

# Thermal Overload Relays with Trip Class 20

## Ordering data for the "New additional Assortment"



TA25DU



TA42DU



TA75DU



TA80DU

| Ordering Details | Order code | Setting range<br>A ... A | Max. fuse<br>gL/gG<br>A | Packing<br>unit<br>piece | Weight/<br>piece<br>kg |
|------------------|------------|--------------------------|-------------------------|--------------------------|------------------------|
| Type             |            |                          |                         |                          |                        |

### TA25DU trip class 20 for contactors A9 ... A40 and (T) AL9 ... (T) AL30

|                             |                 |                          |     |   |       |
|-----------------------------|-----------------|--------------------------|-----|---|-------|
| TA25DU-1.8-20               | 1SAZ211401R1025 | 1.3 ... 1.8              | 10  | 1 | 0.170 |
| TA25DU-2.4-20               | 1SAZ211401R1028 | 1.7 ... 2.4              | 16  | 1 | 0.170 |
| TA25DU-3.1-20               | 1SAZ211401R1031 | 2.2 ... 3.1              | 16  | 1 | 0.170 |
| TA25DU-4.0-20               | 1SAZ211401R1033 | 2.8 ... 4.0              | 20  | 1 | 0.170 |
| TA25DU-5.0-20               | 1SAZ211401R1035 | 3.5 ... 5.0              | 25  | 1 | 0.170 |
| TA25DU-6.5-20               | 1SAZ211401R1038 | 4.5 ... 6.5              | 25  | 1 | 0.170 |
| TA25DU-8.5-20               | 1SAZ211401R1040 | 6.0 ... 8.5              | 32  | 1 | 0.170 |
| TA25DU-11-20                | 1SAZ211401R1043 | 7.5 ... 11               | 40  | 1 | 0.170 |
| TA25DU-14-20                | 1SAZ211401R1045 | 10 ... 14                | 50  | 1 | 0.170 |
| TA25DU-19-20                | 1SAZ211401R1047 | 13 ... 19                | 63  | 1 | 0.170 |
| TA25DU-25-20                | 1SAZ211401R1051 | 18 ... 25                | 80  | 1 | 0.170 |
| TA25DU-32-20 <sup>(1)</sup> | 1SAZ211401R1053 | 24 ... 32 <sup>(1)</sup> | 100 | 1 | 0.190 |

<sup>(1)</sup> with terminal block DX25: 1x16mm<sup>2</sup>

### TA42DU trip class 20 for contactors A30, A40 and (T) AL30, (T) AL40

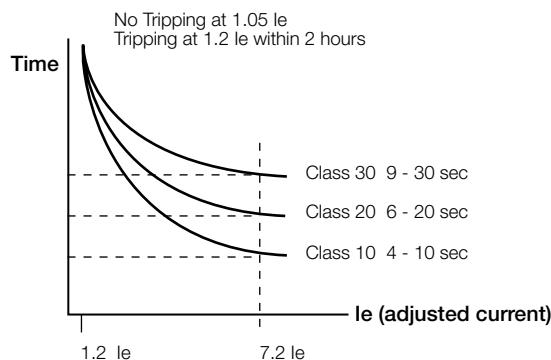
|              |                 |           |     |   |       |
|--------------|-----------------|-----------|-----|---|-------|
| TA42DU-25-20 | 1SAZ311401R1001 | 18 ... 25 | 100 | 1 | 0.370 |
| TA42DU-32-20 | 1SAZ311401R1002 | 22 ... 32 | 125 | 1 | 0.370 |
| TA42DU-42-20 | 1SAZ311401R1003 | 29 ... 42 | 160 | 1 | 0.370 |

### TA75DU trip class 20 for contactors A50 ... A75 and AE50 ... AE75

|              |                 |           |     |   |       |
|--------------|-----------------|-----------|-----|---|-------|
| TA75DU-25-20 | 1SAZ321401R1001 | 18 ... 25 | 100 | 1 | 0.370 |
| TA75DU-32-20 | 1SAZ321401R1002 | 22 ... 32 | 125 | 1 | 0.370 |
| TA75DU-42-20 | 1SAZ321401R1003 | 29 ... 42 | 160 | 1 | 0.370 |
| TA75DU-52-20 | 1SAZ321401R1004 | 36 ... 52 | 200 | 1 | 0.370 |
| TA75DU-63-20 | 1SAZ321401R1005 | 45 ... 63 | 200 | 1 | 0.370 |
| TA75DU-80-20 | 1SAZ321401R1006 | 60 ... 80 | 250 | 1 | 0.370 |

### TA80DU trip class 20 for contactors A95, A110, AE 95 and AE110

|              |                 |           |     |   |       |
|--------------|-----------------|-----------|-----|---|-------|
| TA80DU-42-20 | 1SAZ331401R1003 | 29 ... 42 | 160 | 1 | 0.400 |
| TA80DU-52-20 | 1SAZ331401R1004 | 36 ... 52 | 200 | 1 | 0.400 |
| TA80DU-63-20 | 1SAZ331401R1005 | 45 ... 63 | 200 | 1 | 0.400 |
| TA80DU-80-20 | 1SAZ331401R1006 | 60 ... 80 | 250 | 1 | 0.400 |



# Thermal Overload Relays with Trip Class 20

Resistances and power losses per phase

Short-circuit protection

| Setting range                 | Short-circuit protection (fuses) |                           | UL                   | UL              | Resistance per phase | Power loss per phase             |
|-------------------------------|----------------------------------|---------------------------|----------------------|-----------------|----------------------|----------------------------------|
|                               | Type „2“<br>co-ordination        | Type „1“<br>co-ordination |                      |                 |                      |                                  |
| from ... to<br>A            A | gL/gG<br>A                       | gL/gG<br>A                | Fuse/600V<br>K5<br>A | 600V<br>CB<br>A | mOhm                 | at upper<br>current setting<br>W |

|                                             |     |     |     |     |       |      |
|---------------------------------------------|-----|-----|-----|-----|-------|------|
| Thermal overload relay TA25DU trip class 20 |     |     |     |     |       |      |
| 1.3 ... 1.8                                 | 10  | 25  | 6   | -   | 670.3 | 2.2  |
| 1.7 ... 2.4                                 | 16  | 25  | 10  | -   | 381   | 2.2  |
| 2.2 ... 3.1                                 | 16  | 25  | 10  | -   | 235.3 | 2.3  |
| 2.8 ... 4.0                                 | 20  | 25  | 15  | -   | 140.7 | 2.3  |
| 3.5 ... 5.0                                 | 25  | 25  | 20  | -   | 91.2  | 2.3  |
| 4.5 ... 6.5                                 | 25  | 25  | 25  | -   | 54.5  | 2.3  |
| 6.0 ... 8.5                                 | 32  | 32  | 35  | -   | 32.1  | 2.3  |
| 7.5 ... 11                                  | 40  | 40  | 45  | -   | 15.5  | 1.9  |
| 10 ... 14                                   | 50  | 50  | 60  | -   | 12    | 2.4  |
| 13 ... 19                                   | 63  | 63  | 60  | -   | 6.3   | 2.3  |
| 18 ... 25                                   | 80  | 80  | 70  | -   | 4.7   | 3.0  |
| 24 ... 32                                   | 100 | 100 | 100 | -   | 3.2   | 3.3  |
|                                             |     |     |     |     |       |      |
| Thermal overload relay TA42DU trip class 20 |     |     |     |     |       |      |
| 18 ... 25                                   | 100 | 160 | 80  | 80  | 5.5   | 3.43 |
| 22 ... 32                                   | 125 | 160 | 100 | 80  | 2.89  | 2.91 |
| 29 ... 42                                   | 160 | 160 | 150 | 80  | 1.84  | 3.24 |
|                                             |     |     |     |     |       |      |
| Thermal overload relay TA75DU trip class 20 |     |     |     |     |       |      |
| 18 ...25                                    | 100 | 160 | 80  | 80  | 5.5   | 3.43 |
| 22 ... 32                                   | 125 | 160 | 100 | 80  | 2.89  | 2.91 |
| 29 ...42                                    | 160 | 160 | 150 | 80  | 1.84  | 3.24 |
| 36 ... 52                                   | 200 | 200 | 175 | 125 | 1.3   | 3.51 |
| 45 ... 63                                   | 200 | 250 | 200 | 125 | 0.936 | 3.72 |
| 60 ... 80                                   | 250 | 250 | 250 | 125 | 0.615 | 3.94 |
|                                             |     |     |     |     |       |      |
| Thermal overload relay TA80DU trip class 20 |     |     |     |     |       |      |
| 29 ... 42                                   | 160 | 160 | 150 | 80  | 1.84  | 3.24 |
| 36 ... 52                                   | 200 | 200 | 175 | 125 | 1.3   | 3.51 |
| 45 ... 63                                   | 200 | 250 | 200 | 125 | 0.936 | 3.72 |
| 60 ... 80                                   | 250 | 250 | 250 | 150 | 0.615 | 3.94 |

Type „1“ co-ordination according to IEC 60947-4-1: Under short-circuit conditions, the starter shall cause no danger to persons or installation and may not be suitable for further service without repair and replacement of parts.

Type „2“ co-ordination according to IEC 60947-4-1: Under short-circuit conditions, the contactor or starter shall cause no danger to persons or installation and shall be suitable for further use. The risk of contact welding is recognized, in which case the manufacturer shall indicate the measures to be taken as regards the maintenance of the equipment

**Standard technical data, operating data and dimensions see TA...Relay Main Catalog**