

SURGE PROTECTION DEVICES

For the Railway Industry



SURGE PROTECTION

The WAGO Protect track circuit arrestor (TCA) and signal line arrestor (SLA) are surge protection devices designed to protect your railroad equipment from overvoltage events such as lightning and transients. Replaceable self-sacrificing modules provide consistent and repeatable protection, and can be replaced in the field without interrupting the circuit.

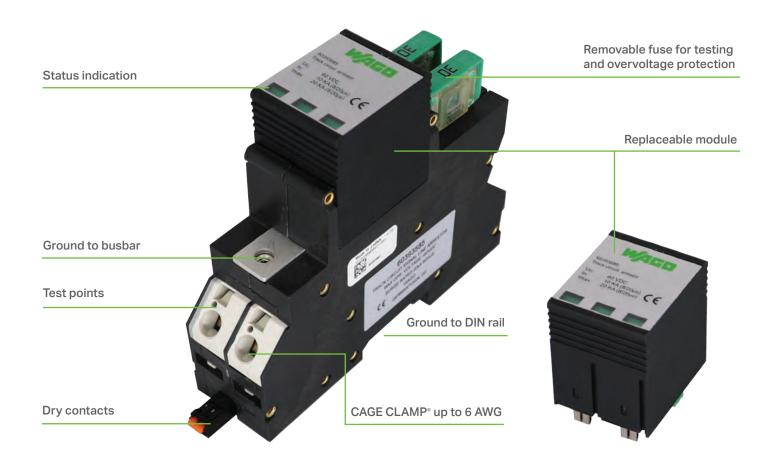
WAGO's CAGE CLAMP® connections are the only other AREMA recognized terminations besides AAR posts that not only meet the harsh demands of the railroad industry, but accommodate 6 AWG wire. Protect your sensitive electronics with surge protection devices from WAGO.

Why WAGO?

- Save up to 33% of panel space compared to spark/air gap arrestors
- Save up to 345 seconds of wiring and installation time when using CAGE CLAMP® versus AAR posts

Not necessary with WAGO Protect:

Task	Time
Install three AAR bases	120 sec
Strip field wire	10 sec
Add ring terminals	20 sec
Strip case wire	10 sec
Add ring terminals	20 sec
Install wire to posts	10 sec
Install three arrestors	90 sec
Install and torque nuts	50 sec
Drill holes for through post	10 sec
Install to through post	120 sec
Total Time	345 sec



Technical Data









Protect - SLA



Properties	Track Circuit Arrestor with Equalizer Circuit	Signal Line Arrestor	
Part Number	60393585	60393586	
Replacement Module Part Number	60393587	60393588	
Electrical			
Rated Voltage	48 VDC	48 VDC	
Current Rating	40 A	40 A	
Max. Continuous Operating Voltage	60 VDC	60 VDC	
Surge Protection			
Surge Protection Technology	MOV, GDT	MOV, GDT	
Surge Protection Modes	2 x L-L+, Equalizer Circuit, L-G	L-L+, L-G	
Response Time	25 ns	25 ns	
8/20 µs Surge Current	20 kA	20 kA	
VPL 8/20 μs L-G	375 @ 3000 A Vpk	375 @ 3000 A Vpk	
Nominal Discharge Surge Current (In)	10 kA	10 kA	
Mechanical/Environmental			
H x W x D	5.31 x 1.42 x 3.81 in	5.31 x 1.42 x 3.81 in	
Operating Temperature	-40 °C +85 °C	-40 °C +85 °C	
Storage Temperature	-40 °C +85 °C	-40 °C +85 °C	
Installation			
Mount Type	DIN rail	DIN rail	
CAGE CLAMP® Wiring Terminal	24 - 6 AWG	24 - 6 AWG	
2-Pin Connector Status Indication Terminal	16 AWG	16 AWG	
Certifications			
RoHS Compliant		Yes	

Accessories













Screwdriver	Test Plugs	DIN Rail	End Stops
Part Number			
210-721	210-136 (2.0 mm Ø)	210-112 (7.5 mm slotted)	249-116 (6 mm wide)
	210-137 (2.3 mm Ø)	210-197 (15 mm slotted)	249-117 (10 mm wide)
			249-197 (14 mm wide)

WAGO Corporation N120 W19129 Freistadt Road Germantown, Wisconsin 53022 Telephone: 800 / DIN-Rail (346-7245) Fax: 262 / 255-3232 info.us@wago.com www.wago.us

WAGO Canada Inc. 1550 Yorkton Court, Unit 1 Burlington, ON L7P 5B7 Telephone: 888 / WAGO 221 (924-6221) info.ca@wago.com www.wago.ca

WAGO SA DE CV Carretera estatal 431 Km. 2+200. Lote 99 6 Parque Industrial Tecnologico Innovacion Queretaro El Marques, Qro. 76246 Lada sin Costo: 01 800 288 WAGO (288-9246) Telefono: 422 / 221-5946 info.mx@wago.com www.wago.mx

 ${\it WAGO}\ is\ a\ registered\ trademark\ of\ WAGO\ Verwaltungsgesells chaft\ mbH.$

"Copyright – WAGO Kontakttechnik GmbH & Co. KG – all rights reserved. The content and structure of the WAGO Websites, catalogs, videos, and other WAGO media are subject to copyright. The dissemination or changing of the content of these pages and videos is not permitted. Furthermore, the content may neither be copied nor made available to third parties for commercial purposes. Also subject to copyright are the images and videos that were made available to WAGO Kontakttechnik GmbH & Co. KG by third parties."