

NFPA79 Compliant Surge Absorber (SPD)

- Safety standards
UL / TÜV / CSA
- RoHS Compliant

Compact Dual-purpose for ground-to-ground and line-to-line LT-CN-WS Series

Circuit Disconnect Device (Thermal fuse) Built-in / Product replacement cycle (Device degradation) with display function

- ★ This product complies with NFPA79, the surge protection standard for industrial machinery intended for the U.S. market, and can be installed on industrial machinery exported to the United States.



Applications

- Power circuit protection for switchboards, control panels, various machine tools such as NC lathes and welding machines, and general industrial equipment

Features

1. UL 1449 Listing Certification / NFPA79 Compliant

- NFPA79: Surge protection for industrial machinery from the 2018 edition used in the United States. If the safety-related circuits of industrial machinery are not adequately protected from overvoltage, the installation of this SPD with UL Listing certification is required.
- NFPA79 is a standard that applies to industrial machinery exported to the United States.

2. Built-in disconnecting device / SPD function display

- Prevents SPD from smoking and ignition by built-in disconnection device when ZnO element deteriorates.

3. Compact and space saving

- Integrated protection for line-to-line and ground-to-ground lightning surges in one unit.
- Compact design with multi-terminal type elements. Same dimensions for 200V to 500V.

4. Reliable withstanding surge

- Maximum discharge current of 5000A (8/20 μ s), Resistant to even major lightning surges.
- Life cycle 1000A x 500 times, Long service life

5. Safety standards

- EN 61643-11 TÜV Certification (TÜV SÜD Japan)
- IEC 61643-11
- UL Standard (UL 1449 Listing Certification)

CSA Standard (C22.2 No. 269) Certification • Made with flame-retardant materials (UL V-0)



● Product replacement cycle with display



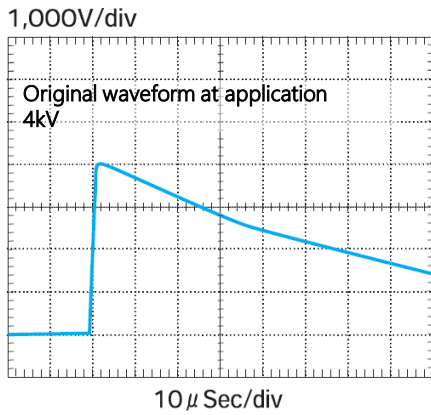
● In the event of a malfunction or component degradation, the indicator will change from "green" to "red". A "Red" indicator means replacement is required.

Electrical Specifications

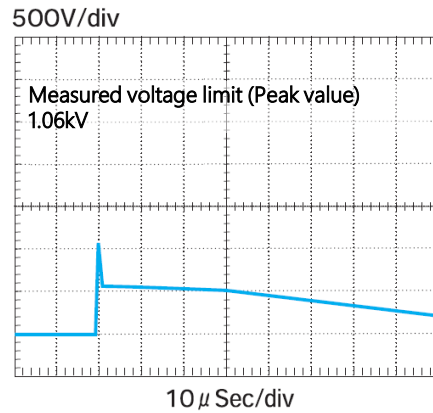
Part number	Single-phase		3-phase		
	LT-CN12G801WS	LT-CN14G801WS	LT-CN32G801WS	LT-CN34G801WS	LT-CN35G102WS
Rated voltage(AC)	L-E,L-L : 250Vrms (UL : 240Vrms)	L-E : 250Vrms (UL : 240Vrms) L-L : 430Vrms (UL : 415Vrms)	Y-connection, Δ -connection: 250Vrms (UL : 240Vrms)	Y-connection : 430Vrms (UL : 415Vrms) Δ -connection : 250Vrms (UL : 240Vrms)	Y-connection : 500Vrms (UL : 480Vrms) Δ -connection : 290Vrms (UL : 277Vrms)
Maximum continuous operating voltage(Uc)	L-E,L-L : 275Vrms	L-E : 280Vrms L-L : 480Vrms	Y-connection, Δ -connection: 275Vrms	Y-connection : 480Vrms Δ -connection : 280Vrms	Y-connection : 550Vrms Δ -connection : 320Vrms
Nominal discharge current (In)	2500A(8 / 20 μ s)				
D.C. Reference voltage(D.C.1mA)(L-L)	540V $\pm$ 10%	940V $\pm$ 10%	540V $\pm$ 10%	940V $\pm$ 10%	1100V $\pm$ 10%
A.C. Reference voltage(A.C.1mA)(L-L)	390Vrms $\pm$ 15%	670Vrms $\pm$ 15%	390Vrms $\pm$ 15%	670Vrms $\pm$ 15%	780Vrms $\pm$ 15%
D.C. Spark-over voltage(L-E)	800V $\pm$ 15%				1000V $\pm$ 15%
A.C. Spark-over voltage(L-E)	560Vrms $\pm$ 15%				700Vrms $\pm$ 15%
Voltage Protection Level(U _p)	1.5kV	1.8kV	1.5kV	1.8kV	2.0kV
Short Circuit Current Rating (SCCR)	5kA *When used as TYPE 2, this is applicable only to single-phase 200V circuits supplied from a three-phase delta connection.	5kA	5kA	5kA	5kA
Maximum discharge current(I _{max})	5000A(8 / 20 μ s)				
Weight	70g	75g		80g	85g
Other Specifications	• Leakage current : Less than 200μA • Ambient temp : -20 ~ 60°C • Ambient storage temperature : -40 ~ 60°C • Insulated wire : UL 1015 AWG14 heat-resistant vinyl electrical wire • Recommended mounting torque : M4 1.6 ~ 2.0Nm • Outer protection class : IP20				

1.2 / Example of a 50 μ s surge voltage application waveform

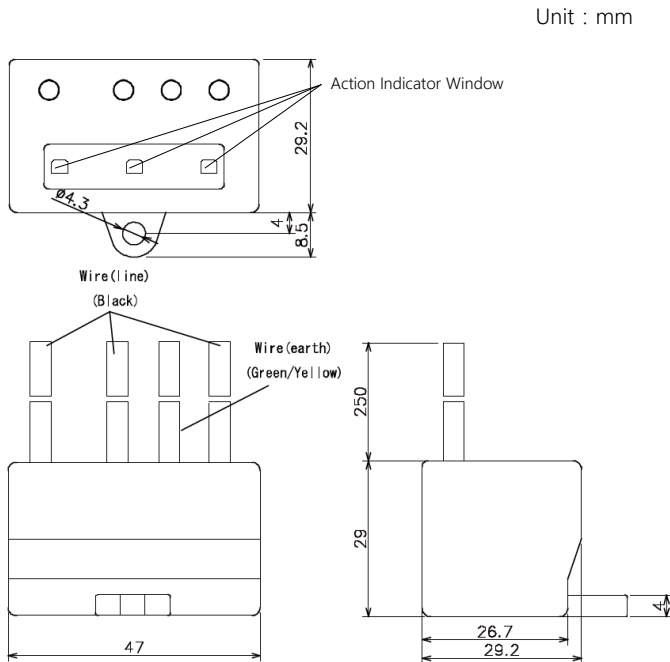
Unmeasured waveform



Typical Characteristics 3-phase 250V (LT-CN32 G 801WS)

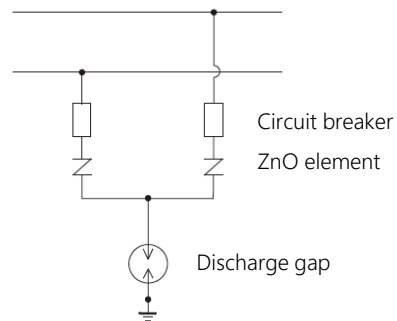


Dimensions

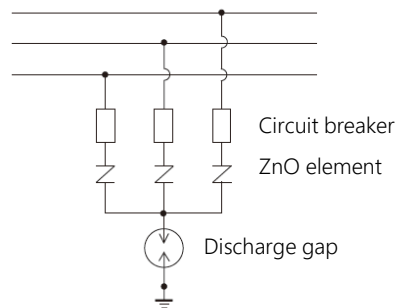


Circuit Diagram

Single-phase circuit diagram



3-phase circuit diagram



Important Notes:

*Subject to change without notice for improvement purposes.

*Please refer to the delivery specifications for important usage instructions before use.

< Contact Information >



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