

Specification for DIRIS A20

Multi-function energy meter for multimeasurement, energy metering and communication of LV networks.

Operation :

- Backlit LCD display enabling 3 measurements (3 phases) to be displayed
The backlight is configurable on the voltage or current or auxiliary supply
- 4 function keys allowing direct access to :
I : phase and neutral currents;
U/F : phase to phase or phase to neutral voltages and frequency;
P/PF : active, reactive and apparent power and power factor by phase and total;
E : active energy (+) and reactive energy (+)
- Self test diagnostics function to check and correct wiring connection by internal. No need to rewire.

Functions :

The device enables the following functions to be carried out :

- Current measurement (I1, I2, I3 and IN), phase/phase and phase/neutral voltages , active P (+), reactive Q (+) and apparent S power, power factor PF (L/C) and frequency F.

- The last maximum demand for 3I, $\Sigma P(+)$ integrated on 5, 8, 10, 15, 20, 30 or 60 minutes.

Note : Reset possible in configuration

- Active + (0 to 99 999 999 kWh) and reactive + (0 to 99 999 999 kvarh) energy metering. One pulse output configurable on pulse rate (0,1 to 100 kWh and kvarh and 1 to 10 MWh and Mvarh) and duration (100 to 900 ms).

- Communication with JBUS/MODBUS protocol (up to 38400 bauds in RTU mode and via functions 3, 6, 8 and 16), and a three-wire (+, - and 0V) RS485 link enabling remote viewing and configuration.

Technical characteristics :

The meter is integrated in panel-mounted case H96xW96xD60 or 80mm (with plug-in module)

Connection by : :

- 1 fixed terminal blocks 6 mm² for current,
- 1 removable terminal blocks 2,5 mm² for voltage,
- 1 removable terminal blocks 2,5 mm² for auxiliary supply, impulse outputs , analogue outputs, inputs and outputs.



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- This device is installed on single, 2, 3 or 4-wire balanced or unbalanced three-phase networks, with different possibilities for the number of current transformers :

- 1, on phase 1
- 2, on phases 1 and 2 or 1 and 3
- 3, on the three phases

Current measurement above one or several CT with 5A secondary and primary configurable up to 10,000 A.

Voltage inputs up to above 500 V AC

- Accuracy :

- for voltages, this is guaranteed with a margin of 0.5 % from 50 to 700 VAC.
- for currents, this is guaranteed with a margin of 0.5 % from 10 to 120 % of the nominal current
- for active energy, this conform to IEC 62053-22 in class 0,5S.
- for reactive energy, this conform to IEC 62053-23 in class 2.

Part numbers

Diris A20 : ref.: 48250A20
(auxiliary supply 110 to 400 VAC or 120 to 350 VDC – CT 5A)

Plug-in modules :

Metering	ref.: 48250080
Communication by JBUS/MODBUS	ref.: 48250082