

Product datasheet



Specifications



Contactor, UEC1-185F, 3P (3NO), DC Coil

Main

Product Series	UEC1			
Product or Component Type	Contactor			
Device Short Name	UEC1-185F			
Contactor Application	Motor control			
	Resistive load			
Utilisation Category	AC-3			
	AC-4			
	AC-1			
Poles Description	3P			
[Ue]Rated Operational Voltage	Power circuit: ≤ 690 V AC 50/60Hz			
[Ie]Rated Operational Current	185 A (at ≤ 40 °C) at ≤ 400 V AC AC-3 for power circuit			
	275 A (at ≤ 40 °C) at ≤ 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	55 kW at 220/240 V AC 50/60 Hz (AC-3)			
	90 kW at 380/400 V AC 50/60 Hz (AC-3)			
	100 kW at 415 V AC 50/60 Hz (AC-3)			
	100 kW at 440 V AC 50/60 Hz (AC-3)			
	110 kW at 500 V AC 50/60 Hz (AC-3)			
	110 kW at 660/690 V AC 50/60 Hz (AC-3)			
Pole Contact Composition	3 NO			
[Ith] Conventional Free Air Thermal Current	275 A (at ≤ 40 °C) for power circuit			
[Icw] Rated Short-Time Withstand Current	1500 A ≤ 40 °C - 10 s for power circuit			
	920 A ≤ 40 °C - 30 s for power circuit			
	740 A ≤ 40 °C - 1 min for power circuit			
	500 A ≤ 40 °C - 3 min for power circuit			

	400 A ≤ 40 °C - 10 min for power circuit
Associated Fuse Rating	315 A gG at ≤ 400 V coordination type 2 for power circuit
Average Impedance	0.33 m Ω - 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 185 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 50/60 Hz (at 25 °C)
Hold-in Power Consumption in VA	4.1...5.1 VA 50/60 Hz (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 1 150 mm ² Power circuit connector 1 150 mm ² Power circuit bar 2 25 x 3 mm Power circuit bolted connection M8 Control circuit: screw clamp terminals 1 1...4 mm ² (AWG 18...12)- cable stiffness: flexible without cable end Control circuit: screw clamp terminals 2 1...4 mm ² (AWG 18...12)- cable stiffness: flexible without cable end Control circuit: screw clamp terminals 1 1...4 mm ² (AWG 18...12) - cable stiffness: flexible with cable end Control circuit: screw clamp terminals 2 1...2.5 mm ² (AWG 18...14)- cable stiffness: flexible with cable end Control circuit: screw clamp terminals 1 1...4 mm ² (AWG 18...12) - cable stiffness: solid without cable end Control circuit: screw clamp terminals 2 1...4 mm ² (AWG 18...12) - cable stiffness: solid without cable end
Tightening Torque	Power circuit: 159 lb.in (18 N·m)- on bolt locking terminals - with external hexagonal wrench 13 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	174 mm
Width	168.5 mm
Depth	181 mm
Net Weight	4.60 kg

Packing Units

Unit Type of Package 1	1 box
Number of Units in Package 1	1 pcs
Package 1 Height	21.7 cm
Package 1 Width	19.3 cm
Package 1 Length	24.0 cm
Package 1 Weight	5.35 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	42.0 cm
Package 2 Length	51.0 cm
Package 2 Weight	21.4 kg

Offer Sustainability

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

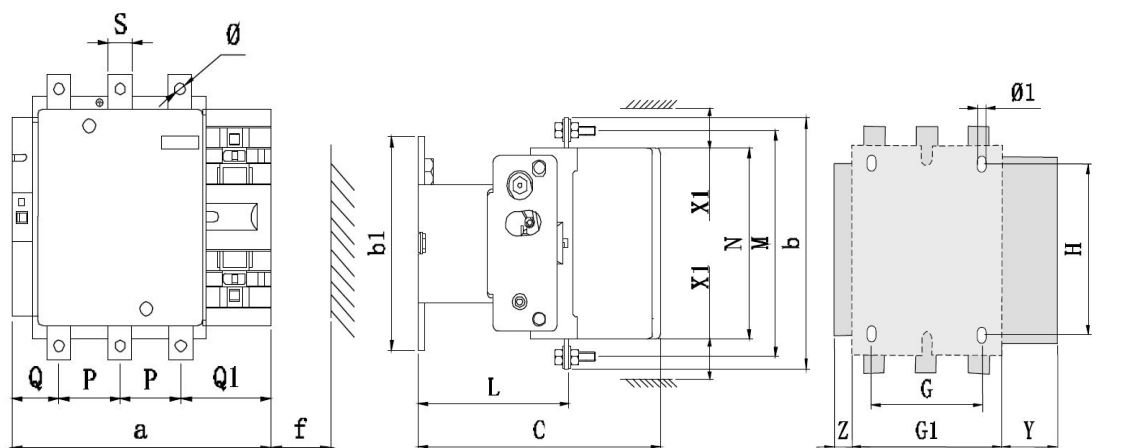
Contractual Warranty

Warranty	18 months
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Dimensions

UEC1-185F (3P, DC coil)

AC contactor:



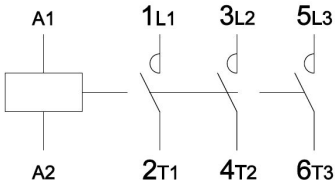
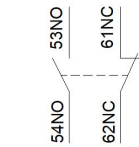
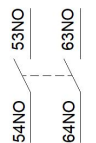
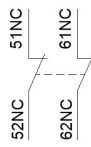
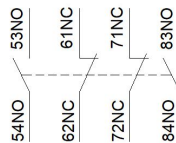
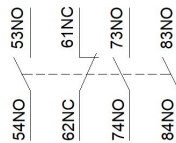
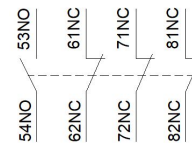
	UEC1-185F
a	168.5
P	40
Q	29
Q1	59.5
S	20
Ø	M8
f	130
b	174
b1	137
M	154
N	127
C	181
L	113.5
G	80
H	120 ~ 106
Ø1	6.5
G1	111
Z	13.5
Y	44
X1	10 ($U_e \leq 500V$) 、 15 ($U_e > 500V$)

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