

# Specifications



## MACH 1 TVSS SERIES

Applications up to 100KW Systems  
For IEEE Cat. B Sub-Panels & Secondary Locations

Manufacturer's Model Number	M1 1120-3	M1 1208-4	M1 1240-3	M1 1240-4	M1 1480-3	M1 1480-4
Common Electrical System Type	1ø	3ø WYE	3ø Delta	3ø Hi-leg	3ø Delta	3ø WYE
Nominal AC Line Voltage (L-N & L-L)	120/240	120/208	240	120/208/240	480	277/480
Frequency Range-USA Std.	47/63Hz	47/63Hz	47/63Hz	47/63Hz	47/63Hz	47/63Hz
Parallel Multi-Element "ME" Protection Modes	L-N;L-L	L-N;L-L;N-G	L-L	L-N;L-L;N-G	L-L	L-N;L-L;N-G
Knockout size for Mounting	½"	½"	½"	½"	½"	½"
Leads: #14 AWG (for 20A Breaker)	3+Grnd	4+Grnd	3+Grnd	4+Grnd. Hi-leg	3+Grnd	4+Grnd
Min. Multi-Element "ME" Surge Capacity per mode	40k Amps	40k Amps	40k Amps	40k Amps	40k Amps	40k Amps
Total Surge Capacity @ 8x20 µSec	120k Amps	240k Amps	150k Amps	240k Amps	150k Amps	240k Amps
Electronic Test Lab rating (Interrupting Current)	200k Amps	200k Amps	200k Amps	200k Amps	200k Amps	200k Amps
Max. Continuous Operating Voltage (MCOV)	150/320	150/320	320	150/320/320	550	320/550
Max. Suppressed Voltage Rating (SVR): L-L	800	800	800	800	1500	1500
Max. Suppressed Voltage Rating (SVR): L-N	400	400	N/A	400	N/A	900
Max. Suppressed Voltage Rating (SVR): H-L	N/A	N/A	N/A	400	N/A	N/A
Mfg's Full Replacement Warranty (parts)	10 years	10 years	10 years	10 years	10 years	10 years
Enclosure size (HxWxD)	5 1/2" x 2 5/16" x 4 5/8"	5 1/2" x 2 5/16" x 4 5/8"	5 1/2" x 2 5/16" x 4 5/8"	5 1/2" x 2 5/16" x 4 5/8"	5 1/2" x 2 5/16" x 4 5/8"	5 1/2" x 2 5/16" x 4 5/8"
Enclosure construction	Nema 12/13	Nema 12/13	Nema 12/13	Nema 12/13	Nema 12/13	Nema 12/13
Shipping Weight (Approximate)	3.0 lbs	3.5 lbs	3.0 lbs	3.5 lbs	3.0 lbs	3.0 lbs

Multi-Element (ME) Technology

# Specifications



## MACH 2 TVSS SERIES

Applications up to 250KW Systems  
For IEEE Cat. C & B Main Panels & Primary Locations

Manufacturer's Model Number	M2 1120-3	M2 1208-4	M2 1240-3	M2 1240-4	M2 1480-3	M2 1480-4	M2 1600-3	M2 1600-4
Common Electrical System Type	1ø	3ø WYE	3ø Delta	3ø Hi-leg	3ø Delta	3ø WYE	3ø Delta	3ø WYE
Nominal AC Line Voltage (L-N & L-L)	120/240	120/208	240	120/208/240	480	277/480	600	347/600
Frequency Range-USA Std.	47/63Hz	47/63Hz	47/63Hz	47/63Hz	47/63Hz	47/63Hz	47/63Hz	47/63Hz
Single Element "SE" Protection Modes	L-N;L-L	L-N;L-L;N-G	L-L	L-N;L-L;N-G	L-L	L-N;L-L;N-G	L-L	L-N;L-L;N-G
Knock Out Size for Mounting	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"
Leads: #12 AWG (for 30A Breaker)	3+Grnd	4+Grnd	3+Grnd	4+Grnd. Hi-leg	3+Grnd	4+Grnd	3+Grnd	4+Grnd
Min. Non-degrading "SE" Surge Capacity per mode	45k Amps	45k Amps	45k Amps	45k Amps	45k Amps	45k Amps	45k Amps	45k Amps
Total Surge Capacity @ 8x20 µSec	225k Amps	315k Amps	270k Amps	315k Amps	270k Amps	315k Amps	270k Amps	315k Amps
Electronic Test Lab rating (Interrupting Current)	200k Amps	200k Amps	200k Amps	200k Amps	200k Amps	200k Amps	200k Amps	200k Amps
Max. Continuous Operating Voltage (MCOV)	150/320	150/320	320	150/320/320	550	320/550	690	400/690
Max. Suppressed Voltage Rating (SVR): L-L	800	800	800	800	1500	1500	1500	1500
Max. Suppressed Voltage Rating (SVR): L-N	500	500	N/A	400	N/A	900	N/A	1120
Max. Suppressed Voltage Rating (SVR): H-L	N/A	N/A	N/A	800	N/A	N/A	N/A	N/A
Mfg's Replacement Warranty (parts)	Lifetime	Lifetime	Lifetime	Lifetime	Lifetime	Lifetime	Lifetime	Lifetime
Enclosure size (HxWxD)	6 1/4" x 4 1/4" x 3 1/8"	6 1/4" x 4 1/4" x 3 1/8"	6 1/4" x 4 1/4" x 3 1/8"	6 1/4" x 4 1/4" x 3 1/8"	6 1/4" x 4 1/4" x 3 1/8"	6 1/4" x 4 1/4" x 3 1/8"	6 1/4" x 6 x 3 7/8"	6 1/4" x 6 x 3 7/8"
Enclosure construction	Nema 4X	Nema 4X	Nema 4X	Nema 4X	Nema 4X	Nema 4X	Nema 4X	Nema 4X
Shipping Weight (Approximate)	7.50 lbs	7.50 lbs	7.50 lbs	7.50 lbs	7.50 lbs	7.50 lbs	7.50 lbs	7.50 lbs

Non-Degrading TVSS Single-Element (SE) Technology

SE = Single Element, Non-degrading TVSS Technology

MCOV=Maximum Continuous Operating Voltage Rating

ME = Multi-Element TVSS Technology

SVR=Suppressed Voltage Rating