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#### PRODUCT-DETAILS

**N31E 220-230V 50Hz / 230-240V 60Hz**

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**Contactor Relay**

**"No longer for sale" replaced by**



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#### General Information

Extended Product Type	N31E 220-230V 50Hz / 230-240V 60Hz
Product ID	1SBH141001R8031
EAN	3471522011800
Catalog Description	N31E 220-230V 50Hz / 230-240V 60Hz Contactor Relay
Long Description	N... contactor relays are used for switching auxiliary circuits and control circuits - Poles: 4-pole contactor relays (mechanically linked contact elements available) - Control circuit: AC operated with laminated magnet circuit - Accessories: a wide range of accessories is available.

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#### Ordering

Minimum Order Quantity	1 piece
Customs Tariff Number	85364900
Replacement Product ID (NEW)	1SBH131001R8031

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#### Popular Downloads

Data Sheet, Technical Information	1SBC100122C0202_Ch03
Instructions and Manuals	FPTC407721P0001

## Dimensions

Product Net Width	44 mm
Product Net Depth / Length	74 mm
Product Net Height	74 mm
Product Net Weight	0.34 kg

## Technical

Number of Auxiliary Contacts NO	3
Number of Auxiliary Contacts NC	1
Standards	Devices complying with international standards IEC 947-5-1 / 947-4-1 and European standards EN 60 947-5-1 / 60 947-4-1. Electromagnetic compatibility (EMC) according to amendment A11 to IEC 947-1, EN 60 947-1 and amendment 2 to IEC 947-4-1
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 <sub>th</sub> )	acc. to IEC 60947-5-1, Θ = 40 °C 16 A
Rated Operational Current AC-15 (I <sub>e</sub> )	(500 V) 2 A (690 V) 2 A (24 / 127 V) 6 A (220 / 240 V) 4 A (380 / 400 V) 3 A
Short-Circuit Protective Devices	gG Type Fuses 10 A
Rated Short-time Withstand Current Low Voltage (I <sub>cw</sub> )	for 0.1 s 140 A for 1 s 100 A
Rated Operational Current DC-13 (I <sub>e</sub> )	(24 V) 6 / 144 A (48 V) 2.8 / 134 A (72 V) 1 / 72 A (125 V) 0.55 / 69 A (250 V) 0.3 / 75 A
Rated Insulation Voltage (U <sub>i</sub> )	acc. to IEC 60947-5-1 690 V acc. to UL/CSA 600 V
Rated Impulse Withstand Voltage (U <sub>imp</sub> )	8 kV
Mechanical Durability	> 20 million
Maximum Mechanical Switching Frequency	6000 cycles per hour
Rated Control Circuit Voltage (U <sub>c</sub> )	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 74 V-A Average Pull-in Value 60 Hz 70 V-A Holding at Max. Rated Control Circuit Voltage 50 Hz 8 V-A Holding at Max. Rated Control Circuit Voltage 60 Hz 8 V-A Holding at Max. Rated Control Circuit Voltage 60 Hz 2 W Pull-in at Max. Rated Control Circuit Voltage 50 Hz 70 V-A Pull-in at Max. Rated Control Circuit Voltage 60 Hz 80 V-A
Operate Time	Between Coil De-energization and NC Contact Closing 9 ... 16 ms Between Coil De-energization and NO Contact Opening 4 ... 11 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	Flexible with Cable End 0.75 ... 2.5 mm <sup>2</sup>

Auxiliary Circuit	Rigid Cable 1 ... 4 mm <sup>2</sup>
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	Screw Terminals

## Environmental

Ambient Air Temperature	Close to Contactor for Storage -60 ... +80 °C Near Contactor for Operation in Free Air (0.85 ... 1.1 Uc) -40 ... +55 °C Near Contactor for Operation in Free Air (Uc) -40 ... 70 °C
Climatic Withstand	acc. to IEC 60068-2-30 and 60068-2-11 - UTE C 63-100 specification II
Maximum Operating Altitude Permissible	Without Derating 3000 m
Resistance to Shock acc. to IEC 60068-2-27	Closed, Shock Direction: B1 10 g Open, Shock Direction: B1 5 g Shock Direction: A 20 g Shock Direction: B2 15 g Shock Direction: C1 20 g Shock Direction: C2 20 g
RoHS Status	Following EU Directive 2011/65/EU

## Certificates and Declarations (Document Number)

BV Certificate	BV_2634H09651D0
CB Certificate	CB_FR_602227B
CCC Certificate	CCC_2018010304059155 CCC_2006010305185052
CQC Certificate	CQC2018010304059155
CSA Certificate	CSA_1041746
Declaration of Conformity - CCC	2020980303000257
Declaration of Conformity - CE	1SBD250808U1000
Declaration of Conformity - UKCA	1SBD250825U1000
DNV Certificate	DNV-GL_TAE00000TY
DNV GL Certificate	DNV-GL_TAE00000TY
Environmental Information	1SBD250049E1002
GOST Certificate	GOST_POCCFRME01B03022
Instructions and Manuals	FPTC407721P0001
LR Certificate	LRS_9830010E2
RINA Certificate	RINA_ELE128713XG002
RMRS Certificate	RMRS_0507015250
RoHS Information	2CMT2021-006277
UL Certificate	UL_110105E48139A

## Container Information

Package Level 1 Units	1 piece
Package Level 1 Width	78 mm
Package Level 1 Depth / Length	79 mm
Package Level 1 Height	47 mm
Package Level 1 Gross Weight	0.34 kg
Package Level 1 EAN	3471522011800

Package Level 2 Units	box 63 piece
Package Level 2 Width	300 mm
Package Level 2 Depth / Length	245 mm
Package Level 2 Height	308 mm
Package Level 2 Gross Weight	21.42 kg
Package Level 3 Units	1220 piece

## Classifications

Object Classification Code	K
ETIM 4	EC000196 - Contactor relay
ETIM 5	EC000196 - Contactor relay
ETIM 6	EC000196 - Contactor relay
ETIM 7	EC000196 - Contactor relay
ETIM 8	EC000066 - Power contactor, AC switching
eClass	V11.0 : 27371003
UNSPSC	39121500
E-Number (Finland)	3709214

## Categories

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

