



Electric Automation
Automation specialists

Reference: AF50-40-00
Code: 1SBL357201R7000

AF50-40-00 100-250V 50Hz / 100-250V
60Hz / 100-250V DC Contactor

Buy it at [Electric Automation Network](#)



AF50 4-pole contactors are mainly used for controlling non-inductive or slightly inductive loads (i.e. resistance furnaces...) and generally for controlling power circuits up to 690 V AC and 440 V DC. The contactors can also be used for many other applications such lighting... 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 4-pole contactors are of the block type design. - Main poles and auxiliary contact blocks: 4 N.O. 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

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| EAN: | 3471522114808 |
| Minimum Order Quantity: | 1 piece |
| Customs Tariff Number: | 85369085 |

Dimensions

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| Product Net Width: | 92 mm |
| Product Net Depth: | 119.5 mm |
| Product Net Height: | 110 mm |

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| Product Net Weight: | 1.420 kg |
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Container Information

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| Package Level 1 Units: | 1 piece |
| Package Level 1 Width: | 142 mm |
| Package Level 1 Length: | 190 mm |
| Package Level 1 Height: | 136 mm |
| Package Level 1 Gross Weight: | 1.42 kg |
| Package Level 1 EAN: | 3471522114808 |
| Package Level 2 Units: | 8 piece |
| Package Level 3 Units: | 84 piece |

Technical

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| Number of Main Contacts NO: | 4 |
| 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 $q = 40\text{ °C}$ 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 |
| Short-Circuit Protective Devices: | gG Type Fuses 100 A |
| Rated Short-time Withstand Current (I_{cw}): | at 40 °C Ambient Temp, in Free Air, from a Cold State 10 s 650 A at 40 °C Ambient Temp, in Free Air, from a Cold State 15 min 110 A at 40 °C Ambient Temp, in Free Air, from a Cold State 1 min 250 A at 40 °C Ambient Temp, in Free Air, from a Cold State 1 s 1000 A at 40 °C Ambient Temp, in Free Air, from a Cold State 30 s 370 A |
| Maximum Breaking Capacity: | cos phi=0.45 (cos phi=0.35 for $I_e > 100\text{ A}$) at 440 V 1300 A cos phi=0.45 (cos phi=0.35 for $I_e > 100\text{ A}$) at 690 V 630 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 |

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| 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 |
| Maximum Mechanical Switching Frequency: | 300 cycles per hour |
| Rated Control Circuit Voltage (U _c): | 50 Hz 100 ... 250 V 60 Hz 100 ... 250 V DC Operation 100 ... 250 V |
| Coil Consumption: | Pull-in at Max. Rated Control Circuit Voltage 50 Hz 210 V·A Pull-in at Max. Rated Control Circuit Voltage 60 Hz 210 V·A Holding at Max. Rated Control Circuit Voltage 60 Hz 7 V·A Holding at Max. Rated Control Circuit Voltage 60 Hz 2.8 W Holding at Max. Rated Control Circuit Voltage 50 Hz 7 V·A Holding at Max. Rated Control Circuit Voltage 50 Hz 2.8 W |
| Operate Time: | Between Coil Energization and NO Contact Closing 30 ... 100 ms Between Coil De-energization and NO Contact Opening 30 ... 110 ms Between Coil De-energization and NC Contact Closing 35 ... 115 ms |
| Connecting Capacity-Main Circuit: | Flexible with Cable End 6 ... 16 mm ² Rigid Cable 6 ... 25 mm ² |
| Connecting Capacity-Auxiliary Circuit: | Flexible with Cable End 0.75 ... 2.5 mm ² Rigid Cable 1 ... 4 mm ² |
| Degree of Protection: | acc. to IEC 60529, IEC 60947-1, EN 60529 Main Terminals IP10 |
| Terminal Type: | Screw Terminals |

Environmental

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| Ambient Air Temperature: | Near Contactor for Operation in Free Air -40 ... +70 °C Close to Contactor for Storage -60 ... +80 °C |
| 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)

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| CCC Certificate: | CCC_2008010304269002 |
| CSA Certificate: | CSA_1033838_LR056745 |
| Declaration of Conformity - CE: | 1SBD250858C1000 |

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| EAC Certificate: | EAC_RU C-FR ME77 B01010 |
| GOST Certificate: | GOST_POCCFRME77B07175 |
| RoHS Information: | 1SBC101059D0201 |

Classifications

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| ETIM 5: | EC000066 - Magnet contactor, AC-switching |
| UNSPSC: | 39121529 |