

Accessories

Contact blocks and lamp blocks with holder for front mounting

| Max. number of blocks in holder | Included blocks | Catalog No. | Ref. Code | List Price |
|--------------------------------------|-----------------|-------------|--------------------|------------|
| For non-illuminated operators | | | | |
| 3 | 1 NC | MCBH-01 | 1SFA 611 605 R1110 | \$ 10.00 |
| 3 | 1 NO | MCBH-10 | 1SFA 611 605 R1101 | 10.00 |
| 3 | 2 NC | MCBH-02 | 1SFA 611 605 R1120 | 18.00 |
| 3 | 2 NO | MCBH-20 | 1SFA 611 605 R1102 | 18.00 |
| 3 | 3 NC | MCBH-03 | 1SFA 611 605 R1130 | 26.00 |
| 3 | 3 NO | MCBH-30 | 1SFA 611 605 R1103 | 26.00 |
| 3 | 1 NO + 1 NC | MCBH-11 | 1SFA 611 605 R1111 | 18.00 |
| 3 | 1 NO + 2 NC | MCBH-12 | 1SFA 611 605 R1121 | 26.00 |
| 3 | 2 NO + 1 NC | MCBH-21 | 1SFA 611 605 R1112 | 26.00 |

For illuminated operators

| | | | | |
|---|--------------------|----------|--------------------|-------|
| 3 | 1 NC + 1 LB | MCBH-011 | 1SFA 611 605 R1210 | 27.50 |
| 3 | 1 NO + 1 LB | MCBH-101 | 1SFA 611 605 R1201 | 27.50 |
| 3 | 1 NO + 1 NC + 1 LB | MCBH-111 | 1SFA 611 605 R1211 | 35.50 |
| 3 | 2 NC + 1 LB | MCBH-021 | 1SFA 611 605 R1220 | 35.50 |
| 3 | 2 NO + 1 LB | MCBH-201 | 1SFA 611 605 R1202 | 35.50 |

Single contact blocks for front mounting

| Included blocks | Catalog No. | Ref. Code | List Price |
|--------------------------------|-------------|--------------------|------------|
| 1 NO | MCB-10 | 1SFA 611 610 R1001 | \$ 8.00 |
| 1 NC | MCB-01 | 1SFA 611 610 R1010 | 8.00 |
| 1 NO with gold plated contacts | MCB-10G | 1SFA 611 610 R1101 | 16.00 |
| 1 NC with gold plated contacts | MCB-01G | 1SFA 611 610 R1110 | 16.00 |

Double contact block for front mounting

To be used together with MCBH5-00 when contact blocks in position 4- and 5- are needed.
Also when using MCBH-00 together with selector switch and contact block in position 3- is needed

| Included blocks | Catalog No. | Ref. Code | List Price |
|-----------------|-------------|--------------------|------------|
| 2 NO | MCB-20 | 1SFA 611 610 R1002 | \$ 16.00 |
| 2 NC | MCB-02 | 1SFA 611 610 R1020 | |
| 1 NO + 1 NC | MCB-11 | 1SFA 611 610 R1011 | |

Single lamp blocks for front mounting, Ba 9s base

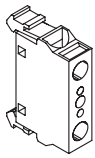
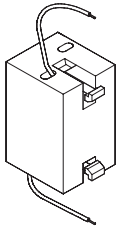
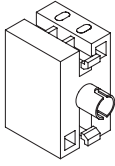
| Description | Catalog No. | Ref. Code | List Price |
|--|-------------|--------------------|------------|
| For max. 2 W, 230 V AC and DC filament bulb or LED | MLB-1 | 1SFA 611 620 R1001 | \$ 17.50 |
| 115 V AC supply voltage. For 60 V filament bulb max. 1.2 W | MLB-2 | 1SFA 611 620 R1002 | 21.50 |
| 230 V AC supply voltage. For 130 V filament bulb max. 2 W | MLB-3 | 1SFA 611 620 R1003 | 21.50 |
| 115 V AC and DC supply voltage For 24 V LED | MLB-4 | 1SFA 611 620 R1004 | 21.50 |
| 24 V AC and DC supply voltage. With resistor. Intended for electronic circuits. The resistor limits the making current and protects against disturbances in the electronic circuit For 24 V filament bulb | MLB-5 | 1SFA 611 620 R1005 | 21.50 |

Holders

| Description | Catalog No. | Ref. Code | List Price |
|----------------------------|-------------|--------------------|------------|
| Holders for front mounting | | | |
| For three blocks | MCBH-00 | 1SFA 611 605 R1100 | \$ 2.00 |
| For five blocks | MCBH5-00 | 1SFA 611 601 R1100 | 4.00 |

Contact blocks and lamp blocks for rear mounting See Page 8.43

Accessories



Transformer block

For 6 or 24 V filament bulb and 24 V LED. Rated power 1.5 W.

| Primary voltage | Secondary voltage | Catalog No. | Ref. Code | List Price |
|-----------------|-------------------|-------------|-----------|------------|
|-----------------|-------------------|-------------|-----------|------------|

With lamp holder for front mounting, Ba 9s base

Intended to supply a 1.2 W filament bulb.

| | | | | |
|----------------|-----------|------------------|--------------------|----------|
| 110 - 127V AC | 6 V AC | KTR1-1001 | 1SFA 616 950 R1001 | \$ 35.00 |
| 220 - 250 V AC | 6 V AC | KTR1-1002 | 1SFA 616 950 R1002 | |
| 380 - 420 V AC | 6 V AC | KTR1-1003 | 1SFA 616 950 R1003 | |
| 440 - 480 V AC | 6 V AC | KTR1-1004 | 1SFA 616 950 R1004 | |
| 500 - 600 V AC | 6 V AC | KTR1-1005 | 1SFA 616 950 R1005 | |
| 110 - 127 V AC | 24 V AC ① | KTR1-1011 | 1SFA 616 950 R1011 | \$ 35.00 |
| 220 - 250 V AC | 24 V AC ① | KTR1-1012 | 1SFA 616 950 R1012 | |
| 380 - 420 V AC | 24 V AC ① | KTR1-1013 | 1SFA 616 950 R1013 | |
| 440 - 480 V AC | 24 V AC ① | KTR1-1014 | 1SFA 616 950 R1014 | |

For illuminated operators ②

Intended to supply a 1.2 W filament bulb mounted in lamp block MLB-1 (1SFA 611 620 R1001) only.

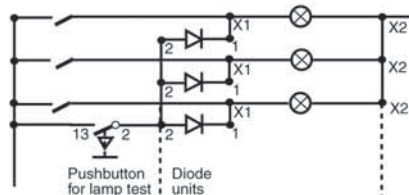
| | | | | |
|----------------|-----------|------------------|--------------------|-------|
| 110 - 127V AC | 6 V AC | KTR1-2001 | 1SFA 616 950 R2001 | 35.00 |
| 220 - 250 V AC | 6 V AC | KTR1-2002 | 1SFA 616 950 R2002 | |
| 380 - 420 V AC | 6 V AC | KTR1-2003 | 1SFA 616 950 R2003 | |
| 440 - 480 V AC | 6 V AC | KTR1-2004 | 1SFA 616 950 R2004 | |
| 500 - 600 V AC | 6 V AC | KTR1-2005 | 1SFA 616 950 R2005 | |
| 110 - 127 V AC | 24 V AC ① | KTR1-2011 | 1SFA 616 950 R2011 | 35.00 |
| 220 - 250 V AC | 24 V AC ① | KTR1-2012 | 1SFA 616 950 R2012 | |
| 380 - 420 V AC | 24 V AC ① | KTR1-2013 | 1SFA 616 950 R2013 | |
| 440 - 480 V AC | 24 V AC ① | KTR1-2014 | 1SFA 616 950 R2014 | |

Diode block

To be used if several lamps are to be connected to a common lamp-test pushbutton. A diode must be connected in series with each lamp. The diode block snaps onto the lamp block or is placed at the side.

| Description | Catalog No. | Ref. Code | List Price |
|-------------|-----------------|--------------------|------------|
| Diode block | MDB-1001 | 1SFA 611 630 R1001 | \$ 14.00 |

Diagram for lamp test with three diode block



① Can be used with LED bulb
② To be used with with directly supplied lamp blocks only.

Accessories

Filament bulbs

Ba 9s base Catalog No. of current: AC/DC. A lamp changing tool is required for changing bulb.

| Description | | | | | Catalog No. | Ref. Code | List Price |
|-----------------|------------------|----------------|----------------|--------------|-------------|-------------|------------|
| Rated voltage V | Rated current mA | Rated output W | Service life h | Lumiance mcd | | | |
| 6 | 200 | 1.2 | 10 000 | 350 | 5911 086-11 | 5911 086-11 | \$ 6.00 |
| 12 | 100 | 1.2 | 10 000 | 230 | 5911 086-12 | 5911 086-12 | |
| 24 | 50 | 1.2 | 10 000 | 280 | 5911 086-13 | 5911 086-13 | |
| 30 | 40 | 1.2 | 10 000 | 250 | 5911 086-4 | 5911 086-4 | |
| 48 | 42 | 2 | 6 000 | 500 | 5911 086-5 | 5911 086-5 | |
| 60 | 20 | 1.2 | 5 000 | 190 | 5911 086-14 | 5911 086-14 | |
| 110 | 18 | 2 | 7 500 | 250 | 5911 086-7 | 5911 086-7 | |
| 130 | 15 | 2 | 7 500 | 120 | 5911 086-15 | 5911 086-15 | |

LEDs

With one diode chip mounted on a Ba 9s base. Choose the same color for the LED and the lamp cap or else use a clear lamp cap.

For white light use white LED with clear lamp cap. At DC the lamp base have to be connected to cathode (-) and the bottom contact to anode (+).

| Description | | | | Catalog No. | Ref. Code | List Price |
|---|------------------|------------------|---------------|-------------|--------------------|------------|
| Color | Rated current mA | Wave-length nm | Luminance mcd | | | |
| Rated voltage 12 V, DC Service life >50 000 h | | | | | | |
| Red | 15 | 630 | 250 | KA2-2011 | 1SFA 616 921 R2011 | \$ 21.00 |
| Green | 15 | 525 | 1000 | KA2-2012 | 1SFA 616 921 R2012 | |
| Yellow | 15 | 592 | 250 | KA2-2013 | 1SFA 616 921 R2013 | |
| Blue | 15 | 470 | 450 | KA2-2014 | 1SFA 616 921 R2014 | |
| White | 15 | x=0.31 y=0.32 | 600 | KA2-2015 | 1SFA 616 921 R2015 | |
| Rated voltage 24 V, (AC)/DC Service life >50 000 h | | | | | | |
| Red | 15 | 630 | 250 | KA2-2021 | 1SFA 616 921 R2021 | 15.00 |
| Green | 15 | 525 | 800 | KA2-2022 | 1SFA 616 921 R2022 | |
| Yellow | 15 | 592 | 250 | KA2-2023 | 1SFA 616 921 R2023 | |
| Blue | 15 | 470 | 400 | KA2-2024 | 1SFA 616 921 R2024 | |
| White | 15 | x=0.31 y=0.32 | 500 | KA2-2025 | 1SFA 616 921 R2025 | |
| Rated voltage 48 V, (AC)/DC Service life >50 000 h | | | | | | |
| Red | 12 | 630 | 200 | KA2-2041 | 1SFA 616 921 R2041 | 21.00 |
| Green | 12 | 525 | 1700 | KA2-2042 | 1SFA 616 921 R2042 | |
| Yellow | 12 | 592 | 240 | KA2-2043 | 1SFA 616 921 R2043 | |
| Blue | 12 | 470 | 720 | KA2-2044 | 1SFA 616 921 R2044 | |
| White | 12 | x=0.31 y=0.32 | 1200 | KA2-2045 | 1SFA 616 921 R2045 | |
| Rated voltage 60 V, (AC)/DC Service life >50 000 h | | | | | | |
| Red | 10 | 630 | 160 | KA2-2051 | 1SFA 616 921 R2051 | 21.00 |
| Green | 10 | 525 | 1400 | KA2-2052 | 1SFA 616 921 R2052 | |
| Yellow | 10 | 592 | 200 | KA2-2053 | 1SFA 616 921 R2053 | |
| Blue | 10 | 470 | 600 | KA2-2054 | 1SFA 616 921 R2054 | |
| White | 10 | x=0.31 y=0.32 | 1000 | KA2-2055 | 1SFA 616 921 R2055 | |
| Rated voltage 110-130 V, AC Service life 25 000 h | | | | | | |
| Red | 4-6 | 630 | 60-100 | KA2-2131 | 1SFA 616 921 R2131 | 15.00 |
| Green | 4-6 | 525 | 500-850 | KA2-2132 | 1SFA 616 921 R2132 | |
| Yellow | 4-6 | 592 | 70-120 | KA2-2133 | 1SFA 616 921 R2133 | |
| Blue | 4-6 | 470 | 220-350 | KA2-2134 | 1SFA 616 921 R2134 | |
| White | 4-6 | x=0.31 y=0.32 | 350-600 | KA2-2135 | 1SFA 616 921 R2135 | |
| Rated voltage 110-130 V, AC/DC Service life 25 000 h | | | | | | |
| Red | 4-6 | 630 | 60-100 | KA2-2141 | 1SFA 616 921 R2141 | 21.00 |
| Green | 4-6 | 525 | 500-850 | KA2-2142 | 1SFA 616 921 R2142 | |
| Yellow | 4-6 | 592 | 70-120 | KA2-2143 | 1SFA 616 921 R2143 | |
| Blue | 4-6 | 470 | 220-350 | KA2-2144 | 1SFA 616 921 R2144 | |
| White | 4-6 | x=0.31 y=0.32 | 350-600 | KA2-2145 | 1SFA 616 921 R2145 | |
| Rated voltage 230 V, AC Service life 25 000 h | | | | | | |
| Red | 4 | 630 | 60 | KA2-2221 | 1SFA 616 921 R2221 | 21.00 |
| Green | 4 | 525 | 500 | KA2-2222 | 1SFA 616 921 R2222 | |
| Yellow | 4 | 592 | 70 | KA2-2223 | 1SFA 616 921 R2223 | |
| Blue | 4 | 470 | 220 | KA2-2224 | 1SFA 616 921 R2224 | |
| White | 4 | x=0.31 y=0.32 | 350 | KA2-2225 | 1SFA 616 921 R2225 | |

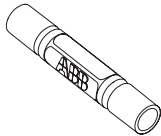
① At AC the luminance is decreased with 30 % and there is also a slight flickering.



Flashing LED

A lamp changing tool is required for changing bulb.
Choose the same color for the LED and the lamp cap or use a clear lamp cap.
The lamp base has to be connected to cathode (-) and the bottom contact to anode (+).

| Description | Catalog No. | Ref. Code | List Price |
|--|----------------|--------------------|------------|
| Rated voltage 24 V, rated current 25 mA, DC | | | |
| | Wave length nm | Service life hours | |
| Color | | | |
| Red | 630 | 50 000 | 4950 512-1 |
| Green | 565 | 50 000 | 4950 512-2 |
| Yellow | 585 | 50 000 | 4950 512-3 |
| | | | 4950 512-1 |
| | | | 4950 512-2 |
| | | | 4950 512-3 |
| | | | \$ 20.00 |
| | | | 44.25 |
| | | | 20.00 |



Lamp changing tool

| Description | Catalog No. | Ref. Code | List Price |
|------------------------|-------------|--------------------|------------|
| For LEDs and for bulbs | KA1-8072 | 1SFA 616 920 R8072 | \$ 10.00 |



Mounting tool

| Description | Catalog No. | Ref. Code | List Price |
|--------------------------------|-------------|--------------------|------------|
| Used for tightening the sleeve | KA1-8015 | 1SFA 611 920 R8015 | \$ 10.00 |



Membrane of rubber

Of transparent, heat and cold resistant rubber. Does not harden at low temperature.
Gives IP 67 degree of protection. When membrane is used, remove the gasket.

| For operator with | Catalog No. | Ref. Code | List Price |
|-------------------|-------------|--------------------|------------|
| Flush button | KA1-8052 | 1SFA 616 920 R8052 | \$ 8.00 |
| Extended button | KA1-8002 | 1SFA 616 920 R8002 | |

Emergency stop shroud

For 40 mm Emergency Stop Pushbuttons. Not for use with plastic enclosure.

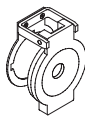
| Color | Catalog No. | Ref. Code | List Price |
|-----------------------------------|-------------|--------------------|------------|
| To prevent inadvertant operation. | | | |
| Yellow | KA1-8053 | 1SFA 616 920 R8053 | \$ 16.00 |



Protective ring

For flush and extended buttons

| Description | Catalog No. | Ref. Code | List Price |
|--|--------------|--------------|------------|
| To prevent inadvertant operation. | | | |
| Not together with legend plate holder. | SK 615 512-1 | SK 615 512-1 | \$ 4.00 |



Protective cover

For flush button.
To prevent inadvertant operation.
Not together with legend plate holder.

| Description | Catalog No. | Ref. Code | List Price |
|--|-------------|--------------------|------------|
| For flush button. | | | |
| To prevent inadvertant operation. | | | |
| Not together with legend plate holder. | KA1-8010 | 1SFA 616 920 R8010 | \$ 15.00 |



Bezel (Packing unit 10 pieces)

| Description | Catalog No. | Ref. Code | List Price |
|----------------------------|-------------|--------------------|------------|
| For pushbutton | | | |
| Grey, plastic | KA1-8079 | 1SFA 616 920 R8079 | \$ 1.00 |
| Black, plastic | KA1-8022 | 1SFA 616 920 R8022 | 1.00 |
| Metal | KA1-8021 | 1SFA 616 920 R8021 | 2.50 |
| For selector switch | | | |
| Grey, plastic | KA1-8077 | 1SFA 616 920 R8077 | 1.00 |
| Black, plastic | KA1-8080 | 1SFA 616 920 R8080 | 1.00 |
| Metal | KA1-8024 | 1SFA 616 920 R8024 | 2.50 |



Square bezel

| | | | |
|---|--------------|--------------------|------|
| Black, plastic (Packing unit 10 pieces) | SK 616 016-2 | SK 616 016-2 | 2.00 |
| Grey, plastic (Packing unit 10 pieces) | KA1-8124 | 1SFA 611 920 R8124 | |

Accessories

30 mm adaptors

For use when fitting the 22 mm pilot devices in 30 mm mounting holes. (1.5 – 4 mm panels)

| Description | Catalog No. | Ref. Code | List Price |
|--|-------------|--------------------|------------|
| For use with emergency stop pushbuttons | | | |
| Black plastic. | KA1-8027 | 1SFA 616 920 R8027 | \$ 8.00 |
| Metal. | KA1-8028 | 1SFA 616 920 R8028 | 10.00 |
| For use with pushbuttons, selector switches, pilot lights, potentiometers and buzzers | | | |
| Black plastic. | KA1-8029 | 1SFA 616 920 R8029 | 8.00 |
| Metal. | KA1-8030 | 1SFA 616 920 R8030 | 10.00 |

Adaptors

| Description | Catalog No. | Ref. Code | List Price |
|--|-------------|--------------------|------------|
| For flush mounted pushbuttons | | | |
| | KA1-8073 | 1SFA 616 920 R8073 | \$ 15.00 |
| For flush mounted selector switches | | | |
| | KA1-8074 | 1SFA 616 920 R8074 | |

Extra key

| Description | Catalog No. | Ref. Code | List Price |
|----------------------------|---------------|---------------|------------|
| Ronis 455 (key code 71) | SK 616 021-71 | SK 616 021-71 | |
| Ronis 421 (key code 72) | SK 616 021-72 | SK 616 021-72 | \$ 10.00 |
| Ronis 3433-E (key code 73) | SK 616 021-73 | SK 616 021-73 | |

Label sheet

| Description | Catalog No. | Ref. Code | List Price |
|---|-------------|-------------|------------|
| For marking of contact blocks at two levels | 2949 1725-1 | 2949 1725-1 | \$ 10.00 |

Lenses for pilot lights (Packing unit 10 pieces)

| Description/Color | Catalog No. | Ref. Code | List Price |
|-------------------|-------------|--------------------|------------|
| Red | KA1-8031 | 1SFA 616 920 R8031 | |
| Green | KA1-8032 | 1SFA 616 920 R8032 | |
| Yellow | KA1-8033 | 1SFA 616 920 R8033 | \$ 2.50 |
| Blue | KA1-8034 | 1SFA 616 920 R8034 | |
| White | KA1-8035 | 1SFA 616 920 R8035 | |

Buttons for pushbuttons (Packing unit 10 pieces)

| Description | Color | Catalog No. | Ref. Code | List Price |
|------------------------------|--------|-------------|--------------------|------------|
| Flush, opaque | Red | KA1-8081 | 1SFA 616 920 R8081 | |
| | Green | KA1-8082 | 1SFA 616 920 R8082 | |
| | Yellow | KA1-8083 | 1SFA 616 920 R8083 | |
| | Blue | KA1-8084 | 1SFA 616 920 R8084 | |
| | White | KA1-8085 | 1SFA 616 920 R8085 | |
| | Black | KA1-8086 | 1SFA 616 920 R8086 | |
| | Grey | KA1-8087 | 1SFA 616 920 R8087 | |
| | Clear | KA1-8088 | 1SFA 616 920 R8088 | |
| Extended, opaque | Red | KA1-8091 | 1SFA 616 920 R8091 | |
| | Green | KA1-8092 | 1SFA 616 920 R8092 | |
| | Yellow | KA1-8093 | 1SFA 616 920 R8093 | |
| | Blue | KA1-8094 | 1SFA 616 920 R8094 | |
| | White | KA1-8095 | 1SFA 616 920 R8095 | |
| | Black | KA1-8096 | 1SFA 616 920 R8096 | \$ 1.50 |
| | Grey | KA1-8097 | 1SFA 616 920 R8097 | |
| | Clear | KA1-8098 | 1SFA 616 920 R8098 | |
| Flush, transparent | Red | KA1-8101 | 1SFA 616 920 R8101 | |
| | Green | KA1-8102 | 1SFA 616 920 R8102 | |
| | Yellow | KA1-8103 | 1SFA 616 920 R8103 | |
| | Blue | KA1-8104 | 1SFA 616 920 R8104 | |
| | White | KA1-8105 | 1SFA 616 920 R8105 | |
| | Clear | KA1-8108 | 1SFA 616 920 R8108 | |
| Extended, transparent | Red | KA1-8111 | 1SFA 616 920 R8111 | |
| | Green | KA1-8112 | 1SFA 616 920 R8112 | |
| | Yellow | KA1-8113 | 1SFA 616 920 R8113 | |
| | Blue | KA1-8114 | 1SFA 616 920 R8114 | |
| | White | KA1-8115 | 1SFA 616 920 R8115 | |
| | Clear | KA1-8118 | 1SFA 616 920 R8118 | |

Accessories

22mm hole plug (UL Type 1, 3R, 4, 4X, 12)

Hole plugs are used to cover pushbutton holes in panels

| Description | Catalog No. | List Price |
|----------------|--------------|------------|
| 22mm hole plug | SK 616 502-B | \$ 2.00 |

Padlock attachment for 30mm mushroom head (twist release only)

Prevents unauthorized use of equipment. Provides space for up to 4 padlocks with the button in the depressed position. Holes fit standard 1/4" padlock.

| Description | Catalog No. | List Price |
|--------------------|--------------|------------|
| Padlock attachment | SK 615 502-D | \$ 20.00 |

Spare gasket

| Description | Catalog No. | List Price |
|-------------|-------------|------------|
| Gasket | 2152 0357-1 | \$ 1.00 |

Selector switch lock

| Description | Catalog No. | List Price |
|----------------------|-------------|------------|
| Selector switch lock | CBK-XSWL | \$ 35.00 |

Selector switch guard

| Description | Catalog No. | List Price |
|-----------------------|-------------|------------|
| Selector switch guard | CBK-XSWG | \$ 8.00 |

