

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 40 years, 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.



Specification

Work within the same outline dimension

8, 15, 25, 34 or 40 ft lbf (11, 20, 34, 46 or 55 Nm).

Variable speed applications

Normal operating speed range - 300 to 1600 r/min.

Recommended rated speed 1500 r/min.

Constant speed applications

Governor drive speed range at rated engine speed - 1200 to 1600 r/min.

Recommended nominal speed 1500 r/min.

Output shaft movement

50 degrees (maximum) with 30 degrees to be used from no load to full load at nominal/rated speed.

Drive shaft rotation

Either clockwise or counter clockwise.

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

Speed droop

Adjustable by external dial type control for 0-160 r/min for 60 % of the output shaft travel.

Speed setting motor

24 Volt dc 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 1500 r/min 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, 48SAE serrated or 25mm 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 Volt DC (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 1500 r/min governor drive speed is 0.37 hp (0.28 kW).

4-20 mA speed setting

An electric speed setting for propulsion packages. A 24 Volt DC 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:

- fuel limit depending upon set speed (1104B-4G)
- 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 fuel limit

A start fuel limit is available using boost air or an electrical signal 24 V.

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