



Engine control unit RGK 30

Planet-SWITCH

Planet-DIN

Planet-LOGIC

 **Lovato**
electric

100% electricity

1922•2002

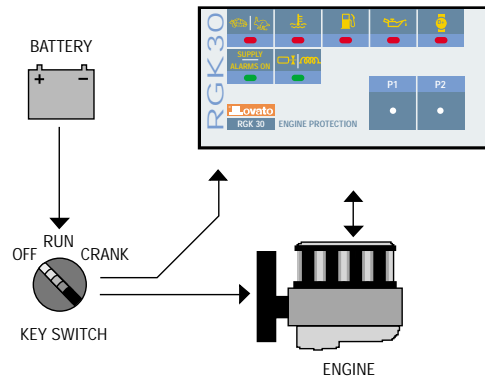


Engine control unit

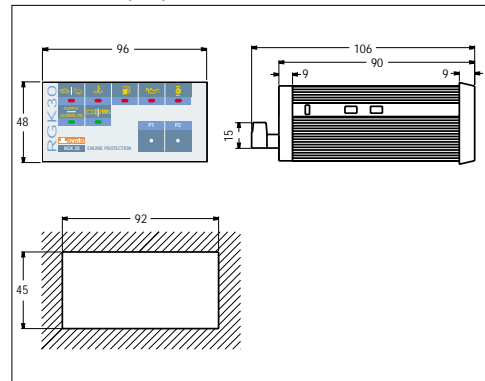


RGK 30

Order code	Description	Qty per pkg	Wt
		n°	[kg]
RGK 30	Microprocessor engine control unit	1	0.160

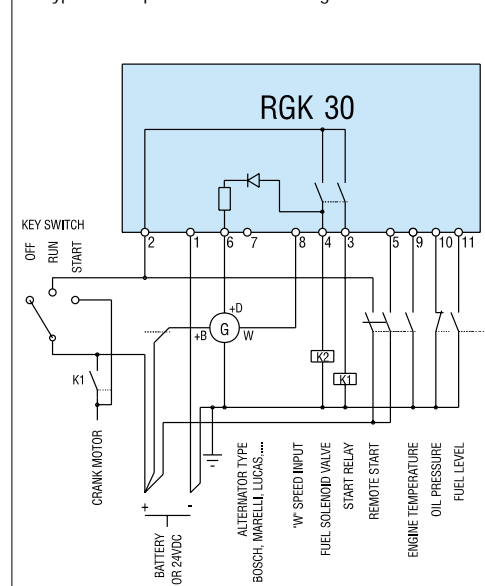


DIMENSIONS (mm)



WIRING DIAGRAM

for typical incorporated remote starting.



Other types of wiring diagrams are available on instructions manual.

General characteristics

The "RGK 30" is a control unit for engine protection and is used for manual starting and stopping of petrol (gasoline) or diesel engines, by means of a key switch. The "RGK 30" provides for automatic monitoring and shutdown of the engine in case of a fault and has protections for:

- low oil pressure
- high engine temperature
- low fuel level
- alternator battery-charger fault
- low and high engine speed.

The "RGK 30" can be easily adapted to many engine types with different alternator battery chargers.

Reliability is warranted by the excellent operating range characteristics and the high standard of manufacture.

The "RGK 30" has the following main characteristics:

- 2 set-up keys
- 7 LEDs for signalling
- 2 engine running inputs: "W" signal (or permanent magnet) and pre-excited alternator
- 3 negative alarm inputs: pressure, temperature, fuel level
- 1 positive input for automatic remote starting attempts
- 1 relay output for fuel valve
- 1 programmable relay output for stop magnet, deceleration, glow-plugs, automatic start or global alarm.

Operational characteristics

POWER SUPPLY

- Rated battery voltage: 12 or 24VDC
- Voltage range: 9...33VDC
- Minimum voltage at the starting: 6.7VDC
- Cranking drop-out: 4VDC for 150ms
- Maximum current consumption: 60mA at 12VDC or 24VDC.

DIGITAL INPUTS

- Input type: (3 negative inputs, 1 positive input): Current: ≤4mA at 12V and ≤8mA at 24V.

ENGINE RUNNING INPUT FOR PERMANENT MAGNET ALTERNATOR OR "W" SIGNAL

- Input type: AC coupling
- Voltage range: 5...40VAC
- Frequency range: 40...2000Hz.

ENGINE RUNNING INPUT (500RPM) FOR PRE-EXCITED ALTERNATOR

- Voltage range: 0...40VDC
- Maximum voltage at +D terminal: 12 or 24VDC battery voltage (prior jumper reposition)
- Pre-excitation current: 170mA 12VDC - 130mA 24VDC.

RELAY OUTPUT TERMINALS (+ BATTERY VOLTAGE OUTPUT)

- Contact type: 1 NO
- Rated voltage: 30VDC
- Rated current at 30VDC: 5A DC1.

AMBIENT OPERATING CONDITIONS

- Operating temperature: -20...+60°C
- Storage temperature: -30...+80°C
- Relative humidity: <90%
- Maximum pollution degree: 2.

CONNECTIONS

- Terminal type: plug-in
- Cable cross section (min... max): 0.2...2.5 mm² (24...12 AWG)
- Tightening torque: 0.8 Nm (7 lbin).

HOUSING

- Version: flush mount (96x48mm)
- Material: self extinguishing UL94 V-0 black Noryl
- Degree of protection: IP41 on front.

Certifications and compliance

Certifications: cULus (pending).

Compliant with standards: EN 55011, IEC/EN 61010-1 and EN 50082-2.