

SB, SBM & SBX Series



Stefan Modular Contactors SB, SBM & SBX used for commutation of single-phase and three-phase low power electrical consumers. They can be combined with auxiliary control, protection and indication functions; can be used to remote control applications in alternative networks: Lighting, heating ventilation roller blinds, sanitary hot water; mechanical ventilation systems; load-shedding of non-priority circuits, etc.

There are available in two versions:

- Contactors without manually operated
- Contactors with manually-operated
- Automatic operating mode
- Temporary "ON" override
- Permanent "ON" override: used to lock the contactor in the ON position during installation maintenance
- Shutdown

Functions:

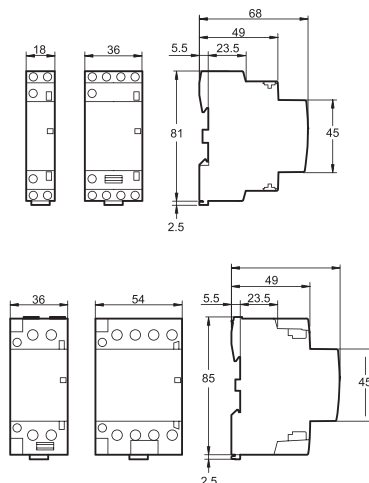
- switching on of consumers
- making of control systems
- remarkable with high reliability of current characteristics
- reliable switching on or separation of power contacts

Technical Data

- comply with standards IEC/EN 61095
- operation class: AC-7a, AC-7B, AC-1, AC-3
- rated operating voltage of the controlling coil: 12Vac; 24Vac; 48Vac; 110Vac; 127Vac; 230Vac; 220-240Vac 50/60Hz, etc
- insulation voltage: 500V AC
- pollution degree: 2
- rated impulse withstand voltage (Uimp): 2.5kV (4kV for 12/24/48V AC)
- electrical endurance (number of cycles): =100,000

Mounting:

- mounting to 35mm DIN-rail
- mounting : vertical gradient - maximum $\pm 5^\circ$
- plastic: nonflammable (self-extinguishing material)
- ambient temperature: -10°C to $+65^\circ\text{C}$
- degree of protection (IEC 60529): IP20
- tropicalization (IEC 60068-1): treatment 2 (relative humidity 95% at 55°C)



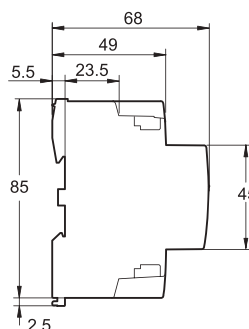
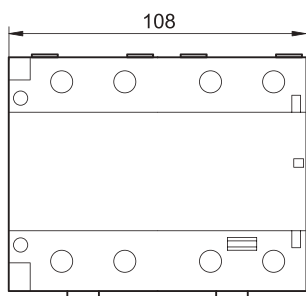
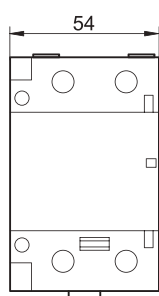
Consumption

Type	Rating (In)		kW	Control Voltage	Consumption		Max.
	AC-7a	AC-7b	AC-7b	(VAC)(50/60Hz)	Holding	Inrush	power
	AC-1	AC-3	AC-3				
2P	16A	7A	1.2kW	12	3.8 VA	15 VA	1.3 W
				24	3.8 VA	15 VA	1.3 W
				48	3.8 VA	15 VA	1.3 W
				220...240	2.7 VA	9.2 VA	1.2 W
	20A	9A	1.3kW	220...240	2.7 VA	9.2 VA	1.2 W
	25A	10A	1.4kW	24	3.8 VA	15 VA	1.3 W
				48	3.8 VA	15 VA	1.3 W
				220...240	2.7 VA	9.2 VA	1.2 W
	40A	22A	3.7kW	220...240	4.6 VA	34 VA	1.6 W
	63A	30A	5.0kW	24	4.6 VA	34 VA	1.6 W
100A	-	-	220...240	4.6 VA	34 VA	1.6 W	
			220...240	6.5 VA	53 VA	2.1 W	
3P	16A	7A	4kW	220...240	4.6 VA	34 VA	1.6 W
	25A	10A	4.1kW	220...240	4.6 VA	34 VA	1.6 W
	40A	22A	12.5kW	220...240	6.5 VA	53 VA	2.1 W
	63A	30A	15kW	220...240	6.5 VA	53 VA	2.1 W
	4P	16A	7A	3.7kW	24	4.6 VA	34 VA
4P	16A	7A	3.7kW	220...240	4.6 VA	34 VA	1.6 W
				20A	9A	4kW	220...240
	25A	10A	4.2kW	24	4.6 VA	34 VA	1.6 W
				220...240	4.6 VA	34 VA	1.6 W
	40A	22A	12.5kW	220...240	6.5 VA	53 VA	2.1 W
	63A	30A	15kW	24	6.5 VA	53 VA	2.1 W
				220...240	6.5 VA	53 VA	2.1 W
	100A	-	-	220...240	13 VA	106 VA	4.2 W

MODULAR CONTACTORS

Basic Information for Standard Contactors

Type	Rating (In)	AC-7b	Control Voltage (VAC)(50/60Hz)	Contact	In 18 mm modules	Order Code
1P						
	16A	7A	230	1NO	1	SB-1610
			230	1NC	1	SB-1601
	20A	9A	230	1NO	1	SB-2010
			230	1NC	1	SB-2001
	25A	9A	230	1NO	1	SB-2510
			230	1NC	1	SB-2501
2P						
	16A	6A	230	2NO	1	SB-1620
			230	2NC	1	SB-1602
			230	1NO+1NC	1	SB-1611
	20A	7A	230	2NO	1	SB-2020
			230	1NO	1	SB-2002
			230	1NC	1	SB-2011
	25A	9A	230	2NO	1	SB-2520
			230	1NO+1NC	1	SB-2511
			230	2NO	2	SB-4020
	40A	18A	230	2NC	2	SB-4002
			230	1NO+1NC	2	SB-4011
			230	2NO	2	SB-6320
	63A	25A	230	2NC	2	SB-6302
			230	1NO+1NC	2	SB-6311
			230	2NO	3	SB-10020
	100A	-	230	2NC	3	SB-10002
			230	1NO+1NC	3	SB-10011
3P						
	16A	6A	230	3NO	2	SB-1630
	25A	9A	230	3NO	2	SB-2530
	40A	18A	230	3NO	3	SB-4030
	63A	25A	230	3NC	3	SB-6330
	100A	-	230	3NO	6	SB-10030
4P						
	20A	6A	230	4NO	2	SB-2040
			230	2NO+2NC	2	SB-2022
			230	3NO+1NC	2	SB-2031
			230	4NC	2	SB-2004
	25A	9A	230	4NO	2	SB-2540
			230	2NO+2NC	2	SB-2522
			230	3NO+1NC	2	SB-2531
			230	4NC	2	SB-2504
	40A	18A	230	4NO	3	SB-4040
			230	2NO+2NC	3	SB-4022
			230	3NO+1NC	3	SB-4031
			230	4NC	3	SB-4004
	63A	25A	230	4NO	3	SB-6340
			230	2NO+2NC	3	SB-6322
			230	3NO+1NC	3	SB-6331
			230	4NC	3	SB-6304
	100A	-	230	4NO	6	SB-10040
			230	2NO+2NC	6	SB-10022
			230	3NO+1NCR	6	SB-10031
			230	4NC	6	SB-10004



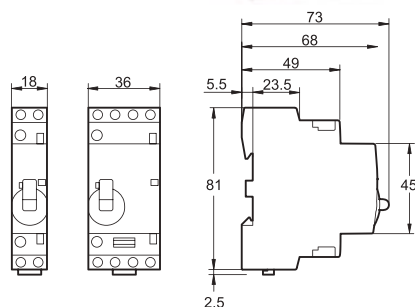
MODULAR CONTACTORS

Basic Information for Manual Control Contactors

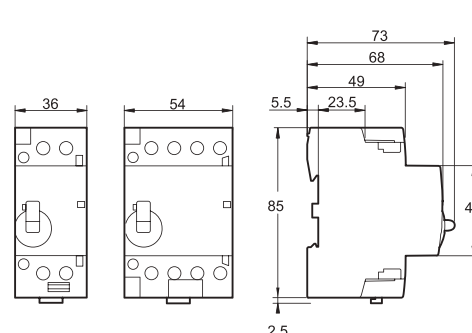
Type	Rating (In)	AC-7b	Control Voltage (VAC)(50/60Hz)	Contact	In 18 mm modules	Order Code
2P	16A	7A	230	2NO	1	SBM-1620
			230	2NC	1	SBM-1602
			230	1NO+1NC	1	SBM-1611
	25A	10A	230	2NO	1	SBM-2520
			230	2NC	1	SBM-2502
			230	1NO+1NC	1	SBM-2511
	40A	22A	230	2NO	2	SBM-4020
			230	2NC	2	SBM-4002
			230	1NO+1NC	2	SBM-4011
	63A	30A	230	2NO	2	SBM-6320
			230	2NC	2	SBM-6302
			230	1NO+1NC	2	SBM-6311
3P	25A	10A	230	3NO	2	SBM-2530
	40A	22A	230	3NO	3	SBM-4030
	63A	30A	230	3NO	3	SBM-6330
4P	25A	10A	230	4NO	2	SBM-2540
			230	4NC	2	SBM-2504
			230	2NO+2NC	2	SBM-2522
	40A	22A	230	4NO	3	SBM-4040
			230	4NC	3	SBM-4004
			230	2NO+2NC	3	SBM-4022
	63A	30A	230	4NO	3	SBM-6340
			230	4NC	3	SBM-6304
			230	2NO+2NC	3	SBM-6322

Warm tips: customized coils voltage can be 12 VAC, 24VAC, 110VAC, 127VAC, 220-240VAC, etc 50/60Hz

If you need customized DC coil like 12VDC, 24VDC, etc please contact email: support@stefanelectric.com



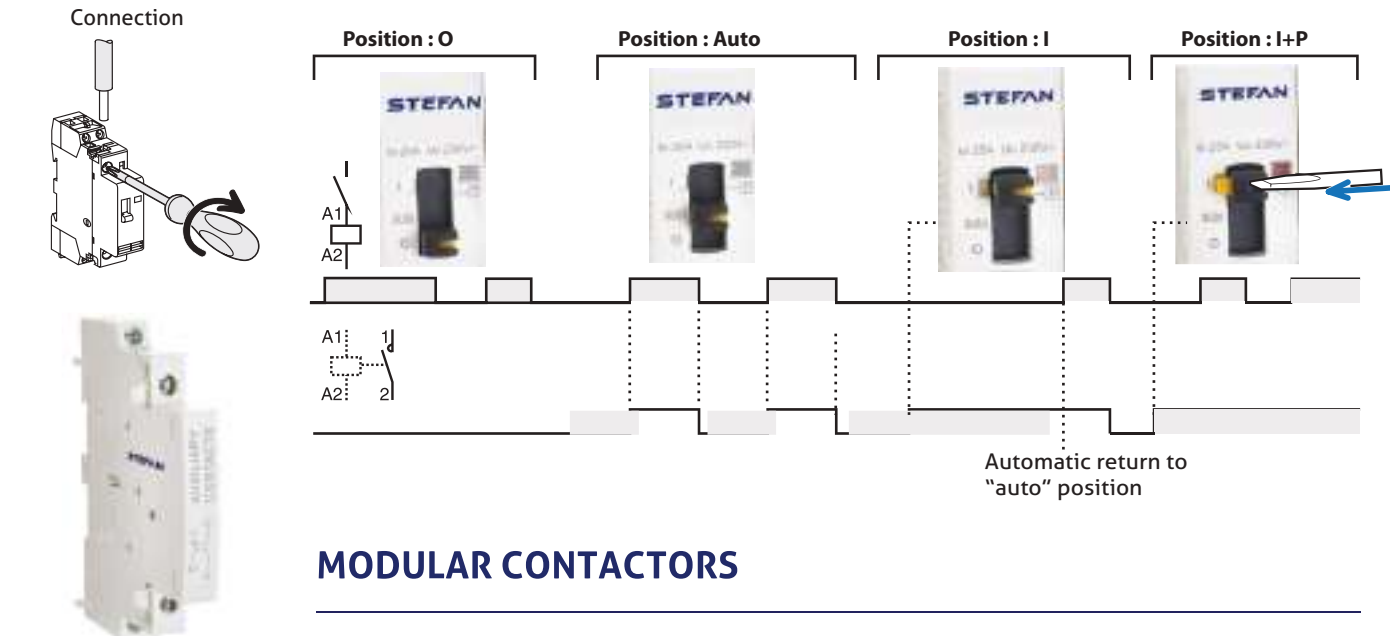
BCH8 manual control contactor 16/25A



Manual control contactor 40/63A

Operation(Manual Control Contactors)

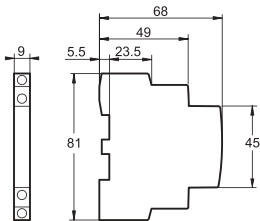
- Manually-operated contactors have a 4-position selector switch on their front face:
- shutdown
 - automatic operating mode
 - temporary "ON" override
 - permanent "ON" override:used to lock the contactor in the ON position during installation maintenance



MODULAR CONTACTORS

Connection

Type	Rating	Length tripping	Circuit	Tightening torque	Copper cables	
					Rigid	Flexible or ferrule
PZ1:4 mm	16-100A	9mm	Control	0.8N.m	1.5 to 2.5mm ² 2× 1.5mm ²	1.5 to 2.5mm ² 2× 2.5mm ²
	16 and 25A				1.5 to 6mm ²	1 to 4mm ²
PZ2:6 mm	40A-63A	14mm	Power	3.5N.m	6 to 25mm ²	6 to 16 mm ²
	100A				6 to 35mm ²	6 to 35mm ²

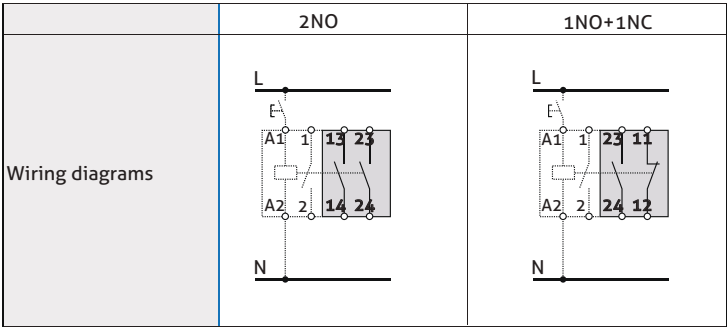


AUXILIARY FOR MODULAR CONTACTORS

- Stefan auxiliary allows indication or control of the "open" or "closed" position of the contactor power contacts
- MOUNTING:**
- Mounted to the right of modular contactors
 - 9mm width

Technical Specifications

Control voltage	VAC	24...240	Order Code
	VDC	24...130	
Operating frequency	Hz	50/60	
Width in 9 mm modules			
Auxiliary contact (breaking capacity)		•Minimum:10mA at 24V DC/AC-COSφ=1 •Maximum: ○5A at 240V AC-COSφ=1 ○1A at 130V DC	
Number of contacts		2NO	SBX-20
		1NO+1NC	SBX-11
Operating temperature	°C	-10° C to +65° C	
Storage temperature	°C	-40° C to +70° C	



Basic Information for DC coil Contactors

Type 1P	Rating (In) AC-7a	AC-7b	Control voltage (VDC)	Contact	In 18 mm modules	Order Code
	16A	7A	12	2NO	1	SB-1620-12V
			12	2NC	1	SB-1602-12V
	20A	9A	12	2NO	1	SB-2020-12V
			12	2NC	1	SB-2002-12V
	25A	10A	12	2NO	1	SB-2520-12V
			12	2NC	1	SB-2502-12V

If you need customized 40A, 63A or 3P, 4P, or DC coil 12VDC, 24VDC,etc please contact email: support@stefanelectric.com