# Product datasheet

Specifications

## Contactor, UEC3-06N，3P (3NO), AC Coil

## Main

| | |
|---|---|
| Product Series | UEC3 |
| Product or Component Type | Contactor |
| Device Short Name | UEC3-06N |
| Contactor Application | Motor control<br>Resistive load |
| Utilisation Category | AC-3<br>AC-4<br>AC-1 |
| Poles Description | 3P |
| [Ue] Rated Operational Voltage | Power circuit: ≤ 690 V AC 50/60Hz |
| [Ie] Rated Operational Current | 6 A (at ≤60 °C) at ≤ 400 V AC AC-3 for power circuit<br>5 A (at ≤60 °C) at ≤ 400 V AC AC-4 for power circuit<br>20 A (at ≤60 °C) at ≤ 690 V AC AC-1 for power circuit |
| [Us] Control Circuit Voltage (AC 50/60Hz) | Voltage (V): 24 36 48 110 220...230 380<br>Code: B7 CC7 E7 F7 M7 Q7 |

## Complementary

| | |
|---|---|
| Motor Power kW | 1.5 kW at 220/230 V AC 50/60 Hz (AC-3)<br>2.2 kW at 380/400 V AC 50/60 Hz (AC-3)<br>3 kW at 660/690 V AC 50/60 Hz (AC-3) |
| Motor Power hp | 1.5 hp at 110...120 V AC 50/60 Hz for 1 phase motors<br>0.75 hp at 200...208 V AC 50/60 Hz for 1 phase motors<br>1 hp at 220...240 V AC 50/60 Hz for 1 phase motors<br>2 hp at 200...208 V AC 50/60 Hz for 3 phases motors<br>2 hp at 220...240 V AC 50/60 Hz for 3 phases motors<br>5 hp at 440...480 V AC 50/60 Hz for 3 phases motors<br>5 hp at 550...600 V AC 50/60 Hz for 3 phases motors |
| Pole Contact Composition | 3 NO |

| | |
|---|---|
| [Ith] Conventional Free Air Thermal Current | 20 A (at ≤60 °C) for power circuit<br>10 A (at ≤60 °C) for signalling circuit |
| [Icw] Rated Short-time Withstand Current | 80 A ≤40 °C - 10 s for power circuit<br>45 A ≤40 °C - 1 min for power circuit<br>20 A ≤40 °C - 10 min for power circuit |
| Associated Fuse Rating | 10 A gG for signalling circuit conforming to IEC 60947-5-1<br>32 A gG at ≤ 690 V coordination type 2 for power circuit |
| Average Impedance | 2.7 mΩ - Ith 50 Hz for power circuit |
| [Ui] Rated Insulation Voltage | Power circuit: 690 V conforming to IEC 60947-4-1<br>Power circuit: 600 V UL Certified<br>Signalling circuit: 690 V conforming to IEC 60947-5-1<br>Signalling circuit: 600 V UL Certified |
| Overvoltage Category | III |
| Pollution Degree | 3 |
| [Uimp] Rated Impulse Withstand Voltage | 6 kV conforming to IEC 60947 |
| Mechanical Durability | 10 M cycles |
| Electrical Durability | 1.4 M cycles 6 A AC-3 at Ue ≤ 400 V |
| Control Circuit Type | AC at 50/60 Hz standard |
| Coil Technology | Without built-in suppressor module |
| Control Circuit Voltage Limits | 0.85...1.1 Us (-40...60 °C): operational AC 50/60 Hz<br>0.2...0.75 Us (-40...60 °C): drop-out AC 50/60 Hz |
| Average Inrush Power in VA | 70 VA 50/60 Hz (at 25 °C) |
| Average Hold-in Power Consumption in VA | 9 VA 50/60 Hz (at 25 °C) |
| Operating Time | Power circuit: 12...22 ms closing, 4...22 ms opening<br>Signalling circuit (NO): 15...26 ms closing, 4...22 ms opening<br>Signalling circuit (NC): 4...19 ms opening, 12...32 ms closing |
| Maximum Operating Rate | Electrical: 1200 cycs/h<br>Mechanical: 3600 cycs/h |
| Connections - Terminals | Power circuit: screw clamp terminals 1 1...4 mm² (AWG 18...12)- cable stiffness: flexible without cable end<br>Power circuit: screw clamp terminals 2 1...4 mm² (AWG 18...12) - cable stiffness: flexible without cable end<br>Power circuit: screw clamp terminals 1 1...4 mm² (AWG 18...12) - cable stiffness: flexible with cable end<br>Power circuit: screw clamp terminals 2 1...2.5 mm² (AWG 18...14)- cable stiffness: flexible with cable end<br>Power circuit: screw clamp terminals 1 1...4 mm² (AWG 18...12)- cable stiffness: solid without cable end<br>Power circuit: screw clamp terminals 2 1...4 mm² (AWG 18...12) - cable stiffness: solid without cable end<br>Control circuit: screw clamp terminals 1 1...4 mm² (AWG 18...12)- cable stiffness: flexible without cable end |

| | |
|---|---|
| | Control circuit: screw clamp terminals 2 1...4 mm² (AWG 18...12)- cable stiffness: flexible without cable end<br>Control circuit: screw clamp terminals 1 1...4 mm² (AWG 18...12) - cable stiffness: flexible with cable end<br>Control circuit: screw clamp terminals 2 1...2.5 mm² (AWG 18...14)- cable stiffness: flexible with cable end<br>Control circuit: screw clamp terminals 1 1...4 mm² (AWG 18...12) - cable stiffness: solid without cable end<br>Control circuit: screw clamp terminals 2 1...4 mm² (AWG 18...12) - cable stiffness: solid without cable end<br>Control circuit, Power circuit: M3.5, Terminal width≤8.1mm (0.318 in) |
| Tightening Torque | Power circuit: 10.7 lb.in (1.2 N·m) - on screw clamp terminals - with screwdriver flat Ø 6 mm<br>Power circuit: 10.7 lb.in (1.2 N·m) - on screw clamp terminals - with screwdriver Philips No 2<br>Control circuit: 10.7 lb.in (1.2 N·m) - on screw clamp terminals - with screwdriver flat Ø 6 mm<br>Control circuit: 10.7 lb.in (1.2 N·m) - on screw clamp terminals - with screwdriver Philips No 2 |
| Auxiliary Contact Composition | 1NO，1NC |
| Minimum Switching Voltage | 24 V for signalling circuit |
| Minimum Switching Current | 0.1A for signalling circuit |
| Insulation Resistance | > 10 MΩ for signalling circuit |
| Mounting Support | Screw<br>35mm DIN Rail |

## Environment

| | |
|---|---|
| Standards | GB/T 14048.4，GB/T 14048.5， IEC/EN 60947-4-1，IEC/EN 60947-5-1，<br>BS EN 60947-4-1，BS EN 60947-5-1，UL 60947-4-1，UL 60947-5-1 |
| Product Certifications | CCC，CE，UKCA，VDE，UL (cULus LISTED) |
| IP Degree of Protection | IP20 front face conforming to IEC 60529 |
| Permissible Ambient Air<br>Temperature Around the Device | -40...60 °C for normal operating<br>60...70 °C with derating (for operation in the range of Us...1.1Us)<br>Storage: -60...80 °C |
| Operating Altitude | 0...3000 m without derating |
| Fire Resistance | Current-carrying parts：850 °C conforming to IEC 60695-2-11 |
| Height | 74 mm |
| Width | 45 mm |
| Depth | 80 mm |
| Net Weight | 0.31 kg |

## Packing Units

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|---|---|
| Unit Type of Package 1 | 1 box |
| Number of Units in Package 1 | 1 pcs |
| Package 1 Height | 8.3 cm |
| Package 1 Width | 4.8 cm |
| Package 1 Length | 7.8 cm |

| | |
|---|---|
| Package 1 Weight | 0.36 kg |
| Unit type of Package 2 | 1 carton |
| Number of Units in Package 2 | 50 pcs |
| Package 2 Height | 19.5 cm |
| Package 2 Width | 26.0 cm |
| Package 2 Length | 41.0 cm |
| Package 2 Weight | 17.3 kg |

## Offer Sustainability

| | |
|---|---|
| REACH Regulation | Conforming |
| EU RoHS Directive | Conforming |
| Mercury Free | Yes |
| China RoHS Regulation | Conforming |
| RoHS Exemption Information | Yes |

## Contractual warranty

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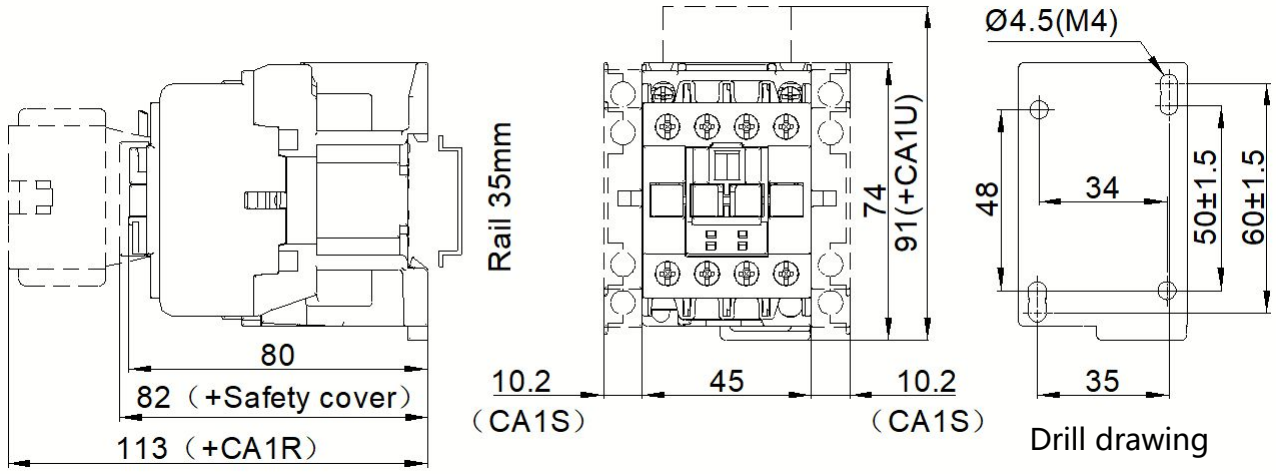
|---|---|
| Warranty | 18 months |

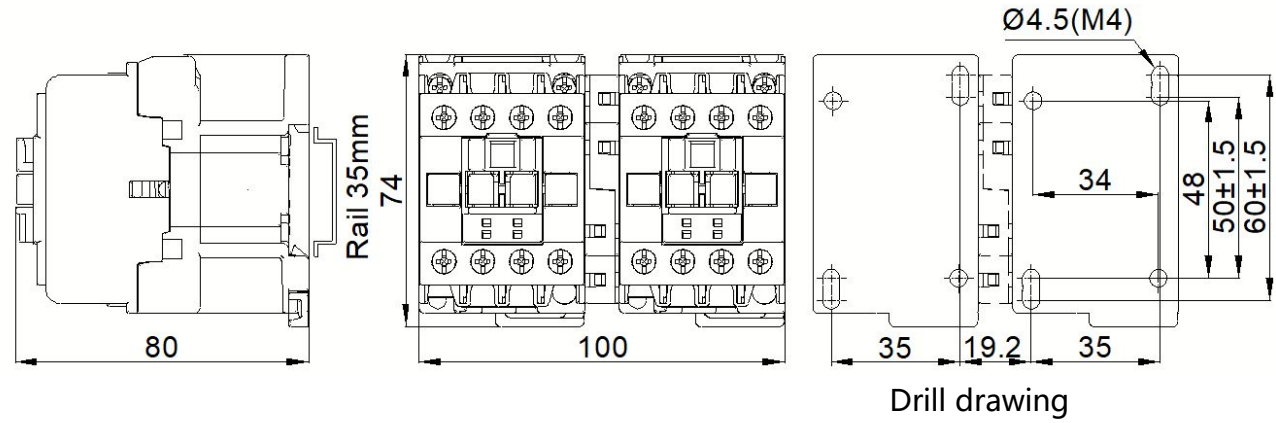
## Dimensions

UEC3-06...25 (3P, AC coil)

AC contactor:

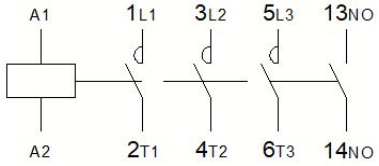
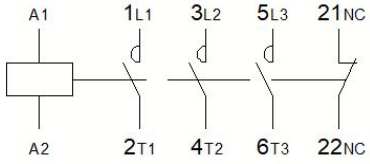


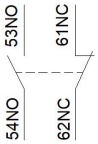
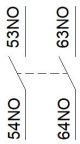
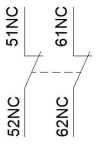
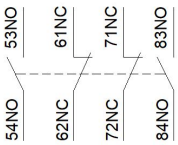
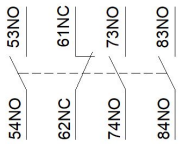
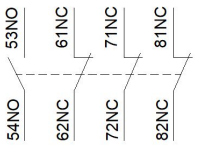
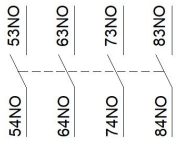
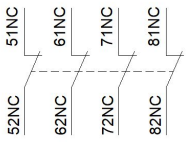

Interlock contactor:

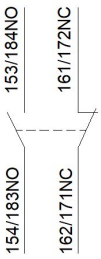
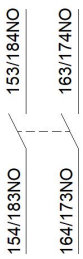
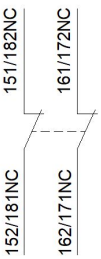



Note: The unit is mm. The tolerance for mounting holes: ± 0.5; for other external dimensions: ± 1.5, unless otherwise specified.

## Wiring diagram

| AC contactor | |
|---|---|
| 3P+1NO | 3P+1NC |
|  |  |

| Top mounting auxiliary contact block (instantaneous auxiliary contact) | | |
|---|---|---|
| CA1R11 (1NO1NC) | CA1R20 (2NO) | CA1R02 (2NC) |
|  |  |  |
| CA1R22 (2NO2NC) | CA1R31 (3NO1NC) | CA1R13 (1NO3NC) |
|  |  |  |
| CA1R40 (4NO) | CA1R04 (4NC) | |
|  |  | |

| Side mounting auxiliary contact block (instantaneous auxiliary contact) | | |
|---|---|---|
| CA1S11 (1NO1NC) | CA1S20 (2NO) | CA1S02 (2NC) |
|  |  |  |