

PRODUCT-DETAILS

# AF116-30-00B-43

## AF116-30-00B-43 Contactor



### General Information

Extended Product Type	AF116-30-00B-43
Product ID	1SFL427002R4300
EAN	7320500560747
Catalog Description	AF116-30-00B-43 Contactor
Long Description	<p>The AF116-30-00B-43 is a 3 pole - 690 V IEC or 600 V UL contactor with Main Circuit Bars, controlling motors up to 55 kW / 400 V AC (AC-3) or 75 hp / 480 V UL and switching power circuits up to 160 A (AC-1) or 160 A UL general use. Thanks to the AF technology, the contactor has a control voltage range (220-240 V 50/60 Hz), faster operation time, 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.</p>

### Ordering

Minimum Order Quantity	1 piece
Customs Tariff Number	8536490099

### Popular Downloads

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	0
Number of Auxiliary Contacts NC	0
Rated Operational Voltage	Main Circuit 690 V
Rated Frequency (f)	Main Circuit 50 / 60 Hz
Conventional Free-air Thermal Current ( $I_{th}$ )	acc. to IEC 60947-4-1, Open Contactors $\Theta = 40\text{ °C}$ 160 A
Rated Operational Current AC-1 ( $I_e$ )	(690 V) 40 °C 160 A (690 V) 60 °C 145 A (690 V) 70 °C 130 A
Rated Operational Current AC-3 ( $I_e$ )	(415 V) 60 °C 116 A (440 V) 60 °C 116 A (500 V) 60 °C 110 A (690 V) 60 °C 65 A (380 / 400 V) 60 °C 116 A (220 / 230 / 240 V) 60 °C 116 A
Rated Operational Current AC-3e ( $I_e$ )	(415 V) 60 °C 116 A (440 V) 60 °C 116 A (500 V) 60 °C 110 A (690 V) 60 °C 65 A (380 / 400 V) 60 °C 116 A (220 / 230 / 240 V) 60 °C 116 A
Rated Operational Power AC-3 ( $P_e$ )	(400 V) 55 kW (415 V) 55 kW (440 V) 75 kW (500 V) 55 kW (380 / 400 V) 55 kW (220 / 230 / 240 V) 30 kW
Rated Operational Power AC-3e ( $P_e$ )	(415 V) 55 kW (440 V) 75 kW (500 V) 75 kW (690 V) 55 kW (380 / 400 V) 55 kW (220 / 230 / 240 V) 30 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 928 A at 40 °C Ambient Temp, in Free Air, from a Cold State 15 min 160 A at 40 °C Ambient Temp, in Free Air, from a Cold State 1 min 379 A at 40 °C Ambient Temp, in Free Air, from a Cold State 1 s 1300 A at 40 °C Ambient Temp, in Free Air, from a Cold State 30 s 536 A
Maximum Breaking Capacity	cos phi=0.45 (cos phi=0.35 for $I_e > 100$ A) at 440 V 2000 A cos phi=0.45 (cos phi=0.35 for $I_e > 100$ A) at 690 V 1000 A
Maximum Electrical	(AC-1) 300 cycles per hour

Switching Frequency	(AC-2 / AC-4) 150 cycles per hour (AC-3) 300 cycles per hour
Rated Insulation Voltage (U <sub>i</sub> )	acc. to IEC 60947-4-1 and VDE 0110 (Gr. C) 1000 V acc. to UL/CSA 1000 V
Rated Impulse Withstand Voltage (U <sub>imp</sub> )	Main Circuit 8 kV
Mechanical Durability	5 million
Maximum Mechanical Switching Frequency	300 cycles per hour
Rated Control Circuit Voltage (U <sub>c</sub> )	50 Hz 220 ... 240 V 60 Hz 220 ... 240 V
Coil Consumption	Holding at Max. Rated Control Circuit Voltage 50 Hz 8 V·A Holding at Max. Rated Control Circuit Voltage 50 Hz 2.5 W Holding at Max. Rated Control Circuit Voltage 60 Hz 8 V·A Holding at Max. Rated Control Circuit Voltage 60 Hz 2.5 W Pull-in at Max. Rated Control Circuit Voltage 50 Hz 130 V·A Pull-in at Max. Rated Control Circuit Voltage 60 Hz 130 V·A
Operate Time	Between Coil De-energization and NO Contact Opening 15 ... 20 ms Between Coil Energization and NO Contact Closing 20 ... 35 ms
Connecting Capacity Main Circuit	Flexible 2 x 10 ... 70 mm <sup>2</sup> Rigid Cu-Cable 1 x 10 ... 95 mm <sup>2</sup>
Connecting Capacity Auxiliary Circuit	Flexible with Ferrule 1x 0.75 ... 2.5 mm <sup>2</sup> Flexible with Ferrule 2x 0.75 ... 2.5 mm <sup>2</sup> Flexible with Insulated Ferrule 1x 0.75 ... 2.5 mm <sup>2</sup> Flexible with Insulated Ferrule 2x 0.75 ... 2.5 mm <sup>2</sup> Flexible 1x 0.75 ... 2.5 mm <sup>2</sup> Flexible 2x 0.75 ... 2.5 mm <sup>2</sup> Solid 1x 1 ... 4 mm <sup>2</sup> Solid 2x 1 ... 4 mm <sup>2</sup> Stranded 1x 1 ... 4 mm <sup>2</sup> Stranded 2x 1 ... 4 mm <sup>2</sup>
Wire Stripping Length	Auxiliary Circuit 9 mm Control Circuit 9 mm
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

## Technical UL/CSA

Maximum Operating Voltage UL/CSA	Main Circuit 600 V
General Use Rating UL/CSA	(600 V AC) 160 A
Horsepower Rating UL/CSA	(200 ... 208 V AC) Three Phase 30 hp (220 ... 240 V AC) Three Phase 40 hp (440 ... 480 V AC) Three Phase 75 hp (550 ... 600 V AC) Three Phase 100 hp
Tightening Torque UL/CSA	Auxiliary Circuit 9 in·lb Control Circuit 9 in·lb Main Circuit 71 in·lb

## Environmental

Ambient Air Temperature	Close to Contactor Fitted with Thermal O/L Relay (0.85 ... 1.1 U <sub>c</sub> ) -25 ... 55 °C Close to Contactor without Thermal O/L Relay (0.85 ... 1.1 U <sub>c</sub> ) -40 ... 70 °C Close to Contactor for Storage -40 ... 70 °C
Maximum Operating Altitude Permissible	Without Derating 3000 m
RoHS Status	Following EU Directive 2011/65/EU and Amendment 2015/863 July 22, 2019

## Circular Value

ABB EcoSolutions	Yes
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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 %

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## Eco Transparency

Environmental Product Declaration - EPD	1SFC100092D0201
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## Certificates and Declarations

Declaration of Conformity - CE	2CMT2015-005439
Declaration of Conformity - UKCA	2CMT2020-006118
UL Certificate	20120925-E36588

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## 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	7320500560747

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## Classifications

Object Classification Code	Q
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)	4758 >> Iec Contactors

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## Categories

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

