

EXTERNAL

PRODUCT MARKETING MANAGER: KIMBERLY FAIRLEY

# OVRHT3D series

NEMA Surge Protection Devices

April 2023

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# OVRHT3D surge protective device

## Agenda

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- Product overview
  - Product description
  - Features and benefits
  - Value propositions
  - Applications
- Ordering information
  - Catalog numbers and nomenclature
  - Availability and pricing
- Marcomm resources



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# OVRHT3D surge protective device

## Product Description



ABB's **OVRHT3D Surge Protective Devices** help reduce costly downtime while protecting sensitive electronic equipment against the damaging effects of surges caused by lightning, load switching, and more.

The OVRHT3D is UL 1449 5thEd, Listed as Type 1 SPD designed for control panel or point-of-use applications.

# OVRHT3D - Surge Protective Devices

## Technical Specs – Features and Benefits

### Technical Specifications

- Maximum Surge Current Rating: 50 kA per phase
- UL Type Designation: Type 1
- UL 1449 I-nominal Rating: 20 kA
- UL 1449 Short Circuit Current Rating (SCCR): 200 kAIC
- Operating Frequency: 50 – 60 Hz

### OVRHT3D



### Features and Benefits

- Type 1 UL 1449 Listed certification eliminates the need for overcurrent protection from a fuse or breaker
- Parallel MOV arrays deliver protection from voltage spikes
- Durable NEMA 4X rated enclosure suitable for indoor and outdoor use
- Green LED light provides an easy indicator of surge protection operational status
- Space-saving design is ideal for compact installations

# OVRHT3D - Surge Protective Devices

## Feature Highlights

### Rugged Enclosure

Durable NEMA 4X rated protects the unit from dirt and debris



### Extended Lifetime

Thermally protected MOVs provide 50kA of protection per phase to extend the protection lifetime



**Compact design**—Small footprint saves space for additional components



4.25" x 2.41" x 2.75"



### Contractor-friendly

Nipple-mount design makes installation quick and easy



### Easy diagnostics

Visual Green LED indicator on the front of the product shows the SPD's operational status

# OVRHT3D - Surge Protective Devices

Why OVRHT3D? **Because it is reliable, compact, and easy**

## OEM



### Reliable protection, efficient performance

- **In stock**– competitively priced and stocked by ABB for quick fulfillment
- **Reliable protection**- UL Listed and evaluated to meet applicable safety standards for reliable protection
- **Compact design**- small footprint saves space for additional components

## Distributor



### Expanded offering, easy to order

- **Easy ordering** – available to order through ABB empower for ease of doing business
- **Product breadth**– most common voltages stocked to meet market needs. Reduce the number of manufacturers needed by adding to your portfolio of ABB solutions

## Contractor



### Easier installation, real savings

- **Contractor-friendly**- nipple-mount design and built-in conduit fitting and pre-wired pigtail conductors help simplify installations- saving time and labor costs
- **Meet National Electric code** - UL 1449 Listed 5<sup>th</sup> ed as a Type 1 SPD for indoor or outdoor commercial installations

# OVRHT3D surge protective device

## Applications



Panelboards 400 A and below



Process automation systems



HVAC systems/Pumps/Heaters



Point-of-use applications





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# **OVRHT3D - Surge Protective Devices**

## **Product Specs & Data**

# OVRHT3D - Surge Protective Devices

## Product Specs & Data

<b>Part number</b>	<b>Voltage</b>	<b>Network type 1 SPD</b>
OVRHT3D502401P	240 V	1-phase, 2-wire + ground
OVRHT3D501202S	240/120 V	2-phase, 3-wire + ground
OVRHT3D501203Y	208/120 V	3-phase Wye, 4-wire + ground
OVRHT3D502203Y	380/220 V	3-phase Wye, 4-wire + ground
OVRHT3D502773Y	480/277 V	3-phase Wye, 4-wire + ground
OVRHT3D502403D	240 V	3-phase Delta, 3-wire + ground
OVRHT3D504803D	480 V	3-phase Delta, 3-wire + ground

# OVRHT3D - Surge Protective Devices

## Product Specs & Data

Voltage	Network Type 1 SPD	Part number
240 V	1-phase, 2-wire + ground	OVRHT3D502401P
277 V	1-phase, 2-wire + ground	OVRHT3D502771P
240/120 V	2-phase, 3-wire + ground	OVRHT3D501202S
208/120 V	3-phase Wye, 4-wire + ground	OVRHT3D501203Y
380/220 V	3-phase Wye, 4-wire + ground	OVRHT3D502203Y
480/277 V	3-phase Wye, 4-wire + ground	OVRHT3D502773Y
240 V	3-phase Delta, 3-wire + ground	OVRHT3D502403D
380 V	3-phase Delta, 3-wire + ground	OVRHT3D503803D
480 V	3-phase Delta, 3-wire + ground	OVRHT3D504803D

Special order		
120 V	1-phase, 2-wire + ground	OVRHT3D501201P
220 V	1-phase, 2-wire + ground	OVRHT3D502201P
230 V	1-phase, 2-wire + ground	OVRHT3D502301P
347 V	1-phase, 2-wire + ground	OVRHT3D503471P
480/240 V	2-phase, 3-wire + ground	OVRHT3D502402S
400/230 V	3-phase Wye, 4-wire + ground	OVRHT3D502303Y
415/240 V	3-phase Wye, 4-wire + ground	OVRHT3D502403Y
600/347 V	3-phase Wye, 4-wire + ground	OVRHT3D503473Y
400 V	3-phase Delta, 3-wire + ground	OVRHT3D504003D
600 V	3-phase Delta, 3-wire + ground	OVRHT3D506003D
240/120 V	3-phase high-leg, 4-wire + ground	OVRHT3D502403H

# OVRHT3D - Surge Protective Devices

## Product Specs & Data

Electrical	
Maximum surge current	50 kA per phase
UL type designation	Type 1
UL 1449 nominal discharge current rating (I-n)	20 kA
UL 1449 fault rating/short circuit current rating (SCCR)	200 kAIC
Design specifications	
Product design	Individual thermally fused and protected MOVs
Connection methods	External parallel connected for mounting next to electrical gear
Typical connection	18" #12 AWG (pre-wired pig tails)

Enclosure	
Enclosure type	Polycarbonate, NEMA 4X
Installation location	Indoor/outdoor
Mounting method	12.7 mm (½") NPT side-mount nipple
Technical data	
Humidity range	0–95% non-condensing
Operating environment	-35 °C to +85 °C (-31 °F to +185 °F)
Operating frequency	50–60 Hz
Modes of protection	Model dependent

# OVRHT3D - Surge Protective Devices

## Product Specs & Data

### Performance data

	Voltage	Modes	VPRs	MCOV
OVRHT3D501201P	120	L-N	700	180
		L-G	1200	180
		N-G	600	180
OVRHT3D502201P	220	L-N	1200	350
		L-G	2000	350
		N-G	1200	350
OVRHT3D502301P	230	L-N	1200	350
		L-G	2000	350
		N-G	1200	350
OVRHT3D502401P	240	L-N	1200	350
		L-G	2000	350
		N-G	1200	350
OVRHT3D502771P	277	L-N	1200	350
		L-G	2000	350
		N-G	1200	350
OVRHT3D501202S	240/120	L-L	1200	360
		L-N	700	180
		L-G	1200	180
		N-G	600	180
OVRHT3D502402S	480/240	L-L	2000	700
		L-N	1200	350
		L-G	2000	350
		N-G	1200	350
OVRHT3D501203Y	208/120	L-L	1000	300
		L-N	600	150
		L-G	1000	150
		N-G	600	150
OVRHT3D502203Y	380/220	L-L	2000	700
		L-N	1200	350
		L-G	2000	350
		N-G	1200	350

	Voltage	Modes	VPRs	MCOV
OVRHT3D502303Y	400/230	L-L	2000	700
		L-N	1200	350
		L-G	2000	350
		N-G	1200	350
OVRHT3D502403Y	415/240	L-L	2000	700
		L-N	1200	350
		L-G	2000	350
OVRHT3D502773Y	480/277	L-L	2000	700
		L-N	1200	350
		L-G	2000	350
OVRHT3D502403D	240	L-L	1200	275
		L-G	1200	275
		L-L	2000	550
OVRHT3D503803D	380	L-G	2000	550
		L-L	2000	550
OVRHT3D504003D	400	L-L	2000	550
		L-G	2000	550
OVRHT3D504803D	480	L-L	2000	550
		L-G	2000	550
OVRHT3D506003D	600	L-L	2500	680
		L-G	2000	680
OVRHT3D502403H	240/120	L-L	1200	275
		L-N	700	180
		L-G	1200	180
		N-G	700	180
		H-L	1500	275
		H-N	900	275
		H-G	1500	275

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# **OVRHT3D - Surge Protective Devices**

## **Ordering information**

# OVRHT3D - Surge Protective Devices

## Cross-reference

### From OVRHT3B and OVRHT3C to OVRTH3D

Old part number	Old Alt Materials numbers	Old part number	Old Alt Materials numbers	New Model numbers	NEW alt material numbers
OVRHT3B501201P	2CJC405120P0000	OVRHT3C501201P	2CJC605120P0000	OVRHT3D501201P	2CJC705120P0000
OVRHT3B501202S	2CJC405120S0000	OVRHT3C501202S	2CJC605120S0000	OVRHT3D501202S	2CJC705120S0000
OVRHT3B501203Y	2CJC405120Y0000	OVRHT3C501203Y	2CJC605120Y0000	OVRHT3D501203Y	2CJC705120Y0000
OVRHT3B502201P	2CJC405220P0000	OVRHT3C502201P	2CJC605220P0000	OVRHT3D502201P	2CJC705220P0000
OVRHT3B502203Y	2CJC405220Y0000	OVRHT3C502203Y	2CJC605220Y0000	OVRHT3D502203Y	2CJC705220Y0000
OVRHT3B502301P	2CJC405230P0000	OVRHT3C502301P	2CJC605230P0000	OVRHT3D502301P	2CJC705230P0000
OVRHT3B502303Y	2CJC405230Y0000	OVRHT3C502303Y	2CJC605230Y0000	OVRHT3D502303Y	2CJC705230Y0000
OVRHT3B502401P	2CJC405240P0000	OVRHT3C502401P	2CJC605240P0000	OVRHT3D502401P	2CJC705240P0000
OVRHT3B502402S	2CJC405240S0000	OVRHT3C502402S	2CJC605240S0000	OVRHT3D502402S	2CJC705240S0000
OVRHT3B502403D	2CJC405240D0000	OVRHT3C502403D	2CJC605240D0000	OVRHT3D502403D	2CJC705240D0000
OVRHT3B502403H	2CJC405240H0000	OVRHT3C502403H	2CJC605240H0000	OVRHT3D502403H	2CJC705240H0000
OVRHT3B502403Y	2CJC405240Y0000	OVRHT3C502403Y	2CJC605240Y0000	OVRHT3D502403Y	2CJC705240Y0000
OVRHT3B502771P	2CJC405277P0000	OVRHT3C502771P	2CJC605277P0000	OVRHT3D502771P	2CJC705277P0000
OVRHT3B502773Y	2CJC405277Y0000	OVRHT3C502773Y	2CJC605277Y0000	OVRHT3D502773Y	2CJC705277Y0000
OVRHT3B503471P	2CJC405347YP000	OVRHT3C503471P	2CJC605347YP000	OVRHT3D503471P	2CJC705347YP000
OVRHT3B503473Y	2CJC405347Y0000	OVRHT3C503473Y	2CJC605347Y0000	OVRHT3D503473Y	2CJC705347Y0000
OVRHT3B503803D	2CJC405380D0000	OVRHT3C503803D	2CJC605380D0000	OVRHT3D503803D	2CJC705380D0000
OVRHT3B504003D	2CJC405400D0000	OVRHT3C504003D	2CJC605400D0000	OVRHT3D504003D	2CJC705400D0000
OVRHT3B504803D	2CJC405480D0000	OVRHT3C504803D	2CJC605480D0000	OVRHT3D504803D	2CJC705480D0000
OVRHT3B506003D	2CJC405600D0000	OVRHT3C506003D	2CJC605600D0000	OVRHT3D506003D	2CJC705600D0000

# Ordering info



**Catalog number:** OVRHT3D



**Pricing:** \$\$



**Stocking site:** Mt. Juliet, TN



**Lead Time:** 2-4 weeks



**Ordering:** [ABB empower](#)



**Warranty:** 3 years

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# Marcomm resources

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# OVRHT3D - Surge Protective Devices

## MARCOM RESOURCES:

Marcomm	Internal	External
<a href="#">Application and technical guide</a>	X	X
<a href="#">Product overview</a>	X	X
<a href="#">BuyLog</a>	X	X
<a href="#">Product web page</a>	X	X
<a href="#">ELSA product section</a>	X	
<a href="#">Suggested stocking list</a>	X	
<a href="#">Data sheet</a>	X	
<a href="#">Installation instructions</a>		
<a href="#">Product release note</a>		

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