

PTE-FCL

*Variable Voltage, Frequency
and Phase Shifter Option*



SMC
EURO

PTE-FCL



The PTE-FCL is extremely easy to use and can be used with any existing PTE-100-C

DESCRIPTION

Specifically designed to work as an option for the PTE-100-C, the PTE-FCL has been developed to dramatically expand the application of the PTE-100-C to the most complex relays that require variable voltage and phase shifting capabilities, such as directional, single phase impedance and distance relays.

The PTE-FCL also offers the ability to test frequency relays in the 40 - 70 Hz range.

The PTE-FCL is embedded in the PTE-100-C's cover lid, which allows its users to upgrade their existing PTE-100-C in a very easy and affordable manner.

Due to the limited space available and the relative high power needed by the application, the use of the switching amplifier technology is a must. This allows the amplifier to deliver constant power from 70 V up to 140 V (end of the range), exactly where it is more needed.

The PTE-FCL is extremely easy to use. To reach the desired values a single rotary encoder is used, that has two different modes (Coarse or Fine) selectable just by the touch of a push button.

The multifunctional display and special metering functions already built into the PTE-100-C are used to view the PTE-FCL option's output parameters (Voltage, Phase Angle and Frequency), thus eliminating the need of additional metering elements inside the PTE-FCL itself, with the subsequent cost and space savings.

The input voltage is also taken from the PTE-100-C's output 4, which delivers 110 V at line frequency and also provides the necessary isolation from the main supply.

TECHNICAL SPECIFICATION

POWER OUTPUT

RANGE:	0 - 140Vac
POWER:	30VA (70 - 140 Vac)
I MAX.:	0.45 A (0 - 70Vac)
RESOLUTION:	Coarse: 10V / Fine: 0.1V
LOAD REGULATION:	<1% (@ 0 - Full Load, $\cos \phi = 1$)
LINE REGULATION:	<0.5%
DISTORTION:	<0.5% @ 50Hz
SWITCHING NOISE:	<0.2% F_s (0.75Vpp) @ 0-140Vac
FREQUENCY GENERATOR:	Range: 40 - 70Hz Resolution: Coarse: 1Hz / Fine: 0.1Hz
SYNCHRONISM SOURCE:	Selectable references: Line / Internal Freq Generator
PHASE ANGLE:	Line Referency only Range: 0 - 359.9° Resolution: Coarse: 10° / Fine: 0.1°

GENERAL

POWER INPUT:	110 Vac \pm 10%, 50-60 Hz (Must be isolated from main supply)		
DIMENSIONS:	Height: 287.5 mm	Width: 184.5 mm	Depth: 25 mm
WEIGHT:	2 Kg. - 5 lb.		

DISTRIBUTED BY:

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