



PRODUCT-DETAILS

AF146B-30-22RT-12

AF146B-30-22RT-12 Contactor



General Information

Extended Product Type	AF146B-30-22RT-12
Product ID	1SFL467062R1222
EAN	7320500509906
Catalog Description	AF146B-30-22RT-12 Contactor
Long Description	The AF146B-30-22RT-12 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 75 kW / 400 V AC (AC-3) or 100 hp / 480 V UL and switching power circuits up to 225 A (AC-1) or 200 A UL general use. Thanks to the AF technology, the contactor has a wide control voltage range (48-130 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.

Ordering

Minimum Order Quantity	1 piece
Customs Tariff Number	85364900

Popular Downloads

Data Sheet, Technical Information	1SBC100192C0204
Instructions and Manuals	1SFC100003M0201
CAD Dimensional Drawing	2CDC001079B0201

Dimensions

Product Net Width	90 mm
Product Net Depth / Length	126 mm
Product Net Height	150 mm
Product Net Weight	1.3 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
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 Operational Current AC-1 (I _e)	(1000 V) 40 °C 225 A (1000 V) 55 °C 200 A (1000 V) 60 °C 200 A (1000 V) 70 °C 175 A (690 V) 40 °C 225 A (690 V) 55 °C 200 A (690 V) 60 °C 200 A (690 V) 70 °C 175 A
Rated Operational Current AC-3 (I _e)	(415 V) 55 °C 146 A (440 V) 55 °C 130 A (500 V) 55 °C 130 A (690 V) 55 °C 93 A (1000 V) 55 °C 60 A (380 / 400 V) 55 °C 146 A (220 / 230 / 240 V) 55 °C 146 A
Rated Operational Current AC-3e (I _e)	(415 V) 60 °C 146 A (440 V) 60 °C 146 A (500 V) 60 °C 130 A (690 V) 60 °C 93 A (1000 V) 60 °C 54 A (380 / 400 V) 60 °C 146 A (220 / 230 / 240 V) 60 °C 146 A
Rated Operational Power AC-3 (P _e)	(415 V) 75 kW (440 V) 90 kW (500 V) 90 kW (690 V) 90 kW (1000 V) 75 kW (380 / 400 V) 75 kW (220 / 230 / 240 V) 45 kW
Rated Operational Power AC-3e (P _e)	(415 V) 75 kW (440 V) 90 kW (500 V) 90 kW (690 V) 90 kW (1000 V) 75 kW (380 / 400 V) 75 kW (220 / 230 / 240 V) 45 kW
Rated Breaking Capacity AC-3	8 x I _e AC-3
Rated Breaking Capacity	8.5 x I _e AC-3e

AC-3e	
Rated Making Capacity AC-3	10 x Ie AC-3
Rated Making Capacity AC-3e	12 x Ie 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 1168 A at 40 °C Ambient Temp, in Free Air, from a Cold State 15 min 225 A at 40 °C Ambient Temp, in Free Air, from a Cold State 1 min 477 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 30 s 674 A
Rated Operational Current DC-1 (I _e)	(110 V) 2 Poles in Series, 40 °C 200 A (110 V) 2 Poles in Series, 60 °C 200 A (110 V) 2 Poles in Series, 70 °C 175 A (110 V) 3 Poles in Series, 40 °C 200 A (110 V) 3 Poles in Series, 60 °C 200 A (110 V) 3 Poles in Series, 70 °C 175 A (175 V) 2 Poles in Series, 40 °C 200 A (175 V) 2 Poles in Series, 60 °C 200 A (175 V) 2 Poles in Series, 70 °C 175 A (220 V) 3 Poles in Series, 40 °C 200 A (220 V) 3 Poles in Series, 60 °C 200 A (220 V) 3 Poles in Series, 70 °C 175 A (260 V) 3 Poles in Series, 40 °C 200 A (260 V) 3 Poles in Series, 60 °C 200 A (260 V) 3 Poles in Series, 70 °C 175 A (72 V) 1-Pole, 40 °C 200 A (72 V) 1-Pole, 60 °C 200 A (72 V) 1-Pole, 70 °C 175 A (72 V) 2 Poles in Series, 40 °C 200 A (72 V) 2 Poles in Series, 60 °C 200 A (72 V) 2 Poles in Series, 70 °C 175 A (72 V) 3 Poles in Series, 40 °C 200 A (72 V) 3 Poles in Series, 60 °C 200 A (72 V) 3 Poles in Series, 70 °C 175 A (90 V) 1 Pole, 40 °C 200 A (90 V) 1 Pole, 60 °C 200 A (90 V) 1 Pole, 70 °C 175 A
Mechanical Durability	5 million
Maximum Mechanical Switching Frequency	300 cycles per hour
Rated Control Circuit Voltage (U _c)	50 Hz / 60 Hz 48 ... 130 V DC Operation 48 ... 130 V
Coil Consumption	Holding at Max. Rated Control Circuit Voltage 50 Hz 4 V·A Holding at Max. Rated Control Circuit Voltage 60 Hz 4 V·A Pull-in at Max. Rated Control Circuit Voltage 50 Hz 180 V·A Pull-in at Max. Rated Control Circuit Voltage 60 Hz 180 V·A Pull-in at Max. Rated Control Circuit Voltage DC 150 W
Terminal Type	Main Circuit: Bars

Technical UL/CSA

General Use Rating UL/CSA	(600 V AC) 200 A
Horsepower Rating UL/CSA	(200 ... 208 V AC) Three Phase 40 hp (220 ... 240 V AC) Three Phase 50 hp (440 ... 480 V AC) Three Phase 100 hp (550 ... 600 V AC) Three Phase 125 hp

Material Compliance

Conflict Minerals Reporting Template (CMRT)	9AKK108467A5658
REACH Declaration	2CMT2021-006202
RoHS Information	2CMT2021-006277
RoHS Status	Following EU Directive 2011/65/EU
Toxic Substances Control Act - TSCA	2CMT2023-006525
WEEE B2C / B2B	Business To Business

WEEE Category5. Small Equipment (No External Dimension More Than 50 cm)

Circular Value

ABB EcoSolutions	Yes
Circular Design Principles Recyclability Rate	Design for Closing Resource Loops - Standard EN45555 - 87.8 %
End of Life Instructions	1SFC100112M0001
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
Improved Resource Efficiency for Customers	Product Efficiency - Product requires less energy to operate compared to similar product on market or older products from the same line
Sustainable Material Content	Recycled Metal - 37 %

Eco Transparency

Environmental Product Declaration - EPD	1SFC100092D0201
--	-----------------

Certificates and Declarations

CB Certificate	SEMKO SE-70479M1
CQC Certificate	CQC2013010304604055
cURus Certificate	20150602-E36588
Declaration of Conformity - CCC	2020980304001304
Declaration of Conformity - CE	2CMT2015-005440
Declaration of Conformity - UKCA	2CMT2020-006124
EAC Certificate	9AKK107046A8618
UR Certificate	20150602-E36588

Container Information

Package Level 1 Units	box 1 piece
Package Level 1 Width	207 mm
Package Level 1 Depth / Length	216 mm
Package Level 1 Height	150 mm
Package Level 1 Gross Weight	1.5 kg
Package Level 1 EAN	7320500509906

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

Categories

Low Voltage Products and Systems → Control Products → Contactors → Block Contactors → AF Contactors → AF146

