

## Specifications



## Contactor, UEC3-12N, 3P (3NO), AC Coil

### Main

Product Series	UEC3
Product or Component Type	Contactor
Device Short Name	UEC3-12N
Contactor Application	Motor control Resistive load
Utilisation Category	AC-3 AC-4 AC-1
Poles Description	3P
[Ue] Rated Operational Voltage	Power circuit: $\leq 690$ V AC 50/60Hz
[Ie] Rated Operational Current	12 A (at $\leq 60$ °C) at $\leq 400$ V AC AC-3 for power circuit 10 A (at $\leq 60$ °C) at $\leq 400$ V AC AC-4 for power circuit 25 A (at $\leq 60$ °C) at $\leq 690$ V AC AC-1 for power circuit
[Us] Control Circuit Voltage (AC 50/60Hz)	Voltage (V): 24    36    48    110    220...230    380 Code:            B7    CC7    E7    F7            M7            Q7

### Complementary

Motor Power kW	3 kW at 220/230 V AC 50/60 Hz (AC-3) 5.5 kW at 380/400 V AC 50/60 Hz (AC-3) 7.5 kW at 660/690 V AC 50/60 Hz (AC-3)
Motor Power hp	0.75 hp at 110...120 V AC 50/60 Hz for 1 phase motors 2 hp at 200...208 V AC 50/60 Hz for 1 phase motors 2 hp at 220...240 V AC 50/60 Hz for 1 phase motors 3 hp at 200...208 V AC 50/60 Hz for 3 phases motors 3 hp at 220...240 V AC 50/60 Hz for 3 phases motors 7.5 hp at 440...480 V AC 50/60 Hz for 3 phases motors 10 hp at 550...600 V AC 50/60 Hz for 3 phases motors
Pole Contact Composition	3 NO

[Ith] Conventional Free Air Thermal Current	25 A (at $\leq 60$ °C) for power circuit 10 A (at $\leq 60$ °C) for signalling circuit
[Icw] Rated Short-time Withstand Current	105 A $\leq 40$ °C - 10 s for power circuit 61 A $\leq 40$ °C - 1 min for power circuit 30 A $\leq 40$ °C - 10 min for power circuit
Associated Fuse Rating	10 A gG for signalling circuit conforming to IEC 60947-5-1 32 A gG at $\leq 690$ V coordination type 2 for power circuit
Average Impedance	2.7 m $\Omega$ - Ith 50 Hz for power circuit
[Ui] Rated Insulation Voltage	Power circuit: 690 V conforming to IEC 60947-4-1 Power circuit: 600 V UL Certified Signalling circuit: 690 V conforming to IEC 60947-5-1 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 12 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	0.85...1.1 $U_s$ (-40...60 °C): operational AC 50/60 Hz 0.2...0.75 $U_s$ (-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 Signalling circuit (NO): 15...26 ms closing, 4...22 ms opening Signalling circuit (NC): 4...19 ms opening, 12...32 ms closing
Maximum Operating Rate	Electrical: 1200 cycs/h Mechanical: 3600 cycs/h
Connections - Terminals	Power circuit: screw clamp terminals 1 1...4 mm <sup>2</sup> (AWG 18...12)- cable stiffness: flexible without cable end Power circuit: screw clamp terminals 2 1...4 mm <sup>2</sup> (AWG 18...12) - cable stiffness: flexible without cable end Power circuit: screw clamp terminals 1 1...4 mm <sup>2</sup> (AWG 18...12) - cable stiffness: flexible with cable end Power circuit: screw clamp terminals 2 1...2.5 mm <sup>2</sup> (AWG 18...14)- cable stiffness: flexible with cable end Power circuit: screw clamp terminals 1 1...4 mm <sup>2</sup> (AWG 18...12)- cable stiffness: solid without cable end Power circuit: screw clamp terminals 2 1...4 mm <sup>2</sup> (AWG 18...12) - cable stiffness: solid without cable end Control circuit: screw clamp terminals 1 1...4 mm <sup>2</sup> (AWG 18...12)- cable stiffness: flexible without cable end

Control circuit: screw clamp terminals 2 1...4 mm<sup>2</sup> (AWG 18...12)- cable stiffness: flexible without cable end

Control circuit: screw clamp terminals 1 1...4 mm<sup>2</sup> (AWG 18...12) - cable stiffness: flexible with cable end

Control circuit: screw clamp terminals 2 1...2.5 mm<sup>2</sup> (AWG 18...14)- cable stiffness: flexible with cable end

Control circuit: screw clamp terminals 1 1...4 mm<sup>2</sup> (AWG 18...12) - cable stiffness: solid without cable end

Control circuit: screw clamp terminals 2 1...4 mm<sup>2</sup> (AWG 18...12) - cable stiffness: solid without cable end

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 Power circuit: 10.7 lb.in (1.2 N·m) - on screw clamp terminals - with screwdriver Philips No 2 Control circuit: 10.7 lb.in (1.2 N·m) - on screw clamp terminals - with screwdriver flat Ø 6 mm 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 35mm DIN Rail

## Environment

Standards	GB/T 14048.4, GB/T 14048.5, IEC/EN 60947-4-1, IEC/EN 60947-5-1, 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 Temperature Around the Device	-40...60 °C for normal operating 60...70 °C with derating (for operation in the range of Us...1.1Us) 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

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

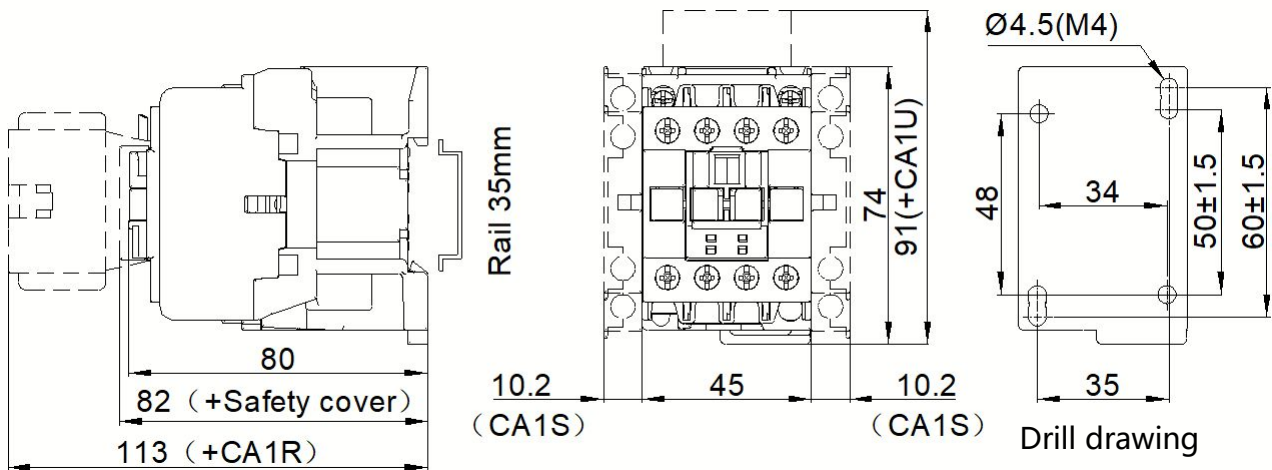
### **Contractual warranty**

Warranty	18 months
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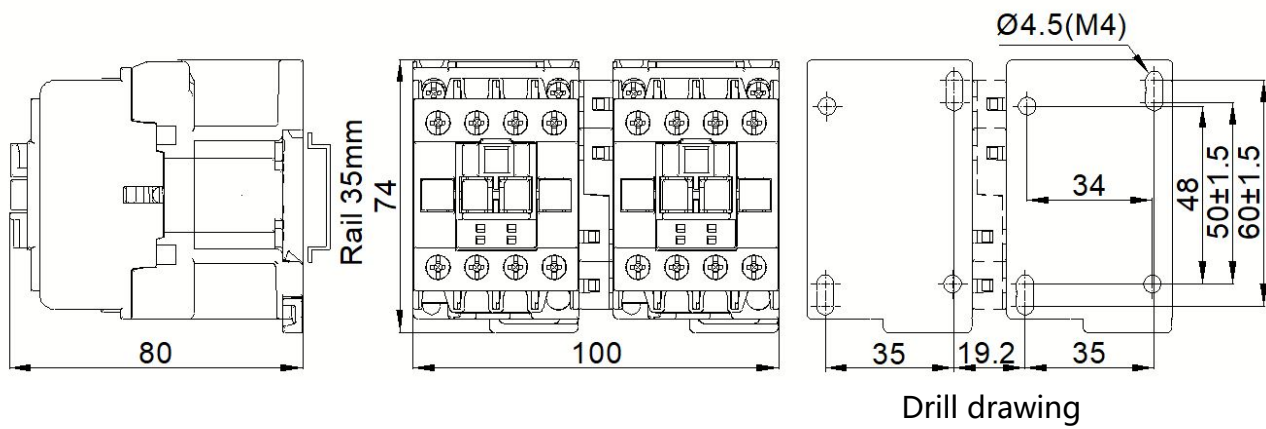
## Dimensions

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

AC contactor:



Interlock 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

