



PRODUCT-DETAILS

# NS44E-20

## NS44E-20 24V50/60HZ Contactor Relay



General Information	
Extended Product Type	NS44E-20
Product ID	1SBH101001R2044
EAN	3471523007208
Catalog Description	NS44E-20 24V50/60HZ Contactor Relay
Long Description	NS... contactor relays are used for switching auxiliary circuits and control circuits. - Poles: 8-pole contactor relays (mechanically-linked auxiliary contacts compliant with Annex L of IEC 60947-5-1 including the "Mechanically Linked" symbol on the contactor relay side) - Control circuit: AC operated with laminated magnet circuit - Accessories: a wide range of accessories is available.

Ordering	
Minimum Order Quantity	1 piece
Customs Tariff Number	85364900

Popular Downloads	
Instructions and Manuals	1SBC101020M9701
CAD Dimensional Drawing	2CDC001079B0201

## Dimensions

Product Net Width	45 mm
Product Net Depth / Length	100.2 mm
Product Net Height	68 mm
Product Net Weight	0.26 kg

## Technical

Number of Auxiliary Contacts NO	4
Number of Auxiliary Contacts NC	4
Standards	IEC 60947-5-1 and EN 60947-5-1, UL 508, CSA C22.2 N°14
Rated Operational Voltage	Auxiliary Circuit 690 V Main Circuit 690 V
Rated Frequency (f)	Auxiliary Circuit 50 / 60 Hz
Conventional Free-air Thermal Current ( $I_{th}$ )	acc. to IEC 60947-5-1, $\Theta = 40\text{ °C}$ 10 A
Rated Operational Current AC-15 ( $I_{\theta}$ )	(500 V) NC 2 (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 ( $I_{\theta}$ )	(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
Rated Insulation Voltage ( $U_i$ )	acc. to IEC 60947-5-1 and VDE 0110 (Gr. C) 690 V acc. to UL/CSA 600 V
Rated Impulse Withstand Voltage ( $U_{imp}$ )	Auxiliary Circuit 6 kV
Maximum Mechanical Switching Frequency	3600 cycles per hour
Rated Control Circuit Voltage ( $U_c$ )	50 Hz 24 V 60 Hz 24 V
Operate Time	Between Coil De-energization and NC Contact Closing 7 ... 22 ms Between Coil De-energization and NO Contact Opening 5 ... 19 ms Between Coil Energization and NC Contact Opening 6 ... 18 ms Between Coil Energization and NO Contact Closing 9 ... 24 ms
Connecting Capacity Auxiliary Circuit	Flexible with Ferrule 1/2x 0.75 ... 2.5 mm <sup>2</sup> Flexible with Insulated Ferrule 1x 0.75 ... 2.5 mm <sup>2</sup> Flexible with Insulated Ferrule 2x 0.75 ... 1.5 mm <sup>2</sup> Rigid 1/2x 0.75 ... 2.5 mm <sup>2</sup>
Connecting Capacity Control Circuit	Flexible with Ferrule 1/2x 0.75 ... 2.5 mm <sup>2</sup> Flexible with Insulated Ferrule 1x 0.75 ... 2.5 mm <sup>2</sup> Flexible with Insulated Ferrule 2x 0.75 ... 1.5 mm <sup>2</sup> Rigid 1/2x 0.75 ... 2.5 mm <sup>2</sup>
Wire Stripping Length	Auxiliary Circuit 9 mm Control Circuit 9 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	Screw Terminals

## Technical UL/CSA

Tightening Torque  
UL/CSA

Auxiliary Circuit 9 in-lb  
Control Circuit 9 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: C1 19 g  
Closed, Shock Direction: C2 16 g  
Open, Shock Direction: C1 8 g  
Open, Shock Direction: C2 13 g  
Shock Direction: A 20 g  
Shock Direction: B1 5 g  
Shock Direction: B2 15 g

Resistance to Vibrations

3g Closed Position & 2g Open Position 5 ... 300 Hz

## 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

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

CB Certificate

CB\_CN\_32453

CCC Certificate

CCC\_2007010305248106

CQC Certificate

CQC2007010305248106

Declaration of Conformity  
- CCC

2020980304001219

Declaration of Conformity  
- CE

1SBD250016U1000

Declaration of Conformity  
- UKCA

1SBD250051U1000

GOST Certificate

GOST\_POCCCNME77B07821.pdf

UL Certificate

UL\_220108-E312527A

UL Listing Card

NOA\_E312527.pdf

## Container Information

Package Level 1 Units

1 piece

Package Level 1 Width

72 mm

Package Level 1 Depth /  
Length

115 mm

Package Level 1 Height

48 mm

Package Level 1 Gross  
Weight

0.26 kg

Package Level 1 EAN

3471523007208

Package Level 2 Units

32 piece

Package Level 2 Width	250 mm
Package Level 2 Depth / Length	315 mm
Package Level 2 Height	195 mm
Package Level 2 Gross Weight	8.32 kg
Package Level 3 Units	768 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	EC000196 - Contactor relay
eClass	V11.0 : 27371001
UNSPSC	39121529
IDEA Granular Category Code (IGCC)	4761 >> Magnet contactor, AC-switching

Categories

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

