

## Contactors



| Cat.no       | Ref.No  | Description                                        | Pack./MOQ |
|--------------|---------|----------------------------------------------------|-----------|
| FTC4A310T3   | F101524 | Contactor 4 kW -400V + laux NO Coil 110V 50/60Hz   | 5         |
| FTC4A310T5   | F101525 | Contactor 4 kW -400V + laux NO Coil 230V 50/60Hz   | 5         |
| FTC4A310T13  | F101526 | Contactor 4 kW -400V + laux NO Coil 380V 50/60Hz   | 5         |
| FTC4A301T3   | F101527 | Contactor 4 kW -400V + laux NC Coil 110V 50/60Hz   | 5         |
| FTC4A301T5   | F101528 | Contactor 4 kW -400V + laux NC Coil 230V 50/60Hz   | 5         |
| FTC4A301T13  | F101529 | Contactor 4 kW -400V + laux NC Coil 380V 50/60Hz   | 5         |
| FTC4A310T2   | F101530 | Contactor 4 kW -400V + laux NO Coil 42V 50/60Hz    | 5         |
| FTC4A301T2   | F101531 | Contactor 4 kW -400V + laux NC Coil 42V 50/60Hz    | 5         |
| FTC4A310T9   | F101532 | Contactor 4 kW -400V + laux NO Coil 48V 50/60Hz    | 5         |
| FTCA301T9    | F101533 | Contactor 4 kW -400V + laux NC Coil 48V 50/60Hz    | 5         |
| FTC4A310T1   | F101534 | Contactor 4 kW -400V + laux NO Coil 24V 50/60Hz    | 5         |
| FTC4A301T1   | F101535 | Contactor 4 kW -400V + laux NC Coil 24V 50/60Hz    | 5         |
| FTC5A310T3   | F101536 | Contactor 5.5 kW -400V + laux NO Coil 110V 50/60Hz | 5         |
| FTC5A310T5   | F101537 | Contactor 5.5 kW -400V + laux NO Coil 230V 50/60Hz | 5         |
| FTC5A310T13  | F101538 | Contactor 5.5 kW -400V + laux NO Coil 380V 50/60Hz | 5         |
| FTC5A301T3   | F101539 | Contactor 5.5 kW -400V + laux NC Coil 110V 50/60Hz | 5         |
| FTC5A301T5   | F101540 | Contactor 5.5 kW -400V + laux NC Coil 230V 50/60Hz | 5         |
| FTC5A301T13  | F101541 | Contactor 5.5 kW -400V + laux NC Coil 380V 50/60Hz | 5         |
| FTC5A310T2   | F101542 | Contactor 5.5 kW -400V + laux NO Coil 42V 50/60Hz  | 5         |
| FTC5A301T2   | F101543 | Contactor 5.5 kW -400V + laux NC Coil 42V 50/60Hz  | 5         |
| FTC5A310T9   | F101544 | Contactor 5.5 kW -400V + laux NO Coil 48V 50/60Hz  | 5         |
| FTC5A301T9   | F101545 | Contactor 5.5 kW -400V + laux NC Coil 48V 50/60Hz  | 5         |
| FTC5A310T1   | F101546 | Contactor 5.5 kW -400V + laux NO Coil 24V 50/60Hz  | 5         |
| FTC5A301T1   | F101547 | Contactor 5.5 kW -400V + laux NC Coil 24V 50/60Hz  | 5         |
| FTC7A310T3   | F101548 | Contactor 7.5 kW -400V + laux NO Coil 110V 50/60Hz | 5         |
| FTC7A310T5   | F101549 | Contactor 7.5 kW -400V + laux NO Coil 230V 50/60Hz | 5         |
| FTC7A310T13  | F101550 | Contactor 7.5 kW -400V + laux NO Coil 380V 50/60Hz | 5         |
| FTC7A301T3   | F101551 | Contactor 7.5 kW -400V + laux NC Coil 110V 50/60Hz | 5         |
| FTC7A301T5   | F101552 | Contactor 7.5 kW -400V + laux NC Coil 230V 50/60Hz | 5         |
| FTC7A301T13  | F101553 | Contactor 7.5 kW -400V + laux NC Coil 380V 50/60Hz | 5         |
| FTC7A310T2   | F101554 | Contactor 7.5 kW -400V + laux NO Coil 42V 50/60Hz  | 5         |
| FTC7A301T2   | F101555 | Contactor 7.5 kW -400V + laux NC Coil 42V 50/60Hz  | 5         |
| FTC7A310T9   | F101556 | Contactor 7.5 kW -400V + laux NO Coil 48V 50/60Hz  | 5         |
| FTC7A301T9   | F101557 | Contactor 7.5 kW -400V + laux NC Coil 42V 50/60Hz  | 5         |
| FTC7A310T1   | F101558 | Contactor 7.5 kW -400V + laux NO Coil 48V 50/60Hz  | 5         |
| FTC7A301T1   | F101559 | Contactor 7.5 kW -400V + laux NC Coil 48V 50/60Hz  | 5         |
| FTC11A310T3  | F101560 | Contactor 11 kW -400V + laux NO Coil 110V 50/60Hz  | 5         |
| FTC11A301T3  | F101561 | Contactor 11 kW -400V + laux NC Coil 110V 50/60Hz  | 5         |
| FTC11A310T5  | F101562 | Contactor 11 kW -400V + laux NO Coil 230V 50/60Hz  | 5         |
| FTC11A301T5  | F101563 | Contactor 11 kW -400V + laux NC Coil 230V 50/60Hz  | 5         |
| FTC11A310T13 | F101564 | Contactor 11 kW -400V + laux NO Coil 380V 50/60Hz  | 5         |
| FTC11A301T13 | F101565 | Contactor 11 kW -400V + laux NC Coil 380V 50/60Hz  | 5         |

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|--------------|---------|-----------------------------------------------------|-----------|
| FTC11A310T2  | F101566 | Contactor 11 kW -400V + laux NO Coil 42V 50/60Hz    | 5         |
| FTC11A301T2  | F101567 | Contactor 11 kW -400V + laux NC Coil 42V 50/60Hz    | 5         |
| FTC11A310T9  | F101568 | Contactor 11 kW -400V + laux NO Coil 48V 50/60Hz    | 5         |
| FTC11A301T9  | F101569 | Contactor 11 kW -400V + laux NC Coil 48V 50/60Hz    | 5         |
| FTC11A310T1  | F101570 | Contactor 11 kW -400V + laux NO Coil 24V 50/60Hz    | 5         |
| FTC11A301T1  | F101571 | Contactor 11 kW -400V + laux NC Coil 24V 50/60Hz    | 5         |
| FTC15A310T3  | F101572 | Contactor 15 kW -400V + laux NO Coil 110V 50/60Hz   | 5         |
| FTC15A301T3  | F101573 | Contactor 15 kW -400V + laux NC Coil 110V 50/60Hz   | 5         |
| FTC15A310T5  | F101574 | Contactor 15 kW -400V + laux NO Coil 230V 50/60Hz   | 5         |
| FTC15A301T5  | F101575 | Contactor 15 kW -400V + laux NC Coil 230V 50/60Hz   | 5         |
| FTC15A310T13 | F101576 | Contactor 15 kW -400V + laux NO Coil 380V 50/60Hz   | 5         |
| FTC15A301T13 | F101577 | Contactor 15 kW -400V + laux NC Coil 380V 50/60Hz   | 5         |
| FTC15A310T2  | F101578 | Contactor 15 kW -400V + laux NO Coil 42V 50/60Hz    | 5         |
| FTC15A301T2  | F101579 | Contactor 15 kW -400V + laux NC Coil 42V 50/60Hz    | 5         |
| FTC15A310T9  | F101580 | Contactor 15 kW -400V + laux NO Coil 48V 50/60Hz    | 5         |
| FTC15A301T9  | F101581 | Contactor 15 kW -400V + laux NC Coil 48V 50/60Hz    | 5         |
| FTC15A310T1  | F101582 | Contactor 15 kW -400V + laux NO Coil 24V 50/60Hz    | 5         |
| FTC15A301T1  | F101583 | Contactor 15 kW -400V + laux NC Coil 24V 50/60Hz    | 5         |
| FTC18A310T3  | F101584 | Contactor 18.5 kW -400V + laux NO Coil 110V 50/60Hz | 5         |
| FTC18A301T3  | F101585 | Contactor 18.5 kW -400V + laux NC Coil 110V 50/60Hz | 5         |
| FTC18A310T5  | F101586 | Contactor 18.5 kW -400V + laux NO Coil 230V 50/60Hz | 5         |
| FTC18A301T5  | F101587 | Contactor 18.5 kW -400V + laux NC Coil 230V 50/60Hz | 5         |
| FTC18A310T13 | F101588 | Contactor 18.5 kW -400V + laux NO Coil 380V 50/60Hz | 5         |
| FTC18A301T13 | F101589 | Contactor 18.5 kW -400V + laux NC Coil 380V 50/60Hz | 5         |
| FTC18A310T2  | F101590 | Contactor 18.5 kW -400V + laux NO Coil 42V 50/60Hz  | 5         |
| FTC18A301T2  | F101591 | Contactor 18.5 kW -400V + laux NC Coil 42V 50/60Hz  | 5         |
| FTC18A310T9  | F101592 | Contactor 18.5 kW -400V + laux NO Coil 48V 50/60Hz  | 5         |
| FTC18A301T9  | F101593 | Contactor 18.5 kW -400V + laux NC Coil 48V 50/60Hz  | 5         |
| FTC18A310T1  | F101594 | Contactor 18.5 kW -400V + laux NO Coil 24V 50/60Hz  | 5         |
| FTC18A301T1  | F101595 | Contactor 18.5 kW -400V + laux NC Coil 24V 50/60Hz  | 5         |
| FTC22A311M3  | F101596 | Contactor 22 kW -400V + laux NO Coil 110V 50/60Hz   | 1         |
| FTC22A311M5  | F101597 | Contactor 22 kW -400V + laux NO Coil 230V 50/60Hz   | 1         |
| FTC22A311M13 | F101598 | Contactor 22 kW -400V + laux NO Coil 380V 50/60Hz   | 1         |
| FTC22A311M2  | F101599 | Contactor 22 kW -400V + laux NO Coil 42V 50/60Hz    | 1         |
| FTC22A311M9  | F101600 | Contactor 22 kW -400V + laux NO Coil 48V 50/60Hz    | 1         |
| FTC22A311M1  | F101601 | Contactor 22 kW -400V + laux NO Coil 24V 50/60Hz    | 5         |
| FTC30A311M3  | F101602 | Contactor 30 kW -400V + laux NO Coil 110V 50/60Hz   | 5         |
| FTC30A311M5  | F101603 | Contactor 30 kW -400V + laux NO Coil 230V 50/60Hz   | 5         |
| FTC30A311M13 | F101604 | Contactor 30 kW -400V + laux NO Coil 380V 50/60Hz   | 5         |



## Contactors(Continued)

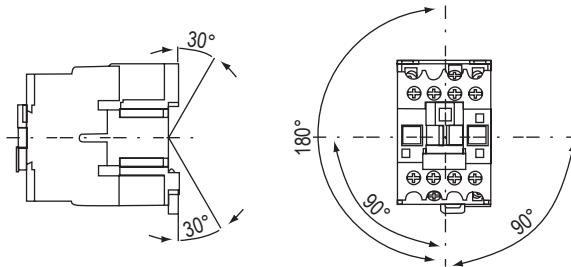


| Cat.no       | Ref.No  | Description                                       | Pack./MOQ |
|--------------|---------|---------------------------------------------------|-----------|
| FTC30A311M2  | F101605 | Contactor 30 kW -400V + laux NO Coil 42V 50/60Hz  | 5         |
| FTC30A311M9  | F101606 | Contactor 30 kW -400V + laux NO Coil 48V 50/60Hz  | 5         |
| FTC30A311M1  | F101607 | Contactor 30 kW -400V + laux NO Coil 24V 50/60Hz  | 1         |
| FTC37A311M3  | F101608 | Contactor 37 kW -400V + laux NO Coil 110V 50/60Hz | 1         |
| FTC37A311M5  | F101609 | Contactor 37 kW -400V + laux NO Coil 230V 50/60Hz | 1         |
| FTC37A311M13 | F101610 | Contactor 37 kW -400V + laux NO Coil 380V 50/60Hz | 1         |
| FTC37A311M2  | F101611 | Contactor 37 kW -400V + laux NO Coil 42V 50/60Hz  | 1         |
| FTC37A311M9  | F101612 | Contactor 37 kW -400V + laux NO Coil 48V 50/60Hz  | 1         |
| FTC37A311M1  | F101613 | Contactor 37 kW -400V + laux NO Coil 24V 50/60Hz  | 1         |
| FTC45A311M3  | F101614 | Contactor 45 kW -400V + laux NO Coil 110V 50/60Hz | 1         |
| FTC45A311M5  | F101615 | Contactor 45 kW -400V + laux NO Coil 230V 50/60Hz | 1         |
| FTC45A311M13 | F101616 | Contactor 45 kW -400V + laux NO Coil 380V 50/60Hz | 1         |
| FTC45A311M2  | F101617 | Contactor 45 kW -400V + laux NO Coil 42V 50/60Hz  | 1         |
| FTC45A311M9  | F101618 | Contactor 45 kW -400V + laux NO Coil 48V 50/60Hz  | 1         |
| FTC45A311M1  | F101619 | Contactor 45 kW -400V + laux NO Coil 24V          | 1         |

### Built-in auxiliary contacts

|                                                 |                                                                   |
|-------------------------------------------------|-------------------------------------------------------------------|
| Rated thermal current (1th at T< °C55)          | 10A                                                               |
| Rated insulation voltage (Ui) acc. IEC 60947    | 690A                                                              |
| Utilisation AC 15 acc.IEC                       | 24V-6A, 48V-6A, 120V-3A, 230V-2A, 400V-1.3A, 440V-1.1A, 600V-0.8A |
| Utilisation acc.cUL/UL                          | A600                                                              |
| Utilisation DC13 acc.IEC                        | 24V-5A, 48V-1.9A, 125V-0.6A, 250V-0.3A, 440V-0.1A                 |
| Short-circuit protection (max fuse class gL/gG) | 10A                                                               |

### Installation capabilities



All frames mounting positions with maximum six auxiliaries except four auxiliaries in case of Frame 1/Frame 2 at  $\pm 30$  degrees

### Mounting fixations

|                                                      | Frame | 1 | 2 | 3 |
|------------------------------------------------------|-------|---|---|---|
| Fixing by clipping onto 35+-0.3mm DIN rail (EN50022) |       | x | x |   |
| Fixing by clipping onto 75+-0.5mm DIN rail (EN50022) |       |   |   | x |

### Short-circuit

Short- circuit values, either for gL/gG fuse are:

- Ir according the standard.
- Iq 50 kA at 400V

### Protection against short-circuit

| Type 1 Coordination without TOR (gG type fuse) |    |     |     |    |    |      |    |    |    |     |
|------------------------------------------------|----|-----|-----|----|----|------|----|----|----|-----|
| Contact rating (kW)                            | 4  | 5.5 | 7.5 | 11 | 15 | 18.5 | 22 | 30 | 37 | 45  |
| Fuse rating (A)                                | 20 | 25  | 25  | 32 | 40 | 50   | 63 | 80 | 80 | 110 |

## Contactors

### Power circuit

| I <sub>e</sub> at 400V<br>AC3 (A) | Poles | I <sub>th</sub> (A) | AC3(kW)  |          |      |      |          |
|-----------------------------------|-------|---------------------|----------|----------|------|------|----------|
|                                   |       |                     | 230/220V | 400/380V | 415V | 500V | 690/660V |
| 9                                 | 3     | 20                  | 2.2      | 4        | 4    | 5.5  | 5.5      |
| 11.5                              | 3     | 25                  | 3        | 5.5      | 5.5  | 7.5  | 7.5      |
| 15.5                              | 3     | 25                  | 4        | 7.5      | 7.5  | 7.5  | 7.5      |
| 22                                | 3     | 32                  | 5.5      | 11       | 11   | 15   | 15       |
| 29                                | 3     | 40                  | 7.5      | 15       | 15   | 18.5 | 18.5     |
| 35                                | 3     | 50                  | 11       | 18.5     | 18.5 | 22   | 30       |
| 41                                | 3     | 60                  | 15       | 22       | 30   | 30   | 30       |
| 55                                | 3     | 80                  | 18.5     | 30       | 37   | 37   | 37       |
| 66                                | 3     | 80                  | 22       | 37       | 45   | 55   | 45       |
| 80                                | 3     | 110                 | 30       | 45       | 45   | 55   | 45       |

### Electrical endurance

| Frame | Contactors range (kW) | Electrical endurance*                          |
|-------|-----------------------|------------------------------------------------|
| 1     | 4, 5.5, 7.5, 11       | 0.75<br>*(AC3 @ 400V) (10 <sup>6</sup> cycles) |
| 2     | 15, 18.5              |                                                |
| 3     | 22, 30, 37, 45        |                                                |

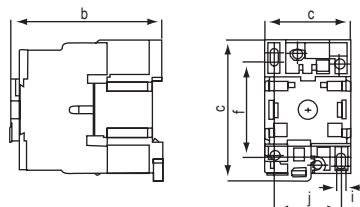
#### Max. operational rate

| Dual frequency coil Duty | Unit     | Frame 1 | Frame 2 | Frame 3 |
|--------------------------|----------|---------|---------|---------|
|                          |          | AC      | AC      | AC      |
| No load                  | Cycles/h | 3600    | 3600    | 3600    |
| AC3 with rated power     | Cycles/h | 900     | 900     | 900     |
| AC4 with rated power     | Cycles/h | 150     | 150     | 120     |

### Electrical endurance of built-in auxiliary contacts

| Frame | Contactors range (kW) | Mechanical endurance*      |
|-------|-----------------------|----------------------------|
| 1     | 4, 5.5, 7.5, 11       | 6                          |
| 2     | 15, 18.5              | 4 (10 <sup>6</sup> cycles) |
| 3     | 22, 30, 37, 45        |                            |

### Dimensions



Overall dimensions shall be measured as per the diagram below

#### Device dimensions(mm) within- ± 2 mm tolerance

| 3 Phase devices       | Frame 1 | Frame 2 | Frame 3          |
|-----------------------|---------|---------|------------------|
| Contactor rating (kW) | 4-7.5   | 11      | 15 18.5 22-37 45 |
| Width (a)             | 46      | 46      | 56 56 76 85      |
| Depth (b)             | 80      | 85      | 94 98 112 120    |
| Height (c)            | 74      | 74      | 84 84 127 127    |

#### Device dimensions (mm)

|              |       |       |       |       |         |         |
|--------------|-------|-------|-------|-------|---------|---------|
| Diameter (i) | 4.5   | 4.5   | 4.5   | 4.5   | 6.5     | 6.5     |
| (j)          | 34/35 | 34/35 | 40    | 40    | 40      | 40      |
| (f)          | 50/60 | 50/60 | 50/60 | 50/60 | 100/110 | 100/110 |