

*Miniature circuit breakers* A

*Residential current circuit breaker* B

*Busbar systems* C

*Comfort functions/Energy control* D

*Residential enclosures* E

*Contactors/Soft starters/Speed drives* F

**Overload relays** G

G.2 **Thermal overload relays** type b ...K for LS ...K-contactors

G.3 CT overload relays for heavy duty - Tripping class 20

G.4 CT overload relays for heavy duty - Tripping class 30

G.5 Accessories for overload relays type b ...K and bw ...K

G.6 **Thermal overload relays** type b ... for LS ...K/LS-contactors

G.7 Accessories for overload relays type b ...

*Control and signalling units* H

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*Fuse systems/Loadbreak disconnectors* M

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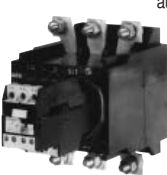
*Wiring devices* O

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**G.1**

# Thermal overload relays

## Thermal overload relays for LS ...K-contactors - 3 poles

|                                                                                                                               | Fits to contactors type...                                                                                                       | Adjusting ranges of relays (A) | Cat. No. | E-No.           | Pack. |
|-------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|--------------------------------|----------|-----------------|-------|
| <b>b 18K</b><br>aux. contacts 1NO 1NC<br>    | <b>Basic version to couple with contactor</b>                                                                                    | 0.16 - 0.26                    | b 18K    | 910-343 201-000 | 5     |
|                                                                                                                               | Separate mounting part see page G.5                                                                                              | 0.25 - 0.41                    | b 18K    | 910-343 202-000 | 5     |
|                                                                                                                               | LS 4K (3-pole)                                                                                                                   | 0.4 - 0.65                     | b 18K    | 910-343 203-000 | 5     |
|                                                                                                                               | LS 5K (3+4-pole)                                                                                                                 | 0.65 - 1.1                     | b 18K    | 910-343 204-000 | 5     |
|                                                                                                                               | LS 7K (3+4-pole)                                                                                                                 | 1 - 1.5                        | b 18K    | 910-343 205-000 | 5     |
|                                                                                                                               | LS 11K (3-pole)                                                                                                                  | 1.3 - 1.9                      | b 18K    | 910-343 206-000 | 5     |
|                                                                                                                               | LS 15K (3-pole)                                                                                                                  | 1.8 - 2.7                      | b 18K    | 910-343 207-000 | 5     |
|                                                                                                                               | LS 18K (3-pole)                                                                                                                  | 2.5 - 4                        | b 18K    | 910-343 208-000 | 5     |
|                                                                                                                               |                                                                                                                                  | 4 - 6.3                        | b 18K    | 910-343 209-000 | 5     |
|                                                                                                                               |                                                                                                                                  | 5.5 - 8.5                      | b 18K    | 910-343 210-000 | 5     |
|                                                                                                                               |                                                                                                                                  | 8 - 12                         | b 18K    | 910-343 211-000 | 5     |
|                                                                                                                               |                                                                                                                                  | 10 - 16                        | b 18K    | 910-343 212-000 | 5     |
|                                                                                                                               |                                                                                                                                  | 14.5 - 18                      | b 18K    | 910-343 213-000 | 5     |
|                                                                                                                               |                                                                                                                                  | 17.5 - 22                      | b 18K    | 910-343 214-000 | 5     |
|                                                                                                                               |                                                                                                                                  | 21 - 26                        | b 18K    | 910-343 215-000 | 5     |
|                                                                                                                               |                                                                                                                                  | 25 - 32                        | b 18K    | 910-343 216-000 | 5     |
|                                                                                                                               |                                                                                                                                  | 30 - 40                        | b 18K    | 910-343 217-000 | 5     |
| <b>b 55K</b><br>aux. contacts 1NO 1NC<br>   | <b>Basic version to couple with contactor</b>                                                                                    | 11.5 - 15                      | b 55K    | 910-343 251-000 | 1     |
|                                                                                                                               | Separate mounting part see page G.5                                                                                              | 14.5 - 19                      | b 55K    | 910-343 252-000 | 1     |
|                                                                                                                               | LS 22K (3-pole)                                                                                                                  | 18.5 - 25                      | b 55K    | 910-343 253-000 | 1     |
|                                                                                                                               | LS 30K (3-pole)                                                                                                                  | 24 - 32                        | b 55K    | 910-343 254-000 | 1     |
|                                                                                                                               | LS 37K (3-pole)                                                                                                                  | 30 - 43                        | b 55K    | 910-343 255-000 | 1     |
|                                                                                                                               | LS 45K (3-pole)                                                                                                                  | 42 - 55                        | b 55K    | 910-343 256-000 | 1     |
|                                                                                                                               | LS 55K (3-pole)                                                                                                                  | 54 - 65                        | b 55K    | 910-343 257-000 | 1     |
|                                                                                                                               |                                                                                                                                  | 64 - 82                        | b 55K    | 910-343 258-000 | 1     |
|                                                                                                                               |                                                                                                                                  | 78 - 97                        | b 55K    | 910-343 259-000 | 1     |
|                                                                                                                               |                                                                                                                                  | 90 - 110                       | b 55K    | 910-343 260-000 | 1     |
| <b>b 90K</b><br>aux. contacts 1NO 1NC<br>  | <b>Basic version to couple with contactor</b>                                                                                    | 55 - 80                        | b 90K    | 910-343 271-000 | 1     |
|                                                                                                                               | No additional parts for sep. mounting with screws                                                                                | 63 - 90                        | b 90K    | 910-343 272-000 | 1     |
|                                                                                                                               | LS 75K (3-pole)                                                                                                                  | 90 - 120                       | b 90K    | 910-343 273-000 | 1     |
|                                                                                                                               | LS 90K (3-pole)                                                                                                                  | 110 - 140                      | b 90K    | 910-343 274-000 | 1     |
|                                                                                                                               |                                                                                                                                  | 140 - 190                      | b 90K    | 910-343 275-000 | 1     |
| <b>b 160K</b><br>aux. contacts 1NO 1NC<br> | <b>For separate mounting with screws</b>                                                                                         | 120 - 190                      | b 160K   | 910-343 281-000 | 1     |
|                                                                                                                               | Connecting parts to couple with contactor see page G.5                                                                           | 175 - 280                      | b 160K   | 910-343 282-000 | 1     |
|                                                                                                                               | LS 110K (3-pole)                                                                                                                 | 200 - 310                      | b 160K   | 910-343 283-000 | 1     |
|                                                                                                                               | LS 132K (3-pole)                                                                                                                 |                                |          |                 |       |
| <b>b 375K</b><br>aux. contacts 1NO 1NC<br> | <b>For separate mounting with screws, basic version with ct's</b>                                                                | 120 - 190                      | b 375K   | 910-343 291-000 | 1     |
|                                                                                                                               | Connecting parts to couple with contactor see page G.5                                                                           | 175 - 280                      | b 375K   | 910-343 292-000 | 1     |
|                                                                                                                               | LS 220K (3-pole)                                                                                                                 | 250 - 400                      | b 375K   | 910-343 293-000 | 1     |
|                                                                                                                               | LS 280K (3-pole)                                                                                                                 | 315 - 500                      | b 375K   | 910-343 294-000 | 1     |
|                                                                                                                               | LS 375K (3-pole)                                                                                                                 | 430 - 700                      | b 375K   | 910-343 295-000 | 1     |
| <b>b 450K</b><br>aux. contacts 1NO 1NC<br> | <b>Kit consisting of 3 ct's and separate overload relay</b><br>(Frame size as type b 18k for separate mounting)<br>sep. mounting | 500 - 850                      | b 450K   | 910-343 301-000 | 1     |
|                                                                                                                               |                                                                                                                                  |                                |          |                 |       |

Other overload relays for LS ...K and LS-contactors see page G.6  
Overload relays type b 05 see page G.6

# Thermal overload relays

## CT overload relays for heavy duty - Tripping class 20

3-pole, auxiliary contacts 1NO 1NC

Tripping time 6s < TP ≤ 20s at 7.2 x IE from cold state for direct mounting on contactor



**bx 18K**  
aux. contacts 1NO 1NC  
CLASS 20

| Fits to contactors type...                              | Adjusting ranges of relays [A] | Cat. No.  | Ref. No.      | Pack. |
|---------------------------------------------------------|--------------------------------|-----------|---------------|-------|
| <b>Basic execution for direct mounting on contactor</b> | 2.5 - 4.1                      | bx18K-041 | <b>114066</b> | 5     |
| Separate mounting part see page G.5                     | 4 - 6.3                        | bx18K-063 | <b>114067</b> | 5     |
| LS 4K (3-pole)                                          | 5.5 - 8.5                      | bx18K-085 | <b>114068</b> | 5     |
| LS 5K (3+4-pole)                                        |                                |           |               |       |
| LS 7K (3+4-pole)                                        | 8 - 12                         | bx18K-120 | <b>114069</b> | 5     |
| LS 11K (3-pole)                                         | 10 - 16                        | bx18K-160 | <b>114070</b> | 5     |
| LS 12K                                                  | 14.5 - 20                      | bx18K-200 | <b>114071</b> | 5     |
| LS 15K (3-pole)                                         |                                |           |               |       |
| LS 18K (3-pole)                                         | 17.5 - 22                      | bx18K-220 | <b>114072</b> | 5     |
|                                                         | 21 - 26                        | bx18K-260 | <b>114073</b> | 5     |
|                                                         | 25 - 32                        | bx18K-320 | <b>114074</b> | 5     |
|                                                         | 30 - 40                        | bx18K-400 | <b>114075</b> | 5     |



**bx 55K**  
aux. contacts 1NO 1NC  
CLASS 20

|                                                         |          |           |               |   |
|---------------------------------------------------------|----------|-----------|---------------|---|
| <b>Basic execution for direct mounting on contactor</b> | 24 - 32  | bx55K-032 | <b>114076</b> | 1 |
| Separate mounting part see page G.5                     | 30 - 43  | bx55K-043 | <b>114077</b> | 1 |
| LS 22K (3-pole)                                         | 42 - 55  | bx55K-055 | <b>114078</b> | 1 |
| LS 30K (3-pole)                                         |          |           |               |   |
| LS 37K (3-pole)                                         | 54 - 65  | bx55K-065 | <b>114079</b> | 1 |
| LS 45K (3-pole)                                         | 64 - 82  | bx55K-082 | <b>114080</b> | 1 |
| LS 55K (3-pole)                                         | 78 - 97  | bx55K-097 | <b>114081</b> | 1 |
|                                                         | 90 - 110 | bx55K-110 | <b>114082</b> | 1 |



**bx 90K**  
aux. contacts 1NO 1NC  
CLASS 20

|                                                         |           |           |               |   |
|---------------------------------------------------------|-----------|-----------|---------------|---|
| <b>Basic execution for direct mounting on contactor</b> | 63 - 90   | bx90K-090 | <b>114083</b> | 1 |
| or direct base mounting possible                        | 90 - 120  | bx90K-120 | <b>114084</b> | 1 |
| LS 75K (3-pole)                                         | 110 - 140 | bx90K-140 | <b>114085</b> | 1 |
| LS 90K (3-pole)                                         | 140 - 190 | bx90K-190 | <b>114086</b> | 1 |

# Thermal overload relays

## CT overload relays for heavy duty - Tripping class 30

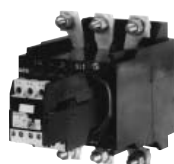
3-pole auxiliary contacts 1NO 1NC

Tripping time 9s < TP ≤ 30s at 7,2 x IE from cold state for separate mounting



bw 55K

| Fits to contactors type... | Adjusting ranges of relays [A] | Cat. No. | E.-No.          | Pack. |
|----------------------------|--------------------------------|----------|-----------------|-------|
| Screw terminals            | 2.5 - 4                        | bw 55K   | 910-343 305-000 | 1     |
|                            | 4 - 6.5                        | bw 55K   | 910-343 306-000 | 1     |
|                            | 5.5 - 8.5                      | bw 55K   | 910-343 307-000 | 1     |
|                            | 7.5 - 11                       | bw 55K   | 910-343 308-000 | 1     |
|                            | 10-16                          | bw 55K   | 910-343 309-000 | 1     |
|                            | 12.5 - 20                      | bw 55K   | 910-343 310-000 | 1     |
|                            | 17 - 27                        | bw 55K   | 910-343 311-000 | 1     |
|                            | 26 - 40                        | bw 55K   | 910-343 312-000 | 1     |
|                            | 32 - 52                        | bw 55K   | 910-343 313-000 | 1     |
|                            | 45 - 70                        | bw 55K   | 910-343 314-000 | 1     |
|                            | 60 - 90                        | bw 55K   | 910-343 315-000 | 1     |
|                            | 80 - 125                       | bw 55K   | 910-343 316-000 | 1     |



bw 160K

|                                                                         |           |         |                 |   |
|-------------------------------------------------------------------------|-----------|---------|-----------------|---|
| Screw terminals<br>Connecting parts to couple to contactor see page G.5 | 120 - 190 | bw 160K | 910-343 317-000 | 1 |
|                                                                         | 175 - 280 | bw 160K | 910-343 318-000 | 1 |
|                                                                         | 200 - 310 | bw 160K | 910-343 319-000 | 1 |



bw 375K

|                                                                         |           |         |                 |   |
|-------------------------------------------------------------------------|-----------|---------|-----------------|---|
| Screw terminals<br>Connecting parts to couple to contactor see page G.5 | 120 - 190 | bw 375K | 910-343 321-000 | 1 |
|                                                                         | 175 - 280 | bw 375K | 910-343 322-000 | 1 |
|                                                                         | 250 - 400 | bw 375K | 910-343 323-000 | 1 |
|                                                                         | 315 - 500 | bw 375K | 910-343 324-000 | 1 |
|                                                                         | 430 - 700 | bw 375K | 910-343 325-000 | 1 |



bw 450K

|                                                      |           |         |                 |   |
|------------------------------------------------------|-----------|---------|-----------------|---|
| Kit consisting of 3 ct's and separate overload relay | 500 - 850 | bw 450K | 910-343 331-000 | 1 |
|------------------------------------------------------|-----------|---------|-----------------|---|

### Accessories for tpe b ...K and bw ...K

### G.5

# Thermal overload relays

## Thermal overload relays for compact contactors - 3 poles

b 05  
aux. contacts 1NC



| Fits to contactors type...                                                                                                                                                                                                                      | Adjusting ranges of relays (A) | Cat. No. | E-No.           | Pack. |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|----------|-----------------|-------|
| <b>Screw terminals</b><br>LS 02K, LS 07, LS 05 (3+4-pole)                                                                                                                                                                                       | 0.11 - 0.17                    | b 05     | 910-343 101-000 | 1     |
|                                                                                                                                                                                                                                                 | 0.17 - 0.26                    | b 05     | 910-343 102-000 | 1     |
|                                                                                                                                                                                                                                                 | 0.26 - 0.43                    | b 05     | 910-343 103-000 | 1     |
|                                                                                                                                                                                                                                                 | 0.43 - 0.65                    | b 05     | 910-343 104-000 | 1     |
|                                                                                                                                                                                                                                                 | 0.65 - 1                       | b 05     | 910-343 105-000 | 1     |
|                                                                                                                                                                                                                                                 | 0.85 - 1.3                     | b 05     | 910-343 106-000 | 1     |
|                                                                                                                                                                                                                                                 | 1.1 - 1.6                      | b 05     | 910-343 107-000 | 1     |
|                                                                                                                                                                                                                                                 | 1.35 - 2                       | b 05     | 910-343 108-000 | 1     |
|                                                                                                                                                                                                                                                 | 1.7 - 2.4                      | b 05     | 910-343 109-000 | 1     |
|                                                                                                                                                                                                                                                 | 2.2 - 3.2                      | b 05     | 910-343 110-000 | 1     |
|                                                                                                                                                                                                                                                 | 3 - 4.7                        | b 05     | 910-343 111-000 | 1     |
|                                                                                                                                                                                                                                                 | 4 - 6.3                        | b 05     | 910-343 112-000 | 1     |
|                                                                                                                                                                                                                                                 | 5.5 - 8                        | b 05     | 910-343 113-000 | 1     |
|                                                                                                                                                                                                                                                 | 7.5 - 10.5                     | b 05     | 910-343 114-000 | 1     |
|                                                                                                                                                                                                                                                 | 10-14                          | b 05     | 910-343 115-000 | 1     |
| <b>with terminal repeater 14/22 (only for one conductor)</b><br><b>with conductor A2-96</b><br>without A2-96 (without connection for A2),<br>auxiliary contacts 95/96 connected separately:<br>Order with E-No. suffix <b>-010</b> instead -000 |                                |          |                 |       |

## Thermal overload relays for LS ...K- and LS-contactors

b 27T  
aux. contacts 1NO 1NC  
with integrated A2-terminal  
(Coil connection)



| Fits to contactors type...                                                                                                                                                                                                                      | Adjusting ranges of relays (A) | Cat. No. | E-No.           | Pack. |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|----------|-----------------|-------|
| <b>Screw terminals</b><br>LS 4K (3-pole)<br>LS 5K (3- + 4-pole)<br>LS 7K (3- + 4-pole)<br>LS 11K (3- pole)<br>LS 15K (3- pole) <sup>(1)</sup><br>LS 18K (3- pole) <sup>(1)</sup><br>LS 4, LS 7, LS 17<br>LS 27<br>LS 37 (3-pole) <sup>(2)</sup> | 0.12 - 0.18                    | b 27T    | 910-341 840-000 | 1     |
|                                                                                                                                                                                                                                                 | 0.18 - 0.28                    | b 27T    | 910-341 841-000 | 1     |
|                                                                                                                                                                                                                                                 | 0.28 - 0.4                     | b 27T    | 910-341 842-000 | 1     |
|                                                                                                                                                                                                                                                 | 0.4 - 0.63                     | b 27T    | 910-341 843-000 | 1     |
|                                                                                                                                                                                                                                                 | 0.56 - 0.8                     | b 27T    | 910-341 844-000 | 1     |
|                                                                                                                                                                                                                                                 | 0.63 - 1                       | b 27T    | 910-341 845-000 | 1     |
|                                                                                                                                                                                                                                                 | 0.8 - 1.2                      | b 27T    | 910-341 846-000 | 1     |
|                                                                                                                                                                                                                                                 | 1 - 1.5                        | b 27T    | 910-341 847-000 | 1     |
|                                                                                                                                                                                                                                                 | 1.2 - 1.8                      | b 27T    | 910-341 848-000 | 1     |
|                                                                                                                                                                                                                                                 | 1.5 - 2.3                      | b 27T    | 910-341 849-000 | 1     |
|                                                                                                                                                                                                                                                 | 1.8 - 2.8                      | b 27T    | 910-341 850-000 | 1     |
|                                                                                                                                                                                                                                                 | 2.3 - 3.5                      | b 27T    | 910-341 851-000 | 1     |
|                                                                                                                                                                                                                                                 | 2.8 - 4                        | b 27T    | 910-341 852-000 | 1     |
|                                                                                                                                                                                                                                                 | 3.5 - 5                        | b 27T    | 910-341 853-000 | 1     |
|                                                                                                                                                                                                                                                 | 4 - 6.3                        | b 27T    | 910-341 854-000 | 1     |
|                                                                                                                                                                                                                                                 | 5 - 7                          | b 27T    | 910-341 855-000 | 1     |
|                                                                                                                                                                                                                                                 | 5.6 - 8                        | b 27T    | 910-341 856-000 | 1     |
|                                                                                                                                                                                                                                                 | 7 - 10                         | b 27T    | 910-341 857-000 | 1     |
|                                                                                                                                                                                                                                                 | 8 - 12.5                       | b 27T    | 910-341 858-000 | 1     |
|                                                                                                                                                                                                                                                 | 10 - 15                        | b 27T    | 910-341 859-000 | 1     |
|                                                                                                                                                                                                                                                 | 11 - 17                        | b 27T    | 910-341 860-000 | 1     |
|                                                                                                                                                                                                                                                 | 15 - 23                        | b 27T    | 910-341 861-000 | 1     |
| 1) in case of load reduction,<br>no additional fixing through adapter hook<br>2) in case of load reduction                                                                                                                                      |                                |          |                 |       |

b 77S for LS-contactors  
aux. contacts 1NO 1NC



|                                                                                |          |       |                 |   |
|--------------------------------------------------------------------------------|----------|-------|-----------------|---|
| <b>Screw terminals, incl. connecting parts for mounting</b><br>3-pole<br>LS 37 | 4 - 6.3  | b 77S | 910-341 974-000 | 1 |
|                                                                                | 5.6 - 8  | b 77S | 910-341 976-000 | 1 |
|                                                                                | 8 - 12.5 | b 77S | 910-341 978-000 | 1 |
|                                                                                | 11 - 17  | b 77S | 910-341 980-000 | 1 |
|                                                                                | 16 - 25  | b 77S | 910-341 982-000 | 1 |
|                                                                                | 20 - 32  | b 77S | 910-341 983-000 | 1 |
| 3-pole<br>LS 47, LS 57, LS 77,<br>LS 87                                        | 25 - 40  | b 77S | 910-341 984-000 | 1 |
|                                                                                | 32 - 50  | b 77S | 910-341 985-000 | 1 |
|                                                                                | 40 - 57  | b 77S | 910-341 986-000 | 1 |
|                                                                                | 50 - 63  | b 77S | 910-341 987-000 | 1 |
|                                                                                | 57 - 70  | b 77S | 910-341 988-000 | 1 |
|                                                                                | 63 - 80  | b 77S | 910-341 989-000 | 1 |

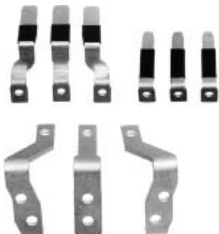
b 177S for LS-contactors  
aux. contacts 1NO 1NC



|                                                                                                                   |           |        |                 |   |
|-------------------------------------------------------------------------------------------------------------------|-----------|--------|-----------------|---|
| <b>Screw terminals, incl. connecting parts for mounting</b><br>3-pole<br>LS 47, LS 57, LS 77,<br>LS 87 (FL + RKB) | 55 - 80   | b 177S | 910-341 782-000 | 1 |
|                                                                                                                   | 63 - 90   | b 177S | 910-341 784-000 | 1 |
| 3-pole<br>LS 107 (FL + RKB),<br>LS 147 (FL + RKB),<br>LS 177                                                      | 80 - 110  | b 177S | 910-341 786-000 | 1 |
|                                                                                                                   | 90 - 120  | b 177S | 910-341 788-000 | 1 |
|                                                                                                                   | 110 - 135 | b 177S | 910-341 790-000 | 1 |
|                                                                                                                   | 120 - 150 | b 177S | 910-341 792-000 | 1 |
|                                                                                                                   | 135 - 160 | b 177S | 910-341 794-000 | 1 |
| 3-pole<br>LS 107 Flat plug terminal,<br>LS 147 Flat plug terminal,<br>LS 177, LS 207                              | 150 - 180 | b 177S | 910-341 796-000 | 1 |

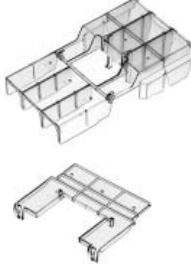
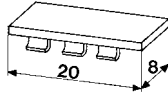
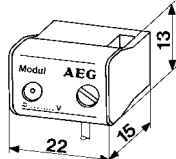
# Thermal overload relays

## Accessories

|                                                                                                                                                                                                                                                                 | Description                                                                                                                                                                                                                                                                        | Usable for devices type...                                                         | Cat. No.           | E-No.                                                                    | Pack.            |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|--------------------|--------------------------------------------------------------------------|------------------|
|                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                    |                                                                                    |                    |                                                                          |                  |
| <b>Adapter, screw mounting</b><br><br>                                                                                                                                         | Sep. mounting, for combinations                                                                                                                                                                                                                                                    | LS 07 with b 05                                                                    |                    | 910-393 144-000                                                          | 1                |
|                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                    |                                                                                    |                    |                                                                          |                  |
| <b>Adapter, separate mounting b 05</b><br><br>                                                                                                                                 | For snap-on mounting on rails DIN EN 50 0222 (order also terminal block)                                                                                                                                                                                                           | b 05                                                                               |                    | 910-393 142-000                                                          | 5                |
|                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                    |                                                                                    |                    |                                                                          |                  |
| <b>Terminal block, separate mounting b 05</b><br><br>                                                                                                                         | For mounting to thermal overload relays b 05 for screw mounting                                                                                                                                                                                                                    | b 05                                                                               |                    | 910-393 141-000                                                          | 5                |
|                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                    |                                                                                    |                    |                                                                          |                  |
| <b>Add-on auxiliary switch, 1 NO contact</b><br><br>                                                                                                                         | Snap-on mounting, only in position "H"                                                                                                                                                                                                                                             | b 05                                                                               | HB 05.10           | 910-393 143-000                                                          | 10               |
|                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                    |                                                                                    |                    |                                                                          |                  |
| <b>Separate mounting parts</b><br><br>                                                                                                                                       | For snap-on mounting on rails DIN EN 50 0222                                                                                                                                                                                                                                       |                                                                                    |                    |                                                                          |                  |
|                                                                                                                                                                                                                                                                 | sep. mounting<br>sep. mounting                                                                                                                                                                                                                                                     | b 27T<br>b 77S                                                                     | VST 27T<br>VST 77S | 910-391 281-000<br>910-391 268-000                                       | 1<br>1           |
| <b>Connecting parts</b><br>Only necessary, if the assembly with the relevant contactors is not possible with the included parts in the package of the overload relay.<br><br> | <b>Plug-in connections for b 77S, E-No. = 1 set = 3 pieces</b><br>for contactors without box type terminal<br>for contactors with box type terminal                                                                                                                                | LS 22K - LS 37K<br>LS 15K - LS 18K<br>LS 37<br>LS 47 - LS 87                       |                    | 910-391 283-000<br>910-391 284-000<br>910-391 271-000<br>910-391 273-000 | 1<br>1<br>1<br>1 |
|                                                                                                                                                                                                                                                                 | <b>Plug-in connections for b 177S, E-No. = 1 set = 3 pieces</b><br>Take notice of the terminal covers<br>for contactors with box terminal<br>for contactors with box terminal<br>for mounting with box terminal RKB 2                                                              | LS 45K - LS 55K<br>LS 47 - LS 87<br>LS 107, LS 147, LS 177<br>b 177S sep. mounting |                    | 910-391 285-000<br>910-391 274-000<br>910-391 275-000<br>910-391 275-000 | 1<br>1<br>1<br>1 |
| <b>Box type terminal</b><br><br>                                                                                                                                             | <b>Triple dual box type terminal can be plugged to the load side of the TOR b 177S</b><br>usable only up to and incl. current ranges 135 - 160A                                                                                                                                    | b 177S                                                                             | RKB 2              | 910-391 276-000                                                          | 1                |
|                                                                                                                                                                                                                                                                 | If a separate mounted b 177S is used, with box type terminal on both sides, order:<br>- 2 x box type terminal 910-391 276-000<br>- 1 x connecting parts 910-391 275-000<br>- 1 x finger proof cover 910-391 277-000<br>(only if a protection is needed acc. DIN VDE 0106 Part 100) |                                                                                    |                    |                                                                          |                  |

# Thermal overload relays

## Accessories (continued)

|                                                                                     |                    | Description                                                                                                                                                                                                           | Usable for devices type...                                     | Cat. No.   | E.-No.          | Pack. |
|-------------------------------------------------------------------------------------|--------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------|------------|-----------------|-------|
|                                                                                     |                    |                                                                                                                                                                                                                       |                                                                |            |                 |       |
|    | Finger proof cover | Later mounting on b 177 S<br>Covering the input and output side                                                                                                                                                       |                                                                | KLAB 177A  | 910-391 272-000 | 1     |
|                                                                                     |                    | Covering the contactor side<br>(Use finger proof cover for the lead side of the thermal overload relay b 177S with box terminal block RKB 2 E-No. 910-391 276-000                                                     | 177S with contactor                                            | KLAB 177B  | 910-391 277-000 | 1     |
|                                                                                     |                    | Auxiliary terminals:<br>for Types b 05, b 27T, b 77S, b 177S, bw 17S - bw 320S not necessary<br>Main terminals:<br>for Types b 05, b 27T, b 77S not necessary                                                         |                                                                |            |                 |       |
|    | Remote operation   | Bowden cable anchor with thread M4 for the connection of bowden cable operators delivery without bowden cable (on request) b 27T, b 77S, b177S, bw ...S, be 627e, b721Sw                                              |                                                                | BZA        | 910-391 249-000 | 1     |
|                                                                                     |                    |                                                                                                                                                                                                                       |                                                                |            |                 |       |
|  | Label              | Can be written by a waterproof pen<br>pluggable in covers<br>Z-Nr 227 261 R01                                                                                                                                         | LS...-contactor, b 27T, b 77S, b 177S, bw ...S, be 627, b721Sw | KZS        | 910-392 366-000 | 100   |
|                                                                                     |                    |                                                                                                                                                                                                                       |                                                                |            |                 |       |
|                                                                                     | A2-module          | Screw terminal<br>With terminal screw M3 up to 2 x 2.5mm <sup>2</sup> and connecting wire from the coil terminal »A2«.<br>Improved accessibility to »A2« in the combination of the overload relay with the contactor. | LS 07, LS 4 - 37, b 77S                                        | A2-module  | 910-392 460-000 | 10    |
|                                                                                     |                    |                                                                                                                                                                                                                       |                                                                |            |                 |       |
|  | LA2-module         | As A2-module, but additional light indicates for signalling of switch states.<br>(Terminal screw and 2 connecting wire) with glow lamp, 110 - 250V AC                                                                 | LS 07, LS 4 - 37, b 27T, b 77S, b 177S                         | LA2-module | 910-392 461-000 | 1     |
|                                                                                     |                    | with 2 antiparallel LED's, 17 - 33V AC/DC                                                                                                                                                                             | LS 07, LS 4 - 37, b 27T, b 77S, b 177S                         | LA2-module | 910-392 462-000 | 1     |
|                                                                                     |                    |                                                                                                                                                                                                                       |                                                                |            |                 |       |