



CHARLIE

PENDANT CONTROL STATION

Charlie pendant 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, Charlie is aimed specifically for the industrial market.

DESIGN

The look of Charlie has been devised by industrial designers who have linked all the graphic elements to specific technical functions. The project has been developed on the basis of specifications such as technicism, anthropomorphism, futurism and ergonomics to obtain a product whose connotation adds to its uniqueness. The small size of the equipment facilitates its use in all environmental and working conditions, while the shape, resulting from the research of a graphic style suitable for a modern industrial environment, makes Charlie very handy.

FEATURES

A threaded ring is used to secure the enclosure and cover, which also allows easy access to the internal components without any need for tools or screws. The switches are assembled inside the pendant station without the need for screws and they all 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 is equipped with positive opening NC switches.

MATERIALS

Materials and components are wear resistant and protect the equipment against water and dust. Charlie is available with different labels and colors.



INDUSTRIAL LIFTING



CONSTRUCTION LIFTING



INDUSTRIAL AUTOMATION



STAGE TECHNOLOGY

STANDARDS - MARKINGS - HOMOLOGATIONS

- Conformity to Community Directives: 2006/95/CE: Low Voltage Directive 2006/42/CE: Machinery Directive

- Conformity to Standards:

EN 60204-1 Safety of machinery - Electrical equipment of machines

EN 60947-1 Low-voltage switchgear and controlgear

EN 60947-5-1 Low-voltage switchgear and controlgear - Control circuit devices and switching elements - Electromechanical control circuit devices

EN 60529 Degrees of protection provided by enclosures

EN 418 Safety of machinery - Emergency stop equipment, functional aspects

- Markings and homologations: C€

GENERAL TECHNICAL SPECIFICATIONS

- Storage ambient temperature: -40°C/+70°C - Operational ambient temperature: -25°C/+70°C

- Protection degree: IP 65 - Insulation category: Class II - Cable entry: Cable clamp M20, spiral cable clamp M20

- Operating positions: any position

- Weight: ~ 320 g

- Markings and homologations: CE

TECHNICAL SPECIFICATIONS OF THE MICROSWITCHES

- 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: 0.5x106 operations

- Terminal referencing: according to EN 50013

- Connections: screw-type terminals

 Wires: 1x2.5 mm², 2x1.5 mm² (UL - (c)UL: use 60°C or 75°C copper (CU) conductor and wire 16-18 AWG)

- Tightening torque: 0.6 Nm

- Markings and homologations: (€ ເພື່ ພ

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

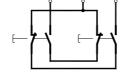
All NC contacts are of the positive opening operation type. The switches have the following reference for internal wiring.



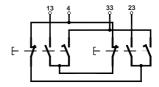




PRSL1001PI



PRSL1002PI

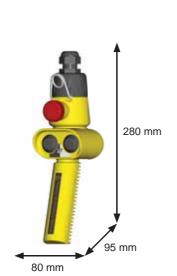


PRSL1003PI

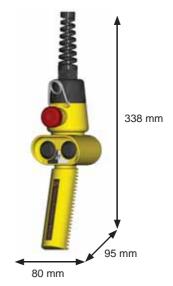
OVERALL DIMENSIONS

PRSL1000PI

With cable clamp M20



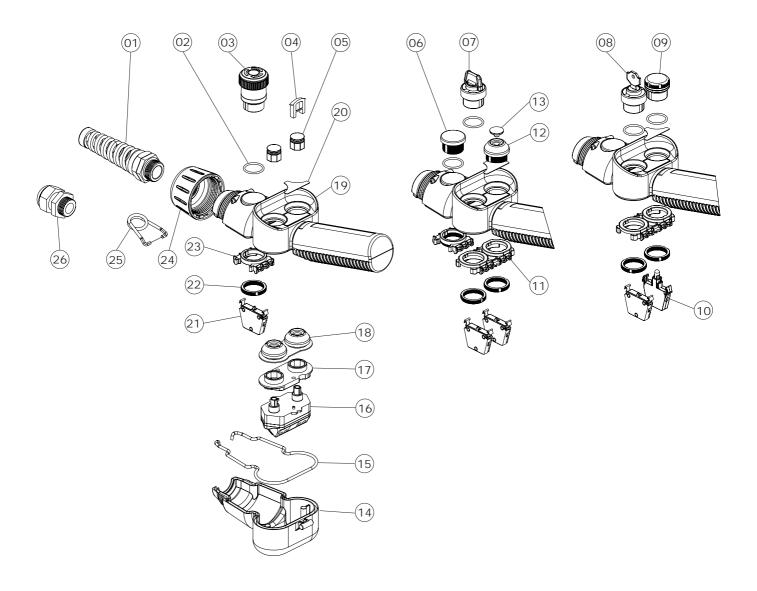
With spiral cable clamp M20



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SWITCHES

REF	DRAWING	DESCRIPTION	SCHEME	Code
10		Lamp holder -		PRSL1004PI
16	A 9	1NO+1NO+common 1 speed double switch	13 4 23	PRSL1002PI
10		1NO+1NO+1NO+common 2 speed double switch		PRSL1003PI
21		NO switch	E\(\frac{13}{14} \)	PRSL1000PI
21		NC switch	E	PRSL1001PI

ACTUATORS

REF	DRAWING	DESCRIPTION	Code
06+02+22		Blanking plug PRS	
11		Holding plate for 2+2 switches	PRSL8735PI
12+13+22	000	Single pushbutton	PRTS000001
17		Holding plate for rubber PRSL873	
18+05		Double pushbutton PRTD	
23		Holding plate for 3 switches	PRSL8739PI

PILOT LIGHTS

REF	DRAWING	DESCRIPTION	Code
	<u> </u>	Red pilot light	PRSL1012PI
09+02+22		Yellow pilot light	PRSL1013PI
		Green pilot light	PRSL1014PI

MUSHROOM PUSHBUTTONS

REF	DRAWING	DESCRIPTION	CODE
03+02+22		Emergency stop mushroom pushbutton	PRSL1009PI

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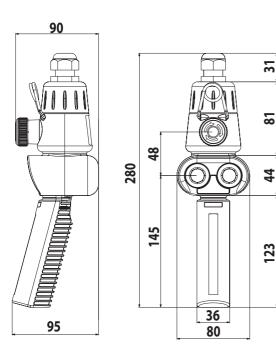
SELECTOR SWITCHES

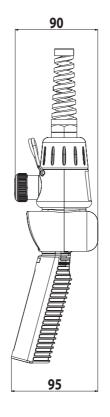
REF	DRAWING	DRAWING DESCRIPTION	
		Spring return selector switch (on-off)	PRSL1015PI
07 - 00 - 00		Selector switch (on-off)	PRSL1016PI
07+02+22		Spring return 3 position selector switch	PRSL1026PI
		3 position selector switch	PRSL1027PI
	_	Key selector switch (on-off)	PRSL1017PI
08+02+22		Spring return key selector switch	PRSL1024PI

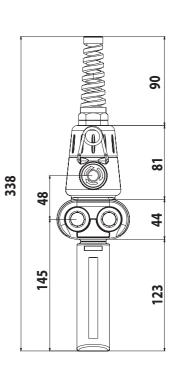
ACCESSORIES

REF	DRAWING	DESCRIPTION	Code
01		Spiral cable clamp M20	PRPS0025PE
26		Cable clamp M20	PRPS0064PE
14+15		Enclosure	PRSL5518PI
19		Cover	PRSL5008PI
	1	Label	ET39030001
		Label	ET39030021
		Label	ET39030014
20		Label	ET39030069
		Label	ET39030015
	GREEN RED	Label	ET39030007
24	0	Closing ring for cable clamp and spiral cable clamp	PRSL5524PI
25		Hook	PRGA0015PE

WITH CABLE CLAMP M20







STANDARD PENDANT CONTROL STATION

Standard pendant stations are equipped with cable clamp M20.

	GRIP		Mushroom +1 nc switch	1 SPEED DOUBLE SWITCH	2 SPEED DOUBLE SWITCH	_
SYMBOLS	STANDARD	Hollow	E	13 4 23	F 7 4 5 F 7 4 7	CODE
_	х			х		PF39020001
	х		х	х		PF39030001
1 t		Х		х		PF39020070
		Х	х	х		PF39030170
_	x				Х	PF39020002
	X		Х		X	PF39030002
1		Х	·	·	X	PF39020071
		Х	Х		Х	PF39030171

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Symbols and control elements GREEN 1 3 5 (1 Simple 13 7 14 PRSL1009PI Mushroom pushbutton Double Simple Simple PRSL1012PI Red pilot light PRSL1013PI Yellow pilot light Instructions PRSL1014PI Green pilot light Write the number corresponding to the control element required (broken line box). When buttons are required, write PRSL1015PI Spring return selector sw. (on-off) the number corresponding to the symbol required and mark the direction of the arrow into the corresponding circle. PRSL1016PI Selector switch (on-off) Personalised symbols and letterings can be requested under Remarks. 20 PRSL1017PI Key selector switch (on-off) Selector switches PRSL1026PI and PRSL1027PI can be assembled only in the central position. 21 PRSL1023PI Blanking plug Write the number corresponding to the single or double switches. 22 PRSL1024PI Spring return key selector switch Mark the appropriate box to show whether the spiral cable clamp M20 or the cable clamp M20 is required.. 23 PRSL1026PI Spring return 3 posit. selector switch PRSL1027PI 3 position selector switch Remarks Single switches 1 PRSL1000PI **1 NO** ² PRSL1001PI 1 NC 3 PRSL1004PI Lamp holder **Double switches** PRSL1002PI 1 speed 1NO+1NO+com 2 PRSL1003PI 2 speeds

1NO+1NO+1NO+com

USE AND MAINTENANCE INSTRUCTIONS

Charlie 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 2006/95/CE and of the Machine Directive 2006/42/CE.

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 (10, 16, 21)* 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 (10, 16, 21). Do not oil or grease the control elements (03, 05, 07, 08, 12) or the switches (10, 16, 21).

The installation of the pendant station shall be carried out by an 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

- Unscrew and remove the front ring (24) and the cable clamp (26)
- Open the lower cover (14)
- Insert the cable into the cable clamp (26) to a length suitable for wiring the switches
- Strip the cable to a length suitable for wiring the switches (10, 16, 21)
- Tape the stripped part of the cable
- Connect all the switches (10, 16, 21) 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)
- Screw the front ring (24) to close enclosure and lower cover (14) (check the proper positioning of the coupling pin of the lower cover (14) and of the rubber (15))
- Tighten the cable clamp (26) on the cable tight enough to guarantee protection against water and/or dust.

Periodic maintenance steps

- Check the proper tightening of the front ring (24)
- Check the proper tightening of the cable clamp (26)
- Check the proper tightening of the switch (10, 16, 21) terminal screws
- Check all wiring (in particular where wires clamp into the switches)
- Check the conditions of the rubber (15) fit into the lower cover (14) and of the rubber of the control elements (12, 18)
- Check that the plastic enclosure (14, 19, 24) 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.

*Please refere to the detailed drawing in the catalogue

REMARKS



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