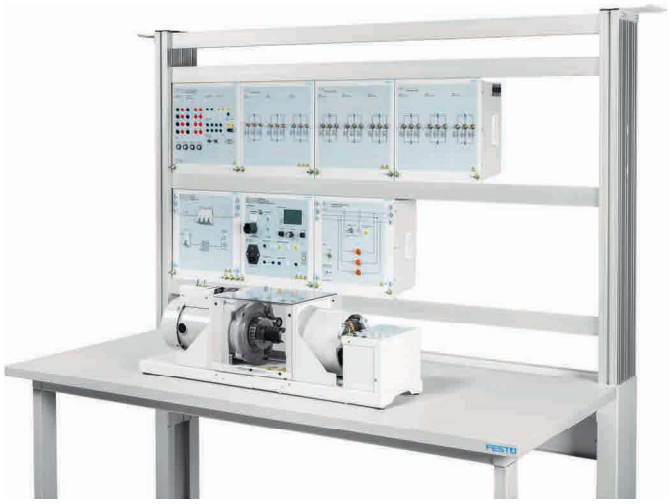
Three-Phase Rotating Machines

TP 8016-1



Equipment Set TP 8016-1

220 – 240 V, 50 Hz	**8223530**

The most important components at a glance:

1x Resistive Load	594820
1x Inductive Load	594821
1x Capacitive Load	594822
1x Squirrel-Cage Induction Machine	595064
1x Synchronous Machine	595802
1x Synchronization Lamps and Contactor	8208627
1x Three-Phase AC 400 V DC 230 V Power Supply	594825
1x 24V AC Power Supply (Wall Mount)	793290
1x Four-Quadrant Power Supply and Dynamometer Controller	595028
1x Four-Quadrant Dynamometer Motor	595062
1x Data Acquisition and Control Interface DACI-2 (note 1)	594499
1x Protective Guard – Face-to-Face	794194

Notes:

(1) The Synchroscope function set must also be activated (sold separately, order no. 579789)

Necessary accessories, also order:

1x Coupling Face-to-Face	792271
1x Connection Lead Set and Grounding Kit	595916
1x Three-Phase AC Power Supply and Safety Unit	594826
1x Mobile Frameline, complete model without energy duct **or**	8075133
1x Tabletop Workstation (DIN A4) **or**	8153360
1x Tabletop Double-Sided Workstation	8158409

Note: A computer with a Windows 7/8/10 operating system is also required.

Master the basics of motors and generators to convert between mechanical and three-phase AC electrical power.

This training package provides hands-on experience with three-phase induction machines, torque, efficiency, and more.

The training package includes the necessary equipment to perform the practical learning activities for the “Three-Phase Rotating Machines” course available on Festo LX (subscription required) or through a campus license (sold separately).

Learners connect modules following step-by-step instructions to study topics such as prime mover and brake, three-phase squirrel cage induction motors, eddy-current brakes, asynchronous generators, and more.

The induction motor is powered by a three-phase power supply. The four-quadrant power supply and dynamometer controller monitor and control the torque and speed of the induction motor. The Data Acquisition and Control Interface (DACI) allows users to monitor and manipulate parameters for the chopper and inverter functions.

Recommended Learning Material

Workbooks (→ page 162)



Campus license:

en	8201321

Notes: The campus license “Fundamentals of AC and DC Rotating Machines” includes the student and instructor manuals of the following workbooks: “Three-Phase Rotating Machines”, “Permanent Magnet DC Machines”, and “Power Factor Correction”. Printed workbooks are available upon request.

Courses on Festo LX:

- → Three-Phase Rotating Machines
- → Permanent Magnet DC Machines
- → Power Factor Correction