

MULTIFUNCTION STATION FOR MOTOR TEST BENCH

These multifunction station on wheels, equipped with a man-height control console, powered on 400VAC three-phase mains with neutral and ground. The left part of the console is dedicated to powering a motor bench. The right part allows the mechanical and electrical measurements. The computer connection for the data consulting is via the USB interface on the top.

GENERAL CHARACTERISTICS

- Key lock emergency stop
- Front panel general on/off
- Three-phase mains cord with industrial connector
- Output on safety terminals Ø 4mm
- Outputs are protected from overloads and short circuits
- A folding tablet of 400 x 500mm on the right side of the station
- AC socket available for a PC power supply for example
- Maintenance-free light signaling
- Dimension 500 x 800 x 980mm



Ref. PST-ALM40

Ref.	PST-ALM20	PST-ALM40
Power supply functions		
CONTINUOUS 0-250V	8A + Voltmeter and Amp meter	16A + Voltmeter and Amp meter
3-PHASE 0-430V	5A + Voltmeter and Amp meter	6A + Voltmeter and Amp meter
CONTINUOUS AUXILIARY 0-250V	2,5A + Voltmeter and Amp meter	2,5A + Voltmeter and Amp meter
Speed driver functions		
Motor power	2000W	4000W
Output to motor	230V three-phase	400V three-phase
Permanent output current	10A	8.5A

Power supply functions

- DC outputs are galvanically isolated from each other as well as from the mains by NF EN 61558 isolation transformers
- The continuous power is produced by a Graetz bridge (ripple 4%)
- The auxiliary DC is full-wave rectifier whose ripple rate varies with the load

Speed control functions

- Speed control by potentiometer
- Start/Stop by button
- Parameterization via the control console (choice of rotation, acceleration ramp, fault reset ...)
- Setting frequency 0-400Hz

Brake control

- Brake control by potentiometer

Functions measurement of mechanical quantities

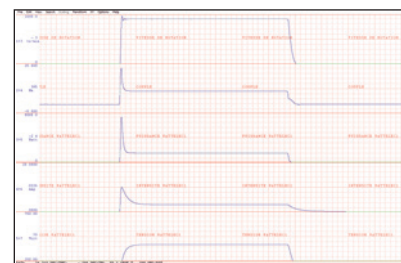
- Display of mechanical torque in N.m
- Speed display in rpm
- Displays mechanical power in Watt
- Speed gauge adjustment by push button (2V/10V/20V/60V gauges for 1000 rpm)
- Torque gauge adjustment by push button (20/50/100N.m gauges)

Functions measurement of balanced electrical quantities

- Values displayed in TRMS
- Display of voltage in V
- Display of current in A
- Display of power in W
- Allows continuous and alternating measurements up to 50Hz
- Max voltage 400V in Single-phase and 700V in three-phase
- Max current 20A
- Single-phase or three-phase selection by switch on the front panel.

Data acquisition functions

- Retrieves measurement of electrical and mechanical signals
- Connection to the PC via a USB interface (cable supplied)
- Allows to visualize in real time or deferred the curves of the measurement
- Possibility to export the curves on a spreadsheet to perform calculations such as slip, efficiency, cosphi,
- Software included only in English
- Possibility to make curves in X / Y



LOAD OPTION

The bench can be optionally equipped with a resistive load.

- The quality of a load is directly related to the equipped switches. Our loads use ultra-fast break switches, able to cut direct current with selfic effect, for example the current delivered by a 3kW dynamo.
- The resistive elements are made of manganin wire wound on ceramic tubes and coated to prevent aging due to oxidation.
- The 6 switches are placed on the front of the Station. (5-10-15-20-25-25%)
- Mode selection jumpers and Ø4mm safety terminals are placed at the rear of the Station.
- DC Mode and Single-Phase 240V / 3-phase triangle 240V / 3-phase star 400V.
- 5% jumps

ref. PST-RH20 for model PST-ALM20

ref. PST-RH40 for model PST-ALM40



Ref. PST-ALM40 + PST-RH40

SYNCHRONOSCOPE OPTION

This option allows you to connect a rotating electrical machine to the grid. The option includes the synchronoscope as well as the attachment to the station.

- Machine and grid connections on safety terminals Ø4mm.
- 2 displays, 1 for the grid side and 1 for the rotating machine side. It indicates the presence and the order of the phases.
- 1 central display allows you to compare the difference in voltage and frequency between the 400V three-phase grid and the rotating machine.
- 1 set of LEDs allows to visualize when to switch the synchronization switch on and thus connect the rotating machine to the grid.

ref. PST-CHR3



Modèle présenté : Réf. PST-ALM40 + PST-RH4 + PST-CHR3