



**ALT-168**

## Acyclism Test Bench

### ◆ General Features

- ◆ Overrunning Alternator Pulleys (OAP), Overrunning Alternator Decoupler (OAD),
- ◆ Double station reliability test bench via belt drive : one motor per station,
- ◆ Simulation of automotive alternator networks with electronic loads and batteries,
- ◆ Full computerized bench control and measurements,
- ◆ The alternator driving system carries out a sinusoidal speed variation,
- ◆ Continuous speed range: from 0 up to 16 500 rpm,
- ◆ Acyclic speed range from 500 up to 9 600 rpm,
- ◆ Acyclic amplitude: from 0 to +/- 512 rpm,
- ◆ Acyclic frequency: from 10 Hz to 100Hz,
- ◆ Alternator electrical features: 300A /14V; 150A/28V; 75A/42V,
- ◆ Operating temperature  $-45^{\circ}\text{C}$  to  $200^{\circ}\text{C}$ , or from ambient to  $200^{\circ}\text{C}$  or at ambient

### ◆ Software Features

- ◆ Specific software to control the bench with a friendly Graphic User Interface,
- ◆ Manual mode: bench is manually driven by user,
- ◆ Calibration mode: via user interface,
- ◆ Automatic mode test: write very easily program test procedures,
- ◆ Test duration: user defined, even until alternator fails,
- ◆ Digital and graphical displays of measurements,
- ◆ Configurable system record measurements data.

### ◆ Safety Features

- ◆ Hardware emergency stop in case of failure (security chain opened, alternator belt broken, door open..)
- ◆ Configurable alarms and warnings or suspend tests
- ◆ Suspend mode on alarm event during an automatic test sequence with a user resume command in order to safeguard all data from start of tests.



### ◆ General data

Output Voltage	0-50V +/- 0.15%
Output current	0-300A +/- 0.15%
Field Voltage	0-50V +/- 0.15%
Field Current	0-10A +/- 0.1%
Battery Voltage	0-50V +/- 0.15%
Operating Temperature	Ambient to $150^{\circ}\text{C}$ +/- $5^{\circ}\text{C}$
Rotor & Pulley Speed	0 up to 16 500 rpm +/- 3rpm
Auxiliary voltage	0-50V +/- 0.15%
Auxiliary current	0-300A +/- 0.15%

### ◆ Options

Operating Temperature	Ambient from $-50^{\circ}\text{C}$ to $200^{\circ}\text{C}$
Extra auxiliary analog & digital I/O	
Additional temperature measurements	

[www.controlsys.fr](http://www.controlsys.fr)  
[info@controlsys.fr](mailto:info@controlsys.fr)

### ControlSys France

20, rue de Lattre de Tassigny  
78990 Elancourt - France  
Tel.: 33 (0)1 30 64 12 55  
Fax: 33 (0)1 30 64 12 65

### ControlSys China - Beijing

Zhongli Heda Technology Co. Ltd  
Room 420 Shuang Tian Office  
Building, Jia No.30 West Road North  
Third Ring, Haidian District, Beijing, China  
Tel.: (+86)13911036255

### ControlSys China - Shanghai

Environmental World Products - EWP  
No.3, Lane 1015, South Boxue Road  
Malu Town, Jiading District  
Shanghai, China 201801  
Tel: (+86) 21 5915 3070