PRODUCT-DETAILS

AFC38-40-00-80H

AFC38-40-00-80H 220-230V50Hz 230-240V60Hz Contactor

General Information

Extended Product Type	AFC38-40-00-80H
Product ID	1SBL291234R8000
EAN	3471525000368
Catalog Description	AFC38-40-00-80H 220-230V50Hz 230-240V60Hz Contactor
Long Description	The AFC38-40-00-80H is a 4-pole (4 N.O) - 690 V IEC or 600 V UL contactor withScrew terminals, mainly controlling power circuits up to 55 A (IEC AC-1) or 55 A UL general use. Within the AF platform, AFC contactors offer an optimized operating time for AC controlled applications with electromagnetic coil (control voltage : 220 ... 230 V AC 50 Hz / 230 ... 240 V AC 60 Hz). AFC contactors have a block type design and can be easily extended with add-on auxiliary contact blocks and a wide range of additionnal accessories. H versions are specific for "Household appliances" application according to IEC 60335-1 section 30 regarding heat and fire withstand.

Ordering

Minimum Order Quantity	1 piece
Customs Tariff Number	85364900

Popular Downloads

Data Sheet, Technical Information	1SBC100219C0201
Instructions and Manuals	1SBC101027M6801

Dimensions

Product Net Width	45 mm
Product Net Depth / Length	101 mm
Product Net Height	86 mm
Product Net Weight	0.393 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	IEC/EN 60947-1, IEC/EN 60947-4-1, UL 508, CSA 22.2 No. 14
Rated Operational Voltage	Main Circuit 690 V
Rated Frequency (f)	Control Circuit 50 / 60 Hz Main Circuit 50 / 60 Hz
Conventional Free-air Thermal Current (I_{th})	acc. to IEC 60947-4-1, Open Contactors Θ = 40 °C 55 A
Rated Operational Current AC-1 (I_e)	(690 V) 40 °C 55 A (690 V) 60 °C 45 A (690 V) 70 °C 37 A
Rated Operational Current AC-3 (I_e)	(415 V) 60 °C 21.2 A (440 V) 60 °C 20 A (500 V) 60 °C 17.6 A (690 V) 60 °C 10.5 A (380 / 400 V) 60 °C 22 A (220 / 230 / 240 V) 60 °C 23.2 A
Rated Operational Power AC-3 (P_e)	(400 V) 11 kW (415 V) 11 kW (440 V) 11 kW (500 V) 11 kW (690 V) 9 kW (220 / 230 / 240 V) 5.5 kW
Rated Short-time Withstand Current Low Voltage (I_{cw})	at 40 °C Ambient Temp, in Free Air, from a Cold State 10 s 300 A at 40 °C Ambient Temp, in Free Air, from a Cold State 15 min 55 A at 40 °C Ambient Temp, in Free Air, from a Cold State 1 min 150 A at 40 °C Ambient Temp, in Free Air, from a Cold State 1 s 450 A at 40 °C Ambient Temp, in Free Air, from a Cold State 30 s 225 A
Maximum Electrical Switching Frequency	(AC-1) 600 cycles per hour (AC-15) 0 cycles per hour (AC-2 / AC-4) 0 cycles per hour (AC-3) 0 cycles per hour (DC-13) 0 cycles per hour
Rated Operational Current DC-1 (I_e)	(110 V) 2 Poles in Series, 40 °C 55 A (110 V) 2 Poles in Series, 60 °C 45 A (110 V) 2 Poles in Series, 70 °C 37 A (110 V) 3 Poles in Series, 40 °C 55 A (110 V) 3 Poles in Series, 60 °C 45 A

	(110 V) 3 Poles in Series, 70 °C 37 A (110 V) 4 Poles in Series, 40 °C 55 A (110 V) 4 Poles in Series, 60 °C 45 A (110 V) 4 Poles in Series, 70 °C 37 A (220 V) 3 Poles in Series, 40 °C 55 A (220 V) 3 Poles in Series, 60 °C 45 A (220 V) 3 Poles in Series, 70 °C 37 A (220 V) 4 Poles in Series, 40 °C 55 A (220 V) 4 Poles in Series, 60 °C 45 A (220 V) 4 Poles in Series, 70 °C 37 A (72 V) 1-Pole, 40 °C 55 A (72 V) 1-Pole, 60 °C 45 A (72 V) 1-Pole, 70 °C 37 A (72 V) 2 Poles in Series, 40 °C 55 A (72 V) 2 Poles in Series, 60 °C 45 A (72 V) 2 Poles in Series, 70 °C 37 A (72 V) 3 Poles in Series, 40 °C 55 A (72 V) 3 Poles in Series, 60 °C 45 A (72 V) 3 Poles in Series, 70 °C 37 A (72 V) 4 Poles in Series, 40 °C 55 A (72 V) 4 Poles in Series, 60 °C 45 A (72 V) 4 Poles in Series, 70 °C 37 A
Rated Insulation Voltage (U_i)	acc. to IEC 60947-4-1 690 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 220 ... 230 V 60 Hz 230 ... 240 V
Coil Consumption	Average Holding Value 50 / 60 Hz 8 V·A Average Pull-in Value 50 Hz 70 V·A Average Pull-in Value 60 Hz 66 V·A
Operate Time	Between Coil De-energization and NC Contact Closing 9 ... 20 ms Between Coil De-energization and NO Contact Opening 4 ... 18 ms Between Coil Energization and NC Contact Opening 7 ... 21 ms Between Coil Energization and NO Contact Closing 10 ... 26 ms
Mounting on DIN Rail	TH35-15 (35 x 15 mm Mounting Rail) acc. to IEC 60715 TH35-7.5 (35 x 7.5 mm Mounting Rail) acc. to IEC 60715
Mounting by Screws (not supplied)	2 x M4 screws placed diagonally
Connecting Capacity Main Circuit	Flexible with Ferrule 1/2x 1.5 ... 16 mm² Flexible with Insulated Ferrule 1/2x 1.5 ... 16 mm² Rigid Solid 1/2x 1.5 ... 4 mm² Rigid Stranded 1/2x 1.5 ... 16 mm²
Connecting Capacity Control Circuit	Flexible with Ferrule 1/2x 0.75 ... 2.5 mm² Flexible with Insulated Ferrule 1x 0.75 ... 2.5 mm² Flexible with Insulated Ferrule 2x 0.75 ... 1.5 mm² Rigid Solid 1/2x 1 ... 2.5 mm² Rigid Stranded 1/2x 1 ... 2.5 mm²
Wire Stripping Length	Control Circuit 10 mm Main Circuit 12 mm
Degree of Protection	acc. to IEC 60529, IEC 60947-1, EN 60529 Main Terminals IP20 acc. to IEC 60529, IEC 60947-1, EN 60529 Coil Terminals IP20
Terminal Type	Screw Terminals

Technical UL/CSA

Maximum Operating Voltage UL/CSA	Main Circuit 600 V
General Use Rating UL/CSA	(600 V AC) 55 A
Connecting Capacity Main Circuit UL/CSA	Rigid Solid 1/2x 16-10 AWG Rigid Stranded 1/2x 16-6 AWG

Connecting Capacity Control Circuit UL/CSA	Rigid Solid 1/2x 18-14 AWG Rigid Stranded 1/2x 18-14 AWG
Tightening Torque UL/CSA	Control Circuit 11 in·lb Main Circuit 22 in·lb

Environmental

Ambient Air Temperature	Close to Contactor Fitted with Thermal O/L Relay -25 ... 60 °C Close to Contactor without Thermal O/L Relay -40 ... 70 °C Close to Contactor without Thermal O/L Relay (0.85 ... 1.1 Uc) -40 ... 60 °C Close to Contactor without Thermal O/L Relay (Uc) -40 ... 70 °C Close to Contactor for Storage -60 ... +80 °C Near Contactor for Operation in Free Air -40 ... 70 °C Near Contactor for Operation in Free Air (0.85 ... 1.1 Uc) -40 ... +60 °C Near Contactor for Operation in Free Air (Uc) -40 ... 70 °C
Climatic Withstand	Category B according to IEC 60947-1 Annex Q
Maximum Operating Altitude Permissible	Without Derating 3000 m
Resistance to Shock acc. to IEC 60068-2-27	Closed, Shock Direction: B1 25 g Open, Shock Direction: B1 5 g Shock Direction: A 30 g Shock Direction: B2 15 g Shock Direction: C1 25 g Shock Direction: C2 25 g
Resistance to Vibrations	4g Closed Position & 2g Open position 5 ... 300 Hz

Material Compliance

REACH Declaration	2CMT2021-006202
RoHS Information	2CMT2021-006277
RoHS Status	Following EU Directive 2011/65/EU and Amendment 2015/863 July 22, 2019
Toxic Substances Control Act - TSCA	2CMT2023-006525
WEEE B2C / B2B	Business To Business
WEEE Category	5. Small Equipment (No External Dimension More Than 50 cm)

Certificates and Declarations

BV Certificate	BV_2634H24898C0
Declaration of Conformity - CE	1SBD250025U1000
RINA Certificate	RINA_ELE334122XG
UL Certificate	UL-US-2343502-0 UL-CA-2337663-0

Container Information

Package Level 1 Units	box 1 piece
Package Level 1 Width	87 mm
Package Level 1 Depth / Length	103 mm
Package Level 1 Height	47 mm
Package Level 1 Gross Weight	0.414 kg
Package Level 1 EAN	3471525000368

Classifications

Object Classification Code	Q
ETIM 7	EC000066 - Power contactor, AC switching
ETIM 8	EC000066 - Power contactor, AC switching
ETIM 9	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 → AF Contactors → AF38