



NU6 Low-voltage Surge Arrester

NU6- I

1. General

1.1 Certificates: international certificates are under proceeding;

1.2 Electric ratings: 230/400V, AC50/60Hz, 3-phase;

1.3 Application: Protect electric system and on-loading electrical apparatus from thunder and instantaneous over-voltage;

1.4 Standard: IEC/EN 61643-1



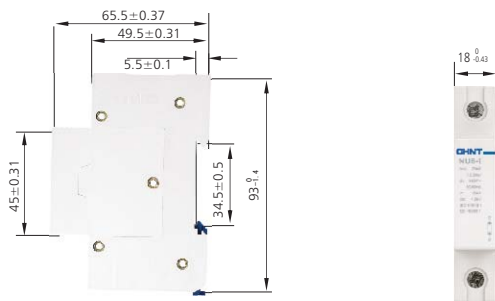
2. Technical data

2.1 Technical parameters

Model	Shock current limp		Max. continuous operational voltage U_c (V~)	Level of protection U_p (kV)	Nominal discharge current I_n (8/20 μ s) (kA)
	I_{peak} (10/350 μ s) (kA)	Load Q As			
NU6- I	15	7.5	275	4.0	25
			320	4.0	
			385	4.0	
			440	4.0	
NU6- I	25	12.5	275	4.0	25
			320	4.0	
			385	4.0	
			440	4.0	
NU6- I	40	20	275	4.0	50
			320	4.0	
			440	4.0	

3. Overall and mounting dimensions (mm)

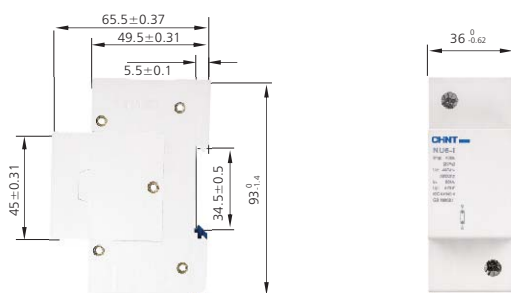
NU6- I (15kA, 25kA)



4. Ordering information

Model	Shock current limp peak (10/350 μ s) (kA)	Max. continuous operational voltage U_c (V~)	CTN	Order code	
				Standard	RoHS
NU6- I	15	275	192	152001	-
NU6- I	15	320	192	152002	-
NU6- I	15	385	192	152003	-
NU6- I	15	440	192	152004	-
NU6- I	25	275	192	152005	-
NU6- I	25	320	192	152006	-
NU6- I	25	385	192	152007	-
NU6- I	25	440	192	152008	-
NU6- I	40	275	96	152009	-
NU6- I	40	320	96	152010	-
NU6- I	40	385	96	152011	-
NU6- I	40	440	96	152012	-

NU6- I (40kA)



NU6-II

1. General

- 1.1 Certificates: international certificates are under proceeding;
- 1.2 Number of poles: 1, 2,3, 4;
- 1.3 Electric ratings: 230/400V, AC50/60Hz;
- 1.4 Application: Protect electric system and on-loading electrical apparatus from thunder and instantaneous over-voltage;
- 1.5 Standard: IEC/EN 61643-1

2. Technical data

Model	Max. continuous operational voltage U_c (V~)	Level of protection U_p (kV)	Nominal discharge current I_n (8/20 μ s) (kA)	Maximum discharge current I_{max} (8/20 μ s) (kA)	Mounting category of protected apparatus
NU6-II	275	1.2	5	15	I, II, III
	320	1.5			I, II, III
	385	1.8			I, II, III
	460	2.0			II, III
	510	2.5			II, III
	550	3.0			II, III
NU6-II	275	1.2	15	40	I, II, III
	320	1.5			I, II, III
	385	1.8			II, III
	460	2.0			II, III
	510	2.5			II, III
	550	3.0			III
NU6-II	275	1.2	25	60	I, II, III
	320	1.5			II, III
	385	1.8			II, III
	460	2.0			II, III
	510	2.5			III
	550	3.0			III
NU6-II	275	1.2	40	100	II, III
	320	1.5			II, III
	385	1.8			II, III
	460	2.0			III
	510	2.5			III
	550	3.0			III

Auxiliary	Configurations	Rated voltage U_n (V)	Rated current I_n (A)
contact	INO+INC	AC125	3

3. How to select surge protectors

- a. The voltage should be $\leq U_c$;
- b. $U_p <$ maximum impulse withstands;
- c. Different protectors should be selected according to various grounding system and protection mode.

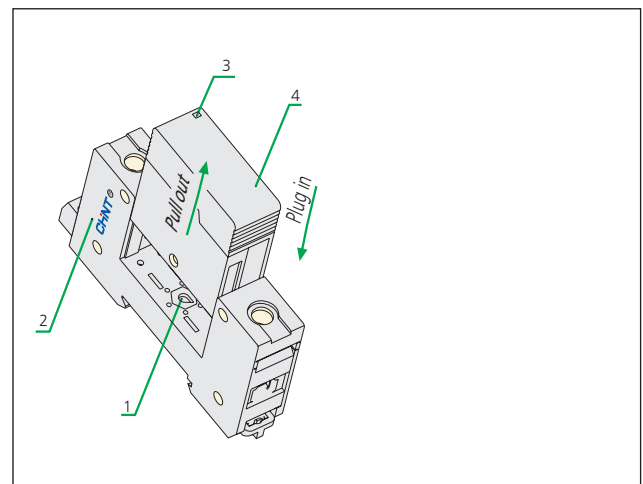
Model	Max. continuous operational voltage U_c (V~)	Applicable grounding system	Protection mode	Circuits	Number of poles
NU6-II	275	TT	L-N	1 phase, 3 phase 4 wire	1
		TN-S	L-PE, N-PE, L-N	1 phase, 3 phase 5 wire	1,2,3,4
		TN-C	L-PE	1 phase, 3 phase 4 wire	1,2,3
	320	TT	L-N	1 phase, 3 phase 4 wire	1
		TN-S	L-PE, N-PE, L-N	1 phase, 3 phase 5 wire	1,2,3,4
		TN-C	L-PE	1 phase, 3 phase 4 wire	1,2,3
	385	TN-S	L-PE, N-PE, L-N	1 phase, 3 phase 5 wire	1,2,3,4
		TN-C	L-PE	1 phase, 3 phase 4 wire	1,2,3
	460	TT	L-PE, N-PE, L-N, L-L	1 phase, 3 phase 4 wire	1,2,3,4
		TN-S	L-PE, N-PE, L-N, L-L	1 phase, 3 phase 5 wire	1,2,3,4
		TN-C	L-PE, L-L	1 phase, 3 phase 4 wire	1,2,3
		IT	L-PE, N-PE, L-L	1 phase, 3 phase 3/4 wire	1,2,3,4
		TT	L-PE, N-PE, L-N, L-L	1 phase, 3 phase 4 wire	1,2,3,4
		TN-S	L-PE, N-PE, L-N, L-L	1 phase, 3 phase 5 wire	1,2,3,4
	510	TN-C	L-PE, L-L	1 phase, 3 phase 4 wire	1,2,3
		IT	L-PE, N-PE, L-L	1 phase, 3 phase 3/4 wire	1,2,3,4
		TT	L-PE, N-PE, L-N, L-L	1 phase, 3 phase 4 wire	1,2,3,4
	550	TN-S	L-PE, N-PE, L-N, L-L	1 phase, 3 phase 5 wire	1,2,3,4
		TN-C	L-PE, L-L	1 phase, 3 phase 4 wire	1,2,3
		IT	L-PE, N-PE, L-L	1 phase, 3 phase 3/4 wire	1,2,3,4

4. Functions

4.1 The product is composed of two independent components: removable protective module 4 and base 2;

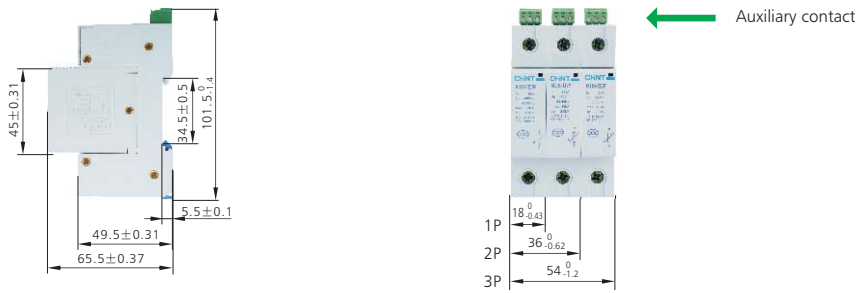
4.2 When the product is damaged, the part 3 will indicate; please replace the removable protective module 4 at once and there is no need to cutoff the circuits;

4.3 The part 1 is for maximum continuous operational voltage indication as well as avoiding replacement with wrong module.

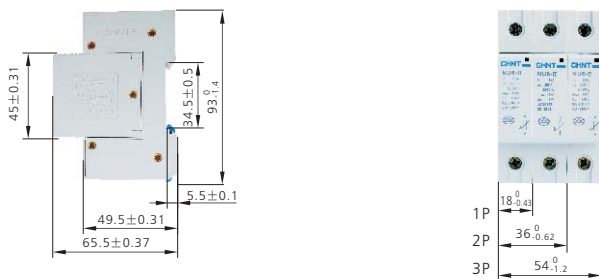


5. Overall and mounting dimensions (mm)

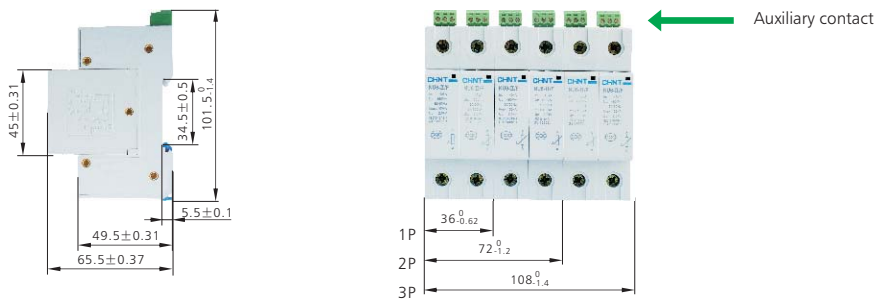
NU6-II/F (5, 15, 25kA) with remote control port



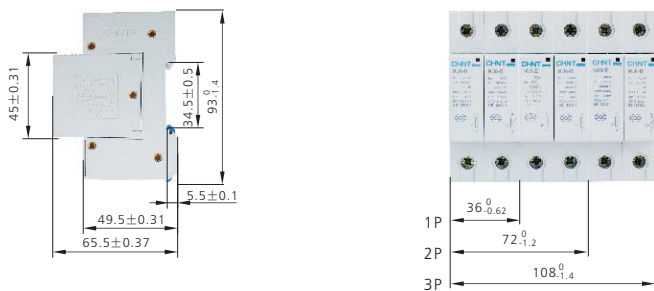
NU6-II (5, 15, 25kA) without remote control port



NU6-II/F (40kA) with remote control port



NU6-II/F (40kA) without remote control port





6. Ordering information

★ NU6- II 1P

Nominal discharge current (kA)	Max. continuous operational voltage U _c (V~)	With remote control port	CTN	Order code	
				Standard	RoHS
5	275	No	144	152101	-
5	320	No	144	152102	-
5	385	No	144	152103	-
5	460	No	144	152104	-
5	510	No	144	152105	-
5	550	No	144	152106	-
15	275	No	144	152107	-
15	320	No	144	152108	-
15	385	No	144	152109	-
15	460	No	144	152110	-
15	510	No	144	152111	-
15	550	No	144	152112	-
25	275	No	144	152113	-
25	320	No	144	152114	-
25	385	No	144	152115	-
25	460	No	144	152116	-
25	510	No	144	152117	-
25	550	No	144	152118	-
40	275	No	72	152119	-
40	320	No	72	152120	-
40	385	No	72	152121	-
40	460	No	72	152122	-
40	510	No	72	152123	-
40	550	No	72	152124	-

★ NU6- II/F 1P

Nominal discharge current (kA)	Max. continuous operational voltage U _c (V~)	With remote control port	CTN	Order code	
				Standard	RoHS
5	275	Yes	144	152125	-
5	320	Yes	144	152126	-
5	385	Yes	144	152127	-
5	460	Yes	144	152128	-
5	510	Yes	144	152129	-
5	550	Yes	144	152130	-
15	275	Yes	144	152131	-
15	320	Yes	144	152132	-
15	385	Yes	144	152133	-
15	460	Yes	144	152134	-
15	510	Yes	144	152135	-
15	550	Yes	144	152136	-
25	275	Yes	144	152137	-
25	320	Yes	144	152138	-
25	385	Yes	144	152139	-
25	460	Yes	144	152140	-
25	510	Yes	144	152141	-
25	550	Yes	144	152142	-
40	275	Yes	72	152143	-
40	320	Yes	72	152144	-
40	385	Yes	72	152145	-
40	460	Yes	72	152146	-
40	510	Yes	72	152147	-
40	550	Yes	72	152148	-

★ NU6-II 2P

Nominal discharge current (kA)	Max. continuous operational voltage U _c (V~)	With remote control port	CTN	Order code	
				Standard	RoHS
5	275	No	72	152149	-
5	320	No	72	152150	-
5	385	No	72	152151	-
5	460	No	72	152152	-
5	510	No	72	152153	-
5	550	No	72	152154	-
15	275	No	72	152155	-
15	320	No	72	152156	-
15	385	No	72	152157	-
15	460	No	72	152158	-
15	510	No	72	152159	-
15	550	No	72	152160	-
25	275	No	72	152161	-
25	320	No	72	152162	-
25	385	No	72	152163	-
25	460	No	72	152164	-
25	510	No	72	152165	-
25	550	No	72	152166	-
40	275	No	36	152167	-
40	320	No	36	152168	-
40	385	No	36	152169	-
40	460	No	36	152170	-
40	510	No	36	152171	-
40	550	No	36	152172	-

★ NU6-II/F 2P

Nominal discharge current (kA)	Max. continuous operational voltage U _c (V~)	With remote control port	CTN	Order code	
				Standard	RoHS
5	275	Yes	72	152173	-
5	320	Yes	72	152174	-
5	385	Yes	72	152175	-
5	460	Yes	72	152176	-
5	510	Yes	72	152177	-
5	550	Yes	72	152178	-
15	275	Yes	72	152179	-
15	320	Yes	72	152180	-
15	385	Yes	72	152181	-
15	460	Yes	72	152182	-
15	510	Yes	72	152183	-
15	550	Yes	72	152184	-
25	275	Yes	72	152185	-
25	320	Yes	72	152186	-
25	385	Yes	72	152187	-
25	460	Yes	72	152188	-
25	510	Yes	72	152189	-
25	550	Yes	72	152190	-
40	275	Yes	36	152191	-
40	320	Yes	36	152192	-
40	385	Yes	36	152193	-
40	460	Yes	36	152194	-
40	510	Yes	36	152195	-
40	550	Yes	36	152196	-



★ NU6- II 3P

Nominal discharge current (kA)	Max. continuous operational voltage U_c (V~)	With remote control port	CTN	Order code	
				Standard	RoHS
5	275	No	48	152197	-
5	320	No	48	152198	-
5	385	No	48	152199	-
5	460	No	48	152200	-
5	510	No	48	152201	-
5	550	No	48	152202	-
15	275	No	48	152203	-
15	320	No	48	152204	-
15	385	No	48	152205	-
15	460	No	48	152206	-
15	510	No	48	152207	-
15	550	No	48	152208	-
25	275	No	48	152209	-
25	320	No	48	152210	-
25	385	No	48	152211	-
25	460	No	48	152212	-
25	510	No	48	152213	-
25	550	No	48	152214	-
40	275	No	24	152215	-
40	320	No	24	152216	-
40	385	No	24	152217	-
40	460	No	24	152218	-
40	510	No	24	152219	-
40	550	No	24	152220	-

★ NU6- II/F 3P

Nominal discharge current (kA)	Max. continuous operational voltage U_c (V~)	With remote control port	CTN	Order code	
				Standard	RoHS
5	275	Yes	48	152221	-
5	320	Yes	48	152222	-
5	385	Yes	48	152223	-
5	460	Yes	48	152224	-
5	510	Yes	48	152225	-
5	550	Yes	48	152226	-
15	275	Yes	48	152227	-
15	320	Yes	48	152228	-
15	385	Yes	48	152229	-
15	460	Yes	48	152230	-
15	510	Yes	48	152231	-
15	550	Yes	48	152232	-
25	275	Yes	48	152233	-
25	320	Yes	48	152234	-
25	385	Yes	48	152235	-
25	460	Yes	48	152236	-
25	510	Yes	48	152237	-
25	550	Yes	48	152238	-
40	275	Yes	24	152239	-
40	320	Yes	24	152240	-
40	385	Yes	24	152241	-
40	460	Yes	24	152242	-
40	510	Yes	24	152243	-
40	550	Yes	24	152244	-

★ NU6- II 4P

Nominal discharge current (kA)	Max. continuous operational voltage U_c (V~)	With remote control port	CTN	Order code	
				Standard	RoHS
5	275	No	36	152245	-
5	320	No	36	152246	-
5	385	No	36	152247	-
5	460	No	36	152248	-
5	510	No	36	152249	-
5	550	No	36	152250	-
15	275	No	36	152251	-
15	320	No	36	152252	-
15	385	No	36	152253	-
15	460	No	36	152254	-
15	510	No	36	152255	-
15	550	No	36	152256	-
25	275	No	36	152257	-
25	320	No	36	152258	-
25	385	No	36	152259	-
25	460	No	36	152260	-
25	510	No	36	152261	-
25	550	No	36	152262	-
40	275	No	12	152263	-
40	320	No	12	152264	-
40	385	No	12	152265	-
40	460	No	12	152266	-
40	510	No	12	152267	-
40	550	No	12	152268	-

★ NU6- II/F 4P

Nominal discharge current (kA)	Max. continuous operational voltage U_c (V~)	With remote control port	CTN	Order code	
				Standard	RoHS
5	275	Yes	36	152269	-
5	320	Yes	36	152270	-
5	385	Yes	36	152271	-
5	460	Yes	36	152272	-
5	510	Yes	36	152273	-
5	550	Yes	36	152274	-
15	275	Yes	36	152275	-
15	320	Yes	36	152276	-
15	385	Yes	36	152277	-
15	460	Yes	36	152278	-
15	510	Yes	36	152279	-
15	550	Yes	36	152280	-
25	275	Yes	36	152281	-
25	320	Yes	36	152282	-
25	385	Yes	36	152283	-
25	460	Yes	36	152284	-
25	510	Yes	36	152285	-
25	550	Yes	36	152286	-
40	275	Yes	12	152287	-
40	320	Yes	12	152288	-
40	385	Yes	12	152289	-
40	460	Yes	12	152290	-
40	510	Yes	12	152291	-
40	550	Yes	12	152292	-

NU6-III

1. General


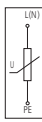
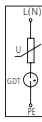

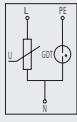

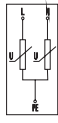
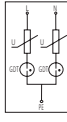
- 1.1 Certificates: international certificates are under proceeding;
- 1.2 Electric ratings: Single phase power distribution and control system of AC50/60Hz, 230V;
- 1.3 Short circuit current: up to 10kA (8/20 μ s);
- 1.4 Application: Protect electric system and on-loading electrical apparatus from lightning and instantaneous over-voltage;
- 1.5 Standard: IEC/EN 61643-1

2. Technical data

Model	Uoc (1.2/50 μ s) (kV)	Short circuit current Isc (8/20us)(KA)	Max. continuous operational voltage Uc (V~)	Level of protection Up (kV)
NU6-III	2	1	275	1.5
			320	1.5
			385	1.5
	3	1.5	275	1.5
			320	1.5
			385	1.5
	4	2	275	1.5
			320	1.5
			385	1.5
	6	3	275	1.5
			320	1.5
			385	1.5
10	5	275	1.5	
		320	1.5	
		385	1.5	
20	10	275	1.5	
		320	1.5	

Auxiliary	Configurations	Rated voltage Un(V)	Rated current In(A)
contact	INO+INC	AC125	3

3. Type and circuit diagram

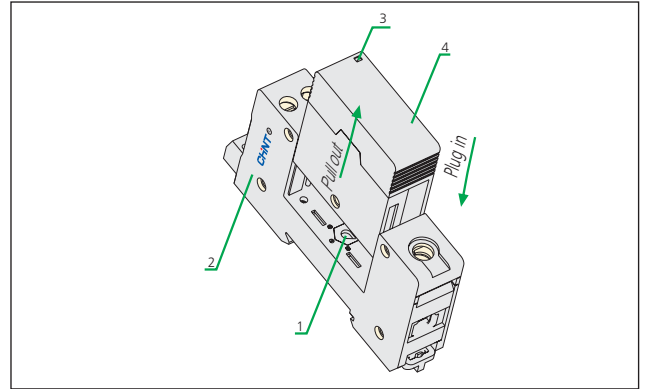
Model	Type	Circuit diagram
NU6-III	L/N-PE 	Voltage Limit Type 
		Compound Type 
	L-N/N-PE 	*
		Compound Type 
	L-PE/N-PE 	Voltage Limit Type 
		Compound Type 

4. Design type and protective mode of different surge protectors

Model	Uoc (1.2/50 μs) (kV)	Uc (V~)	Corresponding design type and protection mode				
NU6-III	2	275	Compound type (with gas discharge tube + voltage sensitive resistance) L-PE/N-PE	Voltage limit type (with voltage sensitive resistance) L-PE/N-PE	Compound type (with gas discharge tube + voltage sensitive resistance) L/N-PE	Voltage limit type (with voltage sensitive resistance) L/N-PE	
		320					
	385						
	3	275					
		320					
	385						
	4	275					
		320					
	385						
	6	275	Voltage limit type (with voltage sensitive resistance) L-PE/N-PE	Compound type (with gas discharge tube + voltage sensitive resistance) L-N/N-PE	Voltage limit type (with voltage sensitive resistance) L/N-PE		
		320					
	385						
10	275						
	320						
385							
20	275						
	320						

5. Functions

5.1 The product is composed of two independent components: removable protective module 4 and base 2;
 5.2 When the product is damaged, the part 3 will indicate; please replace the removable protective module 4 at once and there is no need to cutoff the circuits;
 5.3 The part 1 is for maximum continuous operational voltage indication as well as avoiding replacement with wrong module.

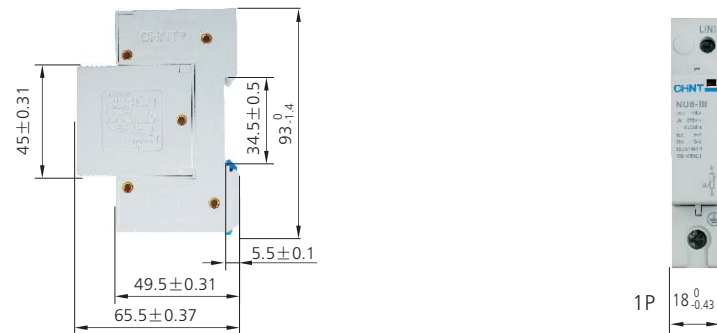


6. Overall and mounting dimensions (mm)

NU6-III/F with remote control port



NU6-III without remote control port



7. Ordering information

★NU6-III Compound type (L/N-PE)

Uoc (kV)	Max. continuous operational voltage U _c (V~)	With remote control port	CTN	Order code	
				Standard	RoHS
2	275	No	144	152301	-
2	320	No	144	152302	-
2	385	No	144	152303	-
3	275	No	144	152304	-
3	320	No	144	152305	-
3	385	No	144	152306	-
4	275	No	144	152307	-
4	320	No	144	152308	-
4	385	No	144	152309	-
6	275	No	144	152310	-
6	320	No	144	152311	-

★NU6-III/F Compound type (L/N-PE)

Uoc (kV)	Max. continuous operational voltage U _c (V~)	With remote control port	CTN	Order code	
				Standard	RoHS
2	275	Yes	144	152313	-
2	320	Yes	144	152314	-
2	385	Yes	144	152315	-
3	275	Yes	144	152316	-
3	320	Yes	144	152317	-
3	385	Yes	144	152318	-
4	275	Yes	144	152319	-
4	320	Yes	144	152320	-
4	385	Yes	144	152321	-
6	275	Yes	144	152322	-
6	320	Yes	144	152323	-

★NU6-III Compound type (L-N/N-PE)

Uoc (kV)	Max. continuous operational voltage U _c (V~)	With remote control port	CTN	Order code	
				Standard	RoHS
6	385	No	144	152325	-
10	275	No	144	152326	-
10	320	No	144	152327	-
10	385	No	144	152328	-
20	275	No	144	152329	-
20	320	No	144	152330	-

★NU6-III/F Compound type (L-N/N-PE)

Uoc (kV)	Max. continuous operational voltage U _c (V~)	With remote control port	CTN	Order code	
				Standard	RoHS
6	385	Yes	144	152331	-
10	275	Yes	144	152332	-
10	320	Yes	144	152333	-
10	385	Yes	144	152334	-
20	275	Yes	144	152335	-
20	320	Yes	144	152336	-

★ NU6-III Compound type (L-PE/N-PE)

Uoc (kV)	Max. continuous operational voltage U _c (V~)	With remote control port	CTN	Order code	
				Standard	RoHS
2	275	No	144	152337	-
2	320	No	144	152338	-
2	385	No	144	152339	-
3	275	No	144	152340	-
3	320	No	144	152341	-
3	385	No	144	152342	-
4	275	No	144	152343	-
4	320	No	144	152344	-
4	385	No	144	152345	-
6	275	No	144	152346	-
6	320	No	144	152347	-

A

★ NU6-III/F Compound type (L-PE/N-PE)

Uoc (kV)	Max. continuous operational voltage Uc (V~)	With remote control port	CTN	Order code	
				Standard	RoHS
2	275	Yes	144	152349	-
2	320	Yes	144	152350	-
2	385	Yes	144	152351	-
3	275	Yes	144	152352	-
3	320	Yes	144	152353	-
3	385	Yes	144	152354	-
4	275	Yes	144	152355	-
4	320	Yes	144	152356	-
4	385	Yes	144	152357	-
6	275	Yes	144	152358	-
6	320	Yes	144	152359	-

★ NU6-III Voltage limit type (L/N-PE)

Uoc (kV)	Max. continuous operational voltage Uc (V~)	With remote control port	CTN	Order code	
				Standard	RoHS
2	275	No	144	152361	-
2	320	No	144	152362	-
2	385	No	144	152363	-
3	275	No	144	152364	-
3	320	No	144	152365	-
3	385	No	144	152366	-
4	275	No	144	152367	-
4	320	No	144	152368	-
4	385	No	144	152369	-
6	275	No	144	152370	-
6	320	No	144	152371	-
6	385	No	144	152372	-
10	275	No	144	152373	-
10	320	No	144	152374	-
10	385	No	144	152375	-
20	275	No	144	152376	-
20	320	No	144	152377	-

★ NU6-III/F Voltage limit type (L/N-PE)

Uoc (kV)	Max. continuous operational voltage Uc (V~)	With remote control port	CTN	Order code	
				Standard	RoHS
2	275	Yes	144	152378	-
2	320	Yes	144	152379	-
2	385	Yes	144	152380	-
3	275	Yes	144	152381	-
3	320	Yes	144	152382	-
3	385	Yes	144	152383	-
4	275	Yes	144	152384	-
4	320	Yes	144	152385	-
4	385	Yes	144	152386	-
6	275	Yes	144	152387	-
6	320	Yes	144	152388	-
6	385	Yes	144	152389	-
10	275	Yes	144	152390	-
10	320	Yes	144	152391	-
10	385	Yes	144	152392	-
20	275	Yes	144	152393	-
20	320	Yes	144	152394	-

★NU6-III Voltage limit type (L-PE/N-PE)

Uoc (kV)	Max. continuous operational voltage U _c (V~)	With remote control port	CTN	Order code	
				Standard	RoHS
2	275	No	144	152395	-
2	320	No	144	152396	-
2	385	No	144	152397	-
3	275	No	144	152398	-
3	320	No	144	152399	-
3	385	No	144	152400	-
4	275	No	144	152401	-
4	320	No	144	152402	-
4	385	No	144	152403	-
6	275	No	144	152404	-
6	320	No	144	152405	-
6	385	No	144	152406	-
10	275	No	144	152407	-
10	320	No	144	152408	-
10	385	No	144	152409	-
20	275	No	144	152410	-
20	320	No	144	152411	-

★NU6-III/F Voltage limit type (L-PE/N-PE)

Uoc (kV)	Max. continuous operational voltage U _c (V~)	With remote control port	CTN	Order code	
				Standard	RoHS
2	275	Yes	144	152412	-
2	320	Yes	144	152413	-
2	385	Yes	144	152414	-
3	275	Yes	144	152415	-
3	320	Yes	144	152416	-
3	385	Yes	144	152417	-
4	275	Yes	144	152418	-
4	320	Yes	144	152419	-
4	385	Yes	144	152420	-
6	275	Yes	144	152421	-
6	320	Yes	144	152422	-
6	385	Yes	144	152423	-
10	275	Yes	144	152424	-
10	320	Yes	144	152425	-
10	385	Yes	144	152426	-
20	275	Yes	144	152427	-
20	320	Yes	144	152428	-

NU6- I series surge arrester	NU6- II series surge arrester	NU6-III series surge arrester
The boundary between lightning protection areas of LPZ0 & LPZ1	The boundary between lightning protection areas of LPZ1 & LPZ2	The boundary between lightning protection areas of LPZ2 & LPZ3
Protection category: B	Protection category: C	Protection category: D
Over-voltage mounting category: III	Over-voltage mounting category: II	Over-voltage mounting category: I
Rated impulse withstand voltage: 4000V	Rated impulse withstand voltage: 2500V	Rated impulse withstand voltage: 1500V
Parameters of discharge: Iimp and In	Parameters of discharge: I _{max} and I _n	Parameters of discharge: U _{oc} and I _{sc}
Applicable to master power distribution switchgear	Applicable to branch power distribution switchgear	Applicable to terminal of power distribution



*Note: Fuse/Circuit breaker are strongly recommended to be installed upstream the surge protector.

8. Recommended circuit breaker selection

Surge protector	Nominal discharge current (kA)	Circuit breaker (upstream)
NU6- I	ALL	NM8 100A
	5	NB1 C10
NU6- II	15	NB1 C20
	25	NB1 C40
	40	DZ158 C63
NU6-III	ALL	NB1 C10