AC MOTOR CONTROL BY INVERTER TRAINER
Model Number : GOTT-ACMCBI-152
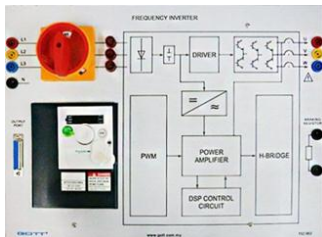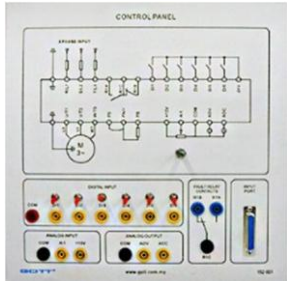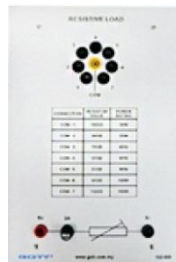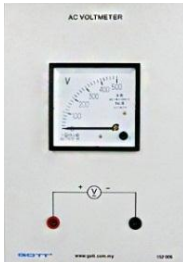

DESCRIPTION

The trainer has been created for learning of speed control of AC motor with inverter controller. Can be control both open-loop and close-loop method. Used frequency inverter as speed control unit.

The individual units of an experimental set-up are connected via 4-mm. safety sockets which are arranged in large, synoptically graphical symbols or current flow diagrams. Due to the vertical arrangement of the experimental panels, the experimental set-up can be seen from a far distance and can be adapted step by step to the course of the lessons or lectures.

PRODUCT MODULES

FREQUENCY INVERTER — CODE 152-003

- Input : 3 x 415VAC/50-60 Hz
  (IL, N 1.6A continuous, IL, N (60S) 2.6A max.)
- Output : 0-100 % of power supply (IINV1.7A, Imax (60S) 2.7A , SINV 1.1kVA, PM,N 0.55kW, PM,N 0.75 HP)
- Port : 1 Port control (DB-15) for link control panel
- Torque characteristics : Constant torque 160% in 1 min
  Variable torque 160% in 1 min
  High starting torque 180% for 0.5 sec
- Control characteristics : Frequency range 0.2-132 Hz, 1-1000Hz
- Speed control range : Open loop 1:15 of synchronous speed
  Close loop 1:120 of synchronous speed
- Rang Type : Linear, Sine shaped
- Display : LED 6 digit

POWER SUPPLY CONSOLE — CODE 152-001

There are six modules as per follows:
- Socket Outlet240/415VAC
- Power Socket 240/415VAC
- Power Supply 240VDC 1A
- Double Outlet 2P + PE 16A 240VAC
- Schuko Socket 2P + PE 16A 240VAC
- Main Power Supply 240/415VAC

CONTROL PANEL — CODE 152-002

- Digital input : 6 points (12, 18, 19, 17, 19, 33)
- Analog input : 3 points (0~10 V, 4~20 mA, Common)
- Analog output : 2 points (+40, -55)
- Input port : DB 25 connect to inverter

RESISTIVE LOAD — CODE 152-004

- Resistance : 1~7 Steps

FREQUENCY METER — CODE 152-005

- Range : 46~54 Hz
- Accuracy : Class 1.5
- Voltage coil : 240VAC

AC VOLTMETER — CODE 152-006

- Type : Moving coil
- Range : 0~500 VAC
- Accuracy : Class 1.5

DC VOLTMETER — CODE 152-007

- Type : Moving coil
- Range : 0~300 VDC
- Accuracy : Class 1.5

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AC AMMETER	CODE 152-008	DC AMMETER	CODE 152-009	THREE PHASE WATTMETER	CODE 152-010	LAMP LOAD 220 VAC 40 W X 5	CODE 152-011
• AC Ammeter 0-1.5A		• DC Voltmeter 0-300V		• Wattmeter 1000W 415VAC 3P		• Lamp type: Incandescent	

TACHO GENERATOR	CODE 159-017	DC GENERATOR	CODE 152-013	THREE PHASE INDUCTION MOTOR	CODE 159-004	PULLEY AND RUBBER COUPLING	CODE 431-000
• Speed : 2000rpm • Output : Max. 20VDC		• Power : 150W • Exciting voltage : 220 VDC • Output voltage : 220 VDC at 4000 rpm • Current limit : 1.46 A		• Power : 170kW • Voltage rate : 415VAC • Current rate : 0.45A • Speed : 1500 rpm • Connection: Δ & Y			

U-LINK	CODE 159-019	SAFETY CONNECTING LEAD	CODE 237-000	VERTICAL FRAME	CODE 297-000	EXPERIMENT MANUAL	CODE 152-018

• For connecting junction point		• Quantity 40 pcs
		  o Length 50 cm (30 pcs)
		  o Length 100 cm (10 pcs)
				• High level : DIN standard A4 with two shelves
				• Material: Aluminium
				• Side Frame: T shape
				• Size: 3-Layer 1450mm Length			

EXPERIMENT TOPICS :

- Start-stop control induction motor with key pad
- Start-stop control induction motor with external signal
- Motor control reversing
- Motor speed control by variation frequency type
- Motor speed control by DC voltage (0-10V)
- Fixed time frequency increment start motor and stop according to frequency decrement
- Fixed time frequency increment start motor and stop motor with DC brake

- Motor speed control by frequency increment and decrement with panel SW
- Motor speed control by speed selection with panel SW
- Motor speed control by Jog frequency type
- Open-loop motor control
- Close-loop motor control

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

ORDERING INFORMATION :

ITEM	MODEL NUMBER	CODE
AC MOTOR CONTROL BY INVERTER TRAINER	GOTT-ACMCBI-152	152-000

Proposed design only, subject to changes without any notice.