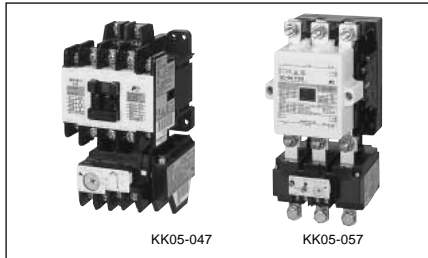


KK05-042

**Starters with quick-operating overload relay**

With the attached quick operating type O/L relay, this is suitable for protecting submersible pumps or compressor motors with a small heat capacity.  
 See page 01/55.

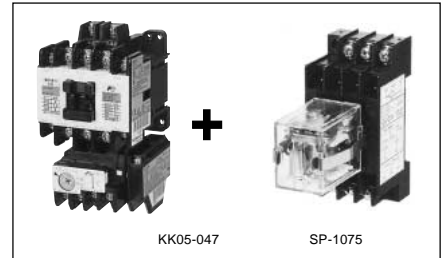


KK05-047

KK05-057

**Starters with phase-loss protective device**

The attached 2E thermal O/L relay protects against motor overload and as well as phase-loss.  
 See page 01/56.



KK05-047

SP-1075

**Starters with phase-loss and phase-sequence protective device**

By combining 2E thermal O/L relay and phase-sequence relay, motor overload, phase-loss and phase-sequence protection is obtained.  
 See page 01/58.



KKD06-010

**Starters with on-off and RESET pushbuttons**

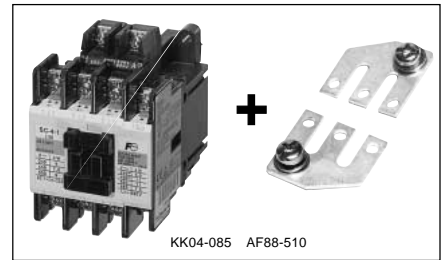
Pushbuttons for close and open are built in the enclosure. Suitable for simple operations.  
 See page 01/60.



SD-704

**Dust-tight/light-corrosion resistant type starters**

The enclosure is dust-tight and corrosion-proof, and so is suitable for locations with dusty or corrosive atmospheres.  
 See page 01/62.



KK04-085 AF88-510

**Contactors for single-phase resistance load**

This is a standard type magnetic contactor with a 3-phase parallel plate terminal. This is most suitable for on-off operation of electric heaters, water heaters and electric lights.  
 See page 01/63.



KKD06-036

**With single-button auxiliary contacts**

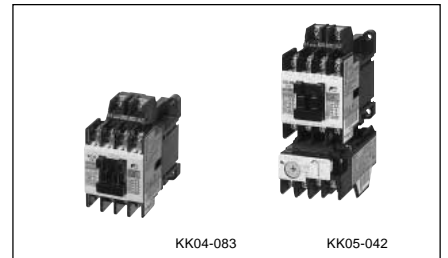
An auxiliary contact of a standard contactor is bifurcated. All SC-03H to SC-N12H contactor, however, feature single-button auxiliary contacts with a higher current rating than the contacts used by the standard contactor.  
 See page 01/64.



AF95-240

**With quick connection terminals**

No removing terminal screw is required. When contactor and starters with the quick connection terminals are shipped, these screws are inserted in the terminals section but make no contact. It reduces the number of wiring steps. Terminals with finger protection enable a high level of safety.  
 See page 01/65.



KK04-083

KK05-042

**UL, CSA, TÜV and CCC approved motor starters and contactors**

Many models of SC series conform to UL, CSA, TÜV and CCC requirements.  
 See page 01/120.

# Magnetic Contactors and Starters

## SC and SW series

### Quick selection guide/Open type

#### ■ Types and ratings/Non-reversing, Open

| Frame size  |                    | 03                                     | 0                                    | 05                                     | 4-0                                      | Further information |
|---|--------------------|--|--------------------------------------|--|--|---------------------|
| Max. motor capacity (kW)                                      | 200–240V           | 2.5                                    | 3.5                                  | 3.5                                    | 4.5                                      |                     |
|   | 380–440V           | 4                                      | 5.5                                  | 5.5                                    | 7.5                                      |                     |
| AC-3, IEC 60947-4-1   | 500–550V           | 4                                      | 5.5                                  | 5.5                                    | 7.5                                      |                     |
|   | 600–660V           | 4                                      | 5.5                                  | 5.5                                    | 7.5                                      |                     |
| Operational current (A)                                       | 200–240V           | 11                                     | 13                                   | 13                                     | 18                                       |                     |
|   | 380–440V           | 9                                      | 12                                   | 12                                     | 16                                       |                     |
|   | 500–550V           | 7                                      | 9                                    | 9                                      | 13                                       |                     |
|   | 600–660V           | 5                                      | 7                                    | 7                                      | 9  |                     |
| Operational current (A)                                       | AC-1               | 20                                     | 20                                   | 20                                     | 25                                       |                     |
| Conventional free air thermal current (A)                     |                    | 20                                     | 20                                   | 20                                     | 25                                       |                     |
| Auxiliary contact arrangement                                 |                    | 1NO<br>1NC                             | 1NO<br>1NC                           | 1NO+1NC<br>2NO, 2NC                    | 1NO<br>1NC                               |                     |
| Standard  | Contact<br>Starter | SC-03<br>SW-03/3H                      | SC-0<br>SW-0/3H                      | SC-05<br>SW-05/3H                      | SC-4-0<br>SW-4-0/3H                      | Page<br>01/25       |
| DC operated   | Contact<br>Starter | SC-03/G<br>SW-03/G3H                   | SC-0/G<br>SW-0/G3H                   | SC-05/G<br>SW-05/G3H                   | SC-4-0/G<br>SW-4-0/G3H                   | Page<br>01/41       |
| OFF-delay release *1  | Contact<br>Starter | SC-03/G+SZ-DE□<br>SW-03/G3H+<br>SZ-DE□ | SC-0/G+SZ-DE□<br>SW-0/G3H+<br>SZ-DE□ | SC-05/G+SZ-DE□<br>SW-05/G3H+<br>SZ-DE□ | SC-4-0/G+SZ-DE□<br>SW-4-0/G3H+<br>SZ-DE□ | Page<br>01/46       |
| With extra pick-up<br>operating coil                          | Contact<br>Starter | SC-03/U<br>SW-03/U3H                   | SC-0/U<br>SW-0/U3H                   | SC-05/U<br>SW-05/U3H                   | SC-4-0/U<br>SW-4-0/U3H                   | Page<br>01/47       |
| Mechanical latch<br>AC operated                               | Contact<br>Starter | SC-03/V<br>–                           | SC-0/V<br>–                          | SC-05/V<br>–                           | SC-4-0/V<br>–                            | Page<br>01/48       |
| Mechanical latch<br>DC operated                               | Contact<br>Starter | SC-03/VG<br>–                          | SC-0/VG<br>–                         | SC-05/VG<br>–                          | SC-4-0/VG<br>–                           | Page<br>01/46       |
| Heavy starting duty   | Contact<br>Starter | –<br>SW-03/3L                          | –<br>SW-0/3L                         | –<br>SW-05/3L                          | –<br>SW-4-0/3L                           | Page<br>01/53       |
| With quick operating<br>overload relay                        | Contact<br>Starter | –<br>SW-03/3Q                          | –<br>SW-0/3Q                         | –<br>SW-05/3Q                          | –<br>SW-4-0/3Q                           | Page<br>01/55       |
| With phase-loss<br>protective device                          | Contact<br>Starter | –<br>SW-03/2E                          | –<br>SW-0/2E                         | –<br>SW-05/2E                          | –<br>SW-4-0/2E                           | Page<br>01/56       |
| With phase-loss and<br>phase sequence<br>protective device *2 | Contact<br>Starter | –<br>SW-03/2E+QE-□0N                   | –<br>SW-0/2E+QE-□0N                  | –<br>SW-05/2E+QE-□0N                   | –<br>SW-4-0/2E+QE-□0N                    | Page<br>01/58       |
| For single-phase<br>resistance load                           | Contact<br>Starter | SC-03+SZ-SP1<br>–                      | SC-0+SZ-SP1<br>–                     | SC-05+SZ-SP1<br>–                      | SC-4-0+SZ-SP2<br>–                       | Page<br>01/63       |
| With quick connection<br>terminals                            | Contact<br>starter | SC-03Y<br>SW-03Y                       | SC-0Y<br>SW-0Y                       | SC-05Y<br>SW-05Y                       | –<br>–                                   | Page<br>01/65       |
| Thermal overload relay<br>On-contactor mounting               |                    |  |                                      |  |  | Page<br>01/88       |
| Standard  |                    | TR-0N/3                                | TR-0N/3                              | TR-0N/3                                | TR-5-1N/3                                |                     |
| Long time operation   |                    | TR-0NL/3                               | TR-0NL/3                             | TR-0NL/3                               | TR-5-1NL/3                               |                     |
| Quick operation   |                    | TR-0NQ                                 | TR-0NQ                               | TR-0NQ                                 | TR-5-1NQ                                 |                     |
| Phase-loss protection   |                    | TK-0N                                  | TK-0N                                | TK-0N                                  | TK-5-1N                                  |                     |

Note: \*1 Replace the □ mark in the type number by the operating voltage code.  
100V AC: 100, 110V AC: 110, 200V AC: 200, 220V AC: 220

\*2 Replace the □ mark in the type number by the operating voltage code.  
200-220V AC: 2, 380-415V AC: 4