

TYPE 1100-4G

DATA SHEET

Description

The REGULATEURS EUROPA 1100 series governor has been established as one of the leaders in the field of prime mover speed control for the past decades, with many thousands in service throughout the world.

The 4G or fourth generation model is specifically designed to meet the ever-increasing demands of modern prime mover controls and incorporates a number of design improvements over earlier models.

Retaining the original modular design, the 4G has an improved stability margin to cope with the more difficult speed governing requirements of today. The work output options are increased so that the 1100 range can control most high and medium-speed diesel and dual-fuel engines.



Features

- Proven design
- One module with 5 different work outputs all within the same frame size
- Numerous speed setting options
- Numerous options i.e. fuel limitation, load control, torque control, etc.
- Shut-down options
- Self-contained oil supply
- Drop adjustment
- Constant or variable speed applications
- Common base mounting
- Output shaft either side
- Drive shaft can rotate clockwise or counter clockwise
- Standard adaptors available to replace other manufacturer's governors

Specification

Work within the same outline dimension	8, 12, 15, 25, 34 or 40 ft lbf (11, 16, 20, 34, 46 or 55 Nm)
Variable speed applications	Normal operating speed range 300 ... 1,600 rpm Recommended rated speed 1,500 rpm
Constant speed applications	Governor drive speed range at rated engine speed 1,200 ... 1,600 rpm Recommended nominal speed 1,500 rpm
Output shaft movement	50° (maximum) with 30° to be used from no load to full load at nominal/rated speed
Drive shaft rotation	Either clockwise or counter clockwise
Speed droop	Adjustable by external dial type control for 0 ... 160 rpm for 60 % of the output shaft travel
Speed setting motor	24 VDC 3 wire (preferred option) Universal motors: 110/120 Volts DC/AC 3 wire 220/230 Volts DC/AC 3 wire Synchronous motor 110 Volts A/C, 220 Volts A/C stepping motors for automatic frequency control and accurate load share A 24 VDC supply is required for the stepping motor drive board

Pneumatic speed setting	Adjustable pressure range 0.5 ... 5.5 bar Hysteresis and repeatability within ± 0.2 % of the maximum speed The air pressure/speed relationship is linear within 2.5 % between 500 and 1,500 rpm governor speed. Other pressure ranges are available
Output shaft dimensions	5/8" in nominal diameter, 36 SAE serrated, either side of the governor, as required
Drive shaft dimensions	Standard 3/4" in nominal diameter, 48 SAE serrated or 25 mm nom. diameter keyed Other drive shafts are available to suit application
Governor adaptors	Various adaptors, studs and drive shafts are available to convert drives, to replace other manufactures governors
Shutdown solenoids	24, 48, 110 and 200 VDC (energised to stop or to run)
Manual shutdown	A manual shutdown can be fitted as a simple shutdown mechanism but this option can also be combined with the solenoid "energise to stop" or the pneumatic shutdown feature, to suit individual requirements
Pneumatic shutdown	A pressure of 6 bar is normally supplied to the pneumatically operated shutdown feature to suit individual requirements
Oil supply	Self-contained 1.5 litres
Weight	Basic governor i.e. lever speed setting model 1101V-4G is 24 kg
Power requirements	At 1,500 rpm governor drive speed is 0.37 hp (0.28 kW)
4-20 mA speed setting	An electric speed setting for propulsion packages. A 24 VDC supply is required for the stepping motor drive board.
Boost fuel limit	To limit the fuelling rate depending on engine boost pressure. Adjustable fuel limit range between: 0.2 ... 1 bar, 0.3 ... 3 bar, 0.5 ... 4 bar, 0.5 ... 6 bar.
Torque control	To protect the engine from excessive overloads, two models are available: a) fuel limit depending upon set speed (1104B-4G) b) to reduce set speed automatically until it arrives at a point of the rated hp curve where the power demand equals the engine's capacity to supply the demanded power. If demanded power decreases, set speed is automatically restored (1104G-4G)
Load control	The load control mechanism gives a hydraulic signal (to f.i. pressure switch) when the engine deviates from a pre-set power/speed curve. (Normally used in conjunction with a C.P.P.) LVDT option available.
Start air fuel limit	A start air fuel limit is available using boost air or an electrical signal 24 V.