

# PECA7/DIVA7

ARDETEM

SFERE



## Type

The analysers **PECA7/DIVA7** are especially designed for the measurement, the control and the display of the voltages and the currents from AC electrical networks.

Easy programming accesible on front face or by PC via the software *SuperVISION (ARDETEM)* or *MCvision (SFERE)*

## Display

- Graphical LCD with rear-lighting.

## Environment

- Operating temperature: 0°C to +55°C.
- Storage temperature: -25°C to +70°C.
- Marking



## Functions

They accept as input by programming  
Current: 1A and 5A AC  
Voltage: 100VLN/173VLL and 330VLN/600VLL

- Quick cycle time: 40ms
- Universal (switching) power supply

## Options

- RS485 Modbus/Jbus output
- 2 relay outputs, programmable by the user as alarm setpoint

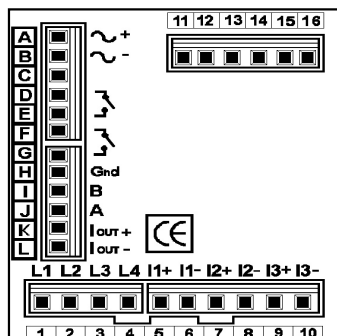
## General data

- Protection :** Housing / terminals: IP 20  
IP40 front face protection (IP65 optional)
- Housing:** Self-extinguishing case of black UL 94 V1 polycarbonate.
- Connectors** plug-off connectors on the rear side for screwed connectings (2.5mm<sup>2</sup>, flexible or rigid)

- DEFG**  
Relay outputs (optional)
- H I J**  
Digital data link 485 (optional)

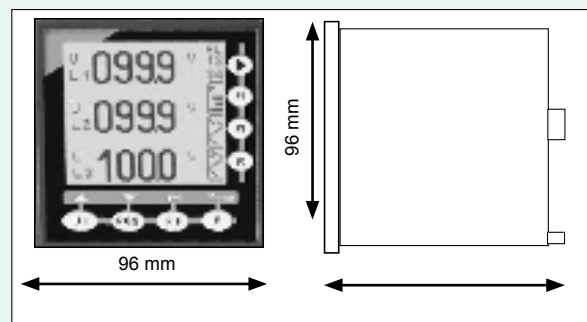
- 1 2 3 4**  
Voltage measures
- 5 6 7 8 9 10**  
Current measures

- A B**  
Auxiliary power supply



## Dimensions

Housing: 96 x 96 x 108 mm (with terminals)



**Mounting :** on panel; cut out 92 x 92 mm

**Tightening :** by 4 screwed fastening hooks

**Weight :** 400 g

# Technical features

## ► inputs

- **Voltage** 2 programmable ranges:  
Un=100VLN/173VLL and 330VLN/600VLL AC
- **Current** 2 programmable ranges: 1 & 5A (In=1.2A & In=6A)
- Measurable overrange* 1.2 In; 1.2 Un
- Overload* permanent: 750 V, 2 In  
during 10 s: 1000 V, 10 In
- Power draw* voltage input: 1 MΩ resistors  
current input: < 0.2 VA
- Test voltage* 2 kV / 50 Hz / 1 min.
- Frequency* 10...50...65 Hz (other frequencies: consult with us)
- Types of networks* single or 3-phase balanced/unbalanced  
with or without neutral

## ► options

### • **RS485 output**

- Type* 2 wire (galvanic partition / inputs: 2 KV)
- Speed* 4800 / 9600 / 19200 bauds
- Protocole* Modbus / Jbus RTU 8 bits programmable parity
- Format of the data* 16 bits integer (table of the units) or 32 bits with  
fixed units and decimal points.

### • **Relay outputs (option R)**

- Type of contact* on potential free contact (galvanic partition: 2.5KV)  
output 1NO
- Rated load* 5A - 250 VAC

#### - SETPOINTS OUTPUT

- Setting of the setpoints : 0 to 100% of the meas. range (programmable)
- Switching hysteresis : 0 to 15% of the setpoint (programmable)
- Time delay : 0 to 15s (programmable)

## ► supply

- Universal power supply  
20...270 VAC / 20...300 VDC
- Power draw 6 VA max. in AC, 3,5W max. in DC

## ► measure

### • **9 measurable parameters**

- Accuracy rating* Voltages, currents: 0.2 (IEC688-1)
- Thermal drifts* < 200ppm
- Measuring method* Fast simultaneous sampling of the 3  
3 voltages and the 3 currents. Digital  
calculation on 32 bits. Measurement of  
deformed signals, pass band 2.5KHz
- Display refreshing each second.*
- Digital filtering* programmable on several levels
- Cycle time* 40ms (for all network types)

## ► wiring

With detailed manual supplied in English.

# Coding

### Types:

**ARDETEM reference: PECA7**  
**SFERE reference: DIVA7**

### Options

- 2R 2 relay outputs
- N RS485 MODBUS/JBUS
- U 3 voltages
- I 3 currents

Order example: For a PECA7 with RS485 outputs, 2 (setpoint)  
relay outputs, measurement of the 3 voltages request the  
reference:

**PECA7/DIVA7 RNU**

measurement of the 3 voltages and the 3 currents:  
**PECA7/DIVA7 RNUI**



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