MOTOR GENERATOR TRAINER

Model Number: GOTT-MGM-0001



DESCRIPTION

The Motor Generator System is an integrated system for in depth studies for Motor Generator theory and working principles. The system comes mounted on its own base plate with an upright control panel and the motor-generator combination is connected via a flexible coupling. The control panel comprises of voltmeter, ampere meter, and all wiring connections brought out to 4mm safety terminals. Connection leads with banana plugs facilitate quick and easy connections between the Motor-Generator System and other controls. The motor and generator can be setup independently, besides in conjunction with each other, for in depth studies on each individual unit. An Operation Manual and Experiment Manual is provided in English.

PRODUCT MODULES

ADJUSTABLE THREE PHASE

CODE 192-001 **AC MEASUREMENT**

CODE 192-002

DC MEASUREMENT UNIT

CODE 192-003

DC MOTOR CONTROL UNIT

Output: 0...240VDC

CODE 192-004

Protection Fuse 2A x 3 units Pilot Lamps L1, L2 & L3 Fault Current Circuit Breaker 3

Poles

Output: 0...240VAC x 3 units

0...415VAC

Input: AC 415V, 50Hz 3-Phase



UNIT

Voltmeter range: 0...500VAC Ammeter range: 0...2A Input: AC 240V, 50Hz 1-Phase Voltmeter range: 0...500VDC Ammeter range: 0...2A Output: 250VDC

Input: AC 240V, 50Hz 1-Phase



Fixed 250VDC







EMERGENCY SWITCH

CODE 191-007

Rated voltage: 240VAC Emergency off button with pull-unlatching



PUSH BUTTON

Rated voltage: 240VAC

Push Button x 2 units

CODE 191-008

CODE

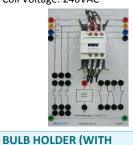
192-005

BULB)

Rated Voltage: 415VAC Rated Current: 10A Coil Voltage: 240VAC

THREE-PHASE

CONTACTOR



WATTMETER

CODE 456-011

CODE

192-007

Range: 0~500 W Accuracy: Class 1.5 Protection Fuse 1A



TACHOMETER

Input: AC 240V

RPM Range: 0...9999rpm

CODE 192-008

Protection Fuse 2A x 2 units

RHEOSTAT

Excitation Resistor: 0~1kΩ Armature Resistor: 0~100Ω



CODE 192-006

CODE

159-014

Incandescent Lamp x 3 units Input: AC 240V, 50Hz 1-Phase



THREE PHASE SALIENT POLE MACHINE

Power: 300W Voltage: 415VAC

Current: 1.17A **Excitation Voltage 12VDC Excitation Current: 0.3A**









MOTOR GENERATOR TRAINER

Model Number: GOTT-MGM-0001

EXCITED MACHINE Power: 240W Voltage: 240VDC Current: 1.0A

DC SEPERATELY

Excitation Voltage: 240VDC **Excitation Current: 1.0A** Speed: 1500rpm



U-LINK CODE 159-019

A unit which is wed to link the unit together





Speed: 2000rpm Output: Max. 20VDC



SAFETY CONNECTING CODE 237-001 **LEAD**

4mm connecting leads



PULLEY AND RUBBER

CODE

159-017

COUPLING

CODE 431-000

ROTATE SPEED SENSOR

CODE 159-018

Used with DC Motor Control Unit / Tachometer



VERTICAL FRAME

High Level: Din Standard A4 with two shelves Material: Aluminium Side Frame: T shape

Size: 2-Layer 1450mm Length



380-000



EXPERIMENT CODE **MANUAL** 192-009



EXPERIMENT TOPICS:

- Characteristic of DC Machine
- Speed Control of DC Machine
- Measurement of DC Generator
- DC Generator with Load
- Characteristic of Three Phase Machine
- Speed Control of Three Phase Machine
- Measurement of Three Phase Machine
- Parallel Operation of Motor Generation

- AC Meter Measurement on Three-phase Machine
- DC Meter Measurement on DC Shunt Wound Motor
- **RPM Sensor Measurement**
- Characteristic of Field Winding Connecting (DC Separated Excited Machine)
- Characteristic of Armature Winding (DC Separated Excited Machine)
- Characteristic of Tacho Generator
- Series Shunt Connection of DC Separated Excited Machine

Manuals:

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

General Terms:

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

Warranty:

2 Years

ORDERING INFORMATION:

ITEM	MODEL NUMBER	CODE
MOTOR GENERATOR TRAINER	GOTT-MGM-0001	192-000