INSTALLATION MANUAL

ENERDIS® — CHAUVIN ARNOUX GROUP

Enerium 100 or 200

Rep.	Function
1.	LCD Screen
2.	Validation Key « OK »
3.	Optical head interface
4.	Navigation key

Enerium 100 / 200

Rep.	Function
1.	On-off or Analogue input / output
2.	Optical head interface
3.	Current inputs
4.	Voltage inputs
5.	RS485 communication interface
6.	Ethernet communication connection
7.	Power supply
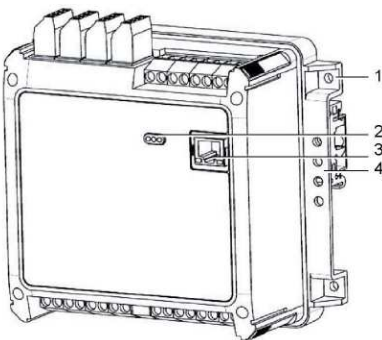
Enerium 110 or 210

Rep.	Function
1.	Hole for fastening on grating
2.	Optical head interface
3.	Remote communication interface
4	DIN rail mounting accessory

SAFETY

You have received a power monitor ENERIUM 100, 110, 200 or 210 and we thank you for your confidence.

⚠ To install this device with best conditions:

- Read this manual and the user's manual MS1-7352 (available on the CD enclosed with the box) and respect installation instructions specified in those two documents.
- This device is expected to be used in category III installations with a pollution degree of 2, in accordance with the standard IEC 61010-1.

INSTALLATION INSTRUCTIONS

The device described in this manual is expected to be used only by authorized or trained users.

When the instrument is received, check that it is complete and has not been damaged during transport. In case of unsafe suspected on the product, it must be put out of order.

Before proceed to product electrical installation:

- Check that the power supply is disconnected and locked out in accordance with good practice and safety rules.
- Check that the network voltage and the required product voltage are the same.

To be aware of others instructions, please consult the handbook MS1-7532 (Available on the CD enclosed with the box).

MECHANICAL INSTALLATION

ENERIUM 100 or 200 have to be always installed on a panel. Proceed as follows:

1. Withdraw the four panel attachments. To withdraw a panel attachment, lift the front before sliding it. *(figure 2)*
2. Make a cut-out in the panel as shown by the figure 1
3. Insert the Enerium in the cut-out.
4. Slide the four panel attachments and push them until they hold the Enerium securely. (*Figure 2*)
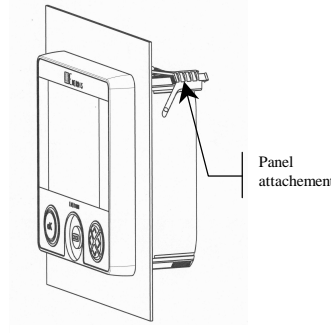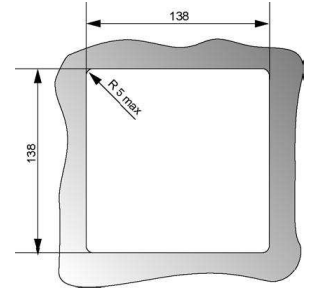

Figure 2

Figure 1

The version without LCD can be installed on a DIN rail or in the back of a cabinet.. Proceed as follow:

1. Clip the two supports on the DIN rail (158mm centres between screws).

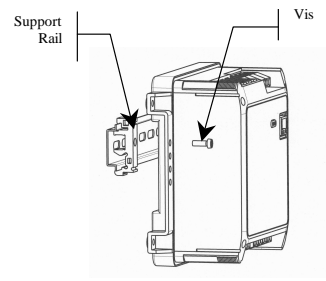2. Attach the monitor to the two supports with screws (four different heights are possible). *Figure 3*

For the installation in back of cabinet, screw the power monitor directly to the back of the cabinet.
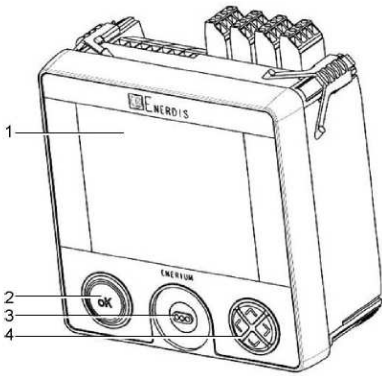

Figure 3

ELECTRICAL SPECIFICATIONS

Voltage inputs	Un = 100V / 400 V
	Umax = 480 V
	Burden < 0,1 VA
Current inputs	In = 5 A
	Imax = 6,5 A
	Burden < 0,15 VA
Auxiliary power supply	80 … 265 Vac (42,5 … 69 Hz) & 110 … 375 Vdc
	Consumption < 20 VA
	19,2 … 57,6 Vdc (Low level version)
	Burden < 9 W
On-off inputs	10 … 70Vdc
	Burden < 0,5W
On-off outputs	24 … 230Vac ±10%
	24 … 110Vdc ±20%
	Burden ≤ 100mA
Analogue outputs	-20 mA ≤ Isortie ≤ 20 mA, avec Imax = 22mA
	Rmax (Ω) = 10V/Ioutput
	0,1 μF max
Analogue inputs	0 … 20 mA with Imax=22mA
	Rmax (Ω) = 50Ω
	Burden < 50mW

ELECTRICAL CONNECTIONS V & I

The insertion of fuses on the voltage inputs and a system for short-circuiting the current inputs is strongly recommended.
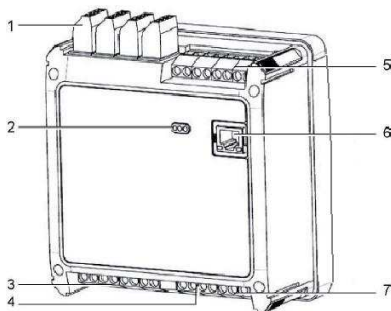
You will find below the mains wiring diagram on electrical network.

To be aware of the other wiring diagram, please consult the handbook MS1-7532 (Available on the CD enclosed with the box).
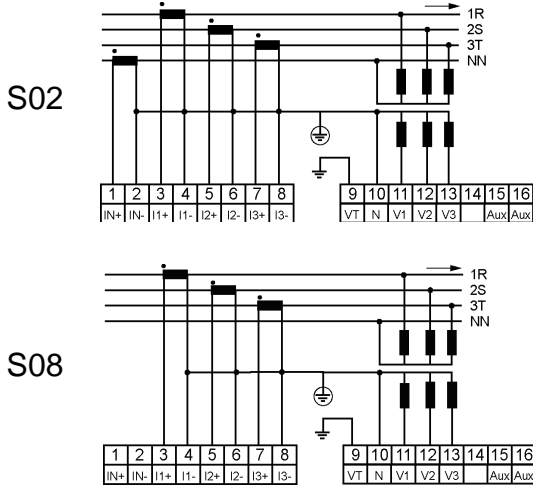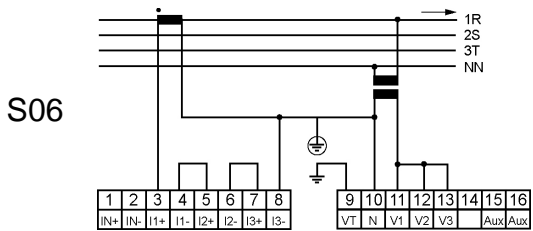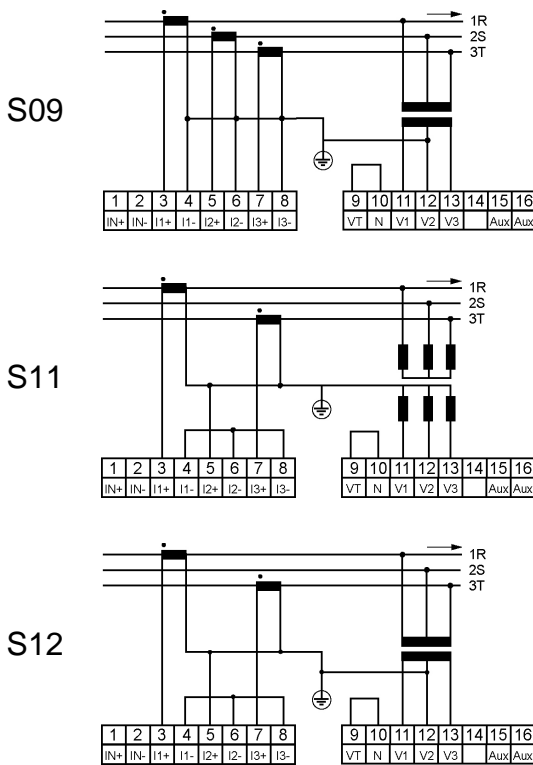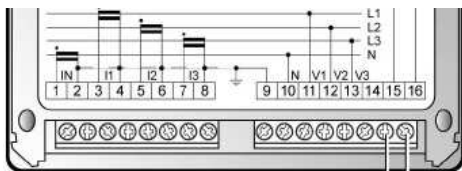
UNBALANCED THREE PHASE NETWORK - 4 WIRES

S02

S08

BALANCED THREE PHASE NETWORK - 4 WIRES

S06

UNBALANCED THREE PHASE NETWORK - 3 WIRES

S09
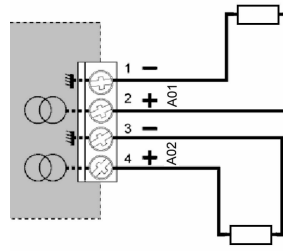

S11

S12

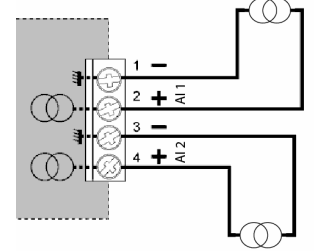## POWER SUPPLY CONNECTION

80…265 Vac & 110…375 Vdc
19,2…57,6 Vdc (Low level version)

OPTIONAL CARDS WIRING

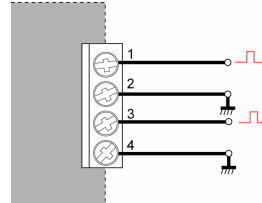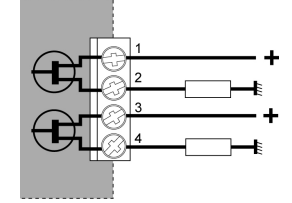### ANALOGUE OUTPUTS

ANALOGUE INPUTS

ON-OFF INPUTS

(Pulses, alarm or synchronization)
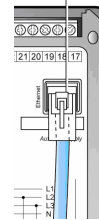

ON-OFF OUTPUTS

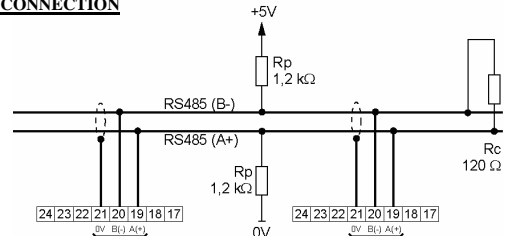(Pulses or alarm)

RS485 & ETHERNET CONNECTION

ETHERNET CONNECTION

RJ45 port

RS485 CONNECTION

NB :

1. Ethernet & RS485 options cannot be available simultaneously
2. For the RS485 network connection refer to standard in force

PARAMETERS LOCAL CONFIGURATION

It has to be done through the configuration menu by selecting the icon beside and pressing the key OK

Then in each menu, select the parameter to be modified with the keys ⬦ ⬦ Then select the value to be modified with the key ⟨⟩ ⟨⟩ Each value is modifiable with the key ⬦ ⬦. Validate with key OK. Go back to the menu with the key ⟨⟩

In case of no action on keys during more than 3 minutes, the backlight is turned in standby mode.

ENERIUM 100, 110, 200 or 210 can be configured with the software E.Set supplied in each box. Communication with the product can be carried out localy with the optical head supplied in option or by remote control via RS485 (MODBUS RTU protocol) or Ethernet (MODBUS/TCP RTU).