

RESISTIVE LOAD UNIT

EM-30-07-01 (300W)

EDU-LABS



This series of resistive Loads is designed to be used with all AC/DC Generators, Machines and Three Phase Transformer in a training environment. For this purpose the units are enclosed in metal housings and provided with Educational Terminal Boards with 4 mm safety terminals socket and clear synoptic showing the feasible connections. The units are also provided with a reference manual which illustrates their use and typical experiments.



Single & Three phase Resistive Load 7 steps variable per phase

Max Power : 3x100 watt
 Voltage : 240/415 Volt
 Frequency : 50Hz
 Protection : Fuse

MAIN CHARACTERISTICS

- Can be connected in Series, Parallel, Star and Delta configurations.
- Can be connected to AC Single and 3 Phase sources.
- Controlled by 3 x 3 circuit breaker switches for 7 steps selection.

TESTING DATA TABLE

At Voltage 240 Volt/Phase, Three Phase 300 watt (Max Power 3 x 100 watt)

No	Switches Positions			Resistance (KΩ) S1	Resistance (KΩ) S2	Resistance (KΩ) S3	Power Consumption Per Phase (Watt)
	SW1	SW2	SW3				
0	OFF	OFF	OFF	-	-	-	-
1	OFF	OFF	ON	2.98	2.97	2.99	19.2
2	OFF	ON	OFF	1.93	1.94	1.94	28.8
3	OFF	ON	ON	1.17	1.17	1.18	48
4	ON	OFF	OFF	1.01	1.00	1.00	57.6
5	ON	OFF	ON	0.75	0.75	0.75	76.8
6	ON	ON	OFF	0.66	0.66	0.66	86.4
7	ON	ON	ON	0.57	0.54	0.54	105.6

No	Switches Positions			Current (A) S1	Current (A) S2	Current (A) S3	Power Consumption Per Phase (Watt)
	SW1	SW2	SW3				
0	OFF	OFF	OFF	-	-	-	-
1	OFF	OFF	ON	0.08	0.08	0.09	19.2
2	OFF	ON	OFF	0.13	0.13	0.13	28.8
3	OFF	ON	ON	0.21	0.21	0.21	48
4	ON	OFF	OFF	0.25	0.25	0.25	57.6
5	ON	OFF	ON	0.33	0.33	0.33	76.8
6	ON	ON	OFF	0.37	0.38	0.38	86.4
7	ON	ON	ON	0.46	0.46	0.46	105.6

EXPERIMENTS COVER

EXPERIMENT 1: BALANCED THREE-PHASE LOADS

Experiment 1.1: Star connection with balance resistive load

Experiment 1.2: Delta connection with balance resistive load

EXPERIMENT 2: UNBALANCED THREE-PHASE LOADS

Experiment 2.1: Star connection with unbalance three-wire resistive load

Experiment 2.2: Star connection with unbalance four-wire resistive load

Experiment 2.3: Delta connection with unbalance resistive load

EXPERIMENT 3: BALANCED THREE-PHASE RL LOADS

Experiment 3.1: Star-Connected with series R-L Load

Experiment 3.2: Delta-Connected with series R-L Load

EXPERIMENT 4: BALANCED THREE-PHASE RC LOADS

Experiment 4.1: Star-Connected with series R-C Load

Experiment 4.2: Delta-Connected with series R-C Load

EXPERIMENT 5: BALANCED THREE-PHASE RLC (SERIES) LOADS

Experiment 5.1: Star-Connected with series R-L-C Load

Experiment 5.2: Delta-Connected with series R-L-C Load

EXPERIMENT 6: BALANCED THREE-PHASE RLC (PARALLEL) LOADS

Experiment 6.1: Star-Connected with parallel R-L-C Load

Experiment 6.2: Delta-Connected with parallel R-L-C Load

Note: Specification May Change Without Prior Notice For Products Continuous Development Process.