Integrated Voltage Insulator & Metering Circuit

An Innovative Solution for Tough Environments!

A harsh environment multi-function Voltage Insulator and Voltage Divider – another innovation from Neundorfer – designed to work where classic voltage divider designs just aren't durable enough.

- Unique design and flexible mounting scheme make for easier installation and safer maintenance.
- Beefy construction lasts longer than conventional voltage dividers.
- Backed by Neundorfer with a full three-year warranty.*

ntroducing a unique heavy-duty harsh environment solution: a voltage divider integrated within an insulator. It is designed to be mounted horizontally or vertically



in the bus duct in place of an insulator or in the transformer/rectifier (T/R) set high-voltage switch housing — no retrofitting is required. An external-mount junction box allows for easy testing and service. Its unique design also means it won't short as easily as conventional voltage dividers, since shorts must follow the extended surface.

Why is it so important to have a voltage divider?

• It's an essential tool for trending and troublesbooting.

Performance levels in an electrostatic precipitator are largely determined by secondary current (mA) and secondary voltage (kV) for a given set of operating conditions. A voltage divider safely provides the necessary signal to read and monitor secondary voltage – essential information for trending and troubleshooting.

• It protects sensitive equipment against costly over-voltage damage.

Voltage dividers also help protect the T/R sets in a precipitator from costly over-voltage damage to the diode bridge and transformer secondary. Voltage dividers enable automatic voltage controls to work at peak performance.



Installation options inside bus duct, replacing existing insulators



Patent Pending

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Easy Installation

Exploded view (right) shows standard components. It is designed to take the place of a standard insulator and can be mounted vertically or horizontally. It can be used with any manufacturer's T/R set or voltage control.

Specify Neundorfer Voltage Dividers in Replacement and Retrofit Installations

New T/R sets usually are equipped with voltage dividers. Typically, they are located in the oil, thus making them hard to replace. Should one fail, however, it can be disconnected and a new Neundorfer voltage divider installed as a replacement outside of the T/R oil-filled housing, in the T/R set high-voltage switch housing or in the bus duct. Older T/R sets often do not have voltage dividers, but can be easily retrofitted to provide the important secondary voltage feedback signal.

Specifications

- Part number: 355-3101
- Dimensions:
 - Insulator: 13-1/8" (H) x 6" (Dia.)
 - Junction Box: 2-15/16" (H) x 8-1/2" (L) x 4-1/2" (D)
- Nominal Rating: 160 Megohm
- Maximum Voltage: 70 kV
- Output: 6.25 µAmps per 1 kV
- Max. Operating Temperature: 100°C
- Does not require modification to the bus duct
- Can be made to fit all installations
- Instructions and mounting parts are included
- Made in U.S.A.

For more information or assistance in selecting the equipment best suited to your application, contact your Neundorfer representative.





Neundorfer part number 84700-250

- Rugged, reliable design
- Small size for easy replacement or retrofit installation
- Epoxy-sealed resistor elements in an encapsulated epoxy-resin assembly
- Low-cost alternative to competitive dividers





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