

## PRODUCT-DETAILS

# A145-30-11-86

## A145-30-11 400-415V 50Hz / 415-440V 60Hz

### Contactor

"No longer for sale" replaced by



#### General Information

Extended Product Type	A145-30-11-86
Product ID	1SFL471001R8611
EAN	7320500209233
Catalog Description	A145-30-11 400-415V 50Hz / 415-440V 60Hz 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 control voltage, versions from 24...690 AC, 50 and 60 Hz

#### Ordering

Minimum Order Quantity	1 piece
Customs Tariff Number	85364900
Replacement Product ID (NEW)	1SFL447002R1411

#### Popular Downloads

Data Sheet, Technical Information	1SBC100192C0206
Instructions and Manuals	1SFC380003-89

## Dimensions

Product Net Width	111.5 mm
Product Net Depth / Length	160 mm
Product Net Height	196 mm
Product Net Weight	2.9 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 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 $\Theta = 40^\circ\text{C}$ 250 A
Rated Operational Current AC-1 ( $I_e$ )	(1000 V) $40^\circ\text{C}$ 180 A (1000 V) $55^\circ\text{C}$ 180 A (1000 V) $70^\circ\text{C}$ 180 A (690 V) $40^\circ\text{C}$ 250 A (690 V) $55^\circ\text{C}$ 230 A (690 V) $70^\circ\text{C}$ 180 A
Rated Operational Current AC-3 ( $I_e$ )	(415 V) $55^\circ\text{C}$ 145 A (440 V) $55^\circ\text{C}$ 145 A (500 V) $55^\circ\text{C}$ 145 A (690 V) $55^\circ\text{C}$ 120 A (1000 V) $55^\circ\text{C}$ 80 A (380 / 400 V) $55^\circ\text{C}$ 145 A (220 / 230 / 240 V) $55^\circ\text{C}$ 145 A
Rated Operational Power AC-3 ( $P_e$ )	(415 V) 75 kW (440 V) 75 kW (500 V) 90 kW (690 V) 110 kW (380 / 400 V) 75 kW (220 / 230 / 240 V) 45 kW
Rated Breaking Capacity AC-3	8 x $I_e$ AC-3
Rated Making Capacity AC-3	10 x $I_e$ AC-3
Short-Circuit Protective Devices	gG Type Fuses 315 A
Rated Short-time Withstand Current Low Voltage ( $I_{cw}$ )	at $40^\circ\text{C}$ Ambient Temp, in Free Air, from a Cold State 10 s 1200 A at $40^\circ\text{C}$ Ambient Temp, in Free Air, from a Cold State 15 min 280 A at $40^\circ\text{C}$ Ambient Temp, in Free Air, from a Cold State 1 min 600 A at $40^\circ\text{C}$ Ambient Temp, in Free Air, from a Cold State 1 s 1800 A at $40^\circ\text{C}$ Ambient Temp, in Free Air, from a Cold State 30 s 800 A
Maximum Breaking Capacity	$\cos \phi = 0.45$ ( $\cos \phi = 0.35$ for $I_e > 100$ A) at 440 V 1500 A $\cos \phi = 0.45$ ( $\cos \phi = 0.35$ for $I_e > 100$ A) at 690 V 1200 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 Operational Current DC-1 ( $I_e$ )	(110 V) 2 Poles in Series, $40^\circ\text{C}$ 250 A (220 V) 3 Poles in Series, $40^\circ\text{C}$ 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 IEC 60947-4-1 and VDE 0110 (Gr. C) 1000 V acc. to UL/CSA 600 V
Rated Impulse Withstand Voltage ( $U_{imp}$ )	Main Circuit 8 kV
Mechanical Durability	5 million
Maximum Mechanical Switching Frequency	3600 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 400 ... 415 V 60 Hz 415 ... 440 V
Coil Consumption	Holding at Max. Rated Control Circuit Voltage 50 Hz 35 V-A Holding at Max. Rated Control Circuit Voltage 60 Hz 40 V-A Pull-in at Max. Rated Control Circuit Voltage 50 Hz 550 V-A Pull-in at Max. Rated Control Circuit Voltage 60 Hz 600 V-A
Operate Time	Between Coil De-energization and NC Contact Closing 5 ... 10 ms Between Coil De-energization and NO Contact Opening 9 ... 13 ms Between Coil Energization and NC Contact Opening 8 ... 22 ms Between Coil Energization and NO Contact Closing 13 ... 27 ms
Connecting Capacity Main Circuit	Bar 24 mm <sup>2</sup> Rigid Al-Cable 1 x 25 ... 150 mm <sup>2</sup> Rigid Cu-Cable 1 x 6 ... 185 mm <sup>2</sup>
Connecting Capacity Auxiliary Circuit	Flexible with Ferrule 1x 0.75 ... 2.5 mm <sup>2</sup> Flexible with Insulated Ferrule 1x 0.75 ... 2.5 mm <sup>2</sup> Flexible 2x0.75 ... 2.5 mm <sup>2</sup> Solid 2 x 1 ... 4 mm <sup>2</sup> Stranded 2 x 1 ... 4 mm <sup>2</sup>
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
Connecting Terminals (delivered in open position) Main Poles	Flat type c/w screws and bolts
Terminal Type	Main Circuit: Bars

## Technical UL/CSA

NEMA Size	4
Maximum Operating Voltage UL/CSA	Main Circuit 600 V
General Use Rating UL/CSA	(600 V AC) 230 A
Horsepower Rating UL/CSA	(200 V AC) Three Phase 40 hp (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

## 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	Without Derating 3000 m
Resistance to Shock acc. to IEC 60068-2-27	Shock Direction: A 5 g Shock Direction: B1 5 g Shock Direction: B2 5 g Shock Direction: C1 5 g

Shock Direction: C2 5 g

Material Compliance		
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 Category	5. Small Equipment (No External Dimension More Than 50 cm)	

Certificates and Declarations		
BV Certificate		09826/C0 BV
CB Certificate		SE-69488
CQC Certificate		CQC2002010304011010 CQC2009010304353525
Declaration of Conformity - CCC		2020980304001633 2020980304001040
Declaration of Conformity - CE		2CMT2015-005436
Declaration of Conformity - UKCA		2CMT2020-006118
DNV Certificate		DNV_E-12191
GL Certificate		GL_15529-00HH
LOVAG Certificate		IT99058
LR Certificate		LR_12-70003
RINA Certificate		ELE060313XG/001
RMRS Certificate		RMRS_12-03683-315

Container Information		
Package Level 1 Units		box 1 piece
Package Level 1 Width		178 mm
Package Level 1 Depth / Length		232 mm
Package Level 1 Height		167 mm
Package Level 1 Gross Weight		3.5 kg
Package Level 1 EAN		7320500209233

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
E-Number (Norway)	4115098
E-Number (Sweden)	3227857

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## Categories

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

