

M602901F

DATA SHEET



Features

Analogue and digital speed setting

Ramp to idle and ramp to rated function

Constant speed mode

Adjustable speed ramp rates

Easy programming without laptop or programming tool

Description

REGULATEURS EUROPA (RE) series hydraulic governors may be equipped with a speed setting device which can be adjusted from a 4-20 mA signal.

In this instance the speed setting mechanism in the governor is adjusted by means of stepper motor. The stepper motor is controlled by driver M602901F.

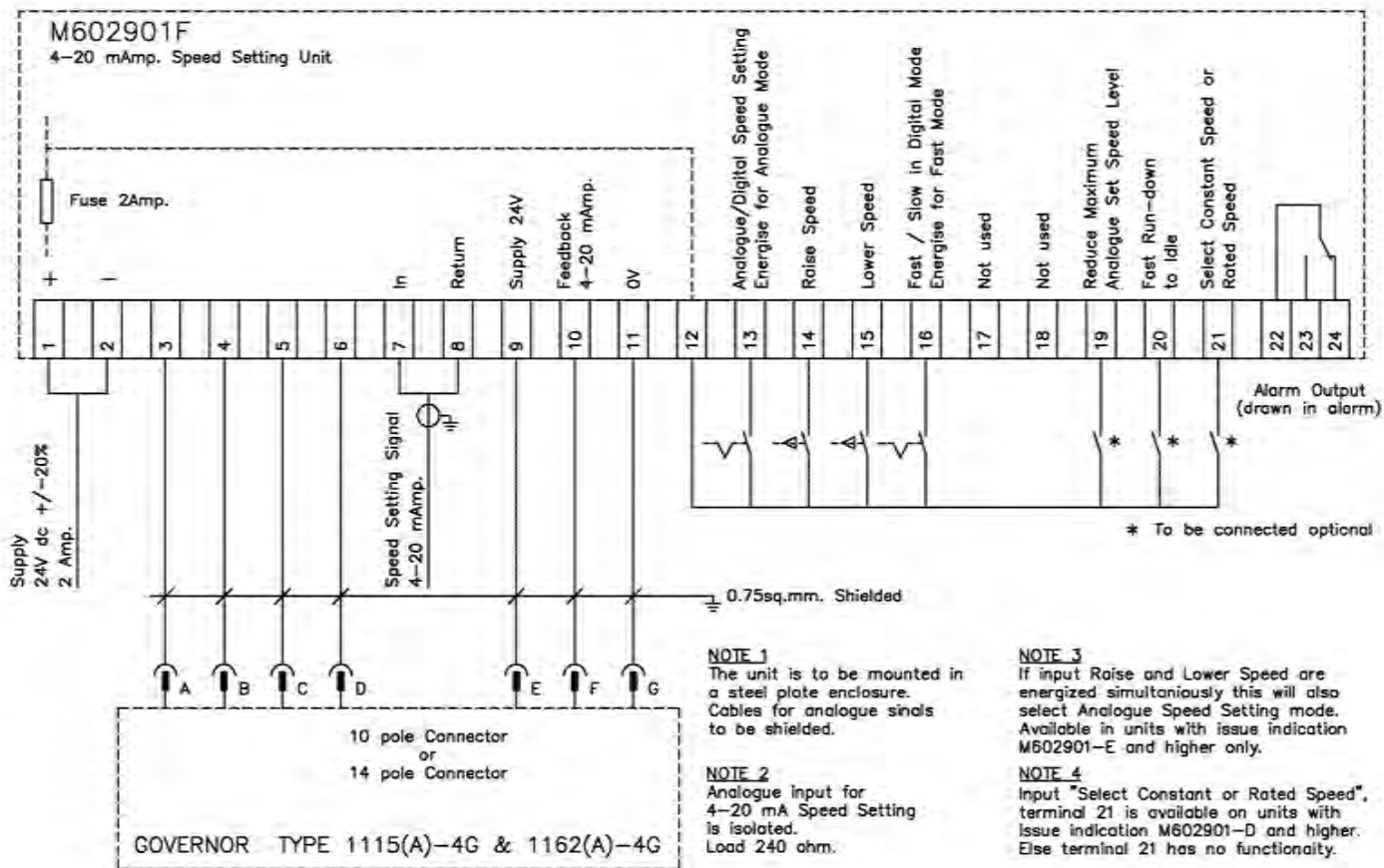
Applications

Hydraulic governors with electronic speed setting and actuators with a mechanical back-up with electronic speed setting. Especially when set speed tracking is required.

Specification

Dimensions	200 x 125 x 75 mm
Weight	0.475 kg
Humidity	0 up to 97 %
IP rating	Enclosure dependent
Power supply	24 VDC +/-20 %, 1,75 A
EMC	The unit complies with the requirements of IEC61000-4-2, -3, -4 and 5 if mounted in a steel plate enclosure
Ambient temperature	60 °C
Output	Bipolar chopper regulated four wire to drive a stepper motor 5 Volt 1 Amp
Command input	4-20 mA into 240 Ω galvanic isolated Range minimum signal level 4 – 8 mA Range maximum signal level 16 – 20 mA
Feedback input	8 – 16 mA into 200 Ω or 0.7 – 3.5 V into 150 kΩ Supply feedback transducer 24 V
Digital inputs	24 V into 10 kΩ "H" status > 7.5 V "L" status < 5.0 V
Functions	<ul style="list-style-type: none"> • Analogue speed setting mode • Ramp rate adjustable for increase or decrease speed • Raise speed in digital speed setting mode • Lower speed in digital speed setting mode • Fast/Slow ramp rate selectable if in digital speed setting mode • Minimum speed stop • Maximum speed stop • Selectable reduced maximum analogue speed setting level • Select idle speed setting level • Select run-up to rated speed (constant speed)
Analogue speed	Independently adjustable raise and lower speed ramp rates setting mode range of ramp rate 25 - 165 rpm. Below 20 % of maximum speed setting error the ramp rate is proportional to error. The speed setting will be frozen in last position upon failure of the command and/or feed- back signal.
Dead band	Adjustable between 0 – 4 % error
Digital speed setting	If "Slow" is selected adjustable from 0.1 to 10 rpm If "Fast" is selected adjustable from 25 to 100 rpm Please note: Above mentioned ramp rates are expressed in governor speed, the gear ratio governor-engine is to be included!
Alarm output	A potential free change over contact is available for alarm indication. It will change status in case of: <ul style="list-style-type: none"> • Power failure and/or program malfunction • Loss of the command and/or feedback signal
LED indication	<ul style="list-style-type: none"> • Command signal lost • Feedback signal lost • Speed setting is increasing • Speed setting is decreasing • Maximum speed stop reached • Minimum speed stop reached
Mounting	The unit is to be mounted in a metal enclosure. Cabling for analogue signals (command and feedback) to be shielded.
Type approval	GL and DNV type approved, BV type approval pending

Dimensions



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