Pilot devices, 22 mm

Short Form Catalogue

1SFC151002C0201, December 2003, Supersedes 1SFC261009-en of June 2001



Pushbuttons - Compact range

Non-illuminated



Designation, design and function	Type	Order Code	Weight, kg
Pushbutton with flush button Momentary			
Contacts included:			
1 NO	**CP1-10■-10**	**1SFA 619 100 R101□**	0.018
2 NO	**CP1-10■-20**	**1SFA 619 100 R102□**	0.022
1 NC	**CP1-10■-01**	**1SFA 619 100 R104□**	0.018
2 NC	**CP1-10■-02**	**1SFA 619 100 R105□**	0.022
1 NO +1 NC	**CP1-10■-11**	**1SFA 619 100 R107□**	0.022
Pushbutton with flush button Maintained			
Contacts included:			
1 NO	**CP2-10■-10**	**1SFA 619 101 R101□**	0.018
2 NO	**CP2-10■-20**	**1SFA 619 101 R102□**	0.022
1 NC	**CP2-10■-01**	**1SFA 619 101 R104□**	0.018
2 NC	**CP2-10■-02**	**1SFA 619 101 R105□**	0.022
1 NO +1 NC	**CP2-10■-11**	**1SFA 619 101 R107□**	0.022
Pushbutton with extended button Momentary			
Contacts included:			
1 NO	**CP3-10■-10**	**1SFA 619 102 R101□**	0.019
2 NO	**CP3-10■-20**	**1SFA 619 102 R102□**	0.022
1 NC	**CP3-10■-01**	**1SFA 619 102 R104□**	0.019
2 NC	**CP3-10■-02**	**1SFA 619 102 R105□**	0.022
1 NO +1 NC	**CP3-10■-11**	**1SFA 619 102 R107□**	0.022
Pushbutton with extended button Maintained			
Contacts included:			
1 NO	**CP4-10■-10**	**1SFA 619 103 R101□**	0.019
2 NO	**CP4-10■-20**	**1SFA 619 103 R102□**	0.022
1 NC	**CP4-10■-01**	**1SFA 619 103 R104□**	0.019
2 NC	**CP4-10■-02**	**1SFA 619 103 R105□**	0.022
1 NO +1 NC	**CP4-10■-11**	**1SFA 619 103 R107□**	0.022
Pushbutton with flush button Momentary			
White button with black I			
Contacts included:1 NO	**CP11-10W-10**	**1SFA 619 110 R1015**	0.018
Pushbutton with flush button Momentary			
White button with black II			
Contacts included: 1 NO	**CP12-10W-10**	**1SFA 619 120 R1015**	0.018
Pushbutton with extended button Momentary			
Black button with white 0			
Contacts included:			
1 NC	**CP33-10B-01**	**1SFA 619 132 R1046**	0.018

[1] For bezel in metal replace '1' in the Type CPX-1 0X- XX with the figure '3'.

Color code for pushbuttons

	Type	Order Code
	CPX-10■-XX	1SFA 619 1XX R10X□
	■	□
Red	**R**	**1**
Green	**G**	**2**
Yellow	**Y**	**3**
Blue	**L**	**4**
White	**W**	**5**
Black	**B**	**6**
Grey	**U**	**7**

Ordering example – Pushbutton

Requested: A compact pushbutton, momentary, with red extended button and one NO contact.

Order: 10 pieces of **CP3-10R-10**

Minimum order quantity: 10 pieces
Packing: 10 pieces/plastic bag. 10 bags/box



Ordering example – Selector switch

Requested: A red compact selector switch with three positions, Momentary, spring return from A to B and maintained position in C.

Order: 10 pieces of **C3SS7-10R-02**

Minimum order quantity: 10 pieces
Packing: 10 pieces/plastic bag. 10 bags/box



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Selector switches - Compact range

Non-illuminated



Designation, design and function	Type	Order Code	Weight, kg
Selector switch, short handle. Two pos. Maintained			
Contacts included:			
1 NO	**C2SS1-10■-10**	**1SFA 619 200 R101□**	0.020
2 NO	**C2SS1-10■-20**	**1SFA 619 200 R102□**	0.024
1 NC	**C2SS1-10■-01**	**1SFA 619 200 R104□**	0.020
2 NC	**C2SS1-10■-02**	**1SFA 619 200 R105□**	0.024
1 NO +1 NC	**C2SS1-10■-11**	**1SFA 619 200 R107□**	0.024
Selector switch, short handle. Two pos. Maintained			
Contacts included:			
1 NO	**C2SS2-10■-10**	**1SFA 619 201 R101□**	0.020
2 NO	**C2SS2-10■-20**	**1SFA 619 201 R102□**	0.024
1 NC	**C2SS2-10■-01**	**1SFA 619 201 R104□**	0.020
2 NC	**C2SS2-10■-02**	**1SFA 619 201 R105□**	0.024
1 NO +1 NC	**C2SS2-10■-11**	**1SFA 619 201 R107□**	0.024
Selector switch, short handle. Two pos. Momentary			
Contacts included:			
1 NO	**C2SS3-10■-10**	**1SFA 619 202 R101□**	0.020
2 NO	**C2SS3-10■-20**	**1SFA 619 202 R102□**	0.024
1 NC	**C2SS3-10■-01**	**1SFA 619 202 R104□**	0.020
2 NC	**C2SS3-10■-02**	**1SFA 619 202 R105□**	0.024
1 NO +1 NC	**C2SS3-10■-11**	**1SFA 619 202 R107□**	0.024
Selector switch, short handle. Three pos. Maintained			
Contacts included:			
2 NO	**C3SS1-10■-20**	**1SFA 619 210 R102□**	0.024
2 NC	**C3SS1-10■-02**	**1SFA 619 210 R105□**	0.024
1 NO + 1 NC	**C3SS1-10■-11**	**1SFA 619 210 R107□**	0.024
Selector switch, short handle. Three pos. Momentary			
Contacts included:			
2 NO	**C3SS2-10■-20**	**1SFA 619 211 R102□**	0.024
2 NC	**C3SS2-10■-02**	**1SFA 619 211 R105□**	0.024
1 NO + 1 NC	**C3SS2-10■-11**	**1SFA 619 211 R107□**	0.024
Selector switch, short handle. Three pos. Momentary			
Contacts included:			
2 NO	**C3SS3-10■-20**	**1SFA 619 212 R102□**	0.024
2 NC	**C3SS3-10■-02**	**1SFA 619 212 R105□**	0.024
1 NO + 1 NC	**C3SS3-10■-11**	**1SFA 619 212 R107□**	0.024
Selector switch, short handle. Three pos. Momentary			
Contacts included:			
2 NO	**C3SS7-10■-20**	**1SFA 619 216 R102□**	0.024
2 NC	**C3SS7-10■-02**	**1SFA 619 216 R105□**	0.024
1 NO + 1 NC	**C3SS7-10■-11**	**1SFA 619 216 R107□**	0.024

[1] For bezel in metal replace '1' in the Type CXSSX-1 0X- XX with the figure '3'.

Ordering example – see page 10

Color code

	Type	Order Code
	CXSSX-10■-XX	**1SFA 619 2XX R10X□**
	■	**□**
Red	**R**	**1**
Black	**B**	**6**
Grey	**U**	**7**

Contacts actuated

Two position selector switch
Contacts included,

	actuated in position **C**			
	NC	NO	NC	NO
	11	13	21	23
	12	14	22	24
1NO	–	1	–	–
2NO	–	1	–	1
1NC	1	–	–	–
2NC	1	–	1	–
1NO + 1NC	–	1	1	–

Three position selector switch
Contacts included,

	actuated in position:			
	A		**C**	
	NC	NO	NC	NO
	21	23	11	13
	22	24	12	14
2NO	–	1	–	1
2NC	1	–	1	–
1NO + 1NC	1	–	–	1

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Pilot lights - Compact range

Illuminated





Designation, design and function	Type	Order Code	Weight, kg
Pilot light Ba 9s base, bulb not included. See page 15			
Color:			
Red	**CL-100R**	**1SFA 619 402 R1001**	0.018
Green	**CL-100G**	**1SFA 619 402 R1002**	0.018
Yellow	**CL-100Y**	**1SFA 619 402 R1003**	0.018
Blue	**CL-100L**	**1SFA 619 402 R1004**	0.018
White	**CL-100W**	**1SFA 619 402 R1005**	0.018
Clear	**CL-100C**	**1SFA 619 402 R1008**	0.018

Pilot light with integrated LED Service life >50 000 hours

Rated voltage V	Rated current (mA)	Type of current	Color	Lumi-nance (mcd)	Wave-length (nM)	Type	Order Code	Weight, kg
12 [1]	30	DC	Red	60	625	**CL-501R**	**1SFA 619 402 R5011**	0.023
12 [1]	15	DC	Green	126	520	**CL-501G**	**1SFA 619 402 R5012**	0.023
12 [1]	30	DC	Yellow	60	590	**CL-501Y**	**1SFA 619 402 R5013**	0.023
12 [1]	30	DC	Blue	22	470	**CL-501L**	**1SFA 619 402 R5014**	0.023
12 [1]	30	DC	White	88	x=3 y=3	**CL-501W**	**1SFA 619 402 R5015**	0.023
24	15	AC/DC	Red	60	625	**CL-502R**	**1SFA 619 402 R5021**	0.023
24	15	AC/DC	Green	126	520	**CL-502G**	**1SFA 619 402 R5022**	0.023
24	15	AC/DC	Yellow	60	590	**CL-502Y**	**1SFA 619 402 R5023**	0.023
24	15	AC/DC	Blue	22	470	**CL-502L**	**1SFA 619 402 R5024**	0.023
24	15	AC/DC	White	88	x=3 y=3	**CL-502W**	**1SFA 619 402 R5025**	0.023
48	15	AC/DC	Red	60	625	**CL-504R**	**1SFA 619 402 R5041**	0.023
48	15	AC/DC	Green	126	520	**CL-504G**	**1SFA 619 402 R5042**	0.023
48	15	AC/DC	Yellow	60	590	**CL-504Y**	**1SFA 619 402 R5043**	0.023
48	15	AC/DC	Blue	22	470	**CL-504L**	**1SFA 619 402 R5044**	0.023
48	15	AC/DC	White	88	x=3 y=3	**CL-504W**	**1SFA 619 402 R5045**	0.023
60	15	AC/DC	Red	60	625	**CL-505R**	**1SFA 619 402 R5051**	0.023
60	15	AC/DC	Green	126	520	**CL-505G**	**1SFA 619 402 R5052**	0.023
60	15	AC/DC	Yellow	60	590	**CL-505Y**	**1SFA 619 402 R5053**	0.023
60	15	AC/DC	Blue	22	470	**CL-505L**	**1SFA 619 402 R5054**	0.023
60	15	AC/DC	White	88	x=3 y=3	**CL-505W**	**1SFA 619 402 R5055**	0.023
110-130	15	AC	Red	60	625	**CL-513R**	**1SFA 619 402 R5131**	0.023
110-130	15	AC	Green	126	520	**CL-513G**	**1SFA 619 402 R5132**	0.023
110-130	15	AC	Yellow	60	590	**CL-513Y**	**1SFA 619 402 R5133**	0.023
110-130	15	AC	Blue	22	470	**CL-513L**	**1SFA 619 402 R5134**	0.023
110-130	15	AC	White	88	x=3 y=3	**CL-513W**	**1SFA 619 402 R5135**	0.023
110-130	15	DC	Red	60	625	**CL-515R**	**1SFA 619 402 R5151**	0.023
110-130	15	DC	Green	126	520	**CL-515G**	**1SFA 619 402 R5152**	0.023
110-130	15	DC	Yellow	60	590	**CL-515Y**	**1SFA 619 402 R5153**	0.023
110-130	15	DC	Blue	22	470	**CL-515L**	**1SFA 619 402 R5154**	0.023
110-130	15	DC	White	88	x=3 y=3	**CL-515W**	**1SFA 619 402 R5155**	0.023
230	15	AC	Red	60	625	**CL-523R**	**1SFA 619 402 R5231**	0.023
230	15	AC	Green	126	520	**CL-523G**	**1SFA 619 402 R5232**	0.023
230	15	AC	Yellow	60	590	**CL-523Y**	**1SFA 619 402 R5233**	0.023
230	15	AC	Blue	22	470	**CL-523L**	**1SFA 619 402 R5234**	0.023
230	15	AC	White	88	x=3 y=3	**CL-523W**	**1SFA 619 402 R5235**	0.023

[1] Care should be taken for 12 V version where + and - must be correctly installed (this is marked on the product, X1 (+) and X2 (-)).

Ordering example – see page 10

Ordering

Minimum order quantity: 10 pieces
Packing: 10 pieces/plastic bag. 10 bags/box

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Pilot devices, Ø 22 mm

Technical data

General

Standards

IEC 73, 529, 947-5-1,
EN 50 013, 60 947-5-1, 947-5-5
UL 508
CSA C22.2 No. 14
For detailed information please contact ABB

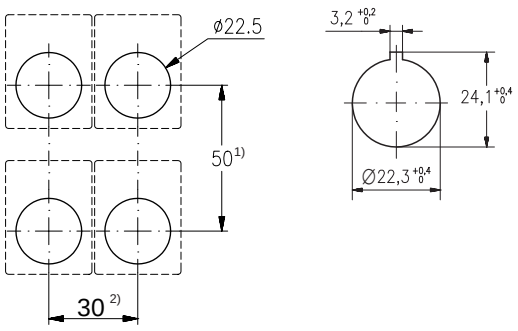
Temperature

Ambient temperature during operation	-25 to +70 °C
Exception: All pilot devices with 2 W continuously lit filament bulb	-25 to +40 °C
Storage temperature	-30 to +85 °C

Tightening torque

Locking nut, M22	Min. 2 Nm Max. 2.3 Nm

Drilling plan for pushbuttons, switches and pilot lights



1) 55 mm when legend plate H= 44.5 mm is used.
61 mm for mushroom pushbutton with D=60 mm

2) 37 mm when legend plate with insert is used,

Compact range

Degrees of protection

Pilot device	IP	UL
Compact pushbutton, type **CP1**, **CP2**, **CP3**, **CP4**	IP66	1, 3R, 4, 4X, 12, 13
Compact selector switch, type **C2SS**, **C3SS**	IP66	1, 3R, 4, 4X, 12, 13
Compact pilot light, type **CL**	IP66	1, 3R, 4, 4X, 12, 13
Electrical functions	IP20	

Contacts - Compact Pilot devices

Ratings as per UL, CSA, NEMA C300, R300	
Rated insulation voltage	250 V
Rated thermal current	2.5 A
Rated operational current	
at 120 V	1.5 A
240 V	0.75 A
Ratings as per IEC 947-5-1	
Rated insulation voltage, U_i	300 V
Rated thermal current, I_{th}	5 A
Rated operational current, I_e utilisation category AC 15	
at 120 V	1.5 A
240 V	1 A
Rated operational current, I_e, utilisation category DC 13,	
at 24 V	0.3 A
125 V	0.2 A
Short circuit protection	
Max. fuse at 1 kA	16 A ordinary 10 A delayed
Max. number of contacts per operator	
Compact pushbutton, type **CP1**, **CP2**, **CP3**, **CP4**	2
Compact selector switch, type **C2SS**, **C3SS**	2
Compact pilot light, type **CL**	1 LB, Ba9s lamp holder
Tightening torque	
compact pushbutton & selector switch	0.8 Nm (M3)
compact pilot light	0.9 Nm (M3.5)

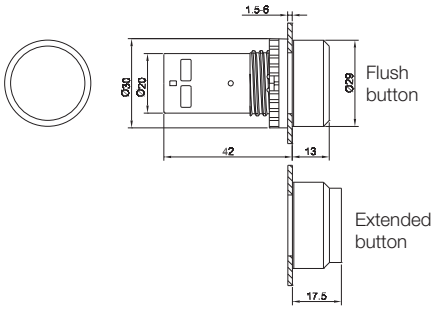
Terminals	
Plus-minus Pozidrive Size 2	
Connectable area	min. 1 x 0.5 mm^2 max. 2 x 1.5 mm^2/ 2 x AWG14
Connectable area (Pilot Light)	min. 1 x 0.5 mm^2 max. 2 x 2.5 mm^2

Pilot devices, Ø 22 mm

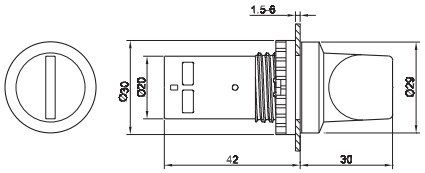
Dimensions

Compact range

Pilot light



Pushbutton



Selector switch

