

M0500 Tacho Voltage Detector

Converter for M2100 Emergency Controller and M2000 Engine Controller

The unit substitutes - together with the M-controller - a voltage relay and a tacho relay with 3 levels. On the front the LED "POWER" will indicate that 12-24V DC is connected.

The M0500 is only operative with programming switch S15 open on the M2000 and the M2100.

In details the unit has two functions:

- 1) To amplify, convert and filter the very low voltage on the self excited synchronous generator present at 33% of nominal frequency, and at the same time take care of the signal when the generator is on nominal voltage.

The output signal is on terminal 3 and when this is connected to terminal 8 "TACHO INPUT" on the controller a square wave voltage will appear with the generator's frequency. In the controller this frequency will be detected as follows:

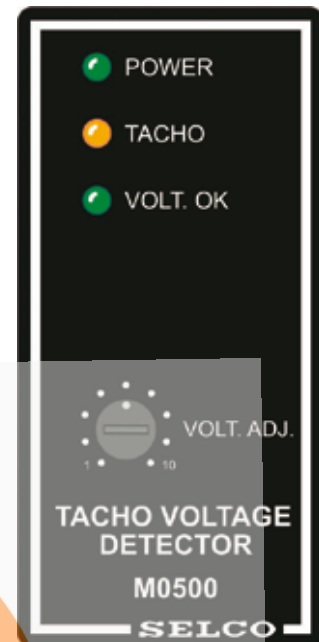
More than 33% is : Crank disconnect
More than 90% is : Normal R.P.M.
More than 115% is : Overspeed

If the output signal is present, the LED "TACHO" indicates.

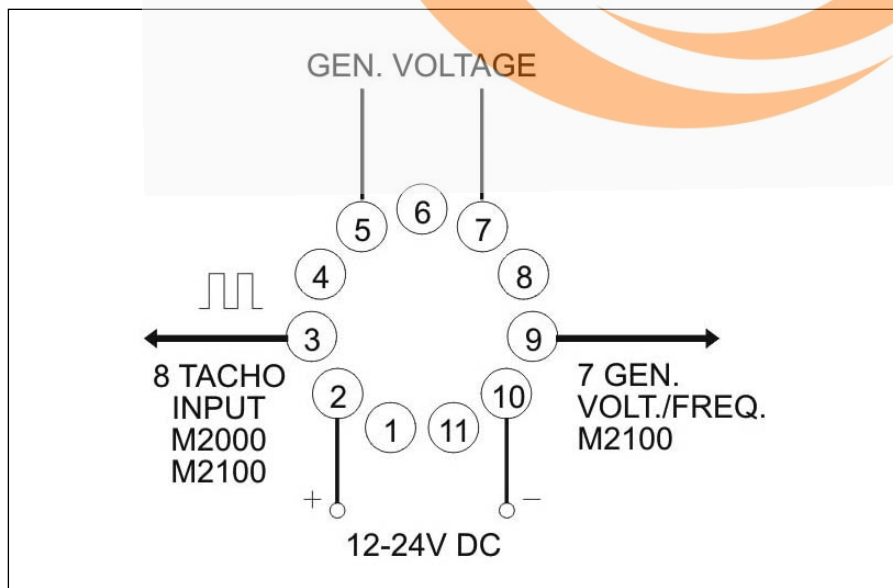
- 2) To measure the generator's voltage and to give a signal when the voltage is higher than 90% of the nominal voltage. This function is used in connection with the M2100.

The output signal is on terminal 9, and with this connected to terminal 7 on the M2100 this terminal will indicate when the generator is on nominal voltage. In the controller the signal is used to allow transfer and load on the emergency generator. When the output signal is present LED "GEN. VOLT" indicates.

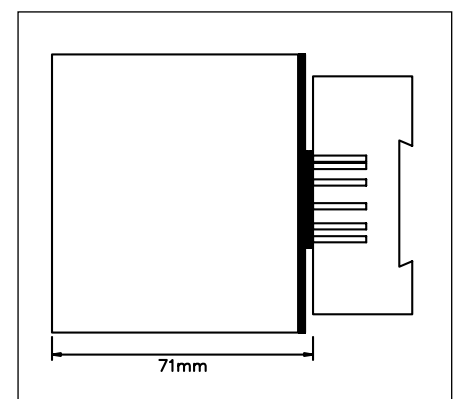
At delivery this voltage level is set to 90% of the nominal voltage. However, this level can be changed on the voltage adjustment dial on the front of the unit. Apply the desired voltage and adjust the dial level so that the "VOLT. OK" LED indicates at this voltage level.



All these functions are used in connection with the M2100, but the M2000 only needs two functions: crank disconnect 33% and overspeed 115%.



Connections.



Dimensions.

Specifications

M0500 Indicator Tacho Voltage Detector

SELCO Worldwide



Argentina
Australia
Austria
Brazil
Belgium
Bulgaria
Chile
China
Croatia
Czech Republic
Egypt
Finland
France
Germany
Greece
Hong Kong
Iceland
India
Indonesia
Iran
Italy
Japan

Korea
Malaysia
Mexico
Netherlands
New Zealand
Norway
Pakistan
Philippines
Poland
Portugal
Romania
Russia
Singapore
South Africa
Spain
Sweden
Taiwan
Thailand
Turkey
Ukraine
United Kingdom
U.S.A.

Voltage supply	12-24V DC -30% / +30% (8-32V DC)
Consumption	40mA
Frequency range	0-100Hz
Operating temperature	-20° to +70°C
EMC	CE according to EN50081-1, EN50082-1, EN50081-2, EN50082-2
Approvals	Certified by major marine classification societies
Burn-in	50 hours before final test
Enclosure material	Noryl. Flame retardant
Weight	160g
Dimensions	76 x 38 x 71mm (H x W x D)
Installation	11 poles plug for screw mounting or DIN-rail

The specifications are subject to change without notice.

Type Selection Table

Type	Pin 5-7	Pin 2-10	Generator voltage adjustment
M0500.0070	230V	12-24V DC	88-225V
M0500.0080	400V	12-24V DC	170-450V

