

AF190-30-11-11



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

General Information

Extended Product Type:	AF190-30-11-11
Product ID:	1SFL487002R1111
EAN:	7320500480410
Catalog Description:	AF190-30-11-11 Contactor
Long Description:	A 3-phase Contactor suitable for various applications such as Motor starting, Isolation, By-pass and Distribution application up to max 1000 V. Operated with wide control voltage range 24-60 V, 50 and 60 Hz, 20-60 V DC

Ordering

Minimum Order Quantity:	1 piece
Customs Tariff Number:	85364900

Popular Downloads

Data Sheet, Technical Information:	1SFC101070D0201
Instructions and Manuals:	1SFC100008M0201
Dimension Diagram:	1SFB535001G1056

Dimensions

Product Net Width:	105.0 mm
Product Net Depth / Length:	152.0 mm
Product Net Height:	196.0 mm
Product Net Weight:	2.778 kg

Technical

Number of Main Contacts NO:	3
Number of Main Contacts NC:	0
Number of Auxiliary Contacts NO:	1
Number of Auxiliary Contacts NC:	1
Rated Operational Voltage:	Main Circuit 1000 V
Rated Frequency (f):	Main Circuit 50/60 Hz
Conventional Free-air Thermal Current (I_{th}):	acc. to IEC 60947-4-1, Open Contactors $q = 40\text{ °C}$ 275 A

Rated Operational Current AC-1 (I_e):	(690 V) 55 °C 250 A (690 V) 40 °C 275 A (1000 V) 40 °C 250 A (1000 V) 55 °C 225 A (690 V) 70 °C 200 A (1000 V) 70 °C 185 A
Rated Operational Current AC-3 (I_e):	(1000 V) 55 °C 85 A (415 V) 55 °C 190 A (690 V) 55 °C 135 A (220 / 230 / 240 V) 55 °C 190 A (440 V) 55 °C 190 A (380 / 400 V) 55 °C 190 A (500 V) 55 °C 135 A
Rated Operational Power AC-3 (P_e):	(220 / 230 / 240 V) 55 kW (380 / 400 V) 90 kW (415 V) 90 kW (440 V) 110 kW (500 V) 90 kW (690 V) 132 kW (1000 V) 110 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 355 A
Rated Short-time Withstand Current (I_{cw}):	at 40 °C Ambient Temp, in Free Air, from a Cold State 15 min 275 A at 40 °C Ambient Temp, in Free Air, from a Cold State 30 s 878 A at 40 °C Ambient Temp, in Free Air, from a Cold State 10 s 1520 A at 40 °C Ambient Temp, in Free Air, from a Cold State 1 s 1900 A at 40 °C Ambient Temp, in Free Air, from a Cold State 1 min 621 A
Maximum Breaking Capacity:	cos phi=0.45 (cos phi=0.35 for $I_e > 100$ A) at 440 V 3300 A cos phi=0.45 (cos phi=0.35 for $I_e > 100$ A) at 690 V 2200 A
Maximum Electrical Switching Frequency:	AC-3 300 cycles per hour AC-1 300 cycles per hour AC-2 / AC-4 150 cycles per hour
Rated Operational Current DC-1 (I_e):	(110 V) 2 Poles in Series, 40 °C 250 A (220 V) 3 Poles in Series, 40 °C 250 A
Rated Operational Current DC-3 (I_e):	(110 V) 2 Poles in Series, 40 °C 250 A (220 V) 3 Poles in Series, 40 °C 250 A
Rated Operational Current DC-5 (I_e):	(110 V) 2 Poles in Series, 40 °C 250 A (220 V) 3 Poles in Series, 40 °C 250 A
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 $\theta \leq 70$ °C) °C
Rated Control Circuit Voltage (U_c):	60 Hz 24 ... 60 V 50 Hz 24 ... 60 V DC Operation 20 ... 60 V
Coil Consumption:	Pull-in at Max. Rated Control Circuit Voltage 60 Hz 165 V·A Holding at Max. Rated Control Circuit Voltage DC 2.5 W Holding at Max. Rated Control Circuit Voltage 50 Hz 6 V·A Pull-in at Max. Rated Control Circuit Voltage DC 205 W Pull-in at Max. Rated Control Circuit Voltage 50 Hz 165 V·A Holding at Max. Rated Control Circuit Voltage 60 Hz 6 V·A
Operate Time:	Between Coil De-energization and NO Contact Opening 37 ... 47 ms Between Coil Energization and NO Contact Closing 25 ... 55 ms
Connecting Capacity Main Circuit:	Rigid Al-Cable 1 x 95 ... 185 mm ² Flexible 2 x 50 ... 95 mm ² Rigid Cu-Cable 2 x 50 ... 120 mm ²
Connecting Capacity Auxiliary Circuit:	Solid 2 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 2x0.75 ... 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:	Main Circuit: Bars

Environmental

Ambient Air Temperature:	Close to Contactor Fitted with Thermal O/L Relay (0.85 ... 1.1 U _c) -25 ... +50 °C Close to Contactor without Thermal O/L Relay (0.85 ... 1.1 U _c) -40 ... +70 °C Close to Contactor for Storage -40 ... +70 °C
Maximum Operating Altitude Permissible:	3000 m
RoHS Status:	Following EU Directive 2002/95/EC August 18, 2005 and amendment

Technical UL/CSA

Maximum Operating Voltage UL/CSA:	Main Circuit 600 V
General Use Rating UL/CSA:	(600 V AC) 250 A
Horsepower Rating UL/CSA:	(208 V AC) Three Phase 50 Hp (440 ... 480 V AC) Three Phase 125 Hp (550 ... 600 V AC) Three Phase 150 Hp (220 ... 240 V AC) Three Phase 60 Hp (200 V AC) Three Phase 50 Hp

Certificates and Declarations (Document Number)

ABS Certificate:	14-LD1092198-PDA
BV Certificate:	BV_36353_A0BV
CB Certificate:	SE-82315
CCC Certificate:	CQC_2014010304676685
CCS Certificate:	GB14T00030
cUL Certificate:	20121023-E36588
Declaration of Conformity - CE:	2CMT004613
DNV Certificate:	DNV_E-14043
EAC Certificate:	EAC_RUC-SE.ME77.B.01005
Environmental Information:	2CMT004732
GL Certificate:	GL_95072-14HH
Instructions and Manuals:	1SFC100008M0201
LR Certificate:	LR_14_70011(E1)
PRS Certificate:	TE_2092_880423_16
RINA Certificate:	ELE060313XG_002
RMRS Certificate:	9AKK107045A6978
RoHS Information:	1SFC101055D0202
UL Listing Card:	UL_E36588

Container Information

Package Level 1 Units:	1 piece
Package Level 1 Width:	223 mm
Package Level 1 Depth / Length:	133 mm
Package Level 1 Height:	186 mm
Package Level 1 Gross Weight:	3.228 kg
Package Level 1 EAN:	7320500480410

Classifications

Object Classification Code:	Q
E-number:	3210132
ETIM 4:	EC000066 - Magnet contactor, AC-switching
ETIM 5:	EC000066 - Magnet contactor, AC-switching
ETIM 6:	EC000066 - Power contactor, AC switching
UNSPSC:	39121529

