

SHC-M Installation contactor



- △ According IEC/EN 61095, IEC 60947-4-1
- △ High degree of electrical life
- △ Noiseless and hum free
- △ Energy saving
- △ Compact design
- △ Auxiliary function
- △ Manual override
- △ 25A / 40A / 63A versions

General information

The SHC modular contactor is mainly suitable for AC 50/60Hz systems up to 400V and rated current in the circuit up to 63A. It can control low-inductance load of household applications and similar purposes. It can also be used to control the load of household motors, the power should be reduced accordingly.

The SHC modular contactors according to the standard IEC/EN 61095, IEC 60947-4-1 are used mainly in building for switching and controlling lighting, heating, ventilation and pumps. They are part of the complete range of DIN-rail products of SEP and can be integrated easily in dedicated panels.

Type key

Example:
SHC-M2540

SHC-	M	25	40	
Product	Type	Current	Pole designation	Voltage
SHC	M = manual P = impuls	16 = 16A 25 = 25A 40 = 40A 63 = 63A (AC-7a)	2NO 4NO 2NC 4NC 1NO/1NC 2NO/2NC 3NO/1NC 1CO 2CO	blanc = 230VAC a = 24VAC b = 48VAC

Certification marks



SHC-M25 Installation contactor, 25A (AC-7a), 9A (AC-7b)



Contact	Coil voltage	Width	Article no.	Type	EAN code	Packing
2NO	230VAC	1MU	3103000010	SHC-M2520	8718959026966	12/120
1NO/1NC	230VAC	1MU	3103000020	SHC-M2511	8718959026973	12/120
2NC	230VAC	1MU	3103000030	SHC-M2502	8718959026980	12/120
4NO	230VAC	2MU	3103000040	SHC-M2540	8718959026997	6/60
4NC	230VAC	2MU	3103000050	SHC-M2504	8718959027000	6/60
2NO/2NC	230VAC	2MU	3103000060	SHC-M2522	8718959027017	6/60
3NO/1NC	230VAC	2MU	3103000070	SHC-M2531	8718959027024	6/60
2NO	24VAC	1MU	3103000190	SHC-M2520a	8718959027147	12/120
2NC	24VAC	1MU	3103000200	SHC-M2511a	8718959027154	12/120
1NO/1NC	24VAC	1MU	3103000210	SHC-M2502a	8718959027161	12/120
4NO	24VAC	2MU	3103000220	SHC-M2540a	8718959027178	6/60
4NC	24VAC	2MU	3103000230	SHC-M2504a	8718959027185	6/60
2NO/2NC	24VAC	2MU	3103000240	SHC-M2522a	8718959027192	6/60
3NO/1NC	24VAC	2MU	3103000250	SHC-M2531a	8718959027208	6/60



SHC-M40 Installation contactor, 40A (AC-7a), 18A (AC-7b)



Contact	Coil voltage	Width	Article no.	Type	EAN code	Packing
2NO	230VAC	2MU	3103000080	SHC-M4020	8718959027031	6/60
1NO/1NC	230VAC	2MU	3103000090	SHC-M4011	8718959027048	6/60
2NC	230VAC	2MU	3103000100	SHC-M4002	8718959027055	6/60
4NO	230VAC	3MU	3103000110	SHC-M4040	8718959027062	4/40
4NC	230VAC	3MU	3103000120	SHC-M4004	8718959027079	4/40
2NO/2NC	230VAC	3MU	3103000130	SHC-M4022	8718959027086	4/40
3NO/1NC	230VAC	3MU	3103000140	SHC-M4031	8718959027093	4/40
2NO	24VAC	2MU	3103000260	SHC-M4020a	8718959027215	6/60
2NC	24VAC	2MU	3103000270	SHC-M4011a	8718959027222	6/60
1NO/1NC	24VAC	2MU	3103000280	SHC-M4002a	8718959027239	6/60
4NO	24VAC	3MU	3103000290	SHC-M4040a	8718959027246	4/40
4NC	24VAC	3MU	3103000300	SHC-M4004a	8718959027253	4/40
2NO/2NC	24VAC	3MU	3103000310	SHC-M4022a	8718959027260	4/40
3NO/1NC	24VAC	3MU	3103000320	SHC-M4031a	8718959027277	4/40



SHC-M63 Installation contactor, 63A (AC-7a), 25A (AC-7b)



Contact	Coil voltage	Width	Article no.	Type	EAN code	Packing
4NO	230VAC	3MU	3103000150	SHC-M6340	8718959027109	4/40
4NC	230VAC	3MU	3103000160	SHC-M6304	8718959027116	4/40
2NO/2NC	230VAC	3MU	3103000170	SHC-M6322	8718959027123	4/40
3NO/1NC	230VAC	3MU	3103000180	SHC-M6331	8718959027130	4/40
4NO	24VAC	3MU	3103000330	SHC-M6340a	8718959027284	4/40
4NC	24VAC	3MU	3103000340	SHC-M6304a	8718959027291	4/40
2NO/2NC	24VAC	3MU	3103000350	SHC-M6322a	8718959027307	4/40
3NO/1NC	24VAC	3MU	3103000360	SHC-M6331a	8718959027314	4/40



SHC-M complementary – auxiliary contact and spacer



Contact	Width	Article no.	Type	EAN code	Packing
1NO/1NC	0.5 MU	3103000001	SHC-AUC11	8718959026942	12/120
2NO	0.5 MU	3103000002	SHC-AUC20	8718959026959	12/120
Spacer	0.5 MU	2119000010	CSP	8718959002052	50/600



SHC-P16 Installation impulse contactor, 16A



Contact	Coil voltage	Width	Article no.	Type	EAN code	Packing
2NO	230VAC/110VDC	1MU	3103100010	SHC-P1620	8718959027321	12/120
1NO/1NC	230VAC/110VDC	1MU	3103100020	SHC-P1611	8718959027338	12/120
1CO	230VAC/110VDC	1MU	3103100030	SHC-P16C1	8718959027345	12/120
4NO	230VAC/110VDC	2MU	3103100040	SHC-P1640	8718959027352	6/60
3NO/1NC	230VAC/110VDC	2MU	3103100050	SHC-P1631	8718959027369	6/60
2NO/2NC	230VAC/110VDC	2MU	3103100060	SHC-P1622	8718959027376	6/60
2CO	230VAC/110VDC	2MU	3103100070	SHC-P16C2	8718959027383	6/60
2NO	24VAC/12VDC	1MU	3103100080	SHC-P1620a	8718959027390	12/120
1NO/1NC	24VAC/12VDC	1MU	3103100090	SHC-P1611a	8718959027406	12/120
1CO	24VAC/12VDC	1MU	3103100100	SHC-P16C1a	8718959027413	12/120
4NO	24VAC/12VDC	2MU	3103100110	SHC-P1640a	8718959027420	6/60
3NO/1NC	24VAC/12VDC	2MU	3103100120	SHC-P1631a	8718959027437	6/60
2NO/2NC	24VAC/12VDC	2MU	3103100130	SHC-P1622a	8718959027444	6/60
2CO	24VAC/12VDC	2MU	3103100140	SHC-P16C2a	8718959027451	6/60
2NO	48VAC/24VDC	1MU	3103100150	SHC-P1620b	8718959027468	12/120
1NO/1NC	48VAC/24VDC	1MU	3103100160	SHC-P1611b	8718959027475	12/120
1CO	48VAC/24VDC	1MU	3103100170	SHC-P16C1b	8718959027482	12/120
4NO	48VAC/24VDC	2MU	3103100180	SHC-P1640b	8718959027499	6/60
3NO/1NC	48VAC/24VDC	2MU	3103100190	SHC-P1631b	8718959027505	6/60
2NO/2NC	48VAC/24VDC	2MU	3103100200	SHC-P1622b	8718959027512	6/60
2CO	48VAC/24VDC	2MU	3103100210	SHC-P16C2b	8718959027529	6/60



SHC-P complementary – spacer



Contact	Width	Article no.	Type	EAN code	Packing
Spacer	0.5 MU	2119000010	CSP	8718959002052	50/600



General parameters

Noiseless an hum free
Suitable for household, utility as well as industrial applications
Spacer available when the interior temperature in the enclosure is in range of 50-60°

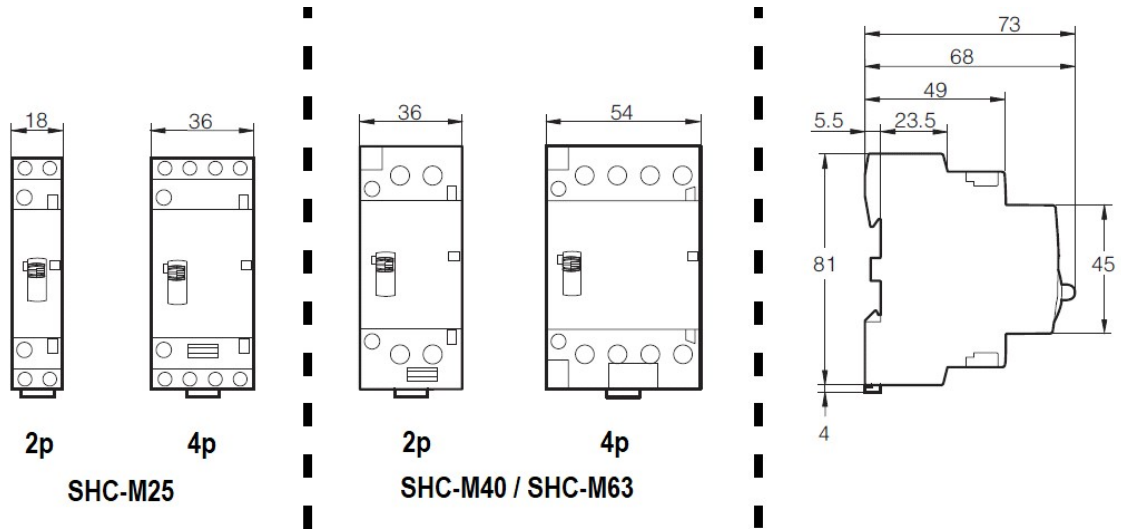
Electrical parameters

Tested according		IEC/EN 61095
Rated operational voltage	Ue	250VAC (2p) / 400VAC (4p)
Rated frequency		50/60Hz
Pole designations		2NO, 1NO/1NC, 2NC, 4NO, 3NO/1NC, 4NC, 2NO/2NC
Rated current	In	25A, 40A, 63A
Utilization category		AC-7a / AC-7b
Rated impulse withstand	Uimp	2,5 kV (4kV for 12/24/48VAC)
Rated insulation voltage	Ui	500V
Dielectric test voltage		2.5 kV
Mechanical life time		1.000.000 operation cycles
Electrical life time		100.000 operation cycles
Maximum operation switching a day		100 operation cycles

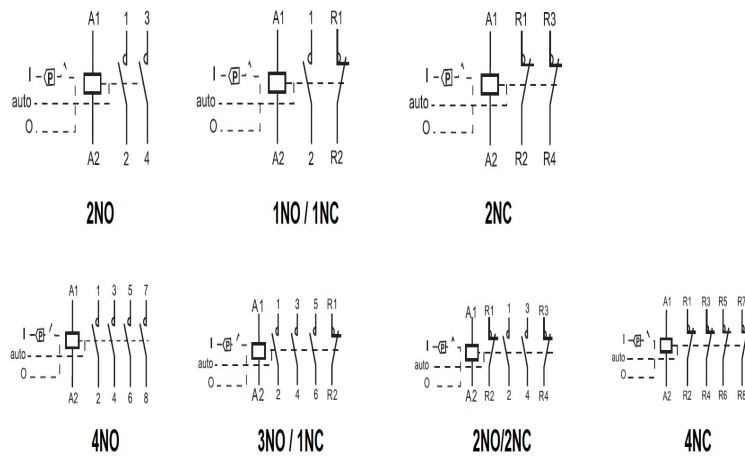
Mechanical parameters

Device width		See dimension drawings
Device height		85mm
Device depth		73mm
Mounting		Easy fastening onto 35mm device rail (DIN)
Degree of protection (all sides)		IP40
Degree of protection (connection terminals)		IP20
Connection possibility		Cable
Terminals		Cage clamp terminal
Terminal capacity of control		1,5 – 2,5mm ² / 2x 1,5mm ² (rigid) 1,5 – 2,5mm ² / 2x 2,5mm ² (flexible or ferrule)
Terminal capacity of power	16-25A	1,5 – 6mm ² (rigid) – 1-4mm ² (flexible or ferrule)
	40-63A	6 – 25mm ² (rigid) – 6-16mm ² (flexible or ferrule)
Fastening torque of control (A1 – A2)		0.8 Nm
Fastening torque of power		0.8 Nm (16-25A), 3.5Nm (40-63A)
Storage temperature		-40°C + 70°C
Ambient temperature		-5°C + 60°C (with daily average < 35°C)
Resistance to humidity and heat		Class 2
Installation class		III
Pollution degree		2

Dimensions



Wiring diagrams



Power loss

Poles	Ie Ratings		Uc VAC / 50 Hz	Power consumption		
	AC-7a	AC-7b		Hold on	Pull in	Max power
2p	25A	9A	24V	3.05VA	11.5VA	1.3W
	40A	18A	230V	2.99VA	11.5VA	1.2W
	63A	25A	230V	4.37VA	31.05VA	1.6W
4p	25A	9A	24V	4.94VA	32.95VA	1.6W
	40A	18A	230V	4.14VA	31.05VA	1.6W
	63A	25A	230V	7.13VA	48.3VA	2.1W

General parameters

Noiseless an hum free
Suitable for household, utility as well as industrial applications
Spacer available when the interior temperature in the enclosure is in range of 50-60°

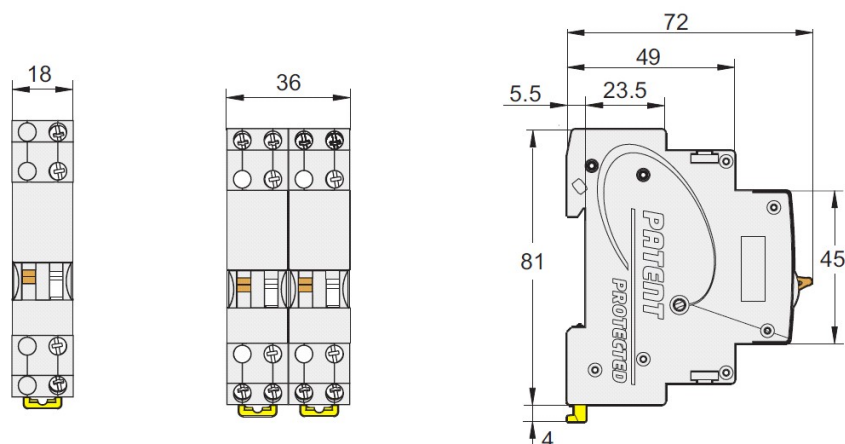
Electrical parameters

Tested according		IEC/EN 60669-2-2
Rated operational voltage	U _e	250VAC
Rated frequency		50/60Hz
Pole designations		2NO, 1NO/1CO, 1CO, 4NO, 3NO/1NC, 2NO/2NC, 2CO
Operation voltage	U _n	230VA-110VDC / 48VAC-24VDC / 24VAC-12VDC
Operation threshold		85% of U _n
Duration of the control		50ms to 1s (200ms recommended)
Response time		50ms
Rated current	I _n	16A
Utilization category		AC21 / AC22
Rated impulse withstand	U _{imp}	6 kV
Rated insulation voltage	U _i	440V
Dielectric test voltage		2.5 kV
Endurance	AC21	200.000 cycles
	AC22	100.000 cycles
Maximum operation switching a day		100 cycles
Maximum number of switching min		5 cycles
Power dissipation (impulse only)		19VA

Mechanical parameters

Device width	18mm (2p) / 36mm (4p)
Device height	85mm
Device depth	72mm
Mounting	Easy fastening onto 35mm device rail (DIN)
Degree of protection (all sides)	IP40
Degree of protection (connection terminals)	IP20
Connection possibility	Cable
Terminals	Cage clamp terminal
Terminal capacity of control	0,5 – 4mm ² (rigid)
	1- 4mm ² (flexible or ferrule)
Terminal capacity of control	1,5 – 4mm ² (rigid)
	1,5 – 4mm ² (flexible or ferrule)
Fastening torque of control (A1 – A2)	1 Nm
Fastening torque of power	1 Nm
Storage temperature	-40°C + 70°C
Ambient temperature	-5°C + 60°C (with daily average < 35°C)
Resistance to humidity and heat	Class 2
Installation class	III
Pollution degree	3

Dimensions



Wiring diagrams

