

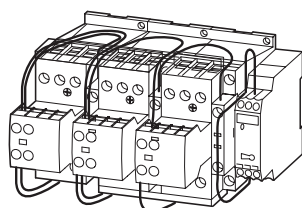
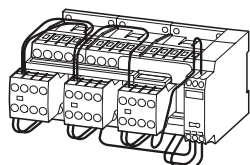
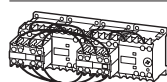
# 1.1

## Contactor combinations

Star-delta combinations

### Ordering

1



### Star-delta combinations SDAINL

Operating frequency: maximum 30 starts per hour

| Rated operational current<br>AC-3 | Max. rated operational power for<br>three-phase motors, 50 - 60 Hz |       |       |       | Max.<br>change-over time<br>s | Part no.<br>Article no.               | Price<br>See price<br>list | Std.<br>pack |
|-----------------------------------|--------------------------------------------------------------------|-------|-------|-------|-------------------------------|---------------------------------------|----------------------------|--------------|
| 400 V                             | 230 V                                                              | 400 V | 500 V | 690 V |                               |                                       |                            |              |
| I <sub>e</sub>                    | P                                                                  | P     | P     | P     |                               |                                       |                            |              |
| A                                 | kW                                                                 | kW    | kW    | kW    |                               |                                       |                            |              |
| 12                                | 4                                                                  | 5.5   | 5.5   | –     | < 30                          | <b>SDAINLEM(230V50Hz)</b><br>051840   |                            | 1 off        |
| 12                                | 3                                                                  | 5.5   | 5.5   | 5.5   | < 20                          | <b>SDAINLM12(230V50Hz)</b><br>278286  |                            | 1 off        |
| 12                                | 3                                                                  | 5.5   | 5.5   | 5.5   | < 20                          | <b>SDAINLM12(400V50Hz)</b><br>101380  |                            | 1 off        |
| 12                                | 3                                                                  | 5.5   | 5.5   | 5.5   | < 20                          | <b>SDAINLM12(24VDC)</b><br>100416     |                            | 1 off        |
| 16                                | 4                                                                  | 7.5   | 7.5   | 7.5   | < 20                          | <b>SDAINLM16(230V50Hz)</b><br>278311  |                            | 1 off        |
| 16                                | 4                                                                  | 7.5   | 7.5   | 7.5   | < 20                          | <b>SDAINLM16(400V50Hz)</b><br>101381  |                            | 1 off        |
| 16                                | 4                                                                  | 7.5   | 7.5   | 7.5   | < 20                          | <b>SDAINLM16(24VDC)</b><br>100417     |                            | 1 off        |
| 22                                | 5.5                                                                | 11    | 11    | 11    | < 20                          | <b>SDAINLM22(230V50Hz)</b><br>278336  |                            | 1 off        |
| 22                                | 5.5                                                                | 11    | 11    | 11    | < 20                          | <b>SDAINLM22(400V50Hz)</b><br>101382  |                            | 1 off        |
| 22                                | 5.5                                                                | 11    | 11    | 11    | < 20                          | <b>SDAINLM22(24VDC)</b><br>100418     |                            | 1 off        |
| 30                                | 7.5                                                                | 15    | 18.5  | 18.5  | < 20                          | <b>SDAINLM30(230V50Hz)</b><br>278361  |                            | 1 off        |
| 30                                | 7.5                                                                | 15    | 18.5  | 18.5  | < 20                          | <b>SDAINLM30(400V50Hz)</b><br>101383  |                            | 1 off        |
| 30                                | 7.5                                                                | 15    | 18.5  | 18.5  | < 20                          | <b>SDAINLM30(RDC24)</b><br>100419     |                            | 1 off        |
| 45                                | 11                                                                 | 22    | 30    | 22    | < 20                          | <b>SDAINLM45(230V50Hz)</b><br>278386  |                            | 1 off        |
| 45                                | 11                                                                 | 22    | 30    | 22    | < 20                          | <b>SDAINLM45(400V50Hz)</b><br>101384  |                            | 1 off        |
| 45                                | 11                                                                 | 22    | 30    | 22    | < 20                          | <b>SDAINLM45(RDC24)</b><br>100420     |                            | 1 off        |
| 55                                | 15                                                                 | 30    | 37    | 30    | < 20                          | <b>SDAINLM55(230V50Hz)</b><br>278411  |                            | 1 off        |
| 55                                | 15                                                                 | 30    | 37    | 30    | < 20                          | <b>SDAINLM55(400V50Hz)</b><br>101385  |                            | 1 off        |
| 55                                | 15                                                                 | 30    | 37    | 30    | < 20                          | <b>SDAINLM55(RDC24)</b><br>100421     |                            | 1 off        |
| 70                                | 18.5                                                               | 37    | 45    | 37    | < 20                          | <b>SDAINLM70(230V50Hz)</b><br>239895  |                            | 1 off        |
| 70                                | 18.5                                                               | 37    | 45    | 37    | < 20                          | <b>SDAINLM70(400V50Hz)</b><br>101386  |                            | 1 off        |
| 90                                | 22                                                                 | 45    | 55    | 45    | < 20                          | <b>SDAINLM90(230V50Hz)</b><br>239937  |                            | 1 off        |
| 115                               | 30                                                                 | 55    | 75    | 55    | < 20                          | <b>SDAINLM115(230V50Hz)</b><br>239963 |                            | 1 off        |
| 140                               | 37                                                                 | 75    | 90    | 90    | < 20                          | <b>SDAINLM140(230V50Hz)</b><br>240009 |                            | 1 off        |
| 165                               | 45                                                                 | 90    | 110   | 132   | < 20                          | <b>SDAINLM165(230V50Hz)</b><br>240035 |                            | 1 off        |
| 200                               | 55                                                                 | 110   | 132   | 160   | < 20                          | <b>SDAINLM200(230V50Hz)</b><br>101010 |                            | 1 off        |
| 260                               | 75                                                                 | 132   | 160   | 160   | < 20                          | <b>SDAINLM260(230V50Hz)</b><br>101031 |                            | 1 off        |

### Individual components of the combination

### Spare auxiliary contacts

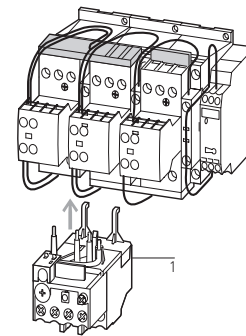
### Notes

| Mains contactor<br>Q11     | Delta contactor<br>Q15     | Star contactor<br>Q13     | Timing relays<br>K1 | Q11 | Q13 | Q15 |
|----------------------------|----------------------------|---------------------------|---------------------|-----|-----|-----|
| Part no.                   | Part no.                   | Part no.                  | Part no.            |     |     |     |
| DILEM-10<br>+ 22DILEM      | DILEM-01                   | DILEM-10 +<br>02DILEM     | DILET               |     | —   | —   |
| DILM7-10<br>+ DILA-XHI20   | DILM7-01<br>+ DILA-XHI20   | DILM7-01<br>+ DILA-XHI20  | ETR4-51             |     |     |     |
| DILM7-10<br>+ DILA-XHI20   | DILM7-01<br>+ DILA-XHI20   | DILM7-01<br>+ DILA-XHI20  | ETR4-51             |     |     |     |
| DILM7-10<br>+ DILA-XHI20   | DILM7-01<br>+ DILA-XHI20   | DILM7-01<br>+ DILA-XHI20  | ETR4-51             |     |     |     |
| DILM9-10<br>+ DILA-XHI20   | DILM9-01<br>+ DILA-XHI20   | DILM7-01<br>+ DILA-XHI20  | ETR4-51             |     |     |     |
| DILM9-10<br>+ DILA-XHI20   | DILM9-01<br>+ DILA-XHI20   | DILM7-01<br>+ DILA-XHI20  | ETR4-51             |     |     |     |
| DILM9-10<br>+ DILA-XHI20   | DILM9-01<br>+ DILA-XHI20   | DILM7-01<br>+ DILA-XHI20  | ETR4-51             |     |     |     |
| DILM12-10<br>+ DILA-XHI20  | DILM12-01<br>+ DILA-XHI20  | DILM7-01<br>+ DILA-XHI20  | ETR4-51             |     |     |     |
| DILM12-10<br>+ DILA-XHI20  | DILM12-01<br>+ DILA-XHI20  | DILM7-01<br>+ DILA-XHI20  | ETR4-51             |     |     |     |
| DILM12-10<br>+ DILA-XHI20  | DILM12-01<br>+ DILA-XHI20  | DILM7-01<br>+ DILA-XHI20  | ETR4-51             |     |     |     |
| DILM17-10<br>+ DILA-XHI20  | DILM17-01<br>+ DILA-XHI20  | DILM17-01<br>+ DILA-XHI20 | ETR4-51             |     |     |     |
| DILM17-10<br>+ DILA-XHI20  | DILM17-01<br>+ DILA-XHI20  | DILM17-01<br>+ DILA-XHI20 | ETR4-51             |     |     |     |
| DILM17-10<br>+ DILA-XHI20  | DILM17-01<br>+ DILA-XHI20  | DILM17-01<br>+ DILA-XHI20 | ETR4-51             |     |     |     |
| DILM25-10<br>+ DILA-XHI20  | DILM25-01<br>+ DILA-XHI20  | DILM17-01<br>+ DILA-XHI20 | ETR4-51             |     |     |     |
| DILM25-10<br>+ DILA-XHI20  | DILM25-01<br>+ DILA-XHI20  | DILM17-01<br>+ DILA-XHI20 | ETR4-51             |     |     |     |
| DILM25-10<br>+ DILA-XHI20  | DILM25-01<br>+ DILA-XHI20  | DILM17-01<br>+ DILA-XHI20 | ETR4-51             |     |     |     |
| DILM32-10<br>+ DILA-XHI20  | DILM32-01<br>+ DILA-XHI20  | DILM25-01<br>+ DILA-XHI20 | ETR4-51             |     |     |     |
| DILM32-10<br>+ DILA-XHI20  | DILM32-01<br>+ DILA-XHI20  | DILM25-01<br>+ DILA-XHI20 | ETR4-51             |     |     |     |
| DILM32-10<br>+ DILA-XHI20  | DILM32-01<br>+ DILA-XHI20  | DILM25-01<br>+ DILA-XHI20 | ETR4-51             |     |     |     |
| DILM40<br>+ DILM150-XHI31  | DILM40<br>+ DILM150-XHI11  | DILM40<br>+ DILM150-XHI11 | ETR4-51             |     | —   | —   |
| DILM40<br>+ DILM150-XHI31  | DILM40<br>+ DILM150-XHI11  | DILM40<br>+ DILM150-XHI11 | ETR4-51             |     | —   | —   |
| DILM50<br>+ DILM150-XHI31  | DILM50<br>+ DILM150-XHI11  | DILM40<br>+ DILM150-XHI11 | ETR4-51             |     | —   | —   |
| DILM65<br>+ DILM150-XHI31  | DILM65<br>+ DILM150-XHI11  | DILM40<br>+ DILM150-XHI11 | ETR4-51             |     | —   | —   |
| DILM80<br>+ DILM150-XHI31  | DILM80<br>+ DILM150-XHI11  | DILM50<br>+ DILM150-XHI11 | ETR4-51             |     | —   | —   |
| DILM95<br>+ DILM150-XHI31  | DILM95<br>+ DILM150-XHI11  | DILM65<br>+ DILM150-XHI11 | ETR4-51             |     | —   | —   |
| DILM115<br>+ DILM150-XHI31 | DILM115<br>+ DILM150-XHI11 | DILM80<br>+ DILM150-XHI11 | ETR4-51             |     | —   | —   |
| DILM150<br>+ DILM150-XHI31 | DILM150<br>+ DILM150-XHI11 | DILM95<br>+ DILM150-XHI11 | ETR4-51             |     | —   | —   |

Main circuit:  
Depending on the type of coordination required (i.e. Type "1" or Type "2") it must be established whether the fuse protection and the input wiring for the mains contactor and delta contactor are to be common or separate.

The following applies for SDAINLM 140 – SDAINLM 260:  
• On the mounting plate.

Circuit diagrams, Star-delta combinations → page 46



### Accessories

1 Overload relay  
Accessories

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