

SELECTION GUIDE

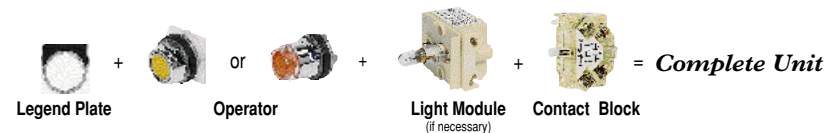


Merlin Gerin
Modicon
Square D
Telemecanique
Schneider Electric Brands

Class Type K 9001 30mm Push Buttons

The Class 9001, Type K family of push button operators offer interchangeable color inserts, color caps, contact blocks and light modules for customer flexibility and reduced inventory. In addition, all contact blocks can be mounted side-by-side and/or in tandem to minimize enclosure space requirements. Further, the Type K was the first automotive manufacturing approved 30 mm operator.

- Heavy duty, oil-tight, dust-tight, and water-tight without boots
- Rated UL Types 4 and 13
- Universal color caps reduce inventory, provide more flexibility
- FINGERSAFE® contact blocks and light modules, for improved safety
- Color coded contact blocks for ease of use and troubleshooting
- Single screw mounting of contact blocks for quick installation



TYPE K MOMENTARY CONTACT PUSH BUTTONS

Operator type	Heavy Duty, Oil-tight, Water-tight, NEMA 4, 13					
	Description	Contact	Color	NON-ILLUMINATED	Color	ILLUMINATED
Full Guard	None	None	● KR1B	● K1L(1)A	● K1L(1)A	
	1 N.O. 1 N.C. 1N.O./1 N.C. 1N.O./1 N.C.	None 1 NC./N.C.E.C. 1 NC./N.C.E.C. 1 NC./N.C.E.C.	● KR1GH5 ● KR1RH6 (2) KR1(2)H13 Ⓢ KR1UH13**	● K1L(1)GH5 ● K1L(1)RH6 (3) K1L(1)(3)H13		
No Guard	None	None	● KR3B	● K2L(1)A	● K2L(1)A	
	1 N.O. 1 N.C. 1N.O./1 N.C. 1N.O./1 N.C.	None 1 NC./N.C.E.C. 1 NC./N.C.E.C. 1 NC./N.C.E.C.	● KR3GH5 ● KR3RH6 (2) KR3(2)H13 Ⓢ KR3UH13**	● K2L(1)GH5 ● K2L(1)RH6 (3) K2L(1)(3)H13		
Extended Guard	None	None	● KR2B	● K3L(1)A	● K3L(1)A	
	1 N.O. 1 N.C. 1N.O./1 N.C. 1N.O./1 N.C.	None 1 NC./N.C.E.C. 1 NC./N.C.E.C. 1 NC./N.C.E.C.	● KR2GH5 ● KR2RH6 (2) KR2(2)H13 Ⓢ KR2UH13**	● K3L(1)GH5 ● K3L(1)RH6 (3) K3L(1)(3)H13		
Mushroom Button	None	None	● KR4B	● K2L(1)A20	● K2L(1)A20	
	1 N.O. 1 3/8" Dia. 1 N.C. 1N.O./1 N.C.	None 1 NC./N.C.E.C. 1 NC./N.C.E.C.	● KR4GH5 ● KR4RH6 (4) KR4(4)H13	● K2L(1)G20H5 ● K2L(1)R20H6 (3) K2L(1)(3)20H13		
Mushroom Button	None	None	● KR5B	● K2L(1)A21	● K2L(1)A21	
	1 N.O. 2 1/4" Dia. 1 N.C. 1N.O./1 N.C.	None 1 NC./N.C.E.C. 1 NC./N.C.E.C.	● KR5GH5 ● KR5RH6*** (4) KR5(4)H13	● K2L(1)G21H5 ● K2L(1)R21H6 (3) K2L(1)(3)21H13		

(1) Insert light module assembly code. See Light Modules table for selections.
 (2) Insert color codes for Types KR1, 2, 3; B=●, L=●, E=●, G=●, S=●, R=●, W=●, Y=●, UNIVERSAL=Ⓢ
 (3) Insert lens color codes for Types K; L=●, G=●, R=●, W=●, Y=●, A=●, C=○
 (4) Insert color codes for Types KR4, 5, 24, 25; B=●, L=●, G=●, S=●, R=●, Y=●
 ** Universal inserts contain one each of the following color inserts: Black, Blue, Green, Orange, Red, White, Yellow. No "Universal" mushroom heads.
 *** Red mushroom head knobs can be imprinted with "EMERGENCY STOP" in raised white letters. Use color code "R05 instead of R", snap-in only.

TYPE K MULTI-FUNCTION PUSH BUTTONS

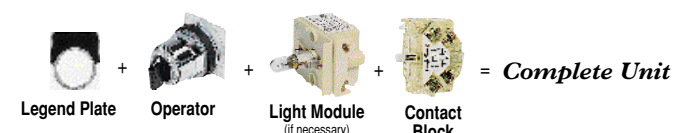
Operator type	Heavy Duty, Oil-tight, Water-tight, NEMA 4, 13			
	Description	Contact	Color	NON-ILLUMINATED
3 Position Mom.-Push Maint.-Neutral Mom.-Pull	None	None	● KR8A	● KR8RH25**
	1 NC./N.C.E.C. 1 NC./N.C.E.C. 1 NC./N.C.E.C.	None 1 NC./N.C.E.C. 1 NC./N.C.E.C.	● KR8RH25** ● KR8GH25 (2) KR8(2)H25	
2 Position Maint.-Push Maint.-Pull	None	None	● KR9A	● KR9RH6**
	1 N.O. 1N.O./1 N.C. 1 NC./N.C.E.C.	None 1 NC./N.C.E.C. 1 NC./N.C.E.C.	● KR9RH6** ● KR9GH13 (2) KR9(2)H13	
3 Position Mom.-Push Maint.-Neutral Mom.-Pull	None	None	● KR8P(1)A	● KR8P(1)RH25**
	1 NC./N.C.E.C. 1 NC./N.C.E.C. 1 NC./N.C.E.C.	None 1 NC./N.C.E.C. 1 NC./N.C.E.C.	● KR8P(1)RH25** ● KR8P(1)GH25 (2) KR8P(1)(2)H25	
2 Position Maint.-Push Maint.-Pull	None	None	● KR9P(1)A	● KR9P(1)RH6
	1 N.C. 1N.O./1 N.C. 1N.O./1 N.C.	None 1 NC./N.C.E.C. 1 NC./N.C.E.C.	● KR9P(1)RH6 ● KR9P(1)GH13 (2) KR9P(1)(2)H13	

(1) Insert light module assembly code. See Light Modules table for selections.
 (2) Color codes for Types KR8 and KR9 illuminated and non-illuminated: B=●, L=●, G=●, S=●, R=●, W=●, Y=●, A=●, C=○

TYPE K PILOT LIGHTS

Pilot Light Type	Heavy Duty, Oil-tight, Water-tight, NEMA 4, 13		
	Description	Color	Type Number
Standard		● KP(1)A31	● KP(1)R31
		● KP(1)G31	● KP(1)A31
		(4) KP(1)(4)	
Push-to-test		● KT(1)A31	● KT(1)R31
		● KT(1)G31	● KT(1)A31
		(4) KT(1)(4)	
Remote Test		● KTR(5)A31	● KTR(5)R31
		● KTR(5)G31	● KTR(5)A31
		(4) KTR(5)(4)	

(1) Insert light module assembly code. See Light Modules table for selections.
 (4) Color codes: A31=●, L31=●, G31=○, R31=●, W31=●, Y31=●
 (5) For KTR, use only full voltage light modules; AC use only. See Light Modules table.



TYPE K MAINTAINED CONTACT SELECTOR SWITCHES

Operator Type 0=Open Contact 1=Closed Contact	Heavy Duty, Oil-tight, Water-tight, NEMA 4, 13						
	Pos.	Desc.	Seq.	NON-ILLUMINATED Clr.	Type K	ILLUMINATED Clr.	Type K
2	Off-On		None 0 1	●	KS11B	●	K11J(1)R
				(2)	KS11(2)H36	●	K11J(1)GH36
2	One contact closed per position		0 1 1 0	●	KS11BH13	(2)	K11J(1)(2)H13
3	Hand-Off-Auto		1 0 0 0 0 1	●	KS43B	●	K43J(1)R
				●	KS43BH13	●	K43J(1)GH13
3	One contact closed per position		1 0 0 0 1 0 0 0 1	●	KS46BH28	(2)	K46J(1)(2)H28
				●	KS46(2)H28	●	K46J(1)GH28
3	Two contacts closed per position		1 0 0 0 1 0 1 0 0 0 1 0 0 0 1	●	KS46BH103	●	K46J(1)RH103
				●	KS46RH103	●	K46J(1)GH103
3	Two contacts closed per position		1 1 0 0 1 1	●	KS42BH7	●	K42J(1)GH7
				●	KS42BH7	●	K42J(1)GH7
4	One contact closed per position		1 0 0 0 0 1 0 0 0 0 1 0 0 0 0 1	●	KS88B	●	K88J(1)R
				●	KS88BH2	(2)	K88J(1)GH2
4	One contact closed per position		1 0 0 0 0 1 0 0 0 0 1 0 0 0 0 1	●	KS88(2)H2	(2)	K88J(1)(2)H2

(1) Insert light module assembly code. See Light Modules table for selections.
 (2) Color Codes for Type KS illuminated and non-illuminated selector switch: B=●, L=●, G=●, S=●, R=●, W=●, Y=●, A=●, C=○
 Available in Gloved Knobs (add F to color code. Example: FB for Black).

Accessories for TYPE K Operators

FINGERSAFE® LIGHT MODULES

TRANSFORMER

Description	Type	Assembly Code (1)
110-120 VAC	KM1	1
220-240 VAC	KM7	7
380-480 VAC	KM5	5
550-600 VAC	KM6	6

FULL VOLTAGE (5)			
(1) Substitute Assembly code number in catalog number.	12-14VAC/DC	KM32	32
FINGERSAFE® removable terminal shroud standard for all light modules	24-28VAC/DC	KM35	35
(5) For Remote Test Pilot lights, use standard depth, full voltage, AC only.	48VAC/DC	KM36	36
	120VAC/DC	KM38	38

FINGERSAFE® CONTACT BLOCKS

Symbol	Type Description	Voltage	Rating	Lamp#(ANSI)	Part Number
	KA1	6V AC/DC	0.9 VA	755	25501-01020
	1N.O./1N.C.	12-14V AC/DC	1.2 VA	756	25501-01037
	KA4	24-28V AC/DC	1.2 VA	757	25501-01002
	1N.O.E.C./1N.C.	48V AC/DC	2.6 VA	48MB	25501-01025
	KA2	120V AC/DC	3.0 VA	120MB	25501-01027
	KA6				
	1N.O.E.C.				
	KA3				
	1N.C.L.O.				
	KA5				

E.C.= Early Closing, L.O.= Late Opening.

"H" SUFFIX NUMBERS for Contact Blocks

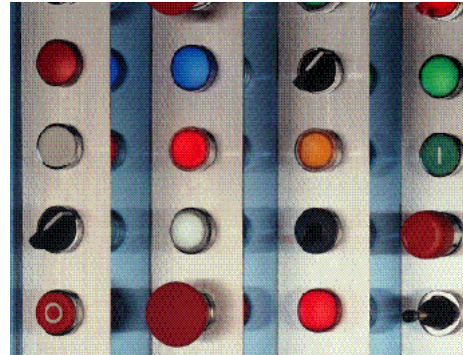
Type KA contact blocks are designed to be mounted side-by-side or in tandem. "H" numbers designate contact block arrangement.

Suffix#	Position					
	1	2	3	4	5	6
H1	KA1					
H2	KA1	KA1				
H5	KA2					
H6	KA3					
H7	KA2	KA2				
H8	KA3	KA3				
H9	KA4	KA4				
H13	KA1					
H14	KA3					
H23	KA1	KA1	KA1	KA1	KA1	
H24	KA1	KA2				
H25	KA5	KA3				
H28	KA1	KA3				
H36	KA2					
H103	KA1	KA1	KA3	KA3		

Example: Full guard universal push button with KA1 contact block located in righthand position (position 2) = 9001KR1UH13

For additional listings, see Square D Digest

SELECTION GUIDE



XB4 22mm Push Buttons

Designed for the most rugged industrial applications, the new XB4 range of 22mm push buttons, selector switches and signaling devices combine ease of installation and new technology such as Protected LED.[®]

The world's most popular push button is rated both NEMA and UL Types 1,2,3,4,4X and 13, and IP65 for the most demanding oil-tight, water-tight, dust-tight and corrosion-resistant applications. Properly installed, these devices are UL Listed, CSA Certified and meet VDE, IEC and European Community Standards.

Available locally and globally with consistent part numbering, the XB line is the most extensive offering of control and signaling devices **in the world!**



PUSH BUTTON OPERATORS

Available Cap Colors: ● ● ● ● ● ● ●

	ZB4BA1	ZB4BA2	ZB4BA3	ZB4BA4	ZB4BA5	ZB4BA6	ZB4BA8
	ZB4BL1	ZB4BL2	ZB4BL3	ZB4BL4	ZB4BL5	ZB4BL6	
	ZB4BA16	ZB4BA26	ZB4BA36	ZB4BA46	ZB4BA56	ZB4BA66	
	ZB4BP1	ZB4BP2	ZB4BP3	ZB4BP4	ZB4BP5	ZB4BP6	
	ZB4BA133 START	ZB4BA331 I START	ZB4BA333 START	ZB4BA432 O OFF	ZB4BA435 OFF		
				ZB4BL432 O STOP	ZB4BL434 STOP	ZB4BL435 OFF	

MUSHROOM OPERATORS

Available Head Colors: ● ●

	30 mm	ZB4BC24	ZB4BC44
	40 mm	ZB4BC2	ZB4BC4
	60 mm	ZB4BR2	ZB4BR4
	Available in: 40 mm 60 mm	ZB4BT2	ZB4BT84*
	Available in: 30 mm 40 mm 60 mm	ZB4BS42	ZB4BS834; ZB4BS44
	Available in: 30 mm 40 mm 60 mm	ZB4BS52	ZB4BS844; ZB4BS54
	Available in: 30 mm 40 mm 60 mm	ZB4BS72	ZB4BS934; ZB4B74
		ZB4BS12	ZB4BS944; ZB4B14
		ZB4BS24	ZB4BS964; ZB4B24

*Trigger-action emergency stop operators

CONTACT BLOCKS

	N/O N/C	Number		N/O N/C	Number		N/O N/C	Number
	1 1	ZB4BZ101		1 -	ZBE101		2 -	ZBE203
	- -	ZB4BZ102		- 1	ZBE102		- 2	ZBE204
	2 2	ZB4BZ103		1 1			1 1	ZBE205
	- -	ZB4BZ104						
	1 1	ZB4BZ105						
	1 1	ZB4BZ141						

2 Position Selector Switch		3 Position Selector Switch	
Contact Block Guide		Contact Block Guide	
X	X	X	X
O	X	O	X
X	O	O	X
O	X	X	X
X	O	O	X
X	O	X	X

SELECTOR SWITCHES

	2 Position	ZB4BD2	ZB4BD4
	3 Position	ZB4BD3	ZB4BD5
		ZB4BD7	ZB4BD8
	2 Position	ZB4BJ2	ZB4BJ4
	3 Position	ZB4BJ3	ZB4BJ5
		ZB4BJ7	ZB4BJ8
	2 Position	ZB4BG2	ZB4BG4
		ZB4BG6	
	3 Position	ZB4BG3	ZB4BG5
		ZB4BG9	ZB4BG0
		ZB4BG7	ZB4BG8
		ZB4BG1	ZB4BG8

• Maintained Position ○ Spring Return † Key Removal

PILOT LIGHT HEADS

Available Lens Colors: ● ● ● ● ● ●

	ZB4BVO13	ZB4BVO33	ZB4BVO43	ZB4BVO53	ZB4BVO63
	ZB4BVO1	ZB4BVO3	ZB4BVO4	ZB4BVO5	ZB4BVO6
				ZB4BVO7	ZB4BVO7

PILOT LIGHT MODULE - With Base

Light Source	Supply Voltage	Number
BA 9s bulb 2.4 W max. NOT INCLUDED	≤ 250 Vac	ZV4BV6
BA 9s bulb INCLUDED	110-120 Vac 50/60 Hz 230-240 Vac 50/60 Hz 440-480 Vac 60 Hz	ZB4BV3 ZB4BV4 ZB4BV8

Light Source	Supply Voltage	Number
Protected LED	24 Vac or Vdc	ZB4BVG1 ZB4BVB3 ZB4BVB4 ZB4BVB5 ZB4BVB6
Protected LED	110-120 Vac	ZB4BVG3 ZB4BVG4 ZB4BVG5 ZB4BVG6

ILLUMINATED PUSH BUTTONS

Available Colors: ● ● ● ● ● ●

	ZB4BW31	ZB4BW33	ZB4BW34	ZB4BW35	ZB4BW36	ZB4BW37
	ZB4BW313	ZB4BW333	ZB4BW343	ZB4BW353	ZB4BW363	
	ZB4BW11	ZB4BW13	ZB4BW14	ZB4BW15	ZB4BW16	ZB4BW17
	ZB4BW113	ZB4BW133	ZB4BW143	ZB4BW153	ZB4BW163	
	ZB4BW513	ZB4BW533	ZB4BW543	ZB4BW553	ZB4BW563	

ILLUMINATED LIGHT MODULE

Available Colors: ● ● ● ● ● NO N/C

LED Type	Supply Voltage	Number
Protected LED	24 Vac or Vdc	ZB4BWOB11
		ZB4BWOB12
		ZB4BWOB13
		ZB4BWOB15
		ZB4BWOB11
		ZB4BWOB12
		ZB4BWOB13
		ZB4BWOB15
		ZB4BWOB31
		ZB4BWOB32
		ZB4BWOB33
		ZB4BWOB35
		ZB4BWOB41
		ZB4BWOB42
		ZB4BWOB43
		ZB4BWOB45
		ZB4BWOB51
		ZB4BWOB52
		ZB4BWOB53
		ZB4BWOB55
		ZB4BWOB51
		ZB4BWOB52
		ZB4BWOB53
		ZB4BWOB55

LIGHT MODULE - With Base

Light Source	Supply Voltage	N/O	N/C	Number
BA 9s 2.4 W max. bulb NOT INCLUDED	≤ 250	1	-	ZB4BW061
		-	1	ZB4BW062
		2	-	ZB4BW063
		1	1	ZB4BW065
BA 9s Incandescent bulb INCLUDED	110-120 Vac 50/60 Hz	1	-	ZB4BW031
		1	1	ZB4BW035
	230-240 Vac 50/60 Hz	1	-	ZB4BW041
		1	1	ZB4BW045

Illuminated and Non-Illuminated Color Key

White	Black	Green	Red	Yellow	Blue	Clear	Grey

RESET OPERATORS

Acuation Dist.	Travel
XB4BA821	0.24-0.63in. (6-16 mm)
XB4BA822	0.63-1.02 in. (16-26 mm)
XB4BA921	1.18-5.12 in. (30-130 mm)
XB4BA922	5.12-10.12 in. (130-257 mm)

POTENTIOMETER OPERATOR

	For potentiometer with shaft length 1.73 to 1.97 in. (44 to 50 mm)	For shaft 0.25 in. (6.35 mm)	ZB4BD922
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JOYSTICK CONTROLLERS

	1 step 1 N/O contact per direction	2 direction	XD4PA12 :Spring Returned XD4PA22 :Maintained
		4 direction	XD4PA14 :Spring Returned XD4PA24 :Maintained

LAMPS

Voltage	Wattage	Number
6 V	1.5 w	DL1CB006
12 V	2.6 w	DL1CE012
24 V	2.6 w	DL1CE024
130 V	2.6 w	DL1CE130

PVC Legend Plates

30 x 40 mm

	ZBY2931
	ZBY2147
	ZBY2304
	ZBY2364
	ZBY2314
	ZBY2308
	ZBY2330
	ZBY2328
	ZBY2305
	ZBY2316
	ZBY2387
	ZBY2321
	ZBY2312
	ZBY2367
	ZBY2311
	ZBY2313
	ZBY2326
	ZBY2323
	ZBY2306
	ZBY2334
	ZBY2327
	ZBY2303
	ZBY2366
	ZBY2307

YELLOW CONTRAST PLATES

60MM Round

ZBY9101
Unmarked

ZBY9330
"Emergency Stop"

90MM Round

ZBY8101
Unmarked

ZBY8330
"Emergency Stop"

For additional listings, see Catalog Number 9001CT9902