

■ Datasheet: Contactors 3-pole, CUBICO High, 37kW, 80A



■ SCHRACK-INFO

- Contactor with 230VAC or 24VAC drive and integrated auxiliary contacts
- Optional auxiliary contact blocks available
- According IEC/EN 60947-3

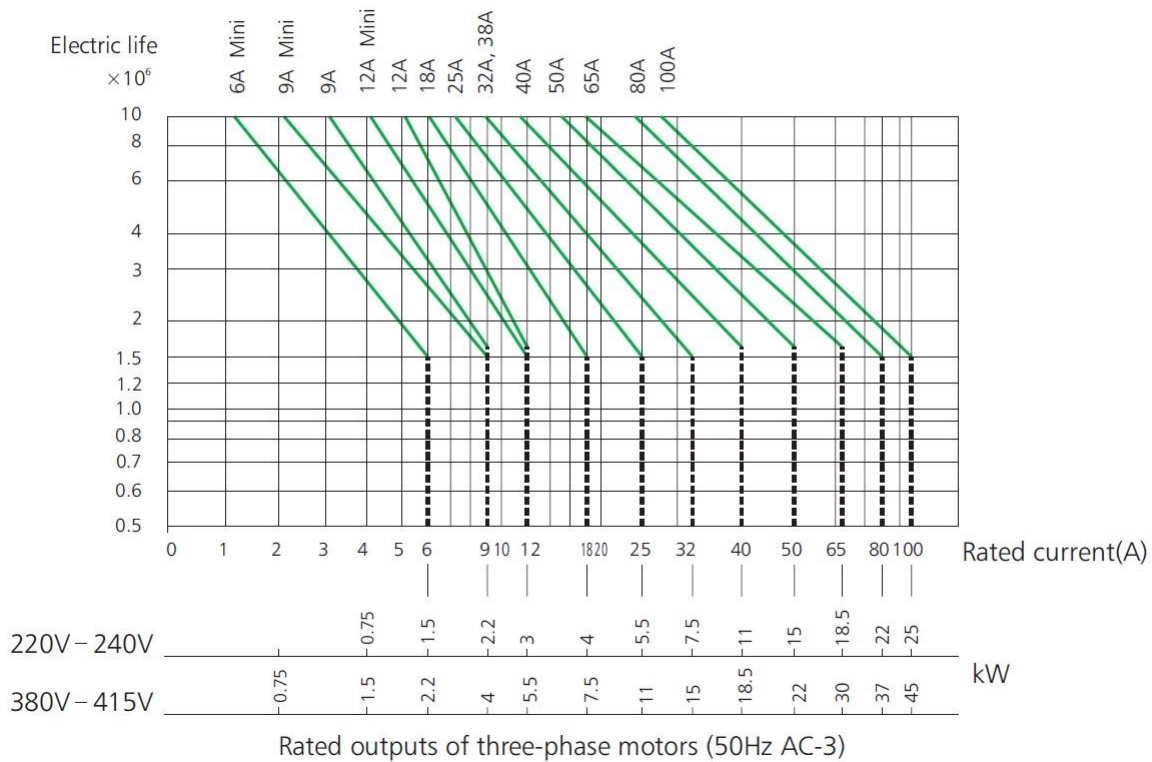
■ Technical datas

| | | |
|---------------------------------|------|------------------|
| Standard | | IEC/EN 60947-4-1 |
| Rated insulation voltage | | 690V AC |
| Rated frequency | | 50/60Hz |
| Rated impulse withstand voltage | | 8kV |
| Overvoltage category | | III |
| Rated current AC1 | | 125A |
| Rated current AC3 | 230V | 80A |
| | 400V | 80A |
| | 415V | 80A |
| | 690V | 49A |
| Rated current AC4 | 230V | 80A |
| | 400V | 80A |
| | 415V | 80A |
| | 690V | 49A |

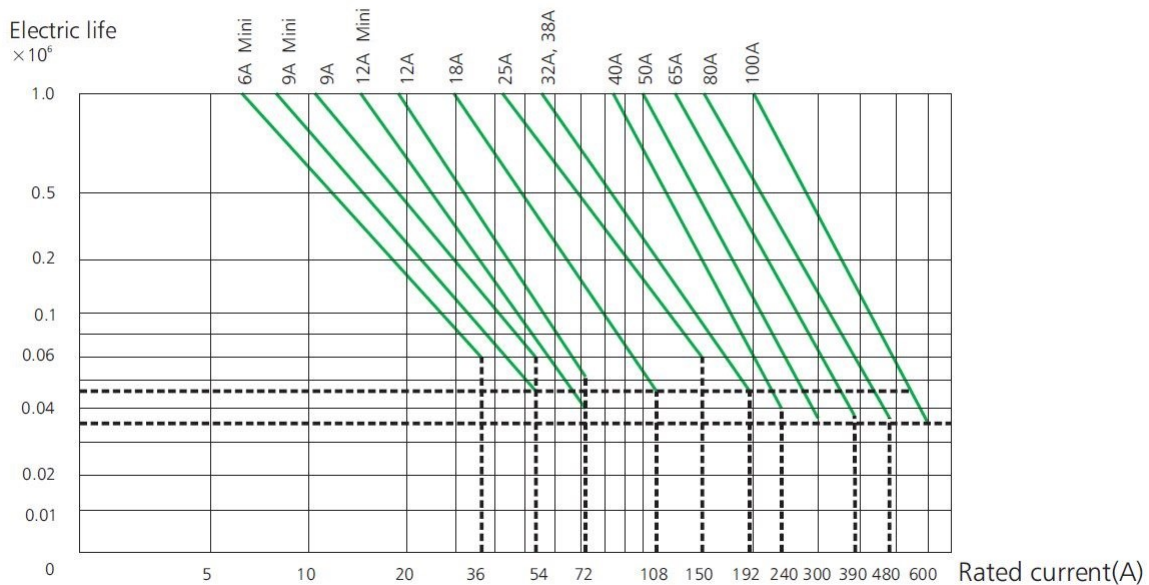
| | | |
|-------------------------------------|---------------|---|
| Rated making capacity | | 10 x I _e (AC3) / 12 x I _e (AC4) |
| Rated breaking capacity | | 8 x I _e (AC3) / 10 x I _e (AC4) |
| Short-time withstand current 10s | | 640A |
| Rated power AC3 | 230V | 22kW |
| | 400V | 37kW |
| | 415V | 45kW |
| | 690V | 45kW |
| Operating frequency | AC3 | 1.200 operations/h |
| | AC4 | 120 operations/h |
| Electrical lifetime | | 1.200.000 operations |
| Mechanical lifetime | | 10.000.000 operations |
| Configuration of main contacts | | |
| | 3-pole | 3NO |
| Configuration of auxiliary contacts | | 1NO and 1NC |
| Protection degree | | IP20 |
| Ambient air temperature | | - 5°C up to + 40°C |
| Storage temperature | | - 25°C up to + 55°C |
| Correction coefficient | 40°C | 1 |
| | 50°C | 0,875 |
| | 60°C | 0,75 |
| | 70°C | 0,625 |
| Altitude | | 2000m |
| Atmosphere conditions | | 50% humidity at +40°C |
| Installation position | | plane and vertical +/- 22,5° |
| Coil voltage | | 230VAC or 24VAC |
| Coil acting range | attraction | 85% - 110% U _s |
| | release | AC: 20%-70% U _s |
| Coil average power | start | 250VA |
| | holding | 30VA |
| Heat wastage | | 8W |
| Main contact action time | close | 30ms |
| | disconnection | 17ms |

| | | |
|--------------------------------------|---|-----------------------------|
| Terminal capacity of main circuit | flexible cable with ferrule | |
| | single cable | 16 - 50mm ² |
| | dual cable | 10 - 35mm ² |
| | Screw siz | M8 |
| | Torque | 6Nm |
| Terminal capacity of control circuit | flexible cable with ferrule | |
| | single cable | 1 - 4mm ² |
| | dual cable | 1 - 2,5mm ² |
| | rigid cable | |
| | single cable | 1 - 4mm ² |
| | dual cable | 1 - 4mm ² |
| | Screw size | M3,5 |
| | Torque | 1,2Nm |
| | Terminal capacity of auxiliary contacts | flexible cable with ferrule |
| single cable | | 1 - 4mm ² |
| dual cable | | 1 - 2,5mm ² |
| rigid cable | | |
| single cable | | 1 - 4mm ² |
| dual cable | | 1 - 4mm ² |
| Screw size | | M3,5 |
| Torque | | 1,2Nm |

Electrical life AC3



Electrical life AC4



Application in illumination circuit

| Incandescent lamp | | | |
|-------------------|------|----|--------------------------------|
| W | A | µF | max. number of lamps per phase |
| 60 | 0,27 | - | 296 |
| 75 | 0,34 | - | 235 |
| 100 | 0,45 | - | 177 |
| 150 | 0,68 | - | 117 |
| 200 | 0,71 | - | 88 |
| 300 | 1,4 | - | 57 |
| 500 | 2,3 | - | 34 |
| 750 | 3,4 | - | 23 |
| 1000 | 4,6 | - | 17 |

| Single fluorescent lamp with starter, without compensation | | | |
|--|------|----|--------------------------------|
| W | A | µF | max. number of lamps per phase |
| 20 | 0,39 | - | 205 |
| 40 | 0,45 | - | 177 |
| 64 | 0,7 | - | 114 |
| 80 | 0,8 | - | 100 |
| 110 | 1,15 | - | 66 |

| Single fluorescent lamp with starter, parallel compensation | | | |
|---|------|----|--------------------------------|
| W | A | µF | max. number of lamps per phase |
| 20 | 0,18 | 5 | 530 |
| 40 | 0,26 | 5 | 365 |
| 65 | 0,42 | 7 | 225 |
| 80 | 0,52 | 7 | 180 |
| 100 | 0,6 | 16 | 145 |
| 110 | 0,7 | 18 | 135 |

| Fluorescent lamps in dual mounting with starter, without compensation | | | |
|---|----------|----|--------------------------------|
| W | A | µF | max. number of lamps per phase |
| 2 x 20 | 2 x 0,22 | - | 180 |
| 2 x 40 | 2 x 0,41 | - | 96 |
| 2 x 65 | 2 x 0,67 | - | 58 |
| 2 x 80 | 2 x 0,82 | - | 48 |
| 2 x 110 | 2 x 1,10 | - | 36 |

| Fluorescent lamps in dual mounting with starter, with compensation in series | | | |
|--|----------|----|--------------------------------|
| W | A | μF | max. number of lamps per phase |
| 2 x 20 | 2 x 0,13 | - | 306 |
| 2 x 40 | 2 x 0,24 | - | 166 |
| 2 x 65 | 2 x 0,39 | - | 102 |
| 2 x 80 | 2 x 0,48 | - | 82 |
| 2 x 110 | 2 x 0,65 | - | 60 |

| Single fluorescent lamp without starter, without compensation | | | |
|---|------|----|--------------------------------|
| W | A | μF | max. number of lamps per phase |
| 20 | 0,43 | - | 186 |
| 40 | 0,55 | - | 145 |
| 65 | 0,8 | - | 100 |
| 80 | 0,95 | - | 84 |
| 110 | 0,4 | - | 57 |

| Single fluorescent lamp with starter, with parallel compensation | | | |
|--|------|----|--------------------------------|
| W | A | μF | max. number of lamps per phase |
| 20 | 0,19 | 5 | 421 |
| 40 | 0,29 | 5 | 275 |
| 65 | 0,46 | 7 | 173 |
| 80 | 0,57 | 7 | 140 |
| 110 | 0,79 | 16 | 101 |

| Fluorescent lamp without starter, without compensation | | | |
|--|----------|----|--------------------------------|
| W | A | μF | max. number of lamps per phase |
| 2 x 20 | 2 x 0,25 | - | 160 |
| 2 x 40 | 2 x 0,47 | - | 84 |
| 2 x 65 | 2 x 0,76 | - | 52 |
| 2 x 80 | 2 x 0,93 | - | 42 |
| 2 x 110 | 2 x 1,3 | - | 30 |

| Fluorescent lamp in dual mounting without starter, with compensation in series | | | |
|---|----------|----|-----------------------------------|
| W | A | μF | max. number of lamps per phase |
| 2 x 20 | 2 x 0,15 | - | 234 |
| 2 x 40 | 2 x 0,26 | - | 152 |
| 2 x 65 | 2 x 0,43 | - | 92 |
| 2 x 80 | 2 x 0,53 | - | 74 |
| 2 x 110 | 2 x 0,72 | - | 54 |

| Low press sodium vapor lamps with parallel compensation | | | |
|---|-----|----|-----------------------------------|
| W | A | μF | max. number of lamps per phase |
| 35 | 0,3 | 17 | 200 |
| 55 | 0,4 | 17 | 150 |
| 90 | 0,6 | 25 | 100 |
| 135 | 0,9 | 36 | 66 |
| 150 | 1 | 36 | 60 |
| 180 | 1,2 | 36 | 50 |
| 200 | 1,3 | 36 | 46 |

| Low press sodium vapor lamps without compensation | | | |
|---|------|----|-----------------------------------|
| W | A | μF | max. number of lamps per phase |
| 150 | 1,9 | - | 31 |
| 250 | 3,2 | - | 18 |
| 400 | 5 | - | 12 |
| 700 | 8,8 | - | 6 |
| 1000 | 12,4 | - | 4 |

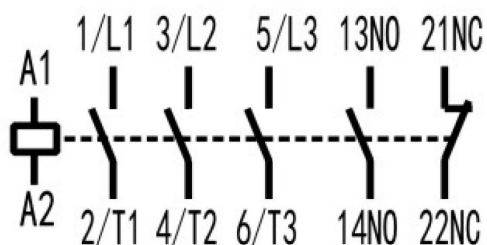
| Low press sodium vapor lamps with parallel compensation | | | |
|---|------|-----|-----------------------------------|
| W | A | μF | max. number of lamps per phase |
| 150 | 0,84 | 20 | 71 |
| 250 | 1,4 | 32 | 42 |
| 400 | 2,2 | 48 | 27 |
| 700 | 3,6 | 96 | 15 |
| 1000 | 5,5 | 120 | 10 |

| High press hydrargyrum lamps without compensation | | | |
|---|------|---------------|-----------------------------------|
| W | A | μF | max. number of lamps per phase |
| 50 | 0,54 | - | 111 |
| 80 | 0,81 | - | 74 |
| 125 | 1,2 | - | 49 |
| 250 | 2,3 | - | 26 |
| 400 | 4,1 | - | 14 |
| 700 | 6,8 | - | 8 |
| 1000 | 9,9 | - | 6 |

| High press hydrargyrum lamps with parallel compensation | | | |
|---|------|---------------|-----------------------------------|
| W | A | μF | max. number of lamps per phase |
| 50 | 0,3 | 10 | 120 |
| 80 | 0,45 | 10 | 120 |
| 125 | 0,67 | 10 | 89 |
| 250 | 1,3 | 18 | 46 |
| 400 | 2,3 | 25 | 26 |
| 700 | 3,8 | 40 | 15 |
| 1000 | 5,5 | 60 | 10 |

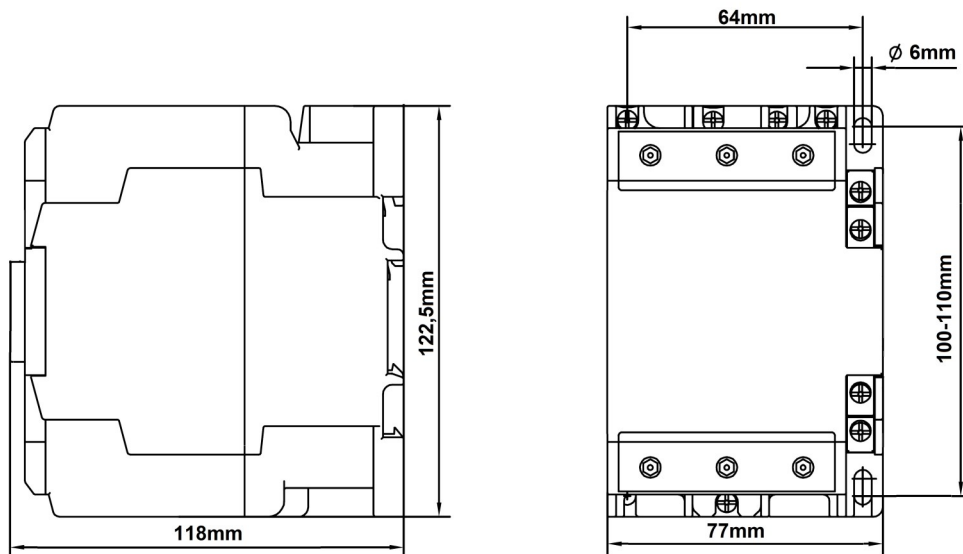
■ Wiring diagram

3-pole, 1NO + 1NC



Dimensions

230VAC or 24VAC Coil



Articles

Contactors 3-pole, CUBICO High, 37kW, 80A

| Description | order no. |
|---|------------|
| Contactor 3-pole, CUBICO High, 37kW, 80A, 1NO+1NC, 230VAC | LZDH80B3-- |
| Contactor 3-pole, CUBICO High, 37kW, 80A, 1NO+1NC, 24VAC | LZDH80B0-- |