



**Electric Automation**  
Automation specialists

Reference: UA30-30-10RA  
Code: 1SBL281024R8110

UA30-30-10RA 24V 50Hz / 24V 60Hz  
Contactor

Buy it at Electric Automation Network



UA30..RA 3-pole contactors for capacitor switching, can be used in installations in which the peak current far exceeds 100 times nominal rms current. The contactors are delivered complete with their damping resistors and must be used without additional inductances (see table below). The capacitors must be discharged (maximum residual voltage at terminals  $\leq 50$  V) before being re-energized when the contactors are making. Their electrical durability is 250 000 operating cycles for  $U_e < 500$  V and 100 000 operating cycles for  $500$  V  $\leq U_e \leq 690$  V. The UA..RA contactors are fitted with a special front mounted block, which ensures the serial insertion of 3 damping resistors into the circuit to limit the current peak on energization of the capacitor bank. Their connection also ensures capacitor precharging in order to limit the second current peak occurring upon making of the main poles. The insertion of resistors allows to damp the highest current peak of the capacitor when switching on, whatever its level. The UA..RA series 3-pole contactors are of the block type design. - Main poles and auxiliary contacts: 3 main poles, 1 built-in auxiliary contact - Control circuit: AC operated with laminated magnet circuit - Accessories: a wide range of accessories is available.

### Ordering

|                         |               |
|-------------------------|---------------|
| EAN:                    | 3471522302816 |
| Minimum Order Quantity: | 1 piece       |
| Customs Tariff Number:  | 85369085      |

### Dimensions

|                     |          |
|---------------------|----------|
| Product Net Width:  | 54 mm    |
| Product Net Depth:  | 141 mm   |
| Product Net Height: | 130 mm   |
| Product Net Weight: | 0.810 kg |

## Container Information

|                               |               |
|-------------------------------|---------------|
| Package Level 1 Units:        | 1 piece       |
| Package Level 1 Width:        | 135 mm        |
| Package Level 1 Length:       | 155 mm        |
| Package Level 1 Height:       | 63 mm         |
| Package Level 1 Gross Weight: | 0.81 kg       |
| Package Level 1 EAN:          | 3471522302816 |
| Package Level 2 Units:        | 24 piece      |

## Technical

|   |   |
|---|---|
| Number of Main Contacts NO:                         | 3   |
| Number of Main Contacts NC:                         | 0   |
| Number of Auxiliary Contacts NO:                    | 1   |
| Number of Auxiliary Contacts NC:                    | 0   |
| Rated Operational Voltage:                          | Main Circuit 690 V<br>Auxiliary Circuit 690 V   |
| Rated Frequency (f):                                | Supply Circuit 50 Hz<br>Supply Circuit 60 Hz  |
| Conventional Free-air Thermal Current ( $I_{th}$ ): | acc. to IEC 60947-5-1, $q = 40\text{ °C}$ 16 A  |
| Rated Operational Current AC-15 ( $I_e$ ):          | (220 / 240 V) 4 A<br>(24 / 127 V) 6 A<br>(380 / 440 V) 3 A<br>(500 V) 2 A<br>(690 V) 2 A  |
| Short-Circuit Protective Devices:                   | Auxiliary Circuit - gG Type Fuses 10 A<br>gG Type Fuses 200 A   |
| Rated Short-time Withstand Current ( $I_{cw}$ ):    | at 40 °C Ambient Temp, in Free Air, from a Cold State 10 s 400 A<br>at 40 °C Ambient Temp, in Free Air, from a Cold State 15 min 65 A<br>at 40 °C Ambient Temp, in Free Air, from a Cold State 1 min 150 A<br>at 40 °C Ambient Temp, in Free Air, from a Cold State 1 s 600 A<br>at 40 °C Ambient Temp, in Free Air, from a Cold State 30 s 225 A<br>for 0.1 s 140 A<br>for 1 s 100 A |

|   |   |
|---|---|
| Maximum Breaking Capacity:                                    | cos phi=0.45 (cos phi=0.35 for I <sub>e</sub> > 100 A) at 440 V 820 A<br>cos phi=0.45 (cos phi=0.35 for I <sub>e</sub> > 100 A) at 690 V 340 A  |
| Maximum Electrical Switching Frequency:                       | 240 cycles per hour   |
| Rated Operational Current DC-13 (I <sub>e</sub> ):            | (125 V) 1.1 / 138 A<br>(24 V) 6 / 144 A<br>(250 V) 0.55 / 138 A<br>(48 V) 2.8 / 134 A<br>(72 V) 2 / 144 A   |
| Rated Insulation Voltage (U <sub>i</sub> ):                   | acc. to IEC 60947-4-1 and VDE 0110 (Gr. C) 1000 V<br>acc. to UL/CSA 600 V   |
| Rated Impulse Withstand Voltage (U <sub>imp</sub> ):          | 8 kV  |
| Coil Operating Limits:  | (acc. to IEC 60947-4-1)0.85 ... 1.1 x U <sub>c</sub> (at θ ≤ 55 °C) °C  |
| Rated Control Circuit Voltage (U <sub>c</sub> ):              | 50 Hz 24 V<br>60 Hz 24 V  |
| Coil Consumption:   | Average Holding Value 50 / 60 Hz 12 V·A<br>Average Holding Value 50 / 60 Hz 3 W<br>Average Holding Value 50 Hz 12 V·A<br>Average Holding Value 50 Hz 3 W<br>Average Holding Value 60 Hz 12 V·A<br>Average Holding Value 60 Hz 3 W<br>Average Pull-in Value 50 Hz 120 V·A<br>Average Pull-in Value 60 Hz 140 V·A |
| Operate Time:   | Between Coil Energization and NO Contact Closing 8 ... 21 ms<br>Between Coil De-energization and NO Contact Opening 4 ... 11 ms   |
| Connecting Capacity-Main Circuit:                             | Rigid Cable 2.5 ... 6 mm <sup>2</sup><br>Flexible with Cable End 2.5 ... 4 mm <sup>2</sup>  |
| Connecting Capacity-Auxiliary Circuit:                        | Rigid Cable 1 ... 4 mm <sup>2</sup><br>Flexible with Cable End 0.75 ... 2.5 mm <sup>2</sup>   |
| Degree of Protection:   | acc. to IEC 60529, IEC 60947-1, EN 60529 Auxiliary Terminals IP20   |
| Connecting terminals (delivered in open position) Main poles: | M 5 (+,-) pozidriv 2 screws with 2x (5.6x6.5 mm) connector  |
| Terminal Type:  | Screw Terminals   |

## Environmental

|   |   |
|---|---|
| Ambient Air Temperature:                | Near Contactor for Operation in Free Air (0.85 ... 1.1 U <sub>c</sub> )<br>-40 ... +55 °C<br>Near Contactor for Operation in Free Air (U <sub>c</sub> ) -40 ... +70 °C<br>Close to Contactor for Storage -60 ... +80 °C |
| Climatic Withstand:                     | acc. to IEC 60068-2-30 and 60068-2-11 - UTE C 63-100 specification II   |
| Maximum Operating Altitude Permissible: | 3000 m  |
| RoHS Status:                            | No declaration needed   |

## Certificates and Declarations (Document Number)

|                                 |                            |
|---------------------------------|----------------------------|
| CB Certificate:                 | CB_FR3448_60016915-509739C |
| CSA Certificate:                | CSA_1033838_LR056745       |
| Declaration of Conformity - CE: | 1SBD250846C2000            |
| EAC Certificate:                | EAC_RU C-FR ME77 B01010    |
| GOST Certificate:               | GOST_POCCFRME77B07175      |
| RoHS Information:               | 1SBC101059D0201            |

## Classifications

|         |                                       |
|---------|---------------------------------------|
| ETIM 5: | EC001079 - Capacitor magnet contactor |
| UNSPSC: | 39121529                              |