



INTRODUCTION

Electronic programmer for automatic starting and stopping of diesel or petrol engines, with malfunction detection and very easy programming.

The starting and stopping can be carried out:

- By means of a programmable clock built into the unit.
- By signals from external elements (level sensors, another programmer, etc).
- Manually, by means of a switch.

The stop will also take place automatically on malfunction detection by any sensor (engine overheating, oil pressure, lack of water, etc.), this being indicated by a warning light.

START

The engine start up timing can be adjusted between 1 and 12 seconds.

In case of failure in the starting up, the unit will make 4 attempts, with 2-minute pauses between each. If all four attempts fail, there is a light that gives a warning of the incident.

STOP

Stopping is carried out by the activation of an output, with an time adjustable between 6 and 90 seconds, which can be connected to an electric valve (this cuts off the fuel supply) or an electromagnet (choking the engine).

Once the engine has stopped, the unit will disconnect the engine ignition, re-establishing it when a new start has to take place.

An electric irrigation valve can also be connected to the ignition output.

TIMER OPTIONS

Without timer: In this option, the unit incorporates a start/stop input for possible connection to other programmers or external elements.

With "daily" timer, it repeats the programs every day. In this model, 15 minute intervals between orders are also possible.

With "double sphere" timer, it repeats the programs daily or weekly, but with 30 minute intervals between orders (the most common).

With "one output digital" timer, it is programmed by means of six keys and displays its data on a small LCD screen. It has 24 daily or weekly repeatable programs, with working times from 1 minute on.

With "two output digital" timer, it allows up to 24 separate daily or weekly activations, with working times from 1 minute on. It has two outputs for, for example, working with two different irrigation sectors or with one sector plus fertilizer.

OTHER OPTIONS

With preheating, the unit preheats the engine before each start up attempt.

With a network malfunction detector and two timers, to activate a generator when the electricity supply fails.

For petrol engines. As petrol engines do not normally have oil pressure gauges, in this option start-up detection is obtained from the alternator.

With pump input delay. A generator is used to delay the input of the electric irrigation pump. There is also an option for advancing the stop of the electric pump.

Without box, for building into a cupboard (the price difference will be discounted).

TECHNICAL DETAILS

12 Vdc supply.

Protection against supply input polarity changes.

Protection against accidental start-ups when the engine is working.

WARRANTY

The products created by Progrés enjoy a 2 year warranty against all manufacturing defects.