PRODUCT DATASHEET

OVRHT3B

Sub Distribution and Panelboard – 400A and below

Product features

- UL Listed 1449 4th edition for Type 1 SPD applications.
- 50kA per phase protection.
- Individual thermally fused and protected MOVs.
- Includes pre-wired pigtail conductors.
- Multiple MOVs per phase eliminates single point failure.

Available configurations

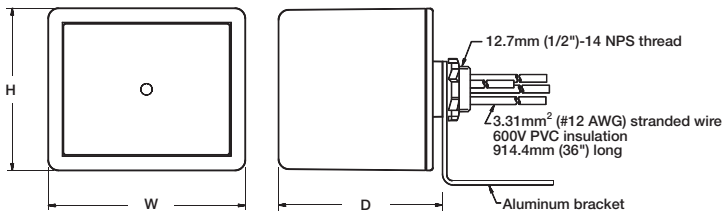
Model number	kA per phase	Voltage	Configuration
OVRHT3B501201P	50kA	120V	1-phase, 2-wire + ground
OVRHT3B502201P	50kA	220V	1-phase, 2-wire + ground
OVRHT3B502301P	50kA	230V	1-phase, 2-wire + ground
OVRHT3B502401P	50kA	240V	1-phase, 2-wire + ground
OVRHT3B502771P	50kA	277V	1-phase, 2-wire + ground
OVRHT3B503471P	50kA	347V	1-phase, 2-wire + ground
OVRHT3B501202S	50kA	120/240V	2-phase, 3-wire + ground
OVRHT3B502402S	50kA	240/480V	2-phase, 3-wire + ground
OVRHT3B502403H	50kA	120/240V	3-phase High-Leg, 4-wire + ground
OVRHT3B501203Y	50kA	120/208V	3-phase Wye, 4-wire + ground
OVRHT3B502203Y	50kA	220/380V	3-phase Wye, 4-wire + ground
OVRHT3B502303Y	50kA	230/400V	3-phase Wye, 4-wire + ground
OVRHT3B502403Y	50kA	240/415V	3-phase Wye, 4-wire + ground
OVRHT3B502773Y	50kA	277/480V	3-phase Wye, 4-wire + ground
OVRHT3B503473Y	50kA	347/600V	3-phase Wye, 4-wire + ground
OVRHT3B502403D	50kA	240V	3-phase Delta, 3-wire + ground
OVRHT3B503803D	50kA	380V	3-phase Delta, 3-wire + ground
OVRHT3B504003D	50kA	400V	3-phase Delta, 3-wire + ground
OVRHT3B504803D	50kA	480V	3-phase Delta, 3-wire + ground
OVRHT3B506003D	50kA	600V	3-phase Delta, 3-wire + ground
Earthing Systems			
OVRHT3B502301PI	50kA	230V	1-phase, 2-wire + ground (for TNC earthing systems)
OVRHT3B502301PJ	50kA	230V	1-phase, 2-wire + ground (for TNS earthing systems)
OVRHT3B502301PK	50kA	230V	1-phase, 2-wire + ground (for IT earthing systems)
OVRHT3B502301PL	50kA	230V	1-phase, 2-wire + ground (for TT earthing systems)
Warranty			
3-years			

Product specifications

Electrical	
Nominal discharge current rating (I-n)	20kA (Earthing Systems 10kA)
Operating frequency	47–63Hz
Connection methods	Parallel to load 914.4mm (36") of 3.31mm² (#12 AWG) wires
Modes of protection	See performance data
Fault rating (SCCR)	100 kAIC
Response time	Less than 1 nanosecond (one per phase)
Standard monitoring	LED status indicator lights
Mechanical	
Weight	.23 kg (.5 lb.)
Enclosure type	NEMA 4X, non-metallic
Installation location	Indoor/Outdoor
Mounting method	12.7mm (1/2")–14 NPT thread
Operating environment	-35° to +80°C (-31° to +176°F)
Altitude	Up to 5000 m (16,400 ft.)
Product design	Individual thermally fused and protected MOVs
Regulatory	
UL 1449 4th edition	Type 1
UL 96A	Yes
IEEE C62.41.1, .2, C62.45	Yes
Listed by	UL

c UL us LISTED RoHS Compliant

Dimensional specifications



Dim	Millimeters (Inches)
H	75.0 (2.95)
W	90.0 (3.54)
D	75.0 (2.95)

OVRHT3B series Earthing Systems

There is a OVRHT3B model for each power system configuration (neutral grounding practice) as defined in EN60950:

For TNC grounded systems use "I" suffix – Neutral and PE (protected earth conductor) are combined throughout the system while TNCS splits the combined PEN into a separate neutral and PE at the service entry; the U.S. practice is a variation of this. The neutral is earthed at the transformer for both types. The OVRHT3B50230I model is suited for both TNC and TNCS systems.

For TNS grounded systems use "J" suffix – Neutral is earthed at the transformer; however, is not bonded to earth or the PE elsewhere. The PE is carried to the site from the transformer and bonded to site earth. The OVRHT3B50230J model is intended for use on this system; it can also be used on TNCS as well as on U.S. 120/240V services without the neutral.

For IT and IT-L grounded systems use "K" suffix – The transformer is unearthed or earthed through high impedance. The PE originates at site; however, is not bonded to a service conductor. No conductor in this system is designated as neutral. The OVRHT3B50230K model is suited for this application; it can also be used on TT, TNS, TNCS and U.S. services without neutral power systems.

For TT grounded systems use "L" suffix – Neutral is earthed at the transformer. The PE originates at site; however, is not bonded to the neutral. There is no interconnection between the PE and transformer earth. The OVRHT3B50230L model is for use on this system; it can also be employed upon TNS, TNCS and U.S. services without neutral.

Performance data

Model number	Protection modes	MCOV	UL 1449 4th edition 6kV 3000A VPR
OVRHT3B501201P	L-N	150	700
	L-G	300	1200
	N-G	150	700
OVRHT3B502201P	L-N	320	1200
	L-G	640	2500
	N-G	320	1200
OVRHT3B502301P	L-N	320	1200
	L-G	640	2500
	N-G	320	1200
OVRHT3B502401P	L-N	320	1200
	L-G	640	2500
	N-G	320	1200
OVRHT3B502771P	L-N	320	1200
	L-G	640	2500
	N-G	320	1200
OVRHT3B503471P	L-N	420	1500
	L-G	840	3000
	N-G	420	1500
OVRHT3B501202S	L-N	150	700
	L-G	300	1200
	N-G	150	700
	L-L	300	1200
OVRHT3B502402S	L-N	320	1200
	L-G	640	2500
	N-G	320	1200
	L-L	640	2000
OVRHT3B501203H	L-N	150	700
	L-G	300	1200
	N-G	150	700
	L-L	300	1200
	H-N	320	1200
	H-G	470	1800
	H-L	470	1500
OVRHT3B501203Y	L-N	150	700
	L-G	300	1200
	N-G	150	700
	L-L	300	1200
OVRHT3B502203Y	L-N	320	1200
	L-G	640	2500
	N-G	320	1200
	L-L	640	2000
OVRHT3B502303Y	L-N	320	1200
	L-G	640	2500
	N-G	320	1200
	L-L	640	2000
OVRHT3B502403Y	L-N	320	1200
	L-G	640	2500
	N-G	320	1200
	L-L	640	2000
OVRHT3B502773Y	L-N	320	1200
	L-G	640	2500
	N-G	320	1200
	L-L	640	2000
OVRHT3B503473Y	L-N	420	1500
	L-G	840	3000
	N-G	420	1500
	L-L	840	2500

Model number	Protection modes	MCOV	UL 1449 4th edition 6kV 3000A VPR
OVRHT3B502403D	L-G	300	1200
	L-L	300	1200
OVRHT3B503803D	L-G	640	2500
	L-L	640	2000
OVRHT3B504003D	L-G	640	2500
	L-L	640	2000
OVRHT3B504803D	L-G	640	2500
	L-L	640	2000
OVRHT3B506003D	L-G	840	3000
	L-L	840	2500

Earthing Systems Model number	Protection modes	MCOV	UL 1449 4th edition 6kV 3000A VPR
OVRHT3B502301PI	L-N	320	1200
	L-G	320	1200
	N-G	320	1200
OVRHT3B502301PJ	L-N	320	1200
	L-G	420	1500
	N-G	420	1500
OVRHT3B502301PK	L-N	320	1200
	L-G	552	1800
	N-G	320	1200
OVRHT3B502301PL	L-N	320	1200
	L-G	552	1800
	N-G	552	1800