In-Core Amplifier

Model: 7007

Application

Model 7007 is an updated version of the existing in-core amplifier.

The In-Core Amplifier is used for converting the current signal from In-Core Detector to voltage. After this, it does further signal processing including Dynamic Signal Compensation, Difference Compensation and Buffering, as well as comparison and driving alarm relay output.

The Tyne Model 7007 In-core amplifier is a state-of-the-art design using military grade components and the most current operational amplifiers. This contributes to the instrument having higher accuracy, linearity, and higher reliability. Also the display has been changed to a 7-segment digital display type instead of the older analog indication meters. The Tyne 7007 will directly display the Power Percentage and Trip Set Point in numerical format, instead of via older analog indicators.

The Tyne Model 7007 can be configured to be compatible with the previous Model 400 (with detector difference compensation) and Model 401 (without detector difference compensation). All the connectors on the rear panel have the same pin assignment and the same type of connector as Models 400 and 401.

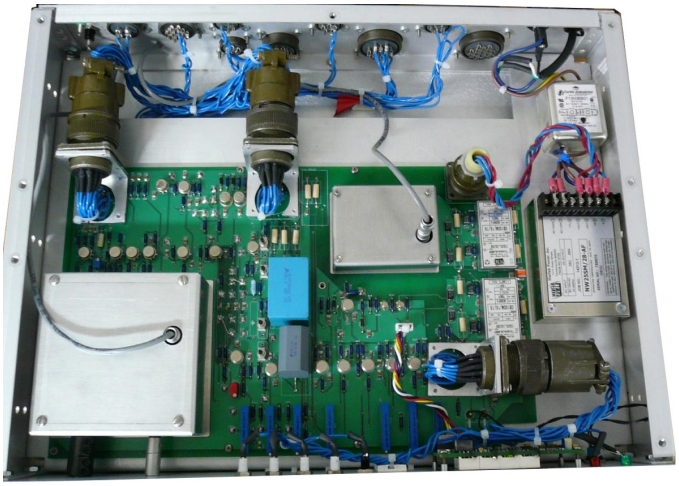
Features

- Compatible with existing Models 400 and 401.
- Updated operational amplifier is used.
- Military grade components are used.
- Digital panel meters used to display the power percentage and setting.

Front View

Description

Tyne's In-Core Amplifier Model 7007 provides the same functionality and form factor as existing In-Core Amplifiers, and at the same time improves the performance by using upgraded military components. Higher accuracy / linearity and higher reliability have been proved by the successfully completed functionality tests (results available on request).



Prototype Module

Rear Panel View

Specifications

Mounting	Rack Mount. Overall dimensions: 3-1/2” height X 19” width X 12” depth
Relay	4- form C 1A 60VDC
Power Supply	120VAC ± 10%, 60Hz ± 2Hz.
Power Consumption	< 150mA
Input Impedance	200Ohm
Input Signal Range	0.25µA to 5µA
Conversion Gain	Selectable
Linearity	Less than ± 0.25% of full range
Resolution	Less than ± 0.05%.
Noise	< 1mV RMS at 0 to 100KHz