



## CA10

Type Size: S0

Classification Contact: Rigid contact bridge

Classification Contact Mat: Silver

Classification Terminal: Screw terminal

Sample image

### 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            |
| 6                                          | III                      |                          | 3                                                                | Valid for lines with grounded common neutral termination |                                                                  | Switch              |
| 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 |                     |
| Conventional enclosed thermal current Ithe |                          |                          |                                                                  |                                                          |                                                                  |                     |
| Current (A)                                | Ambient temperature (°C) | Peak temperature (°C)    | Additional requirements                                          |                                                          | No. of stages (from - to)                                        | Mounting            |
| 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                |

| Rated operational power |              |               |              |             |
|-------------------------|--------------|---------------|--------------|-------------|
| Utilization category    | Voltage (V)  | No. of phases | No. of poles | Power (kW)  |
| 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        |
| 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

| Tightening torque of screws                       |                   |                               |                                    |                      |
|---------------------------------------------------|-------------------|-------------------------------|------------------------------------|----------------------|
| tightening torque (Nm)                            |                   |                               | tightening torque (lb-in)          |                      |
| 0,60                                              |                   |                               | 5                                  |                      |
| 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               |

| 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**

UL 60947-4-1; CSA C22.2 No. 60947-4-1



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