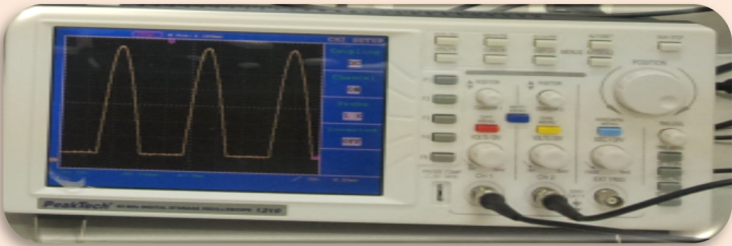
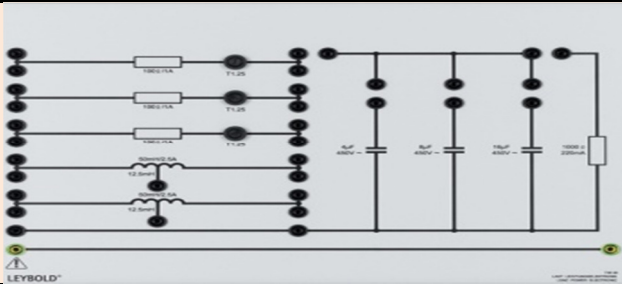


Power Electronics Lab



Photo	Description	Number of item	Item name	م
	Oscilloscope	10	Oscilloscope	1
	Resistive inductive capacitive loads	10	Load Box	2

Power Electronics Lab



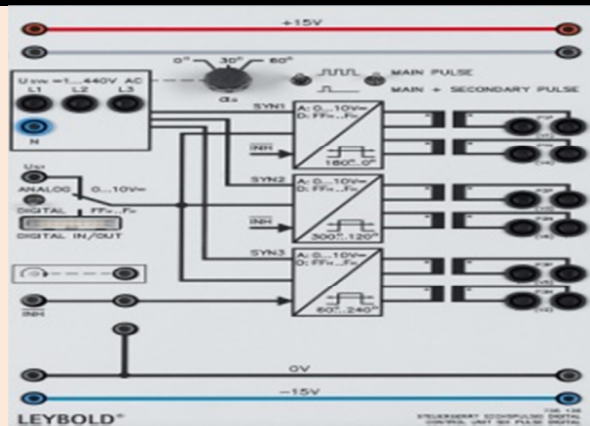
	<p>Single-phase transformer</p>	<p>10</p>	<p>Transformer</p>	<p>3</p>
	<p>PWM generator</p>	<p>10</p>	<p>Control unit PWM</p>	<p>4</p>
	<p>3 phase transformer 90/45</p>	<p>10</p>	<p>3phase Transformer</p>	<p>5</p>

Power Electronics Lab



	15V DC generator	10	DC-Power Supply ± 15 V/3 A	6
	4-wave amplifier and 4-channel insulator is used to isolate the control circuits from the power circuits	10	Isolation amplifier, four channel	7
	Voltage, Current and Resistance Sensors	10	Sensor-CASSY 2	8

Power Electronics Lab

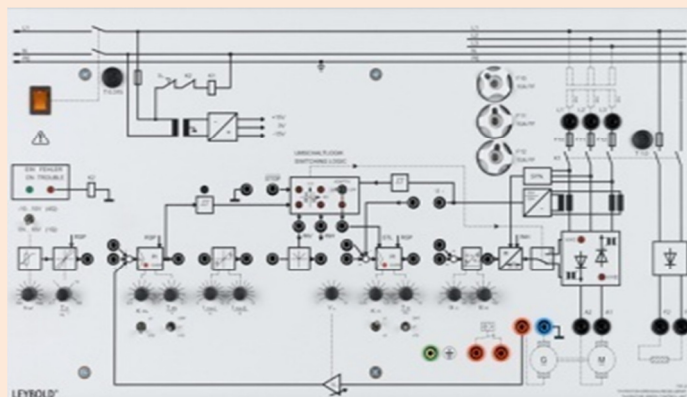


**Pulse generation
unit for three-
phase circuit**

10

**Control unit six
pulse, digital**

9



**DC motors speed
control unit**



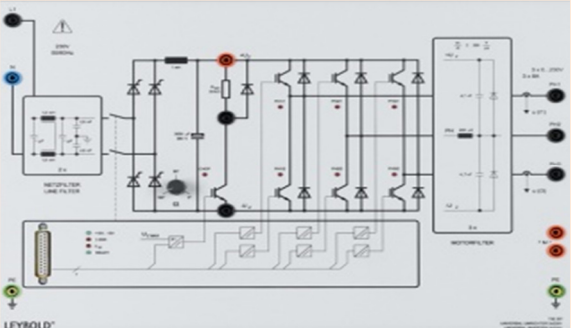
10

**Thyristor speed
control unit**

10

Power Electronics Lab



	Used to record engine speed	10	Tacho generator 0.3	11
	Dc motor	10	Shunt wound machine 0.3	12
	3 phase inverter to control asynchronous machine	10	Universal converter 3 x 230 V	13

Power Electronics Lab



**Machine
properties test
unit**

10

Machine test
system 0.3

14



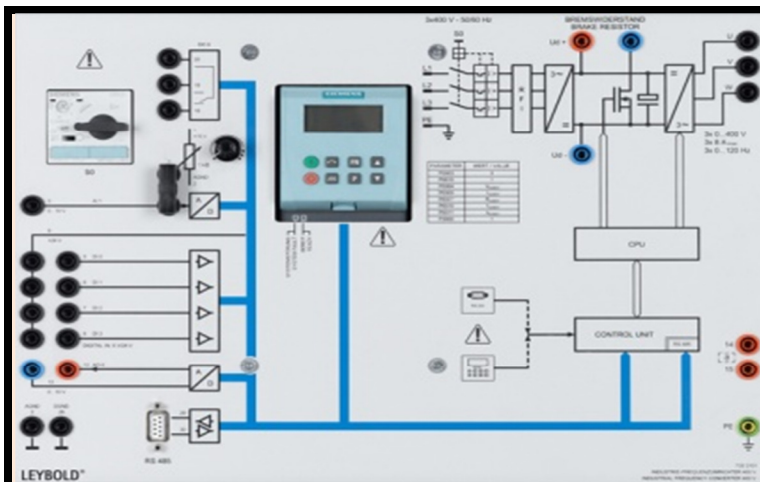
**Three-phase
engine, squirrel
cage**

10

Squirrel cage
motor
400/690/0.3

15

Power Electronics Lab



Industrial three-phase frequency converters

10

Industrial frequency converter 400 V

16



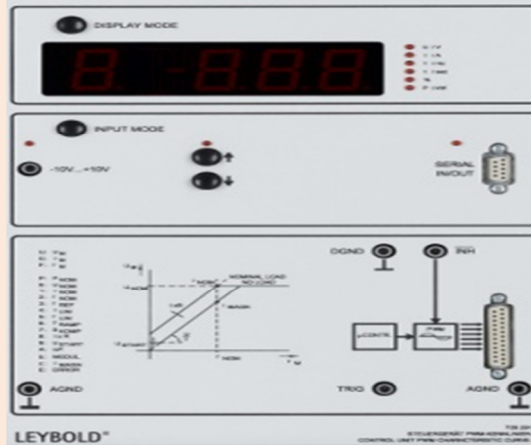
4 channel oscilloscope

2

4-Ch. DSO Digital Oscilloscope

17

Power Electronics Lab



Control unit and
pulse generation
for frequency
converters using
microcontrollers

10

Control Unit
PWM

18