



CAPACITOR CONTROLLERS
INDICATORS
SWITCHES
CONTROL STATIONS

PRODUCT CATALOG



JKL-1BF

JKL Reactive Current Series Auto Compensating Controller

1. General

JKL series controller is made with the superior SCM control technology, its sampling physical quantity is reactive current, it resists higher harmonics of power grid by AC sampling and improves power factor by extracting the power parameters of fundamental wave to control the switching capacitor. This controller is in accordance with trade standard JB/T9663-1999, adapting to different conditions of power grid.

2. Specifications

Type	Boring size (mm)	Rated voltage (V)	Signal frequency (Hz)	Control group number	Display	Weight (kg)
JKL-2CF/5CF	113 × 113	AC380/AC220	50/60	1~12	Lightening code	0.9
JKL-2BF/3CF	162 × 102	AC380/AC220	50/60	1~12	Lightening code	0.7
JKL-1BF	142 × 102	AC380/AC220	50/60	1~12	Lightening code	0.9

JKW Reactive Power Series Auto Compensating Controller

1. General

JKW series intelligent low voltage reactive compensating controller (hereinafter referred to as controller) is a device specially used for compensating reactive power in the low voltage distribution system, designed according to such standards as JB/T9663-1999 trade standard and DL/T597-1996 electric power trade standard of the People's Republic of china. Its sampling physical quantity is reactive power. This controller is of novel design, many functions, perfect control, high reliability, seizes the leading place in the same line at home, as a brand-new equipment provided for the distribution automation. When energized, it will display ZYXX that represents programming edition.

2. Specifications

Type	Boring size (mm)	Rated voltage (V)	Signal frequency (Hz)	Control group number	Display	Machine weight (kg)
JKW15	113 × 113	AC380	50/60	1~12	Lightening code	0.9
JKW3B	162 × 102	AC380	50/60	1~12	Lightening code	0.7
JKW1BF	142 × 102	AC380	50/60	1~12	Lightening code	0.9
JKW2C	113 × 113	AC220	50/60	1~12	Lightening code	0.9
JKW18	139 × 139	AC380	50/60	1~16	Lightening code	0.8



JKW18

INDICATOR & PUSHBUTTON SWITCH



G01-07
LAY5(XB2)

PEDAL SWITCH



G30
SFMS

INDICATOR & PUSHBUTTON SWITCH



G08-11
LAY4(XB4)

KNIFE SWITCH



G30
KHK, KS, HK

INDICATOR & PUSHBUTTON SWITCH



G12-15
XB5

KNIFE SWITCH



G31-32
HD, HS

INDICATOR



G16-18
AD22



UNIVERSAL CHANGEOVER SWITCH

G33-37
LW28, LW28GS, CS-68, D11, GLD11, HZ12, EP, LB

INDICATOR & PUSHBUTTON SWITCH



G19-21
AD16



SWITCH AND PHOTOELECTRIC SWITCH

G38
LJ, CJ, SJ, XJ

CONTROL STATION



G22-23
LAY5(XAL)

SWITCH



G24
BS, LAY5, COB, XMR, XD

LIMITING SWITCH



G25-27
XCK, D4D, YC, TZ, HL, MEA, AZ, ME, L XK3, 3SE3

MICRO SWITCH



G28-29
Z-15, LXW5, AZ, D4MC

TOGGLE SWITCH



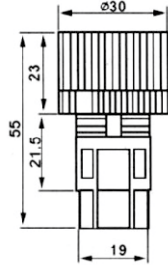
G29
1021, 1121, 1122, 1221, 1322, 1321

Indicator $\phi 22$ IP40

Description	Scheme	Voltage	Color	Type
Direct supply(1)				
For use with incandescent bulb (included) BA9s base fitting		130V 50/60Hz		LAY5-EV133
				LAY5-EV134
				LAY5-EV135
				LAY5-EV136
For use with incandescent bulb (included) BA9s base fitting		$\leq 250V$ 50/60Hz		LAY5-EV161
				LAY5-EV163
				LAY5-EV164
				LAY5-EV165
				LAY5-EV166
			Clear	LAY5-EV167
For use with incandescent bulb (included) E10/13 base fitting		$\leq 250V$ 50/60Hz		LAY5-EV661
				LAY5-EV663
				LAY5-EV664
				LAY5-EV665
				LAY5-EV666
			Clear	LAY5-EV667



LAY5EV164
(XB2-EV164)

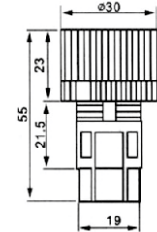


(1)Bulb types for use with direct supply:incandescent bulb 250V, \leq max. power 3W, max. diameter length 28 mm.

For use with neon bulb (included) BA9s base fitting		240V-50/60Hz 220/240V bulb 400V-50/60Hz 380/415V bulb		LAY5-EV443
				LAY5-EV444
				LAY5-EV445
				LAY5-EV446
			Clear	LAY5-EV447
		230V-50/60Hz 130V bulb		LAY5-EV453
				LAY5-EV454
				LAY5-EV455
				LAY5-EV456
			Clear	LAY5-EV457



LAY5EV443
(XB2-EV443)

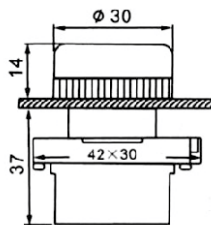


Supply direct through resistor

For use with incandescent bulb (included) BA9s base fitting				LAY5-EV171
				LAY5-EV173
				LAY5-EV174
				LAY5-EV175
				LAY5-EV176
			Clear	LAY5-EV177
BA9s 6.3V/24V bulb supplied	Via integral transformer 1.2VA	220V-240V/6.3V 50/60Hz		LAY5-EV1853
				LAY5-EV1854
				LAY5-EV1855
				LAY5-EV1856
BA9s 6.3V/24V bulb supplied	Via integral transformer 1.2VA	380V-440V/6.3V 50/60Hz		LAY5-EV1873
				LAY5-EV1874
				LAY5-EV1875
				LAY5-EV1876
Direct BA9s		$\leq 380V$		LAY5-EV61
				LAY5-EV63
				LAY5-EV64
				LAY5-EV65
				LAY5-EV66
BA9s, 130V. Direct through resistor BA9s, 130V bulb supplied		220V 250V		LAY5-EV71
				LAY5-EV73
				LAY5-EV74
				LAY5-EV75
				LAY5-EV76



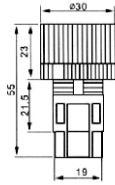
LAY5EV61
(XA2-EV61)



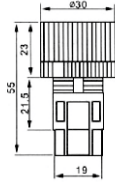
Pushbuttons, spring return



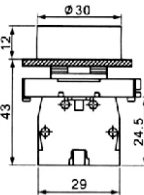
SB7-EA31
(XB7-EA31)



SB7-EA35
(XB7-EA35)



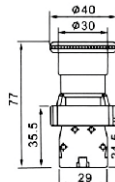
LAY5-EA42
(XB2-EA42)



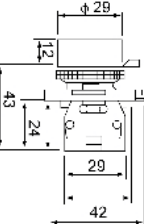
LAY5-EC42
(XB2-EC42)



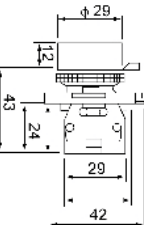
LAY5-ES542
(XB2-ES542)



LAY5-EA3311
(XB2-EA3311)



LAY5-EA4322
(XB2-EA4322)

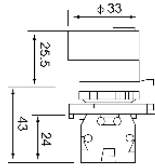


Description	Contact	Scheme	Color	Type	
Pushbutton spring return	N/O		● ●	SB7-EA21 SB7-EA31	
	N/C		●	SB7-EA42	
	N/C+N/O		● ● ●	SB7-EA25 SB7-EA35 SB7-EA45	
Pushbutton latching	N/O		● ●	LAY5-EH121 LAY5-EH131	
	N/C+N/O		● ● ●	LAY5-EH125 LAY5-EH135	
Flush	N/O		● ● ● ●	LAY5-EA21 LAY5-EA31 LAY5-EA51 LAY5-EA61	
	N/C		●	LAY5-EA42	
	Mushroom head φ40mm	N/O		● ● ● ●	LAY5-EC21 LAY5-EC31 LAY5-EC51 LAY5-EC61
		N/C		●	LAY5-EC42
Mushroom head		N/C		φ 30 φ 40 φ 60	LAY5-ES442 LAY5-ES542 LAY5-ES642
		Flush	N/O	●	LAY5-EA3311
	N/O			○ ↑ → ● ↓ ←	LAY5-EA3341 LAY5-EA3351
N/C			● ●	LAY5-EA4322 LAY5-EA4342	

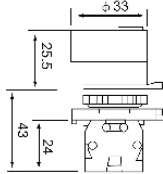
Selector switches



LAY5-ED21
(XA2-ED21)



LAY5-EJ33
(XA2-EJ33)

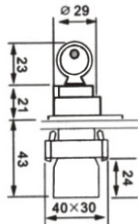


Description	Contact	Scheme	Operator	Type
2 Position stay put	N / C		Standard handle	LAY5 - ED21
			Long handle	LAY5 - EJ21
	N/O+N/C		Standard handle	LAY5 - ED25
			Long handle	LAY5 - EJ25
2 Position 1 spring return from right to left	N / O		Standard handle	LAY5 - ED41
			Long handle	LAY5 - EJ41
	N/O+N/C		Standard handle	LAY5 - ED45
			Long handle	LAY5 - EJ45
3 Position stay put	N/O+N/O		Standard handle	LAY5 - ED33
			Long handle	LAY5 - EJ33
3 Position 2 spring return to centre	N/O+N/O		Standard handle	LAY5 - ED53
			Long handle	LAY5 - EJ53

Key switches (key n ° 455)



LAY5-EG33
(XA2-EG33)



Description	Contact	Scheme	Key removal	Type
2 Position stay put	N / O		LH position	LAY5 - EG21
			LH and RH position	LAY5 - EG41
	N/C+N/O		LH position	LAY5 - EG25
			LH and RH position	LAY5 - EG45
2 Position 1 spring return from right to left	N / O		LH position	LAY5 - EG61
			LH position	LAY5 - EG65
3 Position stay put	N/O+N/O		Centre position	LAY5 - EG33
			LH and RH position	LAY5 - EG53
			All 3 position	LAY5 - EG03
3 Position 2 Spring return to centre position	N/O+N/O		Centre position	LAY5 - EG73

Additional/replacement contact block, screw and captive cable



LAY5-BE101
(ZB2-BE101)



LAY5-EZ101
(ZA2-EZ101)



LAY5-BZ101
(ZB2-BZ101)

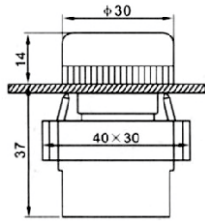
For making up body assemblies with 3,4,5 or maximum of 6 contact blocks or replacing 1st or 2nd contact

N / O	Clamp connection		LAY5 - BE101
N / C			LAY5 - BE102
N / O			LAY5 - EZ/BZ101
N / C			LAY5 - EZ/BZ102
N/O + N/O			LAY5 - EZ/BZ103
N/C + N/C			LAY5 - EZ/BZ104
N/O + N/C			LAY5 - EZ/BZ105

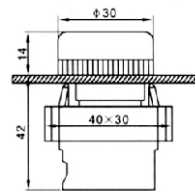
Circular head, screw and captive cable clamp connections Complete units Signalling units $\phi 22$



LAY5-BV63
(XB2-BV63)



LAY5-BV74
(XB2-BV74)

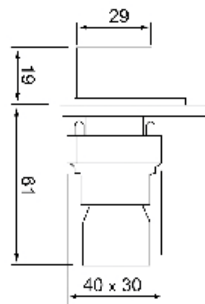


Description	Scheme	Voltage	Color	Type
Direct bulb included		$\leq 380V$	●	LAY5 - BV63
			●	LAY5 - BV64
			●	LAY5 - BV65
Via integral resistor BA9s, 130V bulb supplied		220V 250V	●	LAY5 - BV73
			●	LAY5 - BV74
			●	LAY5 - BV75
Via integral transformer 1.2VA BA9s, 6V bulb supplied		110V/50Hz 110-120V/60Hz	●	LAY5 - BV33
			●	LAY5 - BV34
			●	LAY5 - BV35
		220V/50Hz	●	LAY5 - BV43
			●	LAY5 - BV44
			●	LAY5 - BV45
		240V/50Hz	●	LAY5 - BV943
			●	LAY5 - BV944
			●	LAY5 - BV945
		380V/50Hz	●	LAY5 - BV53
			●	LAY5 - BV54
			●	LAY5 - BV55
415V/50Hz	●	LAY5 - BV933		
	●	LAY5 - BV934		
	●	LAY5 - BV935		

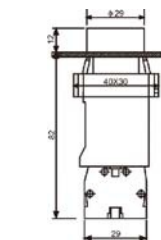
Illuminated flush pushbuttons with 1N/O contact



LAY5-BW3361
(XB2-BW3361)



LAY5-BW3551
(XB2-BW3551)



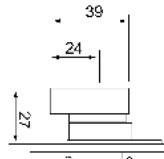
Description	Scheme	Voltage	Color	Type
Direct bulb supplied		$\leq 380V$	●	LAY5 - BW3361
			●	LAY5 - BW3461
			●	LAY5 - BW3561
Direct through resistor BA9s, 130V bulb supplied		220V 250V	●	LAY5 - BW3371
			●	LAY5 - BW3471
			●	LAY5 - BW3571
Via integral transformer 1.2VA BA9s, 6V bulb supplied		110V/50Hz 110-120V/60Hz	●	LAY5 - BW3331
			●	LAY5 - BW3431
			●	LAY5 - BW3531
		220V/50Hz	●	LAY5 - BW3341
			●	LAY5 - BW3441
			●	LAY5 - BW3541
		240V/50Hz	●	LAY5 - BW33941
			●	LAY5 - BW34941
			●	LAY5 - BW35941
		380V/50Hz	●	LAY5 - BW3351
			●	LAY5 - BW3451
			●	LAY5 - BW3551
415V/50Hz	●	LAY5 - BW33931		
	●	XB2 - BW34931		
	●	XB2 - BW35931		

Circular head, with chromium plated metal bezel Complete units with screw and captive cable clamp connections

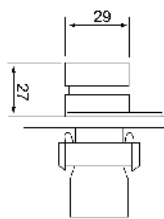
Selector switches



LAY5-BJ21
(XB2-BJ21)



LAY5-BD33
(XB2-BD33)

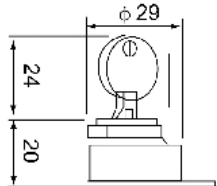


Description	Contact	Scheme	Operator	Type
2 Position stay put	N / O		Standard handle	LAY5- BD21
			Long handle	LAY5- BJ21
2 Position 1 spring return from right to left	N/C+N/O		Standard handle	LAY5- BD25
			Long handle	LAY5- BJ25
2 Position 1 spring return from right to left	N / O		Standard handle	LAY5- BD41
			Long handle	LAY5- BJ41
2 Position 1 spring return from right to left	N/C+N/O		Standard handle	LAY5- BD45
			Long handle	LAY5- BJ45
3 Position stay put	N/O+N/O		Standard handle	LAY5- BD33
			Long handle	LAY5- BJ33
3 Position 2 spring return to centre	N/O+N/O		Standard handle	LAY5- BD53
			Long handle	LAY5- BJ53

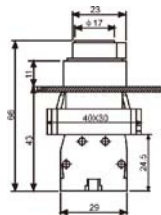
Key switches(key n °445)



LAY5-BG21
(XB2-BG21)



LAY5-BG33
(XB2-BG33)

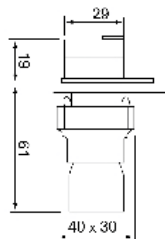


Description	Contact	Scheme	Key removal	Type
2 Position stay put	N / O		LH Position	LAY5- BG21
			LH and RH Position	LAY5- BG41
2 Position 1 spring return from right to left	N/C+N/O		LH Position	LAY5- BG25
			LH and RH Position	LAY5- BG45
2 Position 1 spring return from right to left	N / O		LH Position	LAY5- BG61
			LH Position	LAY5- BG65
3 Position stay put	N/O+N/O		Centre Position	LAY5- BG33
			LH and RH Position	LAY5- BG53
			All 3 Position	LAY5- BG03

Selector switches with pilot light



LAY5-BK2465
(XB2-BK2465)



Description	Contact	Scheme	Type
2 Position stay put	N/C+N/O		LAY5- BK2365
			LAY5- BK2465
			LAY5- BK2565
	N/C+N/O		LAY5- BK2665
			LAY5- BK2765
			LAY5- BK3365
			LAY5- BK3465
			LAY5- BK3565
			LAY5- BK3665
N/C+N/O		LAY5- BK3765	
		LAY5- BK5365	
		LAY5- BK5465	
N/C+N/O		LAY5- BK5565	
		LAY5- BK5665	
		LAY5- BK5765	

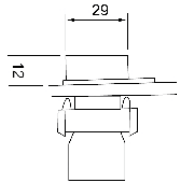
Circular head, with chromium plated metal bezel complete units with screw and captive cable clamp connections

Pushbuttons, spring return

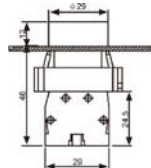
Description	Contact	Scheme	Color	Type
Flush	N/O		<ul style="list-style-type: none"> ○ LAY5 - BA11 ● LAY5 - BA21 ● LAY5 - BA31 ● LAY5 - BA51 ● LAY5 - BA61 	
	N/C		<ul style="list-style-type: none"> ● LAY5 - BA42 	
Protecting	N/O		<ul style="list-style-type: none"> ● LAY5 - BL21 ● LAY5 - BL31 ● LAY5 - BL51 ● LAY5 - BL61 	
	N/C		<ul style="list-style-type: none"> ● LAY5 - BL42 	
Booted	N/O		<ul style="list-style-type: none"> ○ LAY5 - BP11 ● LAY5 - BP21 ● LAY5 - BP31 ● LAY5 - BP51 ● LAY5 - BP61 	
	N/C		<ul style="list-style-type: none"> ● LAY5 - BP42 	
Mushroom head Φ 40mm	N/O		<ul style="list-style-type: none"> ● LAY5 - BC21 ● LAY5 - BC31 ● LAY5 - BC51 ● LAY5 - BC61 	
	N/C		<ul style="list-style-type: none"> ● LAY5 - BC42 	
Mushroom head Φ 60mm	N/O		<ul style="list-style-type: none"> ● Φ 60 LAY5 - BR21 ● Φ 60 LAY5 - BR31 ● Φ 60 LAY5 - BR51 ● Φ 60 LAY5 - BR61 	
	N/C		<ul style="list-style-type: none"> ● Φ 60 LAY5 - BR42 	



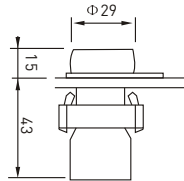
LAY5-BA42
(XB2-BA42)



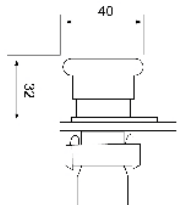
LAY5-BL31
(XB2-BL31)



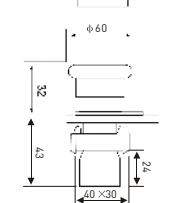
LAY5-BP31
(XB2-BP31)



LAY5-BC42
(XB2-BC42)



LAY5-BR42
(XB2-BR42)

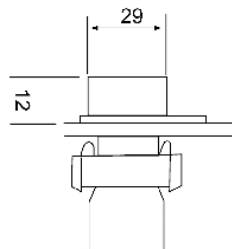


Pushbuttons, spring return with function symbols on button

Description	Contact	Scheme	Color	Type
Flush	N/O		<ul style="list-style-type: none"> ● LAY5 - BA3311 ○ ↑ or → LAY5 - BA3341 ● ↓ or ← LAY5 - BA3351 	
	N/C		<ul style="list-style-type: none"> ● o LAY5 - BA4222 ● stop LAY5 - BA4342 	
Protecting	N/C		<ul style="list-style-type: none"> ● o LAY5 - BL4322 ● stop LAY5 - BL4342 	



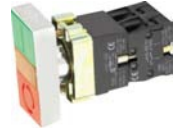
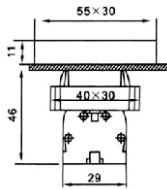
LAY5-BA3341
(XB2-BA3341)



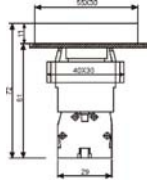
With chromium plated metal bezel complete units with screw and captive cable clamp connections Double-headed pushbuttons, spring return



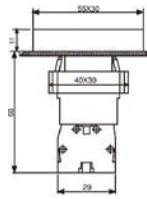
LAY5-BL8325
(XB2-BL8325)



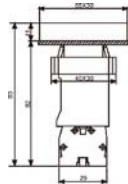
LAY5-BW8365
(XB2-BW8365)



LAY5-BW8375
(XB2-BW8375)



LAY5-BW8345
(XB2-BW8345)

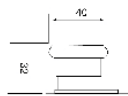


Description	Contact	Scheme	Degree of protection	Type
Without pilot light 1 flush green pushbutton + 1 protecting red pushbutton	N / O		IP40	LAY5 - BL8325
	N/C		IP65	LAY5 - BL9325
			IP40	LAY5 - BL8425
			IP65	LAY5 - BL9425
With pilot light 1 flush green pushbutton + 1 pilot light with Yellow lens direct supply ≤380V + 1 protecting red pushbutton	N / O		IP40	LAY5 - BW8365
	N/C		IP40	LAY5 - BW8465
1 flush green pushbutton + 1 pilot light with Yellow lens 220/250V supply direct through resistor + BA 9s, 130V bulb included + 1 protecting red pushbutton	N / O		IP40	LAY5 - BW8375
	N/C		IP40	LAY5 - BW8475
1 flush green pushbutton + 1 pilot light with Yellow lens 1.2VA-220V direct supply via integral transformer + BA 9s 6V, bulb included + 1 protecting red pushbutton	N / O		IP40	LAY5 - BW8345
	N/C		IP40	LAY5 - BW8445

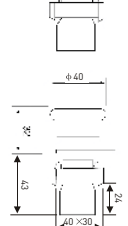
Latching mushroom head “emergency stop” pushbutton



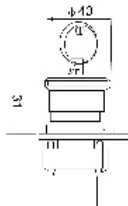
LAY5-BT42
(XB2-BT42)



LAY5-BS542
(XB2-BS542)



LAY5-BS142
(XB2-BS142)



Description	Color	Contact	Scheme	Type
Push-pull Red			ϕ 40	LAY5 - BT42
			ϕ 60	LAY5 - BX42
Turn to release Red		N / C	ϕ 30	LAY5 - BS442
			ϕ 40	LAY5 - BS542
			ϕ 60	LAY5 - BS642
Key release (key n° 455) Red		N / C	ϕ 30	LAY5 - BS742
			ϕ 40	LAY5 - BS142
			ϕ 60	LAY5 - BS242

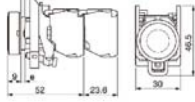
Latching mushroom head pushbutton with “Trigger action”

Turn to release + Key release (Key n° 445) Red	N / O		ϕ 40	LAY5 - BS8445
	N/C			LAY5 - BS9445

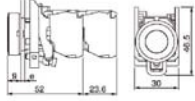
Non-illuminated pushbuttons, momentary (screw clamp terminal connections)



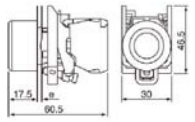
LAY4-BA42
(XB4-BA42)



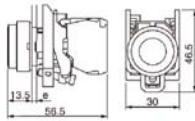
LAY4-BA4322
(XB4-BA4322)



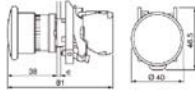
LAY4-BP42
(XB4-BP42)



LAY4-BL42
(XB4-BL42)



LAY4-BC42
(XB4-BC42)

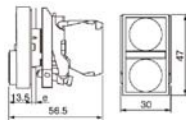


Description	Contact		Scheme	Color	Type
	N/O	N/C			
Flush	1		N/O	● B	LAY4-BA21
	1		N/O	● G	LAY4-BA31
	1		N/O	● Y	LAY4-BA51
	1		N/O	● S	LAY4-BA61
	1		N/C	● R	LAY4-BA42
	1		N/O+N/C	● Y	LAY4-BA55
	2		N/O	○ W	LAY4-BA13
Flush logo	2		N/O	● B	LAY4-BA24
	1		N/O	● G	LAY4-BA3321
	1		N/O	● G	LAY4-BA3361
	1		N/O	⊕ W	LAY4-BA3341
	1		N/C	● B	LAY4-BA3351
Flush with clear silica gel (color of pusher unobscured)	1		N/C	● R	LAY4-BA4322
	1		N/O	● B	LAY4-BP21
	1		N/O	● G	LAY4-BP31
	1		N/O	● Y	LAY4-BP51
	1		N/O	● S	LAY4-BP61
	1		N/C	● R	LAY4-BP42
Extended	1 1		N/O+N/C	● Y	LAY4-BP55
	2		N/O	○ W	LAY4-BP13
	2		N/C+N/C	● B	LAY4-BP24
	1		N/O	● B	LAY4-BL21
	1		N/O	● G	LAY4-BL31
	1		N/O	● Y	LAY4-BL51
	1		N/O	● S	LAY4-BL61
	1 1		N/C	● R	LAY4-BL42
Mushroom φ40mm	1 1		N/O+N/C	● Y	LAY4-BL55
	2		N/O	○ W	LAY4-BL13
	2		N/C+N/C	● B	LAY4-BL24
	1		N/O	● B	LAY4-BC21
	1		N/O	● G	LAY4-BC31
			● R	LAY4-BC42	

Two button pushbuttons, momentary (screw clamp terminal connections)



LAY4-BL845
(XB4-BL845)



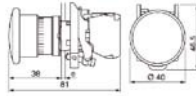
Description	Contact		Protection class	Color	Type
	N/O	N/C			
One flush green push (marked "I") One extended red push (marked "O")	1	1	IP40	⊕ ⊖	LAY4-BL845
	1	1	IP66	⊕ ⊖	LAY4-BL945

Non-illuminated emergency stop mushroom head pushbuttons (Red)

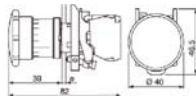
Description	Contact		Diameter	Type
	N/O	N/C		
Push-pull	1		φ 40	LAY4-BT42
Trigger action push-pull	1	1	φ 40	LAY4-BT845
Turn to release	1		φ 40	LAY4-BS542
Trigger action turn to release	1		φ 40	LAY4-BS8445
Key release (n° 455)	1		φ 40	LAY4-BS142
Trigger action key release (n° 455)	1	1	φ 40	LAY4-BS9445



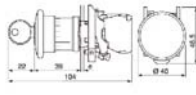
LAY4-BT42
(XB4-BT42)



LAY4-BS542
(XB4-BS542)



LAY4-BS142
(XB4-BS142)

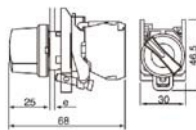


Non-illuminated selector switches (screw clamp terminal connections) standard handle (black)

Description	Contact		Locality	Type
	N/O	N/C		
2positon	1		∨	LAY4-BD21
	1	1		LAY4-BD25
	1		◊	LAY4-BD41
	1	1		LAY4-BD45
3positon	2		∨	LAY4-BD33
	2			◊



LAY4-BD25
(XB4-BD25)

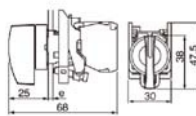


Long handle (black)

Description	Contact		Locality	Reference
	N/O	N/C		
2positon	1		∨	LAY4-BJ21
	1	1		LAY4-BJ25
	1		◊	LAY4-BJ41
	1	1		LAY4-BJ45
3positon	2		∨	LAY4-BJ33
	2			◊



LAY4-BJ21
(XB4-BJ21)

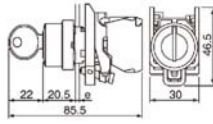


Explain: ∨ ∨ Lock up ◊:1spring return from night to left
◊:2 spring return to centre

Non-illuminated key switches (screw clamp terminal connections) key lock switches



LAY4-BG25
(XB4-BG25)



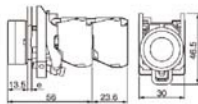
Description	Contact		Locality	Type
	N/O	N/C		
2 position	1			LAY4-BG21
	1	1		LAY4-BG25
	1			LAY4-BG41
	1	1		LAY4-BG45
	1			LAY4-BG61
	1	1		LAY4-BG65
3 position	2			LAY4-BG33
	2			LAY4-BG53
	2			LAY4-BG03

Explain: Lock up :1spring return from right to left
 :Key withdrawal position(s)

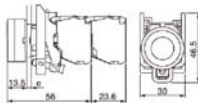
Illuminated pushbuttons, momentary, flush (screw clamp terminal connections)



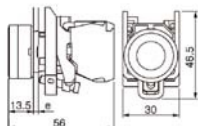
LAY4-BW35B5
(XB4-BW35B5)



LAY4-BW33G5
(XB4-BW33G5)



LAY4-BW36M5
(XB4-BW36M5)

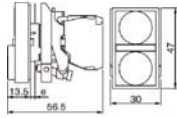


Description	Contact		Color	Type
	N/O	N/C		
Protected LED 24VAC/VDC	1	1	○ W	LAY4-BW31B5
	1	1	● G	LAY4-BW33B5
	1	1	● R	LAY4-BW34B5
	1	1	● Y	LAY4-BW35B5
	1	1	● S	LAY4-BW36B5
Protected LED 110~120 VAC	1	1	○ W	LAY4-BW31G5
	1	1	● G	LAY4-BW33G5
	1	1	● R	LAY4-BW34G5
	1	1	● Y	LAY4-BW35G5
	1	1	● S	LAY4-BW36G5
Protected LED 110~120 VAC	1	1	○ W	LAY4-BW31M5
	1	1	● G	LAY4-BW33M5
	1	1	● R	LAY4-BW34M5
	1	1	● Y	LAY4-BW35M5
	1	1	● S	LAY4-BW36M5

Double-headed pushbuttons, spring return (screw clamp terminal connections)



LAY4-BW84B5
(XB4-BW84B5)

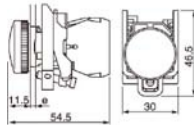


Description	Scheme Power voltage	Contact		Protection class	Type
		N/O	N/C		
With pilot light 1 flush green 2 pilot light with yellow lens 2 extended red	24	□	□	IP40	LAY4-BW84B5
	~48...120	□	□	IP40	LAY4-BW84G5
	~230...240	□	□	IP40	LAY4-BW84M5

Pilot light for BA9s bulb (screw clamp terminal connections)



LAY4-BV63
(XB4-BV63)



Description	Color	Voltage	Scheme	Type
Direct bulb included Ba9s base fitting	○ W	130v 220/240V 50/60Hz	X1	LAY4-BV61
	● G			LAY4-BV63
	● R		⊗	LAY4-BV64
	● Y			LAY4-BV65
	● S		X2	LAY4-BV66
Through transformer 1.2VABa9s, 6V bulb supplied	○ W	~220-240V 50Hz	X1	LAY4-DV41
	● G			LAY4-BV43
	● R		⊗	LAY4-BV44
	● Y			LAY4-DV45
	● S		X2	LAY4-DV46

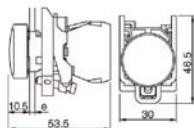
Pilot light with protected LED (screw clamp terminal connections)



LAY4-BVB6
(XB4-BVB6)



LAY4-BVG4
(XB4-BVG4)



Voltage	Color	Type
24VAC/VDC	○ W	LAY4-BVB1
	● G	LAY4-BVB3
	● R	LAY4-BVB4
	● Y	LAY4-BVB5
	● S	LAY4-BVB6
	○ W	LAY4-BVG1
110~130VAC	● G	LAY4-BVG3
	● R	LAY4-BVG4
	● Y	LAY4-BVG5
220~240VAC	● S	LAY4-BVG5
	○ W	LAY4-BVM1
	● G	LAY4-BVM3
	● R	LAY4-BVM4
	● Y	LAY4-BVM5
	● S	LAY4-BVM6

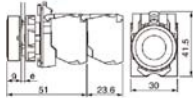
Non-illuminated pushbuttons, momentary (screw clamp terminal connections)



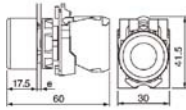
XB5-AA51



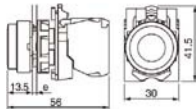
XB5-AA4322



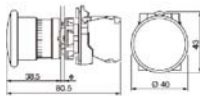
XB5-AP51



XB5-AL51



XB5-AC31

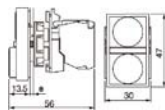


Description	Contact		Color	Type
	N/O	N/C		
Flush		1	● B	XB5-AA21
	1		● G	XB5-AA31
	1		● Y	XB5-AA51
	1		● S	XB5-AA61
		1	● R	XB5-AA42
	1	1	○ W	XB5-AA11
Flush Logo		1	⊕ G	XB5-AA3311
		1	⊖ G	XB5-AA3361
	1		⊕ W	XB5-AA3341
	1		⊖ B	XB5-AA3351
		1	● R	XB5-AA4322
		1	● R	XB5-AA4342
Flush with clear silica gel		1	● B	XB5-AP21
		1	● G	XB5-AP31
		1	● Y	XB5-AP51
		1	● S	XB5-AP61
		1	● R	XB5-AP42
	1	1	● Y	XB5-AP11
Extended	2		○ W	XB5-AP13
		2	● B	XB5-AP24
	1		● B	XB5-AL21
	1		● G	XB5-AL31
	1		● Y	XB5-AL51
	1		● S	XB5-AL61
Mushroom Φ40mm	1	1	● R	XB5-AL42
	1	1	● Y	XB5-AL55
	2		○ W	XB5-AL13
		2	● B	XB5-AL24
	1		● B	XB5-AC21
	1		● G	XB5-AC31
	1	● R	XB5-AC42	

Two button pushbuttons, momentary (screw clamp terminal connections)



XB5-AL845

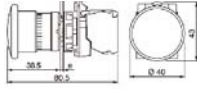


Description	Contact		Scheme	Degree of protection	Type
	N/O	N/C			
One flush green push (marked "I") One extended red push (marked "O")	1	1	⊕ ⊖	IP40	XB5-AL845
	1	1	⊕ ⊖	IP66	XB5-AL945

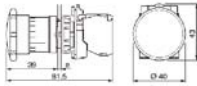
Non-illuminated emergency stop mushroom head pushbuttons (red)



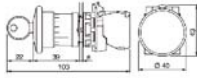
XB5-AT42



XB5-AS5/42



XB5-AS142

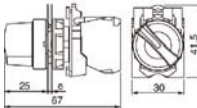


Description	Contact		Diameter	Type
	N/O	N/C		
Push-pull	1		φ 40	XB5-AT42
Trigger action push-pull	1	1	φ 40	XB5-AT845
	1	1	φ 60	XB5-AX42
Turn to release	1		φ 30	XB5-AS442
	1		φ 40	XB5-AS542
	1		φ 60	XB5-AS642
Trigger action turn to release	1	1	φ 40	XB5-AS8445
Key release (n° 455)	1		φ 30	XB5-AS742
	1		φ 40	XB5-AS142
	1		φ 60	XB5-AS242
Trigger action key release (n° 455)	1	1	φ 40	XB5-AS9445

Non-illuminated selector switches (screw clamp terminal connections) standard handle (black)



XB5-AD21

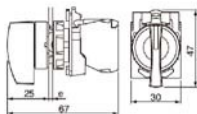


Description	Contact		Locality	Type
	N/O	N/C		
2positon	1		∨	XB5-AD21
	1	1		XB5-AD25
	1		∩	XB5-AD41
	1	1		XB5-AD45
3positon	2		∨	XB5-AD33
	2		∩	XB5-AD53
	2		∩	XB5-AD73
	2		∩	XB5-AD83

Long handle (black)



XB5-AJ21



Description	Contact		Locality	Type
	N/O	N/C		
2positon	1		∨	XB5-AJ21
	1	1		XB5-AJ25
	1		∩	XB5-AJ41
	1	1		XB5-AJ45
3positon	2		∨	XB5-AJ33
	2		∩	XB5-AJ53
	2		∩	XB5-AJ73
	2		∩	XB5-AJ83

Explain: ∨ ∩ Lock up ∩ :1spring return from nightto left
 ∩ :2 spring return tocentre

Non-illuminated key switches (screw clamp terminal connections)

Description	Contact		Locality	Type
	N/O	N/C		
2position	1			XB5-AG21
	1	1		DB5-AG25
	1			XB5-AG41
	1	1		XB5-AG45
3position	1			XB5-AG61
	1	1		XB5-AG65
	2			XB5-AG33
	2			XB5-AG53
	2			XB5-AG03
	2			XB5-AG73
	2			XB5-AG83

Explain: Lock up :1spring return from rightto left
 :Key withdrawal position(s)

Illuminated pushbuttons, momentary, flush (screw clamp terminal connections)

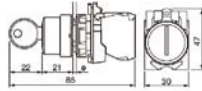
Description	Contact		Color	Type
	N/O	N/C		
Protected LED 24VAC/VDC	1	1	○ W	XB5-AW31B5
	1	1	● G	XB5-AW33B5
	1	1	● R	XB5-AW34B5
	1	1	● Y	XB5-AW35B5
	1		● S	XB5-AW36B5
Protected LED 110~120 VAC	1	1	○ W	XB5-AW31G5
	1	1	● G	XB5-AW33G5
	1	1	● R	XB5-AW34G5
	1	1	● Y	XB5-AW35G5
	1	1	● S	XB5-AW36G5
Protected LED 220~240 VAC/VDC	1	1	○ W	XB5-AW31M5
	1	1	● G	XB5-AW33M5
	1	1	● R	XB5-AW34M5
	1	1	● Y	XB5-AW35M5
	1		● S	XB5-AW36M5

Double-headed push buttons, spring return (screw clamp terminal connections)

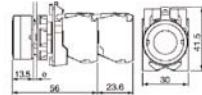
Description	Scheme Power voltage	Contact		Protection class	Type
		N/O	N/C		
With pilot light	24			IP40	XB5-BW84B5
1 flush green	~48...120			IP40	XB5-BW84G5
2 pilot light with yellow lens	~230...240			IP40	XB5-BW84M5
2 extended red					



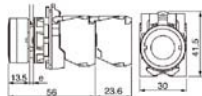
XB5-AG21



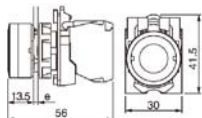
XB5-AW33B5



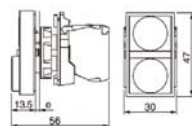
XB5-AW34G5



XB5-AW36M5



XB5-AW84B5



Pilot light for BA9s bulb (screw clamp terminal connections)

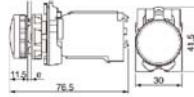
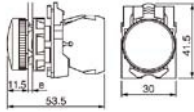
Description	Color	Voltage	Scheme	Type
Direct supply, for BA 9s(LED, neon U ≤ 250V , 2.4W bulb (bulb not included))	○ W	≤ 250VAC/VDC	X1 ⊗ X2	XB5-BV61
	● G			XB5-BV63
	● R			XB5-BV64
	● Y			XB5-BV65
Transformer type with 1.2VA 6V BA9s incandescent bulb included	○ W	110~120V 50/60Hz	X1 ⊗ X2	XB5-DV41
	● G			XB5-BV33
	● R			XB5-BV34
	● Y			XB5-DV35

Pilot light with protected LED (screw clamp terminal connections)

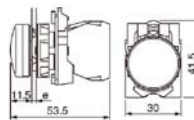
Description	Color	Type
24VAC/VDC	○ W	XB5-AVB1
	● G	XB5-AVB3
	● R	XB5-AVB4
	● Y	XB5-AVB5
	● S	XB5-AVB6
110~130VAC	○ W	XB5-AVG1
	● G	XB5-AVG3
	● R	XB5-AVG4
	● Y	XB5-AVG5
	● S	XB5-AVG6
220~240VAC	○ W	XB5-AVM1
	● G	XB5-AVM3
	● R	XB5-AVM4
	● Y	XB5-AVM5
	● S	XB5-AVM6



XB5-AVB6



XB5-AVM4

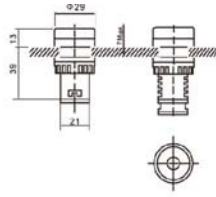


AD22 Indicator

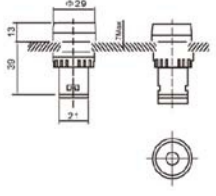
Description	Voltage	Color	Type
Protected LED Indicator	21-DC.AC6V 22-DC.AC12V 23-DC.AC24V 24-DC.AC36V 25-DC.AC48V 26-DC.AC110V 27-DC.AC127V 31-AC220V 32-AC380V	● Red ● Yellow	AD22-22DS
Protected LED Indicator	21-DC.AC6V 22-DC.AC12V 23-DC.AC24V 24-DC.AC36V 25-DC.AC48V 26-DC.AC110V 27-DC.AC127V 31-AC220V 32-AC380V	● Green	AD22-22DS
Protected LED Indicator	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	● Green(PG) ● Blue(PB) ○ White(PW)	AD22-22DS
Protected LED Indicator	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	● Red ● Green ● Yellow ● Blue ○ White	AD22-22BS
Protected LED Indicator	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	● Red ● Green ● Yellow ● Blue ○ White	AD22-22CS
Protected LED Indicator	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	● Red ● Green ● Yellow ● Blue ○ White	AD22-22ES
Protected LED Indicator	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	● Red ● Green ● Yellow ● Blue ○ White	AD22-22HS



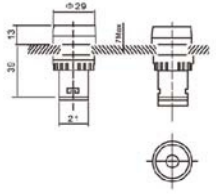
AD22-22DS/R



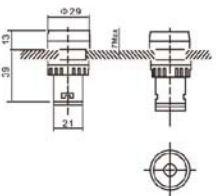
AD22-22DS/G



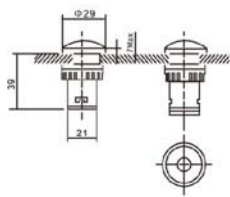
AD22-22DS/B



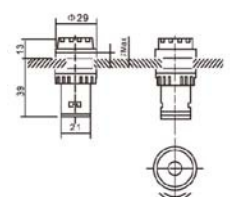
AD22-22BS/G



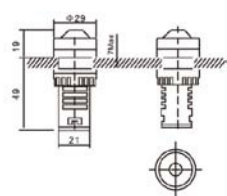
AD22-22CS/R



AD22-22ES/R



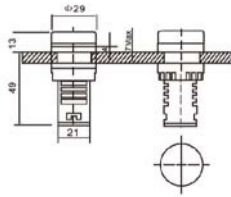
AD22-22HS/R



AD22 Indicator



AD22-22D/R



Protected
LED
Indicator

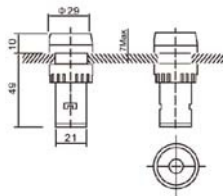
21-DC.AC6V
22-DC.AC12V
23-DC.AC24V
24-DC.AC36V
25-DC.AC48V
26-DC.AC110V
27-DC.AC127V
28-DC.AC220V
31-AC220V
32-AC380V

- Red
- Green
- Yellow
- Blue
- White

AD22-22D



AD22-22B/G



Protected
LED
Indicator

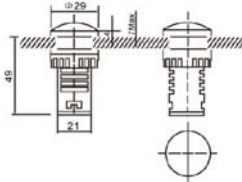
21-DC.AC6V
22-DC.AC12V
23-DC.AC24V
24-DC.AC36V
25-DC.AC48V
26-DC.AC110V
27-DC.AC127V
28-DC.AC220V
31-AC220V
32-AC380V

- Red
- Green
- Yellow
- Blue
- White

AD22-22B



AD22-22C/Y



Protected
LED
Indicator

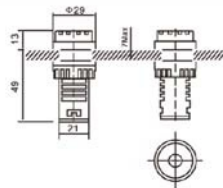
21-DC.AC6V
22-DC.AC12V
23-DC.AC24V
24-DC.AC36V
25-DC.AC48V
26-DC.AC110V
27-DC.AC127V
28-DC.AC220V
31-AC220V
32-AC380V

- Red
- Green
- Yellow
- Blue
- White

AD22-22C



AD22-22E/R



Protected
LED
Indicator

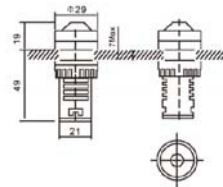
21-DC.AC6V
22-DC.AC12V
23-DC.AC24V
24-DC.AC36V
25-DC.AC48V
26-DC.AC110V
27-DC.AC127V
28-DC.AC220V
31-AC220V
32-AC380V

- Red
- Green
- Yellow
- Blue
- White

AD22-22E



AD22-22H/G



Protected
LED
Indicator

21-DC.AC6V
22-DC.AC12V
23-DC.AC24V
24-DC.AC36V
25-DC.AC48V
26-DC.AC110V
27-DC.AC127V
28-DC.AC220V
31-AC220V
32-AC380V

- Red
- Green
- Yellow
- Blue
- White

AD22-22H



φ 7.5 PL-101A



φ 10 PL-101



φ 10 XDN1



φ 10 MDX-11A



φ 12.5 MDX-14A



φ 13.5 PL



φ 10 PL-108-C



φ 10 PL-108-CB



φ 15 PL-1604PL-15-2



φ 15 PL-1602PL-15-4



φ 22 AD-11-22/25 8GZ



φ 16 AD16-16C



φ 16 AD17-16C



φ 16 AD17-16



φ 22 ENA-22




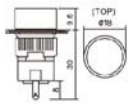
φ AD22-30DS/R


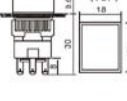



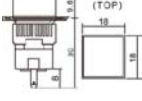
φ AD22-30DS/G


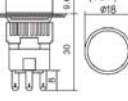



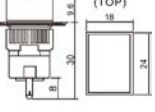
φ AD22-30DS/Y


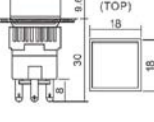
Description	Type
 <p>Installed light circular</p> <p>LED 24V/AC/DC Neon 220V/AC</p> <p>● ● ● ● ●</p>	<p>AD16-AXD</p> <p>X1 X2</p> 


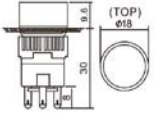
Description	Type
 <p>Pushbutton single knife</p> <p>LED 24V/AC/DC Neon 220V/AC</p> <p>● ● ● ● ●</p>	<p>AD 16-11CFD AD 16-11CFDL</p> <p>NO+NC X1 NO NC X2</p> 


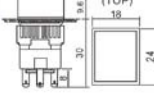
Description	Type
 <p>Installed light square</p> <p>LED 24V/AC/DC Neon 220V/AC</p> <p>● ● ● ● ●</p>	<p>AD16-FXD</p> <p>X1 X2</p> 


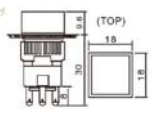
Description	Type
 <p>Installed light circular double knife</p> <p>LED 24V/AC/DC Neon 220V/AC</p> <p>● ● ● ● ●</p>	<p>AD 16-22AD AD 16-ADL</p> <p>2NO+2NC NO NC X1 NO NC X2 C</p> 


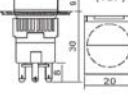
Description	Type
 <p>Installed light rectangular</p> <p>LED 24V/AC/DC Neon 220V/AC</p> <p>● ● ● ● ●</p>	<p>AD16-CFXD</p> <p>X1 X2</p> 

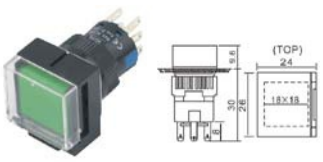
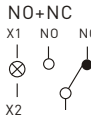
Description	Type
 <p>Installed light square double knife</p> <p>LED 24V/AC/DC Neon 220V/AC</p> <p>● ● ● ● ●</p>	<p>AD 16-22FXD AD 16-22FDL</p> <p>2NO+2NC NO NC X1 NO NC X2 C</p> 

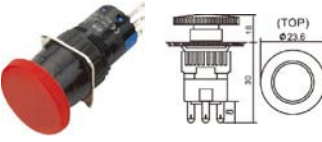
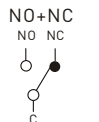
Description	Type
 <p>Pushbutton single knife</p> <p>LED 24V/AC/DC Neon 220V/AC</p> <p>● ● ● ● ●</p>	<p>AD16-11AD AD16-11ADL</p> <p>NO+NC X1 NO NC X2</p> 


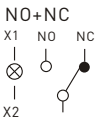
Description	Type
 <p>Installed light rectangular double knife</p> <p>LED 24V/AC/DC Neon 220V/AC</p> <p>● ● ● ● ●</p>	<p>AD 16-22CFD AD 16-22CFDL</p> <p>2NO+2NC NO NC X1 NO NC X2 C</p> 

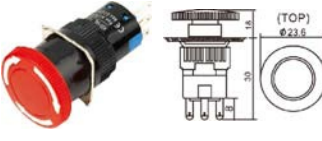
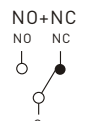
Description	Type
 <p>Pushbutton single knife</p> <p>LED 24V/AC/DC Neon 220V/AC</p> <p>● ● ● ● ●</p>	<p>AD16-11FD AD16-11FDL</p> <p>NO+NC X1 NO NC X2</p> 



Description	Type
 <p>Installed light circular single knife</p> <p>LED 24V/AC/DC Neon 220V/AC with protection cover IP40</p> <p>● ● ● ● ●</p>	<p>AD 16-11ADFG AD 16-11ADFGL</p> <p>NO+NC X1 NO NC X2</p> 

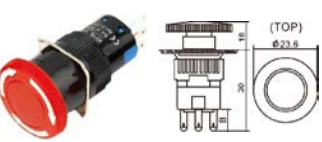
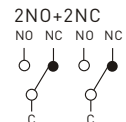
Description	Type
 <p>Installed light square single knife LED 24V/AC/DC Neon 220V/AC with protection cover IP40</p>	<p>AD16-11FDFG AD16-11FDFGL</p>  <p>● ● ● ● ●</p>



Description	Type
 <p>Mushroom button single knife circular</p>	<p>AD16-11M AD16-11ML AD16-22M AD16-22ML</p>  <p>● ● ● ● ●</p>

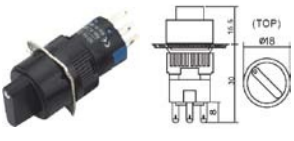

Description	Type
 <p>Installed light square single knife LED 24V/AC/DC Neon 220V/AC with grade IP40</p>	<p>AD16-11FDFG AD16-11FDFGL</p>  <p>● ● ● ● ●</p>


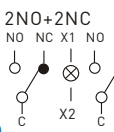
Description	Type
 <p>Emergency push button push locking in clockwise direction, move reset single knife</p>	<p>AD16-11ZS</p>  <p>● ● ● ● ●</p>

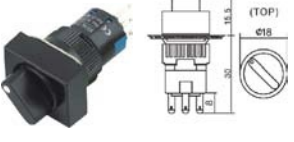

Description	Type
 <p>Indicator Buzzer</p>	<p>AD16-MF</p>  <p>● ●</p>

Description	Type
 <p>Emergency push button push locking in clockwise direction, move reset single knife</p>	<p>AD16-22ZS</p>  <p>● ● ● ● ●</p>

Description	Type
 <p>Installed light Mushroom button single knife LED 24V/AC/DC Neon 220V/AC</p>	<p>AD16-11MD AD16-11MDL</p>  <p>● ● ● ● ●</p>

Description	Type
 <p>90° 2 Position</p>	<p>AD 16-11XA-2P AD 16-11XA-3P</p>  <p>●</p>

Description	Type
 <p>Installed light Mushroom button single knife LED 24V/AC/DC Neon 220V/AC double knife</p>	<p>AD16-22MD AD16-22MDL</p>  <p>● ● ● ● ●</p>

Description	Type
 <p>90° 2 Position</p>	<p>AD 16-11XA-2P AD 16-11XA-3P</p>  <p>●</p>

Description	Type
90° 2 Position	AD16-11YA-2P AD16-11YA-3P

AD16-11YA

○ Null

Description	Type
45° 3 Position	AD16-22YCF-2P AD16-22YCF-3P

AD16-22YCF

○ Null

Description	Type
90° 2 Position	AD16-11YF-2P AD16-11YF-3P

AD16-11YF

○ Null

Description	Type
90° 2 Position	AD16-11XCF-2P AD16-11XCF-3P

AD16-11XCF

●

Description	Type
90° 2 Position	AD16-11YCF-2P AD16-11YCF-3P

AD16-11CF

○ Null

Description	Type
45° 3 Position	AD16-22XA-2P AD16-22XA-3P

AD16-22XA

●

Description	Type
45° 3 Position	AD16-22YA-2P AD16-22YA-3P

AD16-22YA

○ Null

Description	Type
45° 3 Position	AD16-22XF-2P AD16-22XF-3P

AD16-22XF

●

Description	Type
45° 3 Position	AD16-22YF-2P AD16-22YF-3P

AD16-22YF

○ Null

Description	Type
45° 3 Position	AD16-22XCF-2P AD16-22XCF-3P

AD16-22XCF

●

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



LAY5-B101H29
(XAL-B101H29)



LAY5-B112
(XAL-B112)



LAY5-B164H29
(XAL-B164H29)

Description	Scheme	Marking on legend	Marking on button	Type	Weight kg
1 green flush pushbutton spring return	$\begin{array}{c} \text{N/O} \\ + \\ \left[\begin{array}{l} 13 \\ \text{---} \\ 14 \end{array} \right. \\ \text{N/C} \end{array}$	Start	—	LAY5-B101H29	0.120
		—	I	LAY5-B102	0.120
		—	Start	LAY5-B103	0.120
1 red flush pushbutton spring return	$\begin{array}{c} \text{N/O} \\ \left[\begin{array}{l} 21 \\ \text{---} \\ 22 \end{array} \right. \end{array}$	Stop	—	LAY5-B111H29	0.120
		—	Stop	LAY5-B114	0.120
		—	O	LAY5-B112	0.120
1 red mushroom head pushbutton, ϕ 40 mm spring return	N/C	Emergency stop	—	LAY5-B164H29	0.120
1 red flush pushbutton spring return	$\begin{array}{c} \text{N/C} \\ \left[\begin{array}{l} 21 \\ \text{---} \\ 22 \end{array} \right. \end{array}$	—	Stop	LAY5-B116	0.120

Emergency stop functions (yellow lid with dark grey base)



LAY5-J174
(XAL-J174)



LAY5-J184
(XAL-J184)



LAY5-J178
(XAL-J178)

Description	Scheme	Marking on legend	Marking on button	Type	Weight kg
1 red mushroom head pushbutton, ϕ 40 mm, latching Turn to release	$\begin{array}{c} \text{N/C} \\ \left[\begin{array}{l} 21 \\ \text{---} \\ 22 \end{array} \right. \end{array}$	Unmarked		LAY5-J174	0.14
1 red mushroom head pushbutton, ϕ 40 mm, latching Key release(key n ° 445)	$\begin{array}{c} \text{N/C} \\ \left[\begin{array}{l} 21 \\ \text{---} \\ 22 \end{array} \right. \end{array}$	Unmarked		LAY5-J184	0.17




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

Description	Scheme	Marking on legend	Marking on button	Type	Weight kg
1 red mushroom head pushbutton, ϕ 40 mm, latching Turn to release	$\left[\begin{array}{l} 21 \\ \text{---} \\ 22 \end{array} \right.$	Unmarked		LAY5-J178	0.14
1 red mushroom head pushbutton, ϕ 40 mm, latching Key release(key n ° 445)	$\left[\begin{array}{l} 21 \\ \text{---} \\ 22 \end{array} \right.$	Unmarked		LAY5-J188	0.17



Other versions

Use adaptable sub-assemblies:
empty enclosures, contact blocks, signalling units, operators, legend plates

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

Description	Scheme	Marking on legend	Marking on button	Type	Weight kg
 2 spring return pushbutton 1 flush green 1 flush red LAY5-B211H29 (XAL-B211H29)	N/O $\left[\begin{array}{l} 13 \\ 14 \end{array} \right]$ + N/C $\left[\begin{array}{l} 21 \\ 22 \end{array} \right]$	Start Stop	— —	LAY5-B211H29	0.165
		— —	I O	LAY5-B213	0.165
		— —	Start Stop	LAY5-B215	0.165
 1 selector switch 2 position stay put standard black handle LAY5-B132H29 (XAL-B132H29),	N/O $\left[\begin{array}{l} 13 \\ 14 \end{array} \right]$	Start Stop	— —	LAY5-B132H29	0.125
		O I	— —	LAY5-B314	0.125
 1 selector switch key operated(key n° 455) 2 position stay put key withdrawal from LH position LAY5-B142H29 (XAL-B142H29)	N/C $\left[\begin{array}{l} 13 \\ 14 \end{array} \right]$	Start Stop	— —	LAY5-B142H29	0.150
		O I	— —	LAY5-B144	0.150

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

Description	Scheme	Marking on legend	Marking on button	Type	Weight kg
 1 red pilot light Direct supply $\leq 130V$ Bulb not included(1) + 2 spring return pushbuttons 1 flush green 1 flush red LAY5-B361H29 (XAL-B361H29)	N/O $\left[\begin{array}{l} x1 \\ x2 \end{array} \right]$ + N/C $\left[\begin{array}{l} 13 \\ 14 \\ 21 \\ 22 \end{array} \right]$	Start Stop	— —	LAY5-B361H29	0.200
		— —	I O	LAY5-B363	0.200
		— —	Start Stop	LAY5-B366	0.200
 1 red pilot light,230V Supply direct through resistor Bulb with BA 9s base fitting-130V (included) + 2 spring return pushbuttons 1 flush green 1 flush red LAY5-B373 (XAL-B373)	N/O $\left[\begin{array}{l} x1 \\ x2 \end{array} \right]$ + N/C $\left[\begin{array}{l} 13 \\ 14 \\ 21 \\ 22 \end{array} \right]$	Start Stop	— —	LAY5-B371H29	0.205
		— —	I O	LAY5-B373	0.205
		— —	Start Stop	LAY5-B376	0.205

(1) Bulb types for use with direct supply:
 -incandescent bulb, BA 9s base fitting: $U \leq 130V$, maximum power 2.6W, maximum length: 28 mm,
 -neon bulb, BA 9s base fitting: $110V \leq U \leq 380V$.
 Please consult our local representatives or agents.

Other versions Use adaptable sub-assemblies:
 empty enclosures, contact blocks, signalling units, operators, legend plates



LAY5-BOX1



LAY5-BOX2



LAY5-BOX3



LAY5-BOX4



LAY5-BOX5



BS216



BS230



BS211



COB-61



COB-62



COB-63



COB-64



COB-61A



COB-62A



COB-63A

The word lords make switch



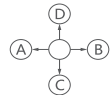
LAY5-B2-PA..

Locked	2	-	LAY5-B2-PA12	0.0467
Spring return	2	-	LAY5-B2-PA22	0.0467



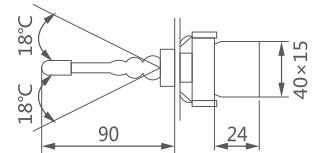
LAY5-B2-PA..

Locked	2	2	LAY5-B2-PA14	0.0525
Spring return	2	2	LAY5-B2-PA24	0.0525



LAY5-C402

	4	-	LAY5-C402	0.193
	4	-	LAY5-C4022	0.193
	2	-	LAY5-C201	0.190
	2	-	LAY5-C2011	0.190



XMR-301



XMR-302



XMR-303



XMR-304



XMR-305



XMR-306



XD-1



XD-2



XD-3



XD-4

1. General

Limiting switches are ideal electrical and other industries. They have complete specifications and various types, compact structure, nice appearance, excellent performance, flexible and reliable action, easy installation, operation, maintenance and adjustment.

The switches are applicable to AC control circuits of 40 to 60Hz, with a voltage up to 500V or DC control circuits with a voltage up to 660V, and a current up to 10A to convert a mechanical signal into an electrical signal for the purpose of controlling mechanical movement or performing sequential control.



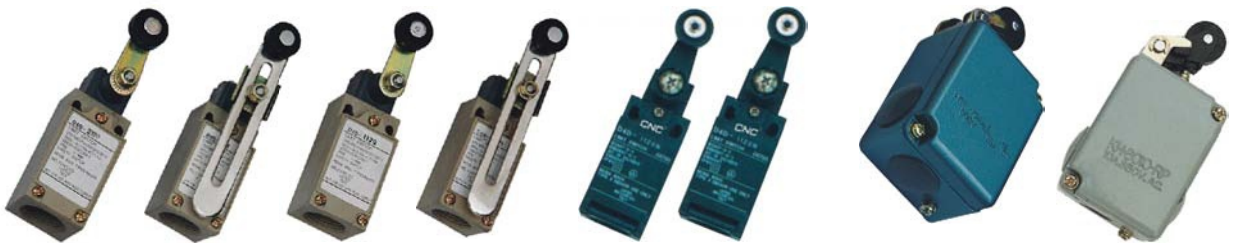
XCK-M110 XCK-M121 XCK-M115 XCK-M102 XCK-P106 XCK-P102 XCK-P118 XCK-P121 XCK-P110



XCK-S102 XCK-S141 XCK-S131 XCK-S101 XCK-T110 XCK-T118 XCK-T102 XCK-T106 XCK-T121



XCK-J1161 XCK-J121 XCK-J108 XCK-J161 XCK-J10541 XCK-J10511 XCK-J167



D4D-1120 D4D-1121 D4D-2120 D4D-2121 D4D-1120N K244 KH-8010-RP



YC-CA2 YC-CA32-41 YC-NJ-S2 YC-CL YC-D YC-CA12-2 YC-NJ YC-CA12 YC-D2 YC-CA2-2



TZ-8166 TZ-8122 TZ-8169 TZ-8111 TZ-8112 TZ-8122 TZ-8104 TZ-8107 TZ-8108



HL-5050 HL-5030 HL-5300 HL-5200 HL-5100 HL-5000 MEA-9104 MEA-9169 MEA-9108



AZ-8200 AZ-8166 AZ-8108 AZ-8112 ME8169 ME8101 ME8107 ME8166



AZ-8107 AZ-8111 AZ-8169 AZ-8122 AZ-8104 ME8122 ME8111 ME8112 ME8108 ME8104



LXK3-20S/T



LXX3-20S/H₂



LXX3-20S/W



LXK3-20S/D



LXK3-20S/Z



LXK3-20S/L



LXK3-20S/J



LXX3-20S/B



3SE3 120-1D



3SE3 120-1B



3SE3 120-1G



3SE3 120-1T



3SE3 100-1R



3SE3 100-1G



3SE3 404D



3SE3 100-TA



3SE3 100-1U



3SE3 120-1C



3SE3 120-1E



3SE3 120-1U



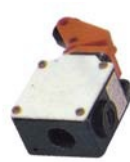
3SE3 120-1R



3SE3 120-1W



3SE3 100-1F



3SE3 100-1B



3SE3 303-1D



3SE3 100-1E



3SE3 100-1W



LXK3-20H/J



LXK3-20H/Z



LXK3-20H/D



LXK3-20H/T



LXK3-20H/B

1. General

General purpose micro switches may be used in AC control circuits of 50/60Hz, with a voltage up to 380V and a rated control capacity of 100VA or in DC control circuits with a voltage up to 220V and rated control capacity of 10W.



Z-15HW24-B



Z-15GQ-B



Z-15GW-B



Z-15GW22-B



Z-15GQ22-B



Z-15GD-B



Z-15GQ21-B



Z-15GW2-B



Z-15G-B



Z-15GW21-B



LXW5-11Z



LXW5-11Nz



LXW5-11D



LXW5-11G1



LXW5-11G3



LXW5-11Qz



LXW5-11M



LXW5-11Q1



LXW5-11G2



LXW5-11N1



AZ-7100



AZ-7110



AZ-7144



AZ-7124



AZ-7121



AZ-7141



AZ-7166



AZ-7310



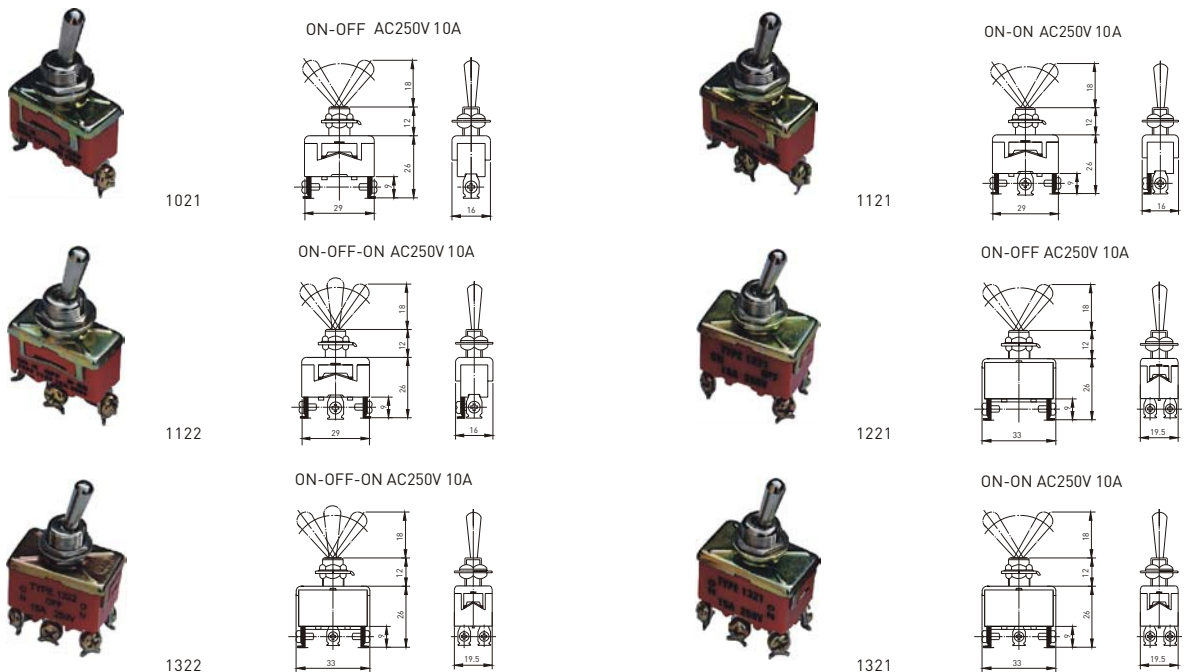
AZ-7311



AZ-7312



Toggle Switch



1. General

Pedal switches are widely used in machine, light-textile, medicine, transportation, industry and automatic production line.



Knife Switch

Specifications

2P×20A knife switch, single throw, 2P20A, 250V

2P×30A knife switch, single throw, 2P30A, 250V

2P×60A knife switch, single throw, 2P60A, 250V

2P×100A knife switch, single throw, 2P100A, 250V

3P×20A knife switch, single throw, 3P20A, 250V

3P×30A knife switch, single throw, 3P30A, 250V

3P×60A knife switch, single throw, 3P60A, 250V

3P×100A knife switch, single throw, 3P100A, 250V

2P×20A knife switch, single throw, 2P20A, 250V

2P×30A knife switch, double throw, 2P30A, 250V

2P×60A knife switch, double throw, 2P60A, 250V

2P×100A knife switch, double throw, 2P100A, 250V

3P×20A knife switch, double throw, 3P20A, 250V

3P×30A knife switch, double throw, 3P30A, 250V

3P×60A knife switch, double throw, 3P60A, 250V

3P×100A knife switch, double throw, 3P100A, 250V

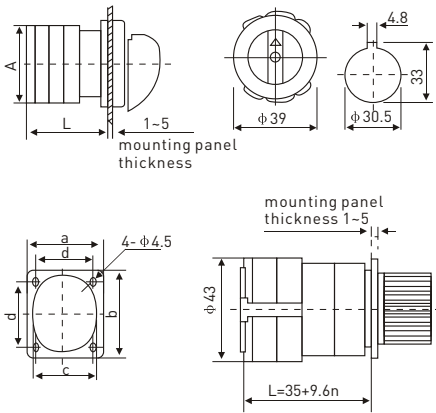


LW28 Universal Changeover Switch

1. Specifications



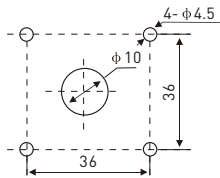
LW28



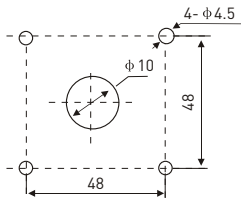
Type	I _{th} A	U _i V	U _e V	AC-21A		AC-22A		AC-23A		AC-2		AC-3		AC-4		AC-15 DC-13			
				I _e A	P A	I _e A	P A	I _e A	P kw	I _e A	P kw	I _e A	P kw	I _e A	P kw	I _e A	P kw		
LW28-20	20	660	440	20	20	15	7.5	15	7.5	11	5.5	3.5	1.5	4					
			240																5
			120																
LW28-25	25	660	440	25	25	22	11	22	11	15	7.5	6.5	3	5					
			240																8
			120																1.5
LW28-32	32	660	440	32		30	15	30	15	22	11	11	5.5	6					
			240																14
			120																25
LW28-63	63	660	440	63		57	30	57	30	36	18.5	15	7.5						
			120																55
LW28-125	125		125	125	125	100	45	100	45	50	22	18	12					90	
LW28-160	160		160	160	160	115	57	115	57	65	33	25	15					110	
Operating cycles	No load		8500												Electrical life (times)				
	With load		1500												Mechanical life (times)				
	Total		1000												60×10 ⁴				

2. Overall and mounting dimensions (mm)

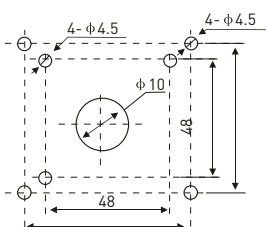
Small panel mounting dimension diagram



Big panel mounting dimension diagram



Oversize panel mounting dimension diagram



Type	Panel shape	External dimension (mm)				Mounting dimension (mm)			
		A	B	C	L	a	b	d1	d2
LW28-20	M1 square	48	48	43	22+9.6n	36	36	φ 8.5	φ 4.5
	M1 rectangular	48	60	43	22+9.6n	36	36	φ 8.5	φ 4.5
LW28-25	M2 square	64	64	43	25+9.6n	48	48	φ 10	φ 4.5
	M2 rectangular	64	80	43	25+9.6n	48	48	φ 10	φ 4.5
LW28-32	M1 square	48	48	45.2	23+12.8n	36	36	φ 8.5	φ 4.5
	M1 rectangular	48	60	45.2	23+12.8n	36	36	φ 8.5	φ 4.5
	M2 square	64	64	45.2	26.5+12.8n	48	48	φ 10	φ 4.5
LW28-63	M2 rectangular	64	80	45.2	26.5+12.8n	48	48	φ 10	φ 4.5
	M2 square	64	64	58	29.5+12.8n	48	48	φ 10	φ 4.5
	M2 rectangular	64	80	58	29.5+12.8n	48	48	φ 10	φ 4.5
LW28-125	M2 square	64	64	66	29.5+21.5n	48	48	φ 10	φ 4.5
	M2 rectangular	64	80	66	29.5+21.5n	48	48	φ 10	φ 4.5
	M3 square	88	88	84	35+26.5n	68	68	φ 13	φ 6
LW28-160	M3 rectangular	88	107	84	35+26.5n	68	68	φ 13	φ 6
	M3 square	88	88	88	35+26.5n	68	68	φ 13	φ 6

LW28GS Universal Changeover Switch

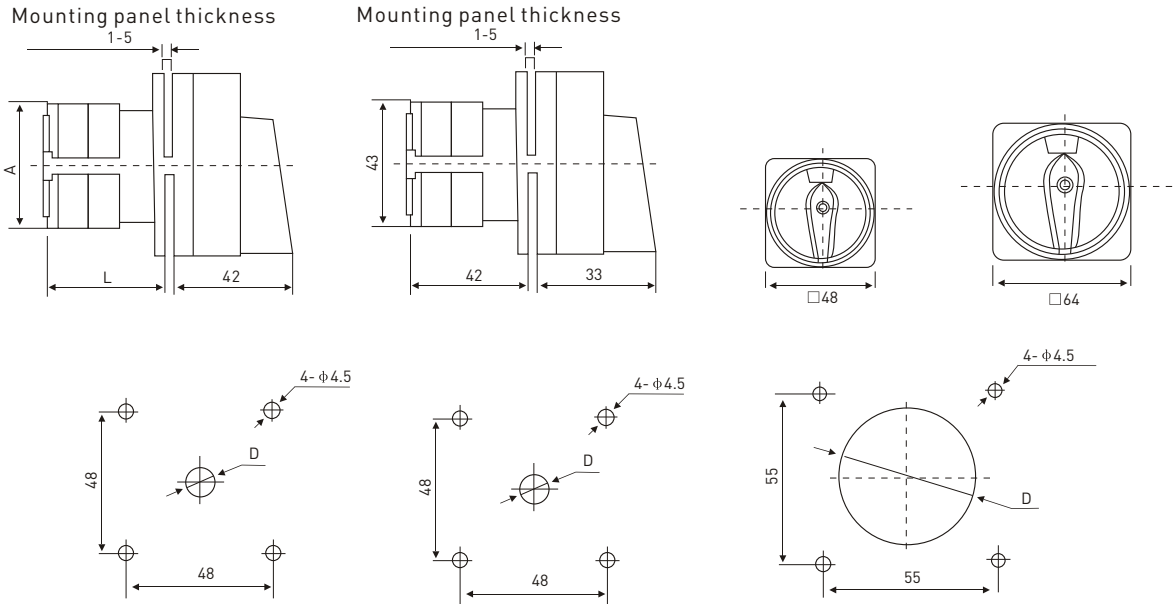
1. Specifications



LW28GS

Type		LW28GS-20	LW28GS-25	LW28GS-32	LW28GS-63
Rated insulating voltage U_{il}	V	690	690	690	690
Rated operating voltage U_e	V	440	440	440	440
Conventional heating current I_{th}	A	20	25	32	63
Rated working current I_e	A	20	25	32	63
AC-21A	A	20	25	32	63
AC-22A	A	20	25	32	63
AC-23A	A	15	22	30	57

2. Overall and mounting dimensions (mm)



Type	Dimension (mm)		
	A	L	D
LW28GS-20	43	43	$\phi 8.5$
LW28GS-25	45.2	51	$\phi 8.5$
LW28GS-32	58	55	$\phi 10$
LW28GS-63	66	72.5	$\phi 10$
LW28GS-125	84	90	$\phi 13$
LW28GS-160	88	101	$\phi 13$

CS-68 Universal Changeover Switch

1. Specifications

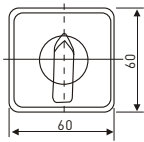


CS-68

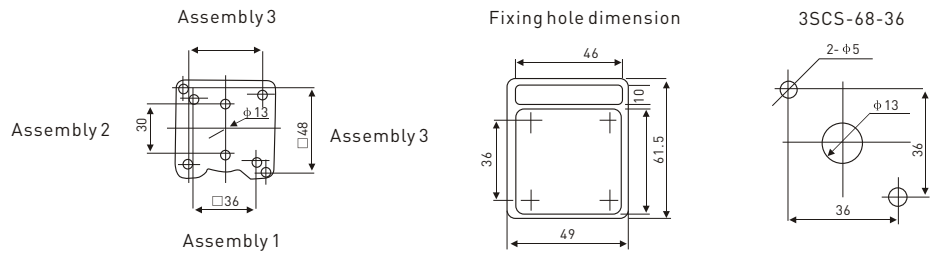
Type	Low voltage, lowcurrent (contact seat with white indication)		High voltage, highcurrent (contact seat with blue indication)	
Contact capacity	24V	0.1A	600V	15A
Contact impedance	During initial period, below 10 Ω		During initial period, below 50 Ω	
Voltage withstand	220VAC		500VAC	
Insulation impedance	Over 100m Ω		60s	
life	Mechanical: above 100,000 times			

2. Overall and mounting dimensions(mm)

Dimension diagram,



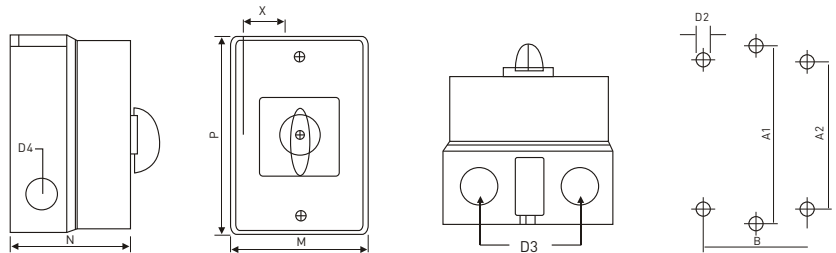
3SCS-68-52



D11

D11 Closed Type Load Switch

1. Overall and mounting dimensions (mm)



Type	Outline dimension (mm)					Installation dimension (mm)			
	D3	D4	M	N	P	A1	A2	B	D2
D11-20/3	23	19	85	80	120	110	-	-	4.1
D11-32/3	23	19	85	80	120	110	-	-	4.1
D11-40/3	29	23	91	91	160	178	-	-	4.1
D11-63/3	29	23	91	91	160	178	-	-	4.1
D11-80/3	37.5	23	100	100	250	-	124	124	4.1
D11-20/6	29	23	91	91	160	178	-	-	4.1
D11-32/6	29	23	91	91	160	178	-	-	4.1
D11-40/6	37.5	23	100	91	160	-	124	124	4.1
D11-63/6	37.5	23	100	100	250	-	124	124	4.1
D11-80/6	50	23	89	83	156	150	150	150	7.5

GLD11 Universal Changeover Switch

1. Specifications

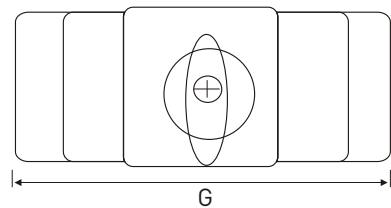
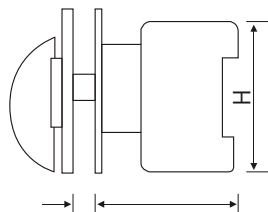
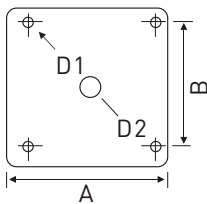


GLD11

Control current or power	Application category	IEC/BS/VDE rated nominal values					
		Heating current I _{th}	Resistive load Ac21	Ac3 occasional switchover motor or high inductive load		Ac3 direct on-line starting motor	
				3×220 ~240V	3×380 ~440V	3×220 ~240V	3×380 ~440V
Switch type							
	GLD11-25	25A	25A	4KW	7.5KW	3KW	5.5KW
	GLD11-32	32A	32A	5.5KW	11KW	4KW	7.5KW
	GLD11-40	40A	40A	7.5KW	15KW	7.5KW	11KW
	GLD11-63	63A	63A	11KW	22KW	11KW	12.5KW
	GLD11-80	80A	80A	18.5KW	30KW	15KW	22KW
	GLD11-100	100A	100A	22KW	37KW	18.5KW	30KW

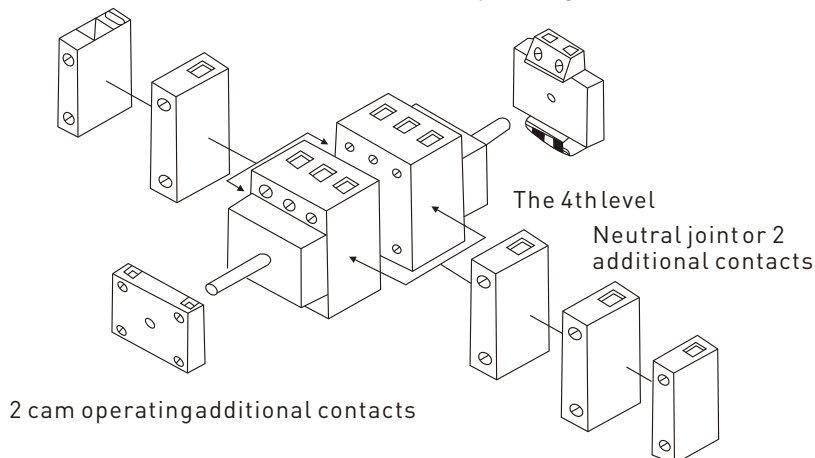
Switch	Type	NO. of poles	A	B	Cam	D ₁	D ₂	F	G	H	L
GLD11-25	On-Off	3pole	64	48	4	4	22	42	-	54	62
	On-Off	4pole	64	48	4	4	22	56	-	54	62
GLD11-32	On-Off	3pole+N	64	48	4	4	22	56	-	54	62
	On-Off	3pole+N+E	64	48	4	4	22	69	-	54	62
GLD11-40	On-Off	6pole	64	48	4	4	22	-	84	54	62
	On-Off	3pole	64	48	4	4	22	50	-	64	67
GLD11-63	On-Off	4pole	64	48	4	4	22	66	-	64	67
	On-Off	3pole+N	64	48	4	4	22	66	-	64	67
GLD11-80	On-Off	3pole+N+E	64	48	4	4	22	82	-	64	67
	On-Off	6pole	64	48	4	4	22	-	100	64	67
GLD11-100	On-Off	3pole	64	48	4	5.5	22	70	-	80	82
	On-Off	4pole	64	48	4	5.5	22	92	-	80	82
GLD11-100	On-Off	3pole+N+E	64	48	4	5.5	22	104	-	80	82
	On-Off	6pole	88	68	4	5.5	22	-	140	80	82

2. Overall and mounting dimensions(mm)



Earthing or 2 additional contacts

2 cam operating additional contacts



HZ12 Power Switch

Specifications



HZ12-16

Type	HZ12-16		HZ12-25		HZ12-40	
Rated working current Ie(A)	16		25		40	
Rated working voltage Ue(V)	500		500		500	
Rated insulating current Ui(V)	380	500	380	500	380	500
Rated heating current Lth(A)	16	10	25	16	40	24
Mechanical life(times)	3×10 ⁴					
Electrical life(times/n)	1×10 ⁴					

EP Universal Changeover Switch

Specifications



HZ12-25

Type	Ith A	Ui V	Ue V	AC-21A		AC-21A		AC-23A		AC-2		AC-3		AC-4		AC-15		DC-13			
				Ie A	le A	Ie A	P kw	Ie A	P kw	Ie A	P kw	Ie A	P kw	Ie A	P kw	Ie A	le A	Ie A	le A		
EP-20	20	600	400	20	20	15	7.5	15	7.5	11	5.5	3.5	1.5	4							
			240													5	1				
			120																		5
EP-25	25	600	440	25	25	22	11	22	11	15	7.5	6.5	3	5							
			240													8	1.5				
			120																		9
EP-32	32	600	440	32	32	30	15	30	15	22	11	11	5.5	6							
			240													14	11				
			120																		25
EP-75	75	600	440	75	75	72	30	72	30	32	24	23	11.5								
			120																		60
EP-125	125		440	125	125	90	45	90	45	36	45	30	18.5								
Number of cycles of operation	No-load		8500												Electrical life						
	loaded		1500												20×10 ⁴	6×10 ⁴					
	Total		1000												Mechanical life(times)						
																60×10 ⁴					



EP-20A



EP-75A

LB3 LB4 LB5 Universal Combined Switch

Specifications

Controlling current or power	Application category	IEC/BS/VD rated nominal value					
		Heat current Ith	Resistant load AC21	AC23 occasional switch over motor or high induction load		Ac3 direct on-line starting motor	
				3×220 ~240V	3×380 ~440V	3×220 ~240V	3×380 ~440V
Type							
LB3-25	25A	25A	4kW	7.5kW	3kW	5.5kW	
LB4-40	40A	40A	7.5kW	15kW	7.5kW	11kW	
LB5-63	63A	63A	11kW	22kW	11kW	12.5kW	



LB3



LB4



LB5

Close Switch and Photoelectric Switch



E type infrared photoelectric switch structure and name

E	18	D	10	B	1	□
E	Structure model	Detecting way	Detected ways	Working voltage	Output state	Aux. Function
Infrared photoelectric switch	12 15 18 19 25 30 50 76	D Diffusion reflecting type R Feedback reflecting M Correlative type C Groove type P Note inspecting I Fibre-optical type F Separate type	7mm 17mm 60mm 10cm 30cm 50cm 70cm 1m 2m 3m	B DC:10~36V C DC:5~10V D DC:48V A AC:24~250V L AC:350~450V G DC/AC: 24~250V H AC: 12~48V T Special voltage	1 NPN NO 2 NPN NC 12 NPN-OP-CL 3 PNP NO 4 PNP NC 34 PNP-OP-CL <input type="checkbox"/> 1 AC NO <input type="checkbox"/> 2 AC NC J Output with relay S Output with photo-couple	H: aviation socket R: double silicon controlled output Y1: pre-delay Y2: back delay B: alternative open/close T: special requirement

LJ、CJ、SJ、XJ Type infrared close switch structure and name

LJM	E	18	T	5	Z	N	K	□
Limit switch	Structure model	Detecting way	Detected distance	Working voltage	Output state	Aux. Function		
LJM Inductive type CJD Capacity type SJD Hall type XJD Line type	M Cylindrical type B Angled type D Common type C Long type E Groove type F Face type	T Embedded type A Non-embedded type G Separation type I Top S Left side K Right side D Upper X Below 	1 1mm 2 2mm 4 4mm 5 5mm 8 8mm 10 10mm 15 15mm 20 20mm	Z DC:6~36V Z1 DC:10~60V Z2 DC:110V J AC:24~250V J1 AC:350~450V G DC/AC:24~250V T Special voltage	NK NPN NO NU NPN NC NU NPN-OP-CL PK PNP NO PH PNP NC PU PNP-OP-CL K 2LINES NO H 2LINES NC KH AC-OP-CL W Output with relay WU Voltage output <input type="checkbox"/> B Alternative open/close	H: aviation socket R: double silicon controlled output Y1: waterproof anti-oil Y2: special requirement B: special requirement		



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