



# ELECTRIC MACHINES – UNILAB – 1 kW



## MULTIFUNCTION DIGITAL SYSTEM (MDS)



### DL 55060T

Electrical and mechanical measurement module.

The unit allows the following measurements:

Electrical measurements:

- AC: voltage  $10 \div 450V$ , current  $0.3 \div 20A$ , active power, reactive power, apparent power, power factor,  $\cos\phi$ , frequency, etc.
- DC: voltage  $< 600V$ , current  $0.3 \div 20A$ , power.

Mechanical measurements:

- Torque ( $0 \div 500 Nm$ ), speed ( $0 \div 4000 rpm$ ), mechanical power.

HMI (Human-Machine Interface) touch panel 7".

Available connections: RS 485, Ethernet, USB.

Communication Protocol: MODBUS RTU.

Possibility of remote control with PC, tablet or Smart Phone through an Ethernet network.

Possibility to connect to a printer, mouse, keyboard or pen drive to export data through a USB port.

Power supply: 90-260VAC, 50/60Hz

## MECHANICAL POWER DIGITAL MEASURING SYSTEM



### DL 50050TR – DL 50050TR1

Digital meter.

Placed between two machines, it allows measuring the torque, the shaft power and the speed.

**Technical features:**

- Power Supply: 220 - 240 V AC 1-phase, 50-60 Hz
- Nominal torque: - 17.50 Nm - + 17.50 Nm
- Nominal shaft power: - 5.50 kW - + 5.50 kW
- Nominal speed: - 3000 rpm - + 3000 rpm
- Max. mechanical torque: 25 Nm
- Tacho feedback output: 14 V DC / 1000 rpm
- Baud Rate: 9600 kB / 19200 kB
- Data acquisition protocol: Modbus RTU 8N1

## TACHOGENERATOR



### DL 2065RM

Transducer that provides a voltage proportional to the angular velocity.

It is basically a direct current generator whose excitation circuit is composed of a permanent magnet, so that the flux is constant, coaxially mounted on the machine under test.

**Technical features:**

Constant of the tachogenerator:  $KT = 0.03 V/rpm$

At  $n = 3000 rpm$ ,  $V = 90 V f.s.$