



Sample image

## Datasheet

**Article number:** 70002741

**Designation:** CA10.A240.FT2

**Description:** Switch

### IEC 60947-3 EN 60947-3, VDE 0660 Teil 107

#### Rated insulation voltage Ui

Voltage (V) AC / DC  
690 AC / DC

#### Rated impulse withstand voltage Uimp

| Voltage (kV) | Overvoltage category | Pollution degree                                         | Supply system       | Function |
|--------------|----------------------|----------------------------------------------------------|---------------------|----------|
| 4 III        | 3                    | Valid for lines with grounded common neutral termination | Switch disconnecter |          |

#### Rated uninterrupted current Iu/Ith

| Current (A) | Ambient temperature (°C) | Peak temperature (°C) additional requirements                       |
|-------------|--------------------------|---------------------------------------------------------------------|
| 20          | 55                       | 60 Ambient temperature +55°C during 24 hours with peaks up to +60°C |

#### Rated operational current Ie

| Utilization category | Voltage (V) | Current (A) |
|----------------------|-------------|-------------|
| AC-15                | 220 - 240   | 6           |
| AC-15                | 380 - 440   | 4           |

#### Rated operational power

| Utilization category | Voltage (V) | No. of phases | No. of poles | Power (kW) |
|----------------------|-------------|---------------|--------------|------------|
| AC-3                 | 220 - 240   | 3             | 3            | 3          |
| AC-3                 | 380 - 440   | 3             | 3            | 5,50       |
| AC-3                 | 660 - 690   | 3             | 3            | 5,50       |
| AC-3                 | 220 - 240   | 1             | 2            | 2,20       |
| AC-3                 | 380 - 440   | 1             | 2            | 3          |
| AC-23A               | 220 - 240   | 3             | 3            | 3,70       |
| AC-23A               | 380 - 440   | 3             | 3            | 7,50       |
| AC-23A               | 660 - 690   | 3             | 3            | 7,50       |
| AC-23A               | 220 - 240   | 1             | 2            | 2,50       |
| AC-23A               | 380 - 440   | 1             | 2            | 3,70       |

#### Max Fuse Rating IEC

| Fuse characteristic | No. of Fuses | Current (A) |
|---------------------|--------------|-------------|
| gG                  | 1            | 25          |

### UL60947-4-1, UL508

#### Nominal Voltage

Voltage (V) AC / DC  
300 AC / DC

#### Rated insulation voltage Ui

Voltage (V) AC / DC  
300 AC

#### Rated thermal current

| Current (A) | Ambient temperature (°C) Additional Text |
|-------------|------------------------------------------|
| 20          | 0 - 40 --                                |

#### Horsepower rating

| Across-the-Line Motor Starting | Voltage (V) | No. of phases | No. of poles | Power (HP) | Ambient temperature [°C] |
|--------------------------------|-------------|---------------|--------------|------------|--------------------------|
| Reversing                      | 110 - 120   | 1             | 2            | 0,17       | 40                       |
| Reversing                      | 220 - 240   | 1             | 2            | 0,50       | 40                       |
| Reversing                      | 277 - 277   | 1             | 2            | 0,60       | 40                       |
| Reversing                      | 110 - 120   | 3             | 3            | 0,50       | 40                       |
| Reversing                      | 220 - 240   | 3             | 3            | 1          | 40                       |
| DOL                            | 110 - 120   | 1             | 2            | 0,50       | 40                       |
| DOL                            | 220 - 240   | 1             | 2            | 1          | 40                       |
| DOL                            | 277 - 277   | 1             | 2            | 2          | 40                       |
| DOL                            | 110 - 120   | 3             | 3            | 1,50       | 40                       |
| DOL                            | 220 - 240   | 3             | 3            | 3          | 40                       |

#### Pilot duty rating code

Duty Code  
A300

#### SCCR / Max. fuse rating

##### Conditions of acceptability

These devices are suitable for use on circuits capable of delivering not more than 5000 rms symmetrical amperes, 600V ac max. when protected by Class RK1 fuses. Manual Motor Controllers when intended for use as a motor disconnecter are suitable for use on a circuit capable of delivering not more than 5000 rms symmetrical amperes, 600V ac max. when protected by 30A Class J time delay fuses.

#### Temp. rating of wire

| Temperature rating (°C) | Current (A) Text        |
|-------------------------|-------------------------|
| 60 - 75                 | -- Use copper wire only |

|                                                                                                                                      |                   |                               |                          |                                    |                           |                                                                                       |
|--------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------------------|--------------------------|------------------------------------|---------------------------|---------------------------------------------------------------------------------------|
| Connecting instructions                                                                                                              |                   |                               |                          |                                    |                           |                                                                                       |
| Markings                                                                                                                             |                   |                               |                          |                                    |                           |                                                                                       |
| When intended for use as a motor disconnecter the device shall be provided with a method of being locked in the OFF-position.        |                   |                               |                          |                                    |                           |                                                                                       |
| General Use                                                                                                                          |                   |                               |                          |                                    |                           |                                                                                       |
| AC / DC                                                                                                                              | Voltage (V)       | Current (A)                   | No. of phases            | No. of poles                       | No. of contacts in series |                                                                                       |
| AC                                                                                                                                   | 300               | 20                            | 1                        | 2                                  | 1                         |                                                                                       |
| AC                                                                                                                                   | 300               | 20                            | 3                        | 3                                  | 1                         |                                                                                       |
| CSA                                                                                                                                  |                   |                               |                          |                                    |                           |                                                                                       |
| Nominal Voltage                                                                                                                      |                   |                               |                          |                                    |                           |                                                                                       |
|                                                                                                                                      |                   |                               |                          | Voltage (V)                        | AC / DC                   |                                                                                       |
|                                                                                                                                      |                   |                               |                          | 300 AC                             |                           |                                                                                       |
| Rated insulation voltage UI                                                                                                          |                   |                               |                          |                                    |                           |                                                                                       |
|                                                                                                                                      |                   |                               |                          | Voltage (V)                        | AC / DC                   |                                                                                       |
|                                                                                                                                      |                   |                               |                          | 300 AC                             |                           |                                                                                       |
| Rated thermal current                                                                                                                |                   |                               |                          |                                    |                           |                                                                                       |
|                                                                                                                                      |                   | Current (A)                   | Ambient temperature (°C) |                                    | Additional Text           |                                                                                       |
|                                                                                                                                      |                   | 20                            | 0 - 40                   |                                    | --                        |                                                                                       |
| Horsepower rating                                                                                                                    |                   |                               |                          |                                    |                           |                                                                                       |
| Across-the-Line Motor Starting                                                                                                       |                   |                               |                          | Voltage (V)                        | No. of phases             | No. of poles                                                                          |
|                                                                                                                                      |                   |                               |                          | 110 - 120                          | 1                         | 2                                                                                     |
| DOL                                                                                                                                  |                   |                               |                          | 220 - 240                          | 1                         | 2                                                                                     |
| DOL                                                                                                                                  |                   |                               |                          | 277 - 277                          | 1                         | 2                                                                                     |
| DOL                                                                                                                                  |                   |                               |                          | 110 - 120                          | 3                         | 3                                                                                     |
| DOL                                                                                                                                  |                   |                               |                          | 220 - 240                          | 3                         | 3                                                                                     |
|                                                                                                                                      |                   |                               |                          |                                    |                           |                                                                                       |
| Pilot duty rating code                                                                                                               |                   |                               |                          |                                    |                           |                                                                                       |
| Duty Code                                                                                                                            |                   |                               |                          |                                    |                           |                                                                                       |
| A300                                                                                                                                 |                   |                               |                          |                                    |                           |                                                                                       |
| Temp. rating of wire                                                                                                                 |                   |                               |                          |                                    |                           |                                                                                       |
|                                                                                                                                      |                   |                               | Temperature rating (°C)  | Current (A) Text                   |                           |                                                                                       |
|                                                                                                                                      |                   |                               | 75                       | -- only                            |                           |                                                                                       |
| General Use                                                                                                                          |                   |                               |                          |                                    |                           |                                                                                       |
| AC / DC                                                                                                                              | Voltage (V)       | Current (A)                   | No. of phases            | No. of poles                       | No. of contacts in series |                                                                                       |
| AC                                                                                                                                   | 300               | 20                            | 1                        | 1                                  | 1                         |                                                                                       |
| GENERAL TECHNICAL INFORMATION                                                                                                        |                   |                               |                          |                                    |                           |                                                                                       |
| Tightening torque of screws                                                                                                          |                   |                               |                          |                                    |                           |                                                                                       |
|                                                                                                                                      |                   |                               |                          | tightening torque (Nm)             | tightening torque (lb-in) |                                                                                       |
|                                                                                                                                      |                   |                               |                          | 0,60                               | 5                         |                                                                                       |
| Stripping length                                                                                                                     |                   |                               |                          |                                    |                           |                                                                                       |
|                                                                                                                                      |                   |                               |                          | Length (mm)                        | --                        |                                                                                       |
|                                                                                                                                      |                   |                               |                          | 8 STRIPPINGLENGTH                  |                           |                                                                                       |
| Size of conductor                                                                                                                    |                   |                               |                          |                                    |                           |                                                                                       |
| composition of conductor                                                                                                             | Min. / Max. value | No. of conductor per terminal |                          | Cross section (mm²) or (AWG/kcmil) |                           | Material of the wire                                                                  |
| solid wire                                                                                                                           | Min.              | 1                             |                          | 0.5mm²                             |                           | Copper                                                                                |
| solid wire                                                                                                                           | Min.              | 2                             |                          | 0.5mm²                             |                           | Copper                                                                                |
| flexible wire                                                                                                                        | Min.              | 1                             |                          | 0.75mm²                            |                           | Copper                                                                                |
| flexible wire                                                                                                                        | Min.              | 2                             |                          | 0.75mm²                            |                           | Copper                                                                                |
| flexible wire                                                                                                                        | Max.              | 2                             |                          | 2.5mm²                             |                           | Copper                                                                                |
| flexible wire                                                                                                                        | Max.              | 2                             |                          | AWG 14                             |                           | Copper                                                                                |
| Single-core or stranded wire                                                                                                         | Max.              | 2                             |                          | AWG 12                             |                           | Copper                                                                                |
| Single-core or stranded wire                                                                                                         | Max.              | 2                             |                          | 2.5mm²                             |                           | Copper                                                                                |
| flexible wire with ferrule according to DIN 46228                                                                                    | Min.              | 1                             |                          | 0.5mm²                             |                           | Copper                                                                                |
| flexible wire with ferrule according to DIN 46228                                                                                    | Max.              | 2                             |                          | 2.5mm²                             |                           | Copper                                                                                |
| flexible wire with ferrule according to DIN 46228                                                                                    | Min.              | 2                             |                          | 0.5mm²                             |                           | Copper                                                                                |
| Approbations                                                                                                                         |                   |                               |                          |                                    |                           |                                                                                       |
| Specification                                                                                                                        |                   |                               |                          |                                    |                           | Marking                                                                               |
| EAC                                                                                                                                  |                   |                               |                          |                                    |                           |  |
| CE marking                                                                                                                           |                   |                               |                          |                                    |                           |  |
| UK Directives                                                                                                                        |                   |                               |                          |                                    |                           |  |
| CSA C.22.2 No.14                                                                                                                     |                   |                               |                          |                                    |                           |  |
| GB/T14048.3                                                                                                                          |                   |                               |                          |                                    |                           |  |
| Recommended screw driver                                                                                                             |                   |                               |                          |                                    |                           |                                                                                       |
| Type of screw driver                                                                                                                 |                   |                               |                          | Value                              |                           |                                                                                       |
| Cross Screwdriver                                                                                                                    |                   |                               |                          | PH1                                |                           |                                                                                       |
| Slot screwdriver according to DIN 5264                                                                                               |                   |                               |                          | 0,8x4                              |                           |                                                                                       |
| General Information                                                                                                                  |                   |                               |                          |                                    |                           |                                                                                       |
| Text                                                                                                                                 |                   |                               |                          |                                    |                           |                                                                                       |
| - Do not lubricate or treat contacts.                                                                                                |                   |                               |                          |                                    |                           |                                                                                       |
| - Switches may only be mounted, connected and set into operation by qualified persons according to the accepted rules of technology. |                   |                               |                          |                                    |                           |                                                                                       |

## General Information

### Text

- Use copper wire only. Do not coat the wire end with tin.
- Terminals with factory fitted jumper links are tightened during production. Take care during installation to ensure factory fitted links are not lost by undoing both sides of linked terminals. After wiring, all terminal screws must be tightened to recommended torque specifications.
- After installation of the switches the spacings between the terminals must be sufficient to fulfill the requirement of the applicable standards.

## Waste Electrical & Electronic Equipment (WEEE)

### Picture name Description



Do not throw in the trash as care must be taken to ensure environmentally sound disposal and recycling. Please either use an environmentally friendly waste disposal company; return to the supplier for disposal; or return direct to the manufacturer, Kraus & Naimer. You can find local Kraus & Naimer offices at [www.krausnaimer.com](http://www.krausnaimer.com)

## Proposition 65

### Picture name Description



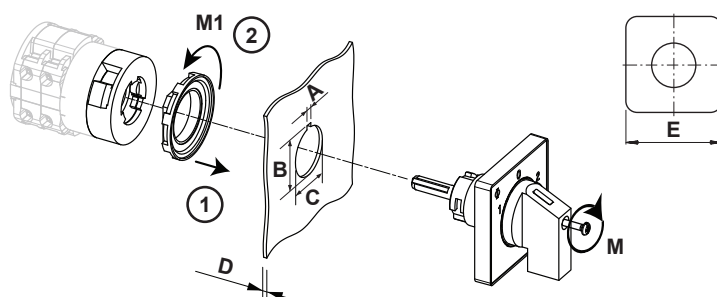
WARNING: This product can expose you to chemicals including nickel and lead, which is known to the State of California to cause cancer. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

Classification Contact: Rigid contact bridge

Classification Contact Mat: Silver

Classification Terminal: Screw terminal

## Mounting-FT2



|                      |   |                   |
|----------------------|---|-------------------|
| IP - Code front side |   | IP66, IP67, IP69k |
| Stages               |   | 1,00 - 12,00      |
| A                    | H | 3,20 mm           |
| A+_tol.              | H | 0,20 mm           |
| A-_tol.              | H | 0,00 mm           |
| B                    | H | 24,10 mm          |
| B+_tol.              | H | 0,40 mm           |
| B-_tol.              | H | 0,00 mm           |
| C                    | Ø | 22,30 mm          |
| C+_tol.              | Ø | 0,40 mm           |
| C-_tol.              | Ø | 0,00 mm           |
| D                    | H | <= 6,00 mm        |
| E                    | □ | 48,00 mm          |
| M                    | ↺ | 0,50 Nm           |
| M1                   | ↺ | 1,80 Nm           |

## Wiring diagram

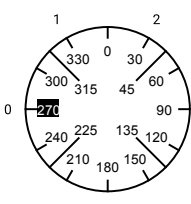
CA10.A240.FT2



## Switch program

CA10.A240.FT2

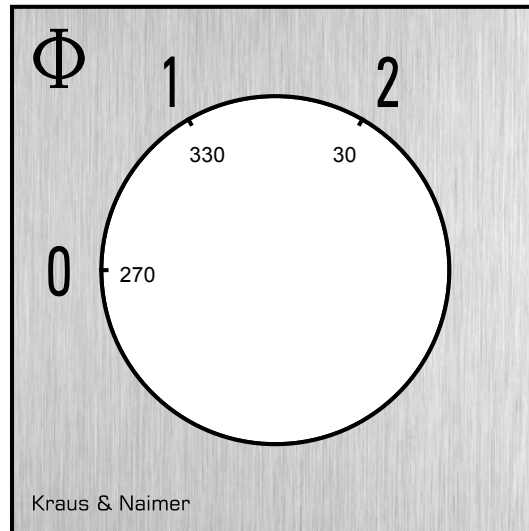
 Kraus & Naimer

|                                                                                                           |  | CA10 |   | A240 |   | Page 1 of 1 |    |    |    |    |    |    |    |
|-----------------------------------------------------------------------------------------------------------|--|------|---|------|---|-------------|----|----|----|----|----|----|----|
| <b>Face Plate</b>                                                                                         |  |      |   |      |   |             |    |    |    |    |    |    |    |
|                          |  | 1    | 3 | 5    | 7 | 9           | 11 | 13 | 15 | 17 | 19 | 21 | 23 |
|                          |  |      |   |      |   |             |    |    |    |    |    |    |    |
| Switching Angle <input type="text" value="60"/><br>Total switching Angle <input type="text" value="120"/> |  | 2    | 4 | 6    | 8 | 10          | 12 | 14 | 16 | 18 | 20 | 22 | 24 |
| 0                                                                                                         |  | 270  |   |      |   |             |    |    |    |    |    |    |    |
|                                                                                                           |  | 285  |   |      |   |             |    |    |    |    |    |    |    |
|                                                                                                           |  | 300  |   |      |   |             |    |    |    |    |    |    |    |
|                                                                                                           |  | 315  |   |      |   |             |    |    |    |    |    |    |    |
| 1                                                                                                         |  | 330  |   |      |   |             |    |    |    |    |    |    |    |
|                                                                                                           |  | 345  |   |      |   |             |    |    |    |    |    |    |    |
|                                                                                                           |  | 0    |   |      |   |             |    |    |    |    |    |    |    |
|                                                                                                           |  | 15   |   |      |   |             |    |    |    |    |    |    |    |
| 2                                                                                                         |  | 30   |   |      |   |             |    |    |    |    |    |    |    |
|                                                                                                           |  | 45   |   |      |   |             |    |    |    |    |    |    |    |
|                                                                                                           |  | 60   |   |      |   |             |    |    |    |    |    |    |    |
|                                                                                                           |  | 75   |   |      |   |             |    |    |    |    |    |    |    |
|                                                                                                           |  | 90   |   |      |   |             |    |    |    |    |    |    |    |
|                                                                                                           |  | 105  |   |      |   |             |    |    |    |    |    |    |    |
|                                                                                                           |  | 120  |   |      |   |             |    |    |    |    |    |    |    |
|                                                                                                           |  | 135  |   |      |   |             |    |    |    |    |    |    |    |
|                                                                                                           |  | 150  |   |      |   |             |    |    |    |    |    |    |    |
|                                                                                                           |  | 165  |   |      |   |             |    |    |    |    |    |    |    |
|                                                                                                           |  | 180  |   |      |   |             |    |    |    |    |    |    |    |
|                                                                                                           |  | 195  |   |      |   |             |    |    |    |    |    |    |    |
|                                                                                                           |  | 210  |   |      |   |             |    |    |    |    |    |    |    |
|                                                                                                           |  | 225  |   |      |   |             |    |    |    |    |    |    |    |
|                                                                                                           |  | 240  |   |      |   |             |    |    |    |    |    |    |    |
|                                                                                                           |  | 255  |   |      |   |             |    |    |    |    |    |    |    |

Version: 77

## Face plate

S0.F075/A10.E1L



## HANDLES

**Designation:** S0C.G251

**Handle colour:** "1" black

