

# SIMULATION SYNCHRONIZING GENERATOR SET

Model Number : DDC-SSYG-140M




## Description

The Standard Lab has been designed for experiments and testing in Electrical Machines in education. This is a typical electrical power generating station complete with synchronizing board but specially adapted for instructional purposes, as the supply requirement for the system operation requires 240/415V, 50Hz.



 **Marelli**  
**Motor & Generator**

TECHNICAL SPECIFICATION :		
<p><b>This system consists of:</b></p> <ul style="list-style-type: none"> <li>❖ 1 x Synchronizing Switchboard</li> <li>❖ 2 x Motor-Generator Sets</li> <li>❖ 2 x Prime Mover Control Panel</li> <li>❖ 1 x Fault Simulator Panel</li> <li>❖ 2 VFD Speed Controller</li> </ul> <p><b>SYNCHRONIZING SWITCHBOARD</b></p> <ul style="list-style-type: none"> <li>❖ This board shall be equipped with the following:</li> <li>❖ 2 x Circuit Breaker 20A, TP, and c/w under-voltage / shunt trip coil.</li> <li>❖ 2 x Neutral Knife Switch</li> <li>❖ 1 x Over Current Relay</li> <li>❖ 1 x Earth Fault Relay</li> <li>❖ 1 x Electronic Combined I DMT relay</li> <li>❖ 2 x Ammeter 0-40A c/w Selector Switch</li> <li>❖ 2 x Voltmeter 0-500V c/w Selector Switch</li> <li>❖ 2 x Frequency Meter</li> <li>❖ 2 x Reverse Power Relay</li> </ul>	<p><b>MOTOR GENERATOR SETS</b></p> <ul style="list-style-type: none"> <li>❖ AC Induction Motor</li> <li>❖ Rating: 10~15HP</li> <li>❖ Speed: 1400~2500 RPM nominal</li> </ul> <p><b>AC GENERATOR</b></p> <ul style="list-style-type: none"> <li>❖ Rating: 15~25KVA</li> <li>❖ Speed: 1400~2500RPM</li> <li>❖ Output: 220~240/415VAC, 3 phase, 50/60Hz</li> </ul> <p><b>PRIME MOVER CONTROL PANEL</b></p> <ul style="list-style-type: none"> <li>❖ 1 x Speed Controller</li> <li>❖ 1 x Ammeter 0-60A</li> <li>❖ Indicating Lights</li> <li>❖ 2x Circuit Breaker 60A TP</li> <li>❖ 2x Pushbuttons</li> <li>❖ 1 x Sheet metal epoxy coated console</li> </ul>	<p><b>FAULT SIMULATION PANEL</b></p> <ul style="list-style-type: none"> <li>❖ Phase Sequence Fault</li> <li>❖ Synchroscope</li> <li>❖ Reverse Power Relay Fault</li> <li>❖ Speed Droop Fault</li> <li>❖ Earth Fault Relay Fault</li> <li>❖ AVR Fault</li> <li>❖ Earth Leakage Fault etc</li> <li>❖ Under Voltage Release Fault</li> </ul> <p> <b>Allen-Bradley</b></p> <ul style="list-style-type: none"> <li>❖ VFD Speed Controller</li> </ul>

### Manuals:

- (1) All manuals are written in English
- (2) Model Answer
- (3) Teaching Manuals

### General Terms:

- (1) Accessories will be provided where applicable.
- (2) Manual & Training will be provided where applicable.
- (3) Design & specifications are subject to change without notice.
- (4) We reserve the right to discontinue the manufacturing of any product.

### Warranty:

2 Years

\* Proposed design only, subject to changes without any notice.