



NXU -II Surge Protective Device

1. Standard

IEC/EN 61643-11

2. Certification

CE, RoHS

3. Main functions

Lightning protection and incoming cabinet surge protection

4. Technical data

Basic parameters and technical performance indicators (see Table 1)

Table 1

Technical parameter items	Parameter value
Test category	Class II
Maximum discharge current I _{max} (kA)	20、 40
Maximum continuous operating voltage U _c (V~)	255、 275、 320、 385、 440
Nominal discharge current I _n (kA)	10、 20
Voltage protection level U _p (kV)	1.2、 1.5、 1.6、 1.8、 2.0
Number of poles	1P、 2P、 3P、 4P、 1P+N、 3P+N
Connecting wire (mm ²)	≤10 (M4) 、 ≤16 (M5)
Tightening torque (N · m)	1.5 (M4) 、 2.0 (M5)
Protection degree	IP20
Overall dimension	See Figure 2~Figure 3
Backup protection fuse	See Table 3
Short circuit current withstand capacity (kA)	5
Transient overvoltage (TOV) characteristics	U _c : 275V, 320V, low-voltage TOV, withstand mode (UT=336V, tT=5s), fault mode (UT=442V, tT=120min)
	U _c : 385V, 440V, low voltage TOV, not applicable (UT=336V, tT=5s), failure mode (UT=442V, tT=120min)
	Number of poles: 1P, 2P, 3P, 4P, HV TOV not applicable 255、 275、 320、 385、 440

Select corresponding specifications according to different grounding systems and protection modes.

Table 2

Grounding system	TT	TN-C	TN-S	IT	remarks	
Maximum operating voltage of power grid U _{s,max}	345V	253V	253V	400V	Refer to IEC60364-5-534	
NXU-II	L-PE/N-PE protection mode U _c =275V, 320V	—	1P, 3P	2P, 4P	—	Not applicable to inductive load
	L-PE/N-PE protection mode U _c =385V, 440V	2P, 4P	1P, 3P	2P, 4P	3P(440V)	
	L-N/N-PE protection mode U _c =255V, 275V, 320V, 385V, 440V	1P+N 3P+N	—	1P+N 3P+N	—	440V is recommended for inductive load

aL-PE/N-PE protection mode: phase line to ground and neutral line to ground protection.

bL-N/N-PE protection mode: protection between phase line to neutral line and neutral line to ground.

Selection of backup fuse

Table 3

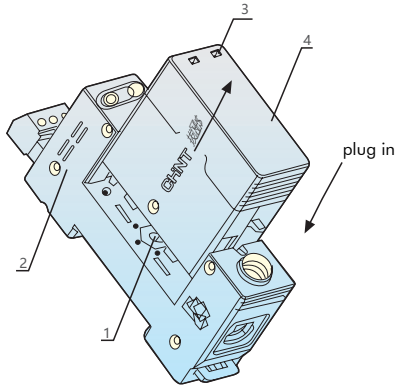
Model of surge protector	Maximum discharge current (kA)	Backup fuse	
		Rated current (A)	Breaking range
NXU-II	20	63	gL/gG
	40	125	gL/gG

Special functions:

a. NXU - II surge protector is composed of two major parts, namely, sequence 4 protection module and sequence 2 base. Its structure is independent of each other and can be plugged in and out, as shown in Figure 1.

b. The NXU - II surge protector is provided with a deterioration indication, as shown in sequence 3 in the figure. After the product deteriorates, it pops up a warning on the surface of the sequence 4 protection module.

c. Sequence 1 is the maximum continuous working voltage indication device of the surge protector, which can also prevent the module with wrong specification from being inserted when replacing the module. The value indicated by the cardioid sharp corner is the maximum continuous operating voltage of the product.



5. Appearance and installation dimensions

See Table 4, Figure 2~Figure 3 for overall dimensions and installation dimensions.

Maximum discharge current I _{max} (kA)	Overall dimension (mm)					
	1P	1P+N	2P	3P	3P+N	4P
20、40	18	18	18	36	36	36

NXU-II/F(20kA、40kA)

Figure 2 Outline and Installation Dimensions of SPD with Remote Signal Output Contact

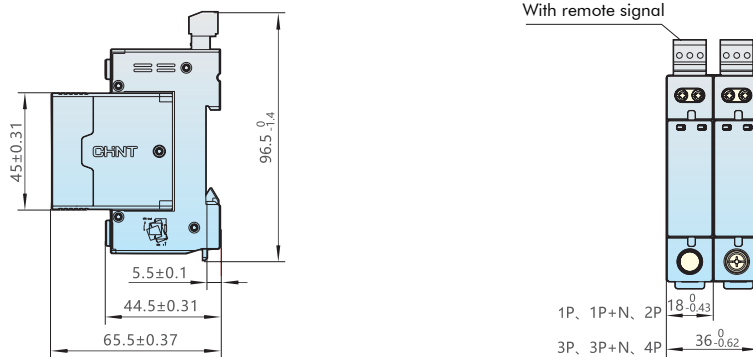
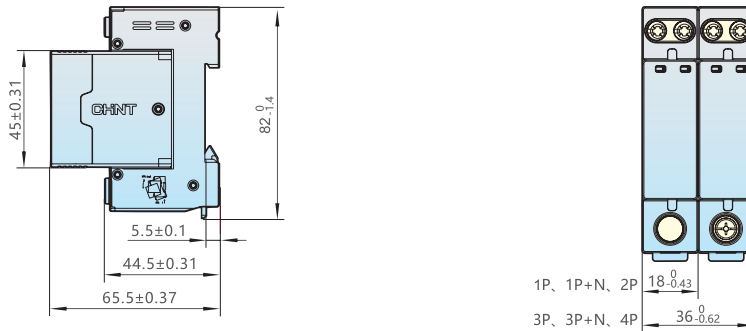


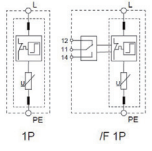
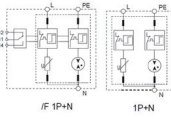
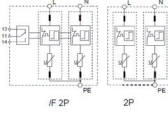
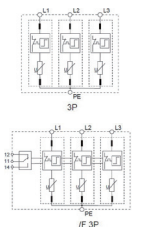
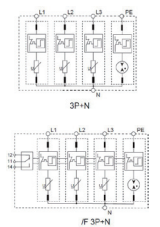
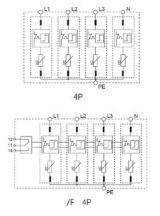
Figure 3 Outline and Installation Dimensions of SPD without Remote Signal Output Contact



NXU	II	/F	20kA	275V	1P
↓	↓	↓	↓	↓	↓
Product type	Test class	Telesignal Function	I_{max}(8/20μs)(kA)	Maximum continuous operational voltage(U_c)(V)	Poles
NXU	II	Default: Normal F: With remote signal output	20kA 40kA	275V 320V 385V 440V	1P 1P+N 2P 3P 3P+N 4P

Diagram	Test class	I _{max} (8/20μs)(kA)	U _c (V)	Poles	Auxiliary contact	Product width(mm)	Description	Code
	II	20	275	1P	N	18	NXU- II 20kA/275V 1P	409698
	II	20	275	1P	Y	18	NXU- II /F 20kA/275V 1P	409690
	II	20	320	1P	N	18	NXU- II 20kA/320V 1P	409699
	II	20	320	1P	Y	18	NXU- II /F 20kA/320V 1P	409691
	II	20	385	1P	N	18	NXU- II 20kA/385V 1P	409700
	II	20	385	1P	Y	18	NXU- II /F 20kA/385V 1P	409692
	II	20	440	1P	N	18	NXU- II 20kA/440V 1P	409701
	II	20	440	1P	Y	18	NXU- II /F 20kA/440V 1P	409693
	II	20	275	1P+N	N	18	NXU- II 20kA/275V 1P+N	409762
	II	20	275	1P+N	Y	18	NXU- II /F 20kA/275V 1P+N	409754
	II	20	320	1P+N	N	18	NXU- II 20kA/320V 1P+N	409763
	II	20	320	1P+N	Y	18	NXU- II /F 20kA/320V 1P+N	409755
	II	20	385	1P+N	N	18	NXU- II 20kA/385V 1P+N	409764
	II	20	385	1P+N	Y	18	NXU- II /F 20kA/385V 1P+N	409756
	II	20	440	1P+N	N	18	NXU- II 20kA/440V 1P+N	409765
	II	20	440	1P+N	Y	18	NXU- II /F 20kA/440V 1P+N	409757

Diagram	Test class	$I_{max}(8/20\mu s)$ (kA)	$U_c(V)$	Poles	Auxiliary contact	Product width(mm)	Description	Code
	II	20	275	2P	N	18	NXU- II 20kA/275V 2P	409714
	II	20	275	2P	Y	18	NXU- II /F 20kA/275V 2P	409706
	II	20	320	2P	N	18	NXU- II 20kA/320V 2P	409715
	II	20	320	2P	Y	18	NXU- II /F 20kA/320V 2P	409707
	II	20	385	2P	N	18	NXU- II 20kA/385V 2P	409716
	II	20	385	2P	Y	18	NXU- II /F 20kA/385V 2P	409708
	II	20	440	2P	N	18	NXU- II 20kA/440V 2P	409717
	II	20	440	2P	Y	18	NXU- II /F 20kA/440V 2P	409709
	II	20	275	3P	N	36	NXU- II 20kA/275V 3P	409730
	II	20	275	3P	Y	36	NXU- II /F 20kA/275V 3P	409722
	II	20	320	3P	N	36	NXU- II 20kA/320V 3P	409731
	II	20	320	3P	Y	36	NXU- II /F 20kA/320V 3P	409723
	II	20	385	3P	N	36	NXU- II 20kA/385V 3P	409732
	II	20	385	3P	Y	36	NXU- II /F 20kA/385V 3P	409724
	II	20	440	3P	N	36	NXU- II 20kA/440V 3P	409733
	II	20	440	3P	Y	36	NXU- II /F 20kA/440V 3P	409725
	II	20	275	3P+N	N	36	NXU- II 20kA/275V 3P+N	409778
	II	20	275	3P+N	Y	36	NXU- II /F 20kA/275V 3P+N	409770
	II	20	320	3P+N	N	36	NXU- II 20kA/320V 3P+N	409779
	II	20	320	3P+N	Y	36	NXU- II /F 20kA/320V 3P+N	409771
	II	20	385	3P+N	N	36	NXU- II 20kA/385V 3P+N	409780
	II	20	385	3P+N	Y	36	NXU- II /F 20kA/385V 3P+N	409772
	II	20	440	3P+N	N	36	NXU- II 20kA/440V 3P+N	409781
	II	20	440	3P+N	Y	36	NXU- II /F 20kA/440V 3P+N	409773
	II	20	275	4P	N	36	NXU- II 20kA/275V 4P	409746
	II	20	275	4P	Y	36	NXU- II /F 20kA/275V 4P	409738
	II	20	320	4P	N	36	NXU- II 20kA/320V 4P	409747
	II	20	320	4P	Y	36	NXU- II /F 20kA/320V 4P	409739
	II	20	385	4P	N	36	NXU- II 20kA/385V 4P	409748
	II	20	385	4P	Y	36	NXU- II /F 20kA/385V 4P	409740
	II	20	440	4P	N	36	NXU- II 20kA/440V 4P	409749

Diagram	Test class	I _{max} (8/20μs) (kA)	U _c (V)	Poles	Auxiliary contact	Product width(mm)	Description	Code
	II	20	440	4P	Y	36	NXU- II /F 20kA/440V 4P	409741
	II	40	275	1P	N	18	NXU- II 40kA/275V 1P	409702
	II	40	275	1P	Y	18	NXU- II /F 40kA/275V 1P	409694
	II	40	320	1P	N	18	NXU- II 40kA/320V 1P	409703
	II	40	320	1P	Y	18	NXU- II /F 40kA/320V 1P	409695
	II	40	385	1P	N	18	NXU- II 40kA/385V 1P	409704
	II	40	385	1P	Y	18	NXU- II /F 40kA/385V 1P	409696
	II	40	440	1P	N	18	NXU- II 40kA/440V 1P	409705
	II	40	440	1P	Y	18	NXU- II /F 40kA/440V 1P	409697
	II	40	275	1P+N	N	18	NXU- II 40kA/275V 1P+N	409766
	II	40	275	1P+N	Y	18	NXU- II /F 40kA/275V 1P+N	409758
	II	40	320	1P+N	N	18	NXU- II 40kA/320V 1P+N	409767
	II	40	320	1P+N	Y	18	NXU- II /F 40kA/320V 1P+N	409759
	II	40	385	1P+N	N	18	NXU- II 40kA/385V 1P+N	409768
	II	40	385	1P+N	Y	18	NXU- II /F 40kA/385V 1P+N	409760
	II	40	440	1P+N	N	18	NXU- II 40kA/440V 1P+N	409769
	II	40	440	1P+N	Y	18	NXU- II /F 40kA/440V 1P+N	409761
	II	40	275	2P	N	18	NXU- II 40kA/275V 2P	409718
	II	40	275	2P	Y	18	NXU- II /F 40kA/275V 2P	409710
	II	40	320	2P	N	18	NXU- II 40kA/320V 2P	409719
	II	40	320	2P	Y	18	NXU- II /F 40kA/320V 2P	409711
	II	40	385	2P	N	18	NXU- II 40kA/385V 2P	409720
	II	40	385	2P	Y	18	NXU- II /F 40kA/385V 2P	409712
	II	40	440	2P	N	18	NXU- II 40kA/440V 2P	409721
	II	40	440	2P	Y	18	NXU- II /F 40kA/440V 2P	409713
	II	40	275	3P	N	36	NXU- II 40kA/275V 3P	409734
	II	40	275	3P	Y	36	NXU- II /F 40kA/275V 3P	409726
	II	40	320	3P	N	36	NXU- II 40kA/320V 3P	409735
	II	40	320	3P	Y	36	NXU- II /F 40kA/320V 3P	409727
	II	40	385	3P	N	36	NXU- II 40kA/385V 3P	409736
	II	40	385	3P	Y	36	NXU- II /F 40kA/385V 3P	409728
	II	40	440	3P	N	36	NXU- II 40kA/440V 3P	409737
	II	40	440	3P	Y	36	NXU- II /F 40kA/440V 3P	409729
	II	40	275	3P+N	N	36	NXU- II 40kA/275V 3P+N	409782
	II	40	275	3P+N	Y	36	NXU- II /F 40kA/275V 3P+N	409774
	II	40	320	3P+N	N	36	NXU- II 40kA/320V 3P+N	409783
	II	40	320	3P+N	Y	36	NXU- II /F 40kA/320V 3P+N	409775
	II	40	385	3P+N	N	36	NXU- II 40kA/385V 3P+N	409784
	II	40	385	3P+N	Y	36	NXU- II /F 40kA/385V 3P+N	409776
	II	40	440	3P+N	N	36	NXU- II 40kA/440V 3P+N	409785
	II	40	440	3P+N	Y	36	NXU- II /F 40kA/440V 3P+N	409777
	II	40	275	4P	N	36	NXU- II 40kA/275V 4P	409750
	II	40	275	4P	Y	36	NXU- II /F 40kA/275V 4P	409742
	II	40	320	4P	N	36	NXU- II 40kA/320V 4P	409751
	II	40	320	4P	Y	36	NXU- II /F 40kA/320V 4P	409743
	II	40	385	4P	N	36	NXU- II 40kA/385V 4P	409752
	II	40	385	4P	Y	36	NXU- II /F 40kA/385V 4P	409744
	II	40	440	4P	N	36	NXU- II 40kA/440V 4P	409753
	II	40	440	4P	Y	36	NXU- II /F 40kA/440V 4P	409745