

Modular contactors for installation into distribution boards

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Description

Modular contactors are used for installation in consumer units in dwellings, business premises, hotels, hospitals, shopping centres, sport centers, production halls, warehouses etc.

They are used for remote switching and automatic control of electric devices and equipment, such as:

- lightning
- all types of pumps
- air-conditioning
- electric heating
- single-phase and three-phase motors

They excel in silent operation, long mechanical life time and high quality.

The contactors are designed for mounting on 35 mm mounting rail in accordance with the EN 60715 standard and they can be leaded by means of lead covers. The auxiliary contact block is available for signalization and ventilation module is available for preventing exceeded heating when contactors are used side-by-side.

All contactors have degree of protection IP20.

Besides the basic AC controlled types R20, R25, R40 and R63, types with increased silent operation RD20, RD25, RD40 and RD63 are available. Due to DC magnet and rectifier enable DC and AC voltage control. Surge arrestor is built in for over voltage protection.

Types R20-R, RD20-R, R25-R and RD25-R are upgraded versions of basic types of modular contactors. Besides basic functions they enable manual control with a handle.

Description of the handle positions:

- A: the contactor functions as an installation contactor without manual control
- O: permanently OFF
- I: manual shifting the handle from position A to I causes the contactor to close; when control voltage is applied, the handle is automatically set to position A.

Types RD20-R and RD25-R are provided with a varistor for over voltage protection and a rectifier, which enables control with AC and DC voltage.

Contactors with manual control enable:

- switching depending on tariff (selection of the most convenient tariff)
- switching when control voltage is not applied

Technical specifications according to:

EN60947-4-1; EN60947-5-1; VDE 0660, IEC 947-4-1; IEC 947-5-1

Advantages

→ Contactors RD series are universal power supply AC/DC with built-in varistor surge protection. RD contactors produce less noise (DC coil inside)



→ Special terminals provide reliable connection with cables.



→ Spring-loaded latch ensures reliable mounting on DIN rail TH 35



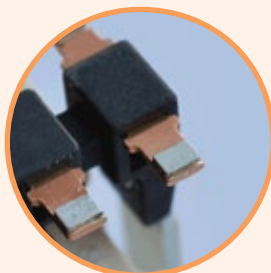
→ Contactors series R-R have operating mode switch:

- Automatic mode (normal operation with control circuit-coil)
- Manual mode (0 - permanently open, I - constantly closed).

In manual mode constantly close operation I presence of voltage on control circuit-coil returns contactor in automatic mode operation.



→ Contact status can be monitored visually or remote by auxiliary contacts



→ Silver contacts provide the best conductivity and lowest contact resistance



→ Spring loaded contacts to reduce bouncing effect and prolong contact life time



→ Specially designed mechanism consisting of two movable cores significantly reduces the noise level at switching

**2-pole, 1 module (17,5 mm), 20 A (AC1, 230V)**

Type	Code No.	Wiring diagram	Weight [g]	Packaging [pcs]
R 20-20 230V	002461210		130	12
R 20-20 24 V	002461211		130	12
R 20-11 230 V	002461220		130	12
R 20-11 24 V	002461221		130	12
R 20-02 230 V	002461230		130	12
R 20-02 24 V	002461231		130	12

**1-pole, 1 module (17,5 mm), 25 A (AC1, 230V)**

Type	Code No.	Wiring diagram	Weight [g]	Packaging [pcs]
R 25-10-24V	002463507		130	12
R 25-10-230V	002463500		130	12

2-pole, 1 module (17,5 mm), 25 A (AC1, 230V)

R 25-20-24V	002463501		130	12
R 25-20 230V	002463502		130	12
R 25-11 24V	002463503		130	12
R 25-11 230V	002463504		130	12
R 25-02 24V	002463505		130	12
R 25-02 230V	002463506		130	12

**4-pole, 2 modules (35 mm), 25 A (AC1, 400 V)**

Type	Code No.	Wiring diagram	Weight [g]	Packaging [pcs]
R 25-40 230 V	002462310		220	6
R 25-40 24 V	002462311		220	6
R 25-31 230 V	002462320		220	6
R 25-31 24 V	002462321		220	6
R 25-13 230 V	002462330		220	6
R 25-13 24 V	002462331		220	6
R 25-22 230 V	002462340		220	6
R 25-22 24 V	002462341		220	6
R 25-04 230 V	002462350		220	6
R 25-04 24 V	002462351		220	6

**4-pole, 3 modules (52,5 mm), 40 A (AC1, 400 V)**

Type	Code No.	Wiring diagram	Weight [g]	Packaging [pcs]
R 40-40 230 V	002463410		360	4
R 40-40 24 V	002463411		360	4
R 40-31 230 V	002463420		360	4
R 40-31 24 V	002463421		360	4
R 40-22 230 V	002463430		360	4
R 40-22 24 V	002463431		360	4
R 40-04 230 V	002463440		360	4
R 40-04 24 V	002463441		360	4

Modular contactors for installation into distribution boards - type R

2 pole, 2 modules (35 mm), 63 A(AC1, 400 V)

Type	Code No.	Wiring diagram	Weight [g]	Packaging [pcs]
R 63-20 230V	002463482		240	6/60
R 63-20 24V	002463483		240	6/60
R 63-11 230V	002463484		240	6/60
R 63-11 24V	002463485		240	6/60

4 pole, 3 modules (52,5mm), 63 A(AC1, 400 V)

Type	Code No.	Wiring diagram	Weight [g]	Packaging [pcs]
R 63-40 230 V	002463450		360	4
R 63-40 24 V	002463451		360	4
R 63-31 230 V	002463460		360	4
R 63-31 24 V	002463461		360	4
R 63-22 230 V	002463470		360	4
R 63-22 24 V	002463471		360	4
R 63-04 230 V	002463480		360	4
R 63-04 24 V	002463481		360	4

Auxiliary contactor block for contactors R25, R40, R63 (max. 1 piece)

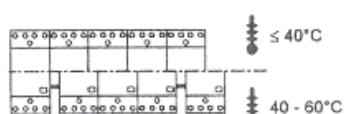
Type	Code No.	Wiring diagram	Weight [g]	Packaging [pcs]
RH 11	002461101		26	3

Sealing cover

Type	Code No.	For use with	Weight [g]	Packaging [pcs]
P721	002461110	R 25	2	10
P690	002461120	R 40..., R 63...	3	10

Distance piece

Type	Code No.	For use with	Weight [g]	Packaging [pcs]
P730	002461130	R20-R63	12	10

Distance piece

Distance piece is used where ambient temperature is higher than 40°C. Piece width is 1/2 module (8,8 mm)

Max 3 contactors can be side by side - use of distance piece is highly recommended.



**1-pole, 1 module (17,5 mm), 20 A (AC1, 230 V)**

Type	Code No.	Wiring diagram	Weight [g]	Packaging [pcs]
RD 20-10-230V AC/DC	002464000		130	10
RD 20-10-24V AC/DC	002464001			
RD 20-01-230V AC/DC	002464002		130	10
RD 20-01-24V AC/DC	002464003			

2-pole, 1 module (17,5 mm), 20 A (AC1, 230 V)

RD 20-20-230V AC/DC	002464004		130	10
RD 20-20-24V AC/DC	002464005			
RD 20-11-230V AC/DC	002464006		130	10
RD 20-11-24V AC/DC	002464007			
RD 20-02-230V AC/DC	002464008		130	10
RD 20-02-24V AC/DC	002464009			

Take care of dissipated heat by: $\leq 40^{\circ}\text{C}$ max. 3 modules side by side40 - 55°C max. 2 modules side by side.

For more contactors together, use distance piece IKV

4-pole, 2 modules (35 mm), 25 A (AC1, 400 V)

Type	Code No.	Wiring diagram	Weight [g]	Packaging [pcs]
RD 25-40-230V AC/DC	002464010		240	5
RD 25-40-24V AC/DC	002464011			
RD 25-31-230V AC/DC	002464012		240	5
RD 25-31-24V AC/DC	002464013			
RD 25-22-230V AC/DC	002464014		240	5
RD 25-22-24V AC/DC	002464015			
RD 25-04-230V AC/DC	002464016		240	5
RD 25-04-24V AC/DC	002464017			

Take care of dissipated heat by: $\leq 40^{\circ}\text{C}$ max. 3 modules side by side40 - 55°C max. 2 modules side by side.

For more contactors together, use distance piece IKV

4-pole, 3 modules (52,5 mm), 40 A (AC1, 400 V)

Type	Code No.	Wiring diagram	Weight [g]	Packaging [pcs]
RD 40-40-230V AC/DC	002464018		420	5
RD 40-40-24V AC/DC	002464019			
RD 40-31-230V AC/DC	002464020		420	5
RD 40-31-24V AC/DC	002464021			
RD 40-22-230V AC/DC	002464022		420	5
RD 40-22-24V AC/DC	002464023			
RD 40-04-230V AC/DC	002464024		420	5
RD 40-04-24V AC/DC	002464025			

Take care of dissipated heat by: $\leq 40^{\circ}\text{C}$ max. 3 modules side by side40 - 55°C max. 2 modules side by side.

For more contactors together, use distance piece IKV

4 pole, 3 modules (52,5mm), 63 A(AC1, 400 V)

Type	Code No.	Wiring diagram	Weight [g]	Packaging [pcs]
RD 63-40-230V AC/DC	002464026		420	5
RD 63-40-24V AC/DC	002464027			
RD 63-31-230V AC/DC	002464028		420	5
RD 63-31-24V AC/DC	002464029			
RD 63-22-230V AC/DC	002464030		420	5
RD 63-22-24V AC/DC	002464031			

Take care of dissipated heat by: $\leq 40^{\circ}\text{C}$ max. 3 modules side by side40 - 55°C max. 2 modules side by side.

For more contactors together, use distance piece IKV

Modular contactors for installation into distribution boards - type RD, R...R, RD...R

1-pole, ON - OFF - AUTO, 1 module (17,5 mm), 20 A (AC1, 230V)

Type	Code No.	Wiring diagram	Weight [g]	Packaging [pcs]
R 20-10-R-230V AC	002464032		130	10
R 20-10-R-24V AC	002464033			
RD 20-10-R-230V AC/DC	002464034			
RD 20-10-R-24V AC/DC	002464035			
R 20-01-R-230V AC	002464036		130	10
R 20-01-R-24V AC	002464037			
RD 20-01-R-230V AC/DC	002464038			
RD 20-01-R-24V AC/DC	002464039			

2-pole, ON - OFF - AUTO, 1 module (17,5 mm), 20 A (AC1, 230V)

R 20-20-R-230V AC	002464040		130	10
R 20-20-R-24V AC	002464041			
RD 20-20-R-230V AC/DC	002464042			
RD 20-20-R-24V AC/DC	002464043			
R 20-11-R-230V AC	002464044		130	10
R 20-11-R-24V AC	002464045			
RD 20-11-R-230V AC/DC	002464046			
RD 20-11-R-24V AC/DC	002464047			
R 20-02-R-230V AC	002464048		130	10
R 20-02-R-24V AC	002464049			
RD 20-02-R-230V AC/DC	002464050			
RD 20-02-R-24V AC/DC	002464051			

Take care of dissipated heat by: $\leq 40^{\circ}\text{C}$ max. 3 modules side by side
 $40 - 55^{\circ}\text{C}$ max. 2 modules side by side.

For more contactors together, use distance piece 1KV

**4-pole, ON - OFF - AUTO, 2 modules (35 mm), 25 A (AC1, 400 V)**

Type	Code No.	Wiring diagram	Weight [g]	Packaging [pcs]
R 25-40-R-230V AC	002464052		240	5
R 25-40-R-24V AC	002464053			
RD 25-40-R-230V AC/DC	002464054			
RD 25-40-R-24V AC/DC	002464055			
R 25-31-R-230V AC	002464056		240	5
R 25-31-R-24V AC	002464057			
RD 25-31-R-230V AC/DC	002464058			
RD 25-31-R-24V AC/DC	002464059			
R 25-22-R-230V AC	002464060		240	5
R 25-22-R-24V AC	002464061			
RD 25-22-R-230V AC/DC	002464062			
RD 25-22-R-24V AC/DC	002464063			
R 25-04-R-230V AC	002464064		240	5
R 25-04-R-24V AC	002464065			
RD 25-04-R-230V AC/DC	002464066			
RD 25-04-R-24V AC/DC	002464067			

Take care of dissipated heat by: $\leq 40^{\circ}\text{C}$ max. 3 modules side by side
 $40 - 55^{\circ}\text{C}$ max. 2 modules side by side.

For more contactors together, use distance piece 1KV



**Auxiliary contactor block for contactors RD, R...R, RD...R**

Type	Code No.	Wiring diagram	Weight [g]	Packaging [pcs]
RN-20	002464068		30	1
RN-02	002464069		30	1
RN-11	002464070		30	1

* The auxiliary switch should not be applied in combination with RD20 and RD20-R.

**Sealing cover**

Type	Code No.	For use with	Weight [g]	Packaging [pcs]
SC20	002464071	RD 20, R20...R	3	2
SC25	002464072	RD 25, R25...R	4	2
SC40/63	002464073	RD 40, RD 60	5	2

**Distance piece**

Type	Code No.	For use with	Weight [g]	Packaging [pcs]
IKV	002464074	RD, R...R	6	1