

1. Generator/Engine Control Module : DSE5220

1. built-in & Integrated Function

- (1) Engine Control, Auto. Start/Stop etc.
- (2) Guard / Detection of Commercial Line
- (3) Guard of Generator Load, Emergency
- (4) Display of Water temp. Oil pressure.
- (5) Detection of High temp., Low pressure
- (6) Display of Voltage, Frequency on Line
- (7) Software and Terminal for Remote Monitoring
- (8) Microprocessor System

2. Data on LCD Display Window

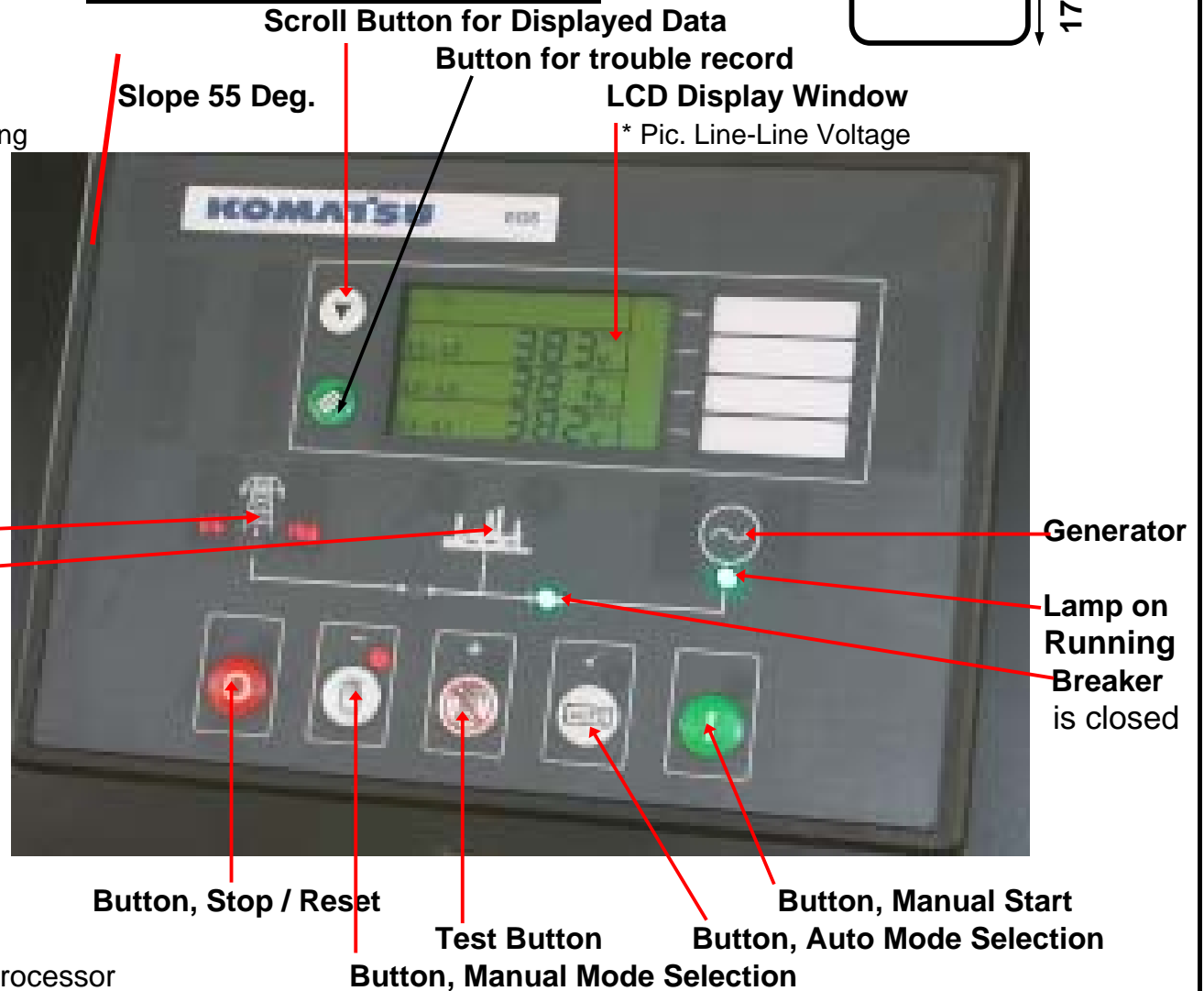
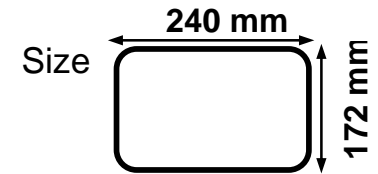
The following data are displayed by digital. Picture can be selected by Scroll Button.

- (1) Engine speed RPM, Frequency Hz
- (2) Line -Neutral Voltage, L1-N,L2-N,L3-N
- (3) Line -Line Voltage, L1-L2,L2-L3,L3-L1
- (4) Lubricant Pressure (BAR, Psi, kPa)
- (5) Coolant Temperature (Deg. C, F)
- (6) Fuel level (%)
- (7) Operating Hours, Hours
- (8) Battery Voltage, DCV
- (9) Generator Current, L1, L2, L3
- (10) Generator Active Power, kW
- (11) Generator Reactive Power, kVar
- (12) Generator Power Factor, Cos
- (13) Commercial Voltage, L1-N,L2-N,L3-N
- (14) Commercial Voltage, L1-L2,L2-L3,L3-L1
- (15) Commercial Frequency, Hz

3. Micro-Processor

Set Data, value and time are stored micro-processor

3. Panel Configuration of DSE5220



Slope 55 Deg.

Scroll Button for Displayed Data

Button for trouble record

LCD Display Window

* Pic. Line-Line Voltage

MAINS
Load

Generator
Lamp on
Running
Breaker
is closed

Button, Stop / Reset

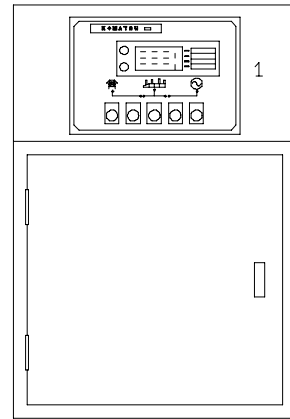
Test Button

Button, Manual Start

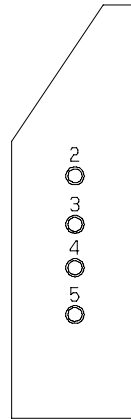
Button, Auto Mode Selection

Button, Manual Mode Selection

2. Function of Engine Control Panel



Front View



Side View

NO	MAIN COMPONENTS
1	DSE 5220 Gen Control Module
2	Emergency Stop Button
3	Panel Lock Key Switch
4	Buzzer Cancel Button
5	Buzzer

The control module provides indication of operational status and fault conditions, automatically shutdown the gen-set and indicating failures by means of an LCD display, and appropriate flashing LED on the front panel. This module can be used to monitor a mains power supply and automatically start a standby gen-set if mains failure is occurred.

DC Measurements (Digital display)

(1) Engine RPM, (2) Engine Oil Pressure, (3) Engine Water Temp, (4) Battery Voltage and (5) Engine Run Hours

Optional digital display of Fuel Level measurement if supplied with Skid Base Fuel Tank.

AC Measurements (Digital display)

(1) Gen Voltage (L1-N, L2-N, L3-N), (2) Gen Voltage (L1-L2, L2-L3, L3-L1), (3) Gen Current (L1, L2, L3), (4) Gen Frequency Hz, (5) Gen kVA, (6) Gen kW and (7) Gen Power Factor

Optional digital display of Mains Voltage (L1-N, L2-N, L3-N), Mains Voltage (L1-L2, L2-L3, L3-L1), and Mains Frequency Hz measurements if connected to Mains power.

3. Function of Engine Control Panel

Built-In Functions :

1. Panel Lock Key Switch
To lock the operation of all push buttons except Emergency Stop button so that unauthorized personnel not able to make adjustment. It is useful for AMF operation when gen-set is on standby.
2. Visual and Audible Alarm
A clear icon based language free display provides access to full gen-set instrumentation, which combined with a buzzer for any alarm.
3. Event Logging of Shutdown Alarms
Capable of storing 15 shutdown events along with date and time for reference.

Safety Protections :

1. Low Oil Pressure Shutdown
2. High Water Temp Shutdown
3. Fail to Start
4. Fail to Charge
5. Under / Over Speed
6. Under / Over Voltage
7. Under / Over Frequency
8. Over Current
9. Under / Over Battery Voltage

Optional Items :

1. RS485 'Modbus' output allows full system integration into building management and control schemes.
2. RS232 Modem link to PC via either PSTN line or GSM network. The module can also signal Engineers via their cell phones using the GSM SMS messaging system to advise of system alarm.