

# A

## AC CONTACTOR



## • APPLICATION

CJX2 (LC1-D) Series AC Contactor is suitable for using in the circuits up to the rated voltage 660V AC50Hz or 60Hz, rated current up to 95A, for making, breaking, frequently starting & controlling the AC motor.

Combined with the auxiliary contact block, timer delay & machine-interlocking device etc, it becomes the delay contactor, mechanical interlocking contactor, star-delta starter.

With the thermal relay, it is combined into the electromagnetic starter. The Contactor is produced according to IEC947-2, VDE0660 & BS5452.

## • SPECIFICATION

| Type                                                      |                     | CJX2-09<br>(LC1-D09) | CJX2-12<br>(LC1-D12) | CJX2-18<br>(LC1-D18) | CJX2-25<br>(LC1-D25) | CJX2-32<br>(LC1-D32) |
|-----------------------------------------------------------|---------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| Rated working current(A)                                  | AC3                 | 9                    | 12                   | 18                   | 25                   | 32                   |
|                                                           | AC4                 | 3.5                  | 5                    | 7.7                  | 8.5                  | 12                   |
| AC3 capacity of phase<br>3 squirrel-cage motor<br>AC3(KW) | 220/230V            | 2.2                  | 3                    | 4                    | 5.5                  | 7.5                  |
|                                                           | 380/400V            | 4                    | 5.5                  | 7.5                  | 11                   | 15                   |
|                                                           | 415V                | 4                    | 5.5                  | 9                    | 11                   | 15                   |
|                                                           | 440V                | 4                    | 5.5                  | 9                    | 11                   | 15                   |
|                                                           | 500V                | 5.5                  | 7.5                  | 10                   | 15                   | 18.5                 |
|                                                           | 660/690V            | 5.5                  | 7.5                  | 10                   | 15                   | 18.5                 |
| Rated heat current(A)                                     |                     | 20                   | 20                   | 32                   | 40                   | 50                   |
| Electrical life                                           | AC4×10 <sup>4</sup> | 20                   | 20-15                | 20-7                 | 15-7                 | 15-7                 |
|                                                           | AC3×10 <sup>6</sup> | 2                    | 2                    | 2                    | 2                    | 2                    |
| Mechanical                                                |                     | 20                   | 20                   | 20                   | 20                   | 20                   |
| Number of the contact                                     |                     | 3P+NO                |                      |                      |                      |                      |
|                                                           |                     | 3P+NC                |                      |                      |                      |                      |

| Volts<br>(VAC) | 24 | 42 | 48 | 110 | 220/230 | 230 | 240 | 380/400 | 400 | 415 | 440 | 500 | 660 |
|----------------|----|----|----|-----|---------|-----|-----|---------|-----|-----|-----|-----|-----|
| 50Hz           | B5 | D5 | E5 | F5  | M5      | P5  | U5  | Q5      | V5  | N5  | R5  | S5  | Y5  |
| 60Hz           | B6 | D6 | E6 | F6  | M6      | -   | U6  | Q6      | -   | -   | R6  | -   | -   |
| 50/60Hz        | B7 | D7 | E7 | F7  | M7      | P7  | U7  | Q7      | V7  | N7  | R7  | -   | -   |



CJX2(LC1-D)09,12,18



CJX2(LC1-D)25



CJX2(LC1-D)32



CJX2(LC1-D)65

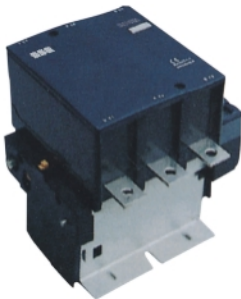


CJX2(LC1-D)95

## • SPECIFICATION



CJX2(LC1-D)115



CJX2(LC1-D)205



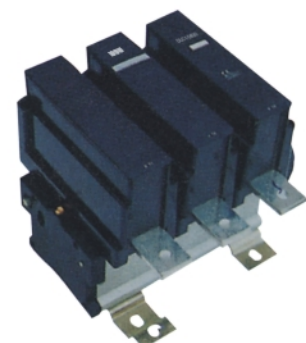
CJX2(LC1-D)330



CJX2(LC1-D)150



CJX2(LC1-D)170



CJX2(LC1-D)620

| Type                                                |  |  | CJX2-40<br>(LC1-D40) | CJX2-50<br>(LC1-D50) | CJX2-65<br>(LC1-D65) | CJX2-80<br>(LC1-D80) | CJX2-95<br>(LC1-D95) |     |
|-----------------------------------------------------|--|--|----------------------|----------------------|----------------------|----------------------|----------------------|-----|
| Rated working current(A)                            |  |  | AC3                  | 40                   | 50                   | 65                   | 80                   | 95  |
|                                                     |  |  | AC4                  | 18.5                 | 24                   | 28                   | 37                   | 44  |
| AC3 capacity of phase 3 spuirrel-cage motor AC3(KW) |  |  | 220/230V             | 11                   | 15                   | 18.5                 | 22                   | 25  |
|                                                     |  |  | 380/400V             | 18.5                 | 22                   | 30                   | 37                   | 45  |
|                                                     |  |  | 415V                 | 22                   | 25                   | 37                   | 45                   | 45  |
|                                                     |  |  | 440V                 | 22                   | 30                   | 37                   | 45                   | 45  |
|                                                     |  |  | 500V                 | 22                   | 30                   | 37                   | 55                   | 55  |
|                                                     |  |  | 660/690V             | 30                   | 33                   | 37                   | 45                   | 45  |
| Rated heat current(A)                               |  |  | 60                   | 80                   | 80                   | 125                  | 125                  |     |
| Electrical life                                     |  |  | AC4×10 <sup>4</sup>  | 10-7                 | 7                    | 7-6                  | 7-5                  | 7-5 |
|                                                     |  |  | AC3×10 <sup>6</sup>  | 2                    | 2                    | 1.6                  | 1.6                  | 1.6 |
| Mechanical                                          |  |  | 20                   | 20                   | 20                   | 10                   | 10                   |     |
| Number of the contact                               |  |  | 3P+NC+NO             |                      |                      |                      |                      |     |

| Type                                                |                 |     | CJX2-115<br>(LC1-D115) | CJX2-150<br>(LC1-D150) | CJX2-170<br>(LC1-D170) | CJX2-205<br>(LC1-D205) | CJX2-245<br>(LC1-D245) | CJX2-300<br>(LC1-D300) | CJX2-410<br>(LC1-D410) | CJX2-475<br>(LC1-D475) | CJX2-620<br>(LC1-D620) |     |
|-----------------------------------------------------|-----------------|-----|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|-----|
| Rated working current (A)                           | 380V            | AC3 | 115                    | 150                    | 170                    | 205                    | 245                    | 300                    | 410                    | 475                    | 620                    |     |
|                                                     |                 | AC4 | 52                     | 60                     | 75                     | 85                     | 105                    | 210                    | 138                    | 147                    | 180                    |     |
|                                                     | 660V            | AC3 | 86                     | 107                    | 110                    | 130                    | 170                    | 325                    | 305                    | 355                    | 460                    |     |
|                                                     |                 | AC4 | 49                     | 61                     | 69                     | 80                     | 90                     | 118                    | 135                    | 145                    | 170                    |     |
| Rated heat current(A)                               |                 |     | 250                    | 250                    | 250                    | 275                    | 315                    | 400                    | 500                    | 700                    | 1000                   |     |
| AC3 capacity of phase 3 squirrel-cage motorAC3 (KW) |                 |     | 220V                   | 30                     | 40                     | 55                     | 63                     | 75                     | 100                    | 110                    | 147                    | 200 |
|                                                     |                 |     | 380V                   | 55                     | 75                     | 90                     | 110                    | 132                    | 160                    | 220                    | 265                    | 335 |
|                                                     |                 |     | 660V                   | 80                     | 100                    | 110                    | 129                    | 160                    | 220                    | 280                    | 335                    | 450 |
| Operation frequency (time/h)                        | Electrical life | AC3 | 600                    |                        |                        |                        |                        |                        |                        |                        |                        |     |
|                                                     |                 | AC4 | 150                    |                        |                        |                        |                        |                        |                        |                        |                        |     |
|                                                     | Mechanical life |     | 2400                   |                        |                        |                        |                        |                        |                        |                        |                        |     |
|                                                     | AC3             |     | 60×10 <sup>5</sup>     | 50×10 <sup>5</sup>     |                        |                        |                        |                        | 30×10 <sup>5</sup>     | 20×10 <sup>5</sup>     |                        |     |
|                                                     | AC4             |     | 15×10 <sup>5</sup>     |                        |                        |                        |                        |                        | 8                      | 5                      |                        |     |
| Mechanical Life                                     |                 |     | 600×10 <sup>5</sup>    |                        |                        |                        |                        |                        | 500                    |                        |                        |     |
| Number of the contact                               |                 |     | RT16-160               | RT16-250               | RT16-250               | RT16-315               | RT16-315               | RT16-400               | RT16-500               | RT16-630               | RT16-630               |     |

## • APPLICATION

CJX2(LC1-D) new type series AC contactors are suitable for frequency 50/60Hz, rated insulation voltage up to 1000V, rated operation current 9~330A under AC-3 duty. It is mainly used for making/breaking electric circuits at a long distance, and for frequent starting/stopping & controlling AC motors. It is used in combination with thermal relay to compose a magnetic motor starter. The products are produced according to IEC60947-4-1 & GB14048.4.

## • SPECIFICATION

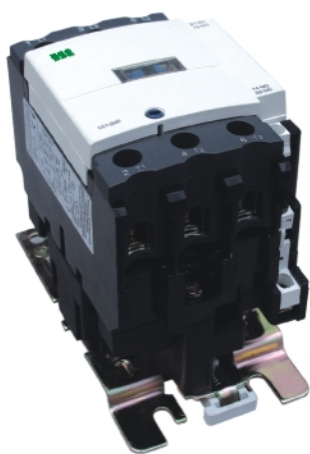
|                                                                                                               |                         |                                                                                                                                               |                   |                   |                   |                   |                   |
|---------------------------------------------------------------------------------------------------------------|-------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| Rated operational current<br>$I_e \text{ max AC-3 } (U_e \leq 440V)$                                          |                         | 9A                                                                                                                                            | 12A               | 18A               | 25A               | 32A               | 38A               |
| $I_e \text{ AC-1 } (0 \leq 60^\circ C)$                                                                       |                         | 25A                                                                                                                                           |                   | 32A               | 40A               | 50A               |                   |
| Rated insulation voltage                                                                                      |                         | 690 V                                                                                                                                         |                   |                   |                   |                   |                   |
| Number of poles                                                                                               |                         | 3                                                                                                                                             | 3                 | 4                 | 3                 | 3                 | 4                 |
| Rated operational power in AC-3                                                                               | 220/240V                | 2.2kW                                                                                                                                         | 3kW               | 4kW               | 5.5kW             | 7.5kW             | 9kW               |
|                                                                                                               | 380/400V                | 4kW                                                                                                                                           | 5.5kW             | 7.5kW             | 11kW              | 15kW              | 18.5kW            |
|                                                                                                               | 415/440V                | 4kW                                                                                                                                           | 5.5kW             | 9kW               | 11kW              | 15kW              | 18.5kW            |
|                                                                                                               | 500V                    | 5.5kW                                                                                                                                         | 7.5kW             | 10kW              | 15kW              | 18.5kW            | 18.5kW            |
|                                                                                                               | 600/690V                | 5.5kW                                                                                                                                         | 7.5kW             | 10kW              | 15kW              | 18.5kW            | 18.5kW            |
|                                                                                                               | 1000V                   | -                                                                                                                                             | -                 | -                 | -                 | -                 | -                 |
| Auxiliary contacts                                                                                            |                         | range comprising up to 4 NC or NO instantaneous, up to 1NO+1NC time delay and up to 2 NO protected contacts and 2 screen continuity terminals |                   |                   |                   |                   |                   |
| Compatible manual or auto thermal overload relays                                                             | Class 10A               | 0.10...10A                                                                                                                                    | 0.10...13A        | 0.10...18A        | 0.10...32A        | 0.10...38A        | 0.10...38A        |
|                                                                                                               | Class 20A               | 2.5...10A                                                                                                                                     | 2.5...13A         | 2.5...18A         | 2.5...32A         | -                 | -                 |
| Suppressor modules (d.c. and low consumption contactors have built-in suppression limiting diode as standard) | Varistor                | •                                                                                                                                             | •                 | •                 | •                 | •                 | •                 |
|                                                                                                               | Diode                   | -                                                                                                                                             | -                 | -                 | -                 | -                 | -                 |
|                                                                                                               | RC circuit              | •                                                                                                                                             | •                 | •                 | •                 | •                 | •                 |
|                                                                                                               | Bidirectional peak      | •                                                                                                                                             | •                 | •                 | •                 | •                 | •                 |
| Relay                                                                                                         |                         | •                                                                                                                                             | •                 | •                 | •                 | •                 | •                 |
| Interfaces                                                                                                    | Relay+override function | •                                                                                                                                             | •                 | •                 | •                 | •                 | •                 |
|                                                                                                               | Solid state             | •                                                                                                                                             | •                 | •                 | •                 | •                 | •                 |
| Contactor type references                                                                                     | ~ or --- 3P             | CJX2-09 (LC1-D09)                                                                                                                             | CJX2-12 (LC1-D12) | CJX2-18 (LC1-D18) | CJX2-25 (LC1-D25) | CJX2-32 (LC1-D32) | CJX2-38 (LC1-D38) |
|                                                                                                               | ~ 4 - P                 | -                                                                                                                                             | CJX2-12 (LC1-D12) | -                 | CJX2-25 (LC1-D25) | -                 | -                 |
|                                                                                                               | --- 4P                  | -                                                                                                                                             | CJX2-12 (LC1-D12) | -                 | CJX2-25 (LC1-D25) | -                 | -                 |
| Reversing contactor type references                                                                           | ~ 3P                    | CJX2-09 (LC1-D09)                                                                                                                             | CJX2-12 (LC1-D12) | CJX2-18 (LC1-D18) | CJX2-25 (LC1-D25) | CJX2-32 (LC1-D32) | CJX2-38 (LC1-D38) |
|                                                                                                               | --- 3P                  | CJX2-09 (LC1-D09)                                                                                                                             | CJX2-12 (LC1-D12) | CJX2-18 (LC1-D18) | CJX2-25 (LC1-D25) | CJX2-32 (LC1-D32) | CJX2-38 (LC1-D38) |
|                                                                                                               | ~ 4P                    | -                                                                                                                                             | CJX2-12 (LC1-D12) | -                 | CJX2-25 (LC1-D25) | -                 | -                 |
|                                                                                                               | --- 4P                  | -                                                                                                                                             | CJX2-12 (LC1-D12) | -                 | CJX2-25 (LC1-D25) | -                 | -                 |



CJX2(LC1-D)09, 12, 18

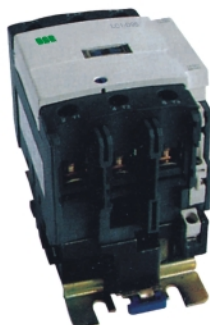


CJX2(LC1-D)25, 32, 38



CJX2(LC1-D)40, 50, 65

## • SPECIFICATION



CJX2(LC1-D)80, 95



CJX2(LC1-D)115, 150



CJX2(LC1-D)170

|                                                                                                               |                         |                                                                                                                                               |   |                   |   |                   |   |                   |   |                   |   |                                         |   |
|---------------------------------------------------------------------------------------------------------------|-------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|---|-------------------|---|-------------------|---|-------------------|---|-------------------|---|-----------------------------------------|---|
| Rated operational current                                                                                     |                         |                                                                                                                                               |   |                   |   |                   |   |                   |   |                   |   |                                         |   |
| I <sub>e</sub> max AC-3 (U <sub>e</sub> ≤440V)                                                                |                         | 40A                                                                                                                                           |   | 50A               |   | 65A               |   | 80A               |   | 95A               |   | 115A 150A                               |   |
| I <sub>e</sub> AC-1 (0≤60℃)                                                                                   |                         | 60A                                                                                                                                           |   | 80A               |   |                   |   | 125A              |   |                   |   | 200A                                    |   |
| Rated insulation voltage                                                                                      |                         | 1000 V on ~ supply, 690 V on supply                                                                                                           |   |                   |   |                   |   |                   |   |                   |   |                                         |   |
| Number of poles                                                                                               |                         | 3                                                                                                                                             | 4 | 3                 | 3 | 4                 | 3 | 4                 | 3 | 3                 | 4 | 3                                       |   |
| Rated operational power in AC-3                                                                               | 220/240V                | 11kW                                                                                                                                          |   | 15kW              |   | 18.5kW            |   | 22kW              |   | 25kW              |   | 30kW 40kW                               |   |
|                                                                                                               | 380/400V                | 18.5kW                                                                                                                                        |   | 22kW              |   | 30kW              |   | 37kW              |   | 45kW              |   | 55kW 75kW                               |   |
|                                                                                                               | 415/440V                | 22kW                                                                                                                                          |   | 25/30kW           |   | 37kW              |   | 45kW              |   | 45kW              |   | 59kW 80kW                               |   |
|                                                                                                               | 500V                    | 22kW                                                                                                                                          |   | 30kW              |   | 37kW              |   | 55kW              |   | 55kW              |   | 75kW 90kW                               |   |
|                                                                                                               | 600/690V                | 30kW                                                                                                                                          |   | 33kW              |   | 37kW              |   | 45kW              |   | 45kW              |   | 80kW 100kW                              |   |
|                                                                                                               | 1000V                   | 22kW                                                                                                                                          |   | 30kW              |   | 37kW              |   | 45kW              |   | 45kW              |   | 75kW 90kW                               |   |
| Auxiliary contacts                                                                                            |                         | Range comprising up to 4 NC or NO instantaneous, up to 1NO+1NC time delay and up to 2 NO protected contacts and 2 screen continuity terminals |   |                   |   |                   |   |                   |   |                   |   |                                         |   |
| Compatible manual or auto thermal overload relays                                                             | Class 10A               | 17...50A                                                                                                                                      |   | 17...70A          |   | 17...80A          |   | 17...104A         |   | 17...104A         |   | 60...150A 60...150A                     |   |
|                                                                                                               | Class 20A               | 17...40A                                                                                                                                      |   | 17...65A          |   | 17...70A          |   | 17...80A          |   |                   |   | 60...150A 60...150A                     |   |
| Suppressor modules (d.c. and low consumption contactors have built-in suppression limiting diode as standard) | Varistor                | •                                                                                                                                             | • | •                 |   | •                 | • | •                 | • | •                 | • | •                                       | - |
|                                                                                                               | Diode                   | •                                                                                                                                             | • | •                 |   | •                 | • | •                 | • | •                 |   | -                                       | - |
|                                                                                                               | RC circuit              | •                                                                                                                                             | • | •                 |   | •                 | • | •                 | • | •                 |   | •                                       | • |
|                                                                                                               | Bidirectional peak      | •                                                                                                                                             | • | •                 |   | •                 | • | •                 | • | •                 |   | -                                       | - |
| Interfaces                                                                                                    | Relay                   | •                                                                                                                                             | • | •                 | • | •                 | • | •                 | • | •                 | • | •                                       | • |
|                                                                                                               | Relay+override function | •                                                                                                                                             | • | •                 | • | •                 | • | •                 | • | •                 | • | •                                       | • |
|                                                                                                               | Solid state             | •                                                                                                                                             | • | •                 | • | •                 | • | •                 | • | •                 | • | •                                       | - |
| Contactor type references                                                                                     | ~ or≡3P                 | CJX2-40 (LC1-D40)                                                                                                                             |   | CJX2-50 (LC1-D50) |   | CJX2-65 (LC1-D65) |   | CJX2-80 (LC1-D80) |   | CJX2-95 (LC1-D95) |   | CJX2-115 (LC1-D115) CJX2-150 (LC1-D150) |   |
|                                                                                                               | ~ 4 - P                 | CJX2-40 (LC1-D40)                                                                                                                             |   | -                 |   | CJX2-65 (LC1-D65) |   | CJX2-80 (LC1-D80) |   | -                 |   | CJX2-115 (LC1-D115) -                   |   |
|                                                                                                               | ≡ 4P                    | CJX2-40 (LC1-D40)                                                                                                                             |   | -                 |   | CJX2-65 (LC1-D65) |   | CJX2-80 (LC1-D80) |   | -                 |   | CJX2-115 (LC1-D115) -                   |   |
| Reversing contactor type references                                                                           | ~3P                     | CJX2-40 (LC1-D40)                                                                                                                             |   | CJX2-50 (LC1-D50) |   | CJX2-65 (LC1-D65) |   | CJX2-80 (LC1-D80) |   | CJX2-95 (LC1-D95) |   | CJX2-115 (LC1-D115) CJX2-150 (LC1-D150) |   |
|                                                                                                               | ≡ 3P                    | -                                                                                                                                             |   | -                 |   | -                 |   | -                 |   | -                 |   | -                                       |   |
|                                                                                                               | ~4P                     | CJX2-40 (LC1-D40)                                                                                                                             |   | -                 |   | CJX2-65 (LC1-D65) |   | CJX2-80 (LC1-D80) |   | -                 |   | CJX2-115 (LC1-D115) -                   |   |
|                                                                                                               | ≡ 4P                    | -                                                                                                                                             |   | -                 |   | -                 |   | -                 |   | -                 |   | -                                       |   |

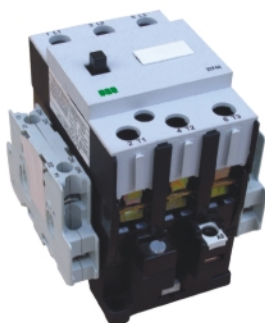
## • APPLICATION

CJX1(3TF) series AC Contactors are suitable in electrical system with AC 50/60Hz, rated operational voltage up to 660V, In AC-3 usage, rated operational voltage up to 380V, rated operational current up to 630A to make or break remote motors or system. They can form electromagnetic starters with suitable thermal overload relays 3UA series to protect system and motors against overload or phase-failure. They are made according to IEC947-2, BS5452 & VDE 0660.

The contactor is a straight motion mechanism having double-breaking contacts. The auxiliary contacts are arranged 2NO, 2NC at most. It is employed the flexible locking connection between the contact support and core. There are no arc-isolated panel in the  $I_e \leq 22A$  contactors. In the  $I_n \geq 32A$  contactors, there are moulded arc-chute with arc-isolated panel. Because all contacts are made of high non-fusibility and against corrosion silver alloy. All series products can be mounted by screws,  $I_e \leq 32A$  contactor also by installation rail.



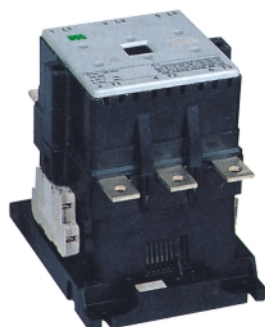
CJX1-9(3TF-40)



CJX1-32(3TF-44)



CJX1-110(3TF-50)



CJX1-400(3TF-56)

## • SPECIFICATION

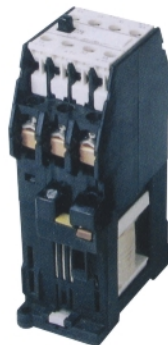
| Type            | Rated thermal current(A) | Rated operation current(A) |      | Controllable power of motor (kW) |      |      |      | Type of auxiliary contact      |
|-----------------|--------------------------|----------------------------|------|----------------------------------|------|------|------|--------------------------------|
|                 |                          | 380V                       | 660V | AC-3                             |      | AC-4 |      |                                |
|                 |                          |                            |      | 380V                             | 660V | 380V | 660V |                                |
| CJX1-9(3TF40)   | 20                       | 9                          | 7    | 4                                | 5.5  | 1.4  | 2.4  | NO<br>NC<br>1NO+1NC<br>2NO+2NC |
| CJX1-12(3TF41)  | 20                       | 12                         | 7.5  | 5.5                              | 7.5  | 1.9  | 3.3  |                                |
| CJX1-16(3TF42)  | 30                       | 16                         | 12.5 | 7.5                              | 11   | 3.5  | 6    |                                |
| CJX1-22(3TF43)  | 30                       | 22                         | 16.5 | 10                               | 15   | 4    | 6.6  |                                |
| CJX1-32(3TF44)  | 55                       | 32                         | 24   | 15                               | 22   | 7.5  | 13   |                                |
| CJX1-38(3TF45)  | 55                       | 38                         | 24   | 18.5                             | 22   | 9    | 15.5 |                                |
| CJX1-45(3TF46)  | 80                       | 45                         | 40   | 22                               | 37   | 12   | 20.8 |                                |
| CJX1-63(3TF47)  | 80                       | 63                         | 60   | 30                               | 55   | 14   | 24.3 | 2NC+2NO<br>4NC+4NO             |
| CJX1-75(3TF48)  | 100                      | 75                         | 60   | 37                               | 55   | 17   | 29.5 |                                |
| CJX1-85(3TF49)  | 100                      | 85                         | 80   | 45                               | 75   | 21   | 36   |                                |
| CJX1-110(3TF50) | 160                      | 110                        | 95   | 55                               | 90   | 27   | 46.9 |                                |
| CJX1-140(3TF51) | 160                      | 140                        | 120  | 75                               | 110  | 35   | 60   |                                |
| CJX1-170(3TF52) | 200                      | 170                        | 160  | 90                               | 150  | 38   | 66   |                                |
| CJX1-205(3TF53) | 210                      | 205                        | 165  | 110                              | 160  | 50   | 86   |                                |
| CJX1-250(3TF54) | 300                      | 250                        | 230  | 132                              | 220  | 58   | 100  |                                |
| CJX1-300(3TF55) | 300                      | 300                        | 260  | 160                              | 250  | 66   | 114  |                                |
| CJX1-400(3TF56) | 400                      | 400                        | 380  | 200                              | 355  | 81   | 140  |                                |
| CJX1-630(3TF68) | 630                      | 630                        | 600  | 335                              | 560  | 160  | 278  |                                |

A

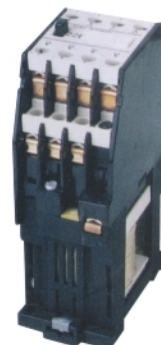
## CJX1(3TP) DC CONTACTOR



CJX1(3TP-41)



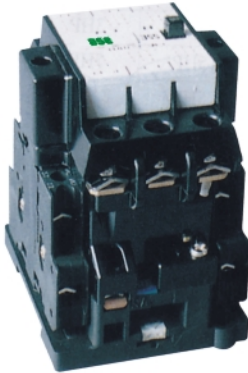
CJX1(3TP-42)



CJX1(3TP-43)

## • APPLICATION

CJX1-B(3TB) series contactor is suitable for using in the circuits up to the rated voltage 660V AC 50Hz or 60Hz, rated current 630A, for making and breaking, and for frequent starting & controlling the motor. After combined with the mechanical interlocking device, it becomes 3TD series convertible contactor for controlling, starting, breaking and reversing of the motor. The products comply with IEC947-2 & VDE0660.



CJX1-32B(3TB-44)

## • SPECIFICATION

| Type            | Rated thermal current(A) | Rated operating current at 380V (A) | Rated operating current at 660V (A) | The power of controlled motor (KW) |      | Type of auxiliary contact |
|-----------------|--------------------------|-------------------------------------|-------------------------------------|------------------------------------|------|---------------------------|
|                 |                          |                                     |                                     | 380V                               | 660V |                           |
| CJX1-9B(3TB40)  | 20                       | 9                                   | 7.2                                 | 4                                  | 5.5  | 1NO                       |
| CJX1-12B(3TB41) | 22                       | 12                                  | 9.5                                 | 5.5                                | 7.5  | 1NC                       |
| CJX1-16B(3TB42) | 35                       | 16                                  | 13.5                                | 7.5                                | 11   | 1NO+1NC                   |
| CJX1-22B(3TB43) | 35                       | 22                                  | 13.5                                | 11                                 | 11   | 2NO+2NC                   |
| CJX1-32B(3TB44) | 55                       | 32                                  | 18                                  | 15                                 | 15   | 2NO+2NC                   |

## JZC1(3TH) AC CONTACTOR

## • APPLICATION

The products are suitable for using in the controlling circuits up to rate voltage A.C.660V or D.C.660V 50Hz or 60Hz, for controlling various electro, agnetic coils to increase signal or transfer signal to relative controlling elements.

## • SPECIFICATION

AC-15

| Rated controlling capacity(VA) | Rated operating |      |      |      |
|--------------------------------|-----------------|------|------|------|
| 360                            | 127V            | 220V | 380V | 660V |
|                                | 2.8             | 1.6  | 1    | 0.55 |

DC-13

| Rated controlling capacity(VA) | Rated operating |      |      |
|--------------------------------|-----------------|------|------|
| 30                             | 110V            | 220V | 660V |
|                                | 0.32            | 0.16 | 0.55 |



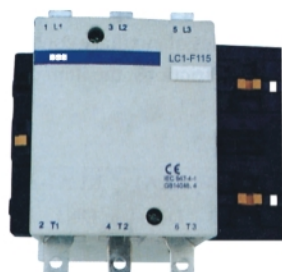
JZC1(3TH-80)

| Type              | Structure    | Contact |    |
|-------------------|--------------|---------|----|
|                   |              | No      | Nc |
| JZC1-40(3TH80-40) | Single story | 4       | 0  |
| JZC1-31(3TH80-31) |              | 3       | 1  |
| JZC1-22(3TH80-22) |              | 2       | 2  |
| JZC1-80(3TH82-80) | Double story | 8       | 0  |
| JZC1-71(3TH82-71) |              | 7       | 1  |
| JZC1-62(3TH82-62) |              | 6       | 2  |
| JZC1-53(3TH82-53) |              | 5       | 3  |
| JZC1-44(3TH82-44) |              | 4       | 4  |

## • APPLICATION

CJX2-F(LC1-F) series AC Contactor is applicable to the circuits up to the rated voltage 1000V AC 50Hz or 60Hz, rated current up to 780A, for long distance breaking circuit and frequently starting or controlling the motor. It also can be used for the control of distribution circuits of rated current from 200A to 1600A.

## • SPECIFICATION



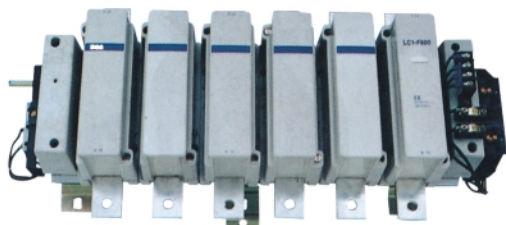
CJX2-F(LC1-F)115



CJX2-F(LC1-F)150



CJX2-F(LC1-F)630



CJX2-F(LC1-F)780



CJX2-F(LC1-F)1154



CJX2-F(LC1-F)2254

| Type                                                     |          | CJX2-F115<br>(LC1-F115) | CJX2-F150<br>(LC1-F150) | CJX2-F185<br>(LC1-F185) | CJX2-F225<br>(LC1-F225) | CJX2-F265<br>(LC1-F265) |
|----------------------------------------------------------|----------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| Rated operation<br>current (A)                           | AC-3     | 115                     | 150                     | 185                     | 225                     | 265                     |
|                                                          | AC-1     | 200                     | 250                     | 275                     | 315                     | 350                     |
| Standard power<br>ratings of 3-phase<br>motors AC-3 (kW) | 220/230V | 30                      | 40                      | 55                      | 63                      | 75                      |
|                                                          | 380/400V | 55                      | 75                      | 90                      | 110                     | 132                     |
|                                                          | 415V     | 59                      | 80                      | 100                     | 110                     | 140                     |
|                                                          | 440V     | 59                      | 80                      | 100                     | 110                     | 140                     |
|                                                          | 500V     | 75                      | 90                      | 110                     | 129                     | 160                     |
|                                                          | 660/690V | 80                      | 100                     | 110                     | 129                     | 160                     |
|                                                          | 1000V    | 65                      | 65                      | 100                     | 100                     | 147                     |

| Type                                                     |          | CJX2-F330<br>(LC1-F330) | CJX2-F400<br>(LC1-F400) | CJX2-F500<br>(LC1-F500) | CJX2-F630<br>(LC1-F630) | CJX2-F780<br>(LC1-F780) |
|----------------------------------------------------------|----------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| Rated operation<br>current (A)                           | AC-3     | 330                     | 400                     | 500                     | 630                     | 780                     |
|                                                          | AC-1     | 400                     | 500                     | 700                     | 1000                    | 1600                    |
| Standard power<br>ratings of 3-phase<br>motors AC-3 (kW) | 220/230V | 100                     | 110                     | 147                     | 200                     | 220                     |
|                                                          | 380/400V | 160                     | 200                     | 250                     | 335                     | 400                     |
|                                                          | 415V     | 180                     | 200                     | 280                     | 375                     | 425                     |
|                                                          | 440V     | 200                     | 250                     | 295                     | 400                     | 425                     |
|                                                          | 500V     | 200                     | 257                     | 355                     | 400                     | 450                     |
|                                                          | 660/690V | 200                     | 280                     | 335                     | 450                     | 475                     |
|                                                          | 1000V    | 160                     | 185                     | 335                     | 450                     | 450                     |

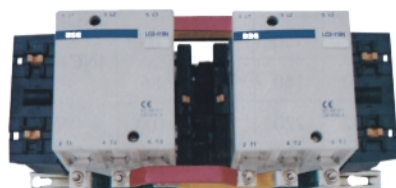
## CJX2-DN(LC2-D) MECHANICAL INTERLOCKED CONTACTOR



CJX2-DN(LC2-D)50

| Type               | Rated current<br>AC-3(A) | Controlled power (KW) |      |      |      |      |
|--------------------|--------------------------|-----------------------|------|------|------|------|
|                    |                          | 220V                  | 380V | 415V | 440V | 660V |
| CJX2-DN(LC2-D)0901 | 9                        | 2.2                   | 4    | 4    | 4    | 5.5  |
| CJX2-DN(LC2-D)1201 | 12                       | 5.5                   | 5.5  | 5.5  | 5.5  | 7.5  |
| CJX2-DN(LC2-D)1801 | 18                       | 7.5                   | 7.5  | 9    | 9    | 10   |
| CJX2-DN(LC2-D)2501 | 25                       | 5.5                   | 11   | 11   | 11   | 15   |
| CJX2-DN(LC2-D)3201 | 32                       | 7.5                   | 15   | 15   | 15   | 18.5 |
| CJX2-DN(LC2-D)4011 | 40                       | 18.5                  | 18.5 | 22   | 22   | 30   |
| CJX2-DN(LC2-D)5011 | 50                       | 15                    | 22   | 25   | 30   | 33   |
| CJX2-DN(LC2-D)6311 | 63                       | 18.5                  | 30   | 37   | 37   | 37   |
| CJX2-DN(LC2-D)8011 | 80                       | 22                    | 37   | 45   | 45   | 45   |
| CJX2-DN(LC2-D)9511 | 95                       | 22                    | 45   | 45   | 45   | 41   |

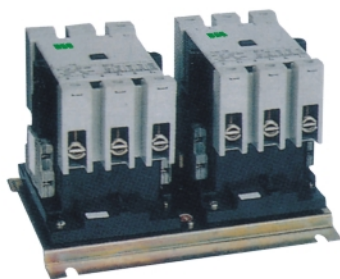
## CJX2-FN(LC2-F) MECHANICAL INTERLOCKED CONTACTOR



CJX2-FN(LC2-F)1154

|                                                                                |                          |          |            |            |            |          |            |            |            |           |            |            |            |            |            |            |            |            |            |            |             |            |            |
|--------------------------------------------------------------------------------|--------------------------|----------|------------|------------|------------|----------|------------|------------|------------|-----------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|-------------|------------|------------|
| CJX2-FN(LC2-F)                                                                 |                          | 115      | 1154       | 185        | 1854       | 265      | 2654       | 400        | 4004       | 500       | 630        | 780        |            |            |            |            |            |            |            |            |             |            |            |
| Maximum rated voltage                                                          |                          | 1000V    | 1000V      | 1000V      | 1000V      | 1000V    | 1000V      | 1000V      | 1000V      | 1000V     | 1000V      | 1000V      |            |            |            |            |            |            |            |            |             |            |            |
| Maximum thermal current                                                        |                          | 200A     | 200A       | 270A       | 270A       | 350A     | 350A       | 500A       | 500A       | 700A      | 1000A      | 1600A      |            |            |            |            |            |            |            |            |             |            |            |
| Maximum rated current<br>LL: Long life/NL: Normal<br>life 3ph.....440V/50/60HZ |                          | -        | NL<br>120A | NL<br>115A | NL<br>150A | -        | NL<br>185A | NL<br>185A | NL<br>205A | -         | NL<br>265A | NL<br>265A | NL<br>300A | -          | NL<br>400A | NL<br>400A | NL<br>450A | NL<br>500A | NL<br>630A | NL<br>630A | NL<br>1000A | NL<br>800A | NL<br>780A |
| Maximum<br>standard<br>power rating<br>under Ac duty                           | 220V<br>Kw<br>hp         | 30<br>40 | 30<br>40   | 45<br>60   | -          | 55<br>75 | 55<br>75   | 63<br>85   | -          | 75<br>100 | 75<br>100  | 90<br>125  | -          | 110<br>150 | 110<br>150 | 132<br>180 | 147<br>200 | 185<br>250 | 200<br>270 | 220<br>300 | 220<br>300  | 280<br>380 |            |
|                                                                                | 380V<br>Kw<br>hp         | -        | 55<br>75   | 55<br>75   | 75<br>100  | -        | 90<br>125  | 90<br>125  | 110<br>150 | -         | 132<br>180 | 132<br>180 | 160<br>220 | -          | 200<br>270 | 200<br>270 | 220<br>300 | 250<br>340 | 335<br>450 | 335<br>450 | 400<br>540  | 400<br>540 | 500<br>680 |
|                                                                                | 415/<br>440V<br>Kw<br>hp | -        | 60<br>80   | 60<br>80   | 80<br>110  | -        | 100<br>135 | 100<br>135 | 110<br>150 | -         | 140<br>190 | 140<br>190 | 160<br>220 | -          | 220<br>300 | 220<br>300 | 250<br>340 | 280<br>380 | 355<br>480 | 375<br>500 | 450<br>610  | 425<br>570 | 530<br>720 |

## CJX1-N(3TD) MECHANICAL INTERLOCKED CONTACTOR



CJX1-110N(3TD-50)

| Type             | Rated thermal<br>current(A) | Rated operation<br>current(A) |      | Controllable power of motor (KW) |      |      |      |
|------------------|-----------------------------|-------------------------------|------|----------------------------------|------|------|------|
|                  |                             |                               |      | AC-3                             |      | AC-4 |      |
|                  |                             | 380V                          | 660V | 380V                             | 660V | 380V | 660V |
| CJX1-9N(3TD40)   | 20                          | 9                             | 7    | 4                                | 5.5  | 1.4  | 2.4  |
| CJX1-12N(3TD41)  | 20                          | 12                            | 8.5  | 5.5                              | 7.5  | 1.9  | 3.3  |
| CJX1-16N(3TD42)  | 30                          | 16                            | 12.5 | 7.5                              | 11   | 3.5  | 6    |
| CJX1-22N(3TD43)  | 30                          | 22                            | 16.5 | 10                               | 15   | 4    | 6.6  |
| CJX1-32N(3TD44)  | 55                          | 32                            | 24   | 15                               | 22   | 7.5  | 13   |
| CJX1-38N(3TD45)  | 55                          | 38                            | 24   | 18.5                             | 22   | 9    | 15.5 |
| CJX1-45N(3TD46)  | 80                          | 45                            | 40   | 22                               | 37   | 12   | 20.8 |
| CJX1-63N(3TD47)  | 80                          | 63                            | 60   | 30                               | 55   | 14   | 24.3 |
| CJX1-75N(3TD48)  | 100                         | 75                            | 60   | 37                               | 55   | 17   | 29.5 |
| CJX1-85N(3TD49)  | 100                         | 85                            | 80   | 45                               | 75   | 21   | 36   |
| CJX1-110N(3TD50) | 160                         | 110                           | 95   | 55                               | 90   | 27   | 46.9 |
| CJX1-140N(3TD51) | 160                         | 140                           | 120  | 75                               | 110  | 35   | 60   |
| CJX1-170N(3TD52) | 200                         | 170                           | 160  | 90                               | 150  | 38   | 66   |
| CJX1-205N(3TD53) | 210                         | 205                           | 165  | 110                              | 160  | 50   | 86   |
| CJX1-250N(3TD54) | 300                         | 250                           | 230  | 132                              | 220  | 58   | 100  |
| CJX1-300N(3TD55) | 300                         | 300                           | 260  | 160                              | 250  | 66   | 114  |

## • APPLICATION

BSA1(EH) series AC contactors is mainly used in the electric power circuit of AC 50Hz or 60Hz, rated voltage to 660V, current to 800A for making and breaking circuit, and it can be formed into motor starter with thermal relay or electronic protector for protecting from overload circuit.

## • SPECIFICATION



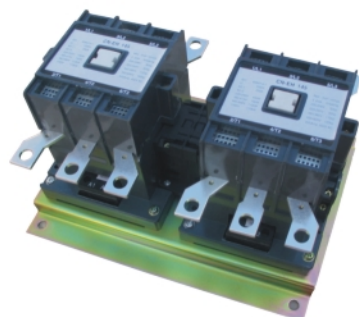
BSA1(EH)-9



BSA1(EH)-90



BSA1(EH)-210



BSA1(EH)-145N

| BSA1(EH)                                          |      | 6                 | 9        | 12       | 16       | 25        | 32      | 40         | 50       | 63         | 75       |
|---------------------------------------------------|------|-------------------|----------|----------|----------|-----------|---------|------------|----------|------------|----------|
| Ui V                                              |      | 690               |          |          |          |           |         |            |          |            |          |
| Ith A                                             |      | 20                | 26       | 28       | 28       | 45        | 65      | 100        | 125      | 125        | 125      |
| Ue V                                              |      | 220<br>380<br>660 |          |          |          |           |         |            |          |            |          |
| Under Interruption Period Operation System Ie (A) | AC-1 | 20                | 22       | 24       | 28       | 45        | 55      | 70         | 100      | 115        | 125      |
|                                                   | AC-3 | 6                 | 9        | 12       | 16       | 25        | 30      | 40         | 50       | 63         | 75       |
|                                                   |      | 6                 | 9        | 12       | 16       | 25        | 30      | 40         | 50       | 63         | 75       |
|                                                   |      |                   | 5.5      | 7        | 7        | 15        | 17.5    | 28         | 38       | 46         | 55       |
|                                                   | AC-4 | 6                 | 9        | 12       | 16       | 25        | 30      | 40         | 50       | 63         | 75       |
|                                                   |      | 6                 | 9        | 12       | 16       | 25        | 30      | 40         | 50       | 63         | 75       |
|                                                   |      |                   | 5.5      | 7        | 7        | 15        | 17.5    | 28         | 38       | 46         | 55       |
| AC-3 Pe Kw                                        |      | 1.5<br>2.2        | 2.2<br>4 | 3<br>5.5 | 4<br>7.5 | 6.5<br>11 | 9<br>15 | 11<br>18.5 | 15<br>22 | 18.5<br>30 | 22<br>37 |
| Non-interrupt Operation Ie(A)                     |      | 20                | 22       | 24       | 28       | 45        | 55      | 70         | 100      | 115        | 125      |

| BSA1(EH)                                          |      | 80  | 90  | 100 | 145 | 175 | 210 | 260 | 300 | 370 | 550 | 700  | 800  |
|---------------------------------------------------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|
| Ui V                                              |      | 690 |     |     |     |     |     |     |     |     |     |      |      |
| Ith A                                             |      | 145 | 160 | 200 | 230 | 260 | 300 | 400 | 445 | 550 | 800 | 1000 | 1000 |
| Ue V                                              |      | 220 |     |     |     |     |     |     |     |     |     |      |      |
|                                                   |      | 380 |     |     |     |     |     |     |     |     |     |      |      |
|                                                   |      | 660 |     |     |     |     |     |     |     |     |     |      |      |
| Under Interruption Period Operation System Ie (A) | AC-1 | 145 | 160 | 200 | 230 | 260 | 300 | 400 | 445 | 550 | 800 | 1000 | 1000 |
|                                                   | AC-3 | 80  | 90  | 120 | 145 | 185 | 210 | 260 | 305 | 400 | 550 | 700  | 750  |
|                                                   |      | 80  | 90  | 120 | 145 | 185 | 210 | 260 | 305 | 400 | 550 | 700  | 750  |
|                                                   |      | 65  | 70  | 120 | 120 | 170 | 210 | 250 | 280 | 370 | 550 | 700  | 750  |
|                                                   | AC-4 | 80  | 80  | 117 | 125 | 146 | 175 | 250 | 250 | 350 | 450 | 630  | 630  |
|                                                   |      | 80  | 80  | 117 | 125 | 146 | 175 | 250 | 250 | 350 | 450 | 630  | 630  |
|                                                   |      | 30  | 35  | 47  | 55  | 66  | 75  | 95  | 95  | 117 | 140 | 185  | 185  |
| AC-3 Pe Kw                                        |      | 22  | 22  | 30  | 45  | 55  | 59  | 80  | 90  | 110 | 160 | 220  | 220  |
|                                                   |      | 40  | 45  | 55  | 75  | 90  | 110 | 140 | 160 | 200 | 280 | 370  | 400  |
|                                                   |      | 45  | 59  | 110 | 110 | 132 | 160 | 200 | 250 | 355 | 500 | 600  | 650  |
| Non-interrupt Operation Ie(A)                     |      | 145 | 160 | 200 | 230 | 260 | 300 | 400 | 445 | 550 | 800 | 1000 | 1000 |

| Aux<br>Contacts<br>Code | Ith<br>A | UI<br>V | Ue V |     | Ie A |      | Contacts type<br>and quantity | Rated controlling<br>capability |       |
|-------------------------|----------|---------|------|-----|------|------|-------------------------------|---------------------------------|-------|
|                         |          |         | AC   | DC  | AC   | DC   |                               | AC(VA)                          | DC(W) |
| BSA1F1                  | 10       | 690     | 127  | 48  | 0.8  | 0.63 | NO1 or NC1                    | 100                             | 30    |
|                         |          |         | 220  | 60  | 0.45 | 0.5  |                               |                                 |       |
| BSA1F2                  |          |         | 380  | 110 | 0.26 | 0.27 | NO1                           |                                 |       |
| BSA1F3                  |          |         | 660  | 220 | 0.15 | 0.14 | NC1                           |                                 |       |

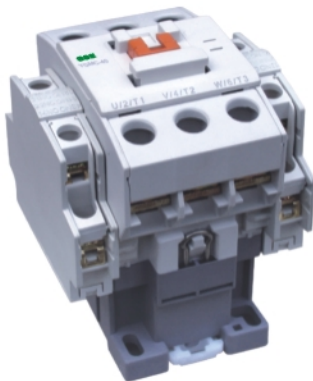
## • APPLICATION

GMC series AC Contactor is suitable for using in the circuits up to the rated voltage 660V AC 50Hz or 60Hz, rated current up to 125A, for making, breaking, frequently starting & controlling the AC motor. Combined with the auxiliary contact block, timer delay & machine-interlocking device etc, it becomes the delay contactor, mechanical interlocking contactor, star-delta starter. With the thermal relay, it is combined into the electromagnetic starter. The Contactor is produced according to IEC947-2, VDE0660 & BS5452.

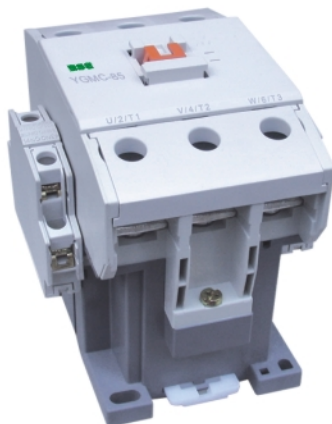
## • SPECIFICATION



GMC-22



GMC-40



GMC-85

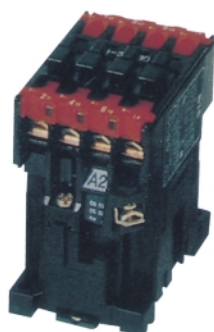
| Type                |                          |              |          | GMC-9      | GMC-12   | GMC-18   | GMC-25    | GMC-32 |
|---------------------|--------------------------|--------------|----------|------------|----------|----------|-----------|--------|
| IEC-60947           | AC1 duty                 |              |          | 20A        | 20A      | 25A      | 32A       | 50A    |
|                     | AC3 duty                 | 200~240V     | 2.5kW11A | 3.5kW13A   | 4.5kW18A | 5.5kW22A | 7.5kW32A  |        |
|                     |                          | 380~440V     | 4kW9A    | 5.5kW12A   | 7.5kW18A | 11kW22A  | 15kW32A   |        |
|                     |                          | 500~550V     | 4kW7A    | 7.5kW12A   | 7.5kW13A | 15kW22A  | 18.5kW28A |        |
|                     |                          | 690V         | 4kW5A    | 7.5kW9A    | 7.5kW9A  | 15kW18A  | 18.5kW21A |        |
| UL                  | Continuous current (Ith) |              |          | 20A        | 25A      | 30A      | 32A       | 45A    |
|                     | AC Motor                 | Single phase | 115V     | 0.5HP      | 0.5HP    | 1HP      | 2HP       | 2HP    |
|                     |                          |              | 230V     | 1HP        | 2HP      | 3HP      | 3HP       | 5HP    |
|                     |                          | Three phase  | 200V     | 2HP        | 3HP      | 5HP      | 7HP       | 7.5HP  |
|                     |                          |              | 230V     | 3HP        | 3HP      | 5HP      | 7.5HP     | 10HP   |
|                     |                          |              | 460V     | 2HP        | 7.5HP    | 10HP     | 10HP      | 20HP   |
|                     |                          |              | 575V     | 5HP        | 10HP     | 15HP     | 15HP      | 20HP   |
|                     |                          | Life time    |          | Electrical | 250      | 250      | 250       | 250    |
| (unit: 10,000 time) |                          | Mechanical   | 2500     | 2500       | 2500     | 2500     | 1500      |        |
| Aux.contact         |                          | Standard     | 1NO1NC   | 1NO1NC     | 1NO1NC   | 1NO1NC   | 2NO2NC    |        |

| Type                |                          |              | GMC-40    | GMC-50  | GMC-65    | GMC-75  | GMC-85  |       |
|---------------------|--------------------------|--------------|-----------|---------|-----------|---------|---------|-------|
| IEC-60947           | AC1 duty                 |              | 60A       | 80A     | 100A      | 110A    | 135A    |       |
|                     | AC3 duty                 | 200~240V     | 11kW40A   | 15kW55A | 18.5kW65A | 22kW75A | 25kW85A |       |
|                     |                          | 380~440V     | 18.5kW40A | 22kW50A | 30kW65A   | 37kW75A | 45kW85A |       |
|                     |                          | 500~550V     | 22kW32A   | 30kW43A | 37kW60A   | 45kW64A | 45kW75A |       |
|                     |                          | 690V         | 22kW25A   | 30kW33A | 37kW47A   | 45kW47A | 45kW52A |       |
| UL                  | Continuous current (Ith) |              | 50A       | 70A     | 80A       | 90A     | 100A    |       |
|                     | AC Motor                 | Single phase | 115V      | 3HP     | 3HP       | 5HP     | 5HP     | 7.5HP |
|                     |                          |              | 230V      | 5HP     | 7.5HP     | 10HP    | 15HP    | 15HP  |
|                     |                          | Three phase  | 200V      | 10HP    | 10HP      | 15HP    | 20HP    | 25HP  |
|                     |                          |              | 230V      | 10HP    | 15HP      | 20HP    | 25HP    | 30HP  |
|                     |                          |              | 460V      | 25HP    | 30HP      | 40HP    | 50HP    | 50HP  |
|                     |                          |              | 575V      | 25HP    | 30HP      | 40HP    | 50HP    | 50HP  |
| Life time           |                          | Electrical   | 200       | 200     | 200       | 200     | 200     |       |
| (unit: 10,000 time) |                          | Mechanical   | 1500      | 1000    | 1000      | 1000    | 1000    |       |
| Aux.contact         |                          | Standard     | 2NO2NC    | 2NO2NC  | 2NO2NC    | 2NO2NC  | 2NO2NC  |       |

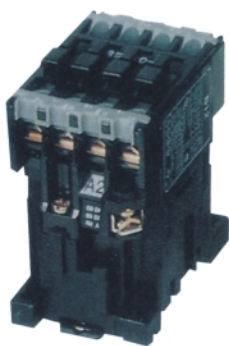
## • APPLICATION

CJX8(B) series AC Contactors are mainly used in 50/60Hz electrical lines of the rated voltage up to 660V AC and rated current up to 475A, are applicable for remote making and breaking of electrical lines or frequent control of AC motors, having no-voltage protection. Usually, it can be combined with T series thermal relay to form electromagnetic starters which have overload and open-phase protection. It complies with IEC947 & VDE0660.

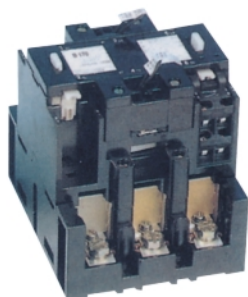
## • SPECIFICATION



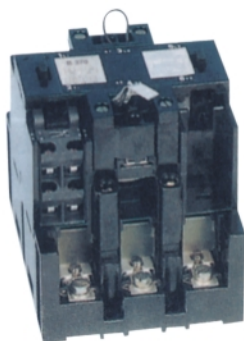
CJX8(B)9



CJX8(B)12



CJX8(B)170



CJX8(B)370

| Type                                                 |      | CJX8-9<br>(B9) | CJX8-12<br>(B12) | CJX8-16<br>(B16) | CJX8-25<br>(B25) | CJX8-30<br>(B30) | CJX8-37<br>(B37) | CJX8-45<br>(B45) |
|------------------------------------------------------|------|----------------|------------------|------------------|------------------|------------------|------------------|------------------|
| The highest control power (kw)                       | 220V | 2.2            | 3                | 4                | 6.5              | 9                | 10               | 13               |
|                                                      | 380V | 4              | 5.5              | 7.5              | 11               | 15               | 18.5             | 22               |
|                                                      | 500V | 4              | 5.5              | 7.5              | 11               | 15               | 18.5             | 22               |
|                                                      | 660V | 4              | 5.5              | 5.5              | 11               | 15               | 18.5             | 22               |
| Rated heating current Ith (A)                        |      | 16             | 20               | 25               | 40               | 45               | 45               | 60               |
| Rated working current AC2/AC3/AC4                    | 380V | 8.5            | 11.5             | 15.5             | 22               | 30               | 37               | 44               |
|                                                      | 660V | 3.5            | 4.9              | 6.7              | 13               | 17.5             | 21               | 25               |
| Rated holding power of a holding coil/pull-in (VA/W) |      | 9/2.2          | 9/2.2            | 9/2.2            | 10/3             | 10/3             | 22/5             | 22/5             |
|                                                      |      | 60/50          | 60/50            | 60/50            | 85/65            | 85/65            | 175/25           | 125              |

| Type                                                 |      | CJX8-65<br>(B65) | CJX8-85<br>(B85) | CJX8-105<br>(B105) | CJX8-170<br>(B170) | CJX8-250<br>(B250) | CJX8-370<br>(B370) |
|------------------------------------------------------|------|------------------|------------------|--------------------|--------------------|--------------------|--------------------|
| The highest control power (kw)                       | 220V | 16               | 20               | 28                 | 46                 | 60                 | 32                 |
|                                                      | 380V | 33               | 45               | 55                 | 90                 | 132                | 200                |
|                                                      | 500V | 40               | 50               | 7                  | 110                | 160                | 250                |
|                                                      | 660V | 40               | 50               | 75                 | 110                | 160                | 250                |
| Rated heating current Ith (A)                        |      | 80               | 100              | 140                | 230                | 300                | 400                |
| Rated working current AC2/AC3/AC4                    | 380V | 65               | 85               | 105                | 170                | 245                | 370                |
|                                                      | 660V | 45               | 55               | 82                 | 118                | 170                | 368                |
| Rated holding power of a holding coil/pull-in (VA/W) |      | 30/8             | 30/8             | 32/9               | 60/15              | 66/16              | 100/27             |
|                                                      |      | 270/130          | 270/130          | 510/280            | 790/460            | 1100/600           | 900/350            |

| CA7                                                                                        | CA9-11 CA9-20                                                  | CA11-11 CA-20                                      |
|--------------------------------------------------------------------------------------------|----------------------------------------------------------------|----------------------------------------------------|
| CJX8-9(B9)<br>CJX8-12(B12)<br>CJX8-16(B16)<br>CJX8-25(B25)<br>CJX8-30(B30)<br>CJX8-37(B37) | CJX8-45(B45)<br>CJX8-65(B65)<br>CJX8-85(B85)<br>CJX8-105(B105) | CJX8-170(B170)<br>CJX8-250(B250)<br>CJX8-370(B370) |

TP Type pneumatic timer delaying the operation of next stage of a control loop

|             |                |              |                                 |
|-------------|----------------|--------------|---------------------------------|
| Start delay | TPD40 0.3~40s  | Relief delay | TP140 0.3~40s<br>TP1180 10~180s |
|             | TPD180 10~180s |              |                                 |

## • APPLICATION

CJX5(S-K) series magnetic AC Contactors are a new generation of contactors. The contactor is suitable for making and breaking remote circuits or frequent starting and controlling of AC motor with 50/60Hz rated voltage up to 660V, rated operating current 9, 12, 16, 22, 30, 40, 50 and 125A at rated operating voltage 380V under the utilization category AC-3.

## • SPECIFICATION

| Contactor type                         |        | CJX5-10<br>S-K10  | CJX5-11<br>S-K11 | CJX5-12<br>S-K12 | CJX5-18<br>S-K18 | CJX5-20<br>S-K20 | CJX5-21<br>S-K21 | CJX5-25<br>S-K25 | CJX5-35<br>S-K35 | CJX5-50<br>S-K50 | CJX5-65<br>S-K65 | CJX5-80<br>S-K80 | CJX5-100<br>S-K95 |
|----------------------------------------|--------|-------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|-------------------|
| Rated operating current in 220V (A)    |        | 11                | 13               | 13               | 18               | 22               | 22               | 30               | 40               | 55               | 65               | 85               | 105               |
| Rated operating current in 380V (A)    |        | 9                 | 12               | 12               | 16               | 22               | 22               | 30               | 40               | 50               | 62               | 85               | 105               |
| Rated operating current in 660V (A)    |        | 5                 | 7                | 7                | 9                | 9                | 9                | 12               | 17               | 26               | 35               | 52               | 65                |
| Controlled motor Power under AC-3(KW)  | at220V | 2.2               | 3                | 3                | 4                | 5.5              | 5.5              | 8.5              | 12               | 17               | 19               | 24               | 30                |
|                                        | at380V | 3.3               | 4                | 4                | 6                | 10               | 10               | 14               | 20               | 25               | 32               | 40               | 55                |
|                                        | at660V | 3.3               | 4.5              | 4.5              | 5.5              | 10               | 10               | 14               | 20               | 30               | 40               | 50               | 60                |
| Coil consumption at rated coil voltage |        | 3.5               | 3.5              | 3.5              | 3.5              | 5.3              | 5.3              | 5.3              | 5.3              | 2.8              | 2.8              | 2.8              | 2.8               |
| Rated frequency of operation Ops/hr    |        | 1800              |                  |                  |                  |                  |                  |                  |                  | 1200             |                  |                  |                   |
| Electric life under AC-3               |        | 1×10 <sup>6</sup> |                  |                  |                  |                  |                  |                  |                  |                  |                  |                  |                   |

| Type | UA-AX422 | UA-AX431 | UA-AX440 | UA-AX413 | UA-AX404 |
|------|----------|----------|----------|----------|----------|
| NO   | 2        | 3        | 4        | 1        | 0        |
| NC   | 2        | 1        | 0        | 3        | 4        |

| Type | UA-AX211 | UA-AX220 | UA-AX202 | UA-AX2 | UA-AX4 |
|------|----------|----------|----------|--------|--------|
| NO   | 1        | 2        | 0        |        |        |
| NC   | 1        | 0        | 2        |        |        |



CJX5(S-K)35



CJX5(S-K)125



S-N12



S-N95

## S-N AC CONTACTOR

## • APPLICATION

S-N series AC Contactors are suitable for AC 50Hz or 60Hz, rated voltage up to 660V, mainly used as putting through long distance, breaking circuit and frequently starting or controlling AC motor. It can also be used for counter-connection breaking of squirrel-cage motor in the case of reducing working current.

## • SPECIFICATION

| Type  | Capacity of 3 phase squirrel-cage motor AC-3 |           |      |      |                             |           |      |      | Rated heating current Ith (A) |
|-------|----------------------------------------------|-----------|------|------|-----------------------------|-----------|------|------|-------------------------------|
|       | Rated power (KW)                             |           |      |      | Rated operating current (A) |           |      |      |                               |
|       | 220V-240V                                    | 380V-440V | 550V | 660V | 220V-240V                   | 380V-440V | 550V | 660V |                               |
| S-N10 | 2.5                                          | 4.0       | 4.0  | 4.0  | 11                          | 9         | 7    | 5    | 20                            |
| S-N11 | 3.5                                          | 5.5       | 5.5  | 5.5  | 13                          | 12        | 9    | 7    | 20                            |
| S-N12 | 3.5                                          | 5.5       | 5.5  | 5.5  | 13                          | 12        | 9    | 7    | 20                            |
| S-N20 | 5.5                                          | 11        | 11   | 7.5  | 22                          | 22        | 17   | 9    | 32                            |
| S-N21 | 5.5                                          | 11        | 11   | 7.5  | 22                          | 22        | 17   | 9    | 32                            |
| S-N25 | 8.5                                          | 14        | 14   | 14   | 30                          | 30        | 12   | 12   | 40                            |
| S-N35 | 12                                           | 20        | 20   | 20   | 40                          | 40        | 17   | 17   | 40                            |



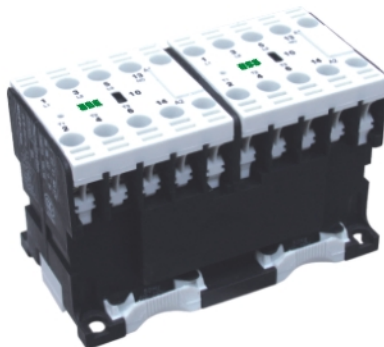
CJX2-K(LC1-K)06, 09, 1210



CJX2-KN(LC2-K)06, 09, 1210



CJX2-E(LC1-E)03, 09



CJX2-EN(LC2-E)03, 09

## APPLICATION

CJX2-K(LC1-K) series AC contactor is suitable for using in the circuit up to the rated voltage 660V AC 50Hz/60Hz, rated current up to 12A, for frequent starting, controlling the AC motor. The addition of auxiliary contact group to the contactor, combined with the proper thermal relay, can act to protect the circuit bound to overload.

## SPECIFICATION

| Type            | Rated working<br>current A (380V) | AC-3 use group   |          |          |      | Contact<br>data (1) |
|-----------------|-----------------------------------|------------------|----------|----------|------|---------------------|
|                 |                                   | Control power kW |          |          |      |                     |
|                 |                                   | 220V             | 380/415V | 440/500V | 660V |                     |
| CJX2-K(LC1-K)06 | 6                                 | 1.5              | 2.2      | 3        | 3    | 3P+NC 3P+NO         |
| CJX2-K(LC1-K)09 | 9                                 | 2.2              | 4        | 4        | 4    | 3P+NC 3P+NO         |
| CJX2-K(LC1-K)12 | 12                                | 3                | 5        | 5        | 5    | 3P+NC 3P+NO         |

| Specification                  |                              | Type         | CJX2-K06 (LC1-K06)                                        | CJX2-K09 (LC1-K09) | CJX2-K12 (LC1-K12) |
|--------------------------------|------------------------------|--------------|-----------------------------------------------------------|--------------------|--------------------|
| Use group under AC-3           |                              |              | 6                                                         | 9                  | 12                 |
| Rated working current (Ie)A    |                              |              | 5                                                         | 7.5                | 10                 |
| Rated thermal current(Ith)A    |                              |              | 16                                                        | 20                 | 20                 |
| Rated working voltage (Ue)V    |                              |              | 380 660                                                   |                    |                    |
| Rated insulation voltage (Ui)V |                              |              | 690                                                       |                    |                    |
| AC-3 (6Ie)                     | Electrical life (times)      |              | 0.5×10 <sup>6</sup>                                       |                    |                    |
|                                | Operation frequency h-1      |              | 1200                                                      |                    |                    |
| AC-4 (6Ie)                     | Electrical life (times)      |              | 10×10 <sup>4</sup>                                        |                    |                    |
|                                | Operation frequency h-1      |              | 300                                                       |                    |                    |
| Mechanical life                |                              |              | 3×10 <sup>6</sup>                                         |                    |                    |
| Auxiliary contact              | Conventional thermal current |              | 6A                                                        |                    |                    |
|                                | Electrical life (times)      | AC-15(360VA) | 0.5×10 <sup>6</sup>                                       |                    |                    |
|                                |                              | DC-13(33W)   |                                                           |                    |                    |
| Coil specifications            | Rated control voltage (Us)   |              | AC: 12, 24, 45, 110, 220, 380<br>DC: 12, 24, 45, 110, 220 |                    |                    |
|                                | Pick-up voltage              |              | AC: 0.85~1.1Us DC: 0.85~1.1Us                             |                    |                    |
|                                | Releasing voltage            |              | AC: 0.1~0.75Us DC: 0.2~0.75Us                             |                    |                    |
|                                | Coil power VA                | Pick-up      | 40                                                        |                    |                    |
|                                |                              | Retain       | 4                                                         |                    |                    |
|                                | Consumption                  |              | 1.2W                                                      |                    |                    |
|                                | Pick-up time                 |              | 6~18ms                                                    |                    |                    |
|                                | Releasing time               |              | 5~23ms                                                    |                    |                    |
|                                | Power factor                 |              | Making 0.8 Breaking 0.3                                   |                    |                    |

## CJX2-E(LC1-E) AC CONTACTOR

### APPLICATION

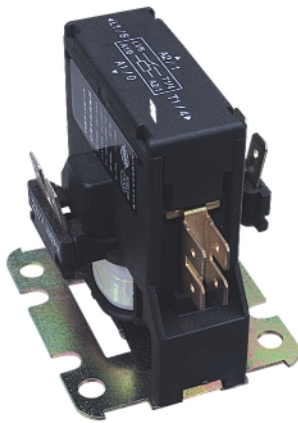
For motor control, from 6 to 9A (AC-3)  
for the control of distribution circuits, Up to 16A (AC-1)  
Control circuit: AC or DC

### SPECIFICATION

| Standard power ratings of 3-phase motors<br>50/60Hz in category AC-3<br>220V 380V 660V<br>230V 400V 415V 440V 500V 690V |     |     |    |    |    | Rated operating current<br>AC-3 AC-1<br>up to 40°C<br>440V |    | Rated non-conductive voltage | Instantaneous auxiliary contacts | Basic reference. Complete with code indicating control circuit voltage(2) Fixing(1) |
|-------------------------------------------------------------------------------------------------------------------------|-----|-----|----|----|----|------------------------------------------------------------|----|------------------------------|----------------------------------|-------------------------------------------------------------------------------------|
| KW                                                                                                                      | KW  | KW  | KW | KW | KW | A                                                          | A  | V                            |                                  |                                                                                     |
| 1.5                                                                                                                     | 2.2 | 2.2 | 3  | 3  | 3  | 6                                                          | 16 | 660                          | 1 -                              | LC1-EC03*                                                                           |
|                                                                                                                         |     |     |    |    |    |                                                            |    |                              | - 1                              | LC1-EC09*                                                                           |
| 2.2                                                                                                                     | 4   | 4   | 4  | 4  | 4  | 9                                                          | 16 | 660                          | 1 -                              | LC1-EC03*                                                                           |
|                                                                                                                         |     |     |    |    |    |                                                            |    |                              | - 1                              | LC1-EC09*                                                                           |

## • APPLICATION

CK3 series air-conditioning AC contactor is mainly used in a circuit of AC 50Hz, rated working voltage up to 380V and rated working current up to 40A, used to make and break the circuit. The product is in conformity with GB/T14048.1, GB14048.4, IEC60947-4-1 and EU RoHS Directive.



CK3-25/1



CK3-25/2



CK3-32/3

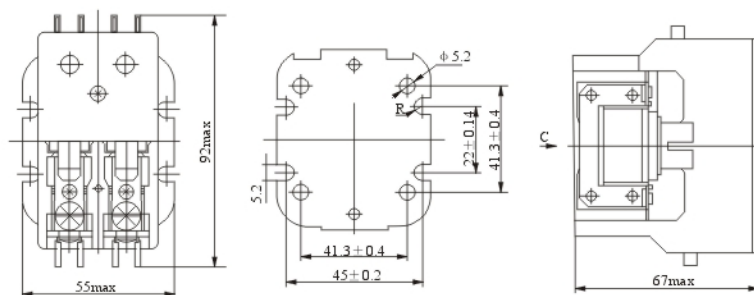
## • WORKING CONDITION

1. Environmental temperature is  $-18^{\circ}\text{C}\sim+50^{\circ}\text{C}$ .
2. The average temperature in 24 hours shall not exceed  $+35^{\circ}\text{C}$ .
3. The altitude of the installation place shall not exceed 2000m.
4. The relative humidity shall not exceed 50% when the environmental temperature is  $+40^{\circ}\text{C}$ .  
The relative humidity may be higher at the lower temperature condition. The maximum month-average relative humidity is 90% in the most humid month with a minimum month-average temperature  $+25^{\circ}\text{C}$ . The factor that dew may occur on the product surface due to temperature change shall be taken into consideration.
5. Pollution grade: Grade III
6. Installation class: III
7. The product shall be installed and operated at a place without obvious shake, impact and vibration.

## • SPECIFICATION

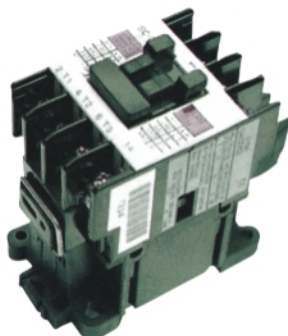
| Model                                 |                            | CK3-1P           | CK3-2P          | CK3-3P |
|---------------------------------------|----------------------------|------------------|-----------------|--------|
| Rated insulation voltage (V)          |                            | 630              |                 |        |
| Rated working voltage (V)             |                            | 220 380          |                 |        |
| Rated working current (A)             |                            | 25/32/40         |                 |        |
| Max. Making/breaking current (A)      |                            | 150/192/240      |                 |        |
| Conventional heating current (A)      |                            | 32/40/50         |                 |        |
| Control voltage of the coil $U_s$ (V) |                            | 220, 380 AC 50Hz |                 |        |
| Application class                     |                            | AC-8a            |                 | AC-8b  |
| Power consumption of coil (VA)        | Pick-up                    | 48               |                 |        |
|                                       | Holding                    | 10.5             |                 |        |
| Action range                          | Pick-up voltage            | 85%~110% $U_s$   |                 |        |
|                                       | Release voltage            | 20%~55% $U_s$    |                 |        |
| Mechanical life (time)                |                            | $6 \times 10^6$  |                 |        |
| Electrical life (time)                |                            | $6 \times 10^5$  | $2 \times 10^5$ |        |
| Auxiliary contact                     | Rated voltage $U_i$ (V)    |                  | 600             |        |
|                                       | Rated current $I_{th}$ (A) |                  | 10              |        |
|                                       | Control capacity           | AC (VA)          | 300             |        |
|                                       |                            | DC (W)           | 30              |        |

## • INSTALLATION DIMENSION AND OUTLINE DIMENSION

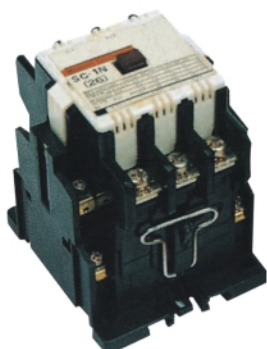


## • APPLICATION

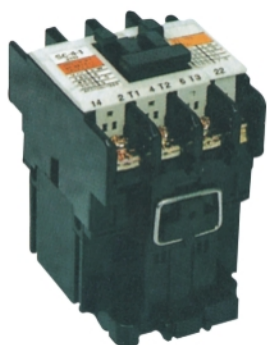
SC series AC contactors are suitable for AC 50HZ or 60HZ, rated voltage up to 600V, mainly used as putting through long distance, breaking circuit and frequently starting to control AC motor. It can also be used for counter-connection breaking of squirrel-cage motor in the case of reducing working current.



SC-03



SC-2N



SC-4-1

## • SPECIFICATION

| Type                                    |            | SC-03 | SC-0 | SC-05      | SC-4-0 | SC-4-1     | SC-05      |
|-----------------------------------------|------------|-------|------|------------|--------|------------|------------|
| Max. value of motor                     | 200-240V   | 2.5   | 3.5  | 3.5        | 4.5    | 5.5        | 5.5        |
|                                         | 380-440V   | 4     | 5.5  | 5.5        | 7.5    | 11         | 11         |
|                                         | 500-550V   | 4     | 5.5  | 5.5        | 7.5    | 11         | 11         |
|                                         | 600-660V   | 4     | 5.5  | 5.5        | 5.5    | 7.5        | 7.5        |
| Operating current AC3 (A)               | 200-240V   | 11    | 13   | 13         | 18     | 22         | 22         |
|                                         | 380-440V   | 9     | 12   | 12         | 16     | 22         | 22         |
|                                         | 500-550V   | 7     | 9    | 9          | 13     | 17         | 17         |
|                                         | 600-660V   | 5     | 7    | 7          | 9      | 9          | 9          |
| Rated heating current(A)                |            | 20    | 20   | 20         | 25     | 32         | 32         |
| Aux-contact layout                      | Standard   | 1NO   | 1NO  | 1NO<br>1NC | 1NO    | 1NO<br>1NC | 2NO<br>2NC |
|                                         | Other      | 1NC   | 1NC  | 2NC<br>2NC | 1NC    | 2NC        | 2NO<br>2NC |
| Life of probability (x10 <sup>4</sup> ) | Electrical | 200   | 200  | 200        | 150    | 200        | 200        |
|                                         | Mechanical | 1000  | 1000 | 1000       | 1000   | 1000       | 1000       |

| Type                                    |            | SC-1N      | SC-2N      | SC-2SN     | SC-3N      | SC-4N      | SC-5N      | SC-6N      |
|-----------------------------------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Max. value of motor                     | 200-240V   | 7.5        | 11         | 15         | 18.5       | 22         | 30         | 37         |
|                                         | 380-440V   | 15         | 18         | 22         | 30         | 40         | 55         | 60         |
|                                         | 500-550V   | 15         | 18         | 25         | 37         | 37         | 55         | 60         |
|                                         | 600-660V   | 11         | 15         | 22         | 30         | 37         | 55         | 60         |
| Operating current AC (A)                | 200-240V   | 27         | 39         | 52         | 65         | 80         | 105        | 126        |
|                                         | 380-440V   | 30         | 37         | 48         | 65         | 80         | 105        | 120        |
|                                         | 500-550V   | 24         | 29         | 38         | 60         | 60         | 85         | 90         |
|                                         | 600-660V   | 15         | 19         | 26         | 38         | 44         | 64         | 72         |
| Rated heating current (A)               |            | 50         | 60         | 80         | 100        | 135        | 150        | 150        |
| Aux-contact layout                      | Standard   | 2NO<br>2NC | 2NO<br>2NC | 2NO<br>2NC | 2NO<br>2NC | 2NO<br>2NC | 2NO<br>2NC | 2NO<br>2NC |
|                                         | Other      | 4NO<br>4NC | 4NO<br>4NC | 4NO<br>4NC | 4NO<br>4NC | 4NO<br>4NC | 4NO<br>4NC | 4NO<br>4NC |
| Life of probability (x10 <sup>4</sup> ) | Electrical | 200        | 200        | 200        | 200        | 100        | 100        | 100        |
|                                         | Mechanical | 1000       | 1000       | 500        | 500        | 500        | 500        | 500        |

## • APPLICATION

SMC series AC contactor is suitable for AC 50HZ or 60HZ, voltage up to 500V current up to 50A circuit, for making, breaking frequently starting and controlling the AC motor. They are able to assemble building block, auxiliary contactor group, thermal relay and accessories etc, to form multi-function series products.

## • SPECIFICATION

| Frame size                              |            | SMC-10P    | SMC-15P    | SMC-20P    | SMC-25P    | SMC-35P    | SMC-48P    |
|-----------------------------------------|------------|------------|------------|------------|------------|------------|------------|
| Power ratings (kW)                      | 220V~240V  | 3.5        | 3.5        | 5.5        | 7.5        | 11         | 11         |
|                                         | 380V~440V  | 5.5        | 5.5        | 11         | 15         | 18.5       | 18.5       |
|                                         | 500~550V   | 7.5        | 7.5        | 15         | 18.5       | 22         | 22         |
| Rated operation current (A)<br>AC3      | 220~240V   | 13         | 13         | 22         | 30         | 40         | 48         |
|                                         | 380V~440V  | 12         | 12         | 22         | 30         | 41         | 45         |
|                                         | 500~550V   | 12         | 12         | 22         | 28         | 32         | 40         |
| Thermal current (A)                     |            | 20         | 20         | 32         | 50         | 60         | 70         |
| NO.Of Auxiliary contacts (poles)        |            | 1NO or 1NC | 1NO or 1NC | 2NO or 2NC | 2NO or 2NC | 2NO or 2NC | 2NO or 2NC |
| Life expectancy (x10 <sup>6</sup> time) | Mechanical | 20         | 20         | 10         | 10         | 10         | 10         |
|                                         | Electrical | 1.5        | 1.5        | 1.5        | 1.5        | 1.5        | 1.5        |
| Switching frequency (Time/hour)         |            | 1800       | 1800       | 1800       | 1800       | 1800       | 1200       |

## • TECHNICAL PARAMETER

| Rated Voltage (V) | Rated current(A) | Operating frequency | Making capacity | Breaking capacity | Mechanical life(time) | Electrial life (time) |
|-------------------|------------------|---------------------|-----------------|-------------------|-----------------------|-----------------------|
| 550               | 16               | 600                 | 12le            | 10le              | 60                    | 300                   |

| Dowerof controllable motor |          |          | Pull in coil              |                     |                        |
|----------------------------|----------|----------|---------------------------|---------------------|------------------------|
|                            |          |          | Rated VoltageaAC.50HZ (V) | Starting power (VA) | Pullin function (VA/w) |
| 200~240V                   | 380~440V | 500~550V |                           |                     |                        |
| 3.7                        | 7.5      | 9        | 36,127,220,380,           | 65                  | 11/5                   |

Thermal stability for contact is 71th.10s below



SMC-10P



SMC-15P



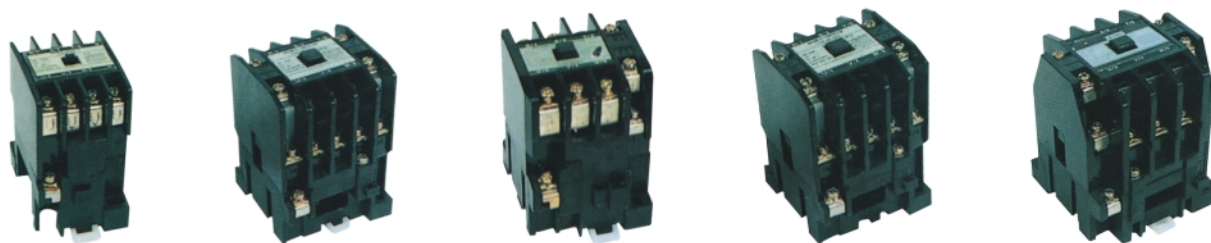
SMC-20P



SMC-35P



C-5X



## • APPLICATION

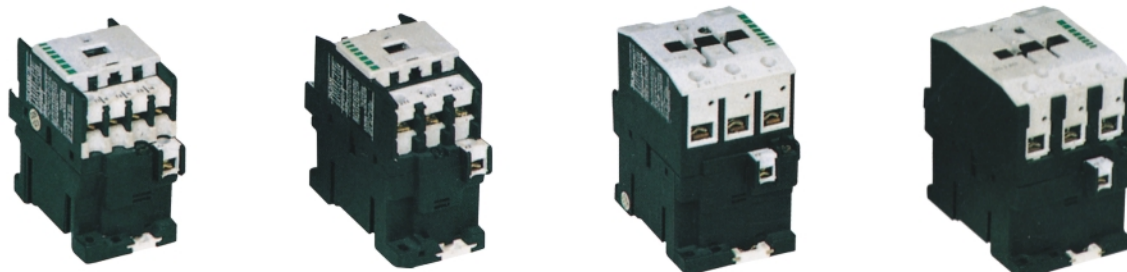
M-CL series AC contactor is suitable for AC 50HZ or 60HZ, voltage up to 660V, current up to 100A electric power system, to switch on & off circuits and AC motors in frequent control. Eleven models M-CL 11, 12, 15, 16, 20, 21, 30, 35, 40, 50 & 60 are available.

## • SPECIFICATION

| Type                                     |      | M-11CL | M-12CL | M-18CL | M-20CL | M-25CL | M-35CL | M-50CL | M-65CL |
|------------------------------------------|------|--------|--------|--------|--------|--------|--------|--------|--------|
| Rated thermal current (A)                |      | 20     | 20     | 25     | 32     | 50     | 60     | 80     | 100    |
| Rated operating motor (A)                | 380V | 9      | 12     | 16     | 22     | 30     | 40     | 50     | 62     |
|                                          | 680V | 5      | 7      | 9      | 9      | 12     | 17     | 26     | 35     |
| Power of controllable motor (KW)         | 330V | 4      | 5.5    | 7.5    | 7.5    | 15     | 18.5   | 22     | 30     |
|                                          | 660V | 4      | 5.5    | 7.5    | 7.5    | 11     | 15     | 22     | 30     |
| Rated frequency of operation cycles/hour |      | 180    |        |        |        |        |        | 120    |        |

A

## DIL AC CONTACTOR

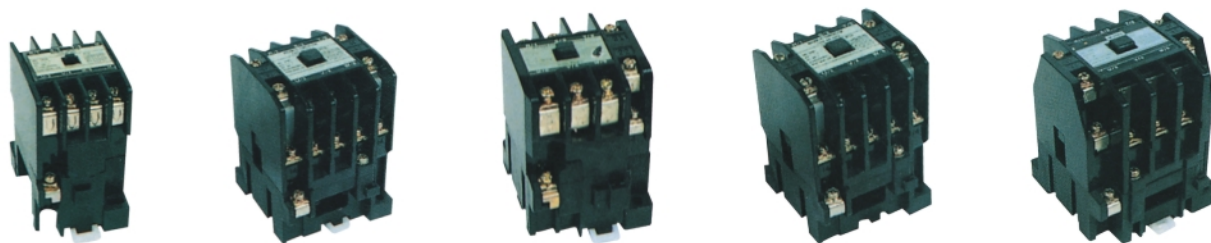


## • APPLICATION

DIL series AC contactor is suitable for 50HZ or 60HZ current up to 100A electric power system for remote switch on and off circuit

## • SPECIFICATION

| Type                             | DILOOM              | DILOOM-10 | DILOOM-01 | DILOOAM | DILOOAM-10 | DILOOAM-01 | DILOM | DILOAM | DIL1M | DIL01AM | DIL2AM | DIL2AM | DIL3M |
|----------------------------------|---------------------|-----------|-----------|---------|------------|------------|-------|--------|-------|---------|--------|--------|-------|
| Thermal current (A)              | 20                  | 20        | 20        | 20      | 20         | 20         | 35    | 35     | 55    | 55      | 90     | 90     | 100   |
| Rated operating current (A)      | 9                   | 9         | 9         | 12      | 12         | 12         | 18    | 25     | 32    | 40      | 50     | 63     | 72    |
|                                  | 5                   | 5         | 5         | 7       | 7          | 7          | 9     | 9      | 12    | 17      | 26     | 35     | 40    |
| Power of controllable motor (KW) | 4                   | 4         | 4         | 5.5     | 5.5        | 5.5        | 7.5   | 11     | 15    | 18.5    | 22     | 22     | 30    |
|                                  | 4                   | 4         | 4         | 5.5     | 5.5        | 5.5        | 7.5   | 7.5    | 11    | 15      | 22     | 22     | 30    |
| Numbers of aux. contact          | 3                   | 4         | 3         | 3       | 4          | 3          | 3     | 3      | 3     | 3       | 3      | 3      | 3     |
|                                  |                     |           | 1         |         |            | 1          | 2     |        |       |         |        |        |       |
| Electrical life (times)          | AC3 $1 \times 10^6$ |           |           |         |            |            |       |        |       |         |        |        |       |
| Mechanical life (times)          | AC3 $1 \times 10^6$ |           |           |         |            |            |       |        |       |         |        |        |       |



## • APPLICATION

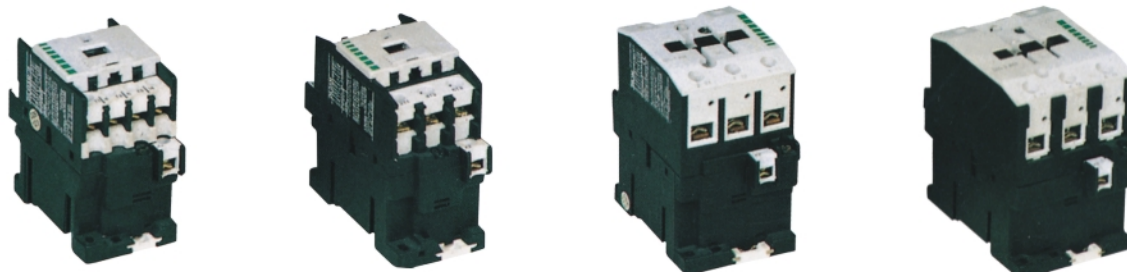
M-CL series AC contactor is suitable for AC 50HZ or 60HZ, voltage up to 660V, current up to 100A electric power system, to switch on & off circuits and AC motors in frequent control. Eleven models M-CL 11, 12, 15, 16, 20, 21, 30, 35, 40, 50 & 60 are available.

## • SPECIFICATION

| Type                                     |      | M-11CL | M-12CL | M-18CL | M-20CL | M-25CL | M-35CL | M-50CL | M-65CL |
|------------------------------------------|------|--------|--------|--------|--------|--------|--------|--------|--------|
| Rated thermal current (A)                |      | 20     | 20     | 25     | 32     | 50     | 60     | 80     | 100    |
| Rated operating motor (A)                | 380V | 9      | 12     | 16     | 22     | 30     | 40     | 50     | 62     |
|                                          | 680V | 5      | 7      | 9      | 9      | 12     | 17     | 26     | 35     |
| Power of controllable motor (KW)         | 330V | 4      | 5.5    | 7.5    | 7.5    | 15     | 18.5   | 22     | 30     |
|                                          | 660V | 4      | 5.5    | 7.5    | 7.5    | 11     | 15     | 22     | 30     |
| Rated frequency of operation cycles/hour |      | 180    |        |        |        |        |        | 120    |        |

A

## DIL AC CONTACTOR

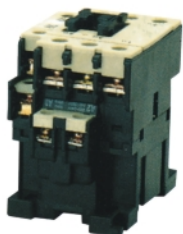


## • APPLICATION

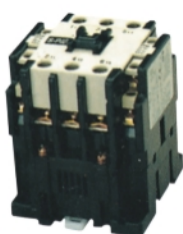
DIL series AC contactor is suitable for 50HZ or 60HZ current up to 100A electric power system for remote switch on and off circuit

## • SPECIFICATION

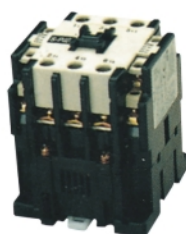
| Type                             | DILOOM              | DILOOM-10 | DILOOM-01 | DILOOAM | DILOOAM-10 | DILOOAM-01 | DILOM | DILOAM | DIL1M | DIL01AM | DIL2AM | DIL2AM | DIL3M |
|----------------------------------|---------------------|-----------|-----------|---------|------------|------------|-------|--------|-------|---------|--------|--------|-------|
| Thermal current (A)              | 20                  | 20        | 20        | 20      | 20         | 20         | 35    | 35     | 55    | 55      | 90     | 90     | 100   |
| Rated operating current (A)      | 9                   | 9         | 9         | 12      | 12         | 12         | 18    | 25     | 32    | 40      | 50     | 63     | 72    |
|                                  | 5                   | 5         | 5         | 7       | 7          | 7          | 9     | 9      | 12    | 17      | 26     | 35     | 40    |
| Power of controllable motor (KW) | 4                   | 4         | 4         | 5.5     | 5.5        | 5.5        | 7.5   | 11     | 15    | 18.5    | 22     | 22     | 30    |
|                                  | 4                   | 4         | 4         | 5.5     | 5.5        | 5.5        | 7.5   | 7.5    | 11    | 15      | 22     | 22     | 30    |
| Numbers of aux. contact          | 3                   | 4         | 3         | 3       | 4          | 3          | 3     | 3      | 3     | 3       | 3      | 3      | 3     |
|                                  |                     |           | 1         |         |            | 1          | 2     |        |       |         |        |        |       |
| Electrical life (times)          | AC3 $1 \times 10^6$ |           |           |         |            |            |       |        |       |         |        |        |       |
| Mechanical life (times)          | AC3 $1 \times 10^6$ |           |           |         |            |            |       |        |       |         |        |        |       |



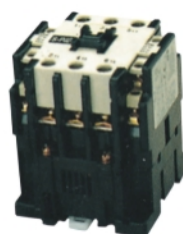
S-P25



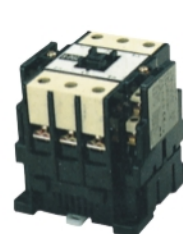
S-P30



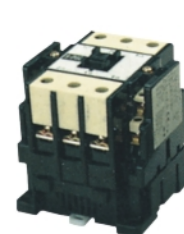
S-P35



S-P40



S-P50



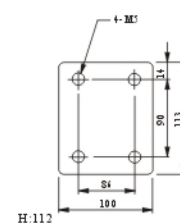
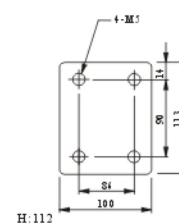
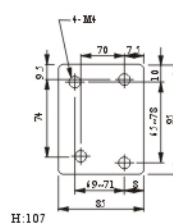
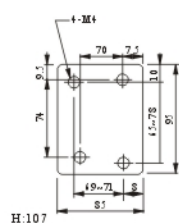
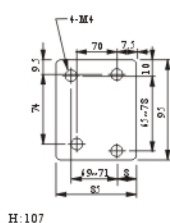
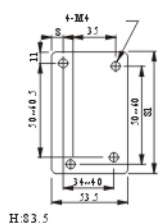
S-P60

| KW  | HP  | A  | KW  | HP | A  | KW  | HP   | A  | KW  | HP  | A  | KW  | HP  | A  | KW  | HP | A  |
|-----|-----|----|-----|----|----|-----|------|----|-----|-----|----|-----|-----|----|-----|----|----|
| 1.1 | 1.5 | 24 | 1.5 | 2  | 30 | 1.8 | 2.5  | 35 | 2.2 | 3   | 44 | 3   | 4   | 58 | 3.7 | 5  | 68 |
| 2.2 | 3   | 24 | 3   | 4  | 30 | 3.7 | 5    | 35 | 4   | 5.5 | 44 | 5.5 | 7.5 | 58 | 7.5 | 10 | 68 |
| 6.5 | 8.5 | 26 | 7.5 | 10 | 30 | 9   | 12.5 | 35 | 11  | 15  | 44 | 15  | 20  | 58 | 19  | 25 | 68 |
| 12  | 16  | 23 | 15  | 20 | 27 | 15  | 20   | 27 | 22  | 30  | 40 | 30  | 40  | 52 | 37  | 50 | 65 |
| 12  | 16  | 20 | 15  | 20 | 22 | 15  | 20   | 22 | 22  | 30  | 32 | 30  | 40  | 41 | 37  | 50 | 52 |

|       |     |    |       |    |    |       |      |    |       |    |    |       |    |    |       |    |    |
|-------|-----|----|-------|----|----|-------|------|----|-------|----|----|-------|----|----|-------|----|----|
| 40    |     |    | 50    |    |    | 50    |      |    | 65    |    |    | 80    |    |    | 100   |    |    |
| AC600 |     |    | AC600 |    |    | AC600 |      |    | AC600 |    |    | AC600 |    |    | AC600 |    |    |
| 6.5   | 8.5 | 26 | 7.5   | 10 | 30 | 9     | 12.5 | 35 | 11    | 15 | 44 | 15    | 20 | 58 | 19    | 25 | 65 |
| 12    | 16  | 23 | 15    | 20 | 27 | 15    | 20   | 27 | 22    | 30 | 40 | 30    | 40 | 52 | 37    | 50 | 65 |
| 12    | 16  | 20 | 15    | 20 | 22 | 15    | 20   | 22 | 22    | 30 | 32 | 30    | 40 | 41 | 37    | 50 | 52 |
| 12    | 16  | 16 | 15    | 20 | 18 | 15    | 20   | 18 | 22    | 30 | 26 | 30    | 40 | 34 | 37    | 50 | 43 |

|       |    |    |       |    |    |       |    |    |       |     |    |       |    |    |       |    |    |
|-------|----|----|-------|----|----|-------|----|----|-------|-----|----|-------|----|----|-------|----|----|
| 32    |    |    | 50    |    |    | 50    |    |    | 50    |     |    | 65    |    |    | 65    |    |    |
| AC600 |    |    | AC600 |    |    | AC600 |    |    | AC600 |     |    | AC600 |    |    | AC600 |    |    |
|       | 2  | 24 |       | 2  | 24 |       | 2  | 24 |       | 3   | 34 |       | 5  | 56 |       | 5  | 56 |
|       | 3  | 17 |       | 5  | 28 |       | 5  | 28 |       | 7.5 | 40 |       | 10 | 50 |       | 10 | 50 |
|       | 10 | 28 |       | 10 | 28 |       | 10 | 28 |       | 15  | 42 |       | -  | -  |       | -  | -  |
|       | 15 | 21 |       | 20 | 27 |       | 20 | 27 |       | 20  | 27 |       | -  | -  |       | -  | -  |
|       | 15 | 17 |       | 30 | 32 |       | 30 | 32 |       | -   | -  |       | 40 | 41 |       | 50 | 52 |

|                |  |                |  |                |  |                |  |                |  |                |  |
|----------------|--|----------------|--|----------------|--|----------------|--|----------------|--|----------------|--|
| 40             |  | 50             |  | 50             |  | 50             |  | 80             |  | 90             |  |
| AC600          |  | AC600          |  | AC600          |  | AC600          |  | AC600          |  | AC600          |  |
| 1              |  | 2              |  | 2              |  | 2              |  | 2              |  | 2              |  |
| 1a1b (1NO 1NC) |  | 2a2b (2NO 2NC) |  | 2a2b (2NO 2NC) |  | 2a2b (2NO 2NC) |  | 2a2b (2NO 2NC) |  | 2a2b (2NO 2NC) |  |
| -              |  | -              |  | -              |  | -              |  | -              |  | -              |  |
| 6              |  | 6              |  | 6              |  | 6              |  | 6              |  | 6              |  |
| 5              |  | 5              |  | 5              |  | 5              |  | 5              |  | 5              |  |
| 3              |  | 3              |  | 3              |  | 3              |  | 3              |  | 3              |  |
| 3              |  | 3              |  | 3              |  | 3              |  | 3              |  | 3              |  |
| 16             |  | 16             |  | 16             |  | 16             |  | 16             |  | 16             |  |
| A600,Q300      |  | A600,Q300      |  | A600,Q300      |  | A600,Q300      |  | A600,Q300      |  | A600,Q300      |  |
| 100            |  | 100            |  | 100            |  | 100            |  | 100            |  | 100            |  |
| 500            |  | 500            |  | 500            |  | 500            |  | 500            |  | 500            |  |
| 0.38           |  | 0.95           |  | 0.95           |  | 0.95           |  | 1.15           |  | 1.15           |  |





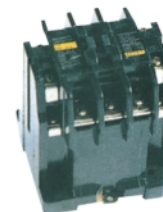
PAK-11H



PAK-18H



PAK-25H



PAK-35H

## APPLICATION

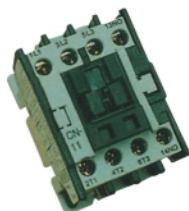
PAK-H series AC Contactor is suitable for using in the circuit up to the rated voltage 660V AC 50HZ or 60HZ , current up to 90A electric power system for remote switch on and off of circuit.

## SPECIFICATION

| Type                                |      | PAK-6H                | PAK-10H | PAK-11H | PAK-12H | PAK-18H | PAK-20H | PAK-25H | PAK-35H | PAK-50H | PAK-65H | PAK-80H |
|-------------------------------------|------|-----------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Rated operating current AC3 (A)     | 220V | 15                    |         |         | 18      | 20      | 25      | 35      | 50      | 65      | 80      | 90      |
|                                     | 440V | 9                     |         | 13      | 13      | 17      | 24      | 32      | 40      | 62      | 75      | 90      |
|                                     | 550V | 7                     |         | 11      | 13      | 17      | 19      | 26      | 32      | 50      | 60      | 72      |
| Rated thermal current (A)           |      | 10                    | 13      | 15      | 26      | 28      | 40      | 45      | 60      | 75      | 90      | 110     |
| Max Key in current (A)              |      | 10×Ie                 |         |         |         |         |         |         |         |         |         |         |
| Max cut off current (A)             |      | 8×Ie                  |         |         |         |         |         |         |         |         |         |         |
| Power of controllable motor AC (KW) | 220V | 2.2                   | 3       | 3       | 3.7     | 4       | 5.5     | 7.5     | 11      | 15      | 19      | 22      |
|                                     | 440V | 2.2                   | 4       | 4       | 7.5     | 7.5     | 11      | 15      | 22      | 30      | 37      | 45      |
|                                     | 550V | 2.2                   | 4       | 4       | 7.5     | 7.5     | 15      | 15      | 30      | 30      | 37      | 45      |
| Electrical life (times)             |      | AC3 1×10 <sup>6</sup> |         |         |         |         |         |         |         |         |         |         |
| Mechanical life (times)             |      | 5×10 <sup>6</sup>     |         |         |         |         |         |         |         |         |         |         |

A

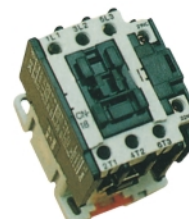
## CN SERIES AC CONTACTOR



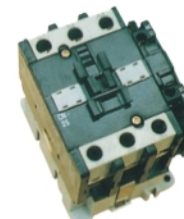
CN-11



CN-16



CN-18



CN-25

## APPLICATION

CN series AC contactor is suitable for AC 50HZ or 60HZ, voltage up to 660V, current up to 60A circuit, five models of CN-11, 16, 18, 25, 35 are available. They are able to assemble building block, auxiliary contactor group, thermal relay & accessories etc, to form multi-function series products.

## SPECIFICATION

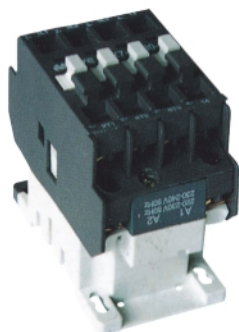
| Type                                             |      | CN-11                 | CN-16 | CN-18 | CN-25 | CN-35 |
|--------------------------------------------------|------|-----------------------|-------|-------|-------|-------|
| Rated insulated voltage (V)                      |      | 660V                  |       |       |       |       |
| Rated heat current (A)                           |      | 25                    | 25    | 35    | 50    | 60    |
| Capacity of 3 phase squirrel-cage motor AC3 (KW) | 220V | 3                     | 4     | 5.5   | 7.5   | 11    |
|                                                  | 380V | 4                     | 5.5   | 9     | 15    | 18.5  |
|                                                  | 350V | 5.5                   | 7.5   | 11    | 15    | 22    |
| Electrical life (times)                          |      | AC3 1×10 <sup>6</sup> |       |       |       |       |
| Mechanical life (times)                          |      | 10×10 <sup>6</sup>    |       |       |       |       |
| MAX Key-in current (A)                           |      | 10×Ie                 |       |       |       |       |
| MAX cut-off current (A)                          |      | 8×Ie                  |       |       |       |       |

## • TECHNICAL PARAMETER

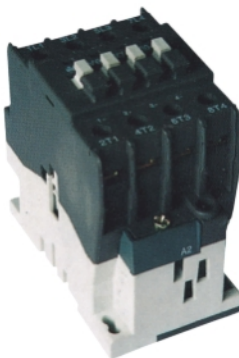
The allowable application category of main circuit and the auxiliary circuit of the contactor and it's code see Table 1.

Table 1 application of main circuit and the auxiliary circuit of the contactor and it' s code.

| Circuit           | Application category code | Example of the typical usage                                                           |
|-------------------|---------------------------|----------------------------------------------------------------------------------------|
| Main circuit      | AC-1                      | Noninductive or the micro ineuductive load, resistance furnace                         |
|                   | AC-2                      | The starting and breaking of wire winding type asynchronous motor                      |
|                   | AC-3                      | The starting and breaking during operation of cage asynchronous motor                  |
|                   | AC-4                      | The starting plug braking or reverse revolution,spot moving of cage asynchronous motor |
| Auxiliary circuit | AC-15                     | Control AC electromagnet load (>72VA)                                                  |
|                   | DC-13                     | Control DC magnet load                                                                 |



CJX7-9(A9)



CJX7-26(A26)



CJX7-30(A30)

Contactor rated insulation voltage( $U_i$ ),rated working voltage( $U_e$ ),conventional free air heat current( $I_{th}$ ), rated operating current( $I_e$ )and rated work rate see Table 2

Table 2 main circuits basic parameters

| Type     | Frame code | Rated insulation voltage<br>U <sub>i</sub> V | Conventional free air heat current I <sub>th</sub> | AC-3 rated operating current I <sub>e</sub> A |      |      | AC-3 control the max. Power KW of generator |      |      |
|----------|------------|----------------------------------------------|----------------------------------------------------|-----------------------------------------------|------|------|---------------------------------------------|------|------|
|          |            |                                              |                                                    | 220V                                          | 380V | 660V | 220V                                        | 380V | 660V |
| CJX7-9   | 16         | 1000                                         | 26                                                 | 9                                             | 9    | 7    | 2.2                                         | 4    | 5.5  |
| CJX7-12  |            |                                              | 28                                                 | 12                                            | 12   | 9    | 3                                           | 5.5  | 7.5  |
| CJX7-16  |            |                                              | 30                                                 | 17                                            | 17   | 10   | 4                                           | 7.5  | 9    |
| CJX7-26  | 26         |                                              | 45                                                 | 26                                            | 26   | 17   | 6.5                                         | 11   | 15   |
| CJX7-30  | 40         |                                              | 65                                                 | 32                                            | 32   | 21   | 9                                           | 15   | 18.5 |
| CJX7-40  |            |                                              | 65                                                 | 37                                            | 37   | 25   | 11                                          | 8.5  | 22   |
| CJX7-50  | 75         |                                              | 100                                                | 50                                            | 50   | 35   | 15                                          | 22   | 30   |
| CJX7-63  |            |                                              | 125                                                | 65                                            | 65   | 43   | 18.5                                        | 30   | 37   |
| CJX7-75  |            |                                              | 125                                                | 75                                            | 75   | 46   | 22                                          | 37   | 40   |
| CJX7-95  | 110        |                                              | 145                                                | 96                                            | 96   | 65   | 25                                          | 45   | 55   |
| CJX7-110 |            |                                              | 160                                                | 110                                           | 110  | 82   | 30                                          | 55   | 75   |

The making and breaking capacity of contacts of the contactor see Table 3.

| Type       | Making  |         |    | Making and breaking |           |
|------------|---------|---------|----|---------------------|-----------|
|            | $I/I_e$ | $U/U_e$ | S  | $I_c/I_e$           | $U_r/U_e$ |
| CJX7-9~110 | 12      | 1.05    | 10 | 10                  | 1.05      |

There are two auxiliary contact modules of the contactor for the user choice,one kind is has one NO or one NC contact front-Loading auxiliary contact module the other is has one NO and NC contact side-loading type auxiliary contact module.CJX7-9~40 contactor body have a pair of NO(or NC)contact auxiliary contact.The basic parameter of auxiliary circuit see Table 4.

Table 4 basic parameter of auxiliary circuits

| Application category | rated insulation voltage $U_i$ V | Conventional free air heat current $I_{th}$ | Rated control capacity |          | Rated operating current $I_e$ |      |
|----------------------|----------------------------------|---------------------------------------------|------------------------|----------|-------------------------------|------|
|                      |                                  |                                             | Making                 | Breaking | 220V                          | 380V |
| AC-15                | 690                              | 16                                          | 3600VA                 | 360VA    | 1.65                          | 0.95 |
| DC-13                |                                  |                                             | 33W                    | 33W      | 0.15                          | -    |

The contactors are suitable for eight hours working system. uninterrupted working system, interruption period working system and the short time working system, Its operating frequency sees.

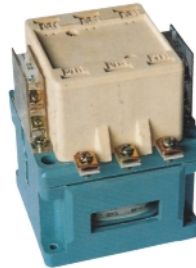
Table 5.The load factor under interruption period working system is 40%.



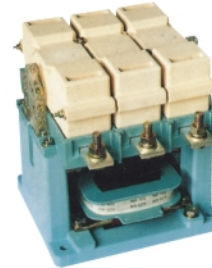
CJ20-16



CJ20-40



CJ20-100



CJ20-630

## • APPLICATION

CJ20 series AC contactors are suitable for frequency 50Hz, rated voltage up to 660V, rated current up to 630A. It is mainly used for making or breaking electric circuits at a long distance & for frequent starting & stopping, controlling AC motors. It is used in combination with thermal relay to compose a magnetic motor starter. The product accords with such standards as IEC60947-4-1 & GB14048.4.

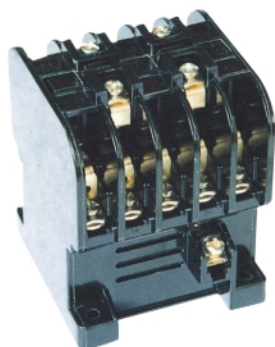
## • APPLICATION

| Type        | Insulation voltage (V) | Rated operating voltage Ue (V) | Conventional thermal current Ith (A) | Rated operating current (AC-3)(A) | Rated control power (AC-3)(kw) | Rated frequency of operation | Coordinate and cooperated of SCPD        | Motion characteristic              | Operating voltage range of coil(VA/W) |           |         |
|-------------|------------------------|--------------------------------|--------------------------------------|-----------------------------------|--------------------------------|------------------------------|------------------------------------------|------------------------------------|---------------------------------------|-----------|---------|
|             |                        |                                |                                      |                                   |                                |                              |                                          |                                    | Start                                 | Atracting |         |
| CJ20-10     | 690                    | 220                            | 10                                   | 10                                | 2.2                            | 1200                         | NT00-20/660                              | Atracting voltage range 0.85~1.1Us | 65/47.6                               | 8.3/2.5   |         |
| CJ20-16     |                        | 380                            |                                      | 10                                | 4                              | 1200                         |                                          |                                    |                                       |           |         |
|             |                        | 660                            |                                      | 5.2                               | 4                              | 600                          |                                          |                                    |                                       |           |         |
|             |                        | 220                            | 16                                   | 16                                | 4.5                            | 1200                         | NT00-32/660                              |                                    |                                       |           |         |
| 380         |                        | 16                             |                                      | 7.5                               | 1200                           |                              |                                          |                                    |                                       |           |         |
| 660         |                        | 13                             |                                      | 11                                | 600                            |                              |                                          |                                    |                                       |           |         |
| CJ20-25     |                        | 220                            | 32                                   | 25                                | 5.5                            | 1200                         | NT00-50/660                              | Release voltage range 0.2~0.75Us   | 93.1/60                               | 13.9/41   |         |
|             |                        | 380                            |                                      | 25                                | 11                             | 1200                         |                                          |                                    |                                       |           |         |
|             |                        | 660                            |                                      | 14.5                              | 13                             | 600                          |                                          |                                    |                                       |           |         |
| CJ20-40     |                        | 220                            | 55                                   | 40                                | 11                             | 1200                         | NT00-80/660                              |                                    | Atracting voltage range 0.8~1.1Us     | 175/82.3  | 19/5.7  |
|             |                        | 380                            |                                      | 40                                | 22                             | 1200                         |                                          |                                    |                                       |           |         |
|             |                        | 660                            |                                      | 25                                | 22                             | 600                          |                                          |                                    |                                       |           |         |
| CJ20-63     |                        | 220                            | 80                                   | 63                                | 18                             | 1200                         | NT1-160/660                              | Atracting voltage range 0.8~1.1Us  |                                       | 480/153   | 57/16.5 |
|             |                        | 380                            |                                      | 63                                | 30                             | 1200                         |                                          |                                    |                                       |           |         |
|             |                        | 660                            |                                      | 40                                | 35                             | 600                          |                                          |                                    |                                       |           |         |
| CJ20-100    |                        | 220                            | 125                                  | 100                               | 28                             | 1200                         | NT1-250/660                              |                                    | Atracting voltage range 0.8~1.1Us     | 570/175   | 61/21.5 |
|             |                        | 380                            |                                      | 100                               | 50                             | 1200                         |                                          |                                    |                                       |           |         |
|             |                        | 660                            |                                      | 63                                | 50                             | 600                          |                                          |                                    |                                       |           |         |
| CJ20-160    | 220                    | 200                            | 160                                  | 48                                | 1200                           | NT2-315/660                  | Atracting 0.8~1.1Us<br>Release 0.2~0.7Us | 855/32                             |                                       | 85.5/34   |         |
|             | 380                    |                                | 160                                  | 85                                | 1200                           |                              |                                          |                                    |                                       |           |         |
|             | 660                    |                                | 100                                  | 85                                | 600                            |                              |                                          |                                    |                                       |           |         |
| CJ20-160/11 | 1140                   | 1140                           | 200                                  | 80                                | 85                             | 300                          |                                          |                                    |                                       |           |         |
| CJ20-250    | 690                    | 220                            | 315                                  | 250                               | 80                             | 600                          |                                          | NT2-400/660                        | Atracting voltage range 0.85~1.1Us    | 570/175   | 152/65  |
| CJ20-250/06 |                        | 380                            |                                      | 250                               | 132                            | 600                          |                                          |                                    |                                       |           |         |
|             |                        | 660                            |                                      | 200                               | 190                            | 300                          |                                          |                                    |                                       |           |         |
| CJ20-400    |                        | 220                            | 400                                  | 400                               | 115                            | 600                          | NT2-500/660                              | Release voltage range 0.2~0.75Us   |                                       | 3578/790  | 250/118 |
|             |                        | 380                            |                                      | 400                               | 200                            | 600                          |                                          |                                    |                                       |           |         |
| CJ20-400/06 |                        | 660                            |                                      | 250                               | 220                            | 300                          |                                          |                                    |                                       |           |         |
| CJ20-630    |                        | 220                            | 630                                  | 630                               | 175                            | 600                          | NT3-630/660                              |                                    | Release voltage range 0.2~0.75Us      | 3578/790  | 250/118 |
|             |                        | 380                            |                                      | 630                               | 300                            | 600                          |                                          |                                    |                                       |           |         |
| CJ20-630/06 |                        | 660                            |                                      | 400                               | 400                            | 350                          |                                          |                                    |                                       |           |         |
| CJ20-630/11 |                        | 1140                           | 1140                                 |                                   | 400                            | 400                          | 120                                      |                                    |                                       |           |         |

## • APPLICATION

CJT1 series AC contactor is mainly used for remove frequently making and preaking circuit in the power system of AC 50Hz or 60Hz, rated voltage to 380V, current to 150A. And it can be formed motor starter with thermal relay or electron protective device for protecting from overload circuit. It's CJ10 upgade replacement product.

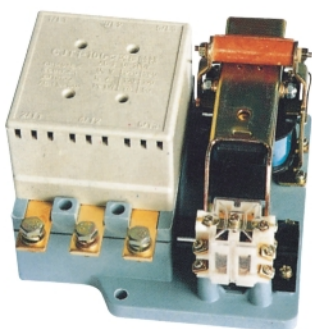
## • SPECIFICATION



CJT1-10A



CJT1-40A



CJT1-100A

| Basic<br>speci-<br>fication | Rated<br>insulation<br>voltage<br>Ui (V) | Rated<br>operation<br>voltage<br>Ue (V) | Conventional<br>thermal<br>current<br>Ith (A) | Under interruption period<br>operation system<br>Ie (A) |      |      |      | AC-3's<br>Pe(kW) | Non-<br>interrupt<br>operation<br>Ie(A) |
|-----------------------------|------------------------------------------|-----------------------------------------|-----------------------------------------------|---------------------------------------------------------|------|------|------|------------------|-----------------------------------------|
|                             |                                          |                                         |                                               | AC-1                                                    | AC-2 | AC-3 | AC-4 |                  |                                         |
| 10                          | 380                                      | 220-380                                 | 10                                            | 10                                                      | 10   | 10   | 10   | 2.2/4            | 10                                      |
| 20                          |                                          | 220-380                                 | 20                                            | 20                                                      | 20   | 20   | 20   | 5.8/10           | 20                                      |
| 40                          |                                          | 220-380                                 | 40                                            | 40                                                      | 40   | 40   | 40   | 11/20            | 40                                      |
| 60                          |                                          | 220-380                                 | 60                                            | 60                                                      | 60   | 60   | 60   | 17/30            | 60                                      |
| 80                          |                                          | 220-380                                 | 80                                            | 80                                                      | 80   | 80   | 80   | 22/37            | 80                                      |
| 100                         |                                          | 220-380                                 | 100                                           | 100                                                     | 100  | 100  | 100  | 28/50            | 100                                     |
| 150                         |                                          | 220-380                                 | 150                                           | 150                                                     | 150  | 150  | 150  | 43/75            | 150                                     |

| Rated operation voltage<br>U <sub>e</sub> (V) | Use category | Rated operation current (A) | Making           |                  |       | Breaking         |                  |       | Making time (S) | (10*T)<br>Electrical durability times |  |  |  |
|-----------------------------------------------|--------------|-----------------------------|------------------|------------------|-------|------------------|------------------|-------|-----------------|---------------------------------------|--|--|--|
|                                               |              |                             | I/I <sub>e</sub> | U/U <sub>e</sub> | cos φ | I/I <sub>e</sub> | I/I <sub>e</sub> | cos φ |                 |                                       |  |  |  |
| 380                                           | AC-3         | I <sub>e</sub> ≤17          | 6                | 1                | 0.65  | 1                | 0.17             | 0.65  | -               | 60                                    |  |  |  |
|                                               |              | I <sub>e</sub> >17          |                  |                  | 0.35  |                  |                  | 0.35  |                 |                                       |  |  |  |
|                                               | AC-4         | I <sub>e</sub> ≤17          | 6                | 1                | 0.65  | 6                | 1                | 0.65  | 0.1             | 2                                     |  |  |  |
|                                               |              | 17<I <sub>e</sub> ≤40       |                  |                  | 0.35  |                  |                  | 0.35  |                 | 1                                     |  |  |  |
|                                               |              | 60                          |                  |                  |       |                  |                  |       |                 |                                       |  |  |  |
|                                               |              | 100                         |                  |                  |       |                  |                  |       |                 |                                       |  |  |  |
|                                               |              | 150                         |                  |                  |       |                  |                  |       |                 | 0.6                                   |  |  |  |

Note: Select making time of electrical durability according to load factor for 4%, and equivalent thermal current within a week no more than conventional thermal current.

## • APPLICATION

JZC4 series AC intermediate relay is used in the controlled circuit of AC 50Hz or 60Hz, voltage up to 660V, and can be used for center-enlarging isolation of passing to the related controlled element.



JZC 4

## • SPECIFICATION

| TYPE                            | JZC4-40         | JZC4-31 | JZC4-22 |
|---------------------------------|-----------------|---------|---------|
| rated insulating voltage        | 660             |         |         |
| given heat current              | 10              |         |         |
| rated working current           | 6               |         |         |
| electrical life-span(time)      | 10 <sup>6</sup> |         |         |
| mechanical life-span(time)      | 10 <sup>7</sup> |         |         |
| shifting time                   | 1.5ms           |         |         |
| the highest operating frequency | 2/S             |         |         |

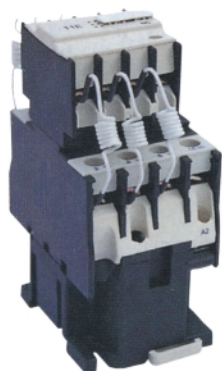
## CJ19 SERIES CHANGE-OVER CAPACITOR CONTACTOR

## • APPLICATION

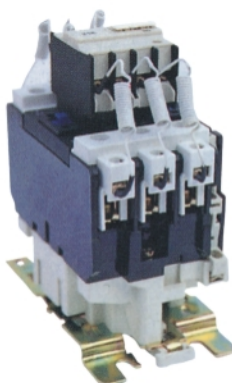
The contactor is suitable for using in the circuits up to voltage 380V AC 50Hz for putting in the low voltage reactive power compensation device or cutting off low voltage parallel capacitor. The contactor is supplied with the suppressing inrush current device for decreasing inrush current shock to capacitor while closing and suppressing over-voltage while breaking.

## • SPECIFICATION

| Parameter/Type                                |                           | CJ19-25   | CJ19-32 | CJ19-43 | CJ19-50 | CJ19-63 | CJ19-80 | CJ19-125 |
|-----------------------------------------------|---------------------------|-----------|---------|---------|---------|---------|---------|----------|
| rated insulating voltage (V)                  |                           | 660 (990) |         |         |         |         |         |          |
| rated working current (A)                     |                           | 18        | 24      | 29      | 36      | 48      | 58      | 87       |
| given heat current (A)                        |                           | 25        | 32      | 43      | 50      | 63      | 80      | 12.5     |
| controlling capacity                          | 220V-240V                 | 6.7       | 8.5     | 10      | 15      | 20      | 25      | 40       |
|                                               | 400V-440V                 | 12.5      | 16.7    | 20      | 25      | 33.3    | 40      | 50       |
| Control the ability of surge current          |                           | ≤20       |         |         |         |         |         |          |
| the controlling capacity of auxiliary contact | given heat current (A)    | 10A       |         |         |         |         |         |          |
|                                               | AC-15 on                  | 3600VA    |         |         |         |         |         |          |
|                                               | DC-13 on                  | 33W       |         |         |         |         |         |          |
|                                               | AC-15 off                 | 360VA     |         |         |         |         |         |          |
|                                               | AC-13 off                 | 33W       |         |         |         |         |         |          |
|                                               | AC-15 380V rating current | 0.95A     |         |         |         |         |         |          |
|                                               | DC-13 220V rating current | 1.15A     |         |         |         |         |         |          |
| coil voltage                                  |                           | 24V       | 48V     | 110V    | 220V    | 380V    |         |          |
| Coil power (VA)                               | Pick up                   | 70        | 110     |         |         | 200     |         |          |
|                                               | Maintain                  | 8         | 11      |         |         | 20      |         |          |
| Power consumption (W)                         |                           | 1.8-2.8   |         | 3-4     |         |         | 6-10    |          |
| operation frequency time/h                    |                           | 120       |         |         |         |         |         |          |
| electrical life                               |                           | 106       |         |         |         |         |         |          |
| mechanical life                               |                           | 107       |         |         |         |         |         |          |
| the section of connection wire (mm)           |                           | 4         | 6       | 6       | 10      | 16      | 16      | 25       |



CJ19-32



CJ19-63

## • APPLICATION

DZX8(3RT) series contactor are suitable in electrical system fro frequency of 50/60HZ. The products are made according to the standard DIN VDE0106.

## • SPECIFICATION

| Product model and specification | Rated voltage (Us) | Auxiliary contact | Rated current (A)<br>AC-3/400V | Code          |
|---------------------------------|--------------------|-------------------|--------------------------------|---------------|
| DZX8-12(3RT1016)                | 220V AC, 50/60Hz   | 1NC               | 7A                             | DZX8-15-1AN22 |
|                                 |                    | 1NO               | 7A                             | DZX8-15-1AN21 |
|                                 | 24V DC             | 1NC               | 7A                             | DZX8-15-1BB42 |
|                                 |                    | 1NO               | 7A                             | DZX8-15-1BB41 |
|                                 | 220V AC, 50/60Hz   | 1NC               | 9A                             | DZX8-16-1AN22 |
|                                 |                    | 1NO               | 9A                             | DZX8-16-1AN21 |
|                                 | 24V DC             | 1NC               | 9A                             | DZX8-16-1AN42 |
|                                 |                    | 1NO               | 9A                             | DZX8-16-1AN41 |
|                                 | 220V AC, 50/60Hz   | 1NC               | 12A                            | DZX8-17-1AN22 |
|                                 |                    | 1NO               | 12A                            | DZX8-17-1AN21 |
|                                 | 24V DC             | 1NC               | 12A                            | DZX8-17-1AN42 |
|                                 |                    | 1NO               | 12A                            | DZX8-17-1AN41 |
| DZX8-25(3RT1025)                | 220V AC, 50/60Hz   | --                | 9A                             | DZX8-23-1BB42 |
|                                 | 24V DC             | --                | 9A                             | DZX8-23-1BB41 |
|                                 | 220V AC, 50/60Hz   | --                | 12A                            | DZX8-24-1AN22 |
|                                 | 24V DC             | --                | 12A                            | DZX8-24-1AN21 |
|                                 | 220V AC, 50/60Hz   | --                | 17A                            | DZX8-25-1BB42 |
|                                 | 24V DC             | --                | 17A                            | DZX8-25-1BB41 |
|                                 | 220V AC, 50/60Hz   | --                | 25A                            | DZX8-26-1AN22 |
|                                 | 24V DC             | --                | 25A                            | DZX8-26-1AN21 |



DZX8(3RT)-16



DZX8(3RT)-25



CJX2-Z(LP1-D)09



CJX2-Z(LP1-D)40

## CJX2-Z (LP1-D) SERIES DC OPERATED AC CONTACTOR

## • APPLICATION

LP1-D series DC Operated AC contactors is suitable for using in the circuit rated voltage up to 660V AC 50Hz or 60Hz, and in rated current 9-95A in AC-3/380V load circuits. For remote controlling circuit making, breaking and frequently starting AC motors. It can be also combinec with the auxiliary contact group, air delayer, thermal relay devices etc. It has specialties of equable & reliable action, quick while working.

## • SPECIFICATION

| Type           | Rated working current IeA (AC-3) | Rated heat current Ith(A) | Rated working voltage Ue V | Rated insulating voltage Ui V | Controlled Power (kW) |      |      |      |      | Electrical life (AC-3) 104 | Contacts Number |
|----------------|----------------------------------|---------------------------|----------------------------|-------------------------------|-----------------------|------|------|------|------|----------------------------|-----------------|
|                |                                  |                           |                            |                               | 220V                  | 380V | 415V | 440V | 660V |                            |                 |
| CJX2-Z(LP-D)09 | 9                                | 20                        | 380V                       | 660V                          | 2.2                   | 4    | 4    | 4    | 5.5  | 660V                       | 3P+NO<br>3P+NC  |
| CJX2-Z(LP-D)12 | 12                               | 20                        |                            |                               | 3                     | 5.5  | 5.5  | 5.5  | 7.5  |                            |                 |
| CJX2-Z(LP-D)18 | 18                               | 32                        |                            |                               | 4                     | 7.5  | 9    | 9    | 9    |                            |                 |
| CJX2-Z(LP-D)25 | 25                               | 40                        |                            |                               | 5.5                   | 11   | 11   | 11   | 15   |                            |                 |
| CJX2-Z(LP-D)32 | 32                               | 50                        | 660V                       | 660V                          | 7.5                   | 15   | 15   | 15   | 18.5 | 3P+NO<br>+NC               |                 |
| CJX2-Z(LP-D)40 | 40                               | 60                        |                            |                               | 11                    | 18.5 | 22   | 22   | 30   |                            |                 |
| CJX2-Z(LP-D)50 | 50                               | 80                        |                            |                               | 15                    | 22   | 25   | 30   | 33   |                            |                 |
| CJX2-Z(LP-D)65 | 65                               | 80                        |                            |                               | 18.5                  | 30   | 37   | 37   | 37   |                            |                 |
| CJX2-Z(LP-D)80 | 80                               | 125                       |                            |                               | 22                    | 37   | 45   | 45   | 45   |                            |                 |
| CJX2-Z(LP-D)95 | 95                               | 125                       |                            |                               | 25                    | 45   | 45   | 45   | 45   |                            |                 |

## • APPLICATION

F4(LA1-D) series auxiliary contact blocks are installed on the top of CA2-D control relay or CJX2(LC1-D) AC contactor for expanding the couples of auxiliary contacts. Owing to adopting the contacting functions of sliding frictions, the item can be self-cleaning, which ensures the electric circuit to be reliable.



F4-11(LA1-DN11)

## • SPECIFICATION

| Type           | LA1-DN02 | LA1-DN11 | LA1-DN20 | LA1-DN22 | LA1-DN40 | LA1-DN04 | LA1-DN13 | LA1-DN31 |
|----------------|----------|----------|----------|----------|----------|----------|----------|----------|
| Contact number | 2NC      | NO+NC    | 2NO      | 2NO+2NC  | 4NO      | 4NC      | 1NO+1NC  | 3NO+1NC  |

# F5(LA2-D) TIME DELAY AUXILIARY CONTACT BLOCK

## • APPLICATION

F5(LA2-D) timer delay auxiliary contact blocks are combined with CJX2(LC1-D) AC contactor & F4(LA1-D) Auxiliary contact block into LC3-D star-delta reduced voltage starter is to start motor.



F4-40(LA1-DN40)

## • SPECIFICATION

| Type        | Delay range | Number of the delay contacts |
|-------------|-------------|------------------------------|
| F5(LA2-D)T0 | 0.1~3s      | NO+NC                        |
| F5(LA2-D)T2 | 0.1~30s     |                              |
| F5(LA2-D)T4 | 10~180s     |                              |
| F5(LA3-D)R2 | 0.1~30s     |                              |
| F5(LA3-D)R4 | 10~180s     |                              |
| F5(LA3-D)R0 | 0.1~3s      |                              |



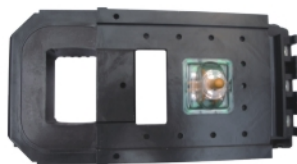
F5-DT2(LA2-DT2)

|            |                    |                                  |
|------------|--------------------|----------------------------------|
| LX1-D2:    | Used for Contactor | CJX2(LC1-D)09 to CJX2(LC1-D)18   |
| LX1-D4:    | Used for Contactor | CJX2(LC1-D)25 to CJX2(LC1-D)32   |
| LX1-D6:    | Used for Contactor | CJX2(LC1-D)40 to CJX2(LC1-D)95   |
| LX1-FF:    | Used for Contactor | CJX2(LC1-F)115 to CJX2(LC1-F)150 |
| LX1-FG:    | Used for Contactor | CJX2(LC1-F)185 to CJX2(LC1-F)225 |
| LX1-FH:    | Used for Contactor | CJX2(LC1-F)265 to CJX2(LC1-F)225 |
| LX1-FJ:    | Used for Contactor | CJX2-F(LC1-F)400                 |
| LX1-FK:    | Used for Contactor | CJX2-F(LC1-F)500                 |
| LX1-FL:    | Used for Contactor | CJX2-F(LC1-F)630                 |
| LX1-FK(1): | Used for Contactor | CJX2-F(LC1-F)780                 |

## AC CONTACTOR COILS



CJX2(LC1-D) Coils



CJX2-F(LC1-F) Coils



LX1



LA9-01



LA9-02



BSA1(EH) Coils



## CONTACT KITS

A



CJX1(3TF)



CJX1(3TF)



CJX1(3TF)



CJ20



LA5(LC1-F)



BSA1(EH)