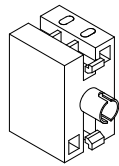
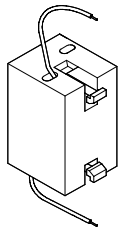


Accessories

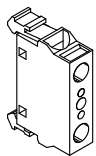
Pilot Devices
Modular Range
30mm



Transformer block with lamp holder for pilot lights



Transformer block for illuminated operators



Diode block

Transformer block

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

Primary voltage	Secondary voltage	Bulb Suffix LED Filament	Catalog number	Ref. code	List price
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With lamp holder for front mounting, Ba 9s base

Intended to supply a 1.2 W filament bulb.

110 - 127 V AC 6 V AC	-	T1	KTR1-1001	1SFA 616 950 R1001	\$ 35.00
220 - 250 V AC 6 V AC	-	T2	KTR1-1002	1SFA 616 950 R1002	
380 - 420 V AC 6 V AC	-	T3	KTR1-1003	1SFA 616 950 R1003	
440 - 480 V AC 6 V AC	-	T4	KTR1-1004	1SFA 616 950 R1004	
500 - 600 V AC 6 V AC	-	T9	KTR1-1005	1SFA 616 950 R1005	
110 - 127 V AC 24 V AC ①	TL1	T5	KTR1-1011	1SFA 616 950 R1011	\$ 35.00
220 - 250 V AC 24 V AC ①	TL2	T6	KTR1-1012	1SFA 616 950 R1012	
380 - 420 V AC 24 V AC ①	TL3	T7	KTR1-1013	1SFA 616 950 R1013	
440 - 480 V AC 24 V AC ①	TL4	T8	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.

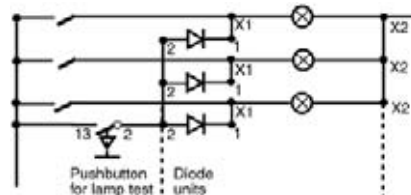
110 - 127V AC 6 V AC	-	T1	KTR1-2001	1SFA 616 950 R2001	35.00
220 - 250 V AC 6 V AC	-	T2	KTR1-2002	1SFA 616 950 R2002	
380 - 420 V AC 6 V AC	-	T3	KTR1-2003	1SFA 616 950 R2003	
440 - 480 V AC 6 V AC	-	T4	KTR1-2004	1SFA 616 950 R2004	
500 - 600 V AC 6 V AC	-	T9	KTR1-2005	1SFA 616 950 R2005	
110 - 127 V AC 24 V AC ①	TL1	T5	KTR1-2011	1SFA 616 950 R2011	35.00
220 - 250 V AC 24 V AC ①	TL2	T6	KTR1-2012	1SFA 616 950 R2012	
380 - 420 V AC 24 V AC ①	TL3	T7	KTR1-2013	1SFA 616 950 R2013	
440 - 480 V AC 24 V AC ①	TL4	T8	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 number	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. A lamp changing tool is required for changing bulb.

Description					Catalog number	Ref. code	List price
Rated voltage V	Rated current mA	Rated output W	Service life h	Luminance 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 number	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		

⊕ At AC the luminance is decreased by 30% and there is also a slight flickering.