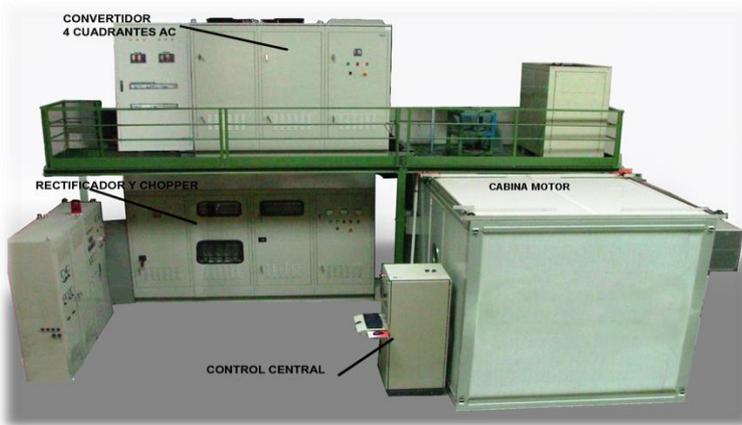


DATASHEET



- Direct and alternating current traction motors
Rated power up to 600kW (other powers available)
Automated control with generation of test protocols

- Carrying out of tests

- Vacuum
- Warming-up
- Switching
- Speed
- Over-speed

User software with all processes controlled from a PLC

- High performance with electric energy recovery

General description

Test bench for engines with recovery to the electric grid developed by SUPSONIK, S.L. allows full testing of traction motors:

- Alternating current traction motors
- Direct current traction motors

The Test Bench represents an automatic checking system for a wide range of motors.

The bank consists of several power and centralized control units that allows to carry out a full test cycle.

- AC/DC or AC/AC Output Converter
- AC III Generator
- AC/AC output converter
- Control and Measurement Unit (PLC)

Due to the transformation of the mechanical energy from the motor to electrical energy, the Bench enables the recovery of energy, reducing energy costs of up to 85%.

Another of the peculiarities of this bench is its complete automation in the carrying out of tests. The whole system is governed by a central control, performing the tests automatically and providing the user with a friendly and simple system-wide interface.

Main parameters of Motor Test Benches:

- Rated power 600kVA
- Pre-programmed motor parameters (according to specifications)
- Motor supply voltage up to 600A
- Energy recovery (reducing energy costs up to 85-90%.)
- Measures of speed, vibration, insulation, windings resistance, temperature of bearings, etc.
- Automated control with generation of test protocols
- Database storage of all tests performed
- User software with all processes controlled from a PLC

*Supsonik S.L. Offer customized development with special features and adapted to your needs.
 For further information please contact the manufacturer.*

AC/DC Converter

Rated/maximum power	600 kW / 660 kW
Nominal input voltage AC	400 V 3~ 50 Hz ± 10%
Rated DC output voltage	350 ÷ 1800 V
Maximum output DC voltage	600 A
Galvanic isolation	yes, Line transformer
Polarity reversal (FIELD terminals)	Yes

AC/AC Converter

Rated power	600 Kw / 660 kW
Nominal input voltage AC	400 V 3~ 50 Hz ± 10%
AC output current voltage	400 ÷ 950 V 3~
AC Output Frequency	0 ÷ 100 Hz
Maximum output AC voltage	950 A
Galvanic isolation	Yes
Output phases sequence changing	Yes

AC III Generator

Rated/maximum power	550 kW (@1500 rpm) / 660 kW (@1800 rpm)
Rated speed	1500 rpm
Rated torque	3500 Nm
Rated frequency	50.5 Hz
Rated current (400Vac 3 ~)	470 A (234kW) @ 580 rpm
	710 A (385kW) @ 1000 rpm
	984 A (550kW) @ 1500 rpm
	1177 A (660kW) @ 1800 rpm

AC/AC Converter

Rated power	660 kW
Nominal input AC voltage	400 V 3~ 50 Hz
Input frequency	19 ÷ 100 Hz
AC Output rated voltage	400 V 3~ 50 Hz
AC output current voltage	950 A
Output Power Factor Typical/ minimum full load	0.99 / 0.97
Typical / maximum harmonic distortion	3% / 5%

ENVIRONMENTAL CHARACTERISTICS

Protection degree	IP21 (optional IP54)
Working temperature	-15°C to 40°C
Storage temperature	-25°C to 65°C
Relative humidity	15% to 95% with no condensation
Altitude	1000 m.

DIMENSIONS AND WEIGHT

AC/DC Converter (input)	
Dimensions (Width x Depth x Height)	3200 x 800 x 2150 mm
Weight	2950 Kg
AC/DC Converter (input)	
Dimensions (Width x Depth x Height)	2400 x 800 x 2150 mm
Weight	2550 Kg
AC/AC Converter (output)	
Dimensions (Width x Depth x Height)	2400 x 800 x 2150 mm
Weight	2550 Kg
PLC Control Panel	
Dimensions (Width x Depth x Height)	600 x 600 x 1800 (mm)
Weight	200 Kg
Colour	RAL 7035

USER INTERFACE

• Graphic touch screen (PC) with performance mimics	• Local / Remote Control.
• Wired signal communications, RS485	• Generation of the protocol (database)

Specifications subject to change without notice