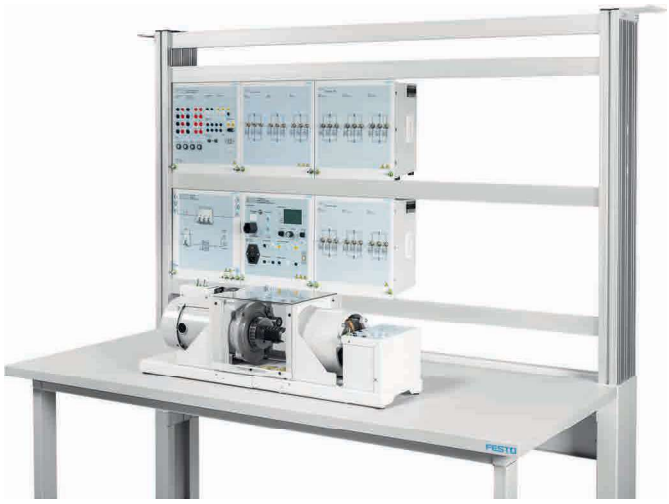
Power Factor Correction

TP 8016-3



Equipment Set TP 8016-3

220 – 240 V, 50 Hz	**8223532**

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 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	594499
1x Protective Guard Face-to-Face	794194

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.

Learn to master power factor correction to create more efficient, cost-effective, and sustainable electrical systems.

This training package provides practical experience to perform power factor correction for induction machines, both in electrical substation and in large industrial applications.

The training package includes the necessary equipment to facilitate the practical learning activities for the "Power Factor Correction" 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 power factor correction.

The resistive, inductive, and capacitive loads allow users to study different types of load behaviors and how they impact power factor. The squirrel-cage induction machine is used to explore motor operations and 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 better observe or analyze power factor correction.

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