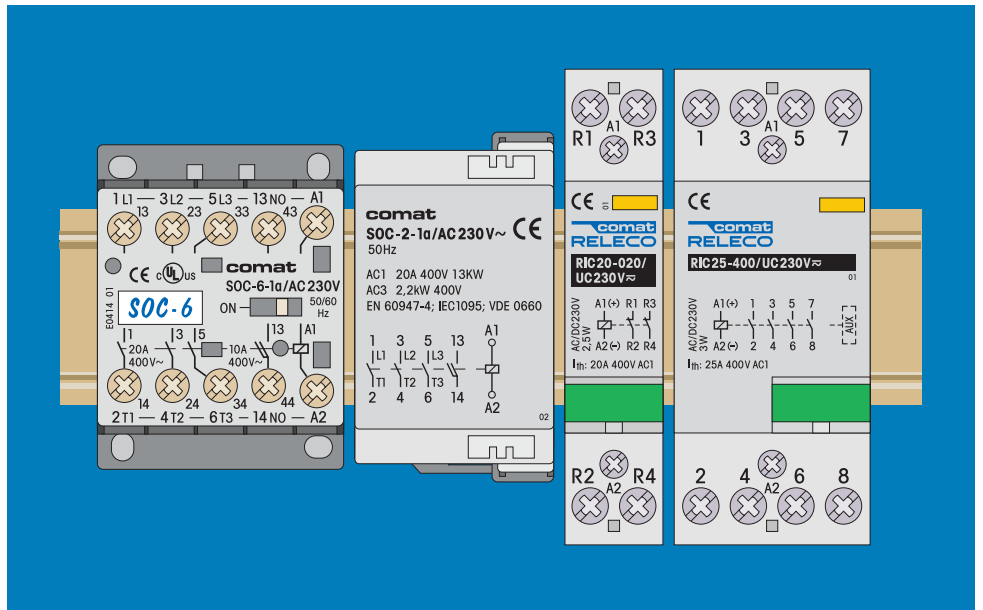


Industrial Relays

Miniature Contactors



DIN

Comat products comply with different international standards and are certified accordingly.

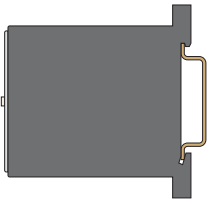


Lloyd's
IEC 61810; EN 60974

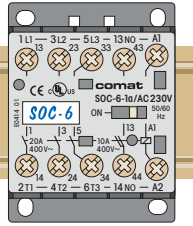
Miniature Contactors Recommended application									
63A									
40A									
25A									
20A									
10A									
6A									
10mA									
5mA									
1mA									
I	2			RIC 20				RIC-AUX	
3+1	SOC-6	SOC-2							
4				RIC 25	RIC 40	RIC 63			

— twin contacts

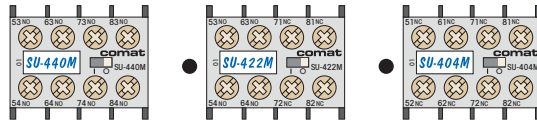
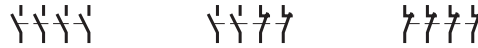
comat
SOC-6 DIN
Miniature Contactor



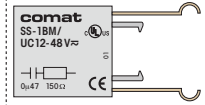
Miniature Contactor



Additional auxiliary Snap-on contacts



RC Modules



3-/4-pole Miniature Contactor

- All contacts with twin interruption
- Manual operation
- Mechanical status display

Test voltage: \square 4000V / 4000V \square

T_{amb.} operation/
storage: -20...+60/-40...+85°C



Continuous terminal No. →
Designation according to DIN/EN 50011 →

Connection lay out (top/bottom)

Data at T_{amb.} = 20°C / ≤ 40°C
Main contacts // Auxiliary contact

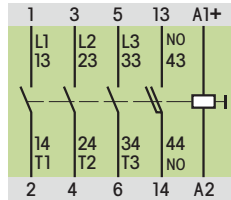
	Contact material	AgNi
	Switching power AC1	11kW 400V // 4kW 400V
	Switching power AC3/4	4kW 9A 400V // -
	Switching current AC15	1,9A 400V // 1,5A 400V
	Switching power DC1	...300W
	Switching power DC13	0,3A 220V // 0,1A 220V
	Making-/Breaking capacity	90A / 70A _{eff}
	Mechanical switching cycles	20x10 ⁶
	Operation voltage AC50Hz/DC	0,8...1,2U _n
	Power consumption	4,2VA/3W
	Typical make/release time	20ms/15ms



SOC-6-1a

Universal Miniature Contactor with 3 main contacts 20A and 1 auxiliary contact 10A (signal twin contact). Contact opening > 3mm and test voltage 4000V. Specially suitable for "safely separation" in low voltage circuits.

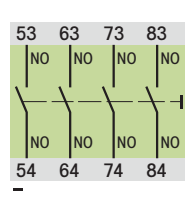
20A // 10A 400V ~
10mA 24V // 1mA 6V



SU-440M

Additional auxiliary contact block 4 NO contacts. Snap-on to miniature contactor SOC-6. Expands the SOC-6 up to a total of 8 NO contacts.

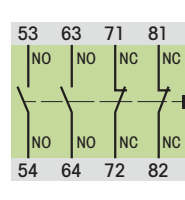
10A 400V ~
10mA 24V



SU-422M

Additional auxiliary contact block 2 NO + 2 NC contacts. Snap-on to miniature contactor SOC-6. Expands the SOC-6 up to a total of 6 NO and 2 NC contacts.

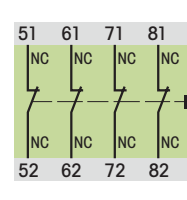
10A 400V ~
10mA 24V



SU-404M

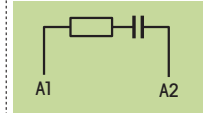
Additional auxiliary contact block 4 NC contacts. Snap-on to miniature contactor SOC-6. Expands the SOC-6 up to a total of 4 NO and 4 NC contacts.

10A 400V ~
10mA 24V



SS-1...

RC Modul to limit overvoltage. Universal version (UC...V~) for AC and DC coils. Snap-on directly onto miniature contactor SOC-6.



Current consumption:
at AC24V : 8mA
at DC24V : 4mA
at AC230V: 12mA
at DC220V: 2,5mA

Release time SOC-6 with RC module ≤ 45ms

24, 230	SOC-6-1a / AC ... V
24	SOC-6-1a / DC ... V

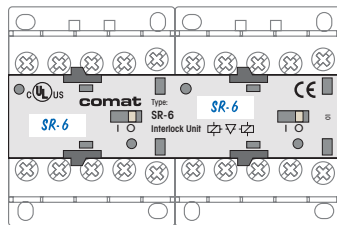
SU-440M

SU-422M

SU-404M

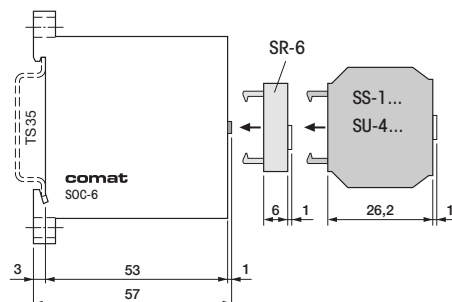
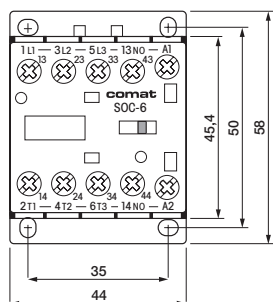
SS-1HM/UC110-240V
SS-1BM/UC12-48V

Interlocking unit SR-6 mechanically prevents the simultaneous engagement of two parallel working SOC-6.

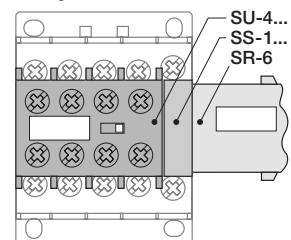


Ordering example

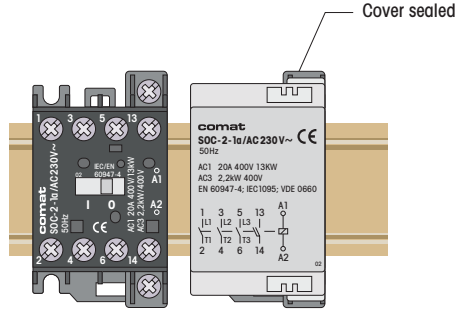
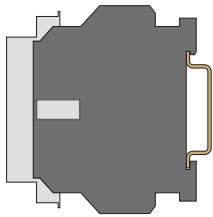
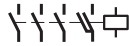
- Miniature contactor
SOC-6-1a/AC230V
- Auxiliary contact block
(2 NO + 2 NC contacts)
SU-422M
- RC module
SS-1H/UC110-240V
- Interlocking unit
SR-6



Arrangement



Installation Contactor SOC-2-1a



SOC-2-1a

Installation Contactor

High power relay up to 3x20A 400V and 1 auxiliary twin contact 6A.

For installation mounting with cover conform DIN 43880.

The cover can be sealed.

For general applications and motors up to 2,2 kW.

Suitable for pilot control signals.

3- + 1-pol. Miniature Contactor

- All contacts with twin interruption
- Manual operation
- Mechanical status display

Test voltage: \square 4000V / 4000V

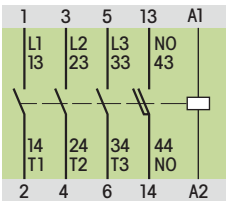
T_{amb.} operation/storage:
 -20...+55/-30...+80°C



Continuous terminal No. →
 Designation according to DIN/EN 50011 →

Connection lay out (top/bottom)

20A // 6A 400V ~
 10mA 24V // 1mA 6V



Data at T_{amb.} = 20°C / ≤40°C
 Main contacts // Auxiliary contact

Contact material
 Switching power AC1
 Switching power AC3/4
 Switching current DC1
 Inrush current

Switching current
 Switching current DC1
 Mechanical life time

Coil voltage
 Coil power
 Typical make/release time

Ag Ni
 13kW 400V
 2,2kW 400V
 20A 24V / 2A 110V
 100A / 2,5 ms

6A 400V
 6A 24V / 0,5A 220V
 > 3 x 10⁶

0,8 - 1,2 U_N
 32W 20ms/1,5W
 < 20ms / < 20ms

AC ~
 50Hz

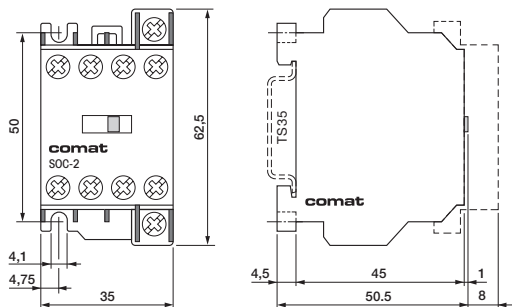
24, 230
SOC-2-1a/AC...V

Ordering example

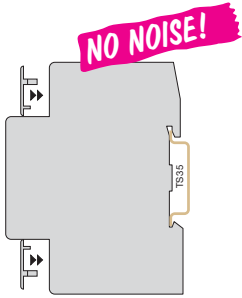
Installation contactor
SOC-2-1a/AC230V

Spare parts

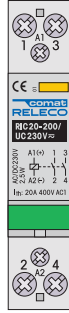
Cover sealed
SOC-2COV



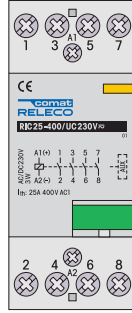
comat
RIC DIN
Miniature Contactor



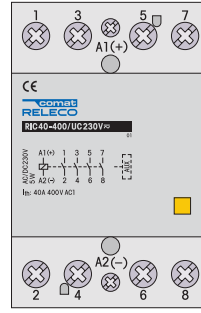
Contactor 20A
2 NO or 2 NC or 1 NO/1 NC



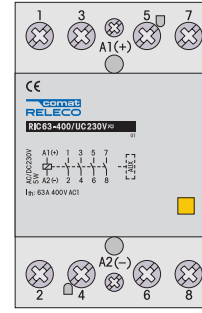
Contactor 25A
4 NO or 4 NC or 2 NO/2 NC



Contactor 40A
4 NO or 4 NC or 2 NO/2 NC



Contactor 63A
4 NO or 2 NO/2 NC



AUX Block
2 NO or 2 NC or 1 NO/1 NC



AC/DC Installation Contactors No noise!

- All contacts doublemake/ doublebrake
- Mechanical status display

Test voltage: 4 kV/3

T_{amb.} operation/storage: -20...+55/-30...+80 °C



RIC 20

Contactor 20A
Contactor with 2 NO or 2 NC or 1 NO+1 NC contacts. UC (AC/DC) versions are noise free and do not need external freewheeling circuits. No coil inrush overcurrent. Sealing cover optional.

20A 400V ~
10mA 24V

RIC 25

Contactor 25A
Contactor with 4 NO or 4 NC or 2 NO+2 NC contacts. UC (AC/DC) versions are noise free and do not need external freewheeling circuits. No coil inrush overcurrent. Sealing cover optional.

25A 400V ~
10mA 24V

RIC 40

Contactor 40A
Contactor with 4 NO or 4 NC or 2 NO+2 NC contacts. UC (AC/DC) versions are noise free and do not need external freewheeling circuits. No coil inrush overcurrent. Sealing cover optional.

40A 400V ~
10mA 24V

RIC 63

Contactor 63A
Contactor with 4 NO or 2 NO+2 NC contacts. UC (AC/DC) versions are noise free and do not need external freewheeling circuits. No coil inrush overcurrent. Sealing cover optional.

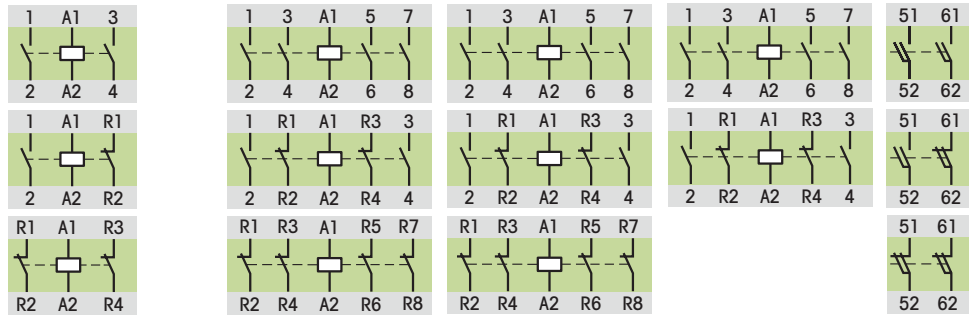
63A 400V ~
10mA 24V

RIC-AUX

Auxiliary
Contactblock with 2 NO or 2 NC or 1 NO+1 NC contacts. For signalling and control applications up to 6 A with crown twin contacts. For all RIC contactors.

6A 400V ~
5mA 24V

Connection lay out (top/bottom)



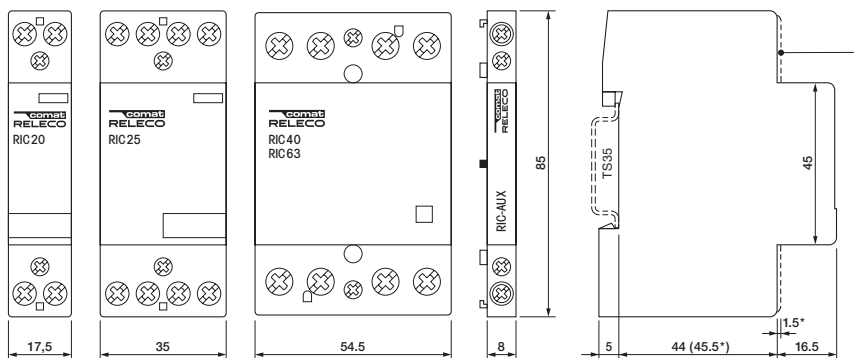
Data at T_{amb} = 20 °C

	RIC 20	RIC 25	RIC 40	RIC 63	RIC-AUX
Contact material	AgNi	AgNi	AgSnO ₂	AgSnO ₂	AgNi
Switching current I _{TH}	20A	25A	40A	63A	6A
Switching voltage	400V	400V	400V	400V	400V
Switching power AC3	1,3kW/230V	2,2kW/400V	5,5kW/400V	8,5kW/230V	-
Switching power AC1/AC7a	4kW/230V	16kW/400V	26kW/400V	40kW/400V	-
Op Frequenz max. cycle/hr	600	600	120	120	600
Electrical life cycles AC1	2x10 ⁵	2x10 ⁵	1x10 ⁵	1x10 ⁵	2x10 ⁵
Coil voltage range	0,85 - 1,1 Un	0,85 - 1,1 Un	0,85 - 1,1 Un	0,85 - 1,1 Un	-
Power consumption	2,5W	3W	5W	5W	-
Operate / release time typ.	20ms // 20ms	10ms // 50ms	20ms // 35ms	20ms // 35ms	- // -

UC	RIC 20	RIC 25	RIC 40	RIC 63	RIC-AUX
UC ~ 50/60 Hz / =	RIC20-200/UC ... V	RIC25-400/UC ... V	RIC40-400/UC ... V	RIC63-400/UC ... V	RIC-AUX20
UC ~ 50/60 Hz / =	RIC20-110/UC ... V	RIC25-220/UC ... V	RIC40-220/UC ... V	RIC63-220/UC ... V	RIC-AUX11
UC ~ 50/60 Hz / =	RIC20-020/UC ... V	RIC25-040/UC ... V	RIC40-040/UC ... V		RIC-AUX02

Ordering example

- Installation contactor
RIC25-400/UC230V
- Aux block
RIC-AUX20
- Sealing cover
RIC-SEAL20



*Option
Sealing cover
Type: RIC-SEAL20
RIC-SEAL25
RIC-SEAL40-63



Kühn Controls AG

Notes:

You want more information about this product, please call us: tel: +49 (0)7082-940000 or send us a fax: +49 (0)7082-940001, or email: sales@kuehn-controls.de or visit our Website: www.kuehn-controls.de