

### Main Features



|                                    |                       |
|------------------------------------|-----------------------|
| Reference                          | : CWCA0               |
| Product code                       | : 12487341            |
| Rated current Ie AC-3 (Ue ≤ 440 V) | : 10 A                |
| Main contacts (power)              | : No main contacts    |
| Auxiliary contacts                 | : 2 NO + 2 NC         |
| Control voltage                    | : 110V 50Hz/120V 60Hz |
| Type of terminal                   | : Screw               |

### Basic data

|  |                        |
|--|------------------------|
| Rated utilization voltage Ue                       |                        |
| - IEC / UL   | : 690 V / 600 V        |
| Isolation voltage Ui (pollution degree 3)          |                        |
| - IEC / UL   | : 690 V / 600 V        |
| Rated impulse withstand voltage Uimp               | : 4 kV                 |
| - Frequency limits [1]                             | : 25 Hz ... 400 Hz     |
| - Mechanical lifespan                              |                        |
| AC-operated contactor                              | : 10 million           |
| DC-operated contactor                              | : 12 million           |
| Electrical lifespan - Ie AC3                       | : Not available        |
| Number of coil terminals (AC Coil)                 |                        |
| AC coil contactors                                 | : 2                    |
| - DC coil contactors                               | : 2                    |
| Resistance to vibration (IEC 60068-2-6)            |                        |
| opened contactor                                   | : 2 g                  |
| closed contactor                                   | : 4 g                  |
| Resistance to mechanical shock (½ sinusoid = 11ms) |                        |
| opened contactor                                   | : 6 g                  |
| closed contactor                                   | : 10 g                 |
| Installation                                       | : DIN 35 mm (EN 50022) |
| Degree of protection (IEC 60529)                   |                        |
| Main circuit                                       | : IP20                 |
| Control circuit                                    | : IP20                 |

### Alternating current - control circuit

|   |                                |                  |
|---|--------------------------------|------------------|
| Isolation voltage Ui (pollution degree 3) |                                | : 690 V / 600 V  |
| - IEC / UL                                |                                |                  |
| Standard voltages for 50/60 Hz            |                                | : 12...660 V     |
| Command circuit operation limits          |                                |                  |
| - control circuit 60 Hz                   | - pick up                      | : 0,4...0,76xUs  |
|   | - drop out                     | : 0,25...0,65xUs |
| - control circuit 50 Hz                   | - pick up                      | : 0,4...0,76xUs  |
|   | - drop out                     | : 0,25...0,65xUs |
| - Average coil consumption                |                                |                  |
| - operating at 60 Hz                      | - closed magnetic circuit      | : 2,5...3,5 VA   |
|   | - power factor (cos φ)         | : 0,28           |
|   | - Thermal power dissipated     | : 1 W            |
|   | - closing the magnetic circuit | : 35 VA          |
| - operating at 50 Hz                      | - closed magnetic circuit      | : 2,5...3,5 VA   |
|   | - power factor (cos φ)         | : 0,28           |
|   | - Thermal power dissipated     | : 1 W            |
|   | - closing the magnetic circuit | : 35 VA          |
| Average time of operation                 |                                |                  |
| - closing the NO contacts                 |                                | : 8...20 ms      |
| - opening the NO contacts                 |                                | : 5...15 ms      |

### Direct current - command circuit

|                                  |   |
|----------------------------------|---|
| - IEC / UL                       |   |
| Standard voltages                | : |
| Command circuit operation limits | : |
| - pick up                        | : |
| - drop out                       | : |
| Average consumption              | : |
| - closed magnetic circuit        | : |
| - closing the magnetic circuit   | : |
| Thermal power dissipated         | : |
| Average time of operation        | : |
| - closing the NO contacts        | : |
| - opening the NO contacts        | : |

### Main contacts (power)

|                              |        |
|------------------------------|--------|
| Rated utilization current Ie |        |
| - AC-3 (Ue ≤ 440 V)          | : 10 A |

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## Contactors



|  |                    |
|--|--------------------|
| - AC-4 (U <sub>e</sub> ≤ 440 V)  | : Not available    |
| - AC-1 (θ ≤ 55 °C, U <sub>e</sub> ≤ 690 V)   | : 10 A             |
| Rated utilization voltage U <sub>e</sub>   |                    |
| - IEC / UL   | : 690 V / 600 V    |
| Number of main contacts  | : No main contacts |
| Establishment capacity (IEC 60947)   | : Not available    |
| Breaking capacity (IEC/EN 60947)   |                    |
| - U <sub>e</sub> ≤400V   | : Not available    |
| - U <sub>e</sub> =500V   | : Not available    |
| - U <sub>e</sub> =690V   | : Not available    |
| Temporary permissible current (without previously current conduction during 15 min at θ ≤ 40 °C) |                    |
| - 1 sec  | : Not available    |
| - 10 sec   | : Not available    |
| - 10 sec   | : Not available    |
| - 1 min  | :                  |
| - 10 min   | : Not available    |
| Protection against short circuit of the contacts main fuse (gL/gG)                               |                    |
| - @600V - UL/CSA   | : Not available    |
| - type 1 coordination  | : Not available    |
| - type 2 coordination  | : Not available    |
| Average power dissipated per pole  |                    |
| AC-1 (θ ≤ 55 °C, U <sub>e</sub> ≤ 690 V)   | : Not available    |
| AC-3 (U <sub>e</sub> ≤ 440 V)  | : Not available    |
| <b>Utilization category AC-3</b>   |                    |
| Rated current I <sub>e</sub> (θ ≤ 55 °C)   |                    |
| - U <sub>e</sub> ≤ 440V  | : 10 A             |
| - U <sub>e</sub> ≤ 500V  | : Not available    |
| - U <sub>e</sub> ≤ 690V  | : Not available    |
| Maximum percentage (600 ops./h)  | : 100 %            |

| Orientative values of power (IEC)-three-phase induction motors (50/60 Hz)-IV poles-1800 rpm |               |               |
|---|---------------|---------------|
| Voltage   | kW            | cv or HP      |
| 220 / 240 V   | Not available | Not available |
| 380 / 400 V   | Not available | Not available |
| 415 / 440 V   | Not available | Not available |
| 500 V   | Not available | Not available |
| 660 / 690 V   | Not available | Not available |

| Orientative values of power (UL) |                |               |
|----------------------------------|----------------|---------------|
| Voltage                          | 1 Phase        | 3 Phase       |
| 120 V                            | Not available  | Not available |
| 200 V                            | Not applicable | Not available |
| 208 V                            | Not available  | Not available |
| 240 V                            | Not available  | Not available |
| 480 V                            | Not available  | Not available |
| 600 V                            | Not available  | Not available |

### Utilization category AC-4

|  |                 |
|--|-----------------|
| Rated current I <sub>e</sub> (θ ≤ 55 °C) |                 |
| - U <sub>e</sub> ≤ 440V                  | : Not available |
| - U <sub>e</sub> ≤ 500V                  | : Not available |
| - U <sub>e</sub> ≤ 690V                  | : Not available |

| Orientative values of power (IEC)-three-phase induction motors (50/60 Hz)-IV poles-1800 rpm |               |               |
|---|---------------|---------------|
| Voltage   | kW            | cv or HP      |
| 220 / 240 V   | Not available | Not available |
| 380 / 400 V   | Not available | Not available |
| 415 / 440 V   | Not available | Not available |
| 500 V   | Not available | Not available |
| 660 / 690 V   | Not available | Not available |

### Utilization category AC-1 (3 P/NA)

|                                 |                 |
|---------------------------------|-----------------|
| Maximum percentage (600 ops./h) | : Not available |
|---------------------------------|-----------------|

| Maximum power operation θ ≤ 55°C (three resistors) |               |
|--|---------------|
| Voltage  | Power         |
| 220 / 240 V  | Not available |
| 380 / 400 V  | Not available |
| 415 / 440 V  | Not contain   |
| 500 V  | Not available |
| 660 / 690 V  | NOT CONTAIN   |

### Auxiliary contacts

|                                   |                  |
|-----------------------------------|------------------|
| Standards compliance              | : IEC 600947-5-1 |
| Insulation voltage U <sub>i</sub> |                  |
| - IEC / UL                        | : 690 V / 600 V  |

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## Contactors



Rated utilization voltage  $U_e$   
 - IEC / UL : 690 V / 690 V  
 Conventional thermal current  $I_{th}$  ( $\theta \leq 55^\circ\text{C}$ ) : 10 A  
 Rated current  $I_e$  - IEC 60947-5-1/AC-15  
 - 220 / 240 V : 10 A  
 - 380 / 440 V : 6 A  
 - 500 V : 4 A  
 - 660 / 690 V : 2 A  
 Rated current  $I_e$  - IEC 60947-5-1/DC-13  
 - 24 V : 6 A  
 - 48 V : 4 A  
 - 110 V : 2 A  
 - 220 V : 0,7 A  
 - 440 V : Not available  
 Establishment capacity - (AC-15 and  $U_e \leq 690\text{V}$  50/60Hz) : 10 x  $I_e$   
 Interruption capacity - (AC-15 and  $U_e \leq 400\text{V}$  50/60Hz) : 10 x  $I_e$   
 Protection against short circuit of the contacts main fuse (gL/gG) : 10 A  
 Control circuit reliability : 17/5 V/mA  
 Electrical lifespan : 1 Million  
 Mechanical lifespan : 10 million  
 Non-overlapping time between NO and NC contacts : Not available  
 Impedance per pole : Not available

### Connection

Main contacts  
 Type of the screw : M3 Flat/Phillips  
 Section of the conductors

| Type of the conductor           | Section (IEC)                  | Section (UL) |
|---------------------------------|--------------------------------|--------------|
| Rigid cable                     | 1 x 0,5...2,5 mm <sup>2</sup>  | 1 x          |
|                                 | 2 x 0,5...2,5 mm <sup>2</sup>  | 2 x          |
| Flexible cable without terminal | 1 x 0,75...2,5 mm <sup>2</sup> | 1 x          |
|                                 | 2 x 0,75...2,5 mm <sup>2</sup> | 2 x          |
| Flexible cable with terminal    | 1 x 0,5...2,5 mm <sup>2</sup>  | 1 x          |
|                                 | 2 x 0,5...1,5 mm <sup>2</sup>  | 2 x          |

Tightening torque (IEC/UL) : 1.1 Nm / 10 lb.in  
 Control circuit  
 Type of the screw : M3 Flat/Phillips  
 Section of the conductors

| Type of the conductor           | Section (IEC)                  | Section (UL) |
|---------------------------------|--------------------------------|--------------|
| Rigid cable                     | 1 x 0,5...2,5 mm <sup>2</sup>  | 1 x          |
|                                 | 2 x 0,5...2,5 mm <sup>2</sup>  | 2 x          |
| Flexible cable without terminal | 1 x 0,75...2,5 mm <sup>2</sup> | 1 x          |
|                                 | 2 x 0,75...2,5 mm <sup>2</sup> | 2 x          |
| Flexible cable with terminal    | 1 x 0,5...2,5 mm <sup>2</sup>  | 1 x          |
|                                 | 2 x 0,5...1,5 mm <sup>2</sup>  | 2 x          |

Tightening torque (IEC/UL) : 1,1 Nm / 10 lb.in

### Direct current application

Utilization category DC-1 ( $L/R \leq 1$  ms)

| Voltage                | Rated utilization current ( $I_e$ ) |               |               |               |
|------------------------|-------------------------------------|---------------|---------------|---------------|
|                        | Pole(s) in series                   |               |               |               |
|                        | 1                                   | 2             | 3             | 4             |
| $U_e \leq 24\text{V}$  | Not available                       | Not available | Not available | Not available |
| $U_e \leq 48\text{V}$  | Not available                       | Not available | Not available | Not available |
| $U_e \leq 60\text{V}$  | Not available                       | Not available | Not available | Not available |
| $U_e \leq 125\text{V}$ | Not available                       | Not available | Not available | Not available |
| $U_e \leq 220\text{V}$ | Not available                       | Not available | Not available | Not available |
| $U_e \leq 440\text{V}$ | Not available                       | Not available | Not available | Not available |
| $U_e \leq 600\text{V}$ | Not available                       | Not available | Not available | Not available |

Utilization category DC-3 ( $L/R \leq 2.5$  ms)

| Voltage                | Rated utilization current ( $I_e$ ) |               |               |               |
|------------------------|-------------------------------------|---------------|---------------|---------------|
|                        | Pole(s) in series                   |               |               |               |
|                        | 1                                   | 2             | 3             | 4             |
| $U_e \leq 24\text{V}$  | Not available                       | Not available | Not available | Not available |
| $U_e \leq 48\text{V}$  | Not available                       | Not available | Not available | Not available |
| $U_e \leq 60\text{V}$  | Not available                       | Not available | Not available | Not available |
| $U_e \leq 125\text{V}$ | Not available                       | Not available | Not available | Not available |
| $U_e \leq 220\text{V}$ | Not available                       | Not available | Not available | Not available |
| $U_e \leq 440\text{V}$ | Not available                       | Not available | Not available | Not available |
| $U_e \leq 600\text{V}$ | Not available                       | Not available | Not available | Not available |

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## Contactors



Operation category DC-5 (L/R ≤ 15ms)

| Voltage   | Rated utilization current (Ie) |               |               |               |
|-----------|--------------------------------|---------------|---------------|---------------|
|           | Pole(s) in series              |               |               |               |
|           | 1                              | 2             | 3             | 4             |
| Ue ≤ 24V  | Not available                  | Not available | Not available | Not available |
| Ue ≤ 48V  | Not available                  | Not available | Not available | Not available |
| Ue ≤ 60V  | Not available                  | Not available | Not available | Not available |
| Ue ≤ 125V | Not available                  | Not available | Not available | Not available |
| Ue ≤ 220V | Not available                  | Not available | Not available | Not available |
| Ue ≤ 440V | Not available                  | Not available | Not available | Not available |
| Ue ≤ 600V | Not available                  | Not available | Not available | Not available |

### Ambient temperature

Operation : -25 °C ... +55 °C  
 Storage : -55 °C ... +80 °C  
 Maximum altitude with no change of rated values [2] : 3000 m

### Dimensions

Height : 58 mm (2.28 in)  
 Width : 45 mm (1.77 in)  
 Depth : 52 mm (2.05 in)  
 Weight : 194 g

### Standards

IEC 60947-1  
 UL 508

### Certifications

CE, UL, IRAM and EAC

### Notes

- 1) Values above 60 Hz should have current reduction;
- 2) For altitudes of 3000 to 4000 m (0.90 x 0.80 x Ie and Ui) and from 4000 to 5000 m (0.80 x 0.75 x Ie and Ui).

1

2

3

4

5

6

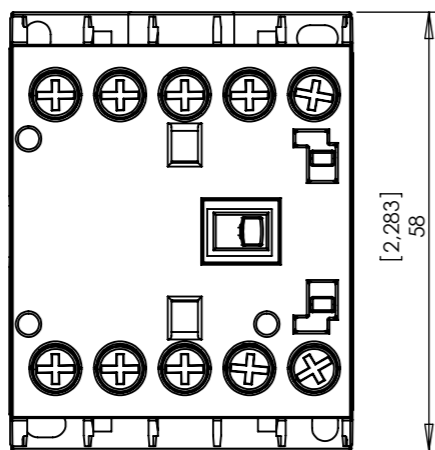
A

B

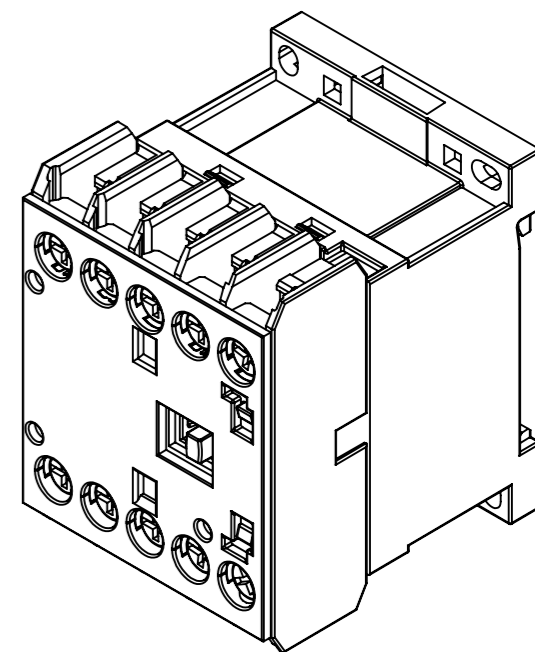
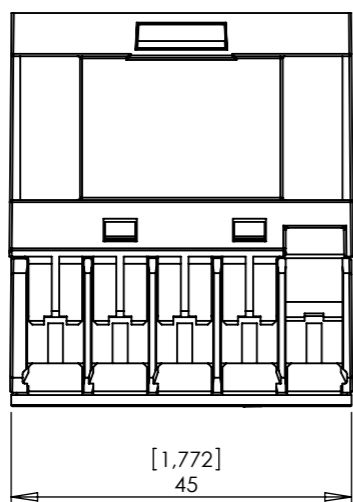
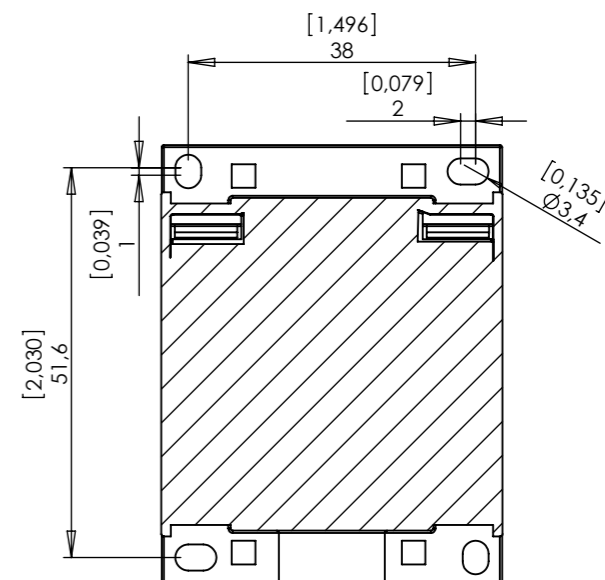
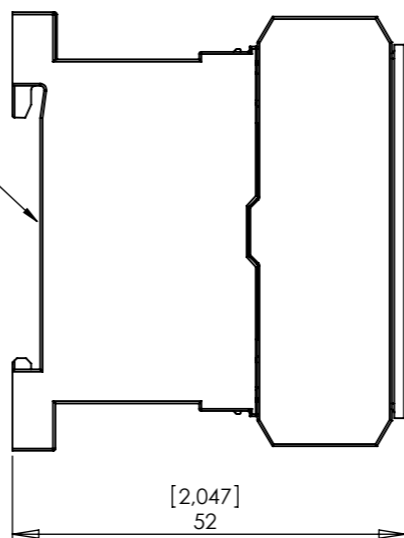
C

D

E



DIN - 35mm  
(EN50022)



CWC07...16-CWCA0

24/02/2012

1:1

mm [inches]



Los valores demostrados pueden ser cambiados sin aviso previo. La información es de referencia solamente.

Sujeito a alteração sem aviso prévio. As informações contidas são valores de referência. The values shown are subject to change without prior notice. The information is for reference only.

A3