

Fuse Systems

Class CC fuse systems

Overview

Class CC fuses are used for "branch circuit protection".

The characteristic of the fuse links is designed and tested to comply with the US National Electrical Code NEC 210.20(A). This means that when subject to continuous operation, only 80 % of the rated current is permissible as operational current.

An operational current of 100 % of the rated current (30 A) is only permissible short-time.

The devices are prepared for the inscription labels of the ALPHA FIX terminal blocks 8WH8120-7AA15 and 8WH8120-7XA05.

There are three different series:

- Characteristic: Slow 3NW1...-0HG
For the protection of control transformers, reactors, inductances. Significantly slower than the minimum requirements specified by UL for Class CC Fuses of 12 s at $2 \times I_n$.

- Characteristic: Quick 3NW2 ...-0HG
For a wide range of applications, for the protection of lighting installations, heating, control systems.
- Characteristic: Slow, current-limiting, 3NW3...-0HG
Slow for overloads and quick for short circuits. High current limitation for the protection of motor circuits.

Note:

For class CC compact fuse holders for motor starter combinations, [see page 5/25](#).

Benefits

- For switchboard assemblies and machine manufacturers who export their systems to the USA or Canada
- Easier export due to UL and CSA approvals for typical applications
- Modern design with touch protection to BGV A3 ensures safe installation

Technical specifications

Class CC fuse holders 3NW75.3-0HG		
Standards Approvals		UL 4248-1; CSA C22.2 UL 4248-1; UL File Number E171267; CSA C22.2
Rated voltage U_n	V AC	600
Rated current I_n	A	30
Rated conditional short-circuit current	kA	200
Breaking capacity • Utilization category		AC-20B (switching without load)
Max. power dissipation of fuse links • With cable, 6 mm ² • With cable, 10 mm ²	W W	3 4.3
Rated impulse withstand voltage	kV	6
Overvoltage category		II
Pollution degree		2
No-voltage changing of fuse links		Yes
Sealable when installed		Yes
Mounting position		Any
Current direction		Any
Degree of protection acc. to IEC 60529		IP20 ¹⁾
Terminals with touch protection according to BGV A3 at incoming and outgoing feeder		Yes
Ambient temperature	°C	45
Conductor cross-sections • Solid and stranded • AWG conductor cross-section, solid and stranded	mm ² AWG	1.5 ... 16 15 ... 5
Tightening torque	Nm	2.5 (22 lbs/in.)

¹⁾ Degree of protection IP20 is tested according to regulations using a straight test finger (from the front), with the device mounted and equipped with a cover, housing or some other enclosure.

Class CC fuse links			
	3NW1...-0HG	3NW2...-0HG	3NW3...-0HG
Standards Approvals	UL 248-4; CSA C22.2 UL 248-4; UL File Number E258218; CSA C22.2		
Characteristic	Slow	Quick	Slow, current limiting
Rated voltage	V AC V DC	600 --	600 150 (3 ... 15 A) 300 (< 3 A, > 15 A)
Rated breaking capacity	kA AC	200	

Selection and ordering data

Number of poles	U_n	I_n	Mounting width	DT	Article No. www.siemens.com/ product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/P. unit	PG	Weight per PU approx.
	V	A	MW							kg
Class CC fuse holders										
1P	600	30	1		3NW7513-0HG		1	12 units	1DN	0.054
2P	600	30	2		3NW7523-0HG		1	6 units	1DN	0.103
3P	600	30	3		3NW7533-0HG		1	4 units	1DN	0.155



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I_n ¹⁾	DT	Characteristic: Slow Article No. www.siemens.com/ product?Article No.	Price per PU	PG	DT	Characteristic: Quick Article No. www.siemens.com/ product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/P. unit	PG	Weight per PU approx.
A											kg
Class CC fuse links											
0.6 (6/10)		3NW1006-0HG		1DN		--					
0.8 (8/10)		3NW1008-0HG		1DN		--					
1		3NW1010-0HG		1DN		3NW2010-0HG		1	10 units	1DN	0.009
1.5 (1 ½)		3NW1015-0HG		1DN		--					
2		3NW1020-0HG		1DN		3NW2020-0HG		1	10 units	1DN	0.008
2.5		3NW1025-0HG		1DN		--					
3		3NW1030-0HG		1DN		3NW2030-0HG		1	10 units	1DN	0.008
4		3NW1040-0HG		1DN		3NW2040-0HG		1	10 units	1DN	0.008
5		3NW1050-0HG		1DN		3NW2050-0HG		1	10 units	1DN	0.009
6		3NW1060-0HG		1DN		3NW2060-0HG		1	10 units	1DN	0.008
7.5		3NW1075-0HG		1DN		--					
8		3NW1080-0HG		1DN		3NW2080-0HG		1	10 units	1DN	0.008
10		3NW1100-0HG		1DN		3NW2100-0HG		1	10/350 units	1DN	0.008
12		--				3NW2120-0HG		1	10 units	1DN	0.008
15		3NW1150-0HG		1DN		3NW2150-0HG		1	10/350 units	1DN	0.008
20		3NW1200-0HG		1DN		3NW2200-0HG		1	10 units	1DN	0.008
25		3NW1250-0HG		1DN		3NW2250-0HG		1	10 units	1DN	0.008
30		3NW1300-0HG		1DN		3NW2300-0HG		1	10 units	1DN	0.008

¹⁾ Values in brackets, American English wording.

I_n	DT	Characteristic: slow, current-limiting Article No. www.siemens.com/ product?Article No.	Price per PU	PU (UNIT, SET, M)	PS*/P. unit	PG	Weight per PU approx.
A							kg
Class CC fuse links							
1		3NW3010-0HG		1	10 units	1DN	0.008
2		3NW3020-0HG		1	10 units	1DN	0.008
3		3NW3030-0HG		1	10 units	1DN	0.008
4		3NW3040-0HG		1	10/350 units	1DN	0.008
5		3NW3050-0HG		1	10 units	1DN	0.008
6		3NW3060-0HG		1	10 units	1DN	0.008
8		3NW3080-0HG		1	10 units	1DN	0.008
10		3NW3100-0HG		1	10 units	1DN	0.008
12		3NW3120-0HG		1	10 units	1DN	0.008
15		3NW3150-0HG		1	10 units	1DN	0.008
20		3NW3200-0HG		1	10 units	1DN	0.008
25		3NW3250-0HG		1	10 units	1DN	0.008
30		3NW3300-0HG		1	10 units	1DN	0.008

