



Electric Automation
Automation specialists

Reference: AF50-30-00
Code: 1SBL357001R7200

AF50-30-00 20-60V DC Contactor

Buy it at Electric Automation Network



AF50 contactors are mainly used for controlling 3-phase motors and generally for controlling power circuits up to 690 V AC and 220 V DC. The contactors can also be used for many other applications such as bypass, capacitor switching, lighting, DC power circuits... The AF... contactors are fitted with an electronic coil interface which accepts a wide control voltage range, on AC 50/60 Hz or DC supplies. The same contactor can accept various supply voltages according to the different countries where the electrical equipment will be installed, or some fluctuation in the control voltage due to the local supply or network. The AF... contactors are also fully suitable for operation in AC or DC control circuit liable to voltage interruptions or voltage dip risks. Advantages: - Wide voltage range, e.g. 100 ... 250 V AC and DC - Can manage large voltage variations - Reduced power consumption - Very distinct closing and opening - Noise free - Can withstand voltage interruptions or voltage dips in the control supply (≤ 20 ms). The AF... series 1-stack 3-pole contactors are of the block type design. - Main poles and auxiliary contact blocks: 3 main poles, front and side-mounted add-on auxiliary contact blocks - Control circuit: AC or DC operated - Accessories: a wide range of accessories is available.

Ordering

EAN:	3471522114624
Minimum Order Quantity:	1 piece
Customs Tariff Number:	85369085

Dimensions

Product Net Width:	70 mm
Product Net Depth:	108 mm
Product Net Height:	110 mm
Product Net Weight:	1.180 kg

Container Information

Package Level 1 Units:	1 piece
Package Level 1 Width:	140 mm
Package Level 1 Length:	146 mm
Package Level 1 Height:	96 mm
Package Level 1 Gross Weight:	1.18 kg
Package Level 1 EAN:	3471522114624
Package Level 2 Units:	20 piece

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 $\theta = 40\text{ °C}$ 100 A
Rated Operational Current AC-1 (I_e):	(690 V) 40 °C 100 A (690 V) 55 °C 85 A (690 V) 70 °C 70 A
Rated Operational Current AC-3 (I_e):	(220 / 230 / 240 V) 55 °C 53 A (380 / 400 V) 55 °C 50 A (415 V) 55 °C 50 A (440 V) 55 °C 45 A (500 V) 55 °C 45 A (690 V) 55 °C 35 A
Rated Operational Power AC-3 (P_e):	(220 / 230 / 240 V) 15 kW (380 / 400 V) 22 kW (415 V) 25 kW (440 V) 25 kW (500 V) 30 kW (690 V) 30 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 100 A

Rated Short-time Withstand Current (I_{cw}):	<p>at 40 °C Ambient Temp, in Free Air, from a Cold State 10 s 650 A</p> <p>at 40 °C Ambient Temp, in Free Air, from a Cold State 15 min 110 A</p> <p>at 40 °C Ambient Temp, in Free Air, from a Cold State 1 min 250 A</p> <p>at 40 °C Ambient Temp, in Free Air, from a Cold State 1 s 1000 A</p> <p>at 40 °C Ambient Temp, in Free Air, from a Cold State 30 s 370 A</p>
Maximum Breaking Capacity:	<p>cos phi=0.45 (cos phi=0.35 for $I_e > 100$ A) at 440 V 1300 A</p> <p>cos phi=0.45 (cos phi=0.35 for $I_e > 100$ A) at 690 V 630 A</p>
Maximum Electrical Switching Frequency:	<p>AC-1 300 cycles per hour</p> <p>AC-2 / AC-4 150 cycles per hour</p> <p>AC-3 300 cycles per hour</p>
Rated Insulation Voltage (U_i):	<p>acc. to IEC 60947-4-1 and VDE 0110 (Gr. C) 1000 V</p> <p>acc. to UL/CSA 600 V</p>
Rated Impulse Withstand Voltage (U_{imp}):	8 kV
Maximum Mechanical Switching Frequency:	300 cycles per hour
Rated Control Circuit Voltage (U_c):	DC Operation 20 ... 60 V
Coil Consumption:	<p>Pull-in at Max. Rated Control Circuit Voltage 50 Hz 210 V·A</p> <p>Pull-in at Max. Rated Control Circuit Voltage 60 Hz 210 V·A</p> <p>Holding at Max. Rated Control Circuit Voltage 60 Hz 7 V·A</p> <p>Holding at Max. Rated Control Circuit Voltage 60 Hz 2.8 W</p> <p>Holding at Max. Rated Control Circuit Voltage 50 Hz 7 V·A</p> <p>Holding at Max. Rated Control Circuit Voltage 50 Hz 2.8 W</p>
Operate Time:	<p>Between Coil Energization and NO Contact Closing 30 ... 100 ms</p> <p>Between Coil De-energization and NO Contact Opening 30 ... 110 ms</p> <p>Between Coil De-energization and NC Contact Closing 35 ... 115 ms</p>
Connecting Capacity-Main Circuit:	<p>Flexible with Cable End6 ... 16 mm²</p> <p>Rigid Cable6 ... 25 mm²</p>
Connecting Capacity-Auxiliary Circuit:	<p>Flexible with Cable End0.75 ... 2.5 mm²</p> <p>Rigid Cable1 ... 4 mm²</p>
Degree of Protection:	acc. to IEC 60529, IEC 60947-1, EN 60529 Coil Terminals IP20
Connecting terminals (delivered in open position) Main poles:	M 6 (+,-) pozidriv 2 screws with 1x (13 x 10 mm) connector
Terminal Type:	Screw Terminals

Environmental

Ambient Air Temperature:	Close to Contactor Fitted with Thermal O/L Relay -25 ... +55 °C Close to Contactor for Storage -60 ... +80 °C Close to Contactor without Thermal O/L Relay -40 ... +70 °C
Climatic Withstand:	acc. to IEC 60068-2-30 and 60068-2-11 - UTE C 63-100 specification II
Maximum Operating Altitude Permissible:	3000 m
Resistance to Shock acc. to IEC 60068-2-27:	Shock Direction: A 20 g Closed, Shock Direction: B1 10 g Open, Shock Direction: B1 5 g Shock Direction: B2 15 g Shock Direction: C1 20 g Shock Direction: C2 20 g
RoHS Status:	No declaration needed

Certificates and Declarations (Document Number)

CCC Certificate:	CCC_2008010304269002 CCC_2010010304402983
CSA Certificate:	CSA_1033838_LR056745
cUL Certificate:	UL_071301E39231
Declaration of Conformity - CE:	1SBD250858C1000
EAC Certificate:	EAC_RU C-FR ME77 B01010
GOST Certificate:	GOST_POCCFRME77B07175
RMRS Certificate:	RMRS_1300130124
RoHS Information:	1SBC101059D0201
UL Certificate:	UL_071301E39231

Classifications

E-nummer:	3228337
ETIM 5:	EC000066 - Magnet contactor, AC-switching
UNSPSC:	39121529