

COOLING SYSTEM MEASURING STATION FOR BEV/PHEV/MHEV

B_23092



B_23092 station is built for the measurement of the hydraulic parameters of powertrain cooling system of thermal, hybrid and/or electric vehicles.

The tests involve the installation of the measurement sensors on a special test bench (already existing) that reproduces the layout of cooling system of the powertrain installed on the vehicle. The surveys are carried out using water/glycol mixture at room temperature.

Pumps (LIN or PWM) are fed with glycol water mix, at different temperature to simulate working conditions. It's possible to run the pump at different speed or with a speed profile.

Flow, pressure, temperature, power and speed are recorded.

By PC panel it's possible to control:

- Flow, mixture pressure, temperature, power and speed
- · Test time and test steps profile

TECHNICAL DATA:

Pressure: 4 bar_g (max)
Flow: 400 ± 2 lpm (max)
Temperature: 80 ± 2 °C (max)

INSTRUMENTATION:

Flow meters: n° 12, DN4 ÷ DN32

0 ÷ 200 lpm; 0,2% f-s accuracy

Pressure transmitters: n° 10 relatives, -1 \div 4 bar_g,

accuracy 0,04% f-s; n° 2 absolutes, 0 ÷ 5 bar_{abs}

accuracy 0,04 f-s.

• Temperature transmitters: 0 ÷ 120 °C, PT100, cl. AAA

Function generator: $0.1 \div 5 \text{ MHz}, \pm 20 \text{ ppm}, 1 \text{ k}\Omega$

• Power supply: $0 \div 80 \text{ V}, 0 \div 20 \text{ A}$

SAFETY DEVICES:

Emergency mushroom button

SUPPLY:

Electric: 400 Vac - 50 Hz – 13 kW

DIMENSIONS AND WEIGHT:

• L, p, h: 1200 x 1033 x 2005 mm;

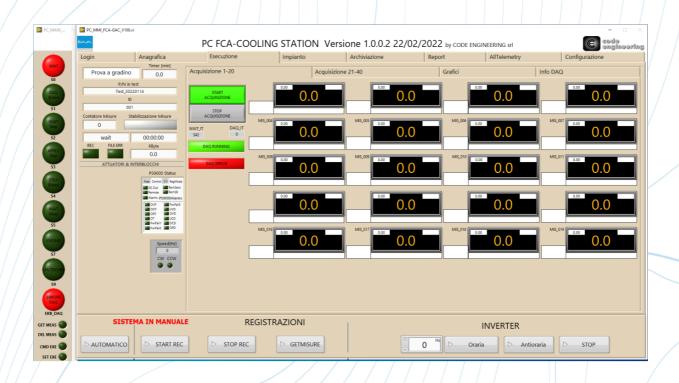
Total raw load: ~ 280 kg

COLOR:

• Standard: Gray 7035.

NOTE:

Fluid and adapters not included



The test stand is equipped with a PC and NI data acquisition system. PC software can set the test profile and can create a complete test report.

The test bench meets Industry 4.0 requirements.

Via internet connection it allows you to:

- obtain informations about test bench and carry out control and management operations;
- use the BAVA remote assistance service;
- any kind of remote control.

GUI can be shown in different languages





