

DC WOUND SHUNT MACHINE motor/generator

MOD.7140S

Technical specifications

Industrial, complete with base plate, provided with silk screened terminal board and with 4mm safety sockets.

Modes:

Self- and external excited
-Generator
-Motor .

Nominal voltage:

230Vdc

Excitation voltage:

230Vdc

(Other voltage on request)

Nominal power:

5kW

(Other power on request
up to 9 kW)

Speed:

0-2000 rpm



General

The shunt wound DC motor falls under the category of self excited DC motors, where the field windings are shunted to, or are connected in parallel to the armature winding of the motor.

Both the armature winding and the field winding can be exposed to the same supply voltage, though there are separate branches for the flow of armature current and the field current.

Also the two windings may be connected to two separate supply voltage.

The shunt excited generator, if driven by a prime motor at its nominal speed, gives its nominal voltage and power.

As indicated on the silk screened terminal board, the machine windings are:

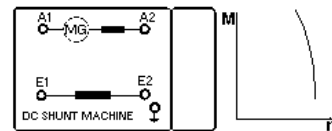
- 1 - A1-A2 rotor winding (Armature)
- 2 - E1-E2 excitation winding

Didactical purpose

- External characteristic determination for a DC generator
- Regulation characteristic determination for a DC generator reversing the rotation direction
- Direct test for mechanical characteristic (torque as function of the speed)
- Motor connection
- Typical machine data evaluation
- Measurement of the windings resistance
- Unload test of the motor
- Direct test for electro-mechanical characteristic (torque, speed, input current, efficiency as function of the output power)



- Protection against thermal overload.
- All connections on 4 mm safety sockets included thermal contact.
- Imprinted terminal boards with the synoptic.
- With coupling cog for easy engagement with other machine.
- Manual explaining theory and practice for laboratory experiments included.



Options and accessories:

Depending on the specific requirements of the application the machine can be provided with two shaft ends or with other power values. Also it can be designed in order to have the required nominal speed.

A full range of accessories are available like electromagnetic brakes, powder brakes, voltmeters, ammeters, power meters, connection cables, power supplies, Speed Encoders, Torque sensors etc.



Starting rheostat for dc motor
MOD.7010



20 step resistive load for AC&DC generator
MOD.7021-R



Field regulator rheostat for ac& dc generator
MOD.7013



Speed control with SCR for DC machine
MOD.7230