



TECHNICAL MANUAL

Thermal overload relay RTE EKF

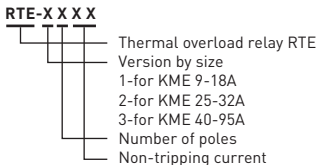
1. DESCRIPTION

The thermal overload relays RTE EKF are designed to protect three-phase squirrel-cage asynchronous motors against current overloads of unacceptable duration, including those resulting from loss of one of the phases.

The relays are used as components in motor control circuits together with contactors KME.

The thermal overload relays RTE correspond to IEC 60947-4-1:2018.

TYPE CODE



2. TECHNICAL CHARACTERISTICS

Main technical characteristics are listed in table 1.

Table 1

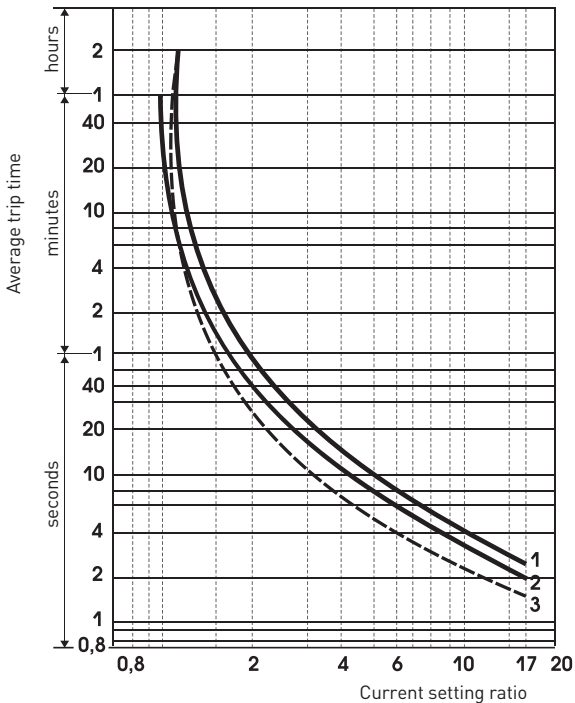
Name	Adjustment range, A	Rated operating voltage Ue, V	Rated insulation voltage Ue, V	Weight, kg	Item code
RTE-1304	0.4-0,63	660	690	0,165	rel-1304-0.4-063
RTE-1305	0,63-1				rel-1305-0.63-1
RTE-1306	1-1,6				rel-1306-1-1.6
RTE-1307	1,6-2,5				rel-1307-1.6-2.5
RTE-1308	2,5-4				rel-1308-2.5-4
RTE-1310	4-6				rel-1310-4-6
RTE-1312	5,5-8				rel-1312-5.5-8
RTE-1314	7-10				rel-1314-7-10
RTE-1316	9-13				rel-1316-9-13
RTE-1321	12-18				rel-1321-12-18
RTE-1322	17-25	rel-1322-17-25			
RTE-2353	23-32	660	690	0,32	rel-2353-23-32
RTE-2355	28-36				rel-2355-28-36
RTE-2355	30-40				rel-2355-30-40
RTE-3353	23-32	660	690	0,51	rel-3353-23-32
RTE-3355	30-40				rel-3355-30-40
PT3-3357	37-50				rel-3357-37-50
RTE-3359	48-65				rel-3359-48-65
RTE-3361	55-70				rel-3361-55-70
RTE-3363	63-80				rel-3363-63-80
RTE-3365	80-93				rel-3365-80-93

TRIPPING CHARACTERISTICS

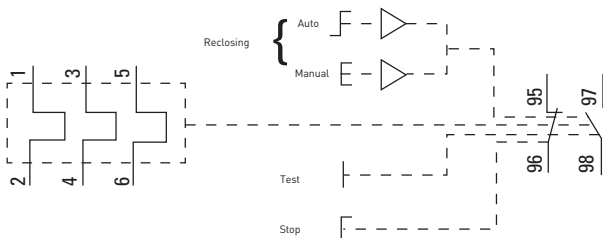
Tripping curves

1. symmetrical three-phase mode from the cold state
2. symmetrical two-phase mode from the cold state
3. symmetrical three-phase mode after prolonged rated current flow (hot state).

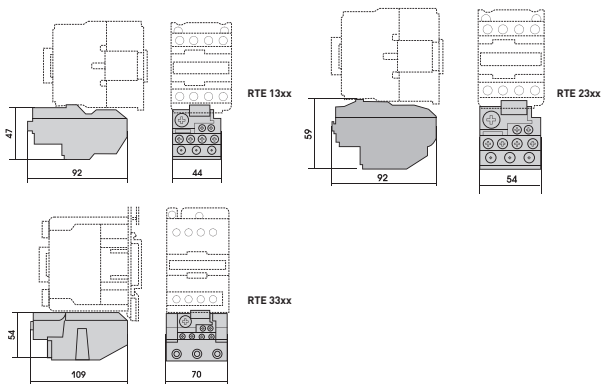
Class 10A



WIRING DIAGRAM



3 OVERALL DIMENSIONS



4 INSTALLATION AND OPERATION

Thermal overload relay shall be installed and connected by qualified electrical personnel.

To change the trip setpoint, open the transparent cover on the relay housing. Set the required current setpoint for relay tripping by turning the grey disc located on the left, matching the current value (A) on the scale with the marking on the housing. The cover may be sealed to prevent unauthorized access.

After opening the transparent cover, change the reclosing mode by turning the blue Reset switch. If turned to the left, the switch is disengaged and switched to the button mode. Press the button to activate manual reclosing. Press the switch and turn it to the right to activate automatic reclosing. The switch remains in the automatic reclosing position until forced return to the manual reclosing position.

Close the cover to lock the switch. Press the red Stop button to activate Stop function (contacts 95-96 open).

Press the red Test button with a screwdriver to activate Test function (triggering of the relay by overload is simulated - it changes the positions of open and close contacts and activates the trip indicator).

Operating temperature: from -40°C to $+50^{\circ}\text{C}$.

Altitude above sea level: max. 2000m.

Position in space - vertical on a vertical plane.

5 DELIVERY SCOPE

Thermal overload relays are supplied in an individual package. For all available documentation, scan the QR-code on the insert or on the inside of the package.

6 SAFETY REQUIREMENTS

Do not operate the thermal overload relay RTE with visual mechanical damage.

By protection method against electric shock, thermal overload relays belong to protection class «0» according to IEC 61140.

The relay shall only be operated with a series-connected fuse or circuit breaker of corresponding rated current.

7 MAINTENANCE

For RTE maintenance, follow national safety rules for operation of electrical Installations.

Under normal operating conditions, visually inspect the relay and tighten screw terminals every 6 months.

8 TRANSPORTATION AND STORAGE

The thermal overload relays RTE can be transported by any means of enclosed transport that ensures the protection of packed products from mechanical and atmospheric impacts.

The thermal overload relays RTE shall be stored indoors in the original package at the ambient temperature from - 40°C to +50°C and relative humidity of max. 75% at +15°C.

9 DISPOSAL

Life-expired and failed products shall be disposed of in compliance with the national and local laws and regulations in force.

To dispose of the product, send it to an authorized company for recycling in compliance with the national and local laws and regulations in force.

10 MANUFACTURER'S WARRANTY

The manufacturer guarantees that thermal overload relays correspond to the requirements of IEC 60947-4-1:2018 provided that the consumer follows the operation, transportation and storage conditions.

Warranty period: 7 years from the date of sale.

Shelf life: 7 years.

Service life: 10 years.

Manufacturer: For information, refer to the product package.

Importer and EKF trademark service representative: EKF ELECTRICAL SOLUTION – FZCO, Dubai Silicon Oasis, DDP, Building A2, Dubai, United Arab Emirates.

Importer and EKF trademark service representative on the territory of the Russian Federation: OOO «Electroresheniya», Otradnaya st., 2b bld. 9, 5th floor, 127273, Moscow, Russia. Tel.: +7 [495] 788-88-15.

Importer and EKF trademark service representative on the territory of the Republic of Kazakhstan: TOO «Energoresheniya Kazakhstan», Kazakhstan, Almaty, Bostandyk district, Turgut Ozal st., 247, apt 4.

11 CERTIFICATE OF ACCEPTANCE

The thermal overload relay RTE EKF complies with IEC 60947-4-1:2018 and has been approved for operation.

Date of manufacture: for information, refer to the product package.

Quality control stamp



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