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SSR-Starter Protection Relay

Applications For all combustion engines

Features
- For original equipment and upgrading
- compact size
- quick mounting

Describtion of the SSR200

The SSR is used to protect the starter motor, the bevel wheel and the engine sprocket. The SSR protect against starting by mistake, when the engine is running or still running.

The SSR is an electronic relay which is switched between clamp 30 (battery +) and clamp 50f (starter motor). The engine speed is measured by the clamp „W" signal from the alternator. The connections of clamp 15 (ignition), 30 and clamp 31 (ground) are used fort the currrent supply.

The SSR switched the voltage to the connection D+ (excitation) during the start phase. In this way it is secured that the clamp „W" produce clearly signals for the engine speed.

Scope of protection
- No start during the engine is running
- No start during the engine stops running
- Protection against restart
- Shut down the starter, if the frequency exceed the specified value at clamp "W" (SSR200=200Hz)

Security concept
- SSR is plus switching.
- Outputs are protected against overload and short circuit.
- The output currents are limited in case of overload.
- All output transistors switch off in case of over temperature.
- In the time of protection against restart the SSR don't need a power supply.
- Output transistors need an approval from the processor and a voltage at clamp 50e for switching (redundance).
- The maximum start time is limited on 60 seconds.

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Technical data

material of the enclosure
Relay enclosure with molded mounting tap;
Dimension: 60 x 30 x 60 mm;

number of Terminals: 8

color black

protection class (Din 40050 page 9)
enclosure: IP53
connector: IP20

Nominal voltage 12 – 24 V

Operating voltage 9 ... 36 V

Capacity output clamp 50f
25 A (static)

Short circuit current limiting clamp 50f
65 – 180 A

Output clamp D+ 2 A (durable)
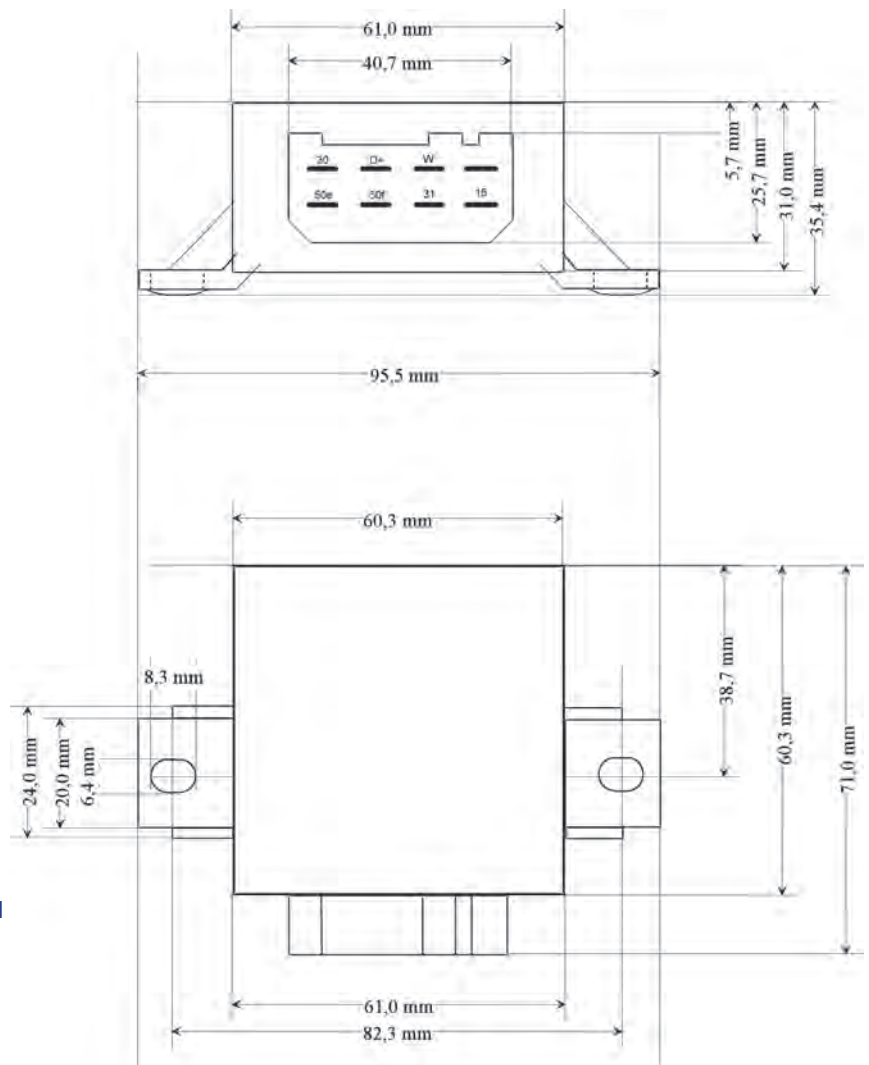
Durable reserve battery

No current flow if battery power supply is reserved

Working temperature –40 bis 85°C