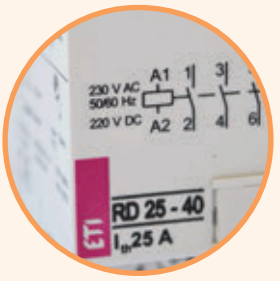
## Advantages

→ 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

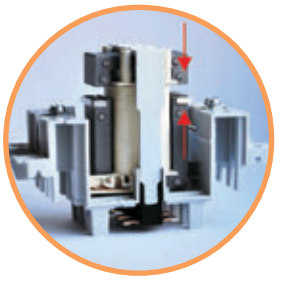
→ Contactors series R-R have operating mode switch:
- Automatic mode (normal operation with control circuit-coil)
- Manual mode (0 - permanently open, I - constantly closed).

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

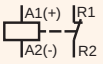
→ Silver contacts provide the best conductivity and lowest contact resistance

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

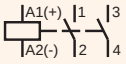
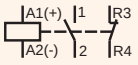
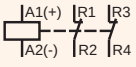


→ Specially designed mechanism consisting of two movable cores significantly reduces the noise level at switching

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

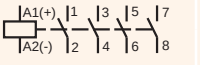
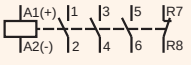
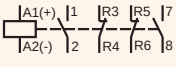
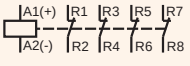
| Type | Code No. | Wiring diagram | Weight [g] | Packaging [pcs] |
|---|---|---|---|---|
| R 20-10-R-230V AC | 002464032 |  | 130 | 10 |
| R 20-10-R-24V AC | 002464033 | | | |
| RD 20-10-R-230V AC/DC | 002464034 | | | |
| RD 20-10-R-24V AC/DC | 002464035 | | | |
| R 20-01-R-230V AC | 002464036 |  |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

| Type | Code No. | Wiring diagram | Weight [g] | Packaging [pcs] |
|---|---|---|---|---|
| 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 |  | | |
| 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 |  | | |
| 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: ≤ 40 °C max. 3 modules side by side
40 - 55 °C max. 2 modules side by side.
For more contactors together, use distance piece IKV

**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 |  | | |
| 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 |  | | |
| 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 |  | | |
| 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: ≤ 40 °C max. 3 modules side by side
40 - 55 °C max. 2 modules side by side.
For more contactors together, use distance piece IKV

**Data according to IEC 947-4-1, IEC 947-5-1, VDE 0660, EN 60947-4-1, EN 60947-5-1**

| | Type | | | | | R 20-R | RD 20-R | R 25-R | R D25-R |
|---|---|---|---|---|---|---|---|---|---|
| General | Standards | | | | | IEC/EN 61095 , IEC/EN 60947-4-1, IEC/EN 60947-5-1 | | | |
| | Module width | | | | | 1 | | 2 | |
| | Mechanical endurance | | | | op. c. | 3 x 106 | | | |
| | Ambient temperature | | | | °C | -5 … +55 | | | |
| | Storage temperature | | | | °C | -30 … +80 | | | |
| | No. of contactors (side-by-side) | | ≤ 40 °C | | | max. 3 | max. 3 | no limit | max. 3 |
| | | | 40 - 55 °C | | | max. 2 | max. 2 | | max. 2 |
| | Contact reliability | | | | | 17 V; ≥ 50 mA | | | |
| | Min. distance of open contacts | | | | mm | 3,6 | | | |
| | Power dissipation per pole | | | | W | 1,7 | 1,7 | 2,2 | 2,2 |
| | Overload current withstand capability | | | | A | 72 | 72 | 68 | 68 |
| | Max. back-up fuse for short-circuit protection gL | | | Iv | A | 20 | 20 | 25 | 25 |
| | Coordination type 2 | | | | | | | | |
| | Max. operating frequency | DC-1 | | | op. c./h | 300 | | | |
| | | AC-1/AC-3/AC-5b/AC-6b | | | | 600 | | | |
| | | AC-15 | | | | 1200 | | | |
| | | no load | | | | 3000 | | | |
| | Weight | | | | kg | 0,13 | 0,13 | 0,24 | 0,24 |
| Main circuit | Rated insulation voltage | | | Ui | V | 230 | | 440 | |
| | Rated impulse withstand voltage | | | Uimp | kV | 4 | | | |
| | Thermal current | | | Ith | A | 20 | 20 | 25 | 25 |
| | Rated operational voltage | | | Ue | V | 230 | 230 | 400 | 400 |
| | Rated frequency | | | f | Hz | 50/60 | | | |
| | Rated operational current | AC-1/AC-7a | | Ie | A | 20 | 20 | 25 | 25 |
| | Operational power AC-1/AC-7a | single-phase | 230 V | | | 4 | 4 | 5,4 | 5,4 |
| | | three-phase | 230 V | Pe | kW | - | - | 9 | 9 |
| | | three-phase | 400 V | | | - | - | 16 | 16 |
| | Electrical endurance | AC-1/AC-7a | | | op. c. | 200.000 | | | |
| | Electrical endurance | AC-3/AC-7b | | | op. c. | 300.000 | 500.000 | 150.000 | |
| | Switching of capacitors | | | | | | | | |
| | | AC-6b | 230 V | C | µF | 30 | 30 | 36 | 36 |
| | Electrical endurance | AC-6b | | | op. c. | 100.000 | | | |
| | Rated operational current | AC-1/AC-7a | | Ie | A | 9 | 9 | 8,5 | 8,5 |
| | Operational power AC-3/AC-7b | single-phase motor | 230 V | | | 1.3 only for NO [1] | 1.3 only for NO [1] | 1.3 [2] | 1.3 [2] |
| | | three-phase motor | 230 V | Pe | kW | - | - | 2,2 | 2,2 |
| | | three-phase motor | 400 V | | | - | - | 4 | 4 |
| | Electrical endurance | AC-3/AC-7b | | | op. c. | 300.000 | | 500.000 | |
| | Switching of capacitors | | | | | | | | |
| | | AC-6b | 230 V | C | µF | 30 | 30 | 36 | 36 |
| | Electrical endurance | AC-6b | | | op. c. | 100.000 | | | |

1) Make contacts are marked NO
2) Data for single-phase power are valid for versions -22, -20 and -02