

# Product datasheet



## Specifications



## Contactor, UEC1-170C, 3P (3NO), AC Coil

### Main

|  |  |
|--|--|
| Product Series                               | UEC1   |
| Product or Component Type                    | Contactor  |
| Device Short Name                            | UEC1-170C  |
| Contactor Application                        | Motor control<br>Resistive load  |
| Utilisation Category                         | AC-3<br>AC-4<br>AC-1   |
| Poles Description                            | 3P   |
| Rated Operational Voltage [Ue]               | Power circuit: $\leq 690$ V AC 50/60Hz   |
| Rated Operational Current [Ie]               | 170 A (at $\leq 60$ °C) at $\leq 400$ V AC AC-3 for power circuit<br>200 A (at $\leq 60$ °C) at $\leq 690$ V AC AC-1 for power circuit |
| [Us] Control Circuit Voltage<br>(AC 50/60Hz) | Voltage (V): 24 36 42 48 110 115 127 220<br>230 240 380 400 415<br>Code: B7 CC7 D7 E7 F7 FE7 FC7 M7<br>P7 U7 Q7 V7 N7                  |

### Complementary

|   |  |
|---|--|
| Motor Power kW                              | 55 kW at 220/230 V AC 50/60 Hz (AC-3)<br>90 kW at 380/400 V AC 50/60 Hz (AC-3)<br>110 kW at 660/690 V AC 50/60 Hz (AC-3) |
| Pole Contact Composition                    | 3 NO   |
| Conventional Free Air Thermal Current [Ith] | 200 A (at $\leq 60$ °C) for power circuit  |
| Associated Fuse Rating                      | 200 A gG at $\leq 690$ V coordination type 2 for power circuit   |
| [Ui] Rated Insulation Voltage               | Power circuit: 1000 V conforming to IEC 60947-4-1  |
| Overvoltage Category                        | III  |
| Pollution Degree                            | 3  |

|  |  |
|--|--|
| [Uimp] Rated Impulse Withstand Voltage | 8 kV conforming to IEC 60947   |
| Mechanical Durability                  | 1 M cycles   |
| Electrical Durability                  | 0.3 M cycles 150 A AC-3 at $U_e \leq 400$ V  |
| Control Circuit Type                   | AC at 50/60 Hz standard  |
| Coil Technology                        | Without built-in suppressor module   |
| Control Circuit Voltage Limits         | 0.8...1.1 $U_s$ (-40...40 °C): operational AC 50 Hz<br>0.85...1.1 $U_s$ (-40...40 °C): operational AC 60 Hz<br>0.2...0.75 $U_s$ (-40...60 °C): drop-out AC 50/60 Hz  |
| Inrush Power in VA                     | 300 VA 50/60 Hz (at 25 °C)   |
| Hold-in Power Consumption in VA        | 35 VA 50/60 Hz (at 25 °C)  |
| Operating Time                         | Power circuit: 12...26 ms closing, 4...19 ms opening   |
| Maximum Operating Rate                 | Electrical: 300 cycs/h<br>Mechanical: 1200 cycs/h  |
| Connections - Terminals                | Power circuit: bolt clamp terminals 1 10...120 mm <sup>2</sup> - cable stiffness: flexible without cable end<br>Power circuit: bolt clamp terminals 2 10...120 mm <sup>2</sup> + 10...50 mm <sup>2</sup> - cable stiffness: flexible without cable end<br>Power circuit: bolt clamp terminals 1 10...120 mm <sup>2</sup> - cable stiffness: flexible with cable end<br>Power circuit: bolt clamp terminals 2 10...120 mm <sup>2</sup> + 10...50 mm <sup>2</sup> - cable stiffness: flexible with cable end<br>Power circuit: bolt clamp terminals 1 10...120 mm <sup>2</sup> - cable stiffness: solid without cable end<br>Power circuit: bolt clamp terminals 2 10...120 mm <sup>2</sup> + 10...50 mm <sup>2</sup> - cable stiffness: solid without cable end<br>Control circuit: screw clamp terminals 1 1...4 mm <sup>2</sup> (AWG 18...12) - cable stiffness: flexible without cable end<br>Control circuit: screw clamp terminals 2 1...4 mm <sup>2</sup> (AWG 18...12) - cable stiffness: flexible without cable end<br>Control circuit: screw clamp terminals 1 1...4 mm <sup>2</sup> (AWG 18...12) - cable stiffness: flexible with cable end<br>Control circuit: screw clamp terminals 2 1...2.5 mm <sup>2</sup> (AWG 18...14) - cable stiffness: flexible with cable end<br>Control circuit: screw clamp terminals 1 1...4 mm <sup>2</sup> (AWG 18...12) - cable stiffness: solid without cable end<br>Control circuit: screw clamp terminals 2 1...4 mm <sup>2</sup> (AWG 18...12) - cable stiffness: solid without cable end |
| Tightening Torque                      | Power circuit: 106 lb.in (12 N·m) - on bolt clamp terminals - with internal hexagon socket wrench 5 mm<br>Control circuit: 11 lb.in (1.2 N·m) - on screw clamp terminals - with screwdriver flat Ø 6 mm<br>Control circuit: 11 lb.in (1.2 N·m) - on screw clamp terminals - with screwdriver Philips No 2  |
| Auxiliary Contact Composition          | Without built-in auxiliary contacts  |

Mounting Support

Screw

Two 35mm DIN Rail

## Environment

|   |  |
|---|--|
| Standards   | GB/T 14048.4, IEC/EN 60947-4-1, BS EN 60947-4-1                                  |
| Product Certifications                                | CCC, CE, UKCA  |
| IP Degree of Protection                               | IP20 (Products with wiring terminal modules , T type)                            |
| Permissible Ambient Air Temperature Around the Device | -40...60 °C for normal operating<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  | 180 mm; 158 mm (Products with wiring terminal modules , T type)                  |
| Width   | 120 mm   |
| Depth   | 137 mm; 141 mm (Products with wiring terminal modules , T type)                  |
| Net Weight  | 2.10 kg (Standard Products) ; 2.50 kg<br>(Products with wiring terminal modules) |

## Packing Units

|                              |          |
|------------------------------|----------|
| Unit Type of Package 1       | 1 box    |
| Number of Units in Package 1 | 1 pcs    |
| Package 1 Height             | 18.9 cm  |
| Package 1 Width              | 16.4 cm  |
| Package 1 Length             | 20.7 cm  |
| Package 1 Weight             | 2.35 kg  |
| Unit type of Package 2       | 1 carton |
| Number of Units in Package 2 | 4 pcs    |
| Package 2 Height             | 23.1 cm  |
| Package 2 Width              | 37.4 cm  |
| Package 2 Length             | 46 cm    |
| Package 2 Weight             | 11.0 kg  |

## Offer Sustainability

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

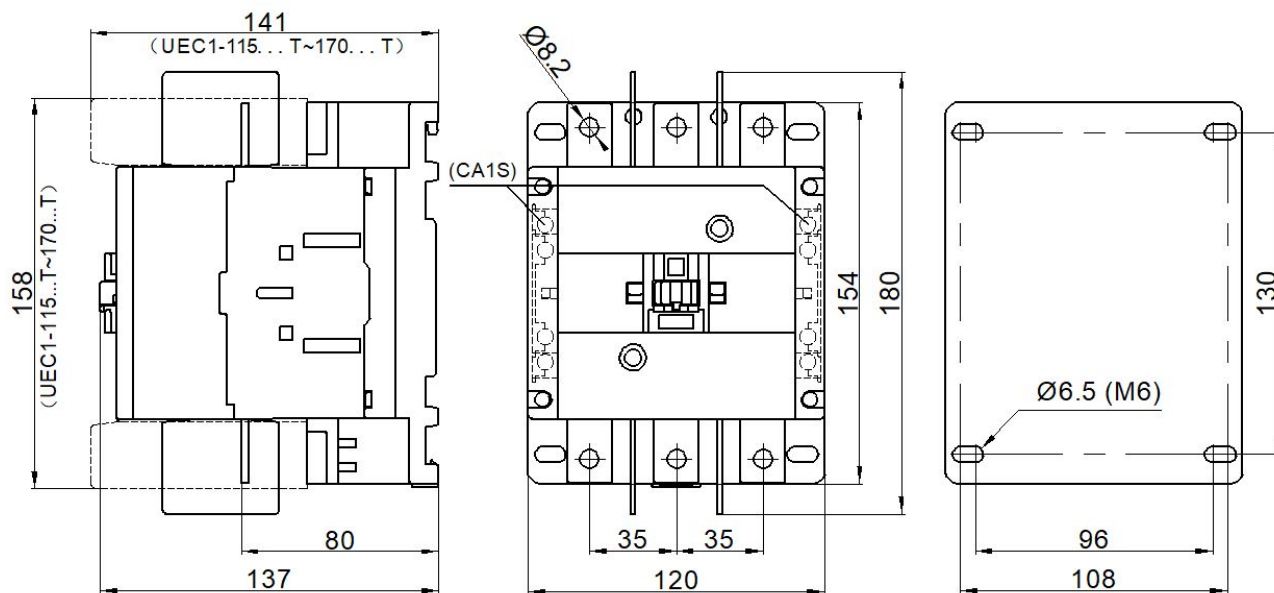
## Contractual Warranty

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

## Dimensions

UEC1-115...170 (3P, AC Coil)

AC Contactor:

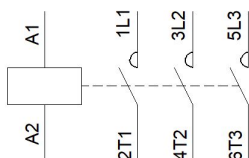


Note: The unit is mm. The tolerance for mounting holes:  $\pm 0.5$ ; for other external dimensions:  $\pm 1.5$ , unless otherwise specified.

## Wiring Diagram

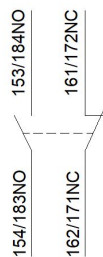
AC contactor

3P



Side mounting auxiliary contact block (instantaneous auxiliary contact)

CA1S11 (1NO1NC)



CA1S20 (2NO)



CA1S02 (2NC)

