

# RTBN Rail Transient Barrier



## FEATURES

Surge module easily snaps into place

Mechanical flag will protrude to indicate the module needs to be replaced

Thermal disconnect releases the indicator when the device reaches end-of-life, disconnecting itself from the circuit to prevent it from becoming a short or shunt

Surge module attaches to the base with a latching mechanism that easily locks the device into place, preventing the module from disconnecting during service

Integration of GDT (gas discharge tube) technology and MOV (metal oxide varistors), a combination that delivers consistency and the capability to protect against fast spikes

Screw-less cage clamp terminal allows for easy connection, solid or stranded wires are simply pushed in to lock into place, reducing installation time by as much as 75%

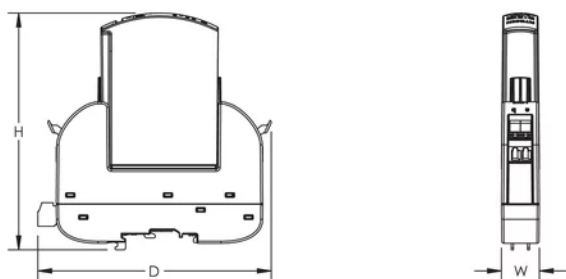
DIN rail grounding connection eliminates the need for extra grounding wires

## SPECIFICATIONS

Catalog Number	RTB12N	RTB130N	RTB30N	RTB50N
Nominal System Voltage (Un)	12 VDC 9 VAC	130 VDC 110 VAC	30 VDC 21 VAC	50 VDC 35 VAC
Max Continuous Operating Voltage (Uc)	18 VDC 12 VAC	170 VDC 130 VAC	33 VDC 23 VAC	65 VDC 50 VAC
Max Discharge Current (Imax)	40kA 8/20 $\mu$ s	40kA 8/20 $\mu$ s	40kA 8/20 $\mu$ s	40kA 8/20 $\mu$ s
Rated Load Current (IL)	15A	15A	15A	15A

Catalog Number	RTB12N	RTB130N	RTB30N	RTB50N
Voltage Protection Rating (VPR)	65 V @ 3 kA L-L 245 V @ 3 kA L+L-PE	530 V @ 3 kA L-L 495 V @ 3 kA L+L-PE	105 V @ 3 kA L-L 245 V @ 3 kA L+L-PE	230 V @ 3 kA L-L 245 V @ 3 kA L+L-PE
Loop Resistance	900 $\mu\Omega$	900 $\mu\Omega$	900 $\mu\Omega$	900 $\mu\Omega$
Mounting	35 mm top hat DIN rail G type DIN rail	35 mm top hat DIN rail G type DIN rail	35 mm top hat DIN rail G type DIN rail	35 mm top hat DIN rail G type DIN rail
Protection Modes	L-L L+L-PE	L-L L+L-PE	L-L L+L-PE	L-L L+L-PE
Status Indication	Mechanical flag Remote Contacts	Mechanical flag Remote Contacts	Mechanical flag Remote Contacts	Mechanical flag Remote Contacts
Connection, Solid	0.75 - 2.5 mm <sup>2</sup>	0.75 - 2.5 mm <sup>2</sup>	0.75 - 2.5 mm <sup>2</sup>	0.75 - 2.5 mm <sup>2</sup>
Connection, Stranded	0.75 - 2.5 mm <sup>2</sup>	0.75 - 2.5 mm <sup>2</sup>	0.75 - 2.5 mm <sup>2</sup>	0.75 - 2.5 mm <sup>2</sup>
Enclosure Material	UL® 94V-0 Thermoplastic	UL® 94V-0 Thermoplastic	UL® 94V-0 Thermoplastic	UL® 94V-0 Thermoplastic
Enclosure Rating	IP 20	IP 20	IP 20	IP 20
Temperature	-40 to 85 °C	-40 to 85 °C	-40 to 85 °C	-40 to 85 °C
Depth (D)	107mm	107mm	107mm	107mm
Height (H)	109 mm	109 mm	109 mm	109 mm
Width (W)	18 mm	18 mm	18 mm	18 mm
Unit Weight	0.1 kg	0.1 kg	0.1 kg	0.1 kg
Complies With	AREMA® C&S Manual Parts 11.5.1, 11.3.2, 14.1.2 ANSI®/IEEE® C62.41.2-2002 Cat A, Cat B, Cat C	AREMA® C&S Manual Parts 11.5.1, 11.3.2, 14.1.2 ANSI®/IEEE® C62.41.2-2002 Cat A, Cat B, Cat C	AREMA® C&S Manual Parts 11.5.1, 11.3.2, 14.1.2 ANSI®/IEEE® C62.41.2-2002 Cat A, Cat B, Cat C	AREMA® C&S Manual Parts 11.5.1, 11.3.2, 14.1.2 ANSI®/IEEE® C62.41.2-2002 Cat A, Cat B, Cat C
Color	Red	Yellow	Black	Purple
Replacement Module	RTBN12M	RTBN130M	RTBN30M	RTBN50M

## DIAGRAMS



**WARNING**

nVent products shall be installed and used only as indicated in nVent's product instruction sheets and training materials. Instruction sheets are available at [www.nvent.com](http://www.nvent.com) and from your nVent customer service representative. Improper installation, misuse, misapplication or other failure to completely follow nVent's instructions and warnings may cause product malfunction, property damage, serious bodily injury and death and/or void your warranty.

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