



M-2148 Adapter Panel

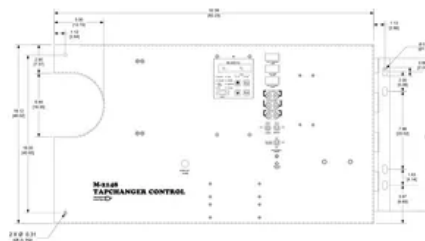
By Beckwith Electric
Catalog # [M-2148](#)

The Beckwith Electric M-2148 Adapter Panel, used in conjunction with the M-2001 series Tapchanger Control, uses modern electronic digital design and digital processing circuitry to achieve an overall stability and resolution unattainable with electromechanical and analog design tapchanger controls. CMOS semiconductors are used throughout the design. The M-2148 Adapter Panel, with the M-2001 series Tapchanger Control, provides a solid state voltage control relay designed to directly replace the General Electric LRT 48 control. There are several sizes of LRT 48 controls, therefore, verify that the M-2148 is the correct replacement. The combination of the Tapchanger Control and Adapter Panel includes the following features:

- M-2148-P: Replaces General Electric LRT-48 Controls and includes the M-0115A and M-0127A for paralleling. (M-0329B is not available)
- M-2148-B: Replaces General Electric LRT-48 Controls and includes the M-0329B for LTC Backup Control Protection.

Features

- Voltage waveform sampling and digital processing circuitry ensure accurate rms voltage sensing in the presence of distortion on the input voltage and current.
- Control accuracy is $\pm 0.3\%$ when tested in accordance with the ANSI/IEEE C57.15.9-1999 standard over a temperature range of -30°C to $+65^{\circ}\text{C}$. The control accuracy is $\pm 0.5\%$ when tested over the full operational temperature range of -40°C to $+85^{\circ}\text{C}$.
- Input and output circuits are protected against system transients. Units pass all requirements of ANSI/IEEE C37.90.1-1989, which defines surge withstand capability. All input and output terminals will withstand 1500 V ac rms to chassis or instrument ground for one minute with a leakage current not to exceed 25 mA, for all terminals to ground. Input and output



circuits are electrically isolated from each other, from other circuits and from ground.

Application

Distribution Protection

General

Catalog Number M-2148

Product Assets

[Installation Manuals - M-2148-IB Instruction Book - Sign in required](#)

[Specifications - M2148 Spec Sheet](#)

[Technical Publications - M-2148 Adapter Panel](#)