



PRODUCT-DETAILS

UA16-30-10RA 24V 50Hz / 24V 60Hz  
UA16-30-10RA 24V 50Hz / 24V 60Hz Contactor



| General Information   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|-----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Extended Product Type | UA16-30-10RA 24V 50Hz / 24V 60Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Product ID            | 1SBL181024R8110                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| EAN                   | 3471522300812                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Catalog Description   | UA16-30-10RA 24V 50Hz / 24V 60Hz Contactor                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Long Description      | <p>The UA16-30-10RA 24V 50Hz / 24V 60Hz is a 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 <math>\leq 50</math> V) before being re-energized when the contactors are making. Their electrical durability is 250 000 operating cycles for <math>U_e &lt; 500</math> V and 100 000 operating cycles for <math>500\text{ V} \leq U_e \leq 690</math> 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.</p> |

| Ordering               |         |
|------------------------|---------|
| Minimum Order Quantity | 1 piece |

Customs Tariff Number85364900

Popular Downloads

|                                   |                 |
|-----------------------------------|-----------------|
| Data Sheet, Technical Information | 1SBC101140C0203 |
| Instructions and Manuals          | 1SBC101002M5501 |
| CAD Dimensional Drawing           | 2CDC001079B0201 |
| Dimension Diagram                 | FPTE307847      |

Dimensions

|                            |         |
|----------------------------|---------|
| Product Net Width          | 44 mm   |
| Product Net Depth / Length | 107 mm  |
| Product Net Height         | 120 mm  |
| Product Net Weight         | 0.46 kg |

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Standards                                                         | IEC/EN 60947-1, IEC/EN 60947-4-1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Rated Operational Voltage                                         | Auxiliary Circuit 690 V<br>Main Circuit 690 V                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Rated Frequency (f)                                               | Auxiliary Circuit 50 / 60 Hz<br>Control Circuit 50 / 60 Hz<br>Main Circuit 50 / 60 Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Conventional Free-air Thermal Current (I <sub>th</sub> )          | acc. to IEC 60947-5-1, $\Theta = 40\text{ }^{\circ}\text{C}$ 16 A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Rated Operational Power AC-6b (P <sub>e</sub> )                   | (230 / 240 V) 40 °C, 50 / 60 Hz 8 kvar<br>(230 / 240 V) 55 °C, 50 / 60 Hz 7.5 kvar<br>(230 / 240 V) 70 °C, 50 / 60 Hz 6 kvar<br>(400 / 415 V) 40 °C, 50 / 60 Hz 12.5 kvar<br>(400 / 415 V) 70 °C, 50 / 60 Hz 10 kvar<br>(400 / 415 V) 55 °C, 50 / 60 Hz 12.5 kvar<br>(440 V) 40 °C, 50 / 60 Hz 15 kvar<br>(440 V) 55 °C, 50 / 60 Hz 13 kvar<br>(440 V) 70 °C, 50 / 60 Hz 11 kvar<br>(500 / 550 V), 40 °C, 50 / 60 Hz 18 kvar<br>(500 / 550 V) 55 °C, 50 / 60 Hz 16 kvar<br>(500 / 550 V) 70 °C, 50 / 60 Hz 12.5 kvar<br>(690 V) 40 °C, 50 / 60 Hz 22 kvar<br>(690 V) 55 °C, 50 / 60 Hz 21 kvar<br>(690 V) 70 °C, 50 / 60 Hz 17 kvar |
| Rated Operational Current AC-15 (I <sub>e</sub> )                 | (500 V) 2 A<br>(690 V) 2 A<br>(24 / 127 V) 6 A<br>(220 / 240 V) 4 A<br>(380 / 400 V) 3 A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Short-Circuit Protective Devices                                  | Auxiliary Circuit - gG Type Fuses 10 A<br>gG Type Fuses 80 A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Rated Short-time Withstand Current Low Voltage (I <sub>cw</sub> ) | 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 250 A<br>cos phi=0.45 (cos phi=0.35 for I <sub>e</sub> > 100 A) at 690 V 90 A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Maximum Electrical                                                | 240 cycles per hour                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |

|                                                              |                                                                   |
|--------------------------------------------------------------|-------------------------------------------------------------------|
| Switching Frequency                                          |                                                                   |
| Rated Operational Current                                    | (24 V) 6 A / 144 W                                                |
| DC-13 (I <sub>g</sub> )                                      | (48 V) 2.8 A / 134 W                                              |
|                                                              | (72 V) 2 / 144 W                                                  |
|                                                              | (110 V) 1.1 A / 121 W                                             |
|                                                              | (125 V) 1.1 / 138 W                                               |
|                                                              | (220 V) 0.55 A / 121 W                                            |
|                                                              | (250 V) 0.55 / 138 W                                              |
| Rated Insulation Voltage (U <sub>i</sub> )                   | acc. to IEC 60947-4-1 1000 V                                      |
|                                                              | acc. to IEC 60947-5-1 690 V                                       |
|                                                              | acc. to UL/CSA 600 V                                              |
| Rated Impulse Withstand Voltage (U <sub>imp</sub> )          | 8 kV                                                              |
| Rated Control Circuit Voltage (U <sub>c</sub> )              | 50 Hz 24 V                                                        |
|                                                              | 60 Hz 24 V                                                        |
| Coil Consumption                                             | Average Holding Value 50 / 60 Hz 8 V·A                            |
|                                                              | Average Holding Value 50 Hz 8 V·A                                 |
|                                                              | Average Holding Value 60 Hz 8 V·A                                 |
|                                                              | Average Pull-in Value 50 Hz 70 V·A                                |
|                                                              | Average Pull-in Value 60 Hz 80 V·A                                |
| Operate Time                                                 | Between Coil De-energization and NO Contact Opening 4 ... 11 ms   |
|                                                              | Between Coil Energization and NO Contact Closing 10 ... 26 ms     |
| Mounting on DIN Rail                                         | TH35-15 (35 x 15 mm Mounting Rail) acc. to IEC 60715              |
|                                                              | TH35-7.5 (35 x 7.5 mm Mounting Rail) acc. to IEC 60715            |
| Mounting by Screws (not supplied)                            | 2 x M4 screws placed diagonally                                   |
| Connecting Capacity Main Circuit                             | Flexible with Cable End 1x 0.75 ... 2.5 mm <sup>2</sup>           |
|                                                              | Rigid Solid 1x 1 ... 4 mm <sup>2</sup>                            |
| Connecting Capacity Auxiliary Circuit                        | Flexible with Cable End 1/2x 0.75 ... 2.5 mm <sup>2</sup>         |
|                                                              | Rigid Solid 1/2x 1 ... 4 mm <sup>2</sup>                          |
| Degree of Protection                                         | acc. to IEC 60529, IEC 60947-1, EN 60529 Auxiliary Terminals IP20 |
|                                                              | acc. to IEC 60529, IEC 60947-1, EN 60529 Coil Terminals IP20      |
|                                                              | acc. to IEC 60529, IEC 60947-1, EN 60529 Main Terminals IP20      |
| Connecting Terminals (delivered in open position) Main Poles | M 3.5 (+,-) pozidriv 2 screws with cable clamp                    |
| Terminal Type                                                | Screw Terminals                                                   |

Technical UL/CSA

|                                         |                           |
|-----------------------------------------|---------------------------|
| Connecting Capacity Main Circuit UL/CSA | 1x 18-10 AWG              |
| Tightening Torque UL/CSA                | Auxiliary Circuit 9 in·lb |
|                                         | Control Circuit 9 in·lb   |
|                                         | Main Circuit 9 in·lb      |

Environmental

|                                        |                                                                                        |
|----------------------------------------|----------------------------------------------------------------------------------------|
| Ambient Air Temperature                | Close to Contactor for Storage -60 ... +80 °C                                          |
|                                        | Near Contactor for Operation in Free Air (0.85 ... 1.1 U <sub>c</sub> ) -40 ... +55 °C |
|                                        | Near Contactor for Operation in Free Air (U <sub>c</sub> ) -40 ... 70 °C               |
| Climatic Withstand                     | acc. to IEC 60068-2-30 and 60068-2-11 - UTE C 63-100 specification II                  |
| Maximum Operating Altitude Permissible | Without Derating 3000 m                                                                |

Material Compliance

|                                             |                                   |
|---------------------------------------------|-----------------------------------|
| Conflict Minerals Reporting Template (CMRT) | 9AKK108467A5658                   |
| REACH Declaration                           | 2CMT2021-006202                   |
| RoHS Information                            | 2CMT2021-006277                   |
| RoHS Status                                 | Following EU Directive 2011/65/EU |
| Toxic Substances Control Act - TSCA         | 2CMT2023-006525                   |

|                |                                                            |
|----------------|------------------------------------------------------------|
| WEEE B2C / B2B | Business To Business                                       |
| WEEE Category  | 5. Small Equipment (No External Dimension More Than 50 cm) |

Certificates and Declarations

|                                     |                                                                                          |
|-------------------------------------|------------------------------------------------------------------------------------------|
| CB Certificate                      | CB_CN-58851                                                                              |
| CCC Certificate                     | CCC_2018010304059154                                                                     |
| CQC Certificate                     | CQC2004010304138319<br>CQC2018010304059153<br>CQC2018010304059154<br>CQC2007010304257961 |
| Declaration of Conformity<br>- CCC  | 2020980304001605<br>2020980304001618<br>2020980304001619<br>2020980304001218             |
| Declaration of Conformity<br>- CE   | 1SBD250805U1000                                                                          |
| Declaration of Conformity<br>- UKCA | 1SBD250822U1000                                                                          |
| GOST Certificate                    | GOST_POCCFRME77B07175                                                                    |
| UL Certificate                      | UL-US-L312527-1102-51017991-2<br>UL-CA-L312527-4102-51017991-2                           |
| UL Listing Card                     | UL_E312527                                                                               |

Container Information

|                                |               |
|--------------------------------|---------------|
| Package Level 1 Units          | box 1 piece   |
| Package Level 1 Width          | 135 mm        |
| Package Level 1 Depth / Length | 155 mm        |
| Package Level 1 Height         | 63 mm         |
| Package Level 1 Gross Weight   | 0.46 kg       |
| Package Level 1 EAN            | 3471522300812 |
| Package Level 2 Units          | box 63 piece  |
| Package Level 2 Width          | 300 mm        |
| Package Level 2 Depth / Length | 245 mm        |
| Package Level 2 Height         | 308 mm        |
| Package Level 2 Gross Weight   | 28.98 kg      |
| Package Level 3 Units          | 260 piece     |

Classifications

|                                    |                                       |
|------------------------------------|---------------------------------------|
| Object Classification Code         | Q                                     |
| ETIM 4                             | EC001079 - Capacitor magnet contactor |
| ETIM 5                             | EC001079 - Capacitor magnet contactor |
| ETIM 6                             | EC001079 - Capacitor contactor        |
| ETIM 7                             | EC001079 - Capacitor contactor        |
| ETIM 8                             | EC001079 - Capacitor contactor        |
| eClass                             | V11.0 : 27371006                      |
| UNSPSC                             | 39121529                              |
| IDEA Granular Category Code (IGCC) | 4756 >> Capacitor magnet contactor    |

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## Categories

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Low Voltage Products and Systems → Control Products → Contactors → Block Contactors → UA and UA..RA Contactors → UA16RA

