

PRODUCT-DETAILS

# AE50-40-00 48V DC

## AE50-40-00 48V DC Contactor



### General Information

Extended Product Type	AE50-40-00 48V DC
Product ID	1SBL359201R8300
EAN	3471522105837
Catalog Description	AE50-40-00 48V DC Contactor
Long Description	AE50 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 AE... 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: DC operated with standard double-winding DC coils (with add-on factory-mounted lagging contact for insertion of the "holding" winding) - Accessories: a wide range of accessories is available.

### Ordering

Minimum Order Quantity	1 piece
Customs Tariff Number	85364900

### Popular Downloads

Data Sheet, Technical Information	1SBC100122C0202_Ch02
Instructions and Manuals	FPTC407701P0003

## Dimensions

Product Net Width	104 mm
Product Net Depth / Length	119.5 mm
Product Net Height	110 mm
Product Net Weight	1.43 kg

## Technical

Number of Main Contacts NO	4
Number of Main Contacts NC	0
Number of Auxiliary Contacts NO	0
Number of Auxiliary Contacts NC	0
Standards	Devices complying with international standards IEC 947-1 / 947-4-1 and European standards EN 60 947-1 / 60 947-4-1. Electromagnetic compatibility (EMC) according to amendment A11 to IEC 947-1, EN 60 947-1 and amendment 2 to IEC 947-4-1
Rated Operational Voltage	Main Circuit 1000 V
Conventional Free-air Thermal Current ( $I_{th}$ )	acc. to IEC 60947-4-1, Open Contactors $q = 40^\circ\text{C}$ 100 A
Rated Operational Current AC-1 ( $I_e$ )	(690 V) $40^\circ\text{C}$ 100 (690 V) $55^\circ\text{C}$ 85 (690 V) $70^\circ\text{C}$ 70
Rated Operational Current AC-3 ( $I_e$ )	(415 V) $55^\circ\text{C}$ 50 A (440 V) $55^\circ\text{C}$ 45 A (500 V) $55^\circ\text{C}$ 45 A (690 V) $55^\circ\text{C}$ 35 A (1000 V) $55^\circ\text{C}$ 23 A (380 / 400 V) $55^\circ\text{C}$ 50 A (220 / 230 / 240 V) $55^\circ\text{C}$ 53
Rated Operational Power AC-3 ( $P_e$ )	(415 V) 25 kW (440 V) 25 kW (500 V) 30 kW (690 V) 30 kW (380 / 400 V) 22 kW (220 / 230 / 240 V) 15 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
Maximum Breaking Capacity	$\cos \phi = 0.45$ ( $\cos \phi = 0.35$ for $I_e > 100$ A) at 440 V 1300 A $\cos \phi = 0.45$ ( $\cos \phi = 0.35$ for $I_e > 100$ 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
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	3600 cycles per hour
Rated Control Circuit Voltage ( $U_c$ )	DC Operation 48 V
Coil Consumption	Average Holding Value, from Warm State 4 W Average Pull-in Value, from Cold State 200 W

	Pull-in at Max. Rated Control Circuit Voltage DC 200 W
Operate Time	Between Coil De-energization and NO Contact Opening 5 ... 15 ms Between Coil Energization and NO Contact Closing 30 ... 30 ms
Connecting Capacity Main Circuit	Flexible with Cable End 6 ... 16 mm <sup>2</sup> Rigid Cable 6 ... 25 mm <sup>2</sup>
Connecting Capacity Auxiliary Circuit	Flexible with Cable End 0.75 ... 2.5 mm <sup>2</sup> Rigid Cable 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 IP10
Connecting Terminals (delivered in open position) Main Poles	M 6 (+,-) pozidriv 2 screws with 1x (13 x 10 mm) connector
Terminal Type	Screw Terminals

## Technical UL/CSA

General Use Rating UL/CSA	(600 V AC) 80 A
------------------------------	-----------------

## Environmental

Ambient Air Temperature	Close to Contactor for Storage -60 ... +80 °C Near Contactor for Operation in Free Air (0.85 ... 1.1 Uc) -40 ... 55 °C Near Contactor for Operation in Free Air (Uc) -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	Without Derating 3000 m
Resistance to Shock acc. to IEC 60068-2-27	Closed, Shock Direction: B1 10 g Open, Shock Direction: B1 5 g Shock Direction: A 20 g Shock Direction: B2 15 g Shock Direction: C1 20 g Shock Direction: C2 20 g
RoHS Status	Following EU Directive 2011/65/EU

## Certificates and Declarations (Document Number)

CSA Certificate	CSA_1033838_LR056745
Declaration of Conformity - CE	1SBD250804U1000
EAC Certificate	EAC_RU C-FR ME77 B01010
Environmental Information	1SBD250017E1003
GOST Certificate	GOST_POCCFRME77B07175
Instructions and Manuals	FPTC407701P0003
RMRS Certificate	RMRS_0507015250
RoHS Information	1SBD250804U1000
UL Certificate	UL_20120830-E312527-10-1
UL Listing Card	UL_E312527

## Container Information

Package Level 1 Units	1 piece
Package Level 1 Width	142 mm
Package Level 1 Depth / Length	190 mm
Package Level 1 Height	136 mm
Package Level 1 Gross Weight	1.43 kg

Package Level 1 EAN	3471522105837
Package Level 2 Units	box 63 piece
Package Level 2 Gross Weight	90.09 kg

### 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

### Categories

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

