

## Surge Protection Solutions

# RayDin 400Y-T1-HV (-ALR)

The unique patented design of the Strikesorb® provides uninterrupted protection from damage caused by electrical surges or direct lightning strikes. Strikesorb's maintenance free design absorbs and dissipates the excess energy of successive surges without performance deterioration, successfully preventing electrical surges or lightning strikes from damaging mission-critical equipment in telecommunications, power generation, defense, transportation and other industrial applications.



RayDin 400Y-T1-HV (-ALR) is based on Strikesorb technology which incorporates a single, heavy duty, distribution grade Metal Oxide Varistor (MOV) disk, assembled under pressure in an environmentally sealed aluminum casing. This unique design provides very low internal contact resistance, excellent thermal management and uniform distribution of the surge current over the total area of the protection element, thus resulting in an extremely high energy handling capability combined with very low let through voltage. Strikesorb's patented design minimizes the effects of ageing and completely eliminates the risk of catastrophic failure, explosion or fire, which are common in conventional surge protective devices relying on the use of internal fuses and thermal disconnectors.

RayDin 400Y-T1-HV (-ALR) is rated for safe operation without the use of internal fuses. This unique feature combined with its capability to be directly connected to the power lines (in-line connection), makes it the most reliable surge protection device known and insures that critical electronic equipment will remain protected at all times. The RayDin 400Y-T1-HV (-ALR) is designed to be easily integrated into electrical panels via DIN rail attachment.

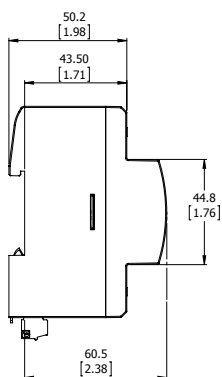
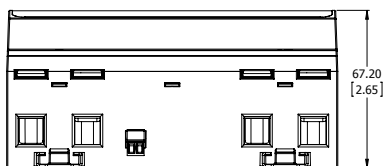
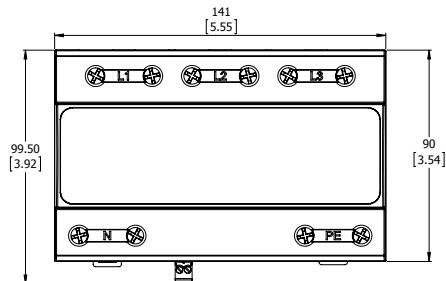
### Features

- Suitable for TN and TT 3 phase 400V L-L Power Systems
- Class I protection for up to 12.5kA 10/350µs per line
- Provides very low let-through voltage, unique for a Class I + II product
- Its unique patented design provides uninterrupted protection from damage caused by lightning
- Available with remote signaling
- Maintenance-free

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## SPECIFICATIONS

# Surge Protection Solutions RayDin 400Y-T1-HV (-ALR)



All dimensions are in mm [inches]  
unless otherwise specified

### Electrical

Surge Protective Device (SPD) Class per IEC 61643-11	Class I + II
Nominal Operating AC Voltage [ $U_n$ ] (L-N)	240V
Maximum Continuous Operating AC Voltage [ $U_c$ ] (L-N)	300V
Temporary AC Overvoltage Withstand [ $U_1$ ] for 5s per IEC 61643-11 (L-N)	442V
Temporary AC Overvoltage Withstand [ $U_1$ ] for 200ms per IEC 61643-11 (N-PE)	1455V
Response Time [ $t_A$ ] (L-N)	<1 ns
Nominal Discharge Current [ $I_n$ ] per IEC 61643-11 (L-N) / (N-PE)	12.5kA 8/20 $\mu$ s / 50kA 8/20 $\mu$ s
Impulse Discharge Current [ $I_{imp}$ ] per IEC 61643-11 (L-N)	12.5kA 10/350 $\mu$ s
Impulse Discharge Current [ $I_{imp}$ ] per IEC 61643-11 (N-PE)	50kA 10/350 $\mu$ s
Voltage Protection Level [ $U_p$ ] per IEC 61643-11 (L-N)	1200V
Voltage Protection Level [ $U_p$ ] per IEC 61643-11 (N-PE)	1500V
Operating Frequency	50/60Hz

### Mechanical

Environmental Ingress Protection (IP) Rating	IP20
Operating Temperature ( $^{\circ}$ C)	-40 $^{\circ}$ C to + 85 $^{\circ}$ C
Mounting Method	35 mm DIN rail
Dimensions (L x W x H) per DIN 43880	141 x 90 x 67.2 mm [5.55" x 3.54" x 2.65"]
Weight	1.27 kg
Max. Cross section Area (all terminals)	50 mm <sup>2</sup> stranded/ flexible
Min. Cross section Area	4 mm <sup>2</sup> stranded/ flexible
Remote Signaling contacts	optional
Type of Remote Signaling contact	NC contact
Remote Signaling Contact Rating	AC:125V/3A, 250V/0.5A
Max. Cross section area of remote signaling contact	max 1.5mm <sup>2</sup> solid/flexible

### Standards Compliance & Certifications

Standards	UL 1449 4th Ed: 2014, IEC 61643-11:2011, EN 61643-11:2012, IEEE C62.41: 2002, IEEE C62.45: 2002
Certifications	VDE*, CE

\*Pending

# Raycap

[www.raycap.com](http://www.raycap.com)



Information contained in this document is subject to change at any time without notice.

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