

## 8.1 - BRAKES & TORQUE METERS

- With rail base and coupling cog for easy engagement with other machine
- Input/output with standard 4 mm safety sockets
- Protection against thermal overload
- Imprinted terminal boards with the synoptic
- Two shaft ends
- Manual explaining theory and practice

### Mod.4170 Electrodynamicometer (brake/generator)

Brake and generator with separate excitation, mounted on oscillating frame in order to operate as a brake. The electrodynamicometer is complete with arms, weights, and counterweights, for usage with the classic mechanical scale method, with the graduated measuring rod and weights. As with all brakes, the torque measurement can be made with the aid of the arms and weight provided or by using the load cell and the reader Mod.4203-07.

- Nominal voltage: 220V d.c.;
- Excitation voltage: 0÷ 210V d.c.
- Speed: 1000/3600 rpm;
- Power: up to 1,5kW at 3000 rpm;
- Coupling type: cog coupling
- Weight: 16 kg

#### Optional accessories:

- Load adjustable with steps.
- Excitation power supply.
- Encoder for detecting the speed in rpm.
- Load cell or torque meter for detecting the couple.
- Digital meter for displaying the speed and couple in Kgm or Nm.



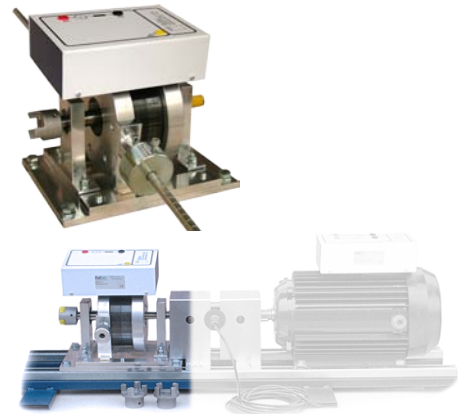
### Mod. 4174 Magnetic powder brake

Magnetic powder brake for test and measurement of the torque and power of electrical motors. Brake is complete with arms, weights, and counterweights, for usage with the classic mechanical scale method, with the graduated measuring rod and weights. For direct test on the brake of electrical motors 1/2kW, 1000/3000 Rpm.

- Couple: 0,3 - 12Nm. •Coupling type: cog coupling; •Weight: 9 kg

#### Optional accessories:

- Excitation power supply.
- Encoder for detecting the speed.
- Load cell or torque meter for detecting the couple.
- Digital meter for displaying the speed (rpm) and torque, both in Kgm or Nm.



### Mod.4180 Electromagnetic Eddy Current Brake

Eddy current brake for test and measurement of the torque and power of electrical motors.

The brake is complete with arms, weights, and counterweights, for usage as the classic mechanical scale with weights. As with all brakes, the torque measurement can be made with the aid of the arms and weight provided or by using the load cell and the reader and digital display Mod.4203-07.

For direct test on the brake of electric motors up to 1,5kW and 3000 Rpm.

- Excitation voltage: 0÷ 210V d.c.
- Speed: 1000/3600 rpm; •Weight: 16 kg

#### Optional accessories:

- Excitation power supply.
- Encoder for detecting the speed.
- Load cell or torque meter for detecting the couple.
- Digital instrument (Mod.4203-07) for displaying the speed (rpm) and couple automatically, both in Kgm or Nm.



### 8.2 - BRAKES & TORQUE METERS

#### Mod.4203-07

##### Torque & Speed Meter with Load Cell

The meter can be equipped with a load cell or an optional torque transducer for torque detection and with a speed sensor. When used with brakes, it allows to measure the motor torque and speed.

It can be calibrated both in kgm or Nm.

The meter can be used with all brakes.

Optional accessories:

- RS485 interface.
- Management software

#### Mod.4203-07-TT

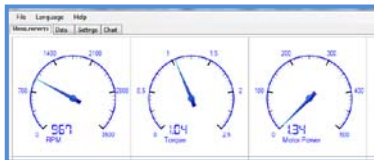
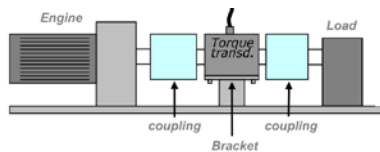
##### Torque Transducer



Torque Transducer



Load Cell



#### Mod.4203-08

##### Torque & Speed Meter with management software

The meter can be equipped with a speed sensor and a load-cell (or a torque-transducer) for torque detection. When used with brakes, it allows to measure the motor torque, speed and power. Values are shown on digital display, in kgm or Nm.

Optional PC RS485 port, allows to read on PC screen: torque, speed and power, in real time. When a load is applied to the motor, it is possible to observe the torque and speed variation and get the power variation of the motor.

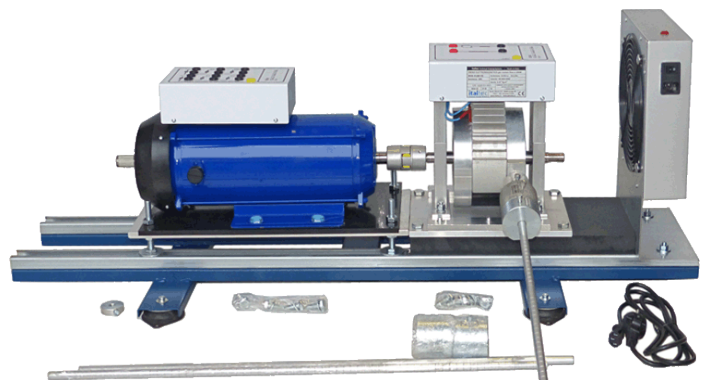
To print the torque-speed graph for all machines under test. Data can be printed or stored xls or pdf files. Meter can be used with all brakes.

#### Mod.6032P Basis for brakes with height-adjustable base for motors

For direct test and measurement with motors with different sizes and watts up to 12 Kw.

Height-adjustable base allows easy alignment of brake even with motors with different shaft height and different sizes and powers.

Optional cooling fan.



#### Mod.4186 Inertia wheel

For simulating heavy starting and energy storage. Design: built into a machine housing with base plate.

- Flywheel mass: 10kg



#### Mod.4180-ALIM

For excitation of brake Mod.4180.

Input: 220/230Vac

Output: 0÷220Vdc