

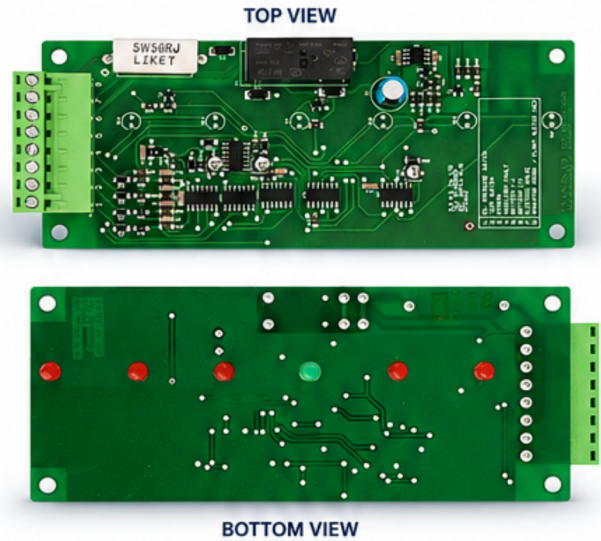
DKSTLS

DIESEL ENGINE PROTECTION CONTROLLER WITH LOW COOLANT MONITORING

The DKSTLS is a compact and reliable engine protection board that provides complete monitoring and protection for diesel engines. It ensures safe operation by detecting critical faults and automatically shutting down the engine to prevent damage.

FEATURES

-  **Complete Engine Protection**
Monitors critical parameters and shuts down the engine upon fault.
-  **Auxiliary Fault Input**
External fault input (active low) with alarm and shutdown.
-  **Low Oil Pressure**
Alarm and automatic shutdown protection.
-  **Fault Bypass Timer**
15 sec delay to avoid nuisance trips during engine start.
-  **High Coolant Temperature**
Alarm and automatic shutdown protection.
-  **Electric Valve Release**
Valve is released if engine does not start within 15 sec.
-  **Dynamo Failure**
Alarm and automatic shutdown protection.
-  **LED Indications**
Green LED for engine running and dedicated red LEDs for each fault.
-  **Low Coolant Level**
Alarm and automatic shutdown protection using radiator probe.
-  **Easy Installation**
Universal supply voltage and plug-in terminal connector.



TECHNICAL SPECIFICATIONS

Operating Voltage	8 – 28 VDC
Absolute Maximum Supply Voltage	30 VDC
Response Delay to Faults	15 sec
Auxiliary Contact Rating	5 A / 250 VAC (AC-1)
Auxiliary Contacts (Relay Output)	8 A (AC-1)
Operating Temperature	0 to 70 °C
Dimensions (L x W)	61 x 141 mm
Weight	67 g

APPLICATIONS



Diesel Generators



Pump Controllers



Industrial Engines



Marine Engines



Agricultural Equipment

FUNCTIONAL DESCRIPTION

When powered, the DKSTLS monitors the oil pressure switch and the dynamo excitation line. The fault bypass timer is enabled only after the oil pressure switch opens or the voltage on the dynamo excitation line exceeds 8 V (engine running).

The low coolant level input is a high impedance input connected to a radiator probe. The small current flowing through the coolant to the engine body and battery negative is sufficient to indicate that the radiator has enough coolant. This input is active as soon as the board is powered.

After 15 seconds (fault bypass time), the remaining fault inputs become active. A voltage of 0 to 1 V on any of these inputs triggers an immediate alarm (corresponding red LED) and engine shutdown.

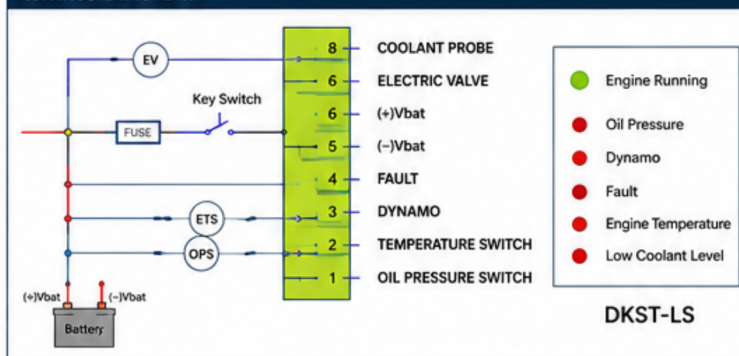
All other fault inputs are immediately disabled after a fault is detected. If the engine does not start within 15 seconds, the electric valve output is de-energized without signaling any faults.

A green LED indicates that the engine is running.

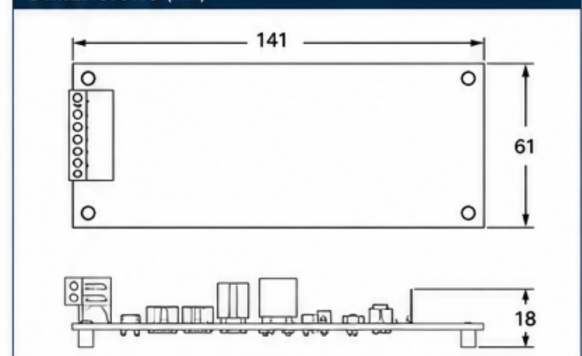
TERMINAL CONNECTIONS

TERMINAL	DESCRIPTION
1	Oil Pressure Switch (OPS)
2	Engine Temperature Switch (ETS)
3	Dynamo Excitation
4	Auxiliary Fault Input (Active Low)
5	Negative Supply from Battery (–Vbat)
6	Positive Supply from Battery (+Vbat) via Key Switch
7	Electric Valve Output
8	Radiator Probe or Float Switch (Normally Closed)

WIRING DIAGRAM



DIMENSIONS (mm)



PROTECTS
YOUR ENGINE



FAST & RELIABLE
SHUTDOWN



SIMPLE
INSTALLATION



BUILT FOR
INDUSTRIAL USE