DIN-TECH[™] MMR Series

AC Main Entrance Protection

Transient Voltage Surge Suppression (TVSS) for AC Main Entrance Protection

DIN-TECH[™] is designed to divert devastating and catastrophic power problems away from critical electronic equipment. Featuring DIN-rail mounted modules in various voltage configurations and energy-handling ratings, DIN-TECH[™] installs easily in almost any environment. When uninterrupted service and reducing downtime is critical, DIN-TECH[™] is an essential part of your total power protection solution. Northern Technologies, Inc. (NTI) provides engineering assistance to configure equipment to your specific needs.

The MMR Series from NTI features Metal Oxide Varistor (MOV) suppression technology for brute-force protection against surges (transients). Installed at the main service entrance, the MMR Series helps reduce the majority of power anomalies commonly associated with lightning, grid switching, etc., that damage sensitive equipment down-line. It is highly recommended that the MMR Series be combined with our DMR Series to ensure the proper level of protection. Combined with a solid grounding system, the MMR Series is an essential part of your total power protection solution.

Features & Benefits

- Brute-force Metal Oxide Varistor (MOV) protection
- Field-replaceable modules
- Features a small footprint for easy installation
- · Supports long-distance monitoring via a remote failure indicator
- · Interior and exterior enclosures available upon request
- Provides easy-to-read LED status indication
- Minimizes lead length for excellent performance
- Fused internally with multiple fuse links and thermal cutoffs for maximum performance and safety (patent pending)
- Backed with a three (3) year standard warranty
- · Competitively priced
- Easily mounted on a 35 mm DIN-rail in accordance with EN50022
- UL 1449 2nd Edition and CE
- Available with optional transient counter and/or N-G protection



NORTHERN TECHNOLOGIES, INC. *Total Power Protection Solutions*

Three Phase with Transient Counter



DIN-TECH[™] MMR Series

Typical Applications

- Main Distribution
 Panels
- Switch Gear
- Transfer Switches
- Motor Loads
- Industrial & Manufacturing Equipment



General MMR Specifications

Suppression Technology	Metal Oxide
Module Dimensions	107H x 36W
Module Weight	Approximate
Electrical Interface	Parallel or "k
Peak Pulse Current:	
8 x 20 µs	104 kA [*] per
10 x 350 µs	15 kA** per p
Remote Failure Indication	Form C Con
Certifications	UL 1449 2nd

Metal Oxide Varistor (MOV) 107H x 36W x 69D mm Approximately 370 g each Parallel or "Kelvin" Series

104 kA^{*} per phase 15 kA^{**} per phase Form C Contact, Hardwire Interface UL 1449 2nd Edition, CE

Specifications

Series	Voltage Configuration	Joule Rating per Phase	Nominal Clamp Voltage‡	Modules Required¹
MMR-B	120/240 V 1 Phase 3W+G	2720	230 Vpk	2 MOV
MMR-C	120/208 V 3 Phase, Wye 4W+G	2720	230 Vpk	3 MOV
MMR-D	240 V, 1 Phase 2W+G	5536	460 Vpk	1 MOV
MMR-E	240 V, 3 Phase Delta, 3W	5536	460 Vpk	3 MOV
MMR-F	220/380 V 3 Phase, Wye 4W+G	4480	380 Vpk	3 MOV
MMR-G	277/480 V 3 Phase, Wye 4W+G	5536	460 Vpk	3 MOV
MMR-J	240/415 V 3 Phase, Wye 4W+G	5536	460 Vpk	3 MOV
MMR-L	220 V, 1 Phase 2W+G	4480	380 Vpk	1 MOV
MMR-M	127/220 V 3 Phase, Wye 4W+G	3136	265 Vpk	3 MOV

*Based on component value.

**Based on actual tested values.

[†]Nominal equals initial clamping voltage at 1 mA.

[†]Add one module (black) for neutral to ground and/or transient counter option.



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