



PED 020 500

(ex EL 2050)

Single phase Rectifier Bridges

MAIN CHARACTERISTICS

The PED 020 500 module enables the study of uncontrolled single phase bridges and of single and double wave controlled bridges.

Thyristors are controlled either by single pulse or by pulse string.

Assisted inverter:

The PED 020 500 module enables the study of the reversible "AC / DC" conversion that occurs during the speed variation of a DC machine powered by a thyristors bridge and using retrieval breaking.

TRAINING LITERATURE

The PED 020 500 module is provided with the following training manuals :

- 1 - Control circuit,
- 2 - Single wave uncontrolled single phase rectifiers,
- 3 - Double wave uncontrolled rectifiers, using middle coil point transformer,
- 4 - Double wave uncontrolled rectifiers (Graetz bridge),
- 5 - Single phase controlled rectifiers,
- 5 - Mixed bridge double wave controlled rectifiers,
- 6 - All thyristors controlled rectifiers (assisted inverter).

TECHNICAL SPECIFICATIONS

Power

Supply voltage : Single phase 24V /50Hz

Output max. current : 2Amp.

Use : All kinds of single phase rectifiers

Uncontrolled :

- Single wave
- Double wave

Controlled :

- All thyristors single wave bridges
- All thyristors double wave bridges
- All thyristors double wave bridges & free wheel diode
- Double wave with mixed bridge
- Double wave with mixed bridge & free wheel diode.

Control

Thyristors start angle linear control by DC voltage adjustable from 0 to 10V10V.

Control, on each phase, by two 90° offset pulses.

Insulation by pulse transformer.

Mechanical characteristics :

Net weight :0.9 Kg (gross : 1.6 Kg)

Dim. : 30 . 20 . 10 cm

Technical Guide

The PED 020 500 module is provided with a manual giving all use indications.

AREAS OF APPLICATION

Basic training :

Introduction in low power, to the control principles of motor - generator machine sets:

- Technical colleges
- Universities and Higher Education.

Professional training:

Introduction in low & safe power, to control modes of industrial machine sets.

AUXILIARIES

Power Supply : 1 x AC 24V- Ref.

EMD030340

Rheostat : 100 W Ref. PMM064010

DC motor bench Ref. EPD037580

& optional Ref. EPD037620

External generator : LFG /

Frequency meter Ref. 3125

Test equipment : Storage oscilloscope

Ref. 4087