

AF140-40-11-12



Products → Low Voltage Products and Systems → Control Products → Contactors → Block Contactors

General Information

Extended Product Type:	AF140-40-11-12
Product ID:	1SFL447101R1211
EAN:	7320500503751
Catalog Description:	AF140-40-11-12 Contactor
Long Description:	A 3-phase Contactor suitable for various applications such as Motor starting, Isolation, By-pass and Distribution application up to max 690 V. Operated with wide control voltage range 48-130 V, 50/60 Hz and DC

Ordering

Minimum Order Quantity:	1 piece
Customs Tariff Number:	85364900

Dimensions

Product Net Width:	120 mm
Product Net Depth / Length:	128,1 mm
Product Net Height:	150 mm
Product Net Weight:	2.07 kg

Technical

Number of Main Contacts NO:	4
Number of Main Contacts NC:	0
Number of Auxiliary Contacts NO:	1
Number of Auxiliary Contacts NC:	1
Rated Operational Voltage:	Main Circuit 690 V
Rated Frequency (f):	Main Circuit 60 Hz
Conventional Free-air Thermal Current (I_{th}):	acc. to IEC 60947-4-1, Open Contactors $q = 40$ °C 200 A
Rated Operational Current AC-1 (I_e):	(690 V) 40 °C 200 A (690 V) 70 °C 160 A (690 V) 60 °C 175 A
Rated Operational Current AC-3 (I_e):	(415 V) 55 °C 140 A (220 / 230 / 240 V) 55 °C 140 A (440 V) 55 °C 140 A (380 / 400 V) 55 °C 140 A

Rated Operational Power AC-3 (P_e):	(220 / 230 / 240 V) 37 kW (380 / 400 V) 75 kW (440 V) 90 kW (415 V) 75 kW
Rated Breaking Capacity AC-3 acc. to IEC 60947-4-1:	8 x I _e AC-3
Rated Making Capacity AC-3 acc. to IEC 60947-4-1:	10 x I _e AC-3
Short-Circuit Protective Devices:	gG Type Fuses 250 A
Rated Short-time Withstand Current (I_{cw}):	at 40 °C Ambient Temp, in Free Air, from a Cold State 30 s 674 A at 40 °C Ambient Temp, in Free Air, from a Cold State 15 min 200 A at 40 °C Ambient Temp, in Free Air, from a Cold State 10 s 1168 A at 40 °C Ambient Temp, in Free Air, from a Cold State 1 s 1460 A at 40 °C Ambient Temp, in Free Air, from a Cold State 1 min 477 A
Maximum Breaking Capacity:	cos phi=0.45 (cos phi=0.35 for I _e > 100 A) at 440 V 3000 A
Maximum Electrical Switching Frequency:	AC-1 300 cycles per hour
Rated Insulation Voltage (U_i):	acc. to UL/CSA 600 V acc. to IEC 60947-4-1 and VDE 0110 (Gr. C) 1000 V
Rated Impulse Withstand Voltage (U_{imp}):	Main Circuit 8 kV
Mechanical Durability:	5 million
Maximum Mechanical Switching Frequency:	300 cycles per hour
Coil Operating Limits:	(acc. to IEC 60947-4-1) 0.85 x U _c Min. ... 1.1 x U _c Max. (at θ ≤ 70 °C) °C
Rated Control Circuit Voltage (U_c):	60 Hz 48 ... 130 V 50 Hz 48 ... 130 V DC Operation 48 ... 130 V
Coil Consumption:	Pull-in at Max. Rated Control Circuit Voltage 60 Hz 170 V·A Holding at Max. Rated Control Circuit Voltage DC 2.5 W Holding at Max. Rated Control Circuit Voltage 50 Hz 4 V·A Pull-in at Max. Rated Control Circuit Voltage DC 130 W Pull-in at Max. Rated Control Circuit Voltage 50 Hz 170 V·A Holding at Max. Rated Control Circuit Voltage 60 Hz 4 V·A
Operate Time:	Between Coil De-energization and NO Contact Opening 40 ... 70 ms Between Coil Energization and NO Contact Closing 20 ... 55 ms
Connecting Capacity Main Circuit:	Flexible 1 x 10 ... 70 mm ² Rigid Cu-Cable 2 x 10 ... 95 mm ²
Connecting Capacity Auxiliary Circuit:	Solid 1 x 1 ... 4 mm ² Flexible with Insulated Ferrule 2 x 0.75 ... 2.5 mm ² Stranded 2 x 1 ... 4 mm ² Flexible 1x0.75 ... 2.5 mm ² Flexible with Ferrule 2 x 0.75 ... 2.5 mm ²

Degree of Protection: acc. to IEC 60529, IEC 60947-1, EN 60529 Coil Terminals IP20
acc. to IEC 60529, IEC 60947-1, EN 60529 Main Terminals IP00

Terminal Type: Double Clamp

Environmental

Ambient Air Temperature: Close to Contactor Fitted with Thermal O/L Relay (0.85 ... 1.1 Uc) -25 ... +50 °C
Close to Contactor without Thermal O/L Relay (0.85 ... 1.1 Uc) -40 ... +70 °C
Close to Contactor for Storage -40 ... +70 °C

Maximum Operating Altitude Permissible: 3000 m

Technical UL/CSA

Maximum Operating Voltage UL/CSA: Main Circuit 600 V

General Use Rating UL/CSA: (600 V AC) 200 A

Certificates and Declarations (Document Number)

CB Certificate: SEMKO_SE-77317

CCC Certificate: 2013010304604055

cUL Certificate: E73397_20140710

DNV GL Certificate: DNV_E-14043

LR Certificate: LR_14_70011(E1)

Container Information

Package Level 1 Units: 1 piece

Package Level 1 Gross Weight: 2.27 kg

Package Level 1 EAN: 7320500503751

Classifications

Object Classification Code: Q

ETIM 4: EC000066 - Magnet contactor, AC-switching

ETIM 5: EC000066 - Magnet contactor, AC-switching

ETIM 6: EC000066 - Power contactor, AC switching



Parameter	Value
U _N	240/275 V
I _N	40 A
I _{cu}	10 kA
I _{cs}	10 kA
I _{cu} (3s)	10 kA
I _{cs} (3s)	10 kA
I _{cu} (1s)	10 kA
I _{cs} (1s)	10 kA
I _{cu} (0.1s)	10 kA
I _{cs} (0.1s)	10 kA
I _{cu} (0.01s)	10 kA
I _{cs} (0.01s)	10 kA
I _{cu} (0.001s)	10 kA
I _{cs} (0.001s)	10 kA
I _{cu} (0.0001s)	10 kA
I _{cs} (0.0001s)	10 kA
I _{cu} (0.00001s)	10 kA
I _{cs} (0.00001s)	10 kA