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PRODUCT-DETAILS

NF40EK-11

NF40EK-11 24-60V50/60HZ 20-60VDC Contactor Relay



General Information

Extended Product Type	NF40EK-11
Product ID	1SBH137005R1140
EAN	3471523152410

Catalog Description

NF40EK-11 24-60V50/60HZ 20-60VDC Contactor Relay

Long Description

NF..K contactor relays are used for switching auxiliary and control circuits. NF contactor relays include an electronic coil interface accepting a wide control voltage Uc min. ... Uc 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. NF..K include Push-in Spring terminals. Only one push is all you need for extremely fast wiring: faster than ever installation, easier than ever wiring, reliable as ever connections. - Poles: 4-pole contactor relays (mechanically-linked auxiliary contacts compliant with Annex L of IEC 60947-5-1 and including the "Mechanically Linked" symbol on the contactor relay side) - Accessories: a wide range of accessories is available.

Ordering

Minimum Order Quantity 1 piece

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Customs Tariff Number 85364900

Popular Downloads		
Instructions and Manuals		1SBC101054M6801
CAD Dimensional Drawing		2CDC001079B0201
Dimensions		
Product Net Width		45 mm
Product Net Depth / Length		77 mm
Product Net Height		92.3 mm
Product Net Weight		0.285 kg
Technical		
Number of Auxiliary Contacts NO		4
Number of Auxiliary Contacts NC		0
Standards	IEC/EN 60947-1, IEC/EN 60	947-5-1, UL 508, CSA C22.2 No. 14-13
Rated Operational Voltage		Auxiliary Circuit 690 V Main 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, Θ = 40 °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 Short-time Withstand Current Low Voltage (I _{cw})		for 0.1 s 140 A for 1 s 100 A
Maximum Electrical Switching Frequency		(AC-15) 1200 cycles per hour (DC-13) 900 cycles per hour
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
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 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
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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 0.5 2.5 mm ² Flexible with Insulated Ferrule 1/2x 0.5 1.5 mm ² Flexible 1/2x 0.5 2.5 mm ² Rigid Solid 1/2x 1 2.5 mm ²
Connecting Capacity Control Circuit	Flexible with Ferrule 1/2x 0.5 2.5 mm ² Flexible with Insulated Ferrule 1/2x 0.5 1.5 mm ² Flexible 1/2x 0.5 2.5 mm ² Rigid Solid 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
Terminal Type	Push-in Spring Terminals

Technical UL/CSA

Connecting Capacity Auxiliary Circuit UL/CSA	Rigid Solid 1/2x 18-14 AWG
Connecting Capacity	Rigid Solid 1/2x 18-14 AWG
Control Circuit UL/CSA	

Environmental

Ambient Air	Close to Contactor for Storage -60 +80 °C
Temperature	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	Without Derating 3000 m
Altitude Permissible	•
Resistance to Vibrations	4g Closed Position & 2g Open position 5 300 Hz

Material Compliance

Conflict Minerals Reporting Template	9AKK108467A5658
(CMRT)	
REACH Declaration	2CMT2021-006202
RoHS Information	2CMT2021-006277
RoHS Status	Following EU Directive 2011/65/EU
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

ABS Certificate	ABS_20-2060694-PDA
CB Certificate	CB SE-93051M2

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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
KC Certificate	KC-HW02016-21031A
LR Certificate	LRS_LR2003684TA-02
RINA Certificate	RINA_ELE240318XG
RMRS Certificate	RMRS_1802702280
UL Certificate	UL_20180227_E252354_2_1

Container Information	
Package Level 1 Units	box 1 piece
Package Level 1 Width	93 mm
Package Level 1 Depth / Length	86 mm
Package Level 1 Height	45 mm
Package Level 1 Gross Weight	0.3 kg
Package Level 1 EAN	3471523152410
Package Level 2 Units	box 21 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	13.5 kg
Package Level 3 Units	1080 piece

Classifications	
Object Classification	К
Code	
ETIM 4	EC000196 - Contactor relay
ETIM 5	EC000196 - Contactor relay
ETIM 6	EC000196 - Contactor relay
ETIM 7	EC000196 - Contactor relay
ETIM 8	EC000196 - Contactor relay
eClass	V11.0 : 27371001
UNSPSC	39121529
IDEA Granular Category	4763 >> Power contactor, DC switching
Code (IGCC)	
E-Number (Finland)	3707945
E-Number (Sweden)	3210630

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Categories

 $Low\ Voltage\ Products\ and\ Systems \rightarrow Control\ Products \rightarrow Contactors \rightarrow Block\ Contactors \rightarrow NF\ Contactor\ Relays$

