



**PRIMATA**  
Tecnologia Eletrônica

## Technical Specifications

# P20

## Three-Phase Bidirectional Load



## Presentation

The **Three-Phase Bidirectional Load P20** is a **portable**, seven-wire equipment used to checking the operation and testing electric power meters installed in service ports of consumer units.

It was developed by **PRIMATA ELETRÔNICA** with the objective of simplifying the field tests and trials carried out by the power distribution companies in **single-phase, two-phase and three-phase meters**, when there is no customer consumption (no load) or when the load is very low, in the **direct and/or reverse energy** directions.



## Applications

- ✓ Verification of the functioning of electric energy meters, including tests in the direct and/or reverse energy directions;
- ✓ Fixed load tests for meter activation, seeking to identify defects or frauds (in this case it is used as a load in conjunction with other deviation analyzers<sup>1</sup>, not supplied with this equipment);

<sup>1</sup> For this application, check the equipment **P80 – Portable Standard Energy Meter Test Equipment (Wireless Transmission)**.

## Benefits

- ✓ Safety in the installation of the load for quick testing of the meters;
- ✓ Supplied with 1.5m flexible cable (2.5 mm<sup>2</sup>) with protected 4mm banana plug, and sets of detachable **Dolphin Clips (CAT III 1000V ou CAT IV 600V)**;
- ✓ Independent On/Off pushbutton and protections for each phase;
- ✓ On/Off pushbutton with power selection (min. and max.);
- ✓ Pushbutton with energy direction selection (consume or inject);
- ✓ Status indicator;
- ✓ Overvoltage-protection board, protection against overcurrent and incorrect installation with fuses of 0,5A for overvoltage-protection board and 30A for power board;
- ✓ No external temperature variation;
- ✓ Case and Handle for manipulation and transport;
- ✓ 1 year factory warranty;

## Technical Features

<b>Supply Voltage (Neutral/Phase)</b>	100 to 240 Volts ±10%
<b>Nominal Frequency</b>	60Hz
<b>Status Indicator</b>	Yes
<b>Overvoltage-protection Board</b>	Yes
<b>Power Selection (Minimum and Maximum)</b>	Yes
<b>Energy Direction Selection (Consume or Inject)</b>	Yes
<b>Overvoltage-protection Board Fuse</b>	0.5A
<b>Power Board Fuse</b>	30A (ceramic)
<b>Weight</b>	5.2 kg
<b>Dimensions</b>	150 x 210 x 290 mm
<b>Level of protection</b>	IP52

## Approximate Power Ranges<sup>1</sup>

<b>Voltage (V)</b>	<b>Power Switch</b>	<b>Power (W)</b>	<b>Current (A)</b>	<b>Consumption (VA)</b>
127	Minimum	500	4	2,8
	Maximum	1.000	8	10
220	Minimum	1.700	8	10
	Maximum	3.500	16	30

<sup>1</sup> The minimum and maximum powers can vary up to 20% depending on the conditions of the electrical contact and connectors used.



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