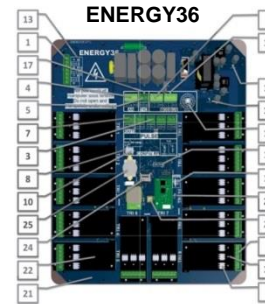


**!!! DANGER ET WARNING !!!**

**Security precautions:** The setup of these equipments can only be done by skilled workers. Only an electrician should be allowed to install these goods. A faulty installation or handling could bring about electrocution, burn, explosion or fire hazard. Before the installation, please read the instructions and take into account the place of specific setup to the goods. Do not open, dismantle, damage or modify the device. Any unauthorized opening or repairing is cancelling the whole of the responsibilities, the replacement right, the warranties as well as the type certification. You should exclusively use RD-TECH accessories. Before the installation of the device, please compare the informations which are on the nameplate with the mains (voltage, current, frequency). The nonobservance of these instruction's indications doesn't engage the manufacturer's responsibility.

**Electrocution, burn, explosion or fire hazard:** the installation and the maintenance of this device should only be realized by skilled staff + before any intervention on the device, please cut off the voltage inputs + anyway, use a suitable voltage detector to confirm the voltage's absence + replace all the devices, doors and covers before switch on the device + anyway, use the appropriate voltage to supply this device + if these precautions were not observed, it should lead to serious injuries. Damage hazard on the device: Please, remember to respect the auxiliary line voltage shown on the settled device + the network's frequency 50 or 60 Hz + a maximal voltage of 660V AC to the input voltage, phase/phase or phase/neutral.

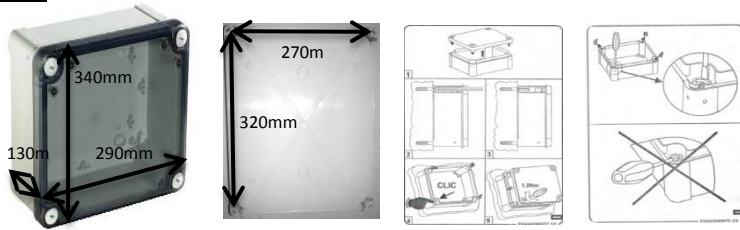
**Very important:** the installer will watch that the ENERGY36 has upstream in the circuit, a system of typical electric isolation such as isolator / switch / disconnecting switch. This isolation's system must be well placed and easily accessible. This system shall be marked as being the unit which cut of the device. This unit must be suitable with the CEI 60947-1 and the CEI 60947-3. The capacity of isolation shall have to allow to cut the ENERGY36 off in it's loading. It represents a caliber cut power of a minimum of 5A. The Severing will have to be applied to the whole wiring connected to the ENERGY36 supply



1. Input terminal block / voltage measurement
2. Current measurement's Tore terminal block
3. Impulse input terminal block
4. Analogic input terminal block
5. T input terminal block
6. MODBUS's communication terminal block
7. « Out » output terminal block
8. Configuration's Slot C/D (Coordinator/Device) with RF com
9. Configuration's Slot of current measurement's Tores
10. Configuration's Slot of the ENERGY36's cluster number
11. Slot of COM RF ON/OFF (connection / disconnection of RF's com)
12. Rotary selector of MODBUS's address
13. Visualization's Led of input/voltage's measurement
14. Visualization's led of current measurement's Tores.
15. Visualization's Led of PC COM
16. Visualization's Led of MODBUS's communication
17. Visualization's Led of T input
18. Visualization's Led of the main input's board
19. Visualization's Led of RF's measurement boards input
20. Visualization's Led of RF's communication (com RF)
21. Main board ENERGY36
22. Current measurement's board
23. The connexion's base of external aerial
24. SD board's medium
25. Battery

**1**

**Montage coffret**

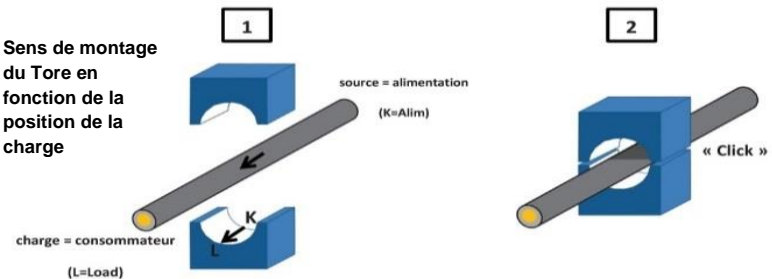


**2**

**Tores setup (CT)**



**Sens de montage du Tore en fonction de la position de la charge**



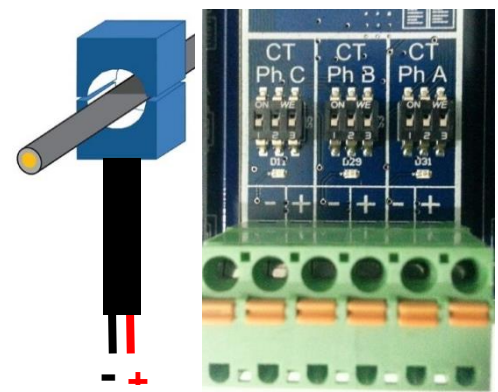
**3**

**Tores parameterization (CT)**

Tores	SWITCH 1	SWITCH 2	SWITCH 3
20 Amp	OFF	OFF	OFF
80 Amp	ON	OFF	OFF
120 Amp	OFF	ON	OFF
300 Amp	ON	ON	OFF
600 Amp	OFF	OFF	ON
1500 Amp	ON	OFF	ON
3000 Amp	OFF	ON	ON
5000 Amp	ON	ON	ON

**4**

**Tores wiring (CT)**



**5**

**Supply connection / voltage measurement**

Type	PhA	PhB	PhC	N	LED PhA	LED PhB	LED Ph C
Alim/mesure tension							
Monophasé					LED	LED	LED
Ph+N	I	0	0	I	ON	OFF	OFF
Triphasé					LED	LED	LED
3Ph+N	I	I	I	I	ON	ON	ON
Triphasé					LED	LED	LED
3Ph	I	0	I	I	ON	OFF	ON

**6**

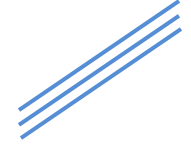
**Configuration of communication method**

**RF radio communication**



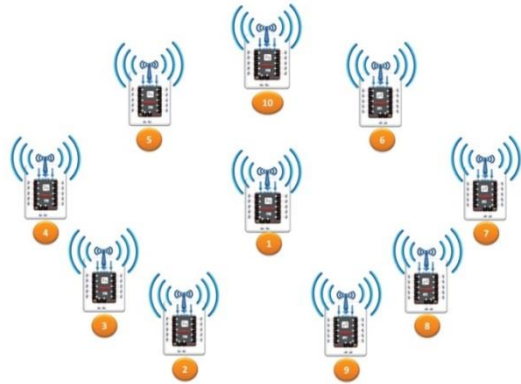
**6 A**

**Modbus wired communication**

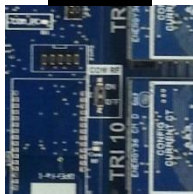


**6 B**

## Configuration N°1 : RF radio communication



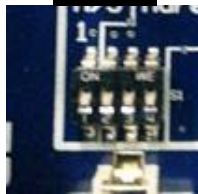
6A - 1



Mark 11  
RF Com Slot On/Off

**Radio communication activation between the ENERGY36**  
(Position « On »)

6A - 2



Mark 8  
C/D Slot  
(Coordinator/Device)

**Configuration of the ENERGY36 which collects data in « Coordinator » and the other one in « Device »**

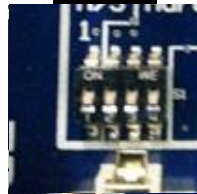
6A - 3



Mark 12  
Rotary selector  
(number from 0 to 9)

**Configuration of the number of an ENERGY36 in a radio cluster** (number to differentiate them inside a cluster in radio communication)

6A - 4



Mark 10  
Cluster N° config slot (RF cluster number)

**Configuration du numéro de groupe radio de l'ENERGY36**  
(Tous les ENERGY36 d'un même groupe radio doivent avoir le même numéro de groupe radio)

**6A - 1** – Activate radio communication between the ENERGY36 (COM RF slot in position « on ». Check radio aerial placement.

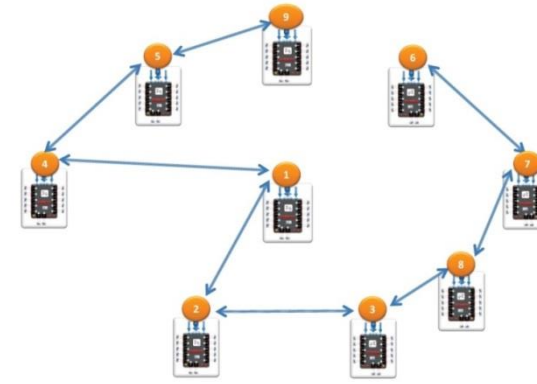
**6A - 2** – Inside a cluster of ENERGY36 in RF radio communication, containing up to 10 ENERGY36, you have to choose which device will collect data to realize datacomms. This one will be configured as “coordinator” (Slot C/D – mark: 8, position « On »).  
For the other ENERGY36 of a same radio cluster, you have to put them as emitter (Device) (slot C/D - mark: 8, position « Off » (Device).

**6A - 3** – Inside a cluster in RF radio communication, you also have to give a different number to each ENERGY36 (Number from 0 to 9 on the rotary selector address– Mark 12), to differentiate the ENERGY36 et identify measured data in indexing memory.

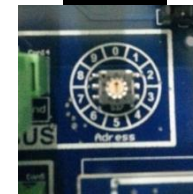
**BE CAREFUL:** The coordinator of a cluster of ENERGY36, in radio communication, must always be configured on « 0 » on the rotary slot address

**6A - 4** – Inside a same cluster of ENERGY36 in radio RF communication, every ENERGY36 must be configured on the same number of the number of radio cluster (config Slot cluster's number – Mark 10). In order to distinguish the member of another radio cluster of ENERGY 36, you will have to give a different radio cluster number.

## Configuration N°2 : Modbus wired communication



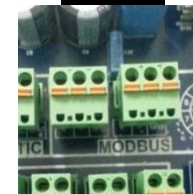
6B - 1



Mark 12  
Address rotary selector  
(number from 1 to 9)

**Configuration Modbus number of an ENERGY36**

6B - 2



Mark 6  
Modbus terminal block

**Wired modbus link on terminal block**

6B - 3



Mark 11  
Slot Com RF On/Off

If necessary:  
**Desactivation of radio communication** (Position « Off »)

**6B - 1** - Define the modbus address of each ENERGY36 on the network. To define the wired modbus number allocated to an ENERGY36, you have to place the rotary selector (mark:12), on a number between 1 à 9, on the main board. Similarly, we 'll give a different wired modbus number to each ENERGY 36 linked on the same wired of MODBUS communication..

Nota: The positions « 0 » and « 1 » of the address rotary slot, give the same wired modbus number « 1 ».

**6B - 2** – Connect the modbus wired link on the terminal block mark 6.

**6B - 3** – If necessary and in function of either the configuration or the environment, you can totally deactivate the radio communication (Slot Com RF position « Off » - mark 11). Thus there will have no more neither radio emission nor radio reception.