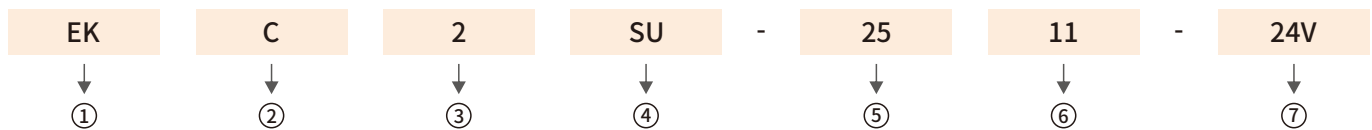


Product Overview

EKC2SU Series ac contactors are used for controlling 3-phase motor circuits up to 690V AC. These contactors are of the block type design with 3 main poles. Built-in 1NO+1NC auxiliary contact and surge suppression, resulting in installation time and cost savings.

Compared with contactors using external surge suppressors, contactor products using built-in surge suppressors will have more reliable performance and at the same time the surges are handled by the contactor itself and the surge never reaches the control circuit.

Type Designation



| Code | Meaning |
|------|----------------------------|
| ① | Company code |
| ② | Contactors |
| ③ | Design sequence NO. |
| ④ | Built-in surge suppressors |

| Code | Meaning |
|------|---|
| ⑤ | Rated operational current (380V/400V, AC3): 9A,12A,18A,25A,32A,40A,50A,65A,80A,95A |
| ⑥ | Number of contacts 11: 3NO main contacts+1NO and 1NC auxiliary contact |
| ⑦ | Coil voltage: 24V,36V,48V,110V,230V,380V,415V,440V |

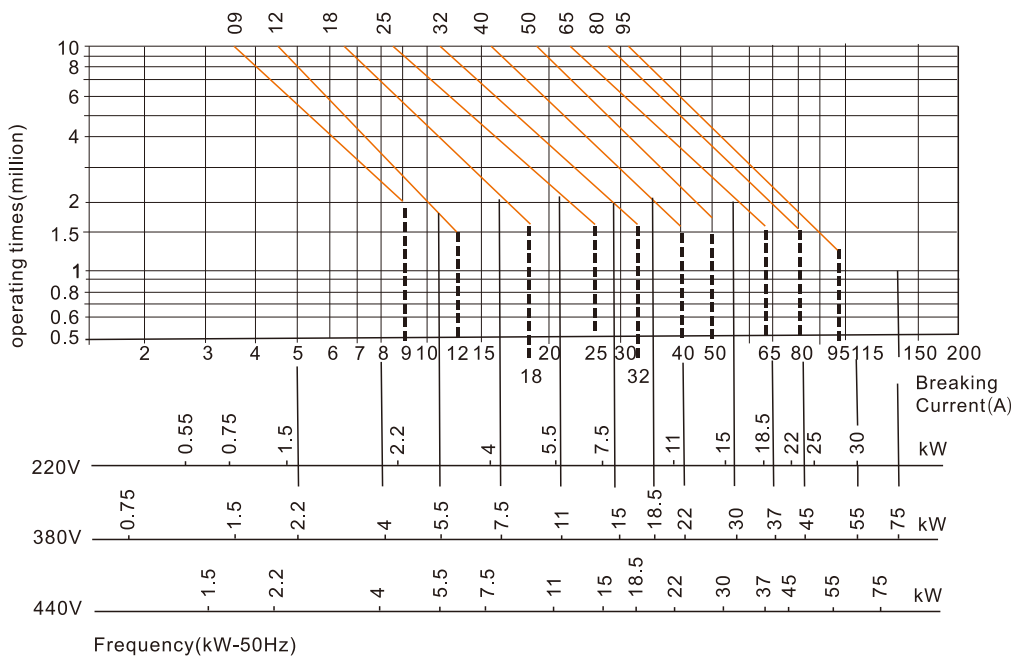
Description

| | |
|----------------------|---|
| Application | Remote making & breaking circuits |
| | Protect circuit from over-load when assembling with thermal over-load relay |
| | Frequent start-up and control of AC contactor |
| Electric value | AC50/60Hz, 690V, up to 95A |
| Utilization category | AC-3, AC-4 |
| Altitude | ≤2000m |
| Ambient temperature | -5°C~+40°C |
| Mounting category | III |
| Mounting conditions | Inclination between the mounting plane and the vertical plane should not exceed ±5° |
| Standard | IEC/EN 60947-4-1, IEC/EN 60947-5-1 |

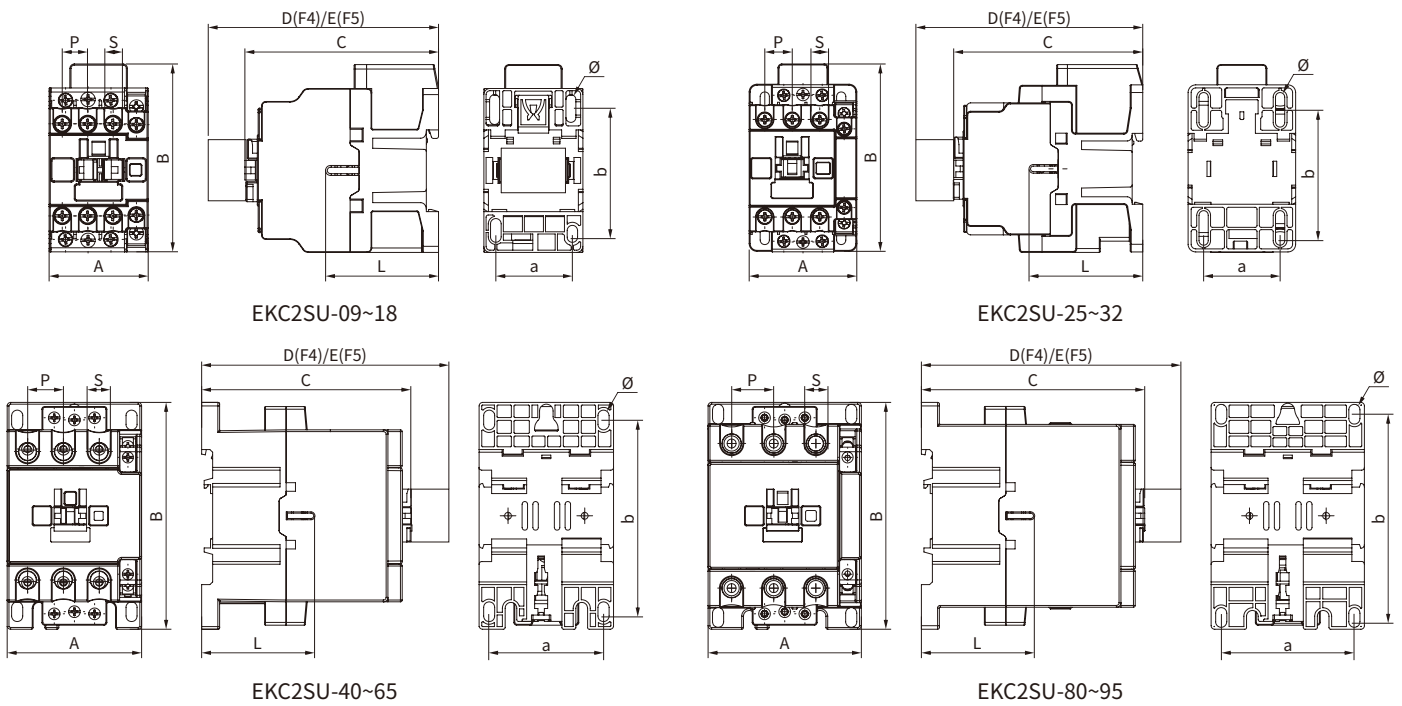
Technical Data

| Type | | EKC2SU-09 | EKC2SU-12 | EKC2SU-18 | EKC2SU-25 | EKC2SU-32 | EKC2SU-40 | EKC2SU-50 | EKC2SU-65 | EKC2SU-80 | EKC2SU-95 |
|---|--------------------------|--|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Main circuit characteristic | | | | | | | | | | | |
| Poles | | 3P | | | | | | | | | |
| Main contact | | 3NO | | | | | | | | | |
| Rated insulation voltage(Ui)(V) | | 690V | | | | | | | | | |
| Rated operating voltage(Ue)(V) | | AC220/230V; 380/400V; 660/690V | | | | | | | | | |
| Rated thermal current(I _{th}), AC-1 | | 20 | 20 | 32 | 40 | 50 | 60 | 80 | 80 | 100 | 125 |
| Rated operation current(I _e)(A) | AC-3, 220/230V | 9 | 12 | 18 | 25 | 32 | 40 | 50 | 65 | 80 | 95 |
| | AC-4, 220/230V | 3.5 | 5 | 7.7 | 8.5 | 12 | 18.5 | 24 | 28 | 37 | 44 |
| | AC-3, 380/400V | 9 | 12 | 18 | 25 | 32 | 40 | 50 | 65 | 80 | 95 |
| | AC-4, 380/400V | 3.5 | 5 | 7.7 | 8.5 | 12 | 18.5 | 24 | 28 | 37 | 44 |
| | AC-3, 660/690V | 6.6 | 8.9 | 12 | 18 | 22 | 34 | 39 | 42 | 49 | 49 |
| | AC-4, 660/690V | 1.5 | 2 | 3.8 | 4.4 | 7.5 | 9 | 12 | 14 | 17.3 | 21.3 |
| Rated operational power(P _e)(A) | AC-3, 220/230V | 2.2 | 3 | 4 | 5.5 | 7.5 | 11 | 15 | 18.5 | 22 | 25 |
| | AC-4, 220/230V | 0.6 | 1.1 | 1.5 | 2.2 | 3 | 5.5 | 6 | 7.5 | 11 | 14 |
| | AC-3, 380/400V | 4 | 5.5 | 7.5 | 11 | 15 | 18.5 | 22 | 30 | 37 | 45 |
| | AC-4, 380/400V | 1.5 | 2.2 | 3.3 | 4 | 5.4 | 7.5 | 11 | 15 | 18.5 | 22 |
| | AC-3, 660/690V | 5.5 | 7.5 | 10 | 15 | 18.5 | 30 | 33 | 37 | 45 | 45 |
| | AC-4, 660/690V | 1.1 | 1.5 | 3 | 3.7 | 5.5 | 7.5 | 10 | 11 | 15 | 18.5 |
| Mechanical life(×10 ⁶ times) | | 10 | 10 | 10 | 10 | 8 | 8 | 8 | 8 | 6 | 6 |
| Electrical life(×10 ⁵ times) | AC-3 | 1000 | 1000 | 1000 | 1000 | 800 | 600 | 600 | 600 | 600 | 600 |
| | AC-4 | 200 | 200 | 200 | 200 | 200 | 150 | 150 | 150 | 100 | 100 |
| Frequency of operation (time/h) | AC-3 | 1200 | 1200 | 1200 | 1200 | 600 | 600 | 600 | 600 | 600 | 600 |
| | AC-4 | 300 | 300 | 300 | 300 | 300 | 300 | 300 | 300 | 300 | 300 |
| Control circuit characteristics | | | | | | | | | | | |
| Rated control voltage(U _s) | 50Hz | 24V,36V,48V,110V,230V,380V,415V,440V | | | | | | | | | |
| | 50/60Hz | 24V,36V,48V,110V,230V,380V,415V,440V | | | | | | | | | |
| Allowed control circuit voltage | Operation | (85%~110%)U _s | | | | | | | | | |
| | Release | (20%~75%)U _s | | | | | | | | | |
| Power consumption of coil | Actuation(VA) | 70 | 70 | 70 | 110 | 110 | 200 | 200 | 200 | 200 | 200 |
| | Keep(VA) | 9.5 | 9.5 | 9.5 | 11.4 | 11.4 | 38.8 | 38.8 | 38.8 | 38.8 | 38.8 |
| | Consumption(W) | 1-3 | 1-3 | 1-3 | 1-3 | 1-3 | 6-10 | 6-10 | 6-10 | 6-10 | 6-10 |
| 50/60Hz | Suction time(ms) | 40 | 40 | 40 | 50 | 50 | 70 | 70 | 70 | 70 | 70 |
| | Release time(ms) | 130 | 130 | 130 | 150 | 150 | 170 | 170 | 170 | 170 | 170 |
| Surge suppressors A1○—□—II—○A2 | RC type | AC/DC 24V,36V,48V,110V,250V,380V,415V,440V | | | | | | | | | |
| Connecting capability of main circuit terminal | | | | | | | | | | | |
| Flexible wire No terminal | 1 wire(mm ²) | 1~4 | 1~4 | 1~4 | 1.5~10 | 1.5~10 | 4~25 | 4~25 | 4~25 | 6~50 | 6~50 |
| | 2 wire(mm ²) | 1~4 | 1~4 | 1~4 | 1.5~6 | 1.5~6 | 4~16 | 4~16 | 4~16 | 6~25 | 6~25 |
| Flexible wire With terminals | 1 wire(mm ²) | 1~4 | 1~4 | 1~4 | 1~6 | 1~6 | 4~25 | 4~25 | 4~25 | 6~50 | 6~50 |
| | 2 wire(mm ²) | 1~2.5 | 1~2.5 | 1~2.5 | 1~4 | 1~4 | 4~10 | 4~10 | 4~10 | 6~16 | 6~16 |
| Hard wire No terminal | 1 wire(mm ²) | 1~4 | 1~4 | 1~4 | 1.5~6 | 1.5~6 | 4~25 | 4~25 | 4~25 | 6~50 | 6~50 |
| | 2 wire(mm ²) | 1~4 | 1~4 | 1~4 | 1.5~6 | 1.5~6 | 4~10 | 4~10 | 4~10 | 6~25 | 6~25 |
| Fastening torque (N.m) | | 0.8 | 0.8 | 0.8 | 1.2 | 1.2 | 3.5 | 3.5 | 3.5 | 4 | 4 |
| Auxiliary contacts | | | | | | | | | | | |
| Built-in auxiliary contact | | 1NO+1NC | | | | | | | | | |
| Rated thermal current (I _{th}) | | 10A | | | | | | | | | |
| Rated operating voltage (U _e) | AC | 380V | | | | | | | | | |
| | DC | 220V | | | | | | | | | |
| Rated control capacity | AC-15 | 360VA | | | | | | | | | |
| | DC-13 | 33W | | | | | | | | | |

Electric Life Curves



Dimension(mm)



| Model | A Max | B Max | C Max | D Max | E Max | a | b | Ø | L | P | S |
|--------------|-------|-------|-------|-------|-------|------|-------|-----|------|------|------|
| EKC2SU-09~18 | 45 | 85 | 87 | 120 | 124 | 34.5 | 50/60 | 4.5 | 51 | 11 | 10.5 |
| EKC2SU-25~32 | 56 | 98 | 98.6 | 132 | 136 | 40 | 61.5 | 4.5 | 59.3 | 14.2 | 13 |
| EKC2SU-40~65 | 75 | 127 | 118 | 151.1 | 155 | 63.5 | 105 | 6 | 63.2 | 20 | 14 |
| EKC2SU-80~95 | 86 | 126.5 | 126.5 | 158.5 | 162.5 | 74.5 | 105 | 6 | 63.2 | 23.5 | 17.5 |