

SS602

S ... A/380 V

**NEOZED® fuse inserts in accordance with DIN 49522
380 V AC/250 V DC
for fuse terminal blocks USEN 14 N and USEN 18 N**



CLIPLINE

Data Sheet
104616_en_00

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1 Description

Fuse inserts for general applications (cable and conductor protection) with a rated current from 2 A to 63 A, depending on the product.

The fuse inserts are specified for use in fuse terminal blocks USEN 14 N and/or USEN 18 N.

NEOZED® is a registered trademark of Siemens AG.

Explanations

The technical data specified in this document is based on tests that were performed in accordance with the appropriate national or international standards in accredited test laboratories or in the company laboratory.

Unless otherwise specified, the data was collected at an ambient temperature of 20 ... 25 °C and in a windless environment. The tests were performed on new fuses, without preloading and from the cold state.



The fuses described in this document were developed to perform safety-related functions as part of a machine or overall system. A safety-related system usually contains signaling devices, sensors, evaluation units, and concepts for safe disconnection.

It is the system or machine manufacturer's responsibility to ensure the correct overall function. Test the product in all intended applications.



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This data sheet is valid for the products listed on the following page:



2 Ordering data

Fuse inserts

Description	Color	Size	Type	Order No.	Pcs./Pkt.
NEOZED® fuse insert 380 V AC/250 V DC, rated current 2 A	Pink	D 01	S 2 A/380 V	0913016	10
NEOZED® fuse insert 380 V AC/250 V DC, rated current 4 A	Brown	D 01	S 4 A/380 V	0913029	10
NEOZED® fuse insert 380 V AC/250 V DC, rated current 6 A	Green	D 01	S 6 A/380 V	0913032	10
NEOZED® fuse insert 380 V AC/250 V DC, rated current 10 A	Red	D 01	S 10 A/380 V	0913045	10
NEOZED® fuse insert 380 V AC/250 V DC, rated current 16 A	Gray	D 01	S 16 A/380 V	0913058	10
NEOZED® fuse insert 380 V AC/250 V DC, rated current 20 A	Blue	D 02	S 20 A/380 V	0913061	10
NEOZED® fuse insert 380 V AC/250 V DC, rated current 25 A	Yellow	D 02	S 25 A/380 V	0913074	10
NEOZED® fuse insert 380 V AC/250 V DC, rated current 35 A	Black	D 02	S 35 A/380 V	0913087	10
NEOZED® fuse insert 380 V AC/250 V DC, rated current 50 A	White	D 02	S 50 A/380 V	0913090	10
NEOZED® fuse insert 380 V AC/250 V DC, rated current 63 A	Copper	D 02	S 63 A/380 V	0913100	10

Accessories

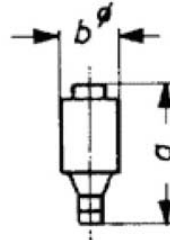
Description	Color	Type	Order No.	Pcs./Pkt.
Fuse terminal block, including protective cap, for installation on NS 35... for NEOZED® fuse insert D 01 (E14)	Light gray	USEN 14 N	3048357	10
Fuse terminal block, including protective cap, for installation on NS 35... for NEOZED® fuse insert D 02 (E18)	Light gray	USEN 18 N	3048360	10
NEOZED® adapter sleeve for USEN 14 N	Pink	H 2 A	0913113	50
	Brown	H 4 A	0913126	50
	Green	H 6 A	0913139	50
	Red	H 10 A	0913142	50
NEOZED® adapter sleeve for USEN 18 N	Pink	HS 2 A	0913210	50
	Brown	HS 4 A	0913223	50
	Green	HS 6 A	0913236	50
	Red	HS 10 A	0913249	50
	Gray	HS 16 A	0913252	50
	Blue	HS 20 A	0913155	50
	Yellow	HS 25 A	0913168	50
	Black	HS 35 A	0913171	50
	White	HS 50 A	0913184	50
	Copper	HS 2 A	0913210	50

3 Technical data

General data

Size

D 01 or D 02, depending on the product



Size	a	b
D 01	36 mm	11 mm
D 02	36 mm	15 mm

Rated voltage

380 V AC/250 V

Rated current

2 ... 63 A, depending on the product

Operating class

gG (gL)

Standard

According to DIN 49522

Rated breaking capacity

50 kA

4 Virtual melting time/true r.m.s. value of the prospective current

4.1 Time-current characteristics

Operating class	gL, gG
Rated voltage	400 V AC/250 V DC
Rated current	2 A ... 63 A (depending on the product)

NEOZED fuse inserts provide reliable disconnection within the entire range of the time-current characteristic, also within the range of critical currents. The rated breaking capacity is 50 kA.

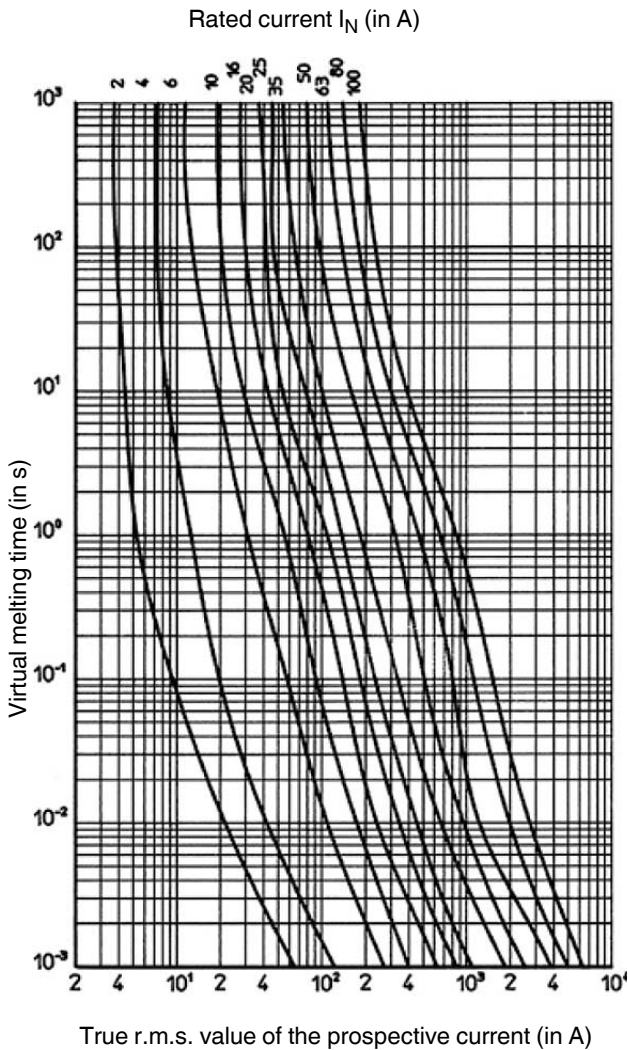


Figure 1 Virtual melting time/true r.m.s. value of the prospective current

4.2 Conducting-state current characteristics

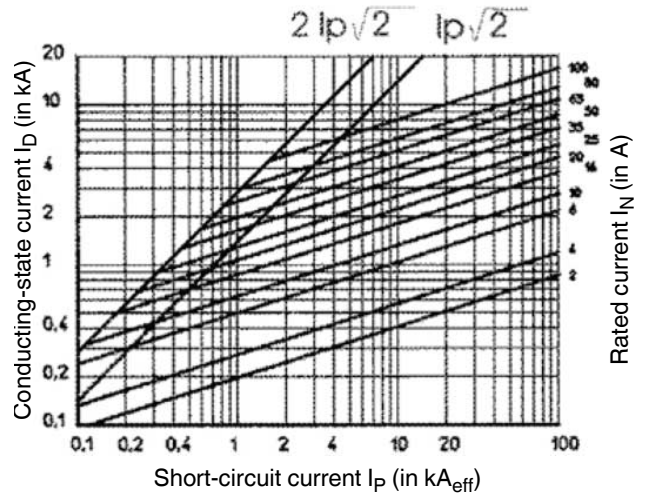


Figure 2 Conducting-state current characteristics



5 Electrical Data

5.1 Power dissipation

The power, which is converted by a fuse insert loaded with its rated current under specified conditions. The values specified in the documents may differ considerably from actual measured values, as different installation conditions are not taken into consideration.

For miniature fuses, the power dissipation is specified at the non-fusing current (e.g., 1.5 times the rated current).

Rated current	Power dissipation ¹	Measured values
2 A	2.5 W	1.5
4 A	1.8 W	1.5
6 A	1.8 W	1.3
10 A	2.0 W	1.8
16 A	2.5 W	2.1
20 A	3.0 W	2.3
25 A	3.5 W	2.6
35 A	4.0 W	2.9
50 A	5.0 W	3.5
63 A	5.5 W	4.2

¹ In accordance with IEC 60269-3, DIN VDE 0636-3

5.2 Direct assignment in the protection of cables and conductors when there is an overload

In the assignment of overcurrent protective devices for the protection of the cable and conductor, the following conditions need to be met in accordance with DIN VDE 0100-430.

$$I_B \leq I_N \leq I_Z \quad (\text{rated current rule})$$

$$I_2 \leq 1.45 \times I_N \quad (\text{tripping rule})$$

I_B	Rated current of the circuit
I_N	Rated current of the selected overcurrent device
I_Z	Approved current carrying capacity of the cable
I_2	Tripping current of the safety equipment

DIN VDE 0636-3 was supplemented by an additional test "Disconnection with $I_2 = 1.45 \times I_N$ within the conventional test duration". NEOZED fuse inserts gL-gG satisfy the conditions of this additional test. This makes it possible to directly assign the rated current of the fuse insert to the load capacity of the conductor or the cable.

6 USEN fuse terminal blocks

The fuse inserts are specified for use in fuse terminal blocks USEN 14 N and/or USEN 18 N.

The S 16 A/380 V fuse insert can be used in the USEN 14 N fuse terminal block. For the fuse inserts with 2 A, 4 A, 6 A and 10 A, you need the corresponding adapter sleeve H ... A.

The S 63 A/380 V fuse insert can be used in the USEN 18 N fuse terminal block. For all other fuse inserts within the range 2 A ... 50 A you need the corresponding adapter sleeve HS ... A.

Operating data	USEN 14 N	USEN 18 N
	for D 01, E 14	for D 02, E 18
Rated voltage U_{max}	400 V	400 V
Nominal current / cross section	16 A / 35 mm ²	63 A / 35 mm ²
Rated cross section	35 mm	35 mm

Connection terminal blocks			
Screw connections	M6		
Connection capacity	Solid	Stranded	With ferrule
1 conductor	1.5 mm ² ... 35 mm ²	1.5 mm ² ... 35 mm ²	1.5 mm ²25 mm ²
2 conductors (two conductors with the same cross section)	1.5 mm ² ... 10 mm ²	1.5 mm ² ... 10 mm ²	–
2 stranded conductors with a TWIN ferrule			1.5 mm ² ... 10 mm ²
Maximum cross section with insertion bridge	25 mm ²	25 mm ²	
Stripping length	19 mm		
Torque (EN 60934)	3.5 Nm ... 4 Nm		

General data	USEN 14 N	USEN 18 N
Panel installation	DIN rail according to EN 60715, NS 35...	DIN rail according to EN 60715, NS 35...
Insulation material	Thermosetting plastics	Thermosetting plastics
Inflammability class	V0	V0
Installation dimensions (W x H x D)	27 mm x 82.7 mm x 71.9 mm	27 mm x 84 mm x 75 mm