



PED 020 600

(ex EL 2060)

Three Phase Rectifier Bridges

MAIN CHARACTERISTICS

The PED 020 600 module enables the study of uncontrolled three 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 020 600 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 020 600 module is provided with the following training manuals :

- 1 - Study of the control circuit
- 2 - Study of single wave uncontrolled three phase rectifiers (3 diodes)
- 3 - Study of double wave uncontrolled three phase rectifiers (6 diodes)
- 4 - Study of single wave controlled three phase rectifiers (3 thyr.)
- 5 - Study of double wave controlled three phase rectifiers (6 thyr.)
- 6 - Study of mixed bridge double wave controlled rectifiers (3 thyristors + 3 diodes)
- 7 - Operation as assisted inverter.

TECHNICAL SPECIFICATIONS

Puissance

Supply voltage : Three phase 24V /50Hz

Output max. current : 2Amp.

Use : All kinds of three phase rectifiers.

Uncontrolled :

- single wave (P3)
- double wave (PD3)

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

Formation fondamentale :

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

Control part : Power Supply: +15 V (DC), 3 x 24V-0,1A (AC) (Mains reference)

Power part : Power Supply. 3 x 24V - 2A (AC) Ref. EMD 030390

Rheostat : 100 W Ref. 2723

Inductance : 0,1 to 1,1 H Ref. 2087

DC motor bench Ref. 3758 & optional Ref. 3762

External generator : LFG / Frequency meter Ref 3125

Test equipment : Storage oscilloscope Ref 4087

