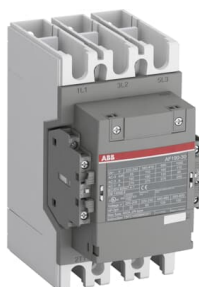




 PRODUCT-DETAILS

AF190B-30-22RT-13

AF190B-30-22RT-13 Contactor



General Information

Extended Product Type:	AF190B-30-22RT-13
Product ID:	1SFL487062R1322
EAN:	7320500510179
Catalog Description:	AF190B-30-22RT-13 Contactor
Long Description:	<p>The AF190B-30-22RT-13 is a 3 pole - 1000 V IEC or 600 V UL contactor with pre-mounted auxiliary contacts and ring tongue ferrules, controlling motors up to 90 kW / 400 V AC (AC-3) or 125 hp / 480 V UL and switching power circuits up to 275 A (AC-1) or 250 A UL general use. Thanks to the AF technology, the contactor has a wide control voltage range (100-250 V 50/60 Hz and DC), managing large control voltage variations, reducing panel energy consumptions and ensuring distinct operations in unstable networks. Furthermore, surge protection is built-in, offering a compact solution. AF contactors have a block type design, can be easily extended with add-on auxiliary contact blocks and an additional wide range of accessories. Includes Mounting kit, containing all necessary screws, washers and sockets for connecting the terminals, and screws for mounting the device.</p>
Display Name:	AF190B-30-22RT-13

Ordering

Minimum Order Quantity:	1 piece
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Customs Tariff Number: 85364900

Popular Downloads

Data Sheet, Technical Information:	1SBC100214C0202
Data Sheet, Technical Information (Part 2):	1SAC200017M0002
Instructions and Manuals:	1SFC100008M0201
CAD Dimensional Drawing:	2CDC001079B0201

Dimensions

Product Net Width:	105 mm
Product Net Depth / Length:	153 mm
Product Net Height:	196 mm
Product Net Weight:	2.4 kg

Technical

Number of Main Contacts NO:	3
Number of Main Contacts NC:	0
Number of Auxiliary Contacts NO:	2
Number of Auxiliary Contacts NC:	2
Number of Poles:	3P
Standards:	IEC/EN 60947-1, IEC/EN 60947-4-1, UL 60947-4-1, CSA C22.2 No. 60947-4-1, IEC 60077-1 (applicable parts), IEC 60077-2 (applicable parts), EN 50155 (applicable parts), TR CU 001/2011, IEC 61373, For compliance confirmation on applicable parts based on your application and combination, please consult your ABB sales representatives.
Rated Operational Voltage:	Main Circuit 1000 V
Rated Frequency (f):	Main Circuit 50 / 60 Hz
Rated Operational Current AC-1 (I _e):	(1000 V) 40 °C 250 A (1000 V) 60 °C 225 A (1000 V) 70 °C 185 A (690 V) 40 °C 275 A (690 V) 60 °C 250 A (690 V) 70 °C 200 A
Rated Operational Current AC-3 (I _e):	(415 V) 60 °C 190 A (440 V) 60 °C 190 A (500 V) 60 °C 156 A (690 V) 60 °C 85 A (1000 V) 60 °C 85 A (380 / 400 V) 60 °C 190 A (220 / 230 / 240 V) 60 °C 190 A
Rated Operational Current AC-3e (I _e):	(415 V) 60 °C 190 A (440 V) 60 °C 190 A (500 V) 60 °C 135 A (690 V) 60 °C 135 A (1000 V) 60 °C 85 A (380 / 400 V) 60 °C 190 A (220 / 230 / 240 V) 60 °C 190 A

Rated Operational Current DC-1 (I_e):

- (100 V) 1 Pole, 40 °C 250 A
- (100 V) 1 Pole, 60 °C 250 A
- (100 V) 1 Pole, 70 °C 200 A
- (110 V) 2 Poles in Series, 40 °C 250 A
- (110 V) 2 Poles in Series, 60 °C 250 A
- (110 V) 2 Poles in Series, 70 °C 200 A
- (110 V) 3 Poles in Series, 40 °C 250 A
- (110 V) 3 Poles in Series, 60 °C 250 A
- (110 V) 3 Poles in Series, 70 °C 200 A
- (175 V) 2 Poles in Series, 40 °C 250 A
- (175 V) 2 Poles in Series, 60 °C 250 A
- (175 V) 2 Poles in Series, 70 °C 200 A
- (200 V) 2 Poles in Series, 40 °C 250 A
- (200 V) 2 Poles in Series, 60 °C 250 A
- (200 V) 2 Poles in Series, 70 °C 200 A
- (220 V) 3 Poles in Series, 40 °C 250 A
- (220 V) 3 Poles in Series, 60 °C 250 A
- (220 V) 3 Poles in Series, 70 °C 200 A
- (260 V) 3 Poles in Series, 40 °C 250 A
- (260 V) 3 Poles in Series, 60 °C 250 A
- (260 V) 3 Poles in Series, 70 °C 200 A
- (300 V) 3 Poles in Series, 40 °C 250 A
- (300 V) 3 Poles in Series, 60 °C 250 A
- (300 V) 3 Poles in Series, 70 °C 200 A
- (72 V) 1-Pole, 40 °C 250 A
- (72 V) 1-Pole, 60 °C 250 A
- (72 V) 1-Pole, 70 °C 200 A
- (72 V) 2 Poles in Series, 40 °C 250 A
- (72 V) 2 Poles in Series, 60 °C 250 A
- (72 V) 2 Poles in Series, 70 °C 200 A
- (72 V) 3 Poles in Series, 40 °C 250 A
- (72 V) 3 Poles in Series, 60 °C 250 A
- (72 V) 3 Poles in Series, 70 °C 200 A
- (90 V) 1 Pole, 40 °C 250 A
- (90 V) 1 Pole, 60 °C 250 A
- (90 V) 1 Pole, 70 °C 200 A

Rated Operational Current DC-3 (I_e):

- (110 V) 2 Poles in Series, 40 °C 250 A
- (110 V) 2 Poles in Series, 60 °C 250 A
- (110 V) 2 Poles in Series, 70 °C 200 A
- (110 V) 3 Poles in Series, 40 °C 250 A
- (110 V) 3 Poles in Series, 60 °C 250 A
- (110 V) 3 Poles in Series, 70 °C 200 A
- (220 V) 3 Poles in Series, 40 °C 250 A
- (220 V) 3 Poles in Series, 60 °C 250 A
- (220 V) 3 Poles in Series, 70 °C 200 A
- (72 V) 2 Poles in Series, 40 °C 250 A
- (72 V) 2 Poles in Series, 60 °C 250 A
- (72 V) 2 Poles in Series, 70 °C 200 A
- (72 V) 3 Poles in Series, 40 °C 250 A
- (72 V) 3 Poles in Series, 60 °C 250 A
- (72 V) 3 Poles in Series, 70 °C 200 A

Rated Operational Current DC-5 (I_e):

- (110 V) 2 Poles in Series, 40 °C 250 A
- (110 V) 2 Poles in Series, 60 °C 250 A
- (110 V) 2 Poles in Series, 70 °C 200 A
- (110 V) 3 Poles in Series, 40 °C 250 A
- (110 V) 3 Poles in Series, 60 °C 250 A
- (110 V) 3 Poles in Series, 70 °C 200 A
- (220 V) 3 Poles in Series, 40 °C 250 A
- (220 V) 3 Poles in Series, 60 °C 250 A
- (220 V) 3 Poles in Series, 70 °C 200 A
- (72 V) 2 Poles in Series, 40 °C 250 A
- (72 V) 2 Poles in Series, 60 °C 250 A
- (72 V) 2 Poles in Series, 70 °C 200 A
- (72 V) 3 Poles in Series, 40 °C 250 A
- (72 V) 3 Poles in Series, 60 °C 250 A
- (72 V) 3 Poles in Series, 70 °C 200 A

Rated Operational Power AC-3 (P_e):	(415 V) 90 kW (440 V) 110 kW (500 V) 110 kW (690 V) 132 kW (1000 V) 110 kW (380 / 400 V) 90 kW (220 / 230 / 240 V) 55 kW
Rated Operational Power AC-3e (P_e):	(415 V) 90 kW (440 V) 110 kW (500 V) 110 kW (690 V) 132 kW (1000 V) 110 kW (380 / 400 V) 90 kW (220 / 230 / 240 V) 55 kW
Rated Breaking Capacity AC-3:	8 x I _e AC-3
Rated Breaking Capacity AC-3e:	8.5 x I _e AC-3e
Rated Making Capacity AC-3:	10 x I _e AC-3
Rated Making Capacity AC-3e:	12 x I _e AC-3e
Rated Short-time Withstand Current Low Voltage (I_{cw}):	at 40 °C Ambient Temp, in Free Air, from a Cold State 10 s 275 A at 40 °C Ambient Temp, in Free Air, from a Cold State 15 min 878 A at 40 °C Ambient Temp, in Free Air, from a Cold State 1 min 1900 A at 40 °C Ambient Temp, in Free Air, from a Cold State 1 s 1520 A at 40 °C Ambient Temp, in Free Air, from a Cold State 30 s 621 A
Rated Insulation Voltage (U_i):	acc. to IEC 60947-4-1 and VDE 0110 (Gr. C) 1000 V acc. to UL/CSA 600 V
Maximum Electrical Switching Frequency:	(AC-1) 300 cycles per hour (AC-3) 300 cycles per hour
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)
Rated Control Circuit Voltage (U_c):	50 Hz / 60 Hz 100 ... 250 V DC Operation 100 ... 250 V
Coil Consumption:	Holding at Max. Rated Control Circuit Voltage 50 Hz 26.8 V·A Holding at Max. Rated Control Circuit Voltage 60 Hz 26.8 V·A Holding at Max. Rated Control Circuit Voltage DC 3.5 V·A Holding at Max. Rated Control Circuit Voltage DC 3.5 W Pull-in at Max. Rated Control Circuit Voltage 50 Hz 285 V·A Pull-in at Max. Rated Control Circuit Voltage 60 Hz 285 V·A Pull-in at Max. Rated Control Circuit Voltage DC 360 V·A Pull-in at Max. Rated Control Circuit Voltage DC 360 W
Power Loss:	7 W at Rated Operating Conditions per Pole 7 W
Connecting Capacity Main Circuit:	Flexible 2 x 50 ... 95 mm ² Rigid Cu-Cable 2 x 50 ... 120 mm ²
Connecting Capacity Auxiliary Circuit:	Flexible with Ferrule 2x 0.75 ... 2.5 mm ² Flexible with Insulated Ferrule 2x 0.75 ... 2.5 mm ² Flexible 2x0.75 ... 2.5 mm ² Solid 2 x 1 ... 4 mm ² Stranded 2 x 1 ... 4 mm ²
Connecting Capacity:	Flexible 2 x 50 ... 95 mm ² Rigid Cu-Cable 2 x 10 ... 95 mm ²
Degree of Protection:	acc. to IEC 60529, IEC 60947-1, EN 60529 Auxiliary Terminals IP40 acc. to IEC 60529, IEC 60947-1, EN 60529 Coil Terminals IP20 acc. to IEC 60529, IEC 60947-1, EN 60529 Main Terminals IP00
Tightening Torque:	Cable Lug 9 N·m Main Circuit 14 ... 31 N·m
Terminal Type:	Main Circuit: Bars

Product Name: Block Contactor

Technical UL/CSA

Maximum Operating Voltage UL/CSA:	Main Circuit 600 V
General Use Rating UL/CSA:	(1000 V AC) 250 A
Horsepower Rating UL/CSA:	(200 ... 208 V AC) Three Phase 50 hp (220 ... 240 V AC) Three Phase 60 hp (440 ... 480 V AC) Three Phase 125 hp (550 ... 600 V AC) Three Phase 150 hp
Full Load Amps Motor Use:	(200 ... 208 V AC) Three Phase 150 A (220 ... 240 V AC) Three Phase 154 A (440 ... 480 V AC) Three Phase 156 A (550 ... 600 V AC) Three Phase 144 A

Environmental

Ambient Air Temperature:	Close to Contactor Fitted with Thermal O/L Relay (0.85 ... 1.1 Uc) -25 ... 50 °C Close to Contactor for Storage -40 ... 70 °C
Maximum Operating Altitude Permissible:	Without Derating 3000 m

Material Compliance

Conflict Minerals Reporting Template (CMRT):	9AKK108467A5658
REACH Declaration:	2CMT2021-006202
RoHS Declaration:	2CMT2021-006277
RoHS Information:	No declaration needed
Toxic Substances Control Act - TSCA:	2CMT2023-006525
WEEE B2C / B2B:	Business To Business
WEEE Category:	5. Small Equipment (No External Dimension More Than 50 cm)

ABB EcoSolutions

ABB EcoSolutions:	Yes
ABB Site Meeting Group Waste To Landfill Target:	Non-hazardous waste is sent to a landfill, where there is no alternative option available within 100km of a facility UL 2799 Zero Waste To Landfill Validation available
EcoSolutions Profile:	1SFC100125C0366
End Of Life Disassembling Instructions:	1SFC100112M0001
Environmental Product Declaration - EPD:	1SFC100095D0201 2TFP200018A1001
Extended Product Lifetime:	Product Durability
Improved Energy Efficiency for Customers:	Product Efficiency - Product requires less energy to operate compared to similar product on market or older products from the same line Product Efficiency - Product considered more energy-efficient compared to similar product on market or older products from the same line

Recyclability Rate of the Product acc. to Design for Closing Resource Loops - Standard EN45555 - 79.1 %
EN45555:

Certificates and Declarations

A2L Certificate – UL:	9AKK108468A6695
CB Certificate:	SE-82315
CCS Certificate:	GB14T00030 GZ15T00069
CQC Certificate:	CQC2014010304676685
cURus Certificate:	20150602-E36588_1
Declaration of Conformity - CE:	2CMT2015-005440
Declaration of Conformity - UKCA:	2CMT2020-006124
KC Certificate:	9AKK107046A9912 9AKK108472A2576
UR Certificate:	20150602-E36588_1

Container Information

Package Level 1 Units:	box 1 piece
Package Level 1 Width:	160 mm
Package Level 1 Depth / Length:	258 mm
Package Level 1 Height:	235 mm
Package Level 1 Gross Weight:	3 kg
Package Level 1 EAN:	7320500510179

External Classifications and Standards

Object Classification Code:	Q
ETIM 7:	EC000066 - Power contactor, AC switching
ETIM 8:	EC000066 - Power contactor, AC switching
ETIM 9:	EC000066 - Power contactor, AC switching
eClass:	V11.0 : 27371003
UNSPSC:	39121529
IDEA Granular Category Code (IGCC):	4755 >> Contactors

Accessories

Identifier	Description	Qty	Type	Unit Of Measure
1SFN074807R1000	LW205 Terminal Enlargement	1	LW205	piece
1SFN074810R1000	LX205 Terminal Extension 1		LX205	piece
1SFN010820R1011	CAL19-11 Auxiliary Contact Block	1	CAL19-11	piece

1SFN010820R3311	CAL19-11B Auxiliary Contact Block	1	CAL19-11B	piece
1SFN030300R1000	VM19 Mechanical Interlock1 Unit		VM19	piece
1SFN034403R1000	VM140/190 Mechanical Interlock Unit	1	VM140/190	piece
1SFN035203R1000	VM205/265 Mechanical Interlock Unit	1	VM205/265	piece
1SFN010829R1011	CAL19-11-RT Auxiliary Contact Block	1	CAL19-11-RT	piece
1SFN010829R3311	CAL19-11B-RT Auxiliary Contact Block	1	CAL19-11B-RT	piece
1SFN124801R1000	LT205-30C Terminal Shroud	1	LT205-30C	piece
1SFN124803R1000	LT205-30L Terminal Shroud	1	LT205-30L	piece
1SFN124804R1000	LT205-30Y Terminal Shroud	1	LT205-30Y	piece
1SFN084811R1000	BER205-4 Connection Set 1		BER205-4	piece

Categories

Products > Low Voltage Products and Systems > Control Products > Contactors > Block Contactors > AF Contactors > AF190

