



PRODUCT-DETAILS

NF22E-11

NF22E-11 24-60V50/60HZ 20-60VDC

Contactor Relay



General Information	
Extended Product Type	NF22E-11
Product ID	1SBH137001R1122
EAN	3471523100114
Catalog Description	NF22E-11 24-60V50/60HZ 20-60VDC Contactor Relay
Long Description	<p>The NF22E-11 is a 690 V IEC or 600 UL 4-pole contactor relay with screw terminals, used for switching auxiliary and control circuits.</p> <p>Thanks to the AF technology, the contactor relay has a wide control voltage range (24-60 V 50/60 Hz and 20-60 V DC), managing large control voltage variations, reducing panel energy consumptions and ensuring distinct operations in unstable networks.</p> <p>Furthermore, surge protection is built-in, offering a compact solution. NF contactor relays have a block type design, can be easily extended with add-on auxiliary contact blocks and an additional wide range of accessories.</p> <p>These contactor relays include mechanically-linked auxiliary contacts compliant with Annex L of IEC 60947-5-1 and are side-marked with the "Mechanically Linked" symbol.</p>

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	2
Number of Auxiliary Contacts NC	2
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, $\Theta = 40^\circ\text{C}$ 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 24 ... 60 V 60 Hz 24 ... 60 V DC Operation 20 ... 60 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 Auxiliary Circuit	Flexible with Ferrule 1/2x 0.75 ... 2.5 mm ² Flexible with Insulated Ferrule 1x 0.75 ... 2.5 mm ² Flexible with Insulated Ferrule 2x 0.75 ... 1.5 mm ² Rigid Solid 1/2x 1 ... 2.5 mm ² Rigid Stranded 1/2x 1 ... 2.5 mm ²
Connecting Capacity Control Circuit	Flexible with Ferrule 1/2x 0.75 ... 2.5 mm ² Flexible with Insulated Ferrule 1x 0.75 ... 2.5 mm ² Flexible with Insulated Ferrule 2x 0.75 ... 1.5 mm ² Rigid Solid 1/2x 1 ... 2.5 mm ² Rigid Stranded 1/2x 1 ... 2.5 mm ²
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 Auxiliary Circuit UL/CSA	Rigid Solid 1/2x 18-14 AWG Rigid Stranded 1/2x 18-14 AWG
Tightening Torque UL/CSA	Auxiliary Circuit 11 in·lb 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
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REACH Declaration	2CMT2021-006202
RoHS Information	2CMT2021-006277
RoHS Status	Following EU Directive 2011/65/EU and Amendment 2015/863 July 22, 2019
SCIP	3a7ec92f-2b59-4ce5-b08c-9a03d3c36d08 China
Simplified SCIP	2ffee727-9423-4522-a5dc-5dd2e652996c Croatia 2ace32b3-e5c0-4f0f-bcd0-9e9b69856f75 Denmark fa7ca2bf-2d20-4649-bc60-69c2768ae348 Sweden 6b134012-e324-488a-ad14-cdd573bd37bb Bulgaria 8f20f14c-5fb2-4666-855c-d23d163d326b Germany d453f2c4-edb1-4d0f-bd25-846404a01957 Germany 751dec63-6235-42cb-a716-b24a7dc773f9 France f12fe3a6-3a4a-4c5f-a3a9-84368c3af96f Poland 93971f11-c2c9-4ed6-8e3b-d4c76de45e18 Sweden 8dae6d97-8c74-4e52-9d9f-322f457b3b17 Germany 2ab6f7e8-088b-4a46-befa-2336e5ac63da Germany 50ce64e4-62ca-429e-be94-5403801d120b Spain f55f1b39-0e66-49e0-80ef-a24977fcbdc8 Belgium 4a60baed-a224-4f36-8a87-28f049c5f338 Belgium 2a18fc35-5b38-4386-92b7-4448e33bd072 Portugal fe309fc0-cad7-4e1d-bc34-f567e796daa5 France 2f3bec9a-60ea-46c4-8f56-771d3a065e51 Germany ce2af395-0548-4622-b15f-607e3bb47270 Poland b61de48c-1aa8-41e2-bf74-31b1478132f0 Czech Republic f69a4ee0-314b-44c1-a9e9-0ae9b25346e6 Poland 1c7a215f-1b80-4e82-bfd8-b06367e446f3 Netherlands 473856fc-2170-4e82-9fa1-df8ebfb870af Estonia 0ede1b8f-42ec-460e-8e53-19be184edade Norway 4015edf7-1d14-4af1-b883-abc4fff42d8b Hungary e7a0c3bb-5f09-4c4d-805a-0fe1c4896270 Hungary 837bcbfc-19d9-47a2-8090-dbd74b5b19bc Finland 3ebc7aed-5457-498f-95a8-5570cbbcf48c Greece
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	1SBD250005U1000

Conformity - CE

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	3471523100114
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)	3705813
E-Number (Sweden)	3211470

Categories

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

