

Product Overview

■ Main functions

Class I+II SPDs are primarily used for surge protection in the main incoming cabinet of low-voltage distribution systems

Class II SPDs are primarily used for surge protection in distribution boxes in low-voltage distribution systems.

Class III SPDs are primarily used for surge protection in terminal distribution boxes.



■ Applied standards

GB/T 18802.1, IEC 61643-11

■ Certification

CQC, RoHS

■ Main features

Rated operating voltage U_o	230V (phase voltage)
Number of poles	1P, 2P, 3P, 4P, 1P+N, 3P+N
Test category	Class I (T1), Class II (T2), Class III (T3)
Max. continuous operating voltage U_c	275/385/440V

Nominal current I_n	10-80kA
Impulse current I_{imp}	12.5kA-25kA
Max. discharge current I_{max}	20-160kA
Voltage protection level U_p	1.2-3.4kV

Product features

- Class I+II I_{imp} impulse current: 12.5kA, 15kA, 25kA
- Class II I_{max} maximum discharge current: 20kA-160kA
- Class III built-in backup protection, with simpler model selection and more convenient installation
- The maximum continuous operating voltage U_c is 440V
- With high-quality chips selected, stable and reliable performance
- Built-in heat disengagement device, more reliable operation
- No power flow current, quick response speed
- Passed the GB/T 18802.1 compliance assessment of lightning protection products of Shanghai Lightning Protection Center

Product Selection

Product series	Inrush current I_{imp} Max. discharge current I_{max}	Number of poles	Maximum continuous operating voltage U_c	Accessories
CDYN-I+II	40	4P	385	YX
CDYN-I+II (Class I)	Impulse current I_{imp} (10/350us) 12: 12.5kA 15: 15kA 25: 25kA	1: 1P 2: 2P 3: 3P 4: 4P 5: 1P+N 6: 3P+N	Default: 385V 275: 275V 440: 440V	Default: No YX: Remote signalling accessory
CDYN-II (Class II)	Max. discharge current I_{max} (8/20us) 20: 20kA 40: 40kA 65: 65kA 80: 80kA 120: 120kA 160: 160kA			
CDYN-III (Class III)	10: 10kV (open-circuit voltage)	5: 1P+N	320: 320V	

Technical Parameters

Main features										
Standard	GB/T 18802.1, IEC 61643-11									
Rated operating voltage Uo	230V (phase voltage)									
Number of poles	1P, 2P, 3P, 4P, 1P+N, 3P+N									1P+N
Test category	Class I (T1)			Class II (T2)						Class III (T3)
Waveform (μs)	10/350us			8/20us						8/20us
Model	CDYN-I+II			CDYN-II						CDYN-III
Impulse current Iimp	12.5kA	15kA	25kA	/	/	/	/	/	/	/
Max. discharge current Imax	/	/	/	20kA	40kA	65kA	80kA	120kA	160kA	10kV (open-circuit voltage Uoc)
Nominal discharge current In	25kA	25kA	50kA	10kA	20kA	30kA	40kA	60kA	80kA	5kA (short-circuit current)
Recommended SCB SPD special backup protection device	15kA (impulse current)		/	≥20kA	≥40kA	≥65kA	≥80kA	≥120kA	/	/
Recommended backup fuse (gL)	250A	250A	300A	50A	100A	125A	160A	200A	250A	Built-in
Recommended backup circuit breaker	/	/	/	25A	40A	63A	/	/	/	/
Max. continuous operating voltage Uc	275/385/440V	275/385/440V	385/440V	275/385/440V	275/385/440V	275/385/440V	275/385/440V	275/385/440V	275/385/440V	320V
Voltage protection level Up	1.6/2.0/2.2kV	1.6/2.0/2.2kV	2.5kV	1.3/1.6/1.8kV	1.5/1.8/2.0kV	1.6/2.0/2.2kV	1.8/2.2/2.2kV	2.2/2.5/2.5kV	3.2/3.3/3.4kV	1.2kV
Other parameters										
Work state indicator window	No color: Normal; Red: Failed, timely replacement required			Green: Normal; Red: Failed, timely replacement required				No color: Normal Red: Failed, timely replacement required	Green light ON: Normal Green light OFF: Failed, timely replacement required	
Remote signalling alarm terminal accessories	Optional; 11 Common terminal 12 Normally-open 13 Normally-closed: Operating voltages≤125V/Switching currents≤1A; Wiring capacity 0.5-1.5mm²									/
	In the event of a fault, 12 normally-open contact is closed, and 13 normally-closed is open, with an alarm signal issued									
Response time	≤25ns		≤100ns	≤25ns						
Wiring capacity	Hard wire ≤ 35mm², soft wire 2.5-25mm²; ultimate torque: 3.5N.m									≤16mm², Ultimate torque 2N.m
Protection grade	IP20									

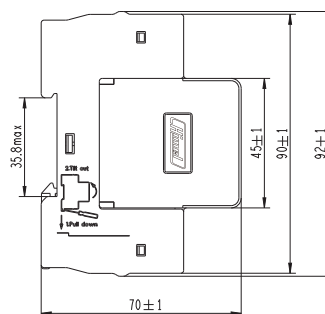
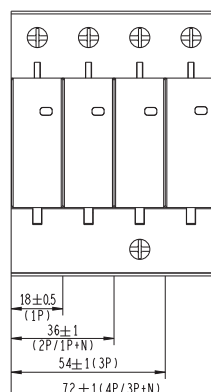
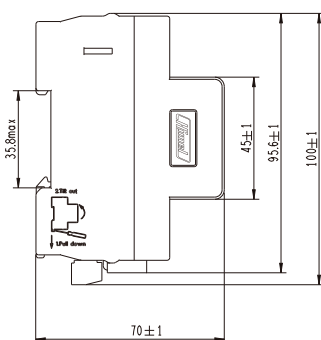
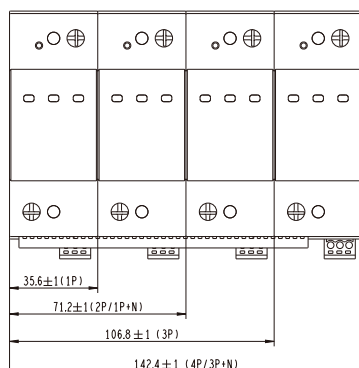
Outline and Installation Dimensions

■ Dimensional drawing

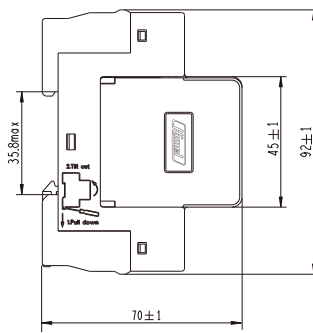
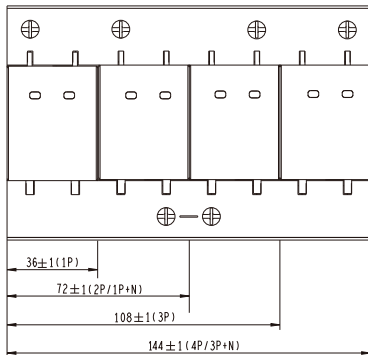
CDYN-I+II 12.5/15/25kA

CDYN-II 160kA

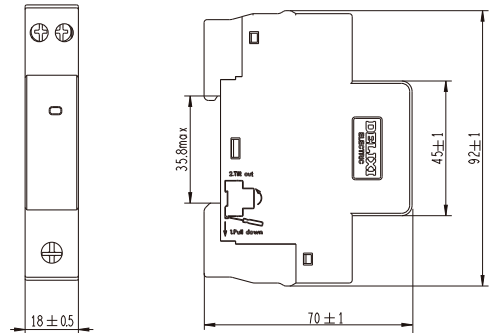
CDYN-II 20/40/65kA

New 6
SERIES

CDYN-II 80/120kA

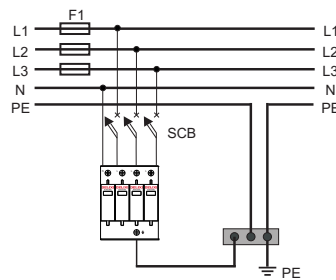
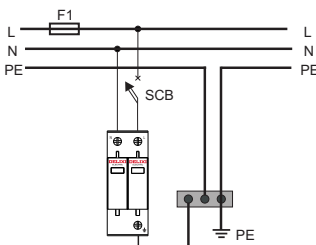


CDYN-III

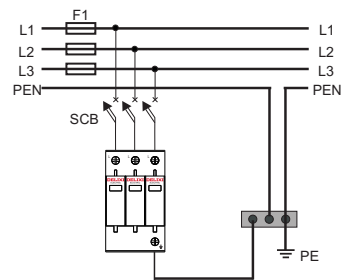


■ Wiring diagram

TN-S system installation diagram



TN-C system installation diagram



TT system installation diagram

