## MOTOR CONTROL TRAINER

Model Number: GOTT-MCT-191

### DESCRIPTION

This trainer provides a good grounding in mastering control technology using various types of electrical contactor circuits. The trainer features modular components that are mounted on a rack system to facilitate the setting up of various types and configurations of circuits. This system allows the students to select the module and design their own wiring on various contactor circuits. The student is also introduced to popular motor control circuits, such as a reversing circuit with various interlocking circuits, star–delta circuits, poles switching circuits for separate winding and different direction rotating.

### PRODUCT MODULES

<table>
<thead>
<tr>
<th>Module Type</th>
<th>Code</th>
<th>Description</th>
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</table>
| THREE PHASE FCCB    | 191-001    | Leakage Current: 30mA  
                    |            | Pilot Lamp L1, L2 & L3 (Voltage Monitor)                                      |
| THREE PHASE CONTACTOR | 159-014    | Rated Voltage: 415VAC  
                        |            | Rated Current: 10A  
                        |            | Coil Voltage: 240VAC                                                     |
| THERMAL OVERLOAD RELAY | 191-003    | Rated Voltage: 240VAC  
                        |            | Rated Current: 10A                                                     |
| AC RELAY (4C)       | 191-004    | Rated Voltage: 240VAC  
                        |            | Coil Voltage: 240VAC  
                        |            | Contact: 4 sets                                                          |
| AC RELAY (2C)       | 191-005    | Rated Voltage: 240VAC  
                        |            | Coil Voltage: 240VAC  
                        |            | Contact: 2 sets                                                          |
| ALARM BUZZER        | 191-006    | Input: 240VAC  
                        |            | 22mm AC BUZZER  
                        |            | 4mm safety banana socket x 12                                             |
| EMERGENCY SWITCH    | 191-007    | Rated voltage: 240VAC  
                        |            | Emergency off button with pull-unlatching                                 |
| SELECTOR SWITCH     | 191-009    | Rated voltage: 240VAC  
                        |            | 22mm selector switch  
                        |            | 4mm safety banana x 12                                                    |
| PUSH BUTTON         | 191-008    | Rated voltage: 240VAC  
                        |            | Push Button x 2 units                                                    |
| PILOT LAMP          | 191-010    | Pilot Lamp x 5 units  
                        |            | Input: 240VAC                                                           |
| TIME RELAY          | 191-011    | Delay Time: 0.4s – 10s  
                        |            | Input: 240VAC                                                           |
| FLICKER TIME RELAY  | 191-012    | Delay Time: 0.4s – 10s  
                        |            | Input: 240VAC                                                           |
TACHOMETER
RPM Range: 0…9999rpm
Input: AC 240V

AC VOLMETER & AC AMMETER
Measurement Mode: AC
Voltage Ranges: 5V, 50V, 250V, 1000V
Current Ranges: 1A, 5A, 25A

DC VOLMETER & DC AMMETER
Measurement Mode: DC
Voltage Ranges: 5V, 50V, 250V, 1000V
Current Ranges: 1A, 5A, 25A

ADJUSTABLE THREE PHASE
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

FUSE
Rated voltage: 415VAC
Protection Fuse 2 x 3 units

THREE PHASE INDUCTION MOTOR
Power: 170W
Voltage: 415VAC
Current: 0.45A
Speed: 1500rpm
Connection: Δ & Y

THREE PHASE SYNCHRONOUS GENERATOR
Power: 170W
Voltage: 415VAC
Current: 0.43A
Excitation Voltage: 12VDC
Excitation Current: 1.4A
Speed: 1500rpm
Connection: Υ

TACHO GENERATOR
Speed: 2000rpm
Output: Max. 20VDC

ROTATE SPEED SENSOR
Used with DC Motor Control Unit / Tachometer

U-LINK
For connecting junction point

SAFETY CONNECTING LEAD
4mm connecting leads

VERTICAL FRAME
High Level: Din Standard
A4 with two shelves
Material: Aluminium
Side Frame: T shape
Size: 3-Layer 1450mm Length

EXPERIMENT TOPICS:
- Unidirectional Rotation Control of Motor – Non Locking Method
- Unidirectional Rotation Control of Motor – Locking Method
- Unidirectional Rotation Control of Motor using Selector Switch
- Unidirectional Rotation Control of Motor using Time Relay
- Timer Control Circuits
- Press and Hold switch circuit
- Pilot lamp indicating circuit
- Alarm buzzer circuit
- Forward and reverse rotation of motor with contactor interlock
- Forward and reverse rotation of motor with switch interlock

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 to discontinue the manufacturing of any product

Warranty:
2 Years

ORDERING INFORMATION:
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<td>191-000</td>
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