

PRODUCT-DETAILS

# AF52-40-00-41

## AF52-40-00-41 24-60V50/60HZ Contactor



### General Information

Extended Product Type	AF52-40-00-41
Product ID	1SBL367201R4100
EAN	3471523133600
Catalog Description	AF52-40-00-41 24-60V50/60HZ Contactor

Long Description	<p>The AF52-40-00-41 is a 4 pole - 690 V IEC or 600 UL contactor with screw terminals, controlling motors up to 22 kW / 400 V AC (AC-3) and switching power circuits up to 100 A (AC-1) or 80 A UL general use. Thanks to the AF technology, the contactor has a wide control voltage range (24-60 V 50/60 Hz), managing large control voltage variations, reducing panel energy consumptions and ensuring distinct operations in unstable networks. Furthermore, surge protection is built-in, offering a compact solution. AF contactors have a block type design, can be easily extended with add-on auxiliary contact blocks and an additional wide range of accessories.</p>
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### Ordering

Minimum Order Quantity	1 piece
Customs Tariff Number	85364900

### Popular Downloads

Instructions and Manuals	1SBC101047M6801
Dimension Diagram	DNV_TAE00001AF-4

## Dimensions

Product Net Width	70 mm
Product Net Depth / Length	113.5 mm
Product Net Height	125.5 mm
Product Net Weight	1.21 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
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 $q = 40$ °C 105 A
Rated Operational Current AC-1 ( $I_e$ )	(690 V) 40 °C 100 A (690 V) 60 °C 80 A (690 V) 70 °C 70 A
Rated Operational Current AC-3 ( $I_e$ )	(415 V) 60 °C 53 A (440 V) 60 °C 53 A (500 V) 60 °C 45 A (690 V) 60 °C 35 A (380 / 400 V) 60 °C 53 A (220 / 230 / 240 V) 60 °C 53 A
Rated Operational Power AC-3 ( $P_e$ )	(415 V) 30 kW (440 V) 30 kW (500 V) 30 kW (690 V) 30 kW (380 / 400 V) 22 kW (220 / 230 / 240 V) 15 kW
Rated Short-time Withstand Current Low Voltage ( $I_{cw}$ )	at 40 °C Ambient Temp, in Free Air, from a Cold State 10 s 600 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 350 A for 1 s -empty- A
Maximum Breaking Capacity	$\cos \phi = 0.45$ ( $\cos \phi = 0.35$ for $I_e > 100$ A) at 440 V 950 A $\cos \phi = 0.45$ ( $\cos \phi = 0.35$ for $I_e > 100$ A) at 690 V 600 A
Maximum Electrical Switching Frequency	(AC-1) 600 cycles per hour
Rated Insulation Voltage ( $U_i$ )	acc. to IEC 60947-4-1 and VDE 0110 (Gr. C) 690 V acc. to UL/CSA 600 V
Rated Impulse Withstand Voltage ( $U_{imp}$ )	6 kV
Maximum Mechanical Switching Frequency	3600 cycles per hour
Rated Control Circuit Voltage ( $U_c$ )	50 Hz 24 ... 60 V 60 Hz 24 ... 60 V DC Operation -
Mounting on DIN Rail	TH35-15 (35 x 15 mm Mounting Rail) acc. to IEC 60715
Mounting by Screws (not supplied)	2 x M4 or 2 x M6 screws placed diagonally
Connecting Capacity Main Circuit	Flexible with Ferrule 1/2x 4 ... 35 mm <sup>2</sup> Rigid 1/2x 6 ... 3.5 mm <sup>2</sup>
Connecting Capacity Control Circuit	Flexible with Ferrule 1/2x 0.75 ... 2.5 mm <sup>2</sup> Rigid 1/2x 1 ... 2.5 mm <sup>2</sup>

Wire Stripping Length	Main Circuit 16 mm
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
Terminal Type	Screw Terminals

## Technical UL/CSA

General Use Rating UL/CSA	(600 V AC) 80 A
Horsepower Rating UL/CSA	(120 V AC) Single Phase 3 hp (200 ... 208 V AC) Three Phase 15 hp (220 ... 240 V AC) Three Phase 20 hp (240 V AC) Single Phase 10 hp (440 ... 480 V AC) Three Phase 40 hp (550 ... 600 V AC) Three Phase 50 hp

## Environmental

Ambient Air Temperature	Close to Contactor for Storage -60 ... +80 °C Near Contactor for Operation in Free Air -40 ... 70 °C
Climatic Withstand	Category B according to IEC 60947-1 Annex Q
Maximum Operating Altitude Permissible	Without Derating 3000 m
Resistance to Vibrations acc. to IEC 60068-2-6	5 ... 300 Hz 3 g Closed position / 2 g Open position
RoHS Status	Following EU Directive 2011/65/EU

## Certificates and Declarations (Document Number)

ABS Certificate	ABS_20-2060694-PDA
BV Certificate	BV_2634H36994A
CB Certificate	CB_SE-108889A1
CCC Certificate	CCC_2015010304824714
CQC Certificate	CQC2015010304824714
Declaration of Conformity - CCC	2020980304001256
Declaration of Conformity - CE	1SBD250001U1000
Declaration of Conformity - UKCA	1SBD250032U1000
EAC Certificate	EAC_RU_FRME77B03447
GL Certificate	DNV-GL_TAE00001AF-3
Instructions and Manuals	1SBC101047M6801
KC Certificate	KC_HW02016-15012C
LR Certificate	LRS_1300087E1
RMRS Certificate	RMRS_1400682124
RoHS Information	1SBD250001U1000
UL Certificate	UL_20141124-E312527-14-2
UL Listing Card	UL_E312527

## Container Information

Package Level 1 Units	box 1 piece
Package Level 1 Width	150 mm
Package Level 1 Depth / Length	150 mm
Package Level 1 Height	103 mm
Package Level 1 Gross	1.32 kg

**Weight**

Package Level 1 EAN	3471523133600
Package Level 2 Units	box 8 piece
Package Level 2 Width	250 mm
Package Level 2 Depth / Length	300 mm
Package Level 2 Height	300 mm
Package Level 2 Gross Weight	10.56 kg
Package Level 3 Units	192 piece

**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
E-Number (Finland)	3707264

**Categories**

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

