italtec
Technical Training Systems

Company with Quality Management System
Certified by DNV = ISO 9001/2008 =

POWDER BRAKE

MOD.3174

Technical specifications

Provided with silk screened front panel and with 4mm CE safety sockets.

Excitation voltage:
0-25Vcc

Excitation current:
0 – 1,00A

Nominal power:
500W (Other power on request)

Maximum torque:
5Nm
(also available 12 Nm, 35Nm)

Minimum speed:
40 rpm

Maximum speed:
3000 rpm

Dimensions (LxWxH):
25x15x24 cm

Weight:
5 kg

CE

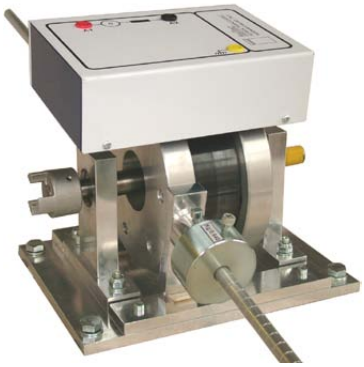
General

Magnetic powder brake is used as a mechanical load for the torque detection of electric motors.

A slight excitation power is required and the full braking torque is available even at standstill.

Torque recording is made using a load cell or a rotating torque-transducer or with the classical balance system.

The brake is for that provided with graduated arms, weights and counter weight for the torque measurement.
Linked to the machine via a free shaft and with cog coupling sleeve and anti-vibration base plate. External cooling



- *Imprinted terminal boards with the synoptic.*
- *Base plate with four rubber feet.*
- *With coupling cog for easy engagement with other machines.*
- *All connections on 4 mm safety sockets included thermal contact.*
- *Manual explaining theory and practice for laboratory experiments.*

Didactical purpose

This device is used for mechanical and electro-mechanical characteristic detection of any motor to be test.
Thanks to its easy use, it is possible to detect the mechanical characteristic of a motor, that means the torque variation as function of the motor speed and the electro-mechanical characteristic that means torque, speed, input current, efficiency and power factor as function of the output power.

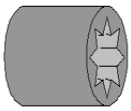
Accessories

A full range of accessories are available like measuring instruments, connection cables and power supplies.

Torque meter **MOD.3180C**

Rotating torque transducer for torque detection

Coupling gears



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