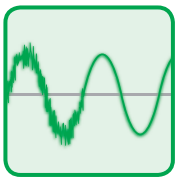
CPS nano & nano plus

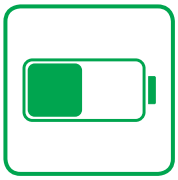
UL & IEC Duality

The CPS nano range brings together Cirprotec's experience of the principal international manufacturing and test standards for SPDs



EMI / RFI Filter

All models include an electromagnetic filter for network noise.



IAD®

The *intelligent aging* display (IAD®) provides visual information about the percentage of protection available from CPS nano plus (100%, 50% early alert, 0%)

MDS

Redundant Multi Discharge System varistor technology with individual disconnection of each MOV

Nema 4

Both models are highly watertight (Nema 4 / IP66)

Remote indication

The IR Remote indication provides an end-of-life signal via a double-throw relay.

CPS nano

Non-modular Surge Protective Device (SPD) designed according to standards UL 1449 3rd ed. and IEC 61643-11 for installation in main panels or distribution panels and for the specific protection of critical loads.

Compact and easy to install, the CPS nano provides comprehensive protection for a wide range of networks and voltages.

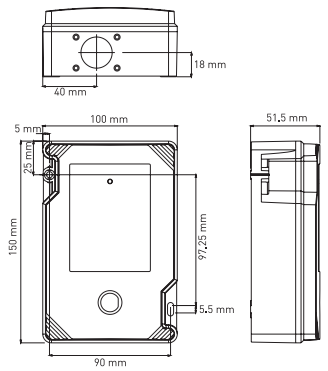
Features

- Type 2, "Permanently connected" SPDs intended for installation on the load side of the service equipment (main panel) overcurrent device; including SPDs located at the branch panel.
- Maximum 8/20 discharge capacity (Imax) from 40 to 120 kA per phase.
- Nominal 8/20 discharge current rating (In) from 10 to 20 kA per phase.
- Redundant *Multi Discharge* System varistor technology with individual disconnection of each MOV.
- Common and differential mode protection.
- Voltage presence LED.
- Status LED of the device.
- Nema 4.
- Remote indication of end of life.

Specifications

Models		Split Phase	1 Phase		3 Phase WYE			3 Phase Delta			High leg Delta
Classification according to UL 1449-3rd Edition		Type 2									
Classification according to IEC 61643-11		Class II									
Protection modes		Common and differential mode protection									
Nominal voltage rating AC 50-60 Hz	Un [V]	120	120	230	120/208	230/400	277/480	240	400	480	120/240
Maximum continuous operating voltage AC 50-60 Hz	MCOV [V]	175	175	320	175	320	385	275	420	510	175/320
Maximum discharge capacity per phase / Nominal discharge capacity per phase	I_{max}/phase [kA]/ I_n/phase [kA]	40/10									
		60/10									
		80/10									
		120/20									
Voltage protection rating (L-N/L-G/N-G)	VPR [V]	600	600	1000	600	1000	1200	900	1500	1800	600
Voltage protection rating (L-L)		1200	----	----	1200	2000	2400	900	1500	1800	1200
Voltage protection rating (L_{HL}-N/L_H-G)		----	----	----	----	----	----	----	----	----	1000
Voltage protection rating (L_{HL}-L)		----	----	----	----	----	----	----	----	----	1200
Maximum back-up fuse	[A gL]	63									
Short-circuit current rating	SCCR [kA]	100									
Response time	t_A [ns]	1									
Multi-Discharge System (MDS)		Yes									
Dynamic thermal disconnection		Yes									
Remote indication (RI)		Yes									
Voltage LED		Yes									
Status indicator LED		Yes									
Enclosure type		IP 66/NEMA 4									
Insulating material and class		PC; V-0									

Dimensions



Certification

Selection Guide

Code: 777976 Y Z

Y	I_{max} / phase
1	40 kA
2	60kA
3	80kA
4	120kA

Z	Grid	V (L-N)
1	1 Phase	120 V
2	1 Phase	230 V
3	Split Phase	120 V
4	3 Phase WYE	120 V
5	3 Phase WYE	230 V
6	3 Phase WYE	277 V
7	3 Phase Delta	240 V
8	3 Phase Delta	400 V
9	3 Phase Delta	480 V
0	High leg Delta	120 V

CPS nano plus

Non-modular Surge Protective Device (SPD) designed according to standards UL 1449 3rd ed. and IEC 61643-11 for installation in main panels or distribution panels and for the specific protection of critical loads.

Compact and easy to install, the CPS nano plus provides comprehensive protection for a wide range of networks and voltages and incorporates several advanced functions previously only available on larger devices.

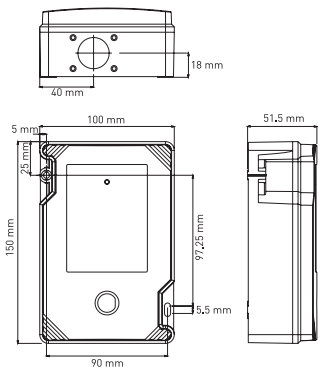
Features

- Type 2, "Permanently connected" SPDs intended for installation on the load side of the service equipment (main panel) overcurrent device; including SPDs located at the branch panel.
- Maximum 8/20 discharge capacity (Imax) from 40 to 160 kA per phase.
- Nominal 8/20 discharge current rating (In) from 10 to 20 kA per phase.
- Redundant *Multi Discharge* System varistor technology with individual disconnection of each MOV.
- Common and differential mode protection.
- EMI / RFI Filter.
- Intelligent aging display (IAD®): end-of-life early alert LED for the entire system (full protection,early alert, replace).
- Voltage presence LED.
- Nema 4.
- Remote indication of end of life.

Specifications

Models		Split Phase	1 Phase		3 Phase WYE			3 Phase Delta			High leg Delta
Classification according to UL 1449-3rd Edition		Type 2									
Classification according to IEC 61643-11		Class II									
Protection modes		Common and differential mode protection									
Nominal voltage rating AC 50-60 Hz	U_n [V]	120	120	230 1	20/208	230/400	277/480	240	400	480	120/240
Maximum continuous operating voltage AC 50-60 Hz	MCOV [V]	175	175	320	175	320	385	275	420	510	175/320
Maximum discharge capacity per phase / Nominal discharge capacity per phase	I_{max} /phase[kA]/ I_n/phase [kA]	40/10									
		60/10									
		80/10									
		120/20									
		160/20									
Voltage protection rating (L-N/L-GN-G)	VPR [V]	600	600	1000	600	1000	1200	900	1500	1800	600
Voltage protection rating (L-L)		1200	----	----	1200	2000	2400	900	1500	1800	1200
Voltage protection rating (L_{HL}-N/L_H-G)		----	----	----	----	----	----	----	----	----	1000
Voltage protection rating (L_{HL}-L)		----	----	----	----	----	----	----	----	----	1200
Maximum back-up fuse	[A gL]	63									
Short-circuit current rating	SCCR [kA]	100									
Response time	t_A [ns]	1									
Multi-Discharge System (MDS)		Yes									
Dynamic thermal disconnection		Yes									
Remote indication (RI)		Yes									
Voltage LED		Yes									
Status indicator LED		Yes									
Intelligent aging display LED (IAD®)		Yes (full protection,early alert, replace)									
EMI Filter		≤ 40 dB									
Enclosure type		IP 66/NEMA 4									
Insulating material and class		PC; V-0									

Dimensions



Certification

Selection Guide

Code: 777977 Y Z

Y	Imax / phase
1	40 kA
2	60kA
3	80kA
4	120kA
5	160kA

Z	Red	V(L-N)
1	1 Phase	120 V
2	1 Phase	230 V
3	Split Phase	120 V
4	3 Phase WYE	120 V
5	3 Phase WYE	230 V
6	3 Phase WYE	277 V
7	3 Phase Delta	240 V
8	3 Phase Delta	400 V
9	3 Phase Delta	480 V
0	High Leg Delta	120 V