ONLINE CERTIFICATIONS DIRECTORY

VZCA.E317603
Surge-protective Devices

VALIDO PARA VERIFICAR CUMPLIMIENTO RETIE, NO PARA TRAMITES VUCE

Page Bottom

Surge-protective Devices

See General Information for Surge-protective Devices

LEVITON MFG CO INC E317603
201 N SERVICE RD
MELVILLE, NY 11747-3138 USA

Model	Product Type	V (V ac)	Phase*	Mode(s)@	VPR (V pk)	In	MCOV
48212-6S	Type 2 SPD	120	1	L-N, L-G, L-L	400	3 kA	150
5280&+, ACSSR&+	Type 3 SPD	125	1	L-N	600	—	—
				L-G	700	—	—
				N-G	600	—	—
5280-IG&+	Type 3 SPD	125	1	L-N	600	—	—
				L-G	700	—	—
				N-G	600	—	—
5380&+	Type 3 SPD	125	1	L-N	600	—	—
				L-G	700	—	—
				N-G	600	—	—
5380-IG&+	Type 3 SPD	125	1	L-N	600	—	—
				L-G	700	—	—
				N-G	600	—	—
5480+, -IG+	Type 3 SPD	125	1	L-N	500	3kA	130
				L-G	600	3kA	130
				N-G	500	3kA	130
5490+, -IG+	Type 3 SPD	125	1	L-N	500	3kA	130
				L-G	600	3kA	130
				N-G	500	3kA	130
8280&&+	Type 3 SPD	125	1	L-N,	600	—	—
				L-G	700	—	—
				N-G	600	—	—
8280-IG&&+	Type 3 SPD	125	1	L-N	600	—	—
				L-G	700	—	—
				N-G	600	—	—
8380&&+	Type 3 SPD	125	1	L-N,	600	—	—
				L-G	700	—	—
				N-G	600	—	—
8380-IG&&+	Type 3 SPD	125	1	L-N	600	—	—

VALIDO PARA VERIFICAR CUMPLIMIENTO RETIE, NO PARA TRAMITES VUCE

				L-G	700	—	—
				N-G	600	—	—
8381&&+	Type 3 SPD	125	1	L-N	600	—	—
				L-G	700	—	—
				N-G	600	—	—
8381-IG&&+	Type 3 SPD	125	1	L-N	600	—	—
				L-G	700	—	—
				N-G	600	—	—
8480-HG+, -HG-IG+	Type 3 SPD	125	1	L-N	500	3kA	130
				L-G	600	3kA	130
				N-G	500	3kA	130
8490-HG+, -HG-IG+	Type 3 SPD	125	1	L-N	500	3kA	130
				L-G	600	3kA	130
				N-G	500	3kA	150
7280&+	Type 3 SPD	125	1	L-N	600	—	—
				L-G	700	—	—
				N-G	600	—	—
7280-IG&+	Type 3 SPD	125	1	L-N	600	—	—
				L-G	700	—	—
				N-G	600	—	—
7380&+	Type 3 SPD	125	1	L-N	600	—	—
				L-G	700	—	—
				N-G	600	—	—
7380-IG&+	Type 3 SPD	125	1	L-N	600	—	—
				L-G	700	—	—
				N-G	600	—	—
ACSR6+$	Type 3 SPD	125	1	L-N	500	3kA	150
				L-G	600	3kA	150
				N-G	600	3kA	150
T5280%+, T5285%+, T7280%+, T8280 %+	Type 3 SPD	125	1	L-N	600	3kA	150
				L-G	700	3kA	150
				N-G	600	3kA	150
T5380%+, T7380%+, T8380%+, T8381%+	Type 3 SPD	125	1	L-N	600	3kA	150
				L-G	700	3kA	150
				N-G	600	3kA	150
3500-P(++), 3500-PC(++), 3500-PT(++)	Type 3 SPD	120	1	L-N	600	—	130
				L-G, N-G	700	—	130
32120-1, 42120-1	Type 2 SPD	120/240	1S	L-N	800	3kA	150
				L-G	1200	3kA	300
				N-G	700	3kA	150
				L-L	1000	3kA	254
32120-DY3, 42120-DY3	Type 2 SPD	120/208	3Y	L-N	700	3kA	150
				L-G	1200	3kA	300
				N-G	700	3kA	150

				L-L	1000	3kA	254
VALIDO PARA VERIFICAR CUMPLIMIENTO RETIE, NO PARA TRAMITES VUCE	Type 2 SPD	208	3D	L-G	1200	3kA	300
				L-L	1000	3kA	254
	Type 2 SPD	220	3D	L-G	1200	3kA	300
				L-L	1000	3kA	254
32277-DY3, 42277-DY3	Type 2 SPD	277/480	3Y	L-N	1200	3kA	320
				L-G	2000	3kA	640
				N-G	1200	3kA	320
				L-L	1800	3kA	552
	Type 2 SPD	220/380	3Y	L-N	1200	3kA	320
				L-G	2000	3kA	640
				N-G	1200	3kA	320
				L-L	1800	3kA	552
	Type 2 SPD	240	3D	L-G	2000	3kA	640
				L-L	1800	3kA	552
	Type 2 SPD	480	3D	L-G	2000	3kA	640
				L-L	1800	3kA	552
32412-DS3, 42412-DS3	Type 2 SPD	240/120	3H	L-N	800	3kA	150
				L-G	1200	3kA	300
				N-G	700	3kA	150
				L-L	1000	3kA	254
				H-N	1000	3kA	254
				H-G	1800	3kA	404
				H-L	1000	3kA	254
51120-1	Type 2 SPD	120/240	1	L-N	800	3KA	150
				L-L	1200	3KA	300
51120-3	Type 2 SPD	120/208	3Y	L-N	800	3KA	150
				L-L	1200	3KA	300
37120-7	Type 2 SPD	208/120	3Y	L-L	1200	5KA	280
				L-N	800	5KA	140
				L-G	900	5KA	140
37277-7				N-G	700	5KA	130
	Type 2 SPD	480/277	3Y	L-L	2000	5KA	640
				L-N	1200	5KA	320
				L-G	1500	5KA	320
				N-G	1200	5KA	300
47120-7, 47120-4X7	Type 2 SPD	208/120	3Y	L-L	1000	10KA	280
				L-N	700	10KA	140
				L-G	900	10KA	140
				N-G	700	10KA	130
47277-7, 47277-4X7	Type 2 SPD	480/277	3Y	L-L	1800	10KA	640
				L-N	1200	10KA	320
				L-G	1500	10KA	320
				N-G	1200	10KA	300

74120-7M3	Type 2	208/120	3Y	L-L	1200	10	300
VALIDO PARA VERIFICAR CUMPLIMIENTO RETIE, NO PARA TRAMITES VUCE				L-N	700	10	150
				L-G	800	10	150
				N-G	500	10	150
75120-7M3	Type 2	208/120	3Y	L-L	1500	10	300
				L-N	800	10	150
				L-G	800	10	150
				N-G	600	10	150
74277-7M3	Type 2	480/277	3Y	L-L	2000	10	640
				L-N	1200	10	320
				L-G	1200	10	320
				N-G	1000	10	320
75277-7M3	Type 2	480/277	3Y	L-L	2000	10	640
				L-N	1200	10	320
				L-G	1200	10	320
				N-G	1000	10	320
51110-001	Type 2 SPD	240/120	1	L-L	1000	3KA	300
				L-N	600	3KA	150
				L-G	600	3KA	150
				N-G	600	3KA	150
51110-SRG	Type 2 SPD	240/120	1	L-L	1000	3KA	300
				L-N	600	3KA	150
				L-G	600	3KA	150
				N-G	600	3KA	150
51110-CT8	Type 2 SPD	240/120	1	L-L	1000	3KA	300
				L-N	600	3KA	150
				L-G	600	3KA	150
				N-G	600	3KA	150
51110-PTC	Type 2 SPD	240/120	1	L-L	1000	3KA	300
				L-N	600	3KA	150
				L-G	600	3KA	150
				N-G	600	3KA	150
S2000-PS#	Type 3 SPD	120	1	L-N	500	—	—
				L-G	700	—	—
				N-G	700	—	—
S2000-PSC#	Type 3 SPD	120	1	L-N	500	—	—
				L-G	700	—	—
				N-G	700	—	—
S2000-S15#	Type 3 SPD	120	1	L-N	500	—	—
				L-G	700	—	—
				N-G	700	—	—
52120-M1	Type 2 SPD	120	1	L-N	1000	20	150
				L-G	1500	20	300
				N-G	700	20	150

52120-M2, 52120-CM2	Type 2 SPD	120/240	1S	L-N	1000	20	150
				L-G	1500	20	300
				N-G	700	20	150
				L-L	1500	20	300
52120-M3, 52120-CM3	Type 2 SPD	120/208	3Y	L-N	1000	20	150
				L-G	1500	20	300
				N-G	700	20	150
				L-L	1500	20	300
52240-DM3	Type 2 SPD	240	3D	L-L	1500	20	320
52480-DM3	Type 2 SPD	480	3D	L-L	2000	20	550
52412-DS3	Type 2 SPD	240/120	3H	L-N	1000	20	150
				L-G	1500	20	300
				N-G	700	20	150
				L-L	1500	20	300
				H-N	1500	20	320
				H-G	2000	20	470
				H-L	2500	20	470
52120-M2H	Type 2 SPD	120/240	1S	L-N	1000	20	150
				L-G	900	20	300
				N-G	700	20	150
				L-L	1500	20	300
57120-M3, 57120-CM3	Type 2 SPD	120/208	3Y	L-N	1000	20	150
				L-G	1500	20	300
				N-G	800	20	150
				L-L	1500	20	300
52120-7M3, 52120-7C3	Type 2 SPD	120/208	3Y	L-N	1000	20	150
				L-G	1200	20	150
				N-G	700	20	150
				L-L	1500	20	300
52120-7MS, 52120-7CS	Type 2 SPD	120/208	3Y	L-N	1000	20	150
				L-G	1200	20	150
				N-G	800	20	150
				L-L	1500	20	300
52277-7M3, 52277-7C3	Type 2 SPD	277/480	3Y	L-N	1500	20	320
				L-G	1500	20	320
				N-G	1200	20	320
				L-L	2500	20	640
52277-7MS, 52277-7CS	Type 2 SPD	277/480	3Y	L-N	1500	20	320
				L-G	1500	20	320
				N-G	1200	20	320
				L-L	2500	20	640
52277-M3, 52277-CM3	Type 2 SPD	277/480	3Y	L-N	1500	20	320
				L-G	2500	20	640
				N-G	1200	20	320

VALIDO PARA VERIFICAR CUMPLIMIENTO RETIE, NO PARA TRAMITES VUCE

				L-L	2500	20	640
57277-M3, 57277-CM3	Type 2 SPD	277/480	3Y	L-N	1500	20	320
				L-G	2500	20	640
				N-G	1200	20	320
				L-L	2500	20	640
57240-DM3	Type 2 SPD	240	3D	L-L	1500	20	320
57480-DM3	Type 2 SPD	480	3D	L-L	2000	20	640
5100-PS#, 5100-S15#	Type 3 SPD	125	1	L-N	500	—	—
				L-G	600	—	—
				N-G	700	—	—
5300-PS#, 5300-S15#	Type 3 SPD	125	1	L-N	500	—	—
				L-G	600	—	—
				N-G	500	—	—
5300-HTS#, 5300-H15#	Type 3 SPD	125	1	L-N	500	—	—
				L-G	700	—	—
				N-G	700	—	—
5300-HT2#	Type 3 SPD	125	1	L-N	500	—	—
				L-G	600	—	—
				N-G	600	—	—
S1000-PS#	Type 3 SPD	120	1	L-N	600	—	—
				L-G	700	—	—
				N-G	700	—	—
S1000-PSC#	Type 3 SPD	120	1	L-N	600	—	—
				L-G	700	—	—
				N-G	700	—	—
S1000-S15#	Type 3 SPD	120	1	L-N	600	—	—
				L-G	700	—	—
				N-G	700	—	—
5300-IPS#	Type 3 SPD	125	1	L-N	500	—	—
				L-G	600	—	—
				N-G	600	—	—
5100-IPS#	Type 3 SPD	125	1	L-N	600	—	—
				L-G	600	—	—
				N-G	600	—	—
5100-IS2#	Type 3 SPD	125	1	L-N	600	—	—
				L-G	700	—	—
				N-G	700	—	—
MT528%	Type 3 SPD	125	1	L-N	600	—	—
				L-G	700	—	—
				N-G	600	—	—
MT538%	Type 3 SPD	125	1	L-N	600	—	—
				L-G	700	—	—
				N-G	600	—	—
MT728%	Type 3 SPD	125	1	L-N	600	—	—

VALIDO PARA VERIFICAR CUMPLIMIENTO RETIE, NO PARA TRAMITES VUCE

				L-G	700	—	—
				N-G	600	—	—
MT738%	Type 3 SPD	125	1	L-N	600	—	—
				L-G	700	—	—
				N-G	600	—	—
MT828%	Type 3 SPD	125	1	L-N	600	—	—
				L-G	700	—	—
				N-G	600	—	—
MT838%	Type 3 SPD	125	1	L-N	600	—	—
				L-G	700	—	—
				N-G	600	—	—

* D - (Delta), Y - (Wye), H - (High Leg Delta)

@ L - (Line), N - (Neutral), G - (Ground), H - (High Leg)

(+) Complementary listed as RTRT under E13399.

(++)Complementary listed as EMDV under E13394.

(#) Complementary listed as XBYS under E118936.

(&) - May be followed by G, GY, I, R or W.

(&&) - May be followed by I, R or W.

% - May be followed by suffixes.

VALIDO PARA VERIFICAR CUMPLIMIENTO RETIE, NO PARA TRAMITES VUCE

These products are intended for installation on the line side (Type 1 SPD) or load side (Type 1, 2 or 3 SPDs) of the main service disconnect in circuits not exceeding 1000 V rms, and have been tested to verify that the transient voltage surges are limited to the maximum amplitudes specified in the Voltage Protection Rating (VPR).

For Type 1 and Type 2 SPDs, Nominal Discharge Current, In, and the Maximum Continuous Operating Voltage (MCOV) are specified.

The effect of the surge protective device on connected loads, the effect of the protector on harmonic distortion of the supply voltage, and the adequacy of the Voltage Protection Rating to protect connected equipment from damage from transient voltage surges has not been determined.

Last Updated on 2014-03-06

Questions? Print this page Terms of Use Page Top

ONLINE CERTIFICATIONS DIRECTORY

VZCA.GuideInfo
Surge-protective Devices

View Listings Page Bottom

Surge-protective Devices

VALIDO PARA VERIFICAR CUMPLIMIENTO RETIE, NO PARA TRAMITES VUCE

Guide Information for Electrical Equipment for Use in Ordinary Locations

GENERAL

This category covers enclosed and open-type surge-protective devices (SPDs) designed for repeated limiting of transient-voltage surges as specified in the standard on 50 or 60 Hz power circuits not exceeding 1000 V ac, or 1500 V dc, including photovoltaic applications (PV SPDs). SPDs are identified with one of the following type designations:

Type 1 — Permanently connected SPDs intended for installation between the secondary of the service transformer and the line side of the service equipment overcurrent device, as well as the load side, including watt-hour meter socket enclosures and intended to be installed without an external overcurrent-protective device.

Type 2 — Permanently connected SPDs intended for installation on the load side of the service equipment overcurrent device, including SPDs located at the branch panel.

Type 3 — Point-of-utilization SPDs, installed at a minimum conductor length of 10 m (30 ft) from the electrical service panel to the point of utilization, e.g., cord-connected, direct-plug-in, receptacle-type and SPDs installed at the utilization equipment being protected. The distance (10 m) is exclusive of conductors provided with or used to attach SPDs.

Open-type SPDs have an incomplete or partial enclosure with field-wiring terminals and/or leads. Open-type SPDs are intended for field installation in accordance with ANSI/NFPA 70, "National Electrical Code," within a suitable enclosure.

SPDs have been investigated to verify that the average of the transient-voltage surges is limited to the Voltage Protection Rating (VPR) marked on the product.

Voltage Protection Rating (VPR) — A rating selected from a list of preferred values as given in the Voltage protection rating (VPR) Table in ANSI/UL 1449 and assigned to each mode of protection. The value of the VPR is determined as the nearest highest value taken from the Voltage protection rating (VPR) Table to the measured limiting voltage determined during the transient-voltage surge suppression test using the combination wave generator at a setting of 6 kV, 3 kA.

Mode(s) — Refers to the pair of electrical connections where the VPR applies. The term "ALL" indicates that the VPR applies to all combinations of pairs of electrical connections.

SPD Type Testing

Type 1 and 2 SPDs are subjected to a Nominal Discharge Current test where an 8 x 20 µs surge current (magnitude specified by the manufacturer) is impressed through the SPD.

Type 3 SPDs are subjected to an Operating Duty Cycle test with a combination wave at 6 kV/3 kA.

PRODUCT MARKINGS

The following information is marked on Type 1, 2 and 3 SPDs:

Electrical ratings, including the operating voltage rating (volts), ac power frequency (Hz) and number of phases or dc. For a two-port SPD, the ratings include the load current rating (amperes).

Voltage Protection Rating (VPR) in volts.

Nominal Discharge Current (I_n) Rating in amps or kA - for Type 1 and 2 SPDs.

Maximum Continuous Operating Voltage Rating (MCOV) in volts - for Type 1 and 2 SPDs.

Short-circuit-current Rating (SCCR) in amps or kA - for Type 1 and 2 SPDs.

PV SPDs investigated to UL 1449 (3rd ed.) are marked "For Use in Photovoltaic Systems Only," or the equivalent.

PV SPDs investigated to UL 1449 (4th ed.) are marked "PVSPD," V_{pvdc}, VPR per mode, Leakage Current (Iq), Short-circuit-current Rating (SCCR), Maximum Ambient Temperature Rating and Load Current Rating in amperes (when applicable).

Open-type SPDs are marked "Installation with an enclosure required, see installation instructions," or the equivalent.

SPDs investigated for Type 1 applications are automatically suitable for Type 2 applications and may be marked for SPD Type 1 and/or Type 2 applications. SPDs only marked "SPD Type 2" are not suitable for Type 1 applications.

FACTORS NOT INVESTIGATED

The effect of the suppressor on connected loads, the effect of the suppressor on harmonic distortion of the supply voltage, and the adequacy of the suppression level to protect connected equipment from damage due to transient-voltage surges has not been investigated.

PRODUCT IDENTITY

One of the following product identities appears on the product:

SPD

Surge-protective Device

VALIDO PARA VERIFICAR CUMPLIMIENTO RETIE, NO PARA TRAMITES VUCE

RELATED PRODUCTS

Cord-connected SPDs employing cord sets provided with leakage-current detection and interruption are covered under Cord Sets with Leakage-current Detection and Interruption (ELGN).

Cord-connected SPDs employing ground-fault circuit interrupters are covered under Ground-fault Circuit Interrupters (KCXS).

Cord-connected and direct-plug-in SPDs are not intended for use with medical, dental or health care facilities equipment.

Component SPDs (Type 4), including discrete components as well as component assemblies, are covered under Surge-protective Devices (VZCA2).

ADDITIONAL INFORMATION

For additional information, see Electrical Equipment for Use in Ordinary Locations (AALZ).

CODES

The following summarizes and defines the codes shown in the individual Certifications.

SPD Type	
1	Type 1 SPD
2	Type 2 SPD
3	Type 3 SPD
ACC	SPD accessory for use in conjunction with an SPD device, such as an alarm, counter, base, etc.
Volts (V)	The rated operating voltage of the SPD
AC/DC/DC PV	
AC	Alternating current (50/60 Hz)
DC	Direct current
DC PV	Direct current for use in photovoltaic applications only
PH (Phase)	Applies to AC-rated SPDs only
1	Single phase
1S	Split single phase
3Y	Three-phase wye
3H	Three-phase high-leg delta
3D	Three-phase delta
Amps (A)	Amperage; applies to two-port SPDs only
Amb (°C) Min./Max	Minimum and Maximum ambient temperature rating of SPD
Mode	Refers to the pair of electrical connections (terminals) between which the specified ratings apply
L	Line
N	Neutral
G	Ground
H	High leg
DC+	DC positive
DC-	DC negative
MCOV (V)	The maximum continuous operating voltage
I_n (kA)	Nominal discharge current rating, kA
SCCR (kA)	Short-circuit-current rating in kA; Type 1 and 2 component assemblies only

REQUIREMENTS

The basic standard used to investigate products for use on AC and/or DC power circuits in this category is ANSI/UL 1449, Surge Protective

Devices" (4th ed.).

The basic standard used to investigate products for photovoltaic applications in this category is ANSI/UL 1449, "Surge Protective Devices."

UL MARK

The Certification Mark of UL on the product is the only method provided by UL to identify products manufactured under its Certification and Follow-Up Service. The Certification Mark for these products includes the UL symbol, the words "CERTIFIED" and "SAFETY," the geographic identifier(s), and a file number.

The Certification Mark for this category requires the use of a holographic label.

Alternate UL Mark

VALIDO PARA
VERIFICAR
CUMPLIMIENTO RETIE,
NO PARA TRAMITES
VUCE

The Listing Mark of UL on the product is the only method provided by UL to identify products manufactured under its Listing and Follow-Up Service. The Listing Mark for these products includes the UL symbol (as illustrated in the Introduction of this Directory) together with the word "LISTED," a control number, and the product name "Surge Protective Device" (or "SPD").

The Listing Mark for this category requires the use of a holographic label.

* *

UL, in performing its functions in accordance with its objectives, does not assume or undertake to discharge any responsibility of the manufacturer or any other party. UL shall not incur any obligation or liability for any loss, expense or damages, including incidental or consequential damages, arising out of or in connection with the use, interpretation of, or reliance upon this Guide Information.

Last Updated on 2015-11-11

Questions? Print this page Terms of Use Page Top