

DATASHEET

ABB wall-mounted TPME 80 kA series

Surge protective devices



Product features

- UL Listed 1449 4th Edition, Type 1, Type 2
- cUL Listed, CSA C22.2
- UL 96A, for use in lightning protection systems
- Thermally protected MOV design eliminates the need for additional upstream over-current protection
- Standard features include a surge counter, audible alarm, indicating lights, dry contacts and NEMA 4 painted steel enclosure
- 10-year limited warranty

Available configurations

Model number	Voltage	Configuration
TPME120S08WMN	240/120	1-phase, 3-wire + ground
TPME120Y08WMN	208Y/120	3-phase, 4-wire + ground
TPME220Y08WMN	380Y/220	3-phase, 4-wire + ground
TPME240D08WMN	240 Delta	3-phase, 3-wire + ground
TPME240H08WMN	240/120 High-Leg Delta	3-phase, 4-wire + ground
TPME240Y08WMN	415Y/240	3-phase, 4-wire + ground
TPME277Y08WMN	480Y/277	3-phase, 4-wire + ground
TPME347Y08WMN	600Y/347	3-phase, 4-wire + ground
TPME480D08WMN	480 Delta	3-phase, 3-wire + ground

Product specifications and performance data

Product specifications

Electrical		
Maximum surge current rating	160 kA per phase, 80 kA per mode	
Nominal discharge current rating (L-N)	20 kA	
Operating frequency	50–60 Hz	
Surge life (IEEE C62.41–C3 10 kA)	>5,000 impulses	
Connection method	#6 to 2/0 AWG conductors, parallel connected	
Modes of protection	All modes (L-N, L-G, N-G, L-L)	
Fault rating (SCCR)	200 kAIC	
Standard monitoring	Status indicator lights (one per phase) and red service light Audible alarm with silencer and test switch Contacts for remote monitoring (2 amp, 125 V AC)–(1 amp, 30 V DC) 6-digit LCD re-settable surge event counter	
Mechanical		
Weight	Varies and depends on enclosure type; please see available options below	
Standard enclosure type	Painted steel, NEMA 4	
Installation location	Service entrance equipment, primary distribution equipment	
Mounting method	Surface mount, 4-point mounting brackets	
Operating environment	-40 °F to 149 °F (-40 °C to 65 °C)	
Altitude	0–12,000 ft. (3.66 km)	
Product design	Individually fused thermally protected MOV technology	
Regulatory		
UL 1449 4th Edition	VZCA: E320456 Type 1 / Type 2	
cUL, CSA C22.2	VZCA7: E320456 Type 2 / Type 2	
UL 1283	FOKY: E320456 Type 2	
UL 96A	Yes	
IEEE C62.62, C62.72, C62.41	Yes	
Listed by	UL	
EMI/RFI filter attenuation		
Max. attenuation frequency	-50 dB minimum at 100 kHz	
Warranty		
	10-year limited warranty	
Suffix number	Available options	Weight
WMN4S / WMN4ST1**	Painted steel, NEMA 4 without disconnect*	44 lbs. (20.0 kg)
WMN4X / WMN4XT1**	Stainless steel, NEMA 4X without disconnect	50 lbs. (22.7 kg)
WMN1 / WMN1T1**	Painted steel, NEMA 1 with disconnect	63 lbs. (28.5 kg)
WMN4 / WMN4**	Fiberglass, NEMA 4X with disconnect	56 lbs. (25.4 kg)

* Standard enclosure

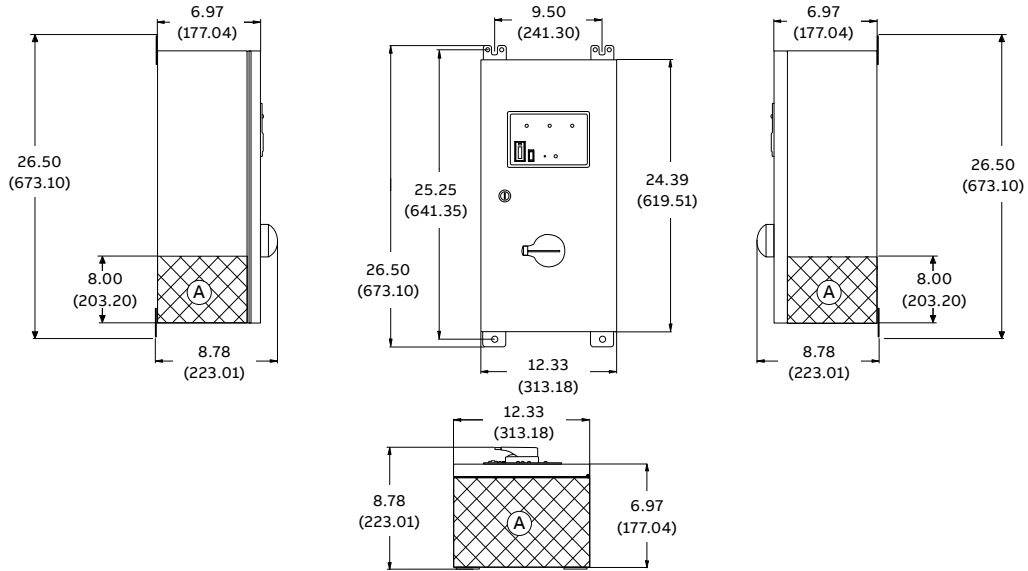
** UL Type 2 / UL Type 1

Performance data

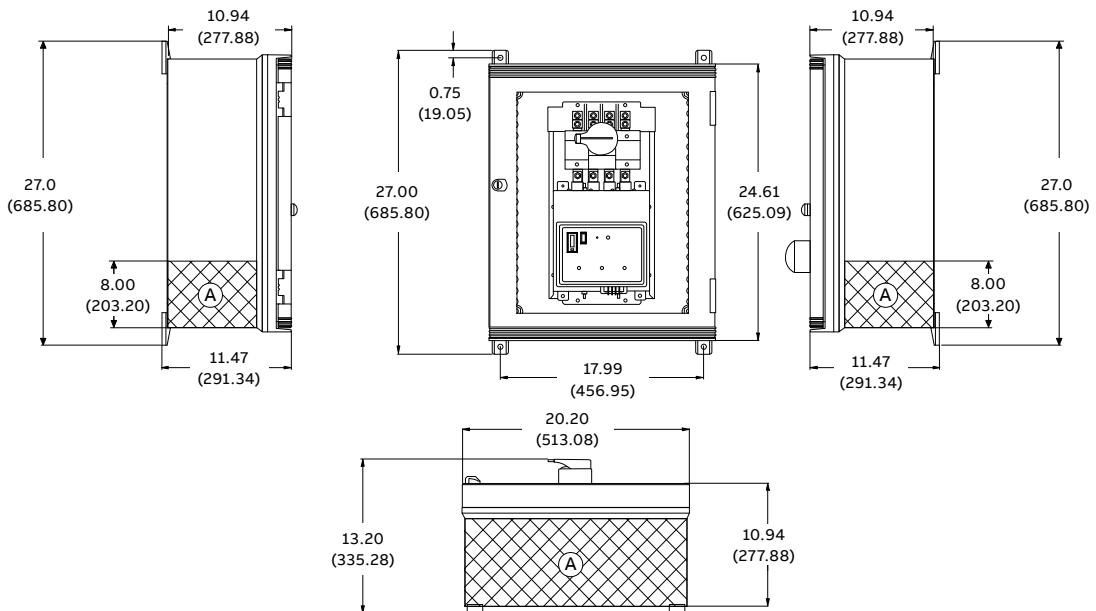
Model number	Protection mode	MCOV	VPR	IEEE Cat. B3 100 kHz/500 A	IEEE Cat. B3/ C1 6 kV/3 kA	IEEE Cat. C3 20 kV/10 kA
TPME120S	L-L	300	1200	752	844	1007
	L-N	150	900	470	600	793
	L-G	150	800	463	485	670
	N-G	150	700	452	476	680
TPME120Y	L-L	300	1200	752	844	1007
	L-N	150	900	470	600	793
	L-G	150	800	463	485	670
	N-G	150	700	452	476	680
TPME220Y	L-L	640	2000	1393	1597	1827
	L-N	320	1500	763	1053	1170
	L-G	320	1200	836	893	1073
	N-G	320	1200	828	880	1180
TPME240D	L-L	540	1800	1240	1453	1640
	L-N	–	–	–	–	–
	L-G	270	1200	750	763	890
	N-G	–	–	–	–	–
TPME240H	L-L	300	2000	752	844	1007
	L-N	150	1000	470	600	793
	L-G	150	800	463	485	670
	N-G	150	700	452	476	680
	H-L	420	2500	1393	1597	1827
	H-N	270	1200	763	1053	1170
TPME240Y	L-L	640	2000	1393	1597	1827
	L-N	320	1500	763	1053	1170
	L-G	320	1200	836	893	1073
	N-G	320	1200	828	880	1180
TPME277Y	L-L	640	2000	1340	1597	1827
	L-N	320	1500	727	1053	1170
	L-G	320	1200	800	893	1073
	N-G	320	1200	792	880	1180
TPME347Y	L-L	840	2500	1723	2020	2220
	L-N	420	1500	883	1187	1467
	L-G	420	1500	1000	1113	1240
	N-G	420	1500	1000	1120	1240
TPME480D	L-L	1110	3000	1800	2647	2933
	L-N	–	–	–	–	–
	L-G	550	1800	1223	1407	1607
	N-G	–	–	–	–	–

Dimensional specifications

—
WMN1
suffix



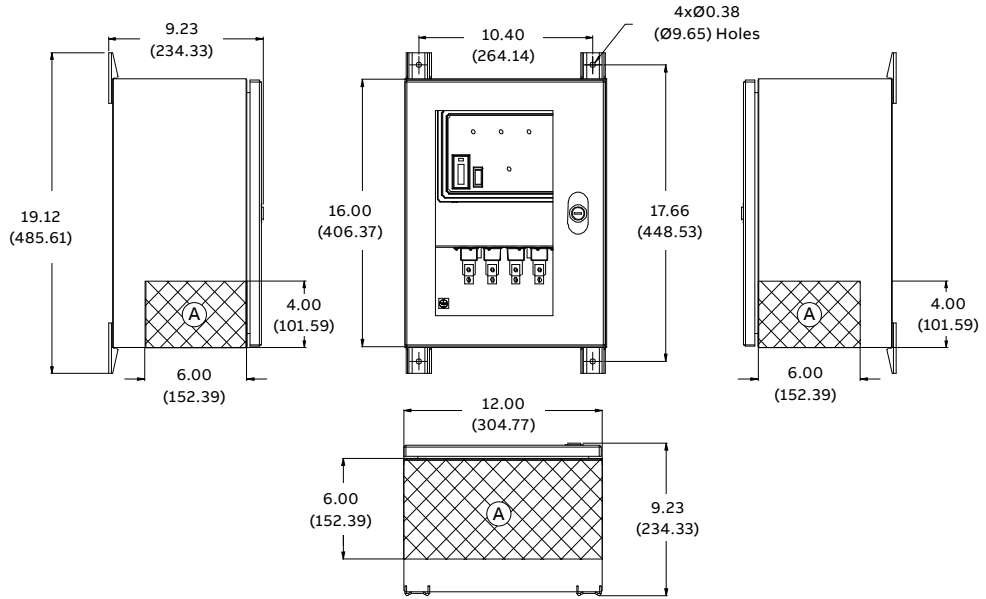
—
WMN4
suffix



Note:
All dimensions are for reference only
and are shown in inches (millimeters).
"A" = Recommended conduit entry areas.

Dimensional specifications

WMN4S/WMN4ST1,
WMN4X/WMN4XT1



Note:
All dimensions are for reference only
and are shown in inches (millimeters).
"A" = Recommended conduit entry areas.

ABB Inc.
Electrification – Smart Buildings
5900 Eastport Blvd.
Richmond, VA 23231
USA

electrification.us.abb.com

We reserve the right to make technical changes or modify the contents of this document without prior notice. With regard to purchase orders, the agreed particulars shall prevail. ABB Power Protection does not accept any responsibility whatsoever for potential errors or possible lack of information in this document

We reserve all rights in this document and in the subject matter and illustrations contained therein. Any reproduction, disclosure to third parties or utilization of its contents – in whole or in parts – is forbidden without prior written consent of ABB Power Protection. Copyright © 2021 ABB