

# Product datasheet



## Specifications



## Contactor, UEC3-38N, 3P (3NO), AC Coil

### Main

Product Series	UEC3					
Product or Component Type	Contactor					
Device Short Name	UEC3-38N					
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	38 A (at $\leq 60$ °C) at $\leq 400$ V AC AC-3 for power circuit 31.7 A (at $\leq 60$ °C) at $\leq 400$ V AC AC-4 for power circuit 50 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	9 kW at 220/230 V AC 50/60 Hz (AC-3) 18.5 kW at 380/400 V AC 50/60 Hz (AC-3) 18.5 kW at 660/690 V AC 50/60 Hz (AC-3)
Motor Power hp	3 hp at 110...120 V AC 50/60 Hz for 1 phase motors 5 hp at 200...208 V AC 50/60 Hz for 1 phase motors 5 hp at 220...240 V AC 50/60 Hz for 1 phase motors 10 hp at 200...208 V AC 50/60 Hz for 3 phases motors 10 hp at 220...240 V AC 50/60 Hz for 3 phases motors 20 hp at 440...480 V AC 50/60 Hz for 3 phases motors 25 hp at 550...600 V AC 50/60 Hz for 3 phases motors
Pole Contact Composition	3 NO

[Ith] Conventional Free Air Thermal Current	50 A (at $\leq 60$ °C) for power circuit 10 A (at $\leq 60$ °C) for signalling circuit
[Icw] Rated Short-time Withstand Current	310 A $\leq 40$ °C - 10 s for power circuit 150 A $\leq 40$ °C - 1 min for power circuit 60 A $\leq 40$ °C - 10 min for power circuit
Associated Fuse Rating	10 A gG for signalling circuit conforming to IEC 60947-5-1 50 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	0.9 M cycles 38 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	75 VA 50/60 Hz (at 25 °C)
Average Hold-in Power Consumption in VA	10.5 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: 600 cycs/h Mechanical: 3600 cycs/h
Connections - Terminals	Power circuit: screw clamp terminals 1 2.5...10 mm <sup>2</sup> (AWG 14...8)- cable stiffness: flexible without cable end Power circuit: screw clamp terminals 2 2.5...10 mm <sup>2</sup> (AWG 14...8) - cable stiffness: flexible without cable end Power circuit: screw clamp terminals 1 1.5...10 mm <sup>2</sup> (AWG 16...8) - cable stiffness: flexible with cable end Power circuit: screw clamp terminals 2 1.5...6 mm <sup>2</sup> (AWG 16...10)- cable stiffness: flexible with cable end Power circuit: screw clamp terminals 1 1.5...10 mm <sup>2</sup> (AWG 16...8)- cable stiffness: solid without cable end Power circuit: screw clamp terminals 2 2.5...10 mm <sup>2</sup> (AWG 14...8) - cable stiffness: solid without cable end Power circuit: M4, Terminal width $\leq 12$ mm (0.472 in) 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: M3.5, Terminal width≤8.1mm (0.318 in)

Tightening Torque	Power circuit: 18 lb.in (2.0 N·m) - on screw clamp terminals - with screwdriver flat Ø 6 mm Power circuit: 18 lb.in (2.0 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, 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	85.5 mm
Width	56 mm
Depth	80 mm
Net Weight	0.38 kg

## Packing Units

Unit Type of Package 1	1 box
Number of Units in Package 1	1 pcs
Package 1 Height	9.6 cm
Package 1 Width	6.3 cm

Package 1 Length	8.8 cm
Package 1 Weight	0.48 kg
Unit type of Package 2	1 carton
Number of Units in Package 2	30 pcs
Package 2 Height	225 cm
Package 2 Width	28.5 cm
Package 2 Length	33.0 cm
Package 2 Weight	13.2 kg

### **Offer Sustainability**

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

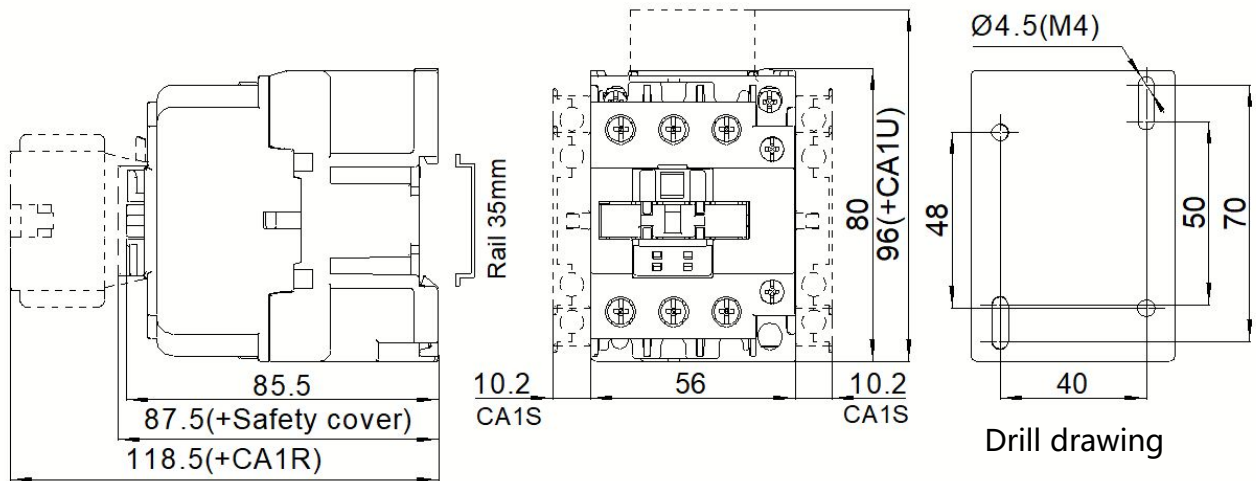
### **Contractual warranty**

Warranty	18 months
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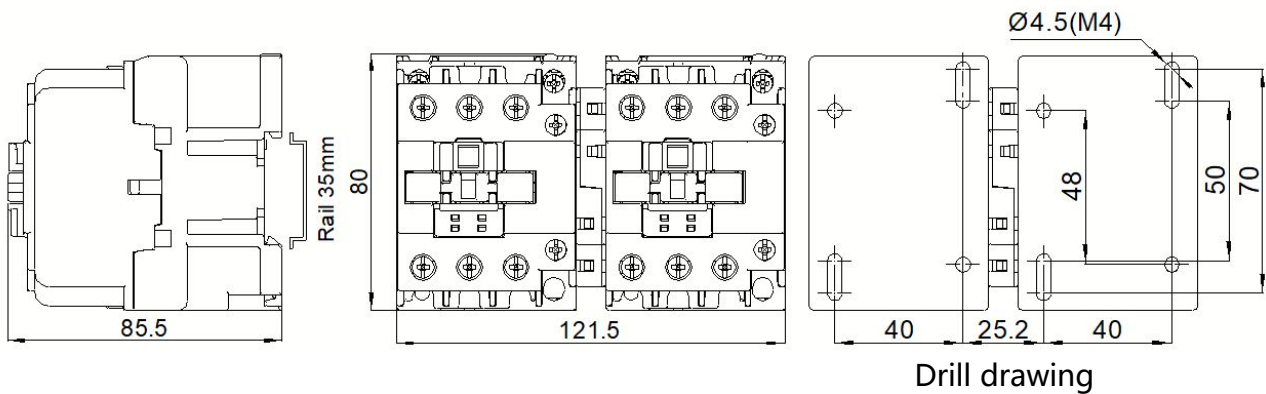
## Dimensions

UEC3-32...38 (3P, AC coil)

AC contactor:

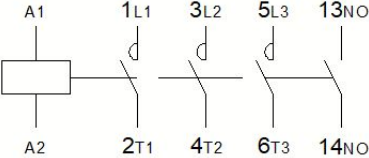
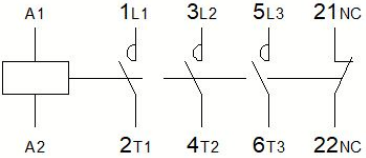
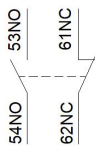
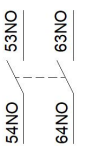
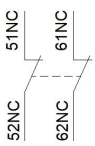
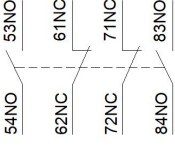
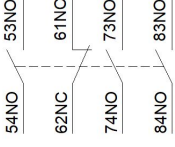
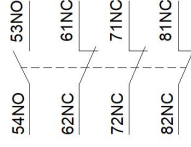
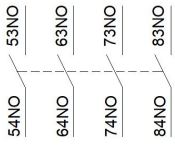
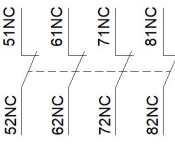


Interlock contactor:



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

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)
