



PRODUCT-DETAILS

NF40E-13

NF40E-13 100-250V50/60HZ-DC Contactor Relay



General Information

Extended Product Type	NF40E-13
Product ID	1SBH137001R1340
EAN	3471523100039
Catalog Description	NF40E-13 100-250V50/60HZ-DC Contactor Relay

Long Description	NF contactor relays are used for switching auxiliary and control circuits. NF contactor relays include an electronic coil interface accepting a wide control voltage U_c min. ... U_c max. Only four coils cover control voltages between 24...500 V 50/60 Hz or 20...500 V DC. NF contactor relays can manage large control voltage variations. One coil can be used for different control voltages used worldwide without any coil change. NF contactor relays have built-in surge protection and do not require additional surge suppressors. - Poles: 4-pole contactor relays - Control Circuit: AC or DC operated - Accessories: a wide range of Accessories is available.
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Ordering

Minimum Order Quantity	1 piece
Customs Tariff Number	85364900

Popular Downloads

EPLAN Data	9AAC159655_EPLAN
Data Sheet, Technical Information	1SBC100214C0202
Instructions and Manuals	1SBC101027M6801
Instructions and Manuals (Part 2)	1SAC200017M0002
CAD Dimensional Drawing	2CDC001079B0201

Dimensions

Product Net Width	45 mm
Product Net Depth / Length	77 mm
Product Net Height	86 mm
Product Net Weight	0.27 kg

Technical

Number of Auxiliary Contacts NO	4
Number of Auxiliary Contacts NC	0
Number of Poles	4P
Standards	IEC/EN 60947-1, IEC/EN 60947-5-1, UL 60335-2-40 LZGH2 A2L, UL 508, CSA C22.2 No. 60335-2-40 LZGH2 A2L, CSA C22.2 No. 14-13
Rated Operational Voltage	Auxiliary Circuit 690 V
Rated Frequency (f)	Auxiliary Circuit 50 / 60 Hz Control Circuit 50 / 60 Hz
Conventional Free-air Thermal Current (I_{th})	acc. to IEC 60947-5-1, $\Theta = 40\text{ °C}$ 16 A
Rated Operational Current AC-15 (I_e)	(500 V) 2 A (690 V) 2 A (24 / 127 V) 6 A (220 / 240 V) 4 A (400 / 440 V) 3 A
Rated Operational Current DC-13 (I_e)	(24 V) 6 A / 144 W (48 V) 2.8 A / 134 W (72 V) 1 A / 72 W (110 V) 0.55 A / 60 W (125 V) 0.55 A / 69 W (220 V) 0.27 A / 60 W (250 V) 0.27 A / 68 W (400 V) 0.15 A / 60 W (500 V) 0.13 A / 65 W (600 V) 0.1 A / 60 W
Rated Short-time Withstand Current Low Voltage (I_{cw})	for 0.1 s 140 A for 1 s 100 A
Rated Insulation Voltage (U_i)	acc. to IEC 60947-5-1 690 V acc. to UL/CSA 600 V
Rated Impulse Withstand Voltage (U_{imp})	6 kV
Maximum Electrical Switching Frequency	(AC-15) 1200 cycles per hour (DC-13) 900 cycles per hour
Maximum Mechanical Switching Frequency	6000 cycles per hour
Rated Control Circuit Voltage (U_c)	50 Hz 100 ... 250 V 60 Hz 100 ... 250 V DC Operation 100 ... 250 V
Operate Time	Between Coil De-energization and NC Contact Closing 13 ... 98 ms Between Coil De-energization and NO Contact Opening 11 ... 95 ms Between Coil Energization and NC Contact Opening 38 ... 90 ms Between Coil Energization and NO Contact Closing 40 ... 95 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	Flexible with Ferrule 1/2x 0.75 ... 2.5 mm²
Auxiliary Circuit	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
Connecting Capacity	Flexible with Ferrule 1/2x 0.75 ... 2.5 mm²
Control Circuit	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	Auxiliary Circuit 10 mm
	Control Circuit 10 mm
Degree of Protection	acc. to IEC 60529, IEC 60947-1, EN 60529 Auxiliary Terminals IP20
	acc. to IEC 60529, IEC 60947-1, EN 60529 Coil Terminals IP20
Tightening Torque	Auxiliary Circuit 1.2 N·m
	Control Circuit 1.2 N·m
Terminal Type	Screw Terminals
Product Name	Block Contactor Relay

Technical UL/CSA

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

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 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
Pollution Degree	3

Material Compliance

Conflict Minerals Reporting Template (CMRT)	9AKK108467A5658
REACH Declaration	2CMT2021-006202
RoHS Information	2CMT2021-006277
RoHS Status	Following EU Directive 2011/65/EU and Amendment 2015/863 July 22, 2019
SCIP	7f157d16-dd5e-4b7b-9580-f91e0f6278a7 China
Simplified SCIP	dc6fcf2e-d541-43a2-9f4b-6ca86e1f25dd Czech Republic
	7435d2de-2aa7-4a6a-9c2b-ada758f086b2 Germany
	ddab8a04-b0e1-4615-a03a-ec81c79ac303 Croatia
	2582c948-b266-4607-a80c-ee6f8be2e314 Poland
	6d939e8d-72a0-42c9-af49-1e8ad30e67ef Poland
	37d088d2-7c79-477f-87ca-33f1e15bdfa9 Netherlands
	51b74668-515d-4dfb-8ff3-c46ca8a94b9d Hungary
	a25eaa8b-f543-4849-b85f-6f6f097736fe Norway
	b8475ac9-d9ab-4215-b695-48163578f8d4 Finland
	1cf00ec8-e95d-4059-bfbd-17813d26470f Hungary
	5e716a07-653a-4d45-bd83-3801cc78fda8 Estonia
	75441054-627a-48f0-9603-c33e2acc3f40 Denmark
	66b048dc-3364-4b04-a56e-81a3167747b3 Bulgaria

501b87e6-616e-4883-a911-fabbea35f0d6 Greece
 2520be6a-a05a-4ed8-b6a8-07a00ecc423c Germany
 a636f80b-7ae5-4eff-8102-bb5a083232ff Portugal
 cc935eb2-9cfd-4558-aba6-09f9bf79f705 Spain
 c7e0338e-c1cd-413b-a689-afda05efb11b Belgium
 c7e26a42-ff75-43a4-9481-97875b523bd3 Belgium
 fe1361a7-80aa-46b9-9748-0c8880ab5e2b France
 9a52a025-058e-4344-ae3-d0de210c229b Sweden
 aa49fb37-9f0a-42e4-80f3-31b729e1ac8c Germany
 bbc87858-0799-4ce7-8c83-8999a279a25b Germany
 f5168fa0-681f-4b62-b7d2-eb09e7edf164 Poland
 aae6891e-ab71-42b7-b7fb-dc5ae946b2c2 Germany
 31bfffaf-82e2-430d-93a5-8bb50db96639 Sweden
 5d806e57-9d31-41da-b4f8-356ad2696755 France

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)

ABB EcoSolutions

End Of Life Disassembling Instructions	1SBC101080M6801
Environmental Product Declaration - EPD	1SBD250584E3000 2TFP200035A1001
Sustainable Material Content in Packaging (wt. %)	Recycled Cardboard - 86 %
Sustainable Material Content in Product (wt. %)	Recycled Metal - 28 %

Certificates and Declarations

A2L Certificate - UL	9AKK108469A4900 9AKK108469A4902
ABS Certificate	ABS_20-2060694-PDA
BV Certificate	BV_2634H24899C0
CB Certificate	CB_SE-93051M2
CCC Certificate	2020980303000185
CQC Certificate	CQC2019010303267993
Declaration of Conformity - CCC	CQC2011010303465426
Declaration of Conformity - CE	1SBD250005U1000
Declaration of Conformity - UKCA	1SBD250036U1000
DNV Certificate	DNV_TAE00001BV-5
EAC Certificate	EAC_RU C-FR ME77 B03544
GOST Certificate	GOST_POCCFR.ME77.B06804.pdf
KC Certificate	KC-HW02016-21031A
LR Certificate	LRS_LR2003684TA-02
RINA Certificate	RINA_ELE142224XG
RMRS Certificate	RMRS_1802702280
UL Certificate	UL_20180227_E252354_2_1
UL Listing Card	UL E252354

Container Information

Package Level 1 Units	box 1 piece
Package Level 1 Width	87 mm
Package Level 1 Depth / Length	79 mm
Package Level 1 Height	47 mm

Package Level 1 Gross Weight	0.27 kg
Package Level 1 EAN	3471523100039
Package Level 2 Units	box 27 piece
Package Level 2 Width	250 mm
Package Level 2 Depth / Length	300 mm
Package Level 2 Height	315 mm
Package Level 2 Gross Weight	14.58 kg

External Classifications and Standards

Object Classification Code	K
ETIM 7	EC000196 - Contactor relay
ETIM 8	EC000196 - Contactor relay
ETIM 9	EC000196 - Contactor relay
eClass	V11.0 : 27371001
UNSPSC	39121529
IDEA Granular Category Code (IGCC)	4763 >> Power contactor, DC switching
E-Number (Finland)	3706415
E-Number (Sweden)	3211456

Categories

Low Voltage Products and Systems → Control Products → Contactors → Block Contactors → NF Contactor Relays

