DIN-TECH[™] DMR Series

AC Critical Equipment 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 DMR Series from NTI features independent primary Silicon Avalanche Diode (SAD) and secondary Metal Oxide Varistor (MOV) suppression technology to ensure optimal protection. This series provides proven, reliable performance along with the lowest clamping voltage and the fastest response time in comparison to other TVSS technologies. Combined with a solid grounding system, the DMR Series is the ultimate in protecting sensitive, down-line, electronic equipment from damaging surges (transients).

Features & Benefits

- Features SAD primary and secondary MOV suppression technology to ensure optimal protection
- Non-degrading Bipolar Silicon Avalanche Diode (SAD) provides reliable performance with the lowest clamping voltage and fastest response time (5 ns) in comparison to other TVSS technologies.
- · Minimizes lead length for excellent performance
- Field-replaceable modules
- Supports long-distance monitoring via a remote failure indicator
- Provides easy-to-read LED status indication
- · Interior and exterior enclosures available upon request
- Color-coded for easy module identification
- 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*



DIN-TECH[™] DMR Series

Typical Applications

- Cellular/PCS Sites
- GSM Sites
- Microwave Tower Sites
- Switch Centers
- Broadcast/Cable Sites
- Hospitals
- Industrial & Manufacturing Equipment



General DMR Specifications

Suppression Technology:			
Primary (blue)	Silicon Avalanche Diode (SAD)		
Secondary (white)	Metal Oxide Varistor (MOV)		
Module Dimensions	107H x 36W x 69D mm		
Module Weight	SAD modules: 320 g each		
-	MOV modules: 370 g each		
Electrical Interface	Parallel or "Kelvin" Series		
Peak Pulse Current:			
8 x 20 µs	104 kA [*] per phase		
10 x 350 µs	15 kA ^{**} per phase		

Form C Contact, Hardwire Interface

UL 1449 2nd Edition, CE

Specifications

Certifications

Remote Failure Indication

Series Unit	Voltage Configuration	Primary‡ Joule (SAD) Rating	Secondary [‡] Joule (MOV) Rating	Nominal° Clamp Voltage	Modules Required [†]
DMR-B	120/240 V 1 Phase, 3 W+G	320	2720	211 Vpk	2 SAD, 2 MOV
DMR-C	120/208 V 3 Phase, Wye 4W+G	320	2720	211 Vpk	3 SAD, 3 MOV
DMR-D	240 V, 1 Phase 2W+G	400	5536	422 Vpk	1 SAD, 1 MOV
DMR-E	240 V, 3 Phase Delta, 3W	400	5536	422 Vpk	3 SAD, 3 MOV
DMR-F	220/380 V 3 Phase, Wye 4W+G	350	4480	369 Vpk	3 SAD, 3 MOV
DMR-G	277/480 V 3 Phase, Wye 4W+G	400	5536	475 Vpk	3 SAD, 3 MOV
DMR-J	240/415 V 3 Phase, Wye 4W+G	400	5536	422 Vpk	3 SAD, 3 MOV
DMR-L	220 V, 1 Phase 2W+G	350	4480	369 Vpk	1 SAD, 1 MOV
DMR-M	127/220 V 3 Phase, Wye 4W+G	400	3136	260 Vpk	3 SAD, 3 MOV

"Based on component value. "Based on actual tested values. **‡** Per phase.

Per phase.

^oNominal equals initial clamping voltage at 1 mA.

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



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