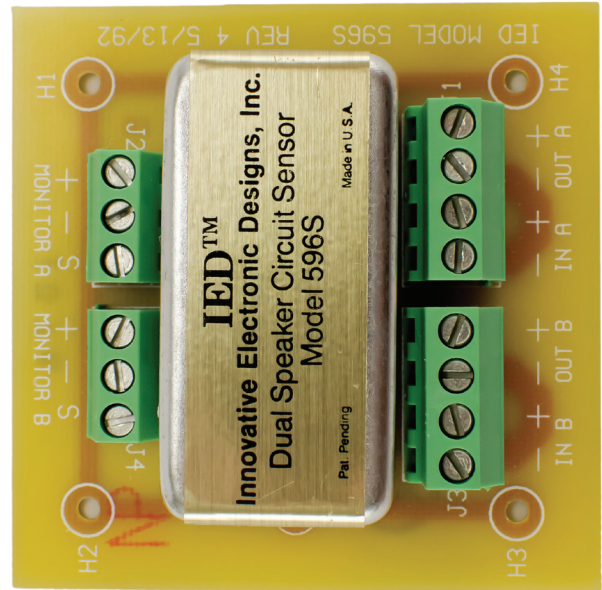


Description

The Model 596S is a Dual Channel, Current sensing, Fault Detector module. In conjunction with any IED Monitor/Test system, it can be used to monitor the current being drawn by a loudspeaker circuit.

The 596S is a current to voltage conversion device that is wired in series with loudspeakers connected to a power amplifier output. The audio monitor output terminals are normally connected to the input of an IED monitor (T9032MT) device. The voltage available at the output terminals is a function of the current delivered to the loudspeakers. The 596S can be used with loudspeaker circuits wired in a Class A scheme to detect a cut in the cable loop.

Once the test signal level and the amplifier gain are set, the amplifier output voltage remains constant during normal testing conditions unless a fault occurs in the amplifier. The loudspeaker line impedance varies due to changes in environmental conditions such as humidity and temperature, or due to a change in equivalent loudspeaker circuit impedance as a result of devices opening or shorting. To accommodate variations of loudspeaker impedance due to environmental changes and thereby avoid spurious speaker line fault indications, the allowable deviation from the set point can be adjusted using the Monitor/Test System software.



Specifications

Electrical

Frequency Response, monitor output

20 Hz.....	-20 dB
2 kHz.....	0 dB
20 kHz.....	-1 dB

Total Harmonic Distortion, THD, monitor output
(20 Hz - 22 kHz filters)

20 Hz.....	<5.0 %
300 Hz.....	<0.5 %
2 kHz.....	<0.5 %
20 kHz.....	<0.5 %

Mechanical

Size

Height.....	2.75" (6.99 cm)
Width.....	2.75" (6.99 cm)
Depth.....	1.062" (2.70 cm)

Mounting Configuration

Snap Track.....	2TK2-48
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Environmental

Operating Temperature Range..... +32 °F - +104 °F (0 °C - +40 °C)

Storage Temperature Range..... -40 °F - +158 °F (-40 °C - +70 °C)

