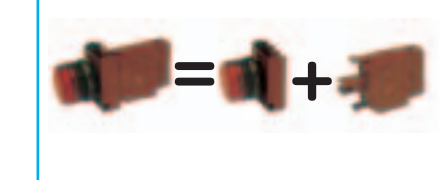
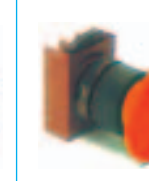
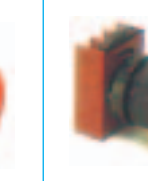
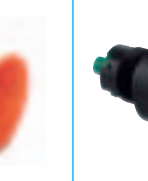
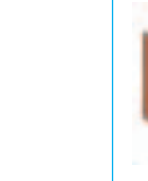
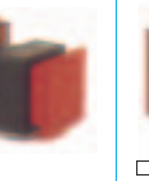
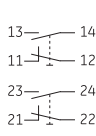


Series P9 - Panel mounting

Standard control units									Illuminated control units					Signalling units	
															
Push-button with flush cap	Push-button with raised cap	Push-button mushroom head	Push-button emergency push-twist to release mushroom head	Push-button emergency with positive break push-twist to release mushroom head	Selector switch with knob	Selector switch with lever	Selector switch with key (code 3095) key removal in all positions	Joystick ① ② ③	Illuminated push-button with flush cap	Illuminated push-button with raised cap	Illuminated push-button with mushroom head	Illuminated push-button push-pull to release with mushroom head	Illuminated selector switch	Pilot light diffused lens	Pilot light unibloc full voltage ≅ BA9S max. 2W not included
Example: Green push-button in metal, round with flush cap + 2 contacts NO = P9 MPNVG + 2x P9 B10VN															
Round satin chrome P9M															
	●N.. 184000 ●R.. 184001 ●V.. 184002 ●G.. 184003 ●L.. 184006	●N.. 184010 ●R.. 184011 ●V.. 184012 ●G.. 184013 ●L.. 184016	●N.. 184030 ●R.. 184031 ●V.. 184032 ●G.. 184033	●R.. 184070	●N.. 184110 ●R.. 184111 ●V.. 184112 ●G.. 184113 ●L.. 184116	●N.. 184370 ●R.. 184371 ●V.. 184372 ●G.. 184373	●N.. 184402 ●R.. 184403 ●V.. 184404 ●G.. 184405 ●L.. 184406	fixed pos. ● P9MMN2F 184700 transient pos. ● P9MMN2T 184701 ① ② ③ fixed pos. ● P9MMN4F 184720 transient pos. ● P9MMN4T 184721	● P9MPL+GD Ref. nr. 184491 ●R.. 184492 ●V.. 184493 ●G.. 184497	● P9MPL+SD Ref. nr. 184501 ●R.. 184502 ●V.. 184503 ●G.. 184507	● P9MEM4+L Ref. nr. 184551 ●R.. 184552 ●V.. 184553 ●G.. 184556	● P9MET4RL1 184561	I-II fixed Ref. nr. 184591 P9MSLDOR* 184591 I-II fixed 184601 P9MSLZOR* 184631 I-O-II spring return 184631	● P9ML+D Ref. nr. 184791 ●R.. 184792 ●V.. 184793 ●G.. 184797	
	●N.. 184000 ●R.. 184001 ●V.. 184002 ●G.. 184003 ●L.. 184006	●N.. 184010 ●R.. 184011 ●V.. 184012 ●G.. 184013 ●L.. 184016	●N.. 184030 ●R.. 184031 ●V.. 184032 ●G.. 184033	●R.. 184070	●N.. 184110 ●R.. 184111 ●V.. 184112 ●G.. 184113 ●L.. 184116	●N.. 184370 ●R.. 184371 ●V.. 184372 ●G.. 184373	●N.. 184402 ●R.. 184403 ●V.. 184404 ●G.. 184405 ●L.. 184406	fixed pos. ● P9MMN2F 184700 transient pos. ● P9MMN2T 184701 ① ② ③ fixed pos. ● P9MMN4F 184720 transient pos. ● P9MMN4T 184721	● P9MPL+GD Ref. nr. 184491 ●R.. 184492 ●V.. 184493 ●G.. 184497	● P9MPL+SD Ref. nr. 184501 ●R.. 184502 ●V.. 184503 ●G.. 184507	● P9MEM4+L Ref. nr. 184551 ●R.. 184552 ●V.. 184553 ●G.. 184556	● P9MET4RL1 184561	I-II fixed Ref. nr. 184591 P9MSLDOR* 184591 I-II fixed 184601 P9MSLZOR* 184631 I-O-II spring return 184631	● P9ML+D Ref. nr. 184791 ●R.. 184792 ●V.. 184793 ●G.. 184797	
	●N.. 184000 ●R.. 184001 ●V.. 184002 ●G.. 184003 ●L.. 184006	●N.. 184010 ●R.. 184011 ●V.. 184012 ●G.. 184013 ●L.. 184016	●N.. 184030 ●R.. 184031 ●V.. 184032 ●G.. 184033	●R.. 184070	●N.. 184110 ●R.. 184111 ●V.. 184112 ●G.. 184113 ●L.. 184116	●N.. 184370 ●R.. 184371 ●V.. 184372 ●G.. 184373	●N.. 184402 ●R.. 184403 ●V.. 184404 ●G.. 184405 ●L.. 184406	fixed pos. ● P9MMN2F 184700 transient pos. ● P9MMN2T 184701 ① ② ③ fixed pos. ● P9MMN4F 184720 transient pos. ● P9MMN4T 184721	● P9MPL+GD Ref. nr. 184491 ●R.. 184492 ●V.. 184493 ●G.. 184497	● P9MPL+SD Ref. nr. 184501 ●R.. 184502 ●V.. 184503 ●G.. 184507	● P9MEM4+L Ref. nr. 184551 ●R.. 184552 ●V.. 184553 ●G.. 184556	● P9MET4RL1 184561	I-II fixed Ref. nr. 184591 P9MSLDOR* 184591 I-II fixed 184601 P9MSLZOR* 184631 I-O-II spring return 184631	● P9ML+D Ref. nr. 184791 ●R.. 184792 ●V.. 184793 ●G.. 184797	
Round plastic P9X															
	●N.. 185000 ●R.. 185001 ●V.. 185002 ●G.. 185003 ●L.. 185006	●N.. 185010 ●R.. 185011 ●V.. 185012 ●G.. 185013 ●L.. 185016	●N.. 185040 ●R.. 185041	●R.. 185070	●N.. 185110 ●R.. 185111 ●V.. 185112 ●G.. 185113 ●L.. 185116	●N.. 185370 ●R.. 185371 ●V.. 185372 ●G.. 185373	●N.. 185402 ●R.. 185403 ●V.. 185404 ●G.. 185405 ●L.. 185406	fixed pos. ● P9XMMN2F 185700 transient pos. ● P9XMMN2T 185701 ① ② ③ fixed pos. ● P9XMMN4F 185720 transient pos. ● P9XMMN4T 185721	● P9XPL+GD Ref. nr. 185491 ●R.. 185492 ●V.. 185493 ●G.. 185497	● P9XPL+SD Ref. nr. 185501 ●R.. 185502 ●V.. 185503 ●G.. 185507	● P9XEM4+L Ref. nr. 185551 ●R.. 185552 ●V.. 185553 ●G.. 185556	● P9XET4RL1 185561	I-II fixed Ref. nr. 185591 P9XSLDOR* 185591 I-O-II fixed 185601 P9XSLZOR* 185631 I-O-II spring return 185631	● P9XL+D Ref. nr. 185791 ●R.. 185792 ●V.. 185793 ●G.. 185797	● P9XU+DDO Ref. nr. 185821 ●R.. 185822 ●V.. 185823 ●G.. 185827
	●N.. 185000 ●R.. 185001 ●V.. 185002 ●G.. 185003 ●L.. 185006	●N.. 185010 ●R.. 185011 ●V.. 185012 ●G.. 185013 ●L.. 185016	●N.. 185040 ●R.. 185041	●R.. 185070	●N.. 185110 ●R.. 185111 ●V.. 185112 ●G.. 185113 ●L.. 185116	●N.. 185370 ●R.. 185371 ●V.. 185372 ●G.. 185373	●N.. 185402 ●R.. 185403 ●V.. 185404 ●G.. 185405 ●L.. 185406	fixed pos. ● P9XMMN2F 185700 transient pos. ● P9XMMN2T 185701 ① ② ③ fixed pos. ● P9XMMN4F 185720 transient pos. ● P9XMMN4T 185721	● P9XPL+GD Ref. nr. 185491 ●R.. 185492 ●V.. 185493 ●G.. 185497	● P9XPL+SD Ref. nr. 185501 ●R.. 185502 ●V.. 185503 ●G.. 185507	● P9XEM4+L Ref. nr. 185551 ●R.. 185552 ●V.. 185553 ●G.. 185556	● P9XET4RL1 185561	I-II fixed Ref. nr. 185591 P9XSLDOR* 185591 I-O-II fixed 185601 P9XSLZOR* 185631 I-O-II spring return 185631	● P9XL+D Ref. nr. 185791 ●R.. 185792 ●V.. 185793 ●G.. 185797	● P9XU+DDO Ref. nr. 185821 ●R.. 185822 ●V.. 185823 ●G.. 185827
	●N.. 185000 ●R.. 185001 ●V.. 185002 ●G.. 185003 ●L.. 185006	●N.. 185010 ●R.. 185011 ●V.. 185012 ●G.. 185013 ●L.. 185016	●N.. 185040 ●R.. 185041	●R.. 185070	●N.. 185110 ●R.. 185111 ●V.. 185112 ●G.. 185113 ●L.. 185116	●N.. 185370 ●R.. 185371 ●V.. 185372 ●G.. 185373	●N.. 185402 ●R.. 185403 ●V.. 185404 ●G.. 185405 ●L.. 185406	fixed pos. ● P9XMMN2F 185700 transient pos. ● P9XMMN2T 185701 ① ② ③ fixed pos. ● P9XMMN4F 185720 transient pos. ● P9XMMN4T 185721	● P9XPL+GD Ref. nr. 185491 ●R.. 185492 ●V.. 185493 ●G.. 185497	● P9XPL+SD Ref. nr. 185501 ●R.. 185502 ●V.. 185503 ●G.. 185507	● P9XEM4+L Ref. nr. 185551 ●R.. 185552 ●V.. 185553 ●G.. 185556	● P9XET4RL1 185561	I-II fixed Ref. nr. 185591 P9XSLDOR* 185591 I-O-II fixed 185601 P9XSLZOR* 185631 I-O-II spring return 185631	● P9XL+D Ref. nr. 185791 ●R.. 185792 ●V.. 185793 ●G.. 185797	● P9XU+DDO Ref. nr. 185821 ●R.. 185822 ●V.. 185823 ●G.. 185827
Square plastic P9S															
	●N.. 186000 ●R.. 186001 ●V.. 186002 ●G.. 186003 ●L.. 186006	●N.. 186010 ●R.. 186011 ●V.. 186012 ●G.. 186013 ●L.. 186016	●R.. 186031	●R.. 186072	●N.. 186110 ●R.. 186111 ●V.. 186112 ●G.. 186113 ●L.. 186116	●N.. 186370 ●R.. 186371 ●V.. 186372 ●G.. 186373	●N.. 186402 ●R.. 186403 ●V.. 186404 ●G.. 186405 ●L.. 186406	fixed pos. ● P9SSM2F 186881 without symbols 186881 with symbols 186891 P9DPLVRG01 186891	● P9SPL+GD Ref. nr. 186491 ●R.. 186492 ●V.. 186493 ●G.. 186497	● P9SPL+SD Ref. nr. 186501 ●R.. 186502 ●V.. 186503 ●G.. 186507	● P9SEM3+L Ref. nr. 186551 ●R.. 186552 ●V.. 186553 ●G.. 186556	● P9SET4RL1 186561	I-II fixed Ref. nr. 186591 P9SSLDOR* 186591 I-O-II fixed 186601 P9SSLZOR* 186631 I-O-II spring return 186631	● P9SL+D Ref. nr. 186791 ●R.. 186792 ●V.. 186793 ●G.. 186797	
	●N.. 186000 ●R.. 186001 ●V.. 186002 ●G.. 186003 ●L.. 186006	●N.. 186010 ●R.. 186011 ●V.. 186012 ●G.. 186013 ●L.. 186016	●R.. 186031	●R.. 186072	●N.. 186110 ●R.. 186111 ●V.. 186112 ●G.. 186113 ●L.. 186116	●N.. 186370 ●R.. 186371 ●V.. 186372 ●G.. 186373	●N.. 186402 ●R.. 186403 ●V.. 186404 ●G.. 186405 ●L.. 186406	fixed pos. ● P9SSM2F 186881 without symbols 186881 with symbols 186891 P9DPLVRG01 186891	● P9SPL+GD Ref. nr. 186491 ●R.. 186492 ●V.. 186493 ●G.. 186497	● P9SPL+SD Ref. nr. 186501 ●R.. 186502 ●V.. 186503 ●G.. 186507	● P9SEM3+L Ref. nr. 186551 ●R.. 186552 ●V.. 186553 ●G.. 186556	● P9SET4RL1 186561	I-II fixed Ref. nr. 186591 P9SSLDOR* 186591 I-O-II fixed 186601 P9SSLZOR* 186631 I-O-II spring return 186631	● P9SL+D Ref. nr. 186791 ●R.. 186792 ●V.. 186793 ●G.. 186797	
	●N.. 186000 ●R.. 186001 ●V.. 186002 ●G.. 186003 ●L.. 186006	●N.. 186010 ●R.. 186011 ●V.. 186012 ●G.. 186013 ●L.. 186016	●R.. 186031	●R.. 186072	●N.. 186110 ●R.. 186111 ●V.. 186112 ●G.. 186113 ●L.. 186116	●N.. 186370 ●R.. 186371 ●V.. 186372 ●G.. 186373	●N.. 186402 ●R.. 186403 ●V.. 186404 ●G.. 186405 ●L.. 186406	fixed pos. ● P9SSM2F 186881 without symbols 186881 with symbols 186891 P9DPLVRG01 186891	● P9SPL+GD Ref. nr. 186491 ●R.. 186492 ●V.. 186493 ●G.. 186497	● P9SPL+SD Ref. nr. 186501 ●R.. 186502 ●V.. 186503 ●G.. 186507	● P9SEM3+L Ref. nr. 186551 ●R.. 186552 ●V.. 186553 ●G.. 186556	● P9SET4RL1 186561	I-II fixed Ref. nr. 186591 P9SSLDOR* 186591 I-O-II fixed 186601 P9SSLZOR* 186631 I-O-II spring return 186631	● P9SL+D Ref. nr. 186791 ●R.. 186792 ●V.. 186793 ●G.. 186797	

Series P9 - Base mounting

		Control units using same operators of standard plastic panel mounting devices				Contact blocks		Cat. nr.		Ref. nr.					
						1 NC 1 NO		P9B01BN P9B10BN		187017 187018					
Power supplies				Cat. nr.		Ref. nr.		Integrated LED				Cat. nr.		Ref. nr.	
Full voltage $\approx$		BA9S max. 380V-2W not included		P9PDNB0		187070				x1 x2 Position on flange 2 3 1 24V AC/DC 120V AC/DC 230V AC/DC Red Red Red P9 PLNB DR* P9 PLNB JR* P9 PLNB NR* 197040 197046 197052 *LED colour palette: A B G V					
															
Electrical diagrams															
Selector switches															
Positions		Function		Contacts		 contact closed		Position on flange 2 3 1							
		D		B10											
		D		B10 B01											
		B/Z		B10 B10											
		Z		B11 B11											
		Z		B10 B01											
Joysticks															
Positions				Contacts				Position on flange 2 3 1							
				B11											
				B11											
				B11											
				B11											

Series P9

Control and Signalling Units



Series P9

Main features

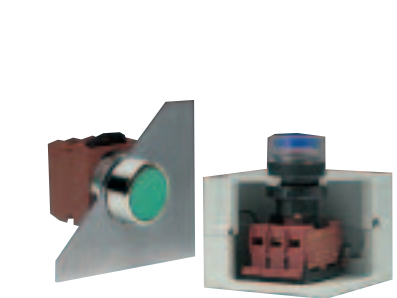


Shape, material and colours

The P9 line offers three types of operators:

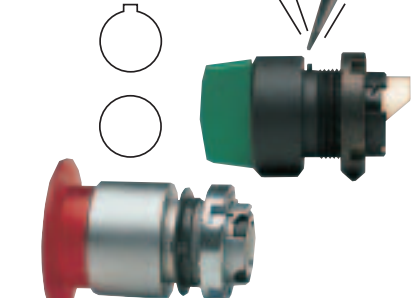
- round in satin chrome metal
- square in engineered thermoplastic
- square in engineered thermoplastic

Modern ergonomic P9 actuators are available in a wide variety of colours and styles, and are the result of superior industrial design experience. SERIES P9 satisfies any sophisticated industrial applications.



Mounting system

The P9 line offers a wide variety of operators, contact blocks and power supplies for panel mounting. Furthermore a range of contact blocks and power supplies are available for base mounting. The base mounting option is simple thanks to plastic enclosures fitted with a standard mounting adaptor, which allows a snap-on and secure fastening.



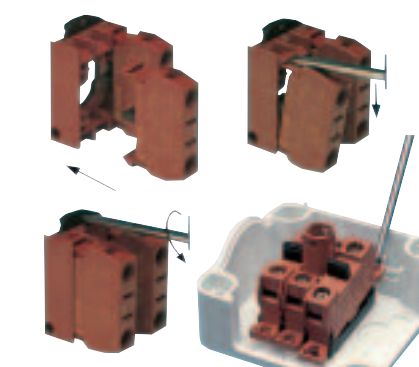
Fitting and positioning

All the P9 operators are fitted with seal to ensure IP66 degree of protection. A locating tab on the operator allows the correct positioning on panels with holes drilled according to CENELEC EN 50007 standards (with notch). The tab also ensures panel stability and prevents unwanted rotations. The tab can be removed with a screwdriver for applications in holes without notch.



Rear locking and back mounting procedure

P9 operators are back mounted to the panel by a patented locking ring. The units can be assembled using a standard screwdriver. As an option, an assembly wrench is available.



Fast mounting

All the P9 rear panel devices are snap-on. Mounting between panel and operator is accomplished by means of a patented snap-on flange which ensures a fast fitting. For base mounting, the fitting is done directly on the adaptor inside the enclosures base. Each single block can be mounted or removed individually. In panel mounting, it is also possible to install or remove the snap-on mounting flange with the contact block group. Blocks and/or flange can be disassembled by a standard screwdriver, to simplify operations.



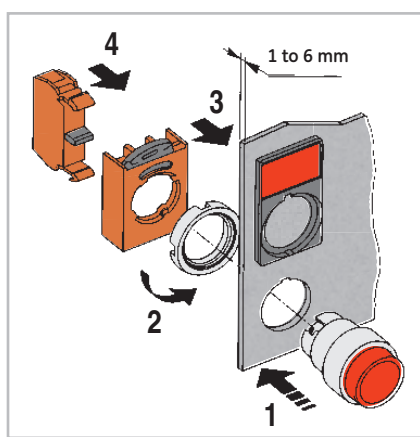
Safety and reliability

The P9 contact blocks are designed to ensure maximum reliability in every condition and to monitor control circuits at low energy levels (12V-5mA minimum), thanks to advanced solution such as:

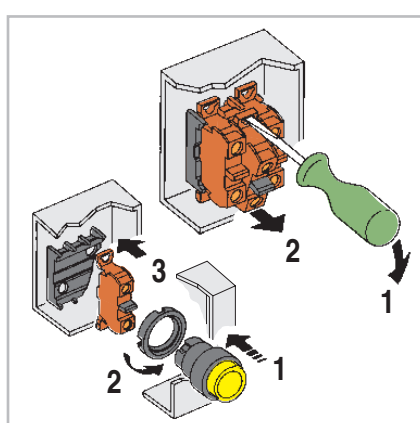
- four contact points
- high efficiency self-cleaning operation
- silver contacts, properly shaped
- high control pressure.

Technical data

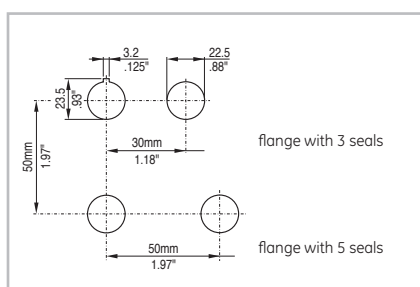
Panel mounting



Base mounting



Mounting



Fitted for panels 1 to 6 mm thick with holes drilled according to CENELEC EN 50007 standards.

Compliance with standards

IEC 947.5.1 - VDE 0660 - NF-C63140
CEI EN 60947.5.1 - UTE - BSI
NEMA - CENELEC EN 50007

Approvals

cULus B - RINA (I)
Lloyd's Register of Shipping (U.K.) - GOST
Bureau Veritas (F)
CE

Climatic protections

The standard versions are suitable for use in the following climates:

- Temperate climate
cat. 23/50 (DIN 50014)
- Wet climate
cat. 23/83 (DIN 50015)
- Hot wet climate
cat. 40/92 (DIN 50015)
- Variable wet climate
cat. FW24 (DIN 50016)

Temperature ranges

- Operation: from - 25°C up to + 70°C
- Storage: from - 40°C up to + 70°C

Degree of protection of the operators

IP66 according to CENELEC EN 60529 when they are mounted into enclosures with the same or a higher degree of protection. Suitable for using into enclosures NEMA type 1-3-3R-3S-4-4X-12-13 according to UL 508.

Degree of protection of the terminals

IP2x according to CENELEC EN 60529

Shock resistance

(according to MIL 202 B method 202 A) 1/2 sinusoid 11 ms:
No damage or disassembling at 100 G for all devices (except for the illuminated operators with transformer 38 G).

Vibration resistance

(according to IEC 68-2-6)
16 G with frequency range from 40 to 500 Hz and maximum shifting 0.75 mm. (peak-to-peak).

Rated insulation voltage

690V according to EN 60947.1

Impulse withstand voltage

4 kV according to EN 60947.1

Electric shock protection

- Class I according to IEC 536 for metal operators
- Class II (double insulation) according to IEC 536 for plastic operators.

Short-circuit protection

With fuses type gG of 16A according to IEC 269.1 and 269.3.

Electrical resistance of the contact

≤ 25 mΩ according to IEC 255, cat 3

Performances of the contacts

- Slow action
- Self-cleaning sliding
- NC "positive opening"
- Double movable contact
- Four switching points
- Double break

Identification of the terminals

According CENELEC EN 50013

Electrical performances

Rated thermal current I_{th} = 10A
Performances according IEC 947.5.1

Category AC15

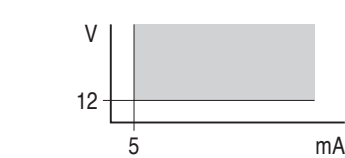
Voltage Ue (V)	24	48	60	110	220	380	500	600
Current Ie (A)	10	10	10	6	3	2	1.5	1.2

Category DC 13

Voltage Ue (V)	24	48	60	110	220	300
Current Ie (A)	2.5	1.4	1	0.55	0.27	0.2

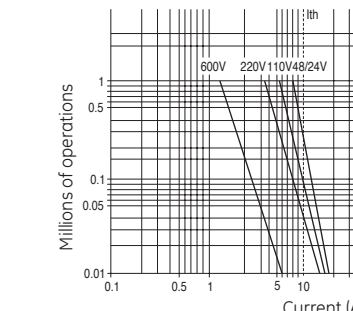
Performances according to CSA and UL AC/Heavy Duty (A600) - DC/Standard Duty (Q300)

Minimum operating range

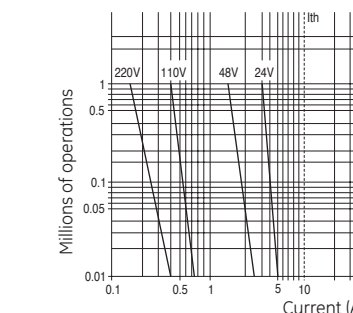


Electrical life

Alternate current 50/60 Hz cat. AC15



Direct current cat. DC 13



Common accessories

Bulbs BA9s

	Vn	Wn	Cat. nr.	Ref. nr.
Filament type	6	0.6	BA9S606	187850
	6	1.5	BA9S615	187851
	12	2.0	BA9S122	187852
	24	2.0	BA9S242	187853
	30	2.1	BA9S30	187854
	48	2.0	BA9S48	187855
	60	1.2	BA9S6012	187856
	130	2.0	BA9S130	187857

Mono led

Vn AC/DC ± 10%	Cat. nr.	Ref. nr.
6	BA9S6LR*	187871
12	BA9S12LR*	187881
24	BA9S24LR*	187891
48	BA9S48LR*	187901
110	BA9S110LR*	187911
Vn AC ± 10%		
230	BA9S230LR*	187921
* Colour palette :		

Insert holders

Supplied with neutral insert engravable on both sides Standard 30 x 50 mm	P9ARTBS P9ASTBS	188000 188010
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Round plates

For emergency push-buttons
diameter 59 mm
(yellow background)

Emergenza Emergency Stop Arrêt d'urgence Not - Aus Noodstop Para Emergencia	080XTGR01 080XTGR02 080XTGR03 080XTGR04 080XTGR05 080XTGR06	179525 179526 179510 179527 179528 179529
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Plugs

Round Square 30x30mm Rectangular 30x50mm	P9ARHPR P9ASHP3 P9ASHP5	187491 187792 187793
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Tools

Locking ring wrench Bulb extractor Extractor for caps and lenses	P9ACWAF 080ESL P9ASEBG	187845 170212 187795
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Push-button stations

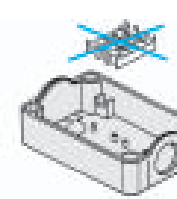
Empty versions in thermoplastic IP66

Light grey coloured
Panel or base mounted



Cover with holes
Knockouts conduit entry

For panel mounting



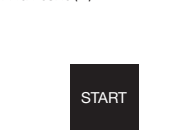
Accessories

Write-on plates

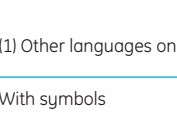
Illuminated, self adhesive,
20 x 20 mm
Black background engravable
for white texts

Without text

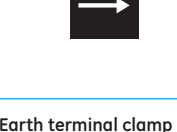
With text (1)



(1) Other languages on request



With symbols



Earth terminal clamp

P9AEMT

Empty versions in aluminium alloy

Grey coloured RAL 7012
Panel mounting

Cover with holes

No of holes	Cat. nr.	Ref. nr.
1 (yellow cover)	P9EPEG1	189000
1	P9EPE01	189001
2	P9EPE02	189002
3	P9EPE03	189003
4	P9EPE04	189004
6	P9EPE06	189005

Equipped versions in thermoplastic IP66, one unit



Operators

Colour

Diagram

Namepl.

Cat. nr.

Ref. nr.

Flush push-button

green

I

P9EPA01Y02

189010

Flush push-button

white

I

P9EPA01Y03

189011

Emergency

push-button with

latch according to

EN418

(on yellow cover)

red

0

P9EPAG1Y01N

189007

Flush push-buttons

black

↑

P9EPA03Y05

189022

red

0

↓

black

0

↑

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