

SURGE PROTECTION PRODUCT GUIDE

Commercial | Industrial | Residential



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Committed to Excellence

In this digital age, we're more dependent on electronics and electricity than ever. DITEK Surge Protection is a proactive investment to safeguard your most valuable electronic and digital assets. It's like insurance for your communications, fire protection, security systems, home appliances — anything you plug in to connect to power.

We all experience power surges every day. Those surges can damage your electronic and digital assets even when you can't see them. DITEK Surge Protection guards your assets against big and small surges so your business or home can stay operational without fear of damage or downtime.

DITEK Surge Protection is the first line of defense for protecting power systems from the negative impacts of power surges. For over 35 years, we have been an industry leader in the technology, design and manufacturing of surge protection solutions for facilities, businesses, homes, and more.



SURGE PROTECTION BASICS

Surges and spikes are temporary and instantaneous events that increase normal electrical line voltage, and can cause serious damage to sensitive equipment. Conventional fuses and breakers do NOT guard against power surges and spikes.

What causes surges and spikes?

Lightning: A direct hit is usually catastrophic.

Proximity Strikes: Lightning strikes several miles away, causing large voltage spikes along transmission lines.

Brownouts/Blackouts: Under-voltage or sag, that is immediately followed by an unusually high voltage transient. If your lights flicker or dim, it's usually an indication that a brownout occurred.

Utility Grid Switching: Utility companies switching transmission lines from one supply system to another.

Inductive Loads: The switching on and off of electric motors inside or outside a facility. For example, HVAC systems or heavy machinery.

What are the effects of surges and spikes?

Degradation: Gradual deterioration of internal circuitry from repeated power surges and spikes that slowly degrade electrical components, shortening their lifespan and making them less reliable.

Destruction: Resulting in expensive equipment repair or replacement costs.

Downtime: The most costly effect, can result in the loss of data, productivity and customers.

What equipment should be protected?

Power surges and spikes can be induced onto any type of unprotected electrical cabling, including utility power lines, network and communication lines, and low voltage power feeds. Therefore, surge protection should be installed on all critical electronic systems and the electrical paths between them.

What are the benefits of investing in quality surge protection?

REDUCED
DOWNTIME

EXTENDED
EQUIPMENT LIFE

INCREASED CUSTOMER
SATISFACTION

UL 1449 – Surge Protective Devices



5TH EDITION PRODUCT MARKINGS

Maximum Continuous Operating Voltage (MCOV)

The maximum voltage a device can withstand continuously before clamping begins.

Nominal Discharge Current Rating (In)

UL 1449 test encompassing 15 surge impulses at a selected level of 3kA, 5kA, 10kA or 20kA. The unit must be fully operational after completion of the test.

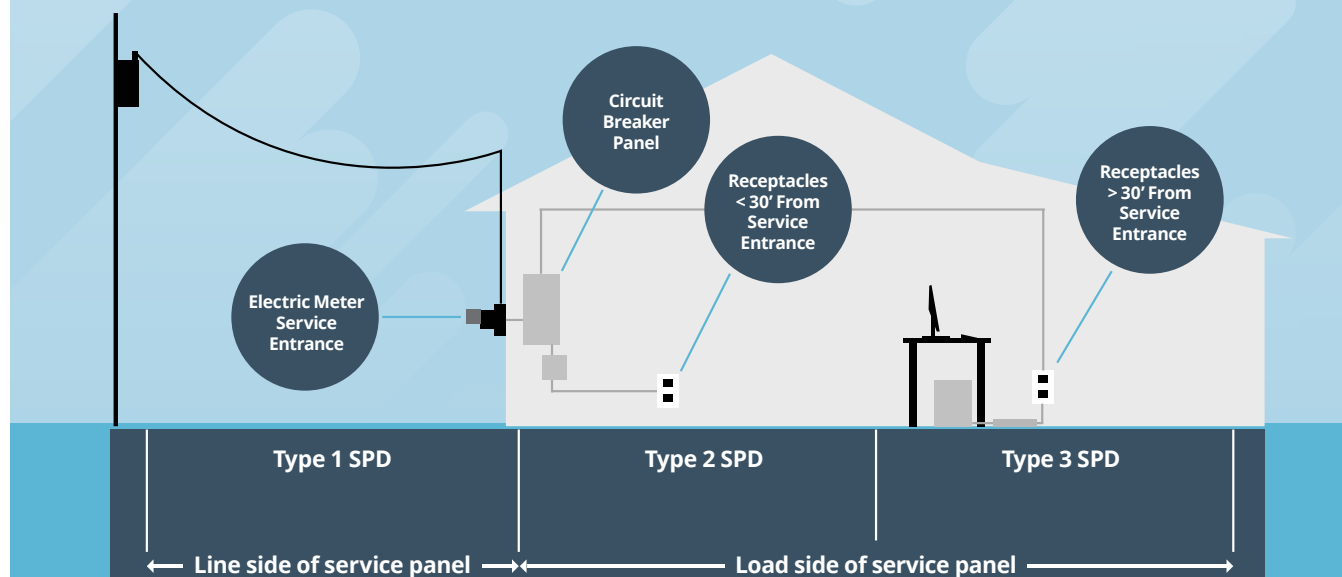
Voltage Protection Rating (VPR)

UL 1449 clamping voltage test performed with a 6kV, 3kA, 8x20 μ s combination waveform.

Short Circuit Current Rating (SCCR)

The level at which an SPD is suitable for use on an AC power circuit that is capable of delivering not more than a declared root-mean-square symmetrical current at a delayed voltage during a short-circuit condition.

SPD LOCATION REQUIREMENTS



Type 1 SPD

A permanently connected SPD 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 Molded Case SPDs intended to be installed without an external overcurrent protective device.

Type 2 SPD

A permanently connected SPD intended for installation on the load side of the service equipment overcurrent device, including SPDs located at the branch panel and Molded Case SPDs.

Type 3 SPD

Point of utilization SPDs, installed at a minimum conductor length of 10 meters (30 feet) from the electrical service panel to the point of utilization, for example cord connected, direct plug-in, receptacle type SPDs installed at the utilization equipment being protected. The distance (10 meters) is exclusive of the conductors provided with or used to attach SPDs.

Residential Protection

A | DTK-120/240BK1

CIRCUIT BREAKER-STYLE – LOAD CENTER

UL 1449 | Type 2 SPD

- Fits multiple load centers w/ 1" spacing
- 50,000A surge current rating
- Audible alarm with silence feature
- Diagnostic LED
- 5 year, \$25,000 connected equipment warranty



B | DTK-120/240HD2

MAIN PANEL, METER OR TRANSFER SWITCH

UL 1449 | Type 1 SPD

- 100,000A/phase surge current rating
- NEMA 4X enclosure
- Diagnostic LED
- Flush mount kit p/n DTK-FMKHD2
- 5 year \$25,000 connected equipment warranty



C | DTK-120/240HD

MAIN PANEL, METER OR TRANSFER SWITCH

UL 1449 | Type 1 SPD

- 50,000A/phase surge current rating
- NEMA 4X enclosure
- Diagnostic LED
- Flush mount version p/n DTK-120/240HDFM
- 5 year, \$10,000 connected equipment warranty



D | DTK-120/240XD

MAIN PANEL, METER OR TRANSFER SWITCH

UL 1449 | Type 1 SPD

- 50,000A/phase surge current rating
- NEMA 4X enclosure
- Diagnostic LED
- Flush mount kit p/n DTK-FMK
- 5 year, \$10,000 connected equipment warranty

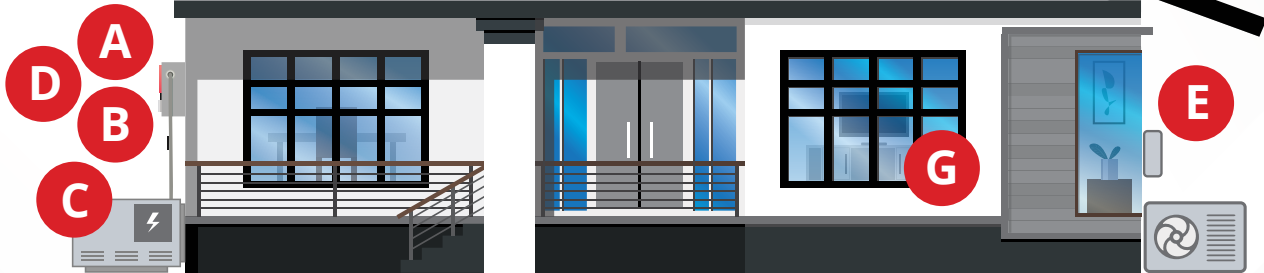


National Electrical Code, Article 230.67 stipulates:



All electrical services to dwellings must have surge protective devices installed at or near the service entrance

SPDs "shall be an integral part of the service equipment or shall be located immediately adjacent thereto"



E | DTK-120/240CM+

HVAC & POOL CONTROLS

UL 1449 | Type 1 SPD

- 50,000A total surge current rating
- NEMA 4X enclosure
- Diagnostic LED
- 3/4" NPT male fitting
- 3 year, \$7,500 connected equipment warranty



F | DTK-MRJPOES

ETHERNET & POE CIRCUITS

UL 497B | 20,000A

- Protects 1 Ethernet or PoE channel
- RJ45 female in/out
- Rated to pass up to 10Gbps
- 20kA/pair surge current rating
- 10 year limited warranty



G | DTK-7VS

PLUG-IN SURGE STRIP

UL 1449 | Type 3 SPD

- Power strip with load-sensing technology
- 120VAC, 15A
- 7 outlets with 4' cord
- Illuminated load-status indicator



Commercial & Industrial Protection – Modular

D200M Series

SERVICE ENTRANCE

UL 1449 | Type 1 SPD

- 200,000A/phase, 100,000A/mode
- NEMA 4 enclosure
- Field-replaceable surge protection module
- 8 AWG–2 AWG mechanical lug connections
- Minimum circuit breaker: 40A



D200MT Series

SERVICE ENTRANCE

UL 1449 | Type 1 SPD

- 200,000A/phase, 100,000A/mode
- NEMA 4 enclosure
- Field-replaceable surge protection module
- 8 AWG–1/0 AWG mechanical lug connections
- UL98 integral disconnect switch included
- Minimum circuit breaker: 40A



D300M Series

SERVICE ENTRANCE

UL 1449 | Type 1 SPD

- 300,000A/phase, 150,000A/mode
- NEMA 4 enclosure
- Field-replaceable surge protection module
- 8 AWG–2 AWG mechanical lug connections
- Minimum circuit breaker: 40A



D300MT Series

SERVICE ENTRANCE

UL 1449 | Type 1 SPD

- 300,000A/phase, 150,000A/mode
- NEMA 4 enclosure
- Field-replaceable surge protection module
- 8 AWG–1/0 AWG mechanical lug connections
- UL98 integral disconnect switch included
- Minimum circuit breaker: 40A



STANDARD FEATURES

- Field-replaceable surge protection module
- Audible alarm with disable feature
- Form C dry contacts for remote monitoring
- Diagnostic health status LEDs per phase
- Surge counter with reset button
- EMI/RFI filtering
- Phase loss indicator
- Service assurance features

D200M SERIES

Model	Integral Disconnect	Voltage	Wiring	Surge Capacity	I(n)	SCCR	NEMA
D200M-120/2401		120/240V Split	3W + G	200kA/phase	20kA	200kA	4
D200M-120/2401T	✓						
D200M-120/2083Y		120/208V Wye	4W + G				
D200M-120/2083YT	✓						
D200M-277/4803Y		277/480V Wye	4W + G				
D200M-277/4803YT	✓						
D200M-2403D		240V Delta	3W + G				
D200M-2403DT	✓						
D200M-4803D		480V Delta	3W + G				
D200M-4803DT	✓						

D300M SERIES

Model	Integral Disconnect	Voltage	Wiring	Surge Capacity	I(n)	SCCR	NEMA
D300M-120/2401		120/240V Split	3W + G	300kA/phase	20kA	200kA	4
D300M-120/2401T	✓						
D300M-120/2083Y		120/208V Wye	4W + G				
D300M-120/2083YT	✓						
D300M-277/4803Y		277/480V Wye	4W + G				
D300M-277/4803YT	✓						
D300M-2403D		240V Delta	3W + G				
D300M-2403DT	✓						
D300M-4803D		480V Delta	3W + G				
D300M-4803DT	✓						

Commercial & Industrial Protection – Non-Modular

D200 Series

DISTRIBUTION PANELS

UL 1449 | Type 1 SPD

- 200,000A/phase, 100,000A/mode
- NEMA 4X enclosure
- 10 AWG, 30" lead wires
- 3/4" NPT non-metallic conduit
- Minimum circuit breaker: 30A
- Flush mount kit, p/n D200-FMK



D150X Series

DISTRIBUTION PANELS

UL 1449 | Type 1 SPD

- 150,000A/phase, 50,000A/mode
- NEMA 4X enclosure
- 10 AWG, 30" lead wires
- 3/4" NPT non-metallic conduit
- Minimum circuit breaker: 30A
- Flush mount kit, p/n D200-FMK



D100 Series

BRANCH PANELS

UL 1449 | Type 1 SPD

- 100,000A/phase, 50,000A/mode
- NEMA 4X enclosure
- 10 AWG, 30" lead wires
- 1/2" NPT non-metallic conduit
- Minimum circuit breaker: 30A
- Flush mount kit, p/n DTK-FMKHD2



D50 Series

BRANCH PANELS

UL 1449 | Type 1 SPD

- 50,000A/phase, 25,000A/mode
- NEMA 4X enclosure
- 12 AWG, 30" lead wires
- 3/4" NPT male hub
- Minimum circuit breaker: 20A
- Flush mount option, add "FM" to p/n



D200 SERIES

Model	Voltage	Wiring	Surge Capacity	I(n)	SCCR	NEMA	LED	Audible Alarm	Dry Contacts
D200-120/2401	120/240V Split	3W + G	200kA/phase	20kA	100kA	4X	✓	✓	✓
D200-120/2083Y	120/208V Wye	4W + G							
D200-120/240HL	120/240V Delta HL	4W + G							
D200-277/4803Y	277/480V Wye	4W + G							
D200-2403D	240V Delta	3W + G							
D200-4803D	480V Delta	3W + G							

D150X SERIES

Model	Voltage	Wiring	Surge Capacity	I(n)	SCCR	NEMA	LED	Audible Alarm	Dry Contacts
D150X-120/2401	120/240V Split	3W + G	150kA/phase	20kA	100kA	4X	✓	✓	✓
D150X-120/2083Y	120/208V Wye	4W + G							
D150X-120/240HL	120/240V Delta HL	4W + G							
D150X-2403D	240V Delta	3W + G							
D150X-277/4803Y	277/480V Wye	4W + G							
D150X-4803D	480V Delta	3W + G							

D100 SERIES

Model	Voltage	Wiring	Surge Capacity	I(n)	SCCR	NEMA	LED	Audible Alarm	Dry Contacts
D100-120/2401	120/240V Split	3W + G	100kA/phase	20kA	100kA	4X	✓		
D100-120/2083Y	120/208V Wye	4W + G							
D100-120/240HL	120/240V Delta HL	4W + G							
D100-277/4803Y	277/480V Wye	4W + G							
D100-2403D	240V Delta	3W + G							
D100-4803D	480V Delta	3W + G							
D100-6003D	600V Delta	3W + G		10kA					

D50 SERIES

Model	Voltage	Wiring	Surge Capacity	I(n)	SCCR	NEMA	LED	Audible Alarm	Dry Contacts
D50-120/2401	120/240V Split	3W + G	50kA/phase	20kA	100kA	4X	✔		
D50-120/2083Y	120/208V Wye	4W + G		10kA					
D50-120/240HL	120/240V Delta HL	4W + G							
D50-277/4803Y	277/480V Wye	4W + G							
D50-2403D	240V Delta	3W + G							
D50-4803D	480V Delta	3W + G							
D50-347/6003Y	347/600V Wye	4W + G							

DIN Rail Protection

DTK-DR Series

AC POWER

UL 1449 | Type 1 CA

- 75,000A surge capacity
- Field-replaceable protection module
- 35mm DIN rail mounting configuration
- Visual and remote end-of-life indicators
- N-G protection module optional
- 120-690VAC voltage configurations



DTK-DRB Series

LOW VOLTAGE & CONTROL CIRCUITS

UL 497B | 20,000A

- 20,000A surge capacity
- Field-replaceable protection module
- Protects 2 circuit pairs
- 35mm DIN rail mounting configuration
- 5-130VDC voltage configurations
- Shorts to ground when compromised



DTK-DRF Series

LOW VOLTAGE & CONTROL CIRCUITS

UL 497B | 20,000A

- 20,000A surge capacity
- Field-replaceable protection module
- Protects 2 circuit pairs
- 35mm DIN rail mounting configuration
- 5-130VDC voltage configurations
- Opens circuit when compromised



Branch Circuit Protection

DTK-DF120S12

CONVENIENCE STORES & MULTI-PUMP FUELING STATIONS

UL 1449 | Type 2 SPD

- Protects up to (12) 120VAC single phase critical loads
- Audible alarm
- Field-replaceable Deflector modules



DTK-120SLR

FIRE ALARM CONTROL PANELS, GATE MOTORS, ETC.

UL 1449 | Type 2 SPD

- UL 1283 noise filtering
- 120VAC single phase, up to 20 Amps
- Series-connected, removes load when surge protection expires



DTK-HW Series

DEDICATED BRANCH CIRCUITS

UL 1449 | Type 1 SPD

- Compact, parallel-wired
- Diagnostic LED
- NEMA 4X enclosures
- **DTK-120HW** 120VAC single phase
- **DTK-240HW** 240VAC single phase
- **DTK-120/240HW** 120/240VAC split phase



DTK-CMXPLUS Series

DEDICATED BRANCH CIRCUITS

UL 1449 | Type 1 SPD

- 25,000A/phase
- NEMA 4X enclosure
- Diagnostic LED
- **DTK-2403CMXPLUS** 208/240VAC three phase
- **DTK-4803CMXPLUS** 480VAC three phase
- **DTK-6003CMXPLUS** 600VAC three phase



HVAC Protection

INTELLIGENT VOLTAGE MONITORING

KoolGuard Series: DTK-KG2

MINI-SPLITS, INVERTER DRIVEN COMPRESSOR SYSTEMS & ECM MOTORS

UL 60947-1 & 60947-5-1 | Voltage Monitor

- Protects against under- and over-voltage events
- Safely disconnects power to the system until input voltage returns to normal range
- Diagnostic LEDs indicate voltage condition
- Includes surge protection components



Voltage Condition Codes

			Condition Normal / On			
			Line 1 Over or Under / Off			
			Line 2 Over or Under / Off			
			Recovering from Line 1 Over or Under / Delayed			
			Recovering from Line 2 Over or Under / Delayed			
			Service Required / On			

B = Blinking A = Alternating

Technical Specifications

Voltage configuration	120/240VAC Split Φ
	120/208VAC Split Φ
Operating frequency	50/60Hz
Max. continuous current	40 Amps
Undervoltage protection	104VAC (L-G)
Overvoltage protection	130VAC (L-G)
Short cycle delay	3 min (default)
	30 sec (optional)
Surge Current Rating	50,000A

Mechanical Specifications

Dimensions	6.29" L x 6.29" W x 2.36" H
	(160 mm x 160 mm x 60mm)
Weight	3 lb (1.36 kg)
Housing	UL type 4X enclosure
Connection method	Series-wired
Conduit size	1/2" or 3/4" NPT
Terminal lugs	14-6 AWG



Disconnect Switch



DTK-KG2



Outdoor Condenser Unit

SURGE PROTECTIVE DEVICES

A | DTK-120/240CM+

CONDENSER UNIT OR AIR HANDLER

UL 1449 | Type 1 SPD

- 10kA Nominal Discharge Current Rating
- NEMA 4X enclosure
- Diagnostic LED
- 3 year \$7,500 warranty



B | DTK-120/240CMX

CONDENSER UNIT OR AIR HANDLER

UL 1449 | Type 1 SPD

- 20kA Nominal Discharge Current Rating
- NEMA 4X enclosure
- Diagnostic LED
- 3 year \$7,500 warranty



C | DTK-CMXPLUS Series

3 PHASE CONDENSER UNIT

UL 1449 | Type 1 SPD

- 25,000A/phase
- NEMA 4X enclosure
- Diagnostic LED

- **DTK-2403CMXPLUS** 208/240VAC three phase
- **DTK-4803CMXPLUS** 480VAC three phase
- **DTK-6003CMXPLUS** 600VAC three phase

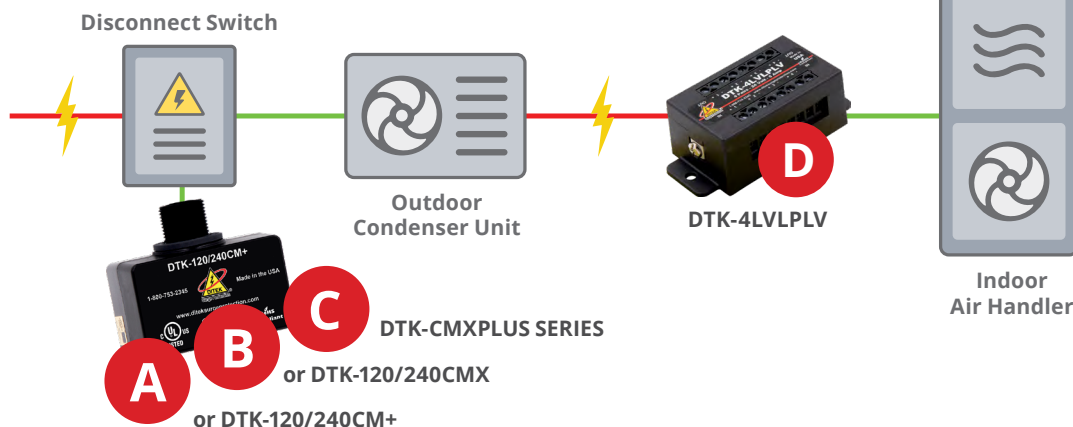


D | DTK-4LVPLV

THERMOSTAT CONTROL WIRING

UL 497B | 20,000A

- 4-pair, 8-wire 24V
- Install in series with thermostat control wires at air handler
- 30-12 AWG terminal block



Fire Alarm Protection

A | DTK-DF120S1

120VAC POWER

UL 1449 | Type 2 SPD

- 120V/20A series-wired SPD
- Rapid-replacement module
- Audible alarm and LED status indicators
- Dry contacts for remote monitoring
- UL 1283 EMI/RFI filtering



B | DTK-120HWL0K

120VAC POWER

UL 1449 | Type 1 SPD

- 120V parallel-wired SPD
- 50,000A max surge current rating
- Includes NFPA 72 breaker lockout
- Available w/out lockout kit: DTK-120HW



C | DTK-2MHLP Series

SLC/IDC/PIV

UL 497B | 20,000A

- 2-pair, multi-stage hybrid surge protectors
- 20kA surge current rating, 5-130V configurations
- Screw terminal connections
- B series shorts to ground when compromised
- F series opens circuit when compromised



D | DTK-MRJ31XWP

DIALER CIRCUITS

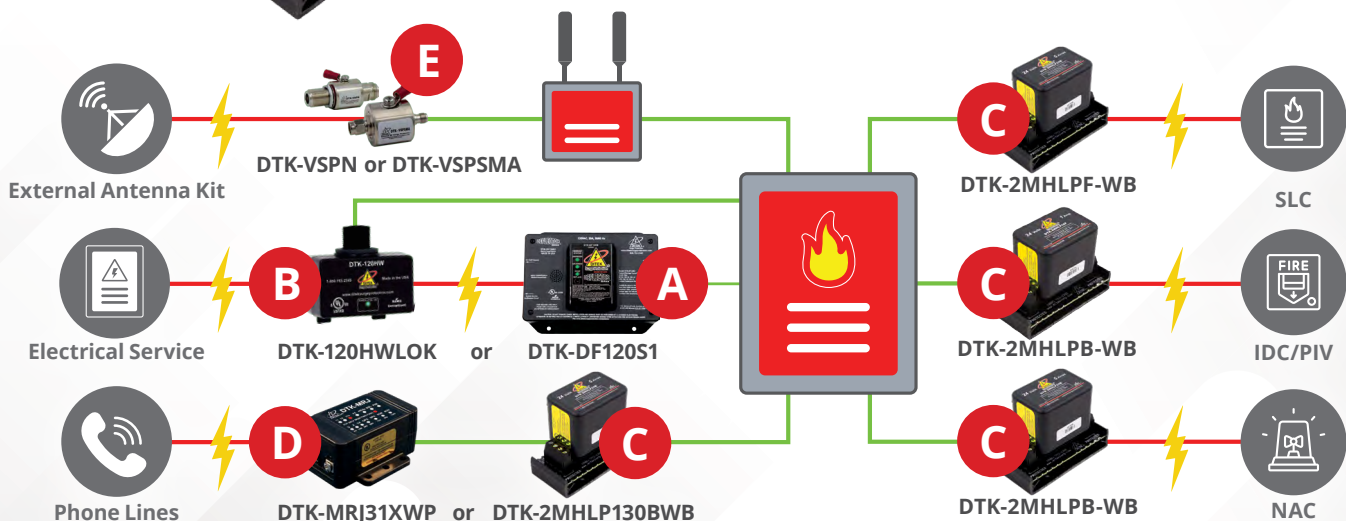
- Single pair dialer protector with RJ31X connection
- Automatic reset handles multiple surges



E | DTK-VSPN/ DTK-VSPSMA

EXTERNAL ANTENNA

- DTK-VSPN features N-type connector F/F
- DTK-VSPSMA features SMA-type connector M/F



Total Surge Solutions

DTK-120X12

120VAC POWER & (12) LOW VOLTAGE CIRCUITS

UL 1449, UL 1283, UL 497B | Type 2 SPD

- Audible alarm with silence feature
- Dry contacts for remote monitoring (Form C)
- 6-position mounting base for 2MHLP modules (sold separately)
- Protects up to 12 pairs of SLC, IDC/PIV, NAC, network or dialer circuits

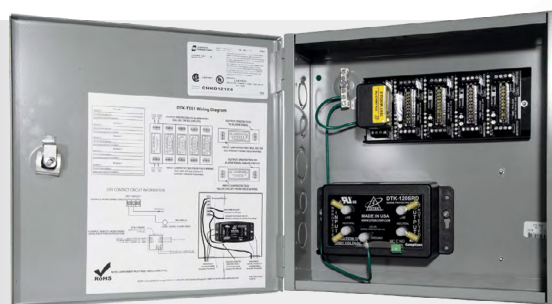


DTK-TSS1

120VAC POWER & (10) LOW VOLTAGE CIRCUITS

UL 1449, UL 1283, UL 497B | Type 2 CA

- 5-position base for 2MHLP modules (sold separately)
- Dry contacts for remote monitoring
- Protects up to 10 pairs of SLC, IDC/PIV, NAC, network or dialer circuits



DTK-TSS2/DTK-TSS2NM

120VAC POWER & (4) LOW VOLTAGE CIRCUITS

UL 1449, UL 1283, UL 497B | Type 2 CA

- 120V protection • NEMA 4X enclosure
- DTK-TSS2 Protects up to 4 pairs of loop circuits
- DTK-TSS2NM Space for monitor module

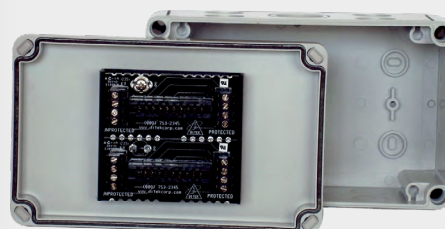


DTK-TSS3

(4) LOW VOLTAGE CIRCUITS

UL 497B | 20,000A

- 2-position base for 2MHLP modules
- Protects up to 4 pairs of building-to-building cable runs
- NEMA 4X enclosure



DTK-TSS4D

120VAC POWER

UL 1449, UL 1283 | Type 2 CA

- 120V protection
- Dry contacts for remote monitoring
- NEMA 4X enclosure



Network Protection

A | RMNETS & RMEXTS Series

UL 497B | 20,000A

- Multi-stage, hybrid protection design
- Robust 20kA per pair surge current rating
- Rapid-replacement modular design
- Supports up to 10Gb Ethernet speed
- Compatible with both STP and UTP cabling
- Designed for rack mounted systems

RMNETS: ETHERNET & POE CIRCUITS

- DTK-RM24NETS 24-channel, 1U rack mount
- DTK-RM16NETS 16-channel, 1U rack mount
- DTK-RM12NETS 12-channel, 1U rack mount

RMEXTS: POE EXTENDER CIRCUITS

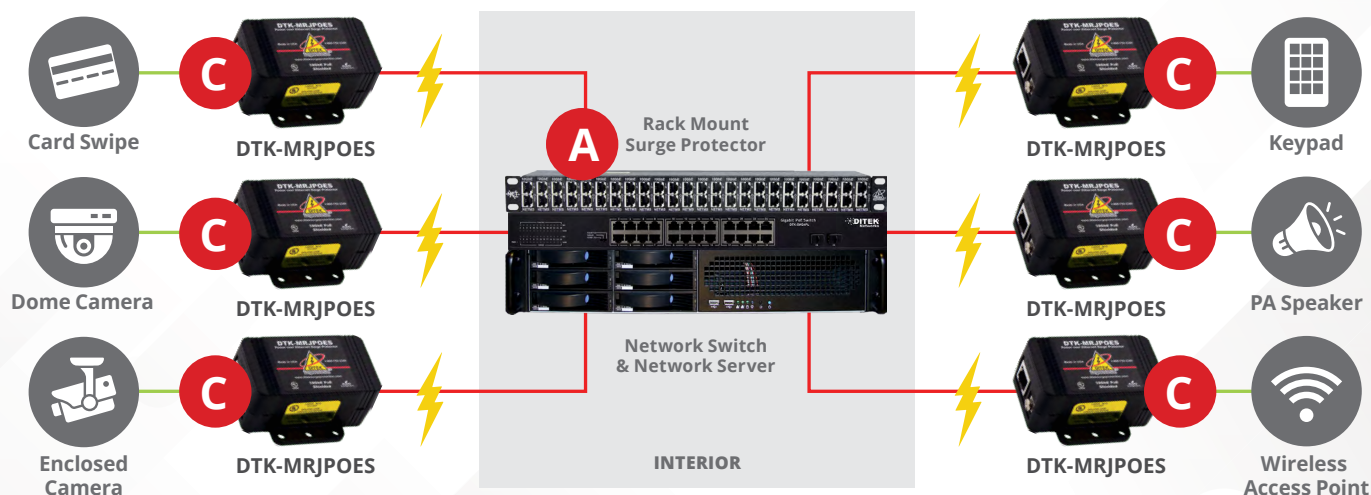
- DTK-RM24EXTS 24-channel, 1U rack mount
- DTK-RM16EXTS 16-channel, 1U rack mount
- DTK-RM12EXTS 12-channel, 1U rack mount



RAPID-REPLACEMENT MODULES

Mix and match replacement modules to protect Ethernet, PoE and PoE extender circuits within the same housing

- DTK-NETMS For Ethernet and PoE circuits
- DTK-EXTMS For PoE Extender circuits



B | WMNETS & WMEXTS Series

UL 497B | 20,000A

- Multi-stage, hybrid protection design
- Robust 20kA per pair surge current rating
- Rapid-replacement modular design
- Supports up to 10Gb Ethernet speed
- Compatible with both STP and UTP cabling
- Designed for wall mounted systems

WMNETS: ETHERNET & POE CIRCUITS

- **DTK-WM8NETS** 8-channel, wall mount
- **DTK-WM4NETS** 4-channel, wall mount

WMEXTS: POE EXTENDER CIRCUITS

- **DTK-WM8EXTS** 8-channel, wall mount
- **DTK-WM4EXTS** 4-channel, wall mount



C | DTK-MRJPOES & DTK-MRJEXTS

ETHERNET, POE & EXTENDER CIRCUITS

UL 497B | 20,000A

- RJ45 female in/out
- Rated to pass up to 10Gbps
- 20kA/pair surge current rating
- Compatible with both STP and UTP cabling
- **DTK-MRJPOES** Ethernet and PoE circuits
- **DTK-MRJEXTS** PoE extender circuits



D | DTK-110C6A Series

CAT6A ETHERNET & POE CIRCUITS

UL 497, UL 497B

- Available in 110 punch down in/out or 110 in/shielded RJ45 female out
- Compatible with CAT5E, CAT6 and CAT6A circuits
- Protects all four pairs
- Automatically resets
- **DTK-110C6A** Ethernet 110 block in/out
- **DTK-110RJ6A** Ethernet 110 block in/RJ45 out
- **DTK-110C6APOE** PoE 110 block in/out
- **DTK-110RJ6APOE** PoE 110 block in/RJ45 out



IP Video Protection

A | DTK-RMNETS Series

ETHERNET & POE SWITCHES

UL 497B | 20,000A

- Multi-stage, hybrid protection design
- Robust 20kA per pair surge current rating
- Available in 12-, 16- or 24-channel

- DTK-RM24NETS
- DTK-RM16NETS
- DTK-RM12NETS



B | DTK-MRJPOE Series

POE CAMERAS & DEVICES

UL 497B | 20,000A

- Multi-stage, hybrid protection design
- Ethernet data speeds up to 10GbE

- DTK-MRJPOE Unshielded RJ45 in/out
- DTK-MRJPOES Shielded RJ45 in/out



C | DTK-PVP Series

POE DEVICES W/ AUX POWER

UL 497B | 20,000A

- Ethernet data speeds up to 10GbE
- Shielded RJ45 in/out connections

- DTK-PVPIPS 2 pairs of 12/24V power
- DTK-PVP56V 2 pairs of 56V power

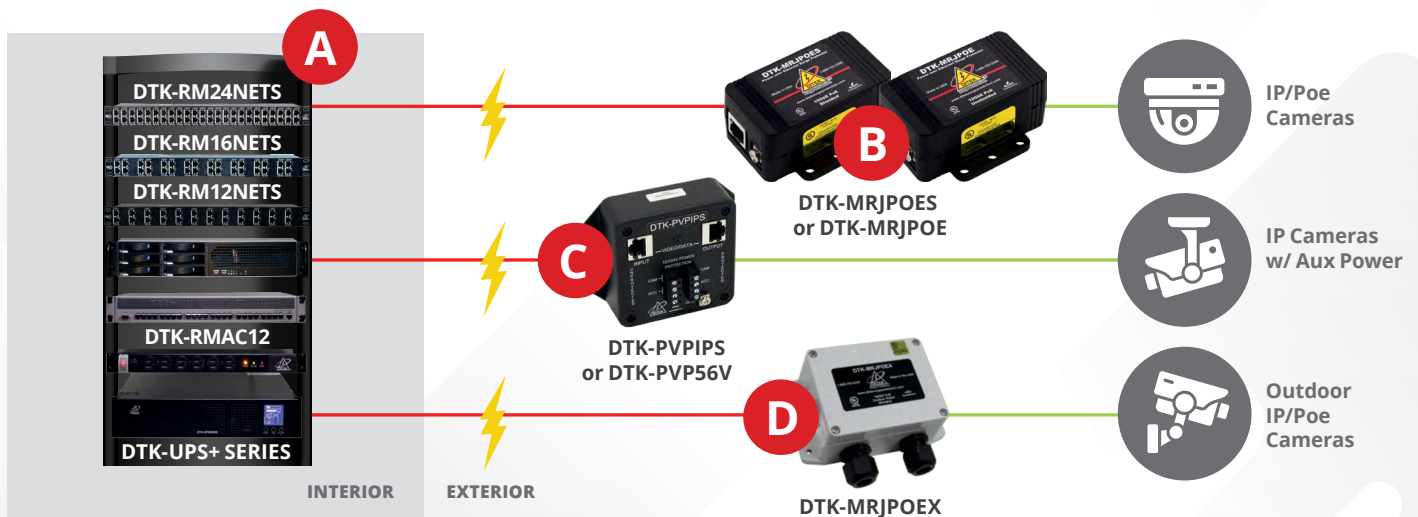


D | DTK-MRJPOEX

OUTDOOR POE CAMERAS & DEVICES

UL 497B | 20,000A

- NEMA 4X enclosure, liquid-tight cordgrips
- Data speeds up to 10GbE without signal degradation
- Compatible with both STP and UTP cabling



Customizable Protection

Versa-Module 2 Series

SIGNALING, DATA AND LOW VOLTAGE POWER CIRCUITS

UL 497B | 20,000A

- Rapid-replacement modular surge protection system with single point ground
- Multi-stage, hybrid protection design
- Mix and match modules to protect 5V to 130V, with RJ45 and screw terminal configurations
- 4-, 8- or 24-channel enclosure options



RJ45 PROTECTION MODULES

- DTK-VM2M5 5V, RJ45 in/out
- DTK-VM2M12 12V, RJ45 in/out
- DTK-VM2M24 24V, RJ45 in/out
- DTK-VM2M36 36V, RJ45 in/out
- DTK-VM2M48 48V, RJ45 in/out
- DTK-VM2M75 75V, RJ45 in/out
- DTK-VM2M130 130V, RJ45 in/out

SCREW TERMINAL PROTECTION MODULES

- DTK-VM2TM5 5V, 2 pair in/out, 14AWG
- DTK-VM2TM12 12V, 2 pair in/out, 14AWG
- DTK-VM2TM24 24V, 2 pair in/out, 14AWG
- DTK-VM2TM36 36V, 2 pair in/out, 14AWG
- DTK-VM2TM48 48V, 2 pair in/out, 14AWG
- DTK-VM2TM75 75V, 2 pair in/out, 14AWG
- DTK-VM2TM130 130V, 2 pair in/out, 14AWG



RACK & WALL MOUNT ENCLOSURES

Also compatible with NETS and EXTS series modules

- DTK-VM2R24 24-channel, 1U rack mount
- DTK-VM2W8 8-channel, wall mount
- DTK-VM2W4 4-channel, wall mount



Commercial A/V Protection

DTK-VM2 Series

CUSTOMIZABLE PROTECTION FOR SIGNALING, DATA & LOW VOLTAGE POWER CIRCUITS

UL 497B | 20,000A

- Mix and match protection modules allow complete customization
- Ideal for lighting control systems and 70V audio systems
- RJ45 and screw terminal configurations available from 5V-130V



DTK-LC2

120VAC PLUG-IN

UL 1449, UL 1283 | Type 3 SPD

- EMI/RFI noise filtering ensures clean power to connected equipment
- Incorporates 2 protected 120VAC NEMA 5-15R outlets
- LED health status indicator and audible alarm sounds if protection is compromised
- Single channel Ethernet and PoE protection module



DTK-HDMI Series

HDMI CABLE CONNECTIONS

EN 55035:2017

- HDMI 2.0a and HDCP 2.2 compatible
- Supports up to 4K UHD
- Includes mounting bracket

- DTK-HDMI1 Single channel
- DTK-HDMI2 Dual channel



DTK-2MHLP75BWB

SPEAKERS & AUDIO EQUIPMENT

UL 1449 | 20,000A

- 2-pair, 70V surge protector with hardwired base
- Multi-stage, hybrid protection design
- Field-replaceable protection module
- 20kA surge current rating



Access Control Protection

A | DTK-2MHLP Series

OSDP READERS

UL 497B | 20,000A

- Multi-stage, hybrid protection design
- Compatible with Open Supervised Device Protocol (OSDP)
- Field-replaceable module

■ **DTK-2MHLP12BWB** 2- or 4-wire OSDP readers (12V power)

■ **DTK-2MHLP24BWB** 2- or 4-wire OSDP readers (24V power)



B | DTK-4LVLP Series

WIEGAND & OSDP READERS

UL 497B | 5,000A

- Multi-stage, hybrid protection design
- Compatible with Open Supervised Device Protocol (OSDP) and Wiegand
- Small form factor

■ **DTK-4LVLPXR** Protects 12V or 24V power, 5V data and LED connections

■ **DTK-4LVLPX** Protects up to (4) pairs of 0-12V power and data connections



C | DTK-MRJPOES

ETHERNET & POE CONNECTIONS

UL 497B | 20,000A

- Multi-stage, hybrid protection design
- Ethernet data speeds up to 10GbE
- Shielded RJ45 connections



D | DTK-ESS

DOOR FRAMES & CONTROL PANELS

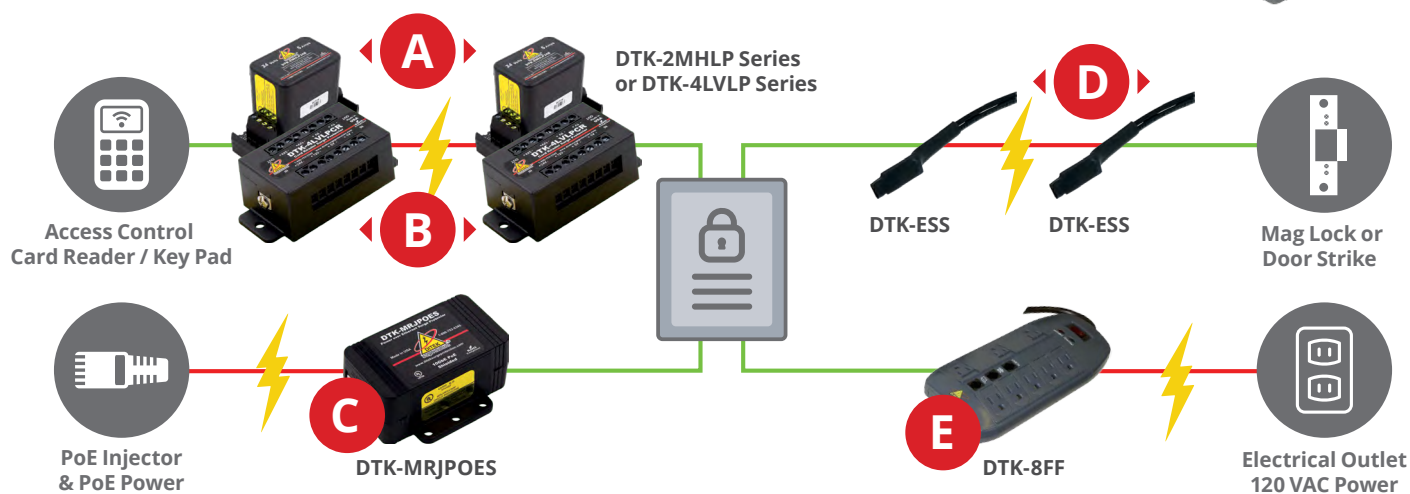
Protects low voltage mag-lock and control panel (2/pkg – both ends of circuit)



E | DTK-8FF

AC POWER & TELCO/FAX LINES

Protects 8 AC outlets and up to 6 transformers; EMI/RFI noise filtering



Gate Access Protection

A | DTK-4LVLP Series

TELEPHONE ENTRY & KEYPADS

UL 497B | 5,000A

- **DTK-4LVLPCR** Protects 12V or 24V power, 5V data and LED connections
- **DTK-4LVLPX** Protects up to 4 pairs of 0-12V power and data connections
- **DTK-4LVTEP** Protects entry system power, telco and door release circuits



B | DTK-2MHLP5BWB

EXIT & SAFETY LOOPS

UL 497B | 20,000A

- 2-pair, 5V exit and safety loop circuit surge protector with hardwired base
- Multi-stage, hybrid protection design
- Field-replaceable protection modules
- 20kA surge current rating



C | DTK-HW Series

GATE MOTOR AC POWER

UL 1449 | Type 1 SPD

- Parallel-wired
- NEMA 4X enclosure
- Diagnostic LED
- **DTK-120HW** 120VAC single phase (2W + G)
- **DTK-120/240HW** 120/240VAC split phase (3W + G)

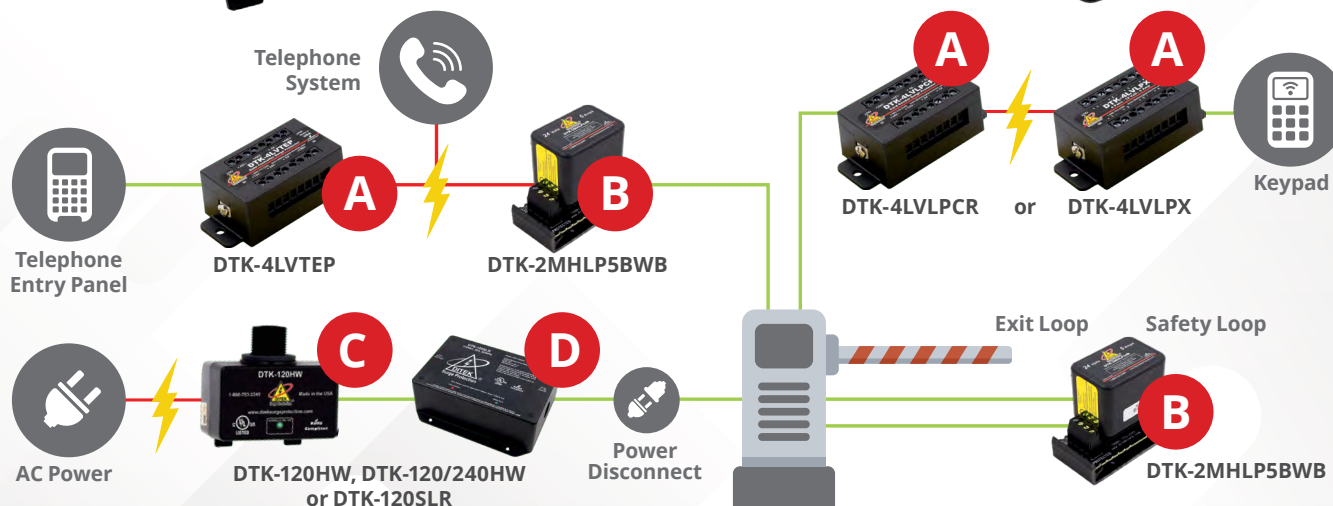


D | DTK-120SLR

GATE MOTOR AC POWER

UL 1449 | Type 2 SPD

- Protects 120VAC single phase circuits ≤ 20 Amps
- Series-connected design for fast response time and maximum protection
- Load removal feature disconnects power to equipment if compromised
- UL 1283 EMI/RFI noise filtering



Intrusion Protection

A | DTK-MRJ31XWP

TELCO CIRCUIT

UL 497B | 5,000A

- RJ45 connection with external grounding screw
- Patch cord included



B | DTK-MRJPOES

ETHERNET & POE CONNECTIONS

UL 497B | 20,000A

- Multi-stage, hybrid protection design
- Ethernet data speeds up to 10GbE
- Shielded RJ45 connections



C | DTK-2MHLP12BWB

REMOTE ZONE SIGNAL LOOP

UL 497B | 20,000A

- Protects 2 pairs
- Multi-stage, hybrid protection design
- Field-replaceable protection modules
- 20kA surge current rating

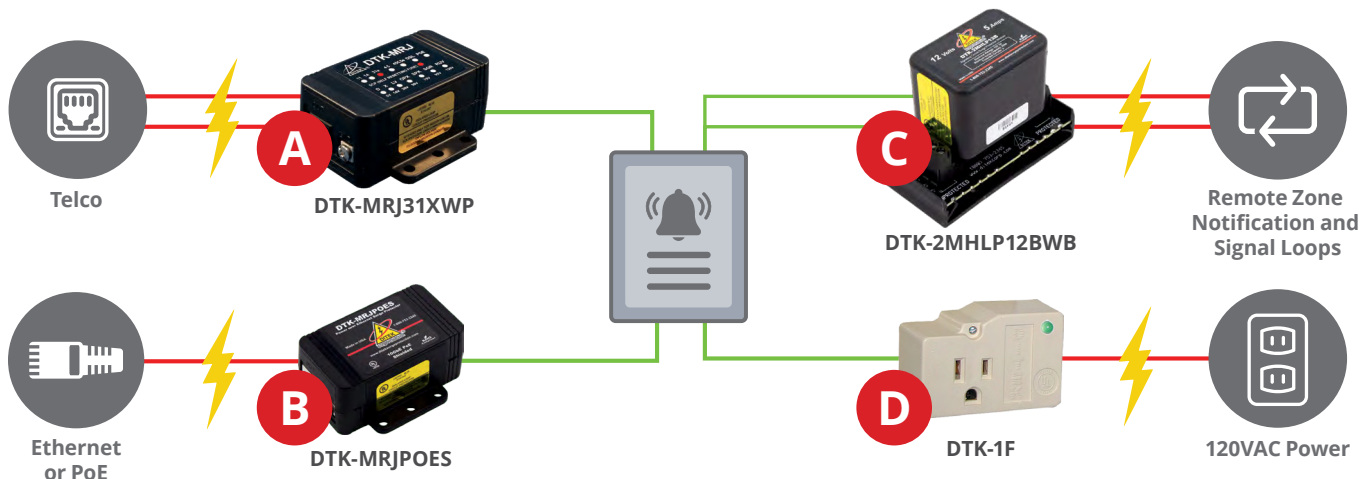


D | DTK-1F

120VAC PLUG-IN

UL 1449 | Type 3 SPD

- Center screw secures to outlet and can also secure a transformer to prevent accidental disconnections
- Diagnostic LED



Uninterruptible Power Supplies

DTK-UPS+ Series

ONLINE UNINTERRUPTIBLE POWER SUPPLY

cTUVus | UL 1778

- Online double conversion UPS technology
- Invisible transitioning between AC and battery
- Intuitive LCD display
- USB and Ethernet interfaces available on all models
- Compliant to U.S. DOE Energy Conservation Standard efficiency requirements

- **DTK-UPS1000R+** 1kVA, 8 x 15A outlets
- **DTK-UPS1500R+** 1.5kVA, 8 x 15A outlets
- **DTK-UPS2000R+** 2kVA, 8 x 20A outlets
- **DTK-UPS3000R+** 3kVA, 1 x 30A outlet, 6 x 20A outlets



DTK-UPS Series

LINE INTERACTIVE UNINTERRUPTIBLE POWER SUPPLY

cTUVus | UL 1778

- Built-in boost and buck AVR for voltage stabilization
- Built-in protection for an Ethernet circuit
- Embedded microprocessor control
- Touch screen LCD
- Auto restart while AC is recovering
- Compliant to U.S. DOE Energy Conservation Standard efficiency requirements

- **DTK-UPS600** 600VA, 6 outlets, RJ45 protection
- **DTK-UPS1000** 1000VA, 8 outlets, RJ45 protection



UPS ACCESSORIES

DTK-UETH1 SNMP web card allows you to monitor and manage UPS devices in a network



DTK-URK1 Rack mounting rails (included with 1.5kVA, 2kVA and 3kVA models)



INSTALLATION BEST PRACTICES



Conductor Length ≥ 3 ft

The conductor length between the SPD and the equipment being protected should be a minimum of three feet in length to allow enough time for the SPD to react. The conductors can be greater than three feet as long as they are isolated and are not subjected or directly exposed to internally- or externally-generated transient voltage spikes and/or surges.



Utilize separate conduit feeds

Always make sure that the field wiring (unprotected wires) and the protected wiring occupy separate conduit feeds. When unprotected and protected wires occupy the same conduit, surge energy can be induced on to the protected wiring and completely bypass the surge protective device.

Use grounding bus bars

The use of a grounding bus bar is strongly recommended as a means of terminating SPD ground wires to existing electrical grounding leads. This will ensure a solid mechanical connection of all grounding wires.

The use of twist-on wire connectors ("wire nuts") is not recommended for termination of SPD ground wires to existing electrical grounding leads. Twist-on wire connectors can increase ground resistance, may become loose and/or corroded over time, and can also unnecessarily extend the length of the grounding conductor. This would degrade the performance of the SPD due to the lack of a short, low impedance ground path.

Use dedicated enclosures

Whenever possible, Surge Protective Devices should be installed in a dedicated enclosure outside of the equipment being protected. This will prevent physical damage to the electronic circuit board, power supply and/or wiring inside of the equipment panel due to a potential catastrophic failure of the SPD.

Use a dedicated ground wire

When installing multiple SPDs and terminating to a common electrical ground, a dedicated ground wire running from each individual SPD to a common grounding bus bar is strongly recommended. "Daisy-chaining" multiple SPD ground wires together via the SPD grounding terminals, or by using twist-on wire connectors, is not recommended as this increases the resistance and extends the length of the ground path.

CONTACT US

SALES 800-753-2345

TECH SUPPORT 888-472-6100

Try our online product selector tool to help find the right surge protection devices.

www.DITEKsurgeprotection.com



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