



Sample image

## CA10

Type Size: S0

Classification Contact: Rigid contact bridge

Classification Contact Mat: Silver

Classification Terminal: Screw terminal

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

#### Rated insulation voltage Ui

| Voltage (V) | AC / DC    |
|-------------|------------|
| 690         | 50/60Hz/DC |

#### Rated impulse withstand voltage Uimp

| Voltage (kV) | Overvoltage category | Pollution degree | Supply system                                            | Function            |
|--------------|----------------------|------------------|----------------------------------------------------------|---------------------|
| 6            | III                  | 3                | Valid for lines with grounded common neutral termination | Switch              |
| 4            | III                  | 3                | Valid for lines with grounded common neutral termination | Switch disconnector |

#### 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 |

#### Conventional enclosed thermal current Ithe

| Current (A) | Ambient temperature (°C) | Peak temperature (°C) | Additional requirements                                          | No. of stages (from - to) | Mounting | Mounting size |
|-------------|--------------------------|-----------------------|------------------------------------------------------------------|---------------------------|----------|---------------|
| 20          | 35                       | 40                    | Ambient temperature +35°C during 24 hours with peaks up to +40°C | --                        | --       | --            |

#### Rated operational current Ie

| Utilization category | Voltage (V) | Current (A) |
|----------------------|-------------|-------------|
| AC-15                | 220 - 240   | 6           |
| AC-15                | 380 - 440   | 4           |
| AC-20A               | 690         | 20          |
| AC-21A               | 20 - 690    | 20          |
| AC-22A               | 220 - 500   | 20          |
| AC-22A               | 660 - 690   | 20          |

#### Rated operational power

| Utilization category | Voltage (V) | No. of phases | No. of poles | Power (kW) |
|----------------------|-------------|---------------|--------------|------------|
| AC-6b                | 380 - 400   | 3             | 3            | --         |
| AC-6b                | 220 - 230   | 1             | 2            | --         |
| AC-2                 | 220 - 240   | 3             | 3            | 4          |
| AC-2                 | 380 - 440   | 3             | 3            | 7,50       |
| AC-2                 | 500 - 500   | 3             | 3            | 10         |
| AC-2                 | 660 - 690   | 3             | 3            | 10         |
| AC-3                 | 220 - 240   | 3             | 3            | 3          |
| AC-3                 | 380 - 440   | 3             | 3            | 5,50       |
| AC-3                 | 500 - 500   | 3             | 3            | 5,50       |
| AC-3                 | 660 - 690   | 3             | 3            | 5,50       |
| AC-3                 | 110 - 120   | 1             | 2            | 0,60       |
| AC-3                 | 220 - 240   | 1             | 2            | 2,20       |
| AC-3                 | 380 - 440   | 1             | 2            | 3          |
| AC-4                 | 220 - 240   | 3             | 3            | 0,55       |
| AC-4                 | 380 - 440   | 3             | 3            | 1,50       |
| AC-4                 | 500 - 500   | 3             | 3            | 1,50       |
| AC-4                 | 660 - 690   | 3             | 3            | 1,50       |
| AC-4                 | 110 - 120   | 1             | 2            | 0,30       |
| AC-4                 | 220 - 240   | 1             | 2            | 0,75       |
| AC-4                 | 380 - 440   | 1             | 2            | 1,50       |
| AC-23A               | 220 - 240   | 3             | 3            | 3,70       |
| AC-23A               | 380 - 440   | 3             | 3            | 7,50       |
| AC-23A               | 500 - 500   | 3             | 3            | 7,50       |
| AC-23A               | 660 - 690   | 3             | 3            | 7,50       |



| Rated operational power |             |               |              |            |
|-------------------------|-------------|---------------|--------------|------------|
| Utilization category    | Voltage (V) | No. of phases | No. of poles | Power (kW) |
| AC-23A                  | 110 - 120   | 1             | 2            | 0,75       |
| 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**

| Rated insulation voltage Ui |  |             |         |  |
|-----------------------------|--|-------------|---------|--|
|                             |  | Voltage (V) | AC / DC |  |
|                             |  | 300         | AC      |  |

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

**CSA**

| Rated insulation voltage Ui |  |             |         |  |
|-----------------------------|--|-------------|---------|--|
|                             |  | Voltage (V) | AC / DC |  |
|                             |  | 300         | AC      |  |

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

**GENERAL TECHNICAL INFORMATION**

| Rated short-time withstand current Icw |  |          |             |  |
|----------------------------------------|--|----------|-------------|--|
|                                        |  | Time (s) | Current (A) |  |
|                                        |  | 1        | 140         |  |

| 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               |

| Recommended screw driver               |                           |
|----------------------------------------|---------------------------|
| Type of screw driver                   | Value                     |
| Cross Screwdriver                      | PH1                       |
| Slot screwdriver according to DIN 5264 | 0,8x4                     |
| Tightening torque of screws            |                           |
|                                        | tightening torque (Nm)    |
|                                        | 0.60                      |
|                                        | tightening torque (lb-in) |
|                                        | 5                         |

| Approbations  |         |  |  |  |
|---------------|---------|--|--|--|
| Specification | Marking |  |  |  |

EAC



CE marking



UK Directives



Lloyd's Register EMEA



IEC 60947-3; EN 60947-3; VDE 0660 Teil107

**IEC 60947-3**  
**EN 60947-3**



| Approbations                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                      | Marking                                                                             |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|-------------------------------------------------------------------------------------|
| Specification                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                      |                                                                                     |
| UL 60947-4-1; CSA C22.2 No. 60947-4-1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                      |  |
| CSA C.22.2 No.14                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                      |  |
| GB/T14048.3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                      |  |
| Russian Maritime Register of Shipping                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                      |  |
| Power loss per pole                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                      | Power (W)                                                                           |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                      | 0,90                                                                                |
| Conditions during transport and storing                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                      |                                                                                     |
| Minimum temperature (°C)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Maximum temperature (°C)             | additional requirements                                                             |
| -40                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 85                                   | In case of temperatures below -5°C no shock load permissible                        |
| Shock / Vibration                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                      |                                                                                     |
| Type of oscillation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Values                               |                                                                                     |
| Resistance to vibration                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Min. 4g, 2-100Hz, 1,6mm              |                                                                                     |
| Resistance to shock                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Min. 5g, 6ms                         |                                                                                     |
| Resistance to vibration                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | IEC 61373 (1999) Category 1, Class B |                                                                                     |
| Resistance to shock                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | min. 5g, 30ms                        |                                                                                     |
| General Information                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                      |                                                                                     |
| Text                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                      |                                                                                     |
| <ul style="list-style-type: none"><li>- Use only copper wires with or without tinned/silver-plated individual wires. Soldering the end of the wire before wiring is not allowed.</li><li>- DC switching capacity applies to ON/OFF switches.</li><li>- Terminals with factory fitted jumper links are tightened during production for loss prevention. When opening the terminal clamps, make sure that no factory fitted links get lost and that all wire connections are properly seated.</li><li>- After wiring, ALL terminal screws must be tightened to the specified torque values.</li><li>- The protection class of the selected mounting type may vary if optional extras are used.</li><li>- Do not lubricate or treat contacts.</li><li>- Switches may only be mounted, connected and set into operation by qualified persons according to the accepted rules of technology.</li><li>- After installation of the switches the spacings between the terminals must be sufficient to fulfill the requirement of the applicable standards.</li></ul> |                                      |                                                                                     |
| Operating temperature                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                      |                                                                                     |
| Min. Temperature [°C]                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                      | Max. Temperature [°C]                                                               |
| -25                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                      | 60                                                                                  |