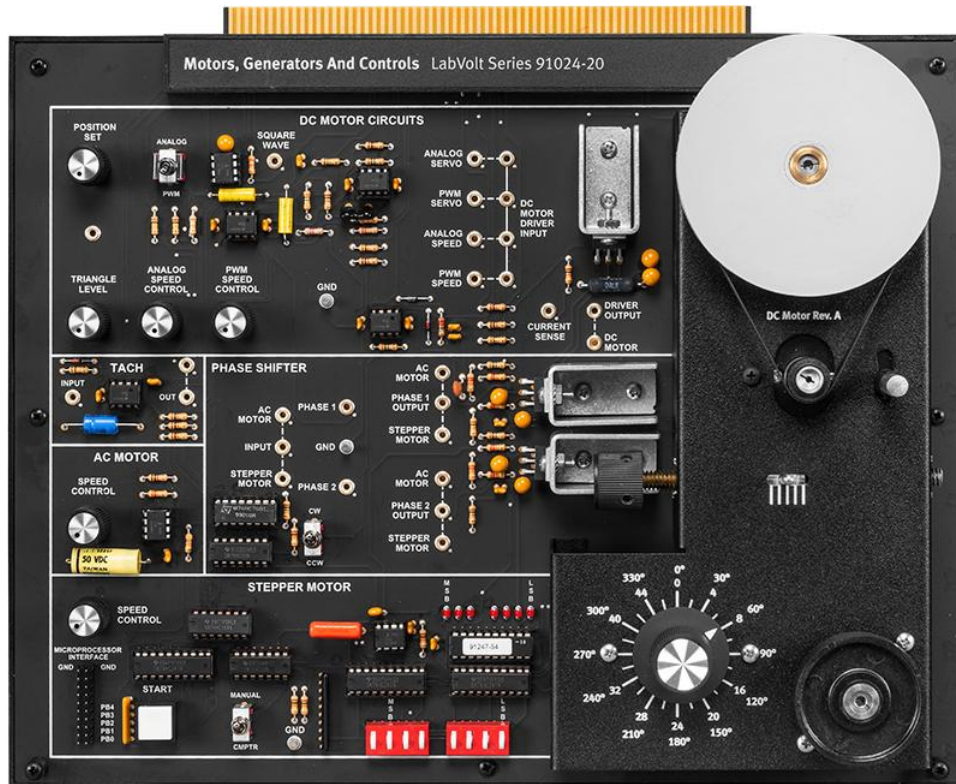


# Motors, Generators and Controls FACET Board 581147 (91024-20)

**FESTO**

LabVolt Series

Datasheet



Festo Didactic

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11/2024

\* The product images shown in this document are for illustration purposes; actual products may vary. Please refer to the Specifications section of each product/item for all details. Festo Didactic reserves the right to change product images and specifications at any time without notice.

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## General Description

Using the Motors, Generators and Controls module, students will configure, operate, and troubleshoot the following:

- Permanent-Magnet DC Motor in Series
- Shunt and Compound Motor Speed in Open and Closed Loop Analog and PWM Systems
- DC Servo Motor in Analog and PWM Circuits
- Stepper Motor Operation
- Drive Circuits
- Speed Control and Positioning Circuits
- AC Synchronous Motor with Variable Frequency Speed Control

The circuits found on this board include:

- DC Motor
- AC Synchronous Motor
- Phase Shifter Motor
- Stepper Motor

## Topic Coverage

- DC Motor Circuits Familiarization
- Stepper Motor and AC Motor Circuits
- Analog DC Motor Positioning, PWM DC Motor Positioning
- Analog and Pulsed Speed Control of a DC Motor
- Variable Frequency Control
- The Tachometer Generator
- Troubleshooting
- Microprocessor Interface (Requires the Optional 32-Bit Microprocessor Module (91017), plus these accessories: 9 V Power Supply (91730) and Flat Ribbon Cable (91627).)

## Features & Benefits

- Built-in tach generator circuit
- Procedures subdivided into short sections for more hands-on training
- Interface with the 32-Bit Microprocessor module
- Students learn the operation and function of:
  - DC motors in analog and pulse servo systems
  - Linear and pulsed signal speed control of dc motors
  - Variable frequency control and speed monitoring of synchronous motors
  - Speed and position control of stepper motors

## Specifications

Parameter	Value
<b>Physical Characteristics</b>	
Dimensions (H x W x D)	100 x 303 x 249 mm (4 x 12 x 9.75 in)
Net Weight	1.6 kg (3.5 lb)

Reflecting the commitment of Festo Didactic to high quality standards in product, design, development, production, installation, and service, our manufacturing and distribution facility has received the ISO 9001 certification.

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