



ENGINE STARTER RELAY ESR 3.1



DESCRIPTION

ESR 3.1 engine starter relay offers excellent functions for manual control of diesel and gasoline engine powered generators.

The operator can start and stop the engine automatically from the front panel push buttons, the unit also provides remote starting of the generator via an external signal.

ESR 3.1 is also provided with alternator phase voltage input terminals so that the unit can monitor and protect the generator against over/under speed and over/under voltage failures automatically.

All these readings can be rolled on the display via the push button on the front panel.

The control unit contains a 5 digit 7-segment LED display.

The operator can monitor the alternator frequency, engine rpm, working engine hours from the front panel, thus avoiding the use of analog type meters on the control cabin.

Other features include monitoring of oil pressure, engine temperature, auxiliary fail input and charge alternator failure.

FEATURES

- Micro-controller based design
- Pre-glow heater control
- Low oil pressure failure detection
- High engine temperature failure detection
- Auxiliary input protection
- Charge alternator failure warning
- Fuel / Start solenoid output relay control
- Alarm Output contact
- Excitation Current feed for charge alternator unit
- Small Dimensions (72mmx72mm)
- Easy connection via screw terminal sockets
- High reliability concept design (MTBF > 50.000 hours)
- Front panel LED indicators
- Auxiliary output contact
- Engine working hour display
- High speed / Low speed protection
- High frequency / Low frequency protection
- Magnetic pick-up input for speed measurement
- High voltage / Low voltage protection (True rms sensing of voltage)
- Battery voltage indication (Vdc) and warning
- Remote start/stop function
- Front panel mounted 5 digit 7-segment LED display for data reading
- IP52 front panel protection class
- CE compliant

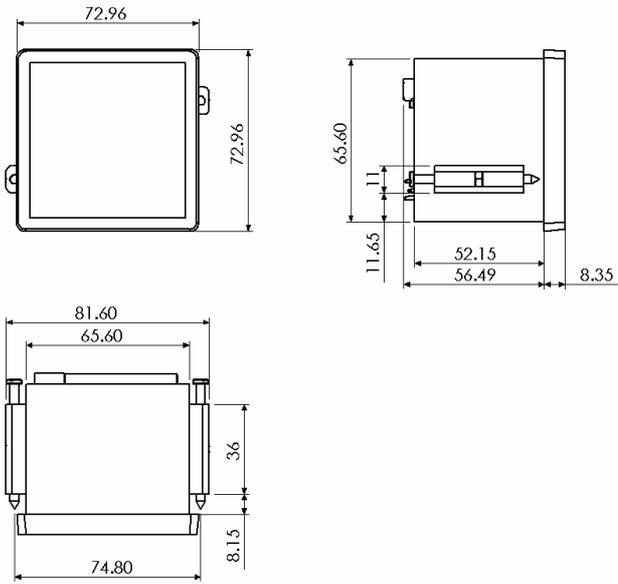
ESR 3.1 ENGINE STARTER RELAY

PROTECTION FUNCTIONS

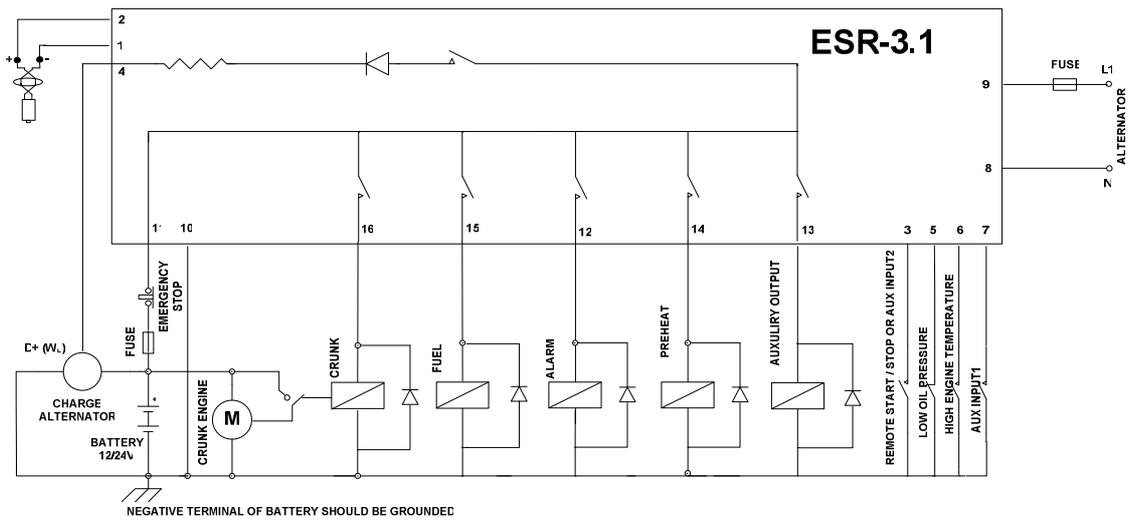
The unit has very efficient protection functions such as:

- Low oil pressure
- High engine temperature
- Low / high alternator voltage
- Low / high DC battery voltage
- Low / high engine speed
- Low / high frequency
- Charge alternator failure warning
- Auxiliary input failure

MOUNTING AND INSTALLATIONS



CONNECTION DIAGRAM



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