

## Specifications



## Contactor, UEC1-225F, 3P (3NO), DC Coil

### Main

Product Series	UEC1			
Product or Component Type	Contactor			
Device Short Name	UEC1-225F			
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	225 A (at $\leq 40$ °C) at $\leq 400$ V AC AC-3 for power circuit 315 A (at $\leq 40$ °C) at $\leq 690$ V AC AC-1 for power circuit			
[Us] Control Circuit Voltage	Voltage (VDC): 24      48      110      220 Code:              BD      ED      FD      MD			

### Complementary

Motor Power kW	63 kW at 220/240 V AC 50/60 Hz (AC-3) 110 kW at 380/400 V AC 50/60 Hz (AC-3) 110 kW at 415 V AC 50/60 Hz (AC-3) 110 kW at 440 V AC 50/60 Hz (AC-3) 129 kW at 500 V AC 50/60 Hz (AC-3) 129 kW at 660/690 V AC 50/60 Hz (AC-3)
Pole Contact Composition	3 NO
[Ith] Conventional Free Air Thermal Current	315 A (at $\leq 40$ °C) for power circuit
[Icw] Rated Short-Time Withstand Current	1800 A $\leq 40$ °C - 10 s for power circuit 1000 A $\leq 40$ °C - 30 s for power circuit 850 A $\leq 40$ °C - 1 min for power circuit 560 A $\leq 40$ °C - 3 min for power circuit

	440 A $\leq 40$ °C - 10 min for power circuit
Associated Fuse Rating	315 A gG at $\leq 400$ V coordination type 2 for power circuit
Average Impedance	0.32 m $\Omega$ - lth 50 Hz 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	3 M cycles
Electrical Durability	0.5 M cycles 225 A AC-3 at $U_e \leq 400$ V
Control Dircuit Type	DC
Control Circuit Voltage Limits	0.85...1.1 Us (-5...40 °C): operational 0.1...0.75 Us (-5...40 °C): drop-out
Inrush Power in VA	737...902 VA (at 25 °C)
Hold-in Power Consumption in VA	4.1...5.1 VA (at 25 °C)
Operating Time	30...40 ms closing, 30...50 ms opening
Maximum Operating Rate	Electrical: 600 cycs/h Mechanical: 1200 cycs/h
Connections - Terminals	Power circuit lugs-ring terminals 1 185 mm <sup>2</sup> Power circuit connector 1 185 mm <sup>2</sup> Power circuit bar 2 32 x 3 mm Power circuit bolted connection M10 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
Tightening Torque	Power circuit: 310 lb.in (35 N·m)- on bolt locking terminals - with external hexagonal wrench 16 Control circuit: 11 lb.in (1.2 N·m) - on screw clamp terminals - with screwdriver flat $\varnothing$ 6 mm Control circuit: 11 lb.in (1.2 N·m) - on screw clamp terminals - with screwdriver Philips No 2
Mounting Support	Screw

## Environment

Standards	GB/T 14048.4, IEC/EN 60947-4-1, BS EN 60947-4-1
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Product Certifications	CCC, CE, UKCA
IP Degree of Protection	IP00 front face conforming to IEC 60529
Permissible Ambient Air Temperature Around the Device	-5...40 °C for normal operating 40...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	197 mm
Width	168.5 mm
Depth	181 mm
Net Weight	4.70 kg

## Packing Units

Unit Type of Package 1	1 box
Number of Units in Package 1	1 pcs
Package 1 Height	21.0 cm
Package 1 Width	22.8 cm
Package 1 Length	23.5 cm
Package 1 Weight	5.60 kg
Unit type of Package 2	1 carton
Number of Units in Package 2	4 pcs
Package 2 Height	24.0 cm
Package 2 Width	48.3 cm
Package 2 Length	49.8 cm
Package 2 Weight	22.40 kg

## Offer Sustainability

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

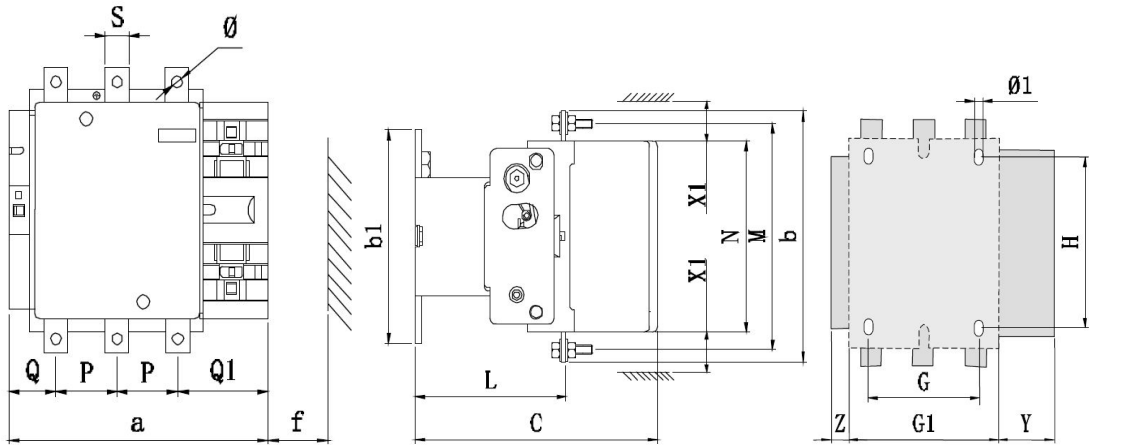
## Contractual Warranty

Warranty	18 months
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## Dimensions

UEC1-225F (3P, DC coil)

AC contactor:



	UEC1-225F
a	168.5
P	48
Q	21
Q1	51.5
S	25
Φ	M10
f	130
b	197
b1	137
M	172
N	127
C	181
L	113.5
G	80
H	120 ~ 106
Φ1	6.5
G1	111
Z	13.5
Y	44
X1	10 ( $U_e \leq 500V$ )、15 ( $U_e > 500V$ )

Note: Unit: mm

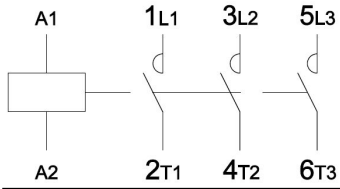
f: Minimum distance required for coil removal.

X1: Minimum electrical clearance according to operational voltage and breaking capacity.

## Wiring diagram

AC contactor

3P



Top mounting auxiliary contact block (instantaneous auxiliary contact)

<p>CA1R11 (1NO1NC)</p>	<p>CA1R20 (2NO)</p>	<p>CA1R02 (2NC)</p>
<p>CA1R22 (2NO2NC)</p>	<p>CA1R31 (3NO1NC)</p>	<p>CA1R13 (1NO3NC)</p>
<p>CA1R40 (4NO)</p>	<p>CA1R04 (4NC)</p>	