



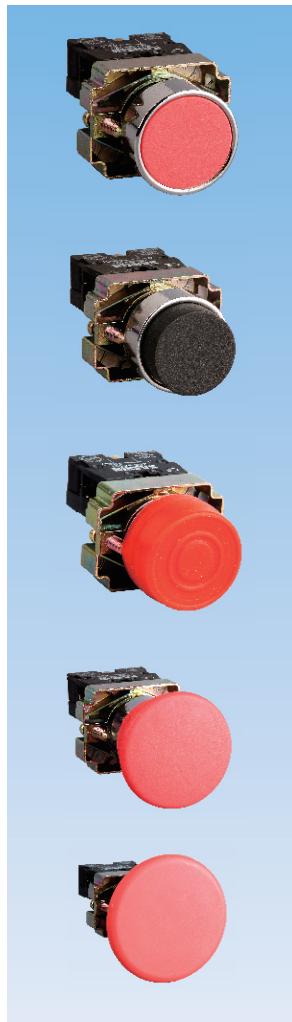
PUSHBUTTONS

6

3SA8	Pushbutton Switch	1~4
3SA28	Pushbutton Switch	5
3SA5	Pushbutton Switch	6~10
3SA18	Pushbutton Switch	11~13
AD22C	Signal lamps	14
AD22 LED	Signal lamps	14~18
3SA16	Pushbutton & Indicators	19~24
3SA17	Pushbutton Switch	25
3SA10	Control Stations	26~29
	Pushbutton Switch & Indicators	30~32
3SP	Pushbutton	33~34

Pushbutton Switch

◆ Pushbutton spring return



Description	Color	Contact type	Type	Overall dimensions
flush pushbuttons	●	N/O	3SA8-BA11	
	●	N/O	3SA8-BA21	
	●	N/O	3SA8-BA31	
	●	N/O	3SA8-BA51	
	●	N/O	3SA8-BA61	
	●	N/C	3SA8-BA22	
	●	N/C	3SA8-BA42	
	●	N/C	3SA8-BA42	
projecting pushbuttons	●	N/O	3SA8-BL21	
	●	N/O	3SA8-BL31	
	●	N/O	3SA8-BL51	
	●	N/O	3SA8-BL61	
	●	N/C	3SA8-BL22	
	●	N/C	3SA8-BL42	
	●	N/C	3SA8-BL42	
booted pushbuttons	●	N/O	3SA8-BP21	
	●	N/O	3SA8-BP31	
	●	N/O	3SA8-BP51	
	●	N/O	3SA8-BP61	
	●	N/C	3SA8-BP42	
	●	N/C	3SA8-BP42	
mushroom head pushbuttons 40mm	●	N/O	3SA8-BC21	
	●	N/O	3SA8-BC31	
	●	N/O	3SA8-BC51	
	●	N/O	3SA8-BC61	
	●	N/C	3SA8-BC42	
	●	N/C	3SA8-BC42	
mushroom head pushbuttons 60mm	●	N/O	3SA8-BR21	
	●	N/C	3SA8-BR42	
	●	N/C	3SA8-BR42	

◆ Spring return with function symbols on button



Description	Color	Contact type	Type	Overall dimensions
flush pushbuttons	●	N/O	3SA8-BA3311	
	↑	N/O	3SA8-BA3341	
	●	N/O	3SA8-BA3351	
	●	N/C	3SA8-BA4322	
	STOP	N/C	3SA8-BA4342	
projecting pushbuttons	●	N/C	3SA8-BL4322	
	●	N/C	3SA8-BL4342	

Pushbutton Switch

◆ Mushroom head Emergency stop pushbutton

	Description	Contact type	Type	Overall dimensions
	push-pull red	Φ 40 N/C 3SA8-BT42 Φ 60 N/C 3SA8-BX42		
	turn to release-red	Φ 30 N/C 3SA8-BS442 Φ 40 N/C 3SA8-BS542 Φ 60 N/C 3SA8-BS642		
	(Ronis 455)	Φ 30 N/C 3SA8-BS742		
	Key release (keyn 455) red	Φ 40 N/C 3SA8-BS142 Φ 60 N/C 3SA8-BS242		

◆ Selector Switches

	Description	Position	Contact type	Type	Overall dimensions
Description: Locked	spring reset	keyout			
			Y Y		
	2positions	↙ ↘	N/O N/O N/C	3SA8-BD21 3SA8-BD25 3SA8-BD41	
		↙ ↘	N/O N/O N/C	3SA8-BD45	
	3 positions	↙ ↗ ↘	2N/O 2N/O 2N/O	3SA8-BD33 3SA8-BD53 3SA8-BD73	
		↙ ↗ ↘	2N/O 2N/O 2N/O	3SA8-BD83	

Long handle

	2positions	↙ ↘	N/O N/O N/C	3SA8-BJ21 3SA8-BJ25 3SA8-BJ41	
		↙ ↘	N/O N/O N/C	3SA8-BJ45	
	3 positions	↙ ↗ ↘	2N/O 2N/O 2N/O	3SA8-BJ33 3SA8-BJ53 3SA8-BJ73	
		↙ ↗ ↘	2N/O 2N/O 2N/O	3SA8-BJ83	

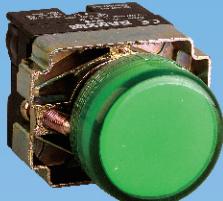
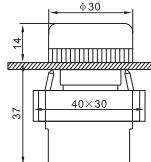
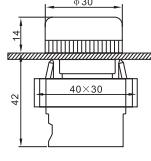
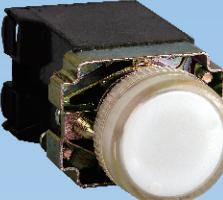
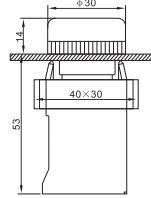
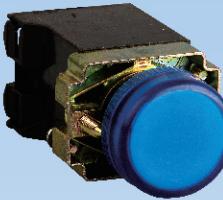
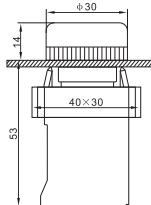
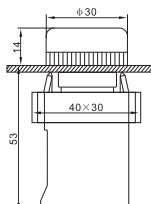
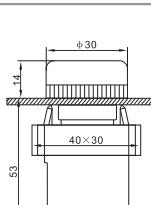
◆ Ronis n 455

Key switches key n ° 455

	2positions	↙ ↘	N/o N/o N/c	3SA8-BG21 3SA8-BG25 3SA8-BG41	
		↙ ↘	N/o N/o N/c	3SA8-BG45 3SA8-BG61 3SA8-BG65	
	3 positions	↙ ↗ ↘	2N/o 2N/o 2N/o	3SA8-BG33 3SA8-BG53 3SA8-BG03	
		↙ ↗ ↘	2N/o 2N/o 2N/o	3SA8-BG73	

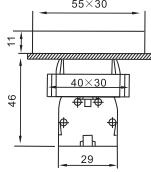
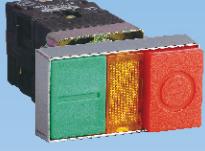
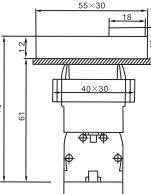
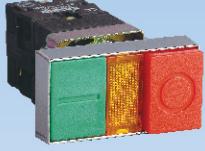
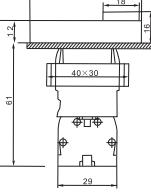
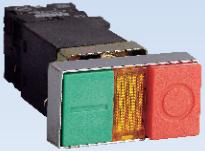
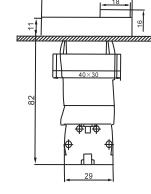
Pushbutton Switch

◆ Pilot light with BA 9s base

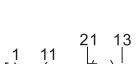
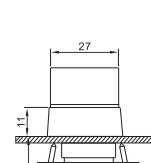
Description	Supply Voltage	Circuit	Color	Type	Overall dimensions
	Direct bulb including BA9a base fitting	≤380V 220/240V 50/60Hz	X1 X2	3SA8-BV61 3SA8-BV63 3SA8-BV64 3SA8-BV65 3SA8-BV66	
	Via integral resistor BA 9s,LED24V bulb supplied	220/240V 50/60Hz	X1 X2	3SA8-BV71 3SA8-BV73 3SA8-BV74 3SA8-BV75 3SA8-BV76	
	Via integral transformer 1.2VA BA 9s,6V bulb supplied	110V/50Hz 110-120V/60Hz	X1 X2	3SA8-BV31 3SA8-BV33 3SA8-BV34 3SA8-BV35 3SA8-BV36	
	Via integral transformer 1.2VA BA 9s,6V bulb supplied	220V/50Hz	X1 X2	3SA8-BV41 3SA8-BV43 3SA8-BV44 3SA8-BV45 3SA8-BV46	
	Via integral transformer 1.2VA BA 9s,6V bulb supplied	240V/50Hz	X1 X2	3SA8-BV941 3SA8-BV943 3SA8-BV944 3SA8-BV945 3SA8-BV946	
	Via integral transformer 1.2VA BA 9s,6V bulb supplied	380V/50Hz 415V/50Hz	X1 X2	3SA8-BV53 3SA8-BV54 3SA8-BV55 3SA8-BV933 3SA8-BV934 3SA8-BV935	

Pushbutton Switch

◆ Double pushbuttons

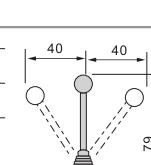
Description	Circuit	Color	Contact type	Type	Overall dimensions
	Without pilot light 1 flush green pushbutton 1 projecting red pushbutton	13 14 21 22	N/O N/C N/O N/C N/O N/C N/O N/C	IP40 IP65 IP40 IP65 3SA8-BL8325 3SA8-BL9325 3SA8-BL8425 3SA8-BL9425	
	Without pilot light 1 flush green pushbutton 1 pilot light with Yellow lens Direct supply≤380V 1 projecting red pushbutton	13 x1 x2 14 21 22	N/O N/C N/O N/C	3SA8-BW8365 3SA8-BW8465	
	1 flush green pushbutton 1 pilot light with Yellow lens 220/250V supply direct through resistor BA 9s,130V bold including 1 projecting red pushbutton	13 14 x1 x2 21 22	N/O N/C N/O N/C	3SA8-BW8375 3SA8-BW8475	
	1 flush green pushbutton 1 pilot light with Yellow lens 1.2VA-220V direct supply via integral transformer BA 9s 6V,bulb including 1 projecting red pushbutton	13 14 x1 x2 21 22	N/O N/C N/O N/C	3SA8-BW8345 3SA8-BW8445	

◆ Selector switches with pilot light

Description	Circuit	Contact type	Type	Overall dimensions
2 positions stay put		 	3SA8-BK2365 3SA8-BK2465 3SA8-BK2565 3SA8-BK2665 3SA8-BK2765	
3 positions stay put		3SA8-BK3365 3SA8-BK3465 3SA8-BK3565 3SA8-BK3665 3SA8-BK3765		
		3SA8-BK5365 3SA8-BK5465 3SA8-BK5565 3SA8-BK5665 3SA8-BK5765		

Pushbutton Switch

◆ Selector switches

Description	Mounting hole diagram of Selector switch	Contact type	Type	Overall dimensions
Mounting panel thickness: 1~6mm				
2 positions 		Locked spring reset	2N/O 2N/C	3SX2PA12 3SX2PA22
				
Mounting panel thickness: 1~6mm				
4 positions 		Locked spring reset	4N/O 4N/C	3SX2PA14 3SX2PA24
				

	Description	Voltage	Position	Color	Contact type	Type
					✓	✓
spring return				●	N/O	3SA28-EA21
				●	N/O	3SA28-EA31
				●	N/C	3SA28-EA41
				●	N/O	3SA28-EA25
				●		3SA28-EA35
				●		3SA28-EA45
				●	N/O	3SA28-EH21
				●		3SA28-EH31
				●	N/O	3SA28-EH25
				●		3SA28-EH35
standard handle			2 position ↘		N/O	
						3SA28-ED21
					N/O	N/C
BA9S			2 position ↘			3SA28-ED25
					2N/O	
						3SA28-ED33
For use with incandescent bulb included Ba9s base fitting		≤230		○		3SA28-EV61
				●		3SA28-EV63
				●		3SA28-EV64
				●		3SA28-EV65
				●		3SA28-EV66
				Clear		3SA28-EV67
			~230	○		3SA28-EV41
				●		3SA28-EV43
				●		3SA28-EV44
				●		3SA28-EV45
BA9S		~230		●		3SA28-EV46
				Clear		3SA28-EV47

Pushbutton Switch



Description	Circuit	Color	Contact Type	Type	Overall dimensions
Even button spring return			N/O N/O N/O N/O N/O	3SA5-BA11 3SA5-BA21 3SA5-BA31 3SA5-BA51 3SA5-BA61	
Even button spring return			N/C	3SA5-BA42	
Even button spring return		 	N/O N/C N/O N/C N/O N/C N/O N/C N/O N/C	3SA5-BA15 3SA5-BA25 3SA5-BA35 3SA5-BA55 3SA5-BA65 3SA5-BA45	
With protection spring return			N/O N/O N/O N/O	3SA5-BU21 3SA5-BU31 3SA5-BU51 3SA5-BU61	
Even button (transparent silica gel cover) unmarked Ip65			N/C	3SA5-BP42	



Description	Color	Contact Type	Type	Overall dimensions	
			N/O N/O N/O N/C N/C N/O N/O	3SA5-BA3311 3SA5-BA3361 3SA5-BA3341 3SA5-BA3351 3SA5-BA4322 3SA5-BA4342 3SA5-BA5331 3SA5-BA5321	

Pushbutton Switch



Description	Color	Contact Type	Type	Overall dimensions
		— — —		
	●	N/O	3SA5-BL21	
	● ●	N/O	3SA5-BL31	
	● ○	N/O	3SA5-BL51	
	● ○	N/O	3SA5-BL61	
	● ○	N/C	3SA5-BL42	
	●	N/O	3SA5-BL3351	
	● ○	N/O	3SA5-BL3341	
	○	N/C	3SA5-BL4322	
	○ STOP	N/C	3SA5-BL4342	
	●	Φ40	N/O	3SA5-BC21
	●	Φ40	N/O	3SA5-BC31
	●	Φ30	N/C	3SA5-BC42
	●	Φ40	N/C	3SA5-BC42

◆ Pushbutton spring return



Mushroom head	●	Φ 60	N/O	3SA5-BR21	
	●	Φ 60	N/O	3SA5-BR31	
	●	Φ 60	N/C	3SA5-BR42	
Turn to release	●	Φ 30	N/C	3SA5-BS442	
	●	Φ 40	N/C	3SA5-BS542	
	●	Φ 60	N/C	3SA5-BS642	

Pushbutton Switch



Description	Color	Contact Type	Type	Overall dimensions
Push-pull Red	ø40 ø60	N/C N/C	3SA5-BT42 3SA5-BX42	
Turn to release Red release (Key n°445)	ø30 ø40 ø60	N/C N/C N/C	3SA5-BS742 3SA5-BS142 3SA5-BS242	

◆ Selector Switches

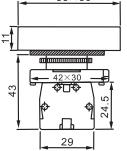
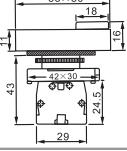
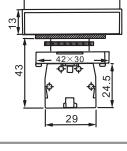
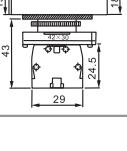


Description	Position	Contact Type	Type	Overall dimensions
2positions	↙ ↗	N/O N/O N/C N/O	3SA5-BD21 3SA5-BD25 3SA5-BD41 3SA5-BD45	
3 positions	↙ ↖ ↘ ↙	2N/O 2N/O 2N/O 2N/O	3SA5-BD33 3SA5-BD53 3SA5-BD73 3SA5-BD83	
2positions	↙ ↗	N/O N/O N/C N/O	3SA5-BJ21 3SA5-BJ25 3SA5-BJ41 3SA5-BJ45	
3 positions	↙ ↖ ↘ ↙	2N/O 2N/O 2N/O 2N/O	3SA5-BJ33 3SA5-BJ53 3SA5-BJ73 3SA5-BJ83	
2positions	↙ ↖	N/o N/o N/c N/o N/o N/c	3SA5-BG21 3SA5-BG25 3SA5-BG41 3SA5-BG45 3SA5-BG61 3SA5-BG65	
3 positions	↙ ↖ ↘ ↙	2N/o 2N/o 2N/o 2N/o	3SA5-BG33 3SA5-BG53 3SA5-BG03 3SA5-BG73	

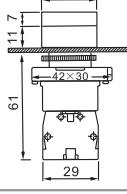
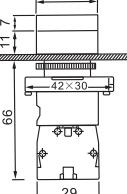
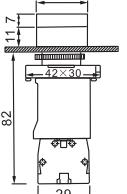
Description: ↘ Locked ↗ spring reset ↛ keyout

Pushbutton Switch

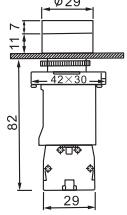
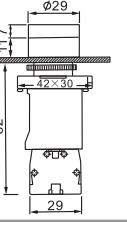
◆ Double pushbuttons

Description	Degree of protection	Color	Contact type	Type	Overall dimensions	
	1 flush green pushbutton 1 flush red pushbutton Unmarked	IP40		N/O N/C	3SA5-BL8325	
	Without pilot light 1 flush green pushbutton 1 flush red pushbutton Unmarked	IP40		N/O N/C	3SA5-BL8425	
	Without pilot light 1 flush green push button 1 flush red push button(transparent silica gel cover) Unmarked Ip65	IP65		N/O N/C	3SA5-BL9325	
	Without pilot light 1 flush green push button 1 flush red push button(transparent silica gel cover) Unmarked Ip65	IP65		N/O N/C	3SA5-BL9425	

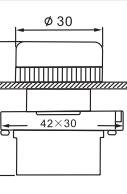
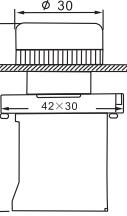
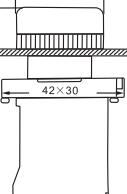
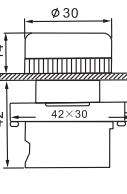
◆ Pushbutton illuminated

Description	Supply Voltage	Color	Contact type	Type	Overall dimensions
	220-240V		N/O	3SA5-BW3161	
	220V 250V		N/O	3SA5-BW3171	
	110V/50HZ 110-120V 60HZ		N/C	3SA5-BW3472	

Pushbutton Switch

Description	Supply Voltage	Color	Contact type	Type	Overall dimensions
			—	—	
	Via integral transformer 1.2VA BA9s,6V bulb supplied	220V/50Hz 240V/50Hz	○ N/O ● N/C ○ N/O ● N/C ○ N/O ● N/C	3SA5-BW3141 3SA5-BW3341 3SA5-BW3541 3SA5-BW3442 3SA5-BW34942 3SA5-BW31941 3SA5-BW33941 3SA5-BW35941	
	Via integral transformer 1.2VA BA9s,6V bulb supplied	380V/50Hz 415V/50Hz	○ N/O ● N/C ○ N/O ● N/C ○ N/O ● N/C	3SA5-BW3151 3SA5-BW3351 3SA5-BW3551 3SA5-BW3452 3SA5-BW34932 3SA5-BW31931 3SA5-BW33931 3SA5-BW35931	

◆ Pilot light

Description	voltage	Circuit	Color	Type	Overall dimensions
	220/240V 50/60Hz	X1 X2	○ ● ○ ● ○ ●	3SA5-BV61 3SA5-BV63 3SA5-BV64 3SA5-BV65 3SA5-BV66	
	110V/50Hz 110-120V 60Hz	X1 X2	○ ● ○ ● ○ ●	3SA5-BV31 3SA5-BV33 3SA5-BV34 3SA5-BV35 3SA5-BV36	
	240V/50Hz	X1 X2	○ ● ○ ● ○ ●	3SA5-BV941 3SA5-BV943 3SA5-BV944 3SA5-BV945 3SA5-BV946	
	220/240V 50/60Hz	— X1 X2	○ ● ○ ● ○ ●	3SA5-BV71 3SA5-BV73 3SA5-BV74 3SA5-BV75 3SA5-BV76	

Pushbutton Switch

◆ Pushbutton spring return with chromium plated metal bezel



Description	Color	Contact type	Type	Overall dimensions
Flush button	●	N/O	3SA18-BA21	
	●	N/O	3SA18-BA31	
	●	N/O	3SA18-BA42	
	●	N/O	3SA18-BA51	
	●	N/O	3SA18-BA61	
	●	N/O N/C	3SA18-BA25	
	●	N/O N/C	3SA18-BA35	
	●	N/O N/C	3SA18-BA45	
Projecting button	●	N/O	3SA18-BL21	
	●	N/O	3SA18-BL31	
	●	N/C	3SA18-BL42	
	●	N/O	3SA18-BL51	
	●	N/O	3SA18-BL61	
Booted flush degree of protection IP66	●	N/O	3SA18-BP21	
	●	N/O	3SA18-BP31	
	●	N/C	3SA18-BP42	
	●	N/O	3SA18-BP51	
	●	N/O	3SA18-BP61	
Flush, with marking	●	N/O	3SA18-BA3311	
	●	N/O	3SA18-BA3341	
	●	N/O	3SA18-BA3351	
	●	N/C	3SA18-BA4322	

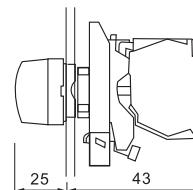
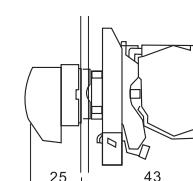
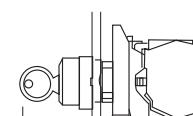
◆ Pushbuttons



Description	Color	Contact type	Type	Overall dimensions
Pushbutton spring return				
Spring return Bc Φ40 BR Φ60	●	N/O	3SA18-BC21	
	●	N/O	3SA18-BC31	
	●	N/C	3SA18-BC42	
	●	N/O	3SA18-BC51	
	●	N/O	3SA18-BR21	
	●	N/O	3SA18-BR31	
	●	N/C	3SA18-BR42	
	●	N/O	3SA18-BR51	
Mushroom head self-lock	●	N/C Φ30	3SA18-BS442	
	●	N/C Φ40	3SA18-BS542	
	●	N/C Φ60	3SA18-BS642	

Pushbutton Switch

◆ Selector switches & key switches

Description	Color	Contact type	Type	Overall dimensions
				
Standard handle black				
2-position locked		N/O	3SA18-BD21	
2-position locked		N/O N/C	3SA18-BD25	
3-position locked		2N/O	3SA18-BD33	
2-position reset		N/O	3SA18-BD41	
2-position reset		N/O N/C	3SA18-BD45	
3-position reset		2N/O	3SA18-BD53	
				
long handle, black				
2-position locked		N/O	3SA18-BJ21	
2-position locked		N/O N/C	3SA18-BJ25	
3-position locked		2N/O	3SA18-BJ33	
2-position reset		N/O	3SA18-BJ41	
2-position reset		N/O N/C	3SA18-BJ45	
3-position reset		2N/O	3SA18-BJ53	
				
Key switch				
 		N/O	3SA18-BG21	
2-position locked		N/O N/C	3SA18-BG25	
2-position locked		2N/O	3SA18-BG33	
3-position locked		N/O	3SA18-BG41	
2-position reset		N/O	3SA18-BG61	
2-position reset		2N/O	3SA18-BG73	
Description:  Locked  spring reset  keyout				

◆ Double pushbutton

Description	Color	Contact type	Type	Overall dimensions
Double end button		N/O N/C	3SA18-BL8325	
Flush flush		N/O N/C	3SA18-BL8312	
Projecting flush		N/O N/C	3SA18-BL8425	
			3SA18-BL8412	
Double end button				
Flush + flush		N/O N/C	3SA18-BW8365	
Projecting flush		N/O N/C	3SA18-BW8465	
LED lamp socket LED				
flush Projecting				
Projecting flush		N/O N/C	3SA18-BL9312	
		N/O N/C	3SA18-BL9434	
Degree of protection IP66				

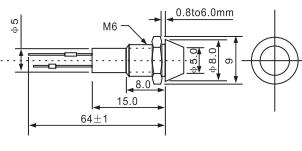
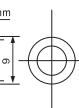
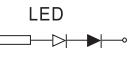
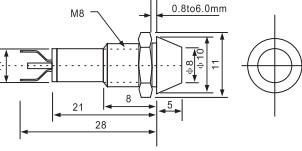
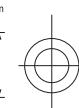
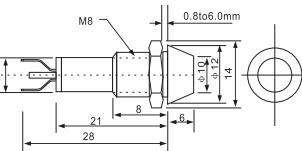
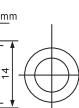
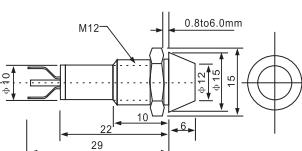
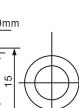
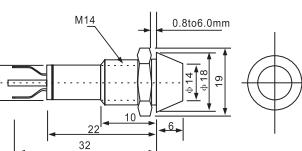
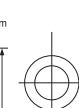
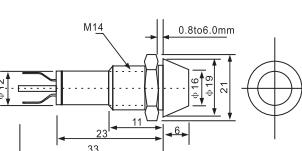
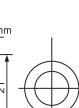
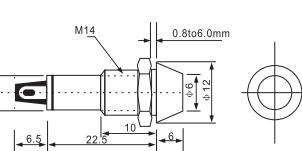
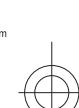
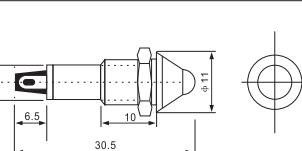
Pushbutton Switch

◆ Pilot light, illuminated pushbutton, selector switch

Description	Supply Voltage	Color	Contact type	Type	Overall dimensions
					
Pilot light					
BA9s Lamp socket					
LED	≤250V				
BA9s bulb and					
neon lamp					
					
Pilot light	24V			3SA18-BVB□	
Integral LED	~48...120V			3SA18-BVG□	
	~230...240V			3SA18-BVM□	
					
Illuminated pushbutton					
BA9S bulb and					
neon lamp	≤250V				
					
Illuminated pushbutton	24V	N/O	N/C	3SA18-BW3□B5	
BA9s Lamp socket	~48...120V	N/O	N/C	3SA18-BW3□G5	
LED	~230...240V	N/O	N/C	3SA18-BW3□M5	
					
Selector switch,					
illuminated,					
standard handle					
	24V	✓	●	3SA18-BK133B5	
		✓	●	3SA18-BK134B5	
		✓	●	3SA18-BK135B5	
		✓	●	3SA18-BK133G5	
	~48...120V	✓	●	3SA18-BK134G5	
		✓	●	3SA18-BK135G5	
		✓	●	3SA18-BK133M5	
	~230...240V	✓	●	3SA18-BK134M5	
		✓	●	3SA18-BK135M5	

AD22C series indicator lamps



Type	Color	Voltage	Shape	Electric principle
AD22C-Φ6	<ul style="list-style-type: none"> ● Red ● Green ● Yellow ○ White ● Blue 	6~220V	 	
AD22C-Φ8	<ul style="list-style-type: none"> ● Red ● Green ● Yellow ○ White ● Blue 	6~220V	 	
AD22C-Φ10	<ul style="list-style-type: none"> ● Red ● Green ● Yellow ○ White ● Blue 	6~220V	 	
AD22C-Φ12	<ul style="list-style-type: none"> ● Red ● Green ● Yellow ○ White ● Blue 	6~220V	 	
AD22C-Φ14	<ul style="list-style-type: none"> ● Red ● Green ● Yellow ○ White ● Blue 	6~220V	 	
AD22C-Φ16	<ul style="list-style-type: none"> ● Red ● Green ● Yellow ○ White ● Blue 	6~220V	 	
AD22C-Φ9	<ul style="list-style-type: none"> ● Red ● Green ● Yellow ○ White ● Blue 	6~220V	 	
AD22B-Φ8	<ul style="list-style-type: none"> ● Red ● Green ● Yellow ○ White ● Blue 	6~220V	 	

AD22 LED series indicator lamps

◆ Environment condition

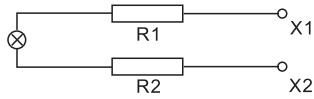
- (1) Ambient temperature: $-25^{\circ}\text{C} \pm 55^{\circ}\text{C}$
- (2) Relative humidity: 98%
- (3) Working under vibration frequency 2 -80Hz, acceleration at 0.7g
- (4) Pollution: class III installation:type III
- (5) "TH" mark can be used in wet and heat conditions

◆ Main Specifications

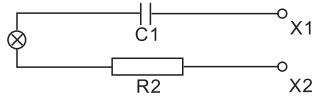
- (1) pressure: 2.5kV,1min
- (2) insulation resistance $\geq 2\text{M}\Omega$
- (3) AC indicative light voltage $\pm 20\%$
- (4) endurance $\geq 30000\text{h}$
- (5) brightness $\geq 60\text{cd}/\text{m}^2$
- (6) leakage index: CT1 ≥ 100
- (7) top protection class IP65, special order IP67
- (8) frequency: AC 50-60Hz

◆ Diagram

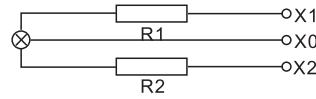
AC,DC indicator (DC,AC 6V-DC,AC 220V)



AC indicator (AC220V-AC380V)



Double colour indicator (DC AC 110-DC , AC 220V)



Note: pay attention to radiation when heat is too high for DC 110V, 220V, 380V;

Note: connecting X0,X1, lighting green;
Connecting X0 X2,lighting red.

Type	Voltage	Color	Overall dimensions
AD22-16AS	21-DC.AC6V 22-DC.AC12V 23-DC.AC24V 24-DC.AC36V 25-DC.AC48V 26-DC.AC110V 27-DC.AC127V 31-AC220V 32-AC380V	<ul style="list-style-type: none"> ● Red ● Green ● Yellow ○ White ● Blue 	
AD22-16DCS	21-DC.AC6V 22-DC.AC12V 23-DC.AC24V 24-DC.AC36V 25-DC.AC48V 26-DC.AC110V 27-DC.AC127V 31-AC220V 32-AC380V	<ul style="list-style-type: none"> ● Red ● Green ● Yellow ○ White ● Blue 	
AD22-16DC	21-DC.AC6V 22-DC.AC12V 23-DC.AC24V 24-DC.AC36V 25-DC.AC48V 26-DC.AC110V 27-DC.AC127V 31-AC220V 32-AC380V	<ul style="list-style-type: none"> ● Red ● Green ● Yellow ○ White ● Blue 	
AD22-16BC	21-DC.AC6V 22-DC.AC12V 23-DC.AC24V 24-DC.AC36V 25-DC.AC48V 26-DC.AC110V 27-DC.AC127V 31-AC220V 32-AC380V	<ul style="list-style-type: none"> ● Red ● Green ● Yellow ○ White ● Blue 	



Φ16 indicator lamp



Φ16 indicator lamp

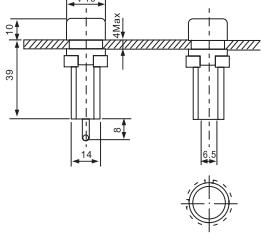
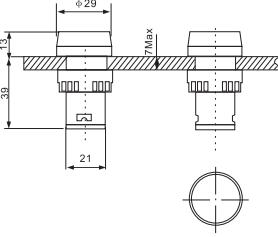
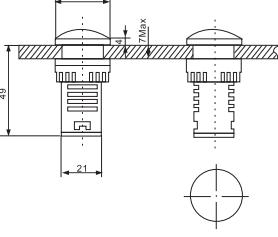
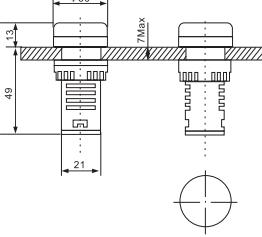
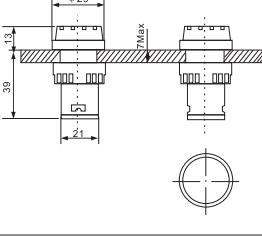
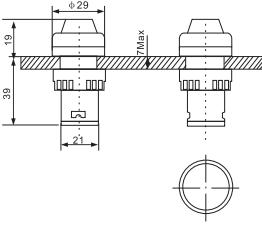


Φ16 Indicator lamp

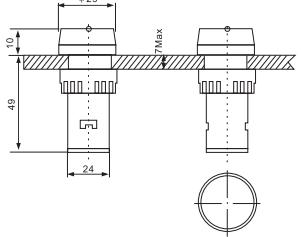
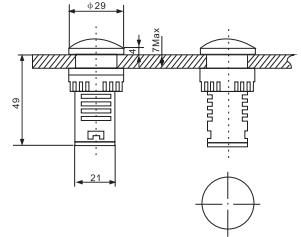
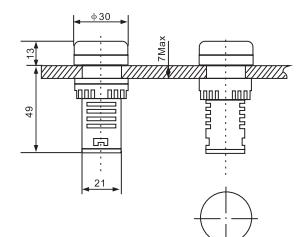
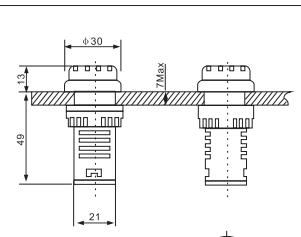


Φ16BC indicator lamp

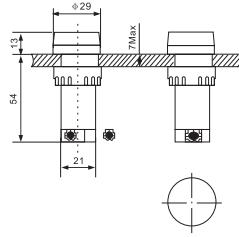
AD22 LED series indicator lamps

Type	Voltage	Color	Overall dimensions
	21-DC.AC6V 22-DC.AC12V 23-DC.AC24V 24-DC.AC36V 25-DC.AC48V 26-DC.AC110V 27-DC.AC127V 31-AC220V 32-AC380V	<ul style="list-style-type: none"> ● Red ● Green ● Yellow ○ White ● Blue 	
	21-DC.AC6V 22-DC.AC12V 23-DC.AC24V 24-DC.AC36V 25-DC.AC48V 26-DC.AC110V 27-DC.AC127V 31-AC220V 32-AC380V	<ul style="list-style-type: none"> ● Red ● Green ● Yellow ○ White ● Blue 	
	21-DC.AC6V 22-DC.AC12V 23-DC.AC24V 24-DC.AC36V 25-DC.AC48V 26-DC.AC110V 27-DC.AC127V 31-AC220V 32-AC380V	<ul style="list-style-type: none"> ● Red ● Green ● Yellow ○ White ● Blue 	
	21-DC.AC6V 22-DC.AC12V 23-DC.AC24V 24-DC.AC36V 25-DC.AC48V 26-DC.AC110V 27-DC.AC127V 31-AC220V 32-AC380V	<ul style="list-style-type: none"> ● Red ● Green ● Yellow ○ White ● Blue 	
	21-DC.AC6V 22-DC.AC12V 23-DC.AC24V 24-DC.AC36V 25-DC.AC48V 26-DC.AC110V 27-DC.AC127V 31-AC220V 32-AC380V	<ul style="list-style-type: none"> ● Red ● Green ● Yellow ○ White ● Blue 	
	21-DC.AC6V 22-DC.AC12V 23-DC.AC24V 24-DC.AC36V 25-DC.AC48V 26-DC.AC110V 27-DC.AC127V 31-AC220V 32-AC380V	<ul style="list-style-type: none"> ● Red ● Green ● Yellow ○ White ● Blue 	

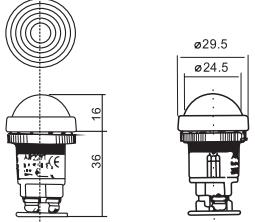
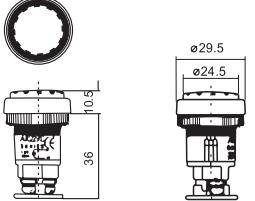
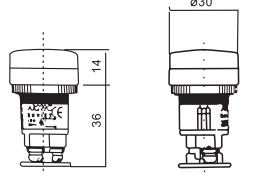
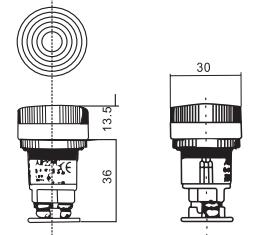
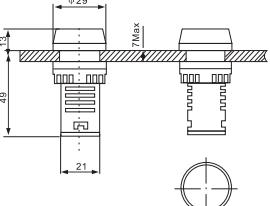
AD22 LED series indicator lamps

Type	Voltage	Color	Overall dimensions
AD22-22B	21-DC.AC6V 22-DC.AC12V 23-DC.AC24V 24-DC.AC36V 25-DC.AC48V 26-DC.AC110V 27-DC.AC127V 28-DC220V 29-FD380V 31-AC220V 32-AC380V	<ul style="list-style-type: none"> ● Red ● Green ● Yellow ○ White ● Blue 	
AD22-22C	21-DC.AC6V 22-DC.AC12V 23-DC.AC24V 24-DC.AC36V 25-DC.AC48V 26-DC.AC110V 27-DC.AC127V 28-DC220V 29-FD380V 31-AC220V 32-AC380V	<ul style="list-style-type: none"> ● Red ● Green ● Yellow ○ White ● Blue 	
AD22-22D	21-DC.AC6V 22-DC.AC12V 23-DC.AC24V 24-DC.AC36V 25-DC.AC48V 26-DC.AC110V 27-DC.AC127V 31-AC220V 32-AC380V	<ul style="list-style-type: none"> ● Red ● Green ● Yellow ○ White ● Blue 	
AD22-22E	21-DC.AC6V 22-DC.AC12V 23-DC.AC24V 24-DC.AC36V 25-DC.AC48V 26-DC.AC110V 27-DC.AC127V 31-AC220V 32-AC380V	<ul style="list-style-type: none"> ● Red ● Green ● Yellow ○ White ● Blue 	

Double color signal lamp

AD22-22Drg	23-DC.AC24V 24-DC.AC36V 25-DC.AC48V 26-DC.AC110V 27-DC.AC127V 28-DC.AC220V 31-AC220V 32-AC380V	<ul style="list-style-type: none"> ● Red ● Green ● Red ● Yellow 	
Φ22/22Drg round double-color lamp			

AD22 LED series indicator lamps

	Type	Voltage	Color	Overall dimensions
	AR229C □□	21-DC.AC6V 22-DC.AC12V 23-DC.AC24V 24-DC.AC36V 25-DC.AC48V 26-DC.AC110V 27-DC.AC127V 31-AC220V 32-AC380V	<ul style="list-style-type: none"> ● Red ● Green ● Yellow ○ White ● Blue 	
	AR229T □□	21-DC.AC6V 22-DC.AC12V 23-DC.AC24V 24-DC.AC36V 25-DC.AC48V 26-DC.AC110V 27-DC.AC127V 31-AC220V 32-AC380V	<ul style="list-style-type: none"> ● Red ● Green ● Yellow ○ White ● Blue 	
	AR229E □□	21-DC.AC6V 22-DC.AC12V 23-DC.AC24V 24-DC.AC36V 25-DC.AC48V 26-DC.AC110V 27-DC.AC127V 31-AC220V 32-AC380V	<ul style="list-style-type: none"> ● Red ● Green ● Yellow ○ White ● Blue 	
	AR229H □□	21-DC.AC6V 22-DC.AC12V 23-DC.AC24V 24-DC.AC36V 25-DC.AC48V 26-DC.AC110V 27-DC.AC127V 31-AC220V 32-AC380V	<ul style="list-style-type: none"> ● Red ● Green ● Yellow ○ White ● Blue 	
	◆ Buzzer AD22-22M/K	23-DC.AC24V 24-DC.AC36V 25-DC.AC48V 26-DC.AC110V 27-DC.AC127V 31-AC220V 32-AC380V	● Black	
	AD22-22M/r	23-DC.AC24V 24-DC.AC36V 25-DC.AC48V 26-DC.AC110V 27-DC.AC127V 31-AC220V 32-AC380V	● Red	The buzzer's voice interrupted flashlight volume is 10cm/80Decibel , electric current is 15~20mA

Pushbutton & Indicator

Type and meaning

Button

3SA 16 - [1] [2] [D] [L] / [3] [4]

- Voltage code
- Color of button
- Alternative belt
- Button with lamp
- Head appearance styles
- Number of poles
- Serial number designed
- Special expression of company's product type

Signal lamp

3SA 16-□ XD

- Signal lamp
- Head appearance styles(see list 1)
- Serial number designed
- Special expression of company's product type

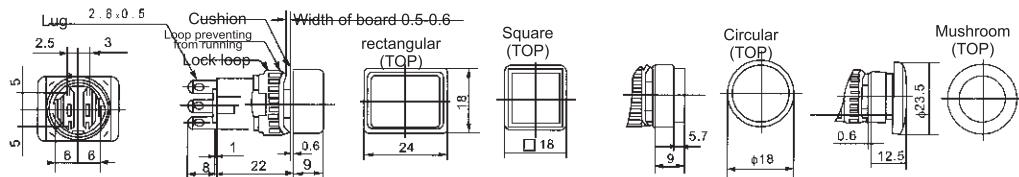
Using condition

- (1) Air temperature $-25^{\circ}\text{C} \sim +50^{\circ}\text{C}$
- (2) Relative humidity: $\leq 85\%$
- (3) Altitude height: $\leq 2,000\text{m}$
- (4) Pollution grade: 3
- (5) Installation type: III
- (6) Protection grade: IP40 /IP55
- (7) Environmental condition: no medium causing explosion, gas or dust of electric conduction

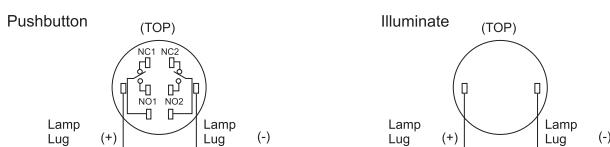
List 1:

Letter	Meaning	Letter	Meaning	Letter	Meaning
AXD	Round indicator	AL	Round flat button of alternative type	XA	Round revolving handle button
FXD	Square indicator	FL	Square button of alternative type	XF	Square revolving handle button
CFXD	Rectangular indicator	CFL	Rectangular button of alternative type	XCF	Rectangular revolving handle button
MXD	Mushroom indicator	A	Round flat button(Instant moving type)	L	Alternative belt(In the type of self-lock and set free)
AD	Round light button	F	Square button (Instant moving type)	ML	Mushroom button
FD	Square light button	CF	Rectangular button(Instant moving type)	ADL	Round belt light button alternative
CFD	Rectangular light button	M	Mushroom button(Instant moving type)	FDL	Square belt light button alternative
MD	Mushroom light button	ZS	Emergency button(alternative moving type)	CFDL	Rectangular belt light button alternative
YA	Round key button	YF	Square key button	YCF	Rectangular key button
FG	With protecting box				

Size



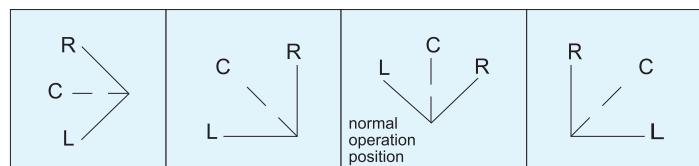
Terminals wiring diagram



SDL16 Selector switch

It is possible to change position of operating system.

It is possible to change position of operating system by running front cover and locker. Every other 45° , front cover can be locked to avoid it automatically running when it is installed on the plate.



Change position of operating system.

Get rid of lock before pulling out, run front cover, push it in every other 45° and then lock front cover.

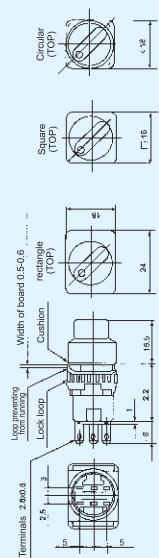
Contact type work

Position	Contact type	Working type		
		Left	Middle	Right
L ↘ R 90°2 Position	Single-pole double throws	NO NC C		NO NC C
	Double-pole double throws	Left Contact type NO NC NO NO Right Contact type NC C		Left Contact type NO NC NO NO Right Contact type NC C
L ↘ R 45°3 Position	Double-pole double throws	Left Contact type NO NC NO NC Right Contact type NO NC NO NC C	Left Contact type NO NC NO NC Right Contact type NO NC NO NC C	Left Contact type NO NC NO NC Right Contact type NO NC NO NC C

Note: Running "connection point" working drawing is accordant with one with key.

Pushbutton & Indicator

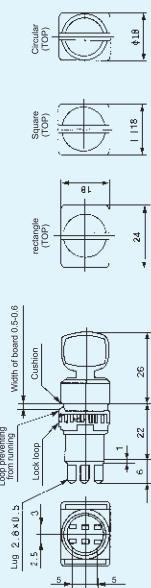
Size



Position	Contact type	Reference	Remark
90°2 Position	L R	1NO+1NC 2NO+2NC	3SA16-11XA-2 3SA16-22XA-2
	C	2NO+2NC	3SA16-22XA-3
45°3 Position	L R	1NO+1NC 2NO+2NC	3SA16-11XF-2 3SA16-22XF-2
	C	2NO+2NC	3SA16-22XF-3
90°2 Position	L R	1NO+1NC 2NO+2NC	3SA16-11XCF-2 3SA16-22XCF-2
	C	2NO+2NC	3SA16-22XCF-3
45°3 Position	L R	2NO+2NC	

-2 means 2 positions
-3 means 3 positions

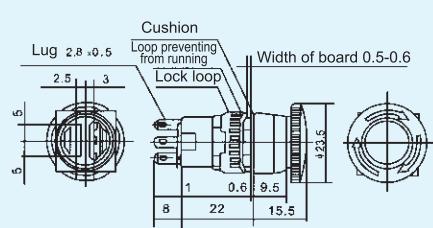
Size



Position	Contact type	Reference	Remark
90°2 Position	L R	1NO+1NC 2NO+2NC	3SA16-11YA-2 3SA16-22YA-2
	C	2NO+2NC	3SA16-22YA-3
45°3 Position	L R	1NO+1NC 2NO+2NC	3SA16-11YF-2 3SA16-22YF-2
	C	2NO+2NC	3SA16-22YF-3
90°2 Position	L R	1NO+1NC 2NO+2NC	3SA16-11YCF-2 3SA16-22YCF-2
	C	2NO+2NC	3SA16-22YCF-3
45°3 Position	L R	2NO+2NC	

-2 means 2 positions
-3 means 3 positions

Size

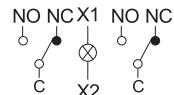
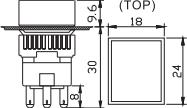
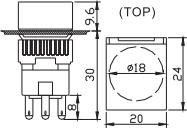
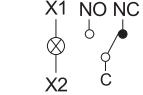
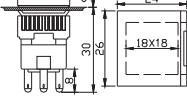
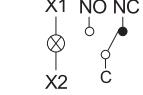
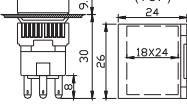


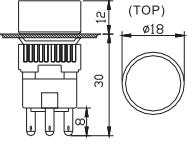
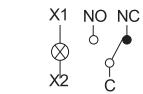
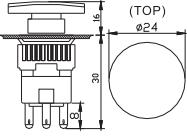
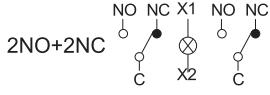
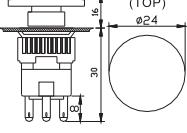
Working type	Contact type	Reference	Remark
Press lock to replace	1NO+1NC	3SA16-11ZS	Red
	2NO+2NC	3SA16-22ZS	

Pushbutton & Indicator

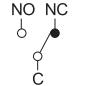
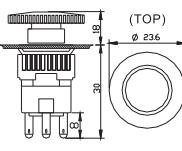
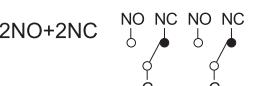
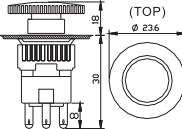
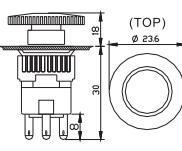
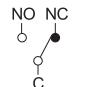
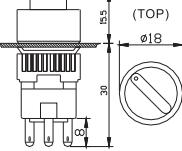
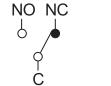
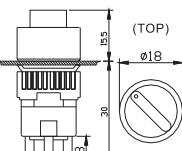
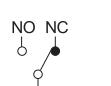
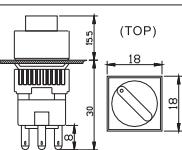
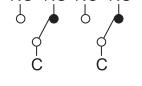
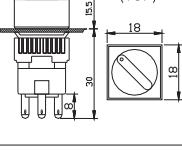
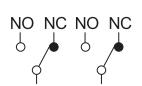
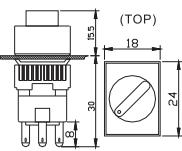
	Description	Contact	Circuit	Color	Type	Contour
	Installed light circular LED 24V/AC/DC Neon 220V/AC	X1 X2		<ul style="list-style-type: none"> ● Red ● Green ● Yellow ○ White ● Blue 	3SA16-AXD	
	Installed light square LED 24V/AC/DC Neon 220V/AC	X1 X2		<ul style="list-style-type: none"> ● Red ● Green ● Yellow ○ White ● Blue 	3SA16-FXD	
	Installed light rectangular LED 24V/AC/DC Neon 220V/AC	X1 X2		<ul style="list-style-type: none"> ● Red ● Green ● Yellow ○ White ● Blue 	3SA16-CFXD	
	Pushbutton signal pole LED 24V/AC/DC Neon 220V/AC	N/O+N/C		<ul style="list-style-type: none"> ● Red ● Green ● Yellow ○ White ● Blue 	3SA16-11AD 3SA16-11ADL	
	Pushbutton signal pole LED 24V/AC/DC Neon 220V/AC	NO+NC		<ul style="list-style-type: none"> ● Red ● Green ● Yellow ○ White ● Blue 	3SA16-11FD 3SA16-11FDL	
	Pushbutton double pole LED 24V/AC/DC Neon 220V/AC	NO+NC		<ul style="list-style-type: none"> ● Red ● Green ● Yellow ○ White ● Blue 	3SA16-11CFD 3SA16-11CFDL	
	Installed light circular double pole LED 24V/AC/DC Neon 220V/AC	2NO+2NC		<ul style="list-style-type: none"> ● Red ● Green ● Yellow ○ White ● Blue 	3SA16-22AD 3SA16-22ADL	
	Installed light square double pole LED 24V/AC/DC Neon 220V/AC	2NO+2NC		<ul style="list-style-type: none"> ● Red ● Green ● Yellow ○ White ● Blue 	3SA16-22FD 3SA16-22FDL	

Pushbutton & Indicator

	Description	Contact	Circuit	Color	Type	Contour
	Installed light rectangular double pole LED 24V/AC/DC Neon 220V/AC	2NO+2NC		<ul style="list-style-type: none"> ● Red ● Green ● Yellow ○ White ● Blue 	<u>3SA16-22CFD</u> <u>3SA16-22CFDL</u>	
	Installed light circular single pole LED 24V/AC/DC Neon 220V/AC with protection cover Ip40	NO+NC		<ul style="list-style-type: none"> ● Red ● Green ● Yellow ○ White ● Blue 	<u>3SA16-11ADFG</u> <u>3SA16-11ADFGL</u>	
	Installed light square single pole LED 24V/AC/DC Neon 220V/AC with protection cover Ip40	NO+NC		<ul style="list-style-type: none"> ● Red ● Green ● Yellow ○ White ● Blue 	<u>3SA16-11FDFG</u> <u>3SA16-11FDFGL</u>	
	Installed light rectangular single pole LED 24V/AC/DC Neon 220V/AC with protection cover Ip40	NO+NC		<ul style="list-style-type: none"> ● Red ● Green ● Yellow ○ White ● Blue 	<u>3SA16-11CFDFG</u> <u>3SA16-11CFDFGL</u>	

	Description	Contact	Circuit	Color	Type	Contour
	Indicator Buzzer			<ul style="list-style-type: none"> ● Red ● Black 	<u>3SA16-MF</u>	
	Installed light Mushroom button signal pole LED 24V/AC/DC Neon 220V/AC	NO+NC		<ul style="list-style-type: none"> ● Red ● Green ● Yellow ○ White ● Blue 	<u>3SA16-11MD</u> <u>3SA16-11MDL</u>	
	Installed light Mushroom button signal pole LED 24V/AC/DC Neon 220V/AC double pole	2NO+2NC		<ul style="list-style-type: none"> ● Red ● Green ● Yellow ○ White ● Blue 	<u>3SA16-22MD</u> <u>3SA16-22MDL</u>	

Pushbutton & Indicator

	Description	Contact	Circuit	Color	Type	Contour
	Mushroom button signal pole circular	NO+NC		<ul style="list-style-type: none"> ● Red ● Green ● Yellow ○ White ● Blue 	3SA16-11M 3SA16-11ML	
	Emergency push button push locking in clockwise direction, move reset signal pole	2NO+2NC		<ul style="list-style-type: none"> ● Red ● Green ● Yellow ○ White ● Blue 	3SA16-22M 3SA16-22ML	
	Emergency push button push locking in clockwise direction, move reset signal pole	2NO+2NC		<ul style="list-style-type: none"> ● Red ● Green ● Yellow ○ White ● Blue 	3SA16-11ZS	
	90° 2 Position	NO+NC		● Black	3SA16-11XA-2P 3SA16-11XA-3P	
	90° 2 Position	NO+NC		● Black	3SA16-11XF-2P 3SA16-11XF-3P	
	90° 2 Position	NO+NC		● Black	3SA16-11XCF-2P 3SA16-11XCF-3P	
	45° 3 Position	2NO+2NC		● Black	3SA16-22XA-2P 3SA16-22XA-3P	
	45° 3 Position	2NO+2NC		● Black	3SA16-22XF-2P 3SA16-22XF-3P	

Pushbutton & Indicator



Description	Contact	Circuit	Color	Type	Contour
45° 3 Position	2NO+2NC		● Black	<u>3SA16-22XCF-2P</u> <u>3SA16-22XCF-3P</u>	
90° 2 Position	NO+NC		○ Null	<u>3SA16-11YA-2P</u> <u>3SA16-11YA-3P</u>	
90° 2 Position	NO+NC		○ Null	<u>3SA16-11YF-2P</u> <u>3SA16-11YF-3P</u>	
90° 2 Position	NO+NC		○ Null	<u>3SA16-11YCF-2P</u> <u>3SA16-11YCF-3P</u>	
45° 3 Position	2NO+2NC		○ Null	<u>3SA16-22YA-2P</u> <u>3SA16-22YA-3P</u>	
45° 3 Position	2NO+2NC		○ Null	<u>3SA16-22YF-2P</u> <u>3SA16-22YF-3P</u>	
45° 3 Position	2NO+2NC		○ Null	<u>3SA16-22YCF-2P</u> <u>3SA16-22YCF-3P</u>	

Pushbutton Switch

Description	Contact	Circuit	Color	Type	Contour
Flush pushbutton	NO+NC	NO — NC C	○ White ● Black ● Green ● Red ● Yellow ● Blue	3SA17-CA15 3SA17-CA25 3SA17-CA35 3SA17-CA45 3SA17-CA55 3SA17-CA65	
Flush pushbutton with lamp	NO+NC	X1 NO — NC C X2	○ White ● Green ● Red ● Yellow ● Blue	3SA17-CW3165 3SA17-CW3365 3SA17-CW3465 3SA17-CW3565 3SA17-CW3665	
Mushroom pushbutton with lamp	NO+NC	X1 NO — NC C X2	● Green ● Red	3SA17-CM35 3SA17-CM45	
Emergency push button push-locking and push-reset	NO+NC	NO — NC C	● Red	3SA17-CS545	
Selector switch standard handle two positions	NO+NC NO+NO	NO NC NO NC NO NO C 101 NO NO	● Black	3SA17-CD25 3SA17-CD33	
Selector switch standard handle two positions with lamp	NO+NC	X1 NO — NC C X2	● Green ● Red ● Yellow	3SA17-CK2365 3SA17-CK2465 3SA17-CK2565	

Control Stations



3SA10-B103



3SA10-B112



3SA10-B164H29



3SA10-J174



3SA10-J184



3SA10-J178

Start-Stop functions(Light grey lid with dark grey base)

Description	Scheme	Marking on legend	Marking on button	Reference	Weight kg
1 green flush pushbutton spring return	N/O + 	Start	—	3SA10-B101H29	0.120
		—	I	3SA10-B102	0.120
		—	Start	3SA10-B103	0.120
1 red flush pushbutton spring return	N/O + 	Stop	—	3SA10-B111H29	0.120
		—	Stop	3SA10-B114	0.120
		—	O	3SA10-B112	0.120
1 red mushroom head pushbutton, Ø 40 mm spring return	N/C	Emergency stop	—	3SA10-B164H29	0.120
1 red flush pushbutton spring return	N/C + 	—	Stop	3SA10-B116	0.120

Emergency stop functions(yellow lid with dark grey base)

Description	Scheme	Marking on legend	Marking on button	Reference	Weight kg
1 red mushroom head pushbutton, Ø 40 mm, latching Turn to release	N/C + 	Unmarked		3SA10-J174	0.14
1 red mushroom head pushbutton, Ø 40 mm, latching Key release(key n° 445)	N/C + 	Unmarked		3SA10-J184	0.17

Emergency stop functions with (yellow lid with dark grey base)

Description	Scheme	Marking on legend	Marking on button	Reference	Weight kg
1 red mushroom head pushbutton, Ø 40 mm, latching Turn to release	+ 	Unmarked		3SA10-J178	0.14
1 red mushroom head pushbutton, Ø 40 mm, latching Key release(key n° 445)	+ 	Unmarked		3SA10-J188	0.17
Other versions					Use adaptable sub-assemblies: empty enclosures,contact blocks,signalling units,operators,legend plates(see pages 5/28 to 5/31).

Control Stations



3SA10-B211H29



3SA10-B213



3SA10-B132H29



3SA10-B142H29



3SA10-B361H29



3SA10-B373

Start-Stop functions(Light grey lid with dark grey base)

Description	Scheme	Marking on legend	Marking on button	Reference	Weight kg
2 spring return pushbutton 1 flush green 1 flush red	N/O + N/C	Start Stop — — — —	— I O Start Stop	3SA10-B211H29 3SA10-B213 3SA10-B215	0.165 0.165 0.165
1 selector switch 2 position stay put standard black handle	N/O	Start Stop — — O I	— — —	3SA10-B132H29 3SA10-B134	0.125 0.125
1 selector switch key operated(key n° 455) 2 position stay put key withdrawal from LH position	N/C	Start Stop — — O I	— — —	3SA10-B142H29 3SA10-B144	0.150 0.150

Start-Stop functions with pilot light(Light grey lid with dark grey base)

Description	Scheme	Marking on legend	Marking on button	Reference	Weight kg
1 red pilot light Direct supply≤130V Bulb not included(1)	N/O +	X1 X2	Start Stop — —	3SA10-B361H29	0.200
2 spring return pushbuttons 1 flush green 1 flush red	N/C	13 21 22	— I O — Start Stop	3SA10-B363 3SA10-B366	0.200 0.200
1 red pilot light,230V Supply direct through resistor Bulb with BA 9s base fitting-130V(included)	N/O +	X1 X2	Start Stop — —	3SA10-B371H29	0.205
2 spring return pushbuttons 1 flush green 1 flush red	N/C	13 21 22	— I O — Start Stop	3SA10-B373 3SA10-B376	0.205 0.205

(1)Bulb types for use with direct supply:

-incandescent bulb, BA 9s base fitting: U≤130V, maximum power 2.6W, maximum length: 28 mm,

-neon bulb, BA 9s base fitting:110V≤U≤380V.

Please consult our local representatives or agents.

Other versions

Use adaptable sub-assemblies:

empty enclosures, contact blocks, signaling units, operators, legend plates (see pages 5/28 to 5/31).

Control Stations



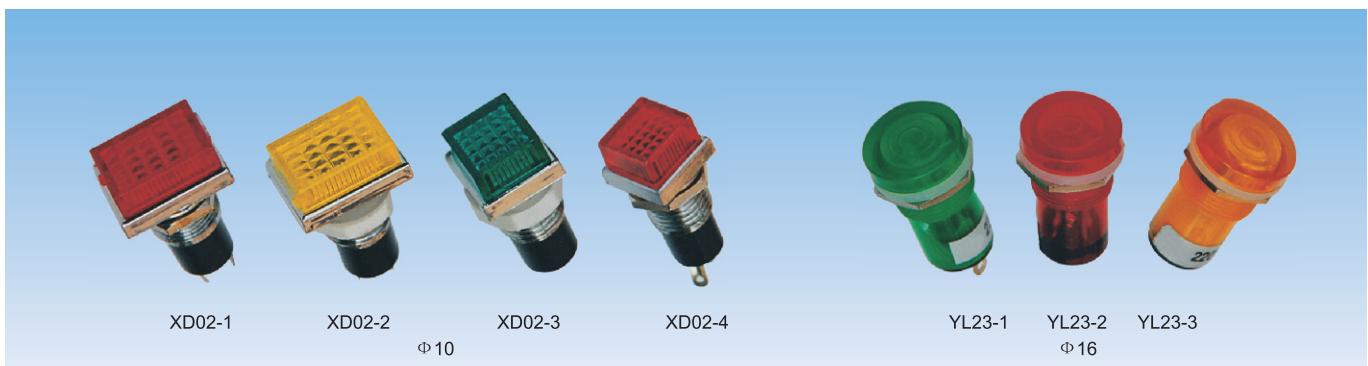
Description	Color	Contact type	Marking on button	Type
			↓ ↓	
Flush pushbuttons	●	N/O	I	3SA10-D102
		N/O	OFF	3SA10-D104
		N/O	Start	3SA10-D103
		N/O N/C	I	3SA10-D102E
	●	N/C	O	3SA10-D112
			NO	3SA10-D117
			Stop	3SA10-D114
		N/O N/C	O	3SA10-D112E
Projecting red	●		Stop	3SA10-D114E
		N/C	O	3SA10-D115
			NO	3SA10-D118
	●		Stop	3SA10-D116
		N/C	O	
			NO	
Flush pushbuttons	●	N/O	OFF	3SA10-D101
			Start	3SA10-D101H29
	●	N/C	O	3SA10-D111
			Stop	3SA10-D111H29
Mushroom red			N/C	3SA10-D164
Turn to release Ø 40		N/C		3SA10-K174
	N/O	N/C		3SA10-K174E
		N/O 2N/C		3SA10-K178G
Key release (keyn° 455)red		N/C		3SA10-K184
	N/O	N/C		3SA10-K184E
		N/O 2N/C		3SA10-K188G

Control Stations

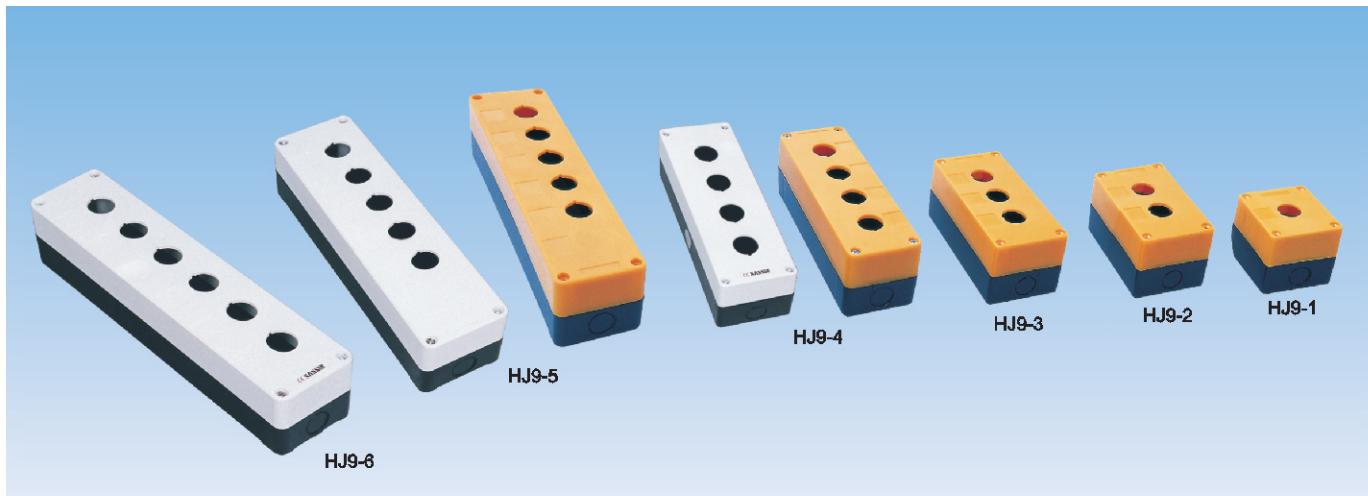


Description	Color	Contact type	Marking on button	Type
		N/O		3SA10-D211
		N/C		
2Flush pushbutton	1Green 1Red		Start Stop	3SA10-D211H29
		N/O		
		N/O		3SA10-D241
		N/O	I	3SA10-D213
		N/C	O	3SA10-D224
2Flush pushbutton	1Green 1Red		Start Stop	3SA10-D215
		N/O N/C	I	
		N/O N/C	O	3SA10-D213E
		N/O	I	
		N/C	O	3SA10-D214
			Start	
			Stop	3SA10-D225
		N/O	O—I	3SA10-D134
				3SA10-D132
1Selection standard handle			Start Stop	3SA10-D144
		N/O N/C	I	
		N/O	O	3SA10-D142
		N/O	O—I	3SA10-D144E
			Start Stop	3SA10-D144
		N/O N/C		
		N/O N/C		3SA10-D142
				3SA10-D144E
2Flush pushbutton		N/O	I	3SA10-D363B
1Red lamp		N/C	O	
				~230 3SA10-D363M
		N/O		
		N/C		~24 3SA10-D361B
				~230 3SA10-D361M

Indicators



Pushbutton Switch Box



Indicators



Pushbutton



BS Power push button switch



■ Application

BS power push button switch is applicable to the motor of the voltage up 500V and the capacity up to 3KW for directly starting run and breaking, also for infrequently turning on and off load current. It's characteristic of accurate on-off, safe and reliable, high intensity of machinery and widely used in machine tools, textile machinery, etc. The switch is the best choice for machinery power.

■ Application

Type	No.of phases	Rated voltage (v)	Applicable motor capacity KW (HP)	Resistance load (A)	Weight (kg)	Dimensions L×B×H
BS-211	2, 3	600	0.75(1)at 220V	7.5(100)	0.13	90×44×49
BS216	2, 3	600	2.2(3)at 220V	15(20)	0.18	93×53×54
BS230	2, 3	600	220V	(30)	0.22	112×62×56

Pushbutton

For control of single-speed motors



Functions	Number of operators	Contact blocks and scheme per direction for "Emergency stop"	Reference
	4 mechanically interlocked between pairs	ZB2-BE101 13 14	3SP-471
	4 mechanically interlocked between pairs +1 trigger action latching "Emergency stop" Ø40 mm operator ZA2-BS54	ZB2-BE102 11 13 + ZB2-BE101 12 14	3SP-481
	4 mechanically interlocked between pairs +1 trigger action latching "Emergency stop" Ø40 mm operator ZA2-BS54	ZB2-BE101 13 14 ZB2-BE102 11 12 13	3SP-4713
	4 mechanically interlocked between pairs +1 trigger action latching "Emergency stop" Ø40 mm operator ZA2-BS54	ZB2-BE102 11 + ZB2-BE101 12 14 ZB2-BE102 11 12 13	3SP-4813
	6 mechanically interlocked between pairs	ZB2-BE101 13 14	3SP-671
	6 mechanically interlocked between pairs +1 trigger action latching "Emergency stop" Ø40 mm operator ZA2-BS44	ZB2-BE102 11 13 + ZB2-BE101 12 14	3SP-681
	6 mechanically interlocked between pairs +1 trigger action latching "Emergency stop" Ø40 mm operator ZA2-BS44	ZB2-BE101 13 14 ZB2-BE102 11 12 13	3SP-6713
	6 mechanically interlocked between pairs +1 trigger action latching "Emergency stop" Ø40 mm operator ZA2-BS44	ZB2-BE102 11 13 + ZB2-BE101 12 14 ZB2-BE102 11 12 13	3SP-6813
	6 mechanically interlocked between pairs	ZB2-BE101 13 14	3SP-871
	6 mechanically interlocked between pairs +1 trigger action latching "Emergency stop" Ø40 mm operator ZA2-BS44	ZB2-BE102 11 13 + ZB2-BE101 12 14	3SP-881
	6 mechanically interlocked between pairs +1 trigger action latching "Emergency stop" Ø40 mm operator ZA2-BS44	ZB2-BE101 13 14 ZB2-BE102 11 12 13	3SP-8713
	6 mechanically interlocked between pairs +1 trigger action latching "Emergency stop" Ø40 mm operator ZA2-BS44	ZB2-BE102 11 13 + ZB2-BE101 12 14 ZB2-BE102 11 12 13	3SP-8813

Pushbutton



For control of 2-speed motors

Functions	Number of operators	Contact blocks and scheme per direction for "Emergency stop"	Reference
	2 mechanically interlocked	ZB2-BE101 13 E-- 14	3SP-271
	2 mechanically interlocked +1 trigger action latching "Emergency stop" Ø30 mm operator ZA2-BS44	ZB2-BE102 21 13 + ZB2-BE101 22 14	3SP-281
	2 mechanically interlocked +1 trigger action latching "Emergency stop" Ø30 mm operator ZA2-BS44	ZB2-BE101 13 E-- 14 ZB2-BE102 11 E-- 12	3SP-2713
	2 mechanically interlocked +1 trigger action latching "Emergency stop" Ø30 mm operator ZA2-BS44	ZB2-BE102 11 13 + ZB2-BE101 12 14	3SP-2813
	2 mechanically interlocked	1N/C+NO+NO staggered XEN-G1191 21 13 33 E-- 22 14 34	3SP-291
	2 mechanically interlocked +1 trigger action latching "Emergency stop" Ø30 mm operator ZA2-BS44	1N/C+NO+NO staggered XEN-G1191 21 13 33 E-- 22 14 34 1N/C ZB2-BE102 11 E-- 12	3SP-2913
	4 mechanically interlocked between pairs	1N/C+NO+NO staggered XEN-G1191 21 13 33 E-- 22 14 34	3SP-491
	4 mechanically interlocked between pairs +1 trigger action latching "Emergency stop" Ø40 mm operator ZA2-BS44	1N/C+NO+NO staggered XEN-G1191 21 13 33 E-- 22 14 34 1N/C ZB2-BE102 11 E-- 12	3SP-4913
	4 mechanically interlocked between pairs +1 trigger action latching "Emergency stop" Ø40 mm operator ZA2-BS44	1N/C+NO+NO staggered(a) XEN-G1191 21 13 33 E-- 22 14 34 1N/C102(b) 13 E-- 14	3SP-4923
	6 mechanically interlocked	1N/C+NO+NO staggered XEN-G1191 21 13 33 E-- 22 14 34	3SP-691
	6 mechanically interlocked +1 trigger action latching "Emergency stop" Ø30 mm operator ZA2-BS44	1N/C+NO+NO staggered XEN-G1191 21 13 33 E-- 22 14 34 1N/C ZB2-BE102 11 E-- 12	3SP-6913