendant Control Station is a control device for all industrial machinery. It operates as an auxiliary controller of electrical motors through a power interface, such as a contactor or PLC. Designed for heavy duty, Alpha is aimed specifically for the industrial market. It is available with 2 to 13 buttons arranged on a double row to allow for pairing of opposite functions and reducing overall dimensions. Alpha has an innovative design, where all graphic elements are linked to specific technical functions. Size and shape, resulting from a thorough analysis of the ergonomic features of the product, combined with the research of a graphic style suitable for a modern industrial environment, make Alpha easy to operate. Alpha has been designed to facilitate wiring and maintenance, thus reducing time for the first installation and saving on costs.

— Materials and components are wear resistant and protect the equipment against water and dust. Alpha can be customised with labels and colours according to the customer's requirements. The pendant station has an angle of inclination which allows the best view of all control elements, allowing the operator to work in a natural and non-tiring position. It is ideal for all environmental and working conditions due to the extremely reduced overall dimensions and the antislip lines on the enclosure.

— The space available for the conductors is dimensioned for a 48 x 1.5 mm² or 30 x 2.5 mm² cable. All switches have terminals facing the cable clamp of the pendant station and screws on the opposite side to facilitate wiring. All electric connections use screw-type terminals. The emergency stop mushroom pushbutton complies with the EN 418 standard and it is equipped with positive opening NC switches.

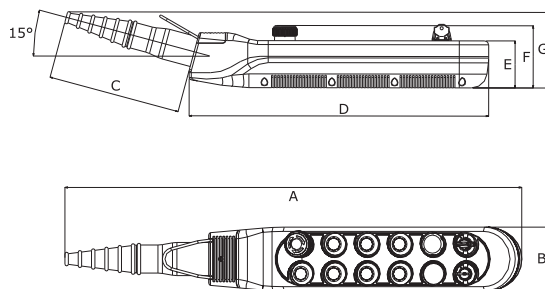
TECHNICAL SPECIFICATIONS

Conformity to Community Directives	73/23/CEE 93/68/CEE
Conformity to Standards	EN 60204-1 EN 60947-1 EN60947-5-1 EN 60529 EN 418 EN 50013 IEC 536
Ambient temperature	Storage -40°C/+70°C Operational -25°C/+70°C
Protection degree	IP 65
Insulation category	Class II
Cable entry	Rubber cable sleeve (Ø 14÷26 mm)
Operating positions	Any position
Homologations	CE, cCSAus

TECHNICAL SPECIFICATIONS OF THE SWITCHES

Utilisation category	AC 15
Rated operational current	3 A
Rated operational voltage	250 V
Rated thermal current	10 A
Rated insulation voltage	500 V~
Mechanical life	0.5x10 ⁶ operations
Terminal referencing	According to EN 50013
Connections	Screw-type terminals
Homologations	CE - UL - (c)UL

OVERALL DIMENSIONS



No. of buttons	Weight (kg)	Overall dimensions (mm)						
		A	B	C	D	E	F	G
4	0,470	382	75	169	220	60	78	97
8	0,720	460	75	169	302	60	78	97
12	0,890	537	75	169	382	60	78	97

FEATURES OF THE SWITCHES

The single switches PRSL1000PI and PRSL1001PI have 1 NO or 1 NC contact with 2 connecting terminals.

The double switch PRSL1002PI (1 speed) has:

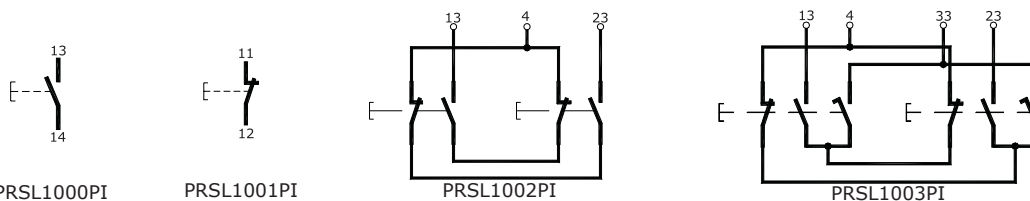
1 NO contact with 1 connecting terminal for each opposite function - 1 single terminal for both functions - electrical interlock.

The double switch PRSL1003PI (2 speeds) has:

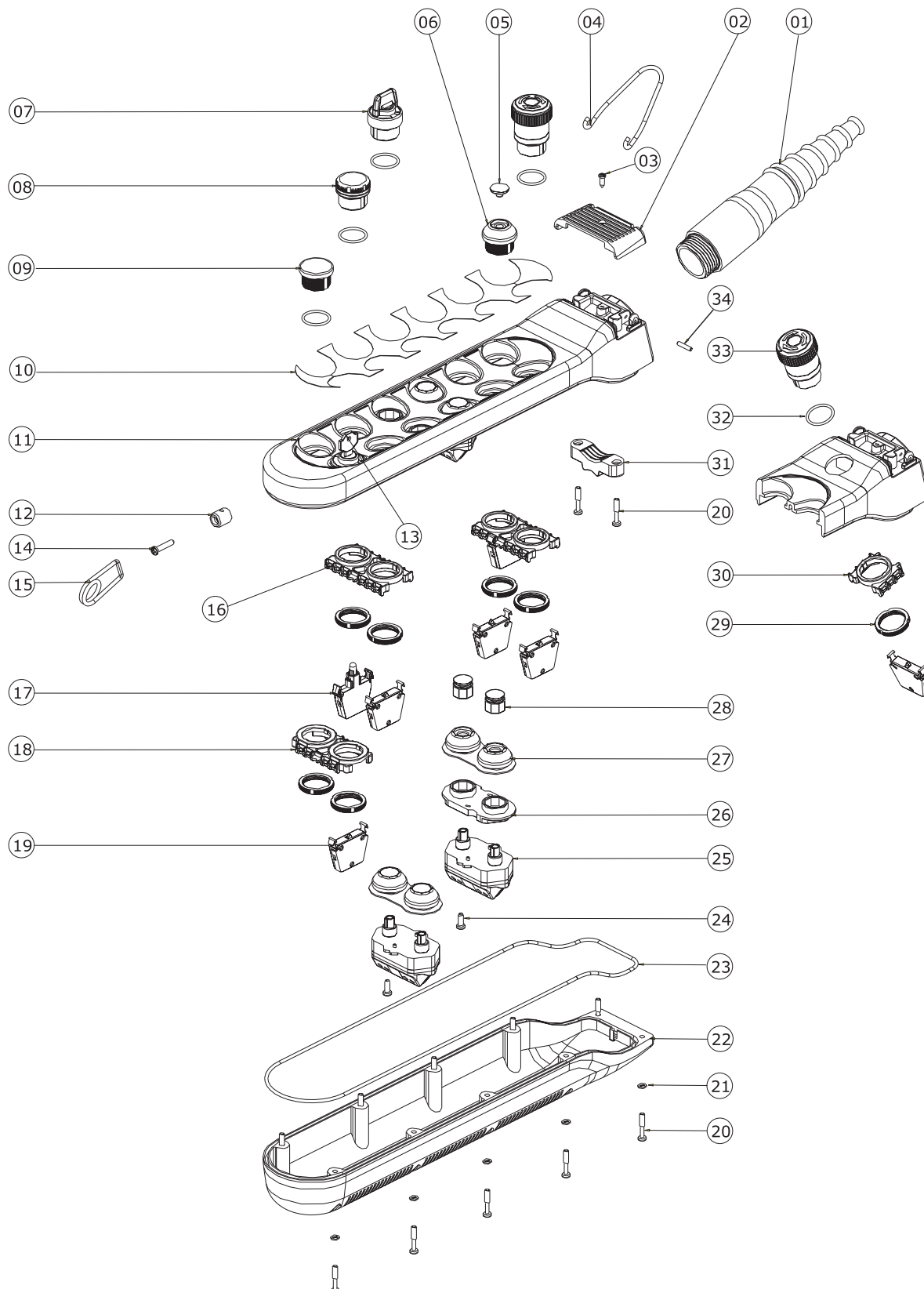
1 NO contact with 1 connecting terminal for the first speed for each opposite function - 1 NO contact with 1 connecting terminal for the second speed for both functions - 1 single terminal for both functions - electrical interlock.

All NC contacts are of the positive opening operation type.

The switches have the following reference for internal wiring



DETAILED DRAWING



ALPHA PENDANT CONTROL STATION



COMPONENTS

REFERENCE	CODE	DESCRIPTION
01	PRSL0145PE	Cable sleeve
02	PRSL5603PI	Small cover
03	PRVI0036PE	Screw 3.5x10
04	PRGA0020PE	Upper hook
05	PRSL9551PI	Button for single pushbutton
06 (+29)	PRSL1010PI	Single pushbutton (without button)
07 (+32+29)	PRSL1015PI	Spring return selector switch (on-off)
	PRSL1016PI	Selector switch (on-off)
	PRSL1026PI	Spring return 3 position selector switch
	PRSL1027PI	3 position selector switch
08 (+32+29)	PRSL1012PI	Red pilot light
	PRSL1013PI	Yellow pilot light
	PRSL1014PI	Green pilot light
09 (+32+29)	PRSL1023PI	Blanking plug
10	ET38xxxxxx	Label
11 (+34)	PRSL5607PI	Cover 2/4
	PRSL5611PI	Cover 3/5
	PRSL5608PI	Cover 6/8
	PRSL5612PI	Cover /9
	PRSL5609PI	Cover 10/12
	PRSL5613PI	Cover 11/13
12	PRT06627PE	Support for hook
13 (+32+29)	PRSL1017PI	Key selector switch (on-off)
	PRSL1024PI	Spring return key selector switch
14	PRVI0126PE	Screw 4x20
15 (+12+14)	PRGA0051PE	Lower hook
16	PRSL8736PI	Holding plate for 3+3 switches
17	PRSL1004PI	Lamp holder
18	PRSL8735PI	Holding plate for 2+2 switches
19	PRSL1000PI	1 NO switch
	PRSL1001PI	1 NC switch
20	PRVI0120PE	Screw 3.9x22
21	PRRN8000PE	Fiber washer
22 (+20+21+23)	PRSL5066PI	Housing 2/3/4/5
	PRSL5067PI	Housing 6/7/8/9
	PRSL5068PI	Housing 10/11/12/13
23	PRGU0045PE	Gasket
24	PRVI0106PE	Screw 4x10
25	PRSL1002PI	1 speed double switch
	PRSL1003PI	2 speed double switch
26	PRSL8737PI	Holding plate for rubber
27	PRGO0020PE	Rubber for double pushbutton (without buttons)
28	PRSL9552PI	Button for double pushbutton
29	PRSL9184PI	Ring
30	PRSL8739PI	Holding plate for 3 switches
31 (+20)	PRSL1020PI	Cable clamp
32	PRGU0056PE	O-Ring 2075
33 (+32+29)	PRSL1009PI	Emergency stop mushroom pushbutton
34	PRVV1502PE	Pin

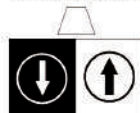
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STANDARD CONTROL STATIONS

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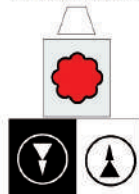
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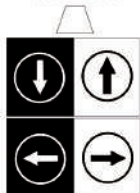
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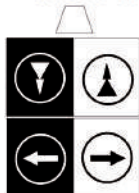
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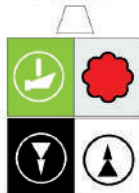
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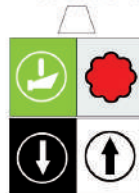
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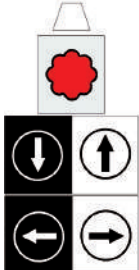
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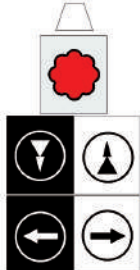
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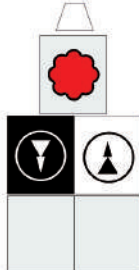
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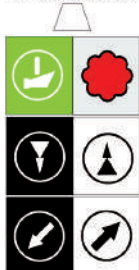
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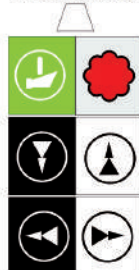
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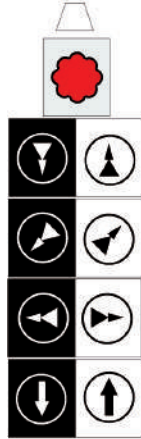
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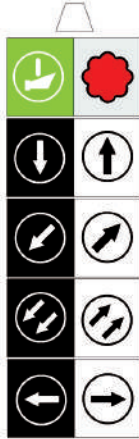
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STANDARD CONTROL STATION

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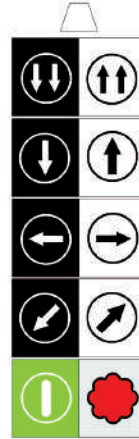
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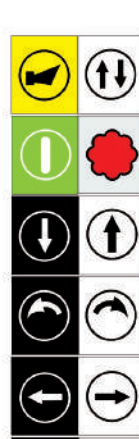
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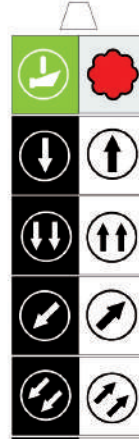
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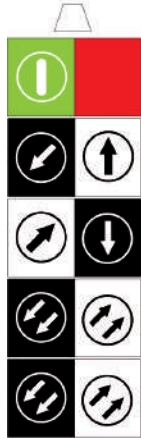
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Legend



PRSL1009PI Emergency stop mushroom pushbutton

PRSL1023PI Blanking plug

PRSL1012PI Red pilot light

PRSL1014PI Green pilot light

PRSL1016PI Selector switch (on-off)

△ Cable sleeve assembled on the top

▽ Cable sleeve assembled on the bottom

Letterings available on request



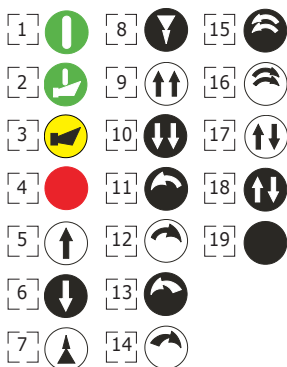
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REQUEST FORM FOR NON STANDARD CONTROL STATIONS

SYMBOLS AND CONTROL ELEMENTS



20	PRSL1009PI	Mushroom pushbutton
21	PRSL1012PI	Red pilot light
22	PRSL1013PI	Yellow pilot light
23	PRSL1014PI	Green pilot light
24	PRSL1015PI	Spring return selector switch on-off
25	PRSL1016PI	Selector switch on-off
26	PRSL1017PI	Key selector switch on-off
27	PRSL1023PI	Blanking plug
28	PRSL1024PI	Spring return key selector switch
29	PRSL1026PI	Spring return 3 pos. selector switch
30	PRSL1027PI	3 position selector switch

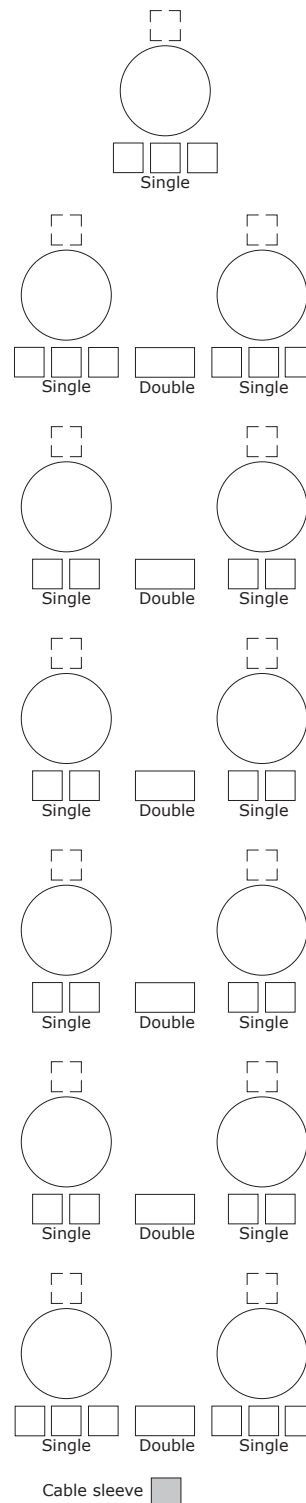
SINGLE SWITCHES

1	PRSL1000PI	1 NO
2	PRSL1001PI	1 NC
3	PRSL1004PI	Lamp holder

DOUBLE SWITCHES

1	PRSL1002PI	1 speed
2	PRSL1003PI	2 speeds

Hook ☐
Cable sleeve ☐



INSTRUCTIONS

- Fill in the **pendant station** scheme for the number of control elements required.
- Write the number corresponding to the **control element** required (broken line box). When buttons are required, write the number corresponding to the **symbol** required and mark the direction of the arrow into the corresponding circle. Personalised symbols and letterings can be requested under Remarks.
- Write the number corresponding to the single or double **switches** required.
- Mark the appropriate box to show where the **cable sleeve** must be assembled (top or bottom).

REMARKS

ALPHA PENDANT CONTROL STATION



USE AND MAINTENANCE INSTRUCTIONS

Alpha Pendant Control Station is an electromechanical device for low voltage control circuits (EN 60947-1, EN 60947-5-1) to be used as electrical equipment on machines (EN 60204-1) in compliance with the fundamental requirements of the Low Voltage Directive 73/23/CEE and of the Machine Directive 89/392/CEE.

The pendant station is designed for industrial use and also for use under particularly severe climatic conditions (operational temperature from -25°C to +70°C, suitable for use in tropical environment).

The equipment is not suitable for use in environments with potentially explosive atmosphere, corrosive agents or a high percentage of sodium chloride (saline fog). Oils, acids or solvents may damage the equipment.

The switches (17, 19, 25) are designed for auxiliary control of contactors or electromagnetic loads (utilisation category AC-15 according to EN 60947-5-1). Do not connect more than one phase to each switch (17, 19, 25). Do not oil or grease the control elements (06, 07, 13, 28, 33) or the switches (17, 19, 25).

The installation of the pendant station shall be carried out by expert and trained personnel. Wiring shall be properly done according to the current instructions.

Prior to the installation and the maintenance of the pendant station, the main power of the machinery shall be turned off.

Steps for the proper installation of the pendant station

- remove the screws on the enclosure (22) to open the pendant station
- cut the variable section rubber cable sleeve (01) and insert the cable tight enough to guarantee protection against water and/or dust.
- fix the cable to the cable sleeve (01) using a cable tie (not supplied).
- strip the cable to a length suitable for wiring the switches (17, 19, 25)
- tape the stripped part of the cable
- fix the cable inside the pendant station using the cable clamp (31)
- connect all the switches (17, 19, 25) according to the contact scheme printed on the switches (tighten the wires into the terminals with a torque equal to 0.6 Nm; insertability of wires into the switch terminals equal to 2x1.5mm² – 1x2.5 mm²)
- close the pendant station checking the proper positioning of the rubber (23) in the enclosure (22)

Periodic maintenance steps

- check the proper tightening of the screws (20) of the enclosure (11, 22)
- check the proper tightening of the switch (17, 19, 25) terminal screws
- check the wiring conditions (in particular where wires clamp into the switches)
- check the conditions of the rubber (23) fit into the enclosure (22), of the rubber of the control elements (06, 27) and of the cable sleeve (01)
- check that the plastic enclosure (11, 22) of the pendant station is not broken

In case any component of the pendant station is modified, the validity of the markings and the guarantee on the equipment are annulled. Should any component need replacement, use original spare parts only.

TER declines all responsibility for damages caused by the improper use or installation of the equipment.

