

PRODUCT-DETAILS

# AF146-30-22B-34

## AF146-30-22B-34 Contactor



### General Information

Extended Product Type	AF146-30-22B-34
Product ID	1SFL467002R3422
EAN	7320500480960
Catalog Description	AF146-30-22B-34 Contactor

Long Description	<p>The AF146-30-22B-34 is a 3 pole - 1000 V IEC or 600 V UL contactor with pre-mounted auxiliary contacts and Main Circuit Bars, 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 (250-500 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.</p>
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### Ordering

Minimum Order Quantity	1 piece
Customs Tariff Number	85364900

### Popular Downloads

Data Sheet, Technical Information	1SBC100192C02
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## Dimensions

Product Net Width	90 mm
Product Net Depth / Length	142.5 mm
Product Net Height	150 mm
Product Net Weight	1.3 kg

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## 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
Rated Operational Voltage	Main Circuit 1000 V
Rated Frequency (f)	Main Circuit 50 Hz
Conventional Free-air Thermal Current ( $I_{th}$ )	acc. to IEC 60947-4-1, Open Contactors $q = 40^\circ\text{C}$ 225 A
Rated Operational Current AC-1 ( $I_e$ )	(1000 V) $40^\circ\text{C}$ 225 A (1000 V) $55^\circ\text{C}$ 200 A (1000 V) $60^\circ\text{C}$ 200 A (1000 V) $70^\circ\text{C}$ 175 A (690 V) $40^\circ\text{C}$ 225 A (690 V) $55^\circ\text{C}$ 200 A (690 V) $60^\circ\text{C}$ 200 A (690 V) $70^\circ\text{C}$ 175 A
Rated Operational Current AC-3 ( $I_e$ )	(415 V) $55^\circ\text{C}$ 146 A (440 V) $55^\circ\text{C}$ 146 A (500 V) $55^\circ\text{C}$ 130 A (690 V) $55^\circ\text{C}$ 93 A (1000 V) $55^\circ\text{C}$ 60 A (380 / 400 V) $55^\circ\text{C}$ 146 A (220 / 230 / 240 V) $55^\circ\text{C}$ 146
Rated Operational Current AC-3e ( $I_e$ )	(415 V) $60^\circ\text{C}$ 146 A (440 V) $60^\circ\text{C}$ 146 A (500 V) $60^\circ\text{C}$ 130 A (690 V) $60^\circ\text{C}$ 93 A (1000 V) $60^\circ\text{C}$ 60 A (380 / 400 V) $60^\circ\text{C}$ 146 A (220 / 230 / 240 V) $60^\circ\text{C}$ 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 Ie AC-3
Rated Breaking Capacity AC-3e	8.5 x Ie AC-3e
Rated Making Capacity AC-3	10 x Ie AC-3
Rated Making Capacity AC-3e	12 x Ie AC-3e
Short-Circuit Protective Devices	gG Type Fuses 315 A
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 200 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
Maximum Electrical Switching Frequency	(AC-1) 300 cycles per hour (AC-2 / AC-4) 150 cycles per hour (AC-3) 300 cycles per hour
Rated Insulation Voltage ( $U_i$ )	acc. to IEC 60947-4-1 and VDE 0110 (Gr. C) 1000 V acc. to UL/CSA 600 V
Rated Impulse Withstand Voltage ( $U_{imp}$ )	8 kV
Mechanical Durability	5 million
Maximum Mechanical Switching Frequency	300 cycles per hour
Coil Operating Limits	(acc. to IEC 60947-4-1) $U_c$ (at $\theta \leq 70$ °C)
Rated Control Circuit Voltage ( $U_c$ )	50 Hz 250 ... 500 V 60 Hz 250 ... 500 V DC Operation 250 ... 500 V
Coil Consumption	Average Pull-in Value 50 Hz 260 V·A Average Pull-in Value 60 Hz 260 V·A Holding at Max. Rated Control Circuit Voltage 50 Hz 16.1 V·A Holding at Max. Rated Control Circuit Voltage 60 Hz 16.1 V·A Pull-in at Max. Rated Control Circuit Voltage 50 Hz 205 V·A Pull-in at Max. Rated Control Circuit Voltage 60 Hz 205 V·A Pull-in at Max. Rated Control Circuit Voltage DC 230 W
Operate Time	Between Coil De-energization and NO Contact Opening 37 ... 47 ms Between Coil Energization and NO Contact Closing 25 ... 55 ms
Degree of Protection	acc. to IEC 60529, IEC 60947-1, EN 60529 Auxiliary Terminals IP40
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 ... 55 °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	Without Derating 3000 m
RoHS Status	Following EU Directive 2011/65/EU and Amendment 2015/863 July 22, 2019

## Certificates and Declarations (Document Number)

ABS Certificate	14-LD1092198-PDA
BV Certificate	BV_36353_A0BV
CB Certificate	SEMKO_SE-70479M1
CCS Certificate	GB14T00030

CQC Certificate	CQC2013010304604055
cUL Certificate	20120925-E36588
Declaration of Conformity - CCC	2020980304001304
Declaration of Conformity - CE	2CMT2015-005439
Declaration of Conformity - UKCA	2CMT2020-006118
DNV Certificate	DNV_E-14043
DNV GL Certificate	DNV_E-14043
EAC Certificate	9AKK107046A8618
Environmental Information	2CMT004732 1SAC200032H0002
GL Certificate	DNV_E-14043
Instructions and Manuals	1SFC100003M0201
KC Certificate	9AKK107046A9910
LR Certificate	LR_14_70011(E1)
PRS Certificate	TE_2092_880423_16
RINA Certificate	ELE060313XG_002
RMRS Certificate	9AKK107045A6978
RoHS Information	2CMT2015-005439
UL Listing Card	UL_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	7320500480960

## 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

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## Categories

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

