

PRODUCT-DETAILS

AF145-30-00-72

AF145-30-00 20-60V DC Contactor

For sale but "Obsolete", replaced by



General Information

Extended Product Type	AF145-30-00-72
Product ID	1SFL477001R7200
EAN	7320500252604
Catalog Description	AF145-30-00 20-60V DC Contactor
Long Description	A 3-phase Contactor suitable for various applications such as Motor starting, Isolation, Bypass and Distribution application up to max 1000 V. Operated with wide control voltage range 20-60 V, DC

Ordering

Minimum Order Quantity	1 piece
Customs Tariff Number	85364900
Replacement Product ID (NEW)	1SFL447002R1100

Popular Downloads

Data Sheet, Technical Information	1SBC100192C0206
Instructions and Manuals	1SFC380003-89
Dimension Diagram	53540923-7

Dimensions

Product Net Width	105 mm
Product Net Depth / Length	160 mm
Product Net Height	196 mm
Product Net Weight	3.4 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
Conventional Free-air Thermal Current (I_{th})	acc. to IEC 60947-4-1, Open Contactors $q = 40\text{ °C}$ 250 A
Rated Operational Current AC-1 (I_e)	(1000 V) 40 °C 180 A (1000 V) 55 °C 180 A (1000 V) 70 °C 180 A (690 V) 40 °C 250 (690 V) 55 °C 230 (690 V) 70 °C 180
Rated Operational Current AC-3 (I_e)	(415 V) 55 °C 145 A (440 V) 55 °C 145 A (500 V) 55 °C 145 A (690 V) 55 °C 120 A (1000 V) 55 °C 80 A (380 / 400 V) 55 °C 145 A (220 / 230 / 240 V) 55 °C 145
Rated Operational Power AC-3 (P_e)	(415 V) 75 kW (440 V) 75 kW (500 V) 90 kW (690 V) 110 kW (1000 V) 110 kW (380 / 400 V) 75 kW (220 / 230 / 240 V) 45 kW
Rated Breaking Capacity AC-3 acc. to IEC 60947-4-1	8 x I_e AC-3
Rated Making Capacity AC-3 acc. to IEC 60947-4-1	10 x I_e AC-3
Short-Circuit Protective Devices	gG Type Fuses 160 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 °C 250 A (220 V) 3 Poles in Series, 40 °C 250 A
Rated Operational Current	(110 V) 2 Poles in Series, 40 °C 250 A

DC-3 (I_e)	(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	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)	DC Operation 20 ... 60 V
Coil Consumption	Holding at Max. Rated Control Circuit Voltage 50 Hz 12 V-A Holding at Max. Rated Control Circuit Voltage 60 Hz 12 V-A Holding at Max. Rated Control Circuit Voltage DC 2 W Pull-in at Max. Rated Control Circuit Voltage 50 Hz 430 V-A Pull-in at Max. Rated Control Circuit Voltage 60 Hz 430 V-A Pull-in at Max. Rated Control Circuit Voltage DC 500 W
Operate Time	Between Coil De-energization and NC Contact Closing 40 ... 50 ms Between Coil Energization and NO Contact Closing 50 ... 90 ms
Connecting Capacity Main Circuit	Bar 24 mm ² Rigid Al-Cable 1 x 25 ... 150 mm ² Rigid Cu-Cable 1 x 6 ... 185 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 1x0.75 ... 2.5 mm ² Solid 2 x 1 ... 4 mm ² Stranded 1 x 1 ... 4 mm ²
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

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

RoHS Status

Following EU Directive 2011/65/EU

Certificates and Declarations (Document Number)

ABS Certificate	15-LD1408622-PDA
BV Certificate	BV_13409-C0BV
CB Certificate	SEMKO_SE-69478
CCS Certificate	GB14T00030
CQC Certificate	CQC2007010304256685 CQC2009010304353527
cUL Certificate	20160920-E36588
Declaration of Conformity - CCC	2020980304001634 2020980304001069
Declaration of Conformity - CE	2CMT2015-005436
DNV GL Certificate	TAE00001W1
EAC Certificate	9AKK107046A8618
Environmental Information	1SFC101007D0201
GL Certificate	GL_20261-04HH
Instructions and Manuals	1SFC380003-89
LOVAG Certificate	SE-0105160
LR Certificate	16-20064
RINA Certificate	ELE060313XG_002
RMRS Certificate	RMRS_12-03683-315
RoHS Information	2CMT2015-005436
TÜV Certificate	MHM-EST-7.70017788e

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	3.6 kg
Package Level 1 EAN	7320500252604

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
eClass	V11.0 : 27371003

UNSPSC

39121529

IDEA Granular Category
Code (IGCC)

4755 >> Contactors

Categories

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

