# Product datasheet

Specifications



## Contactor, HFUC5-115，3P (3NO), AC Coil

## Main

| | |
|---|---|
| Product Series | HFUC5 |
| Product or Component Type | Contactor |
| Device short name | HFUC5-115 |
| 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 | 115 A (at ≤60 °C) at ≤ 400 V AC AC-3 for power circuit<br>160 A (at ≤60 °C) at ≤ 690 V AC AC-1 for power circuit |
| [Us] Control circuit voltage (AC 50/60Hz) | Voltage (V): 24 36 42 48 110 115 127 220 230 240 380 400 415<br>Code: B7 CC7 D7 E7 F7 FE7 FC7 M7 P7 U7 Q7 V7 N7 |

## Complementary

| | |
|---|---|
| Motor power kW | 30 kW at 220/230 V AC 50/60 Hz (AC-3)<br>55 kW at 380/400 V AC 50/60 Hz (AC-3)<br>80 kW at 660/690 V AC 50/60 Hz (AC-3) |
| Pole contact composition | 3 NO |
| [Ith] Conventional free air thermal current | 200 A (at ≤60 °C) for power circuit |
| Associated fuse rating | 160 A gG at ≤ 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 | 0.5 M cycles 115 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 | 0.8...1.1 Us (-40...+40 °C): operational AC 50 Hz<br>0.85...1.1 Us (-40...+40 °C): operational AC 60 Hz<br>0.2...0.75 Us (-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 mm² - cable stiffness: flexible without cable end<br>Power circuit: bolt clamp terminals 2 10...120 mm² +10...50 mm² - cable stiffness: flexible without cable end<br>Power circuit: bolt clamp terminals 1 10...120 mm² - cable stiffness: flexible with cable end<br>Power circuit: bolt clamp terminals 2 10...120 mm² +10...50 mm² - cable stiffness: flexible with cable end<br>Power circuit: bolt clamp terminals 1 10...120 mm² - cable stiffness: solid without cable end<br>Power circuit: bolt clamp terminals 2 10...120 mm² +10...50 mm² - 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<br>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 |
| 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<br>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 | IP00 (Standard Products )<br>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 (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 |

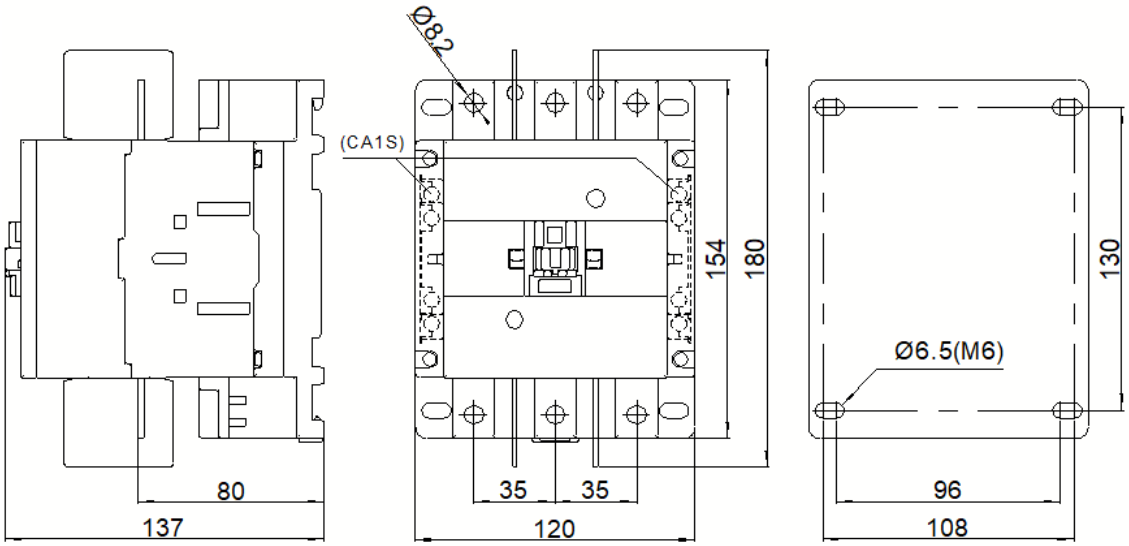
## Contractual warranty

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

## Dimensions

HFUC5-115~170 (3P, AC coil, Standard Products )

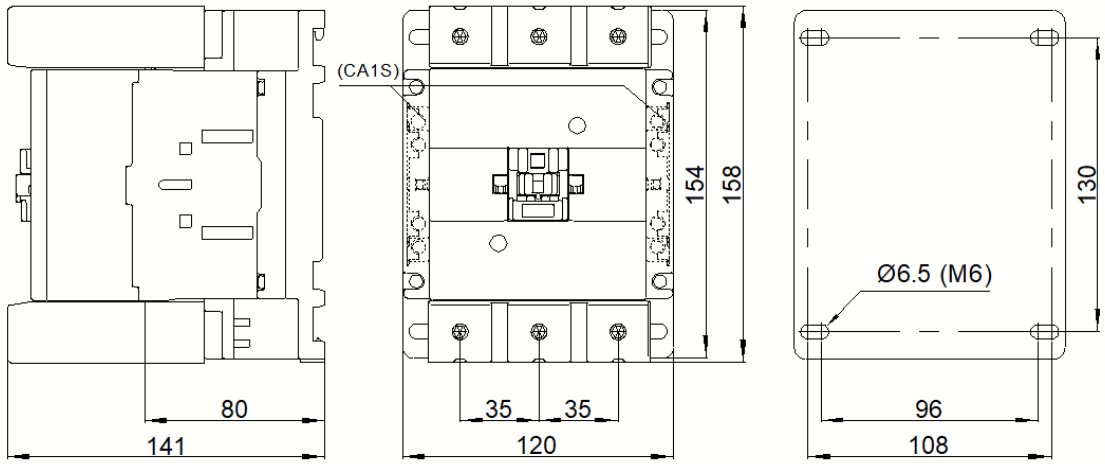
AC contactor:




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

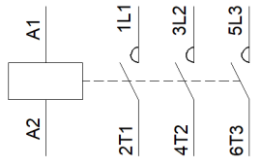
HFUC5-115~170 (3P, AC coil, Products with wiring terminal modules )

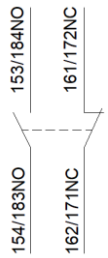
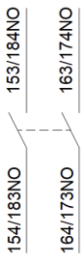
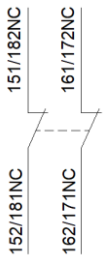
AC contactor:




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 |
|  |

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