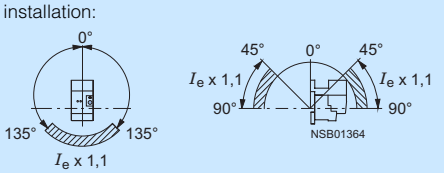
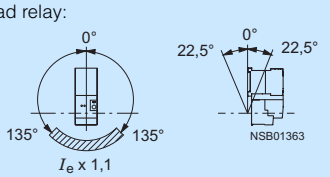
## 3RU11 for standard applications

### Technical specifications

| | | | | | |
|---|---|---|---|---|---|
| **Type** | | **3RU11 16** | **3RU11 26** | **3RU11 36** | **3RU11 46** |
| **Size** | | **S00** | **S0** | **S2** | **S3** |
| **Width** | | **45mm** | **45mm** | **55mm** | **70mm** |
| **General data** | | | | | |
| **Trips in the event of** | | Overload and phase failure | | | |
| **Trip class** according to IEC 60947-4-1 | CLASS | 10 | | | |
| **Phase failure sensitivity** | | Yes | | | |
| **Overload warning** | | No | | | |
| **Reset and recovery** | | | | | |
| • Reset options after tripping | | Manual, automatic and remote RESET[1]) | | | |
| • Recovery time | | | | | |
| - For automatic RESET | min | Depends on the strength of the tripping current and characteristic | | | |
| - For manual RESET | min | Depends on the strength of the tripping current and characteristic | | | |
| - For remote RESET | min | Depends on the strength of the tripping current and characteristic | | | |
| **Features** | | | | | |
| • Display of operating state on device | | Yes, by means of TEST function/switch position indicator slide | | | |
| • TEST function | | Yes | | | |
| • RESET button | | Yes | | | |
| • STOP button | | Yes | | | |
| **Safe operation of motors with "increased safety" type of protection** | | | | | |
| EU type test certificate number according to directive 94/9/EU | | DMT 98 ATEX G 001 ⟨Ex⟩ II (2) GD, DMT 98 ATEX G 001 N1 | | | |
| **Ambient temperature** | | | | | |
| • Storage/transport | °C | -55 ... + 80 | | | |
| • Operation | °C | -20 ... + 70 | | | |
| • Temperature compensation | °C | Up to 60 | | | |
| • Permissible rated current at | | | | | |
| - Temperature inside control cabinet 60 °C | % | 100 (over 60 °C current reduction is not required) | | | |
| - Temperature inside control cabinet 70 °C | % | 87 | | | |
| **Repeat terminals** | | | | | |
| • Coil repeat terminal | | Yes | Not required | | |
| • Auxiliary contact repeat terminal | | Yes | Not required | | |
| **Degree of protection** according to IEC 60529 | | IP20 | | IP20[2]) | |
| **Touch protection** according to IEC 61140 | | Finger-safe | | | |
| **Shock resistance with sine** according to IEC 60068-2-27 | *g*/ms | 8/10 | | | |
| **Electromagnetic compatibility (EMC) – Interference immunity** | | | | | |
| • Conductor-related interference | | | | | |
| - Burst according to IEC 61000-4-4 (corresponds to degree of severity 3) | kV | EMC interference immunity is not relevant for thermal overload relays | | | |
| - Surge according to IEC 61000-4-5 (corresponds to degree of severity 3) | kV | EMC interference immunity is not relevant for thermal overload relays | | | |
| • Electrostatic discharge according to IEC 61000-4-2 (corresponds to degree of severity 3) | kV | EMC interference immunity is not relevant for thermal overload relays | | | |
| • Field-related interference according to IEC 61000-4-3 (corresponds to degree of severity 3) | V/m | EMC interference immunity is not relevant for thermal overload relays | | | |
| **Electromagnetic compatibility (EMC) – Emitted interference** | | EMC interference immunity is not relevant for thermal overload relays | | | |
| **Resistance to extreme climates – Air humidity** | % | 100 | | | |
| **Dimensions** | | See dimensional drawings | | | |
| **Installation altitude above sea level** | m | Up to 2000; above this, please enquire | | | |
| **Mounting position** | | The diagrams show the permissible mounting positions for direct mounting and stand-alone installation. For installation in the hatched area, a setting correction of 10% must be implemented.<br>Stand-alone installation:<br>  <br><br>Contactor + overload relay:<br>  <br> | | | |
| **Type of mounting** | | Direct mounting[3])/ stand-alone installation with terminal bracket[4]) | Direct mounting/stand-alone installation with terminal bracket[4]) | | |

| | | | | | |
|---|---|---|---|---|---|
| **Type** | | **3RU11 16** | **3RU11 26** | **3RU11 36** | **3RU11 46** |
| **Size** | | **S00** | **S0** | **S2** | **S3** |
| **Width** | | **45 mm** | **45 mm** | **55 mm** | **70 mm** |
| **Main circuit** | | | | | |
| **Rated insulation voltage $U_i$** (degree of pollution 3) | V | 690 | | | 1.000 |
| **Rated impulse withstand voltage $U_{imp}$** | kV | 6 | | | 8 |
| **Rated operational voltage $U_e$** | V | 690 | | | 1.000 |
| **Type of current** | | | | | |
| • Direct current | | Yes | | | |
| • Alternating current | | Yes, frequency range up to 400 Hz | | | |
| **Set current** | A | 0.11 ... 0.16 to 9 ... 12 | 1.8 ... 2.5 to 20 ... 25 | 5.5 ... 8 to 40 ... 50 | 18 ... 25 to 80 ... 100 |
| **Power loss per unit (max.)** | W | 3.9 ... 6.6 | 3.9 ... 6 | 6 ... 9 | 10 ... 16.5 |
| **Short-circuit protection** | | | | | |
| • With fuse without contactor | | See Selection and Ordering Data | | | |
| • With fuse and contactor | | See Technical Specifications (short-circuit protection with fuses/ motor starter protectors for motor feeders) | | | |
| **Safe isolation between main and auxiliary conducting path** according to IEC 60947-1 | V | 500 | 690 | | |
| **Connection for main circuit** | | | | | |
| **Connection type** | | **Screw terminals** | **Screw terminals** | **Screw terminals with box terminal** | **Screw terminals with box terminal/rail connection**[1] |
| **Screw terminals** | | | | | |
| • Terminal screw | | Pozidriv size 2 | | | Allen screw 4 mm |
| • Tightening torque | Nm | 0.8 ... 1.2 | 2 ... 2.5 | 3 ... 4.5 | 4 ... 6 |
| • Conductor cross-sections (min./max.), 1 or 2 conductors | | | | | |
| - Solid | $mm^2$ | 2 x (0.5 ... 1.5)[2]<br>2 x (0.75 ... 2.5)[2]<br>Max. 2 x (1 ... 4)[2] | 2 x (1 ... 2.5)[2]<br>2 x (2.5 ... 6)[2]<br>Max. 2 x (2.5 ... 10)[2] | 2 x (0.75 ... 16) | 2 x (2.5 ... 16) |
| - Finely stranded with end sleeve | $mm^2$ | 2 x (0.5 ... 1.5)[2]<br>2 x (0.75 ... 2.5)[2] | 2 x (1 ... 2.5)[2]<br>2 x (2.5 ... 6)[2] | 2 x (0.75 ... 16)<br>1 x (0.75 ... 25) | 2 x (2.5 ... 35)<br>1 x (2.5 ... 50) |
| - Stranded | $mm^2$ | 2 x (0.5 ... 1.5)[2]<br>2 x (0.75 ... 2.5)[2]<br>Max. 2 x (1 ... 4)[2] | 2 x (1 ... 2.5)[2]<br>2 x (2.5 ... 6)[2]<br>Max. 2 x (2.5 ... 10)[2] | 2 x (0.75 ... 25)<br>1 x (0.75 ... 35) | 2 x (10 ... 50)<br>1 x (10 ... 70) |
| - AWG conductors, solid or stranded | AWG | 2 x (18 ... 14) | 2 x (14 ... 10) | 2 x (18 ... 3)<br>1 x (18 ... 1) | 2 x (10 ... 1/0)<br>1 x (10 ... 2/0) |
| - Ribbon cable conductors (number x width x circumference) | mm | -- | | 2 x (6 x 9 x 0.8) | 2 x (6 x 9 x 0.8) |
| **Busbar connection** | | | | | |
| • Terminal screw | | -- | | | M6 x 20 |
| • Tightening torque | Nm | -- | | | 4 ... 6 |
| • Conductor cross-sections (min./max.) | | | | | |
| - Finely stranded with cable lug | $mm^2$ | -- | | | 2 x 70 |
| - Stranded with cable lug | $mm^2$ | -- | | | 3 x 70 |
| - AWG conductors, solid or stranded, with cable lug | AWG | -- | | | 2/0 |
| - With connecting bar (max. width) | mm | -- | | | 12 |
| **Connection type** | | **Cage Clamp terminals** | | | |
| **Cage Clamp terminals** | | | | | |
| • Conductor cross-sections (min./max.) | | | | | |
| - Solid | $mm^2$ | 2 x (0.25 ... 2.5) | -- | | |
| - Finely stranded without end sleeve | $mm^2$ | 2 x (0.25 ... 2.5) | -- | | |
| - Finely stranded with end sleeve | $mm^2$ | 2 x (0.25 ... 1.5) | -- | | |
| - Stranded | $mm^2$ | -- | -- | | |
| - AWG conductors, solid or stranded | AWG | 2 x (24 ... 14) | -- | | |

**Footnotes for page 5/70:**

1) Remote RESET in combination with the corresponding accessories.

2) Terminal compartment: Degree of protection IP00.

3) The 3RU11 16 overload relay with Cage Clamp terminal can only be installed as a stand-alone installation.

4) For screw and snap-on mounting TH 35 standard mounting rail; size S3 also for TH 75 standard mounting rail. For more detailed information about terminal brackets, please see Accessories, Technical Specifications.

**Footnotes for page 5/71:**

1) The box terminal is removable. Rail and cable lug connections are possible if the box terminal is removed.

2) If two different conductor cross-sections are connected to one clamping point, both cross-sections must lie in the range specified. If identical cross-sections are used, this restriction does not apply.

# 3RU1 Thermal Overload Relays

## 3RU11 for standard applications

| Type | | 3RU11 16 | 3RU11 26 | 3RU11 36 | 3RU11 46 |
|---|---|---|---|---|---|
| Size | | S00 | S0 | S2 | S3 |
| Width | | 45mm | 45mm | 55mm | 70mm |
| **Auxiliary circuit** | | | | | |
| **Number of NO contacts** | | 1 | | | |
| **Number of NC contacts** | | 1 | | | |
| **Auxiliary contacts – assignment** | | 1 NO for the signal "tripped",<br>1 NC for disconnecting the contactor | | | |
| **Rated insulation voltage $U_i$**<br>(degree of pollution 3) | V | 690 | | | |
| **Rated impulse withstand voltage $U_{imp}$** | kV | 6 | | | |
| **Contact rating of the auxiliary contacts** | | | | | |
| • NC contact with alternating current AC-14/AC-15, rated operational current $I_e$ at $U_e$: | | | | | |
| - 24 V | A | 4 | | | |
| - 120 V | A | 4 | | | |
| - 125 V | A | 4 | | | |
| - 230 V | A | 3 | | | |
| - 400 V | A | 2 | | | |
| - 600 V | A | 0.6 | | | |
| - 690 V | A | 0.5 | | | |
| • NO contact with alternating current AC-14/AC-15, rated operational current $I_e$ at $U_e$: | | | | | |
| - 24 V | A | 3 | | | |
| - 120 V | A | 3 | | | |
| - 125 V | A | 3 | | | |
| - 230 V | A | 2 | | | |
| - 400 V | A | 1 | | | |
| - 600 V | A | 0.6 | | | |
| - 690 V | A | 0.5 | | | |
| • NC contact, NO contact with direct current DC-13, rated operational current $I_e$ at $U_e$: | | | | | |
| - 24 V | A | 1 | | | |
| - 60 V | A | [1] | | | |
| - 110 V | A | 0.22 | | | |
| - 125 V | A | 0.22 | | | |
| - 220 V | A | 0.11 | | | |
| • Continuous thermal current $I_{th}$ | A | 6[2] | | | |
| • Contact reliability (suitability for PLC control; 17 V, 5 mA) | | Yes | | | |
| **Short-circuit protection** | | | | | |
| • With fuse | | | | | |
| - gL/gG operational class | A | 6 | | | |
| - Quick | A | 10 | | | |
| • With miniature circuit breaker (C characteristic) | A | 6 | | | |
| **Safe isolation between main and auxiliary conducting path** according to IEC 60947-1 | V | 415 | | | |
| **CSA, UL, UR rated data** | | | | | |
| **Auxiliary circuit – switching capacity** | | B600, R300 | | | |
| **Connection of the auxiliary circuit** | | | | | |
| **Connection type** | | **Screw terminals** | | | |
| • Terminal screw | | Pozidriv size 2 | | | |
| • Tightening torque | Nm | 0.8 ... 1.2 | | | |
| • Conductor cross-sections (min./max.), 1 or 2 conductors | | | | | |
| - Solid | $mm^2$ | 2 x (0.5 ... 1.5)[3], 2 x (0.75 ... 2.5)[3] | | | |
| - Finely stranded without end sleeve | $mm^2$ | -- | | | |
| - Finely stranded with end sleeve | $mm^2$ | 2 x (0.5 ... 1.5)[3], 2 x (0.75 ... 2.5)[3] | | | |
| - Stranded | $mm^2$ | 2 x (0.5 ... 1.5)[3], 2 x (0.75 ... 2.5)[3] | | | |
| - AWG conductors, solid or stranded | AWG | 2 x (18 ... 14) | | | |
| **Connection type** | | **Cage Clamp terminals** | | | |
| • Conductor cross-sections (min./max.) | | | | | |
| - Solid | | 2 x (0.25 ... 2.5) | | | |
| - Finely stranded without end sleeve | | 2 x (0.25 ... 2.5) | | | |
| - Finely stranded with end sleeve | | 2 x (0.25 ... 1.5) | | | |
| - Stranded | | -- | | | |
| - AWG conductors, solid or stranded | | 2 x (24 ... 14) | | | |

[1] On request.

[2] Up to $I_k \leq$ 0.5 kA; $\leq$ 260 V.

[3] If two different conductor cross-sections are connected to one clamping point, both cross-sections must lie in the range specified. If identical cross-sections are used, this restriction does not apply.

## *Short-circuit protection with fuses/motor starter protectors for motor feeders*

With short-circuit currents up to 50 kA at 50/60 Hz 690 V AC
Permissible short-circuit protection fuse for motor starters comprising overload relay and contactor, type of coordination 2[1)]

| **Overload relay** Setting range | 3 kW ≙ 3RT10 15 $I_{e\,max}$ = 7 A (at 50 Hz 400 V AC) | | | 4 kW ≙ 3RT10 16 $I_{e\,max}$ = 9 A (at 50 Hz 400 V AC) | | | 5.5 kW ≙ 3RT10 17 $I_{e\,max}$ = 12 A (at 50 Hz 400 V AC) | | | UL-listed fuses RK5 | Motor starter protector for starter combinations at $I_q$ = 50 kA/400 V AC |
|---|---|---|---|---|---|---|---|---|---|---|---|
| A | gL/gG | aM | BS 88 | gL/gG | aM | BS 88 | gL/gG | aM | BS 88 | A | |
| **Size S00** | | | | | | | | | | | |
| 0.11 ... 0.16 | 0.5 | -- | -- | 0.5 | -- | – | 0.5 | – | – | 1 | -- |
| 0.14 ... 0.2 | 1 | -- | -- | 1 | -- | – | 1 | – | – | 1 | 3RV13 21-0BC10 |
| 0.18 ... 0.25 | 1 | -- | -- | 1 | -- | – | 1 | – | – | 1 | 3RV13 21-0CC10 |
| 0.22 ... 0.32 | 1.6 | -- | 2 | 1.6 | -- | 2 | 1.6 | – | 2 | 1 | 3RV13 21-0DC10 |
| 0.28 ... 0.4 | 2 | -- | 2 | 2 | -- | 2 | 2 | – | 2 | 1.6 | 3RV13 21-0EC10 |
| 0.35 ... 0.5 | 2 | -- | 2 | 2 | -- | 2 | 2 | – | 2 | 2 | 3RV13 21-0FC10 |
| 0.45 ... 0.63 | 2 | -- | 4 | 2 | -- | 4 | 2 | – | 4 | 2.5 | 3RV13 21-0GC10 |
| 0.55 ... 0.8 | 4 | -- | 4 | 4 | -- | 4 | 4 | – | 4 | 3 | 3RV13 21-0HC10 |
| 0.7 ... 1 | 4 | -- | 6 | 4 | -- | 6 | 4 | – | 6 | 4 | 3RV13 21-0JC10 |
| 0.9 ... 1.25 | 4 | -- | 6 | 4 | -- | 6 | 4 | – | 6 | 5 | 3RV13 21-0KC10 |
| 1.1 ... 1.6 | 6 | -- | 10 | 6 | -- | 10 | 6 | – | 10 | 6 | 3RV13 21-1AC10 |
| 1.4 ... 2 | 6 | -- | 10 | 6 | -- | 10 | 6 | – | 10 | 8 | 3RV13 21-1BC10 |
| 1.8 ... 2.5 | 10 | -- | 10 | 10 | -- | 10 | 10 | – | 10 | 10 | -- |
| 2.2 ... 3.2 | 10 | -- | 16 | 10 | -- | 16 | 10 | – | 16 | 12 | -- |
| 2.8 ... 4 | 16 | -- | 16 | 16 | -- | 16 | 16 | – | 16 | 16 | -- |
| 3.5 ... 5 | 20 | 6 | 20 | 20 | 6 | 20 | 20 | 6 | 20 | 20 | -- |
| 4.5 ... 6.3 | 20 | 6 | 20 | 20 | 6 | 20 | 20 | 6 | 20 | 25 | -- |
| 5.5 ... 8 | 20 | 10 | 20 | 20 | 10 | 20 | 20 | 10 | 20 | 30 | -- |
| 7 ... 10 | -- | -- | -- | 20 | 16 | 20 | 20 | 16 | 20 | 40 | -- |
| 9 ... 12 | -- | -- | -- | -- | -- | -- | 20 | 16 | 25 | 45 | -- |

| **Overload relay** Setting range | 5.5 kW ≙ 3RT10 24 $I_{e\,max}$ = 12 A (at 50 Hz 400 V AC) | | | 7.5 kW ≙ 3RT10 25 $I_{e\,max}$ = 17 A (at 50 Hz 400 V AC) | | | 11 kW ≙ 3RT10 26 $I_{e\,max}$ = 25 A (at 50 Hz 400 V AC) | | | UL-listed fuses RK5 | Motor starter protector for starter combinations at $I_q$ = 50 kA/400 V AC |
|---|---|---|---|---|---|---|---|---|---|---|---|
| A | gL/gG | aM | BS 88 | gL/gG | aM | BS 88 | gL/gG | aM | BS 88 | A | |
| **Size S0** | | | | | | | | | | | |
| 1.8 ... 2.5 | 10 | – | 10 | 10 | – | 10 | 10 | – | 10 | 10 | 3RV13 21-1CC10 |
| 2.2 ... 3.2 | 10 | – | 16 | 10 | – | 16 | 10 | – | 16 | 12 | 3RV13 21-1DC10 |
| 2.8 ... 4 | 16 | – | 16 | 16 | – | 16 | 16 | – | 16 | 16 | 3RV13 21-1EC10 |
| 3.5 ... 5 | 20 | 6 | 20 | 20 | 6 | 20 | 20 | 6 | 20 | 20 | 3RV13 21-1FC10 |
| 4.5 ... 6.3 | 20 | 6 | 25 | 20 | 6 | 25 | 20 | 6 | 25 | 25 | 3RV13 21-1GC10 |
| 5.5 ... 8 | 25 | 10 | 25/32[2)] | 25 | 10 | 25/32[2)] | 25 | 10 | 32 | 30 | 3RV13 21-1HC10 |
| 7 ... 10 | 25 | 16 | 25/32[2)] | 25 | 16 | 25/32[2)] | 32 | 16 | 35 | 40 | 3RV13 21-1JC10 |
| 9 ... 12.5 | 25 | 20 | 25/32[2)] | 25 | 20 | 25/32[2)] | 35 | 20 | 35 | 45 | 3RV13 21-1KC10 |
| 11 ... 16 | 25 | 20 | 25/32[2)] | 25 | 20 | 25/32[2)] | 35 | 20 | 35 | 60 | 3RV13 21-4AC10 |
| 14 ... 20 | -- | -- | -- | 25 | 20 | 25/32[2)] | 35 | 20 | 35 | 80 | 3RV13 21-4BC10 |
| 17 ... 22 | -- | -- | -- | -- | -- | -- | 35 | 20 | 35 | 80 | 3RV13 21-4CC10 |
| 20 ... 25 | -- | -- | -- | -- | -- | -- | 35 | 20 | 35 | 100 | -- |

For type of coordination 1[1)] see short-circuit protection of the contactors without overload relay under "Controls - Contactors and Contactor Assemblies".

1) Assignment and short-circuit protective devices according to IEC 60947-4-1:
**Type of coordination 1:** the contactor or starter must not endanger persons or the installation in the event of a short-circuit. They do not need to be suitable for further operation without repair and the renewal of parts.
**Type of coordination 2:** the contactor or starter must not endanger persons or the installation in the event of a short-circuit. This must be suitable for further operation. There is a risk of contact welding.

2) At max. 415 V.

# 3RU1 Thermal Overload Relays

## 3RU11 for standard applications

### *Short-circuit protection with fuses/motor starter protectors for motor feeders*

With short-circuit currents up to 50 kA at 50/60 Hz 690 V AC
Permissible short-circuit protection fuse for motor starters comprising overload relay and contactor, type of coordination 2[1)]

| **Overload relays** Setting range | 15 kW ≙ 3RT10 34 $I_{e\,max}$ = 32 A (at 50 Hz 400 V AC) | | | 18.5 kW ≙ 3RT10 35 $I_{e\,max}$ = 40 A (at 50 Hz 400 V AC) | | | 22 kW ≙ 3RT10 36 $I_{e\,max}$ = 50 A (at 50 Hz 400 V AC) | | | UL-listed fuses RK5 | Motor starter protector for starter combinations at $I_q$ = 50 kA/400 V AC |
|---|---|---|---|---|---|---|---|---|---|---|---|
| A | gL/gG | aM | BS 88 | gL/gG | aM | BS 88 | gL/gG | aM | BS 88 | A | |
| **Size S2** | | | | | | | | | | | |
| 5.5 ... 8 | 25 | 10 | 25 | 25 | 10 | 25 | 25 | 10 | 25 | 30 | -- |
| 7 ... 10 | 32 | 16 | 32 | 32 | 16 | 32 | 32 | 16 | 32 | 40 | -- |
| 9 ... 12.5 | 35 | 16 | 35 | 35 | 16 | 35 | 35 | 16 | 35 | 50 | -- |
| 11 ... 16 | 40 | 20 | 40 | 40 | 20 | 40 | 40 | 20 | 40 | 60 | -- |
| 14 ... 20 | 50 | 25 | 50 | 50 | 25 | 50 | 50 | 25 | 50 | 80 | -- |
| 18 ... 25 | 63 | 32 | 63 | 63 | 32 | 63 | 63 | 32 | 63 | 100 | 3RV13 31-4DC10 |
| 22 ... 32 | 63 | 35 | 63 | 63 | 35 | 63 | 80 | 35 | 80 | 125 | 3RV13 31-4EC10 |
| 28 ... 40 | 63 | 50 | 63 | 63 | 50 | 63 | 80 | 50 | 80 | 150 | 3RV13 31-4FC10 |
| 36 ... 45 | -- | -- | -- | 63 | 50 | 80 | 80 | 50 | 80 | 175 | 3RV13 31-4GC10 |
| 40 ... 50 | -- | -- | -- | -- | -- | -- | 80 | 50 | 80 | 200 | 3RV13 31-4HC10 |

| **Overload relays** Setting range | 30 kW ≙ 3RT10 44 $I_{e\,max}$ = 65 A (at 50 Hz 400 V AC) | | | 37 kW ≙ 3RT10 45 $I_{e\,max}$ = 80 A (at 50 Hz 400 V AC) | | | 45 kW ≙ 3RT10 46 $I_{e\,max}$ = 95 A (at 50 Hz 400 V AC) | | | UL-listed fuses RK5 | Motor starter protector for starter combinations at $I_q$ = 50 kA/400 V AC |
|---|---|---|---|---|---|---|---|---|---|---|---|
| A | gL/gG | aM | BS 88 | gL/gG | aM | BS 88 | gL/gG | aM | BS 88 | A | |
| **Size S3** | | | | | | | | | | | |
| 18 ... 25 | 63 | 32 | 63 | 63 | 32 | 63 | 63 | 32 | 63 | 100 | -- |
| 22 ... 32 | 80 | 35 | 80 | 80 | 35 | 80 | 80 | 35 | 80 | 125 | -- |
| 28 ... 40 | 80 | 50 | 80 | 80 | 50 | 80 | 80 | 50 | 80 | 150 | -- |
| 36 ... 50 | 125 | 50 | 125 | 125 | 50 | 125 | 125 | 50 | 125 | 200 | -- |
| 45 ... 63 | 125 | 63 | 125 | 160 | 63 | 160 | 160 | 63 | 160 | 250 | 3RV13 41-4JC10 |
| 57 ... 75 | -- | -- | -- | 160 | 80 | 160 | 160 | 80 | 160 | 300 | 3RV13 41-4KC10 |
| 70 ... 90 | -- | -- | -- | -- | -- | -- | 160 | 100 | 160 | 350 | 3RV13 41-4LC10 |
| 80 ... 100 | -- | -- | -- | -- | -- | -- | 160 | 100 | 160 | 350 | 3RV13 41-4MC10 |

For type of coordination 1[1)] see short-circuit protection of the contactors without overload relay under "Controls - Contactors and Contactor Assemblies".

[1)] Assignment and short-circuit protective devices according to IEC 60947-4-1:
**Type of coordination 1:** the contactor or starter must not endanger persons or the installation in the event of a short-circuit. They do not need to be suitable for further operation without repair and the renewal of parts.
**Type of coordination 2:** the contactor or starter must not endanger persons or the installation in the event of a short-circuit. This must be suitable for further operation. There is a risk of contact welding.