

DCU 3000 - FOR 3 MACHINES

» A HIGH ACCURACY CONTROL

EtherCAT[®]
Technology Group



DCU 3000 rack

CONTROL

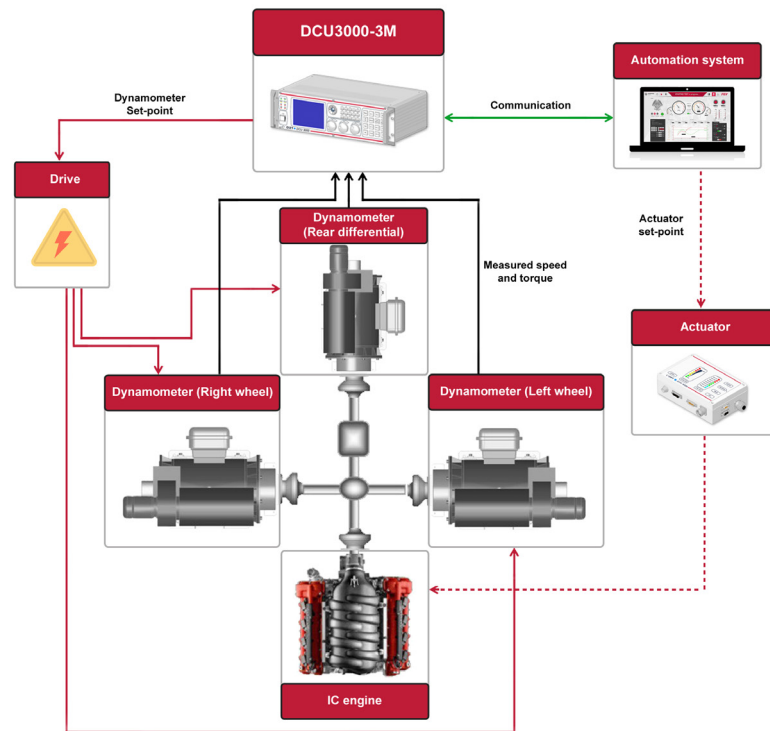
The dynamometer control unit 3000 is entirely dedicated to the control of up to three independent machines. It manages all the regulations modes of your test cell in a completely secure and highly precise manner. The DCU 3000 is adapted to most machines from the market.

EtherCAT is an open high performance Ethernet-based field bus system that enables to support higher frequency, up to 10kHz. Its main goals are to have shorter data update times and to have low communication jitter without increasing wiring and hardware costs.

Benefits

- > All regulations are possible for speed, torque and current
- > Flexible: Adapted to many kinds of drives and machines
- > High performance thanks to EtherCAT bus
- > Dedicated filtering for engine applications
- > Integrated alarms management for secured test bed shut downs

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Technical Data

Acquisition	Measurements, regulations and analog outputs at 1 kHz (16 bits / ± 10V)
Inputs / Outputs	3 x Differential inputs 16 bits ± 10 V for torque measurements 3 x Frequency inputs for speed measurements 3 x Analog outputs ± 10 V for machines and actuators setpoints 13 x Control digital outputs (static relays) 16 x Alarms digital inputs
Interfaces	PC : EtherCAT Front face GUI (panel) Torque and speed measurements: 3 x D-sub 9 pins connectors Machine drive: 3 x D-sub 15 pins connectors
Functions	Torque measurements calibration Parameters setting through GUI or configuration software Safeties parameters setting Online PID set changes (during a test) Motored stop from external contact (ex: emergency stop) Manual control from the front panel
	Torque measurement accuracy: ± 0,1% FS Speed measurement accuracy: ± 1 rpm Power supply: +24 Vdc Average consumption: < 24 W Operating temperature: 0...+50°C EMC: IEC61326-1 Size (L x H x D) : 19" x 3U x 285mm Weight: ~ 5 kg

Technical specifications may be modified without prior notice.

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