

PULSE CONCENTRATOR FOR MODBUS NETWORKS

TNC / CNT

ARDETEM

SFERE



Type

- ▶ The **TNC/CNT** is a *fully programmable pulse concentrator*, that enables direct visualising of power draws in KWh and in number of pulses received.
- ▶ These data are then sent on to a PC via the MODBUS/JBUS RS 485 isolated data link.

Display

- ▶ A high-brightness display (seven 7.6mm red digits) enables visualising of 8 independent counters and totalling of several inputs.
- ▶ Display for each counter of the min. and max. values recorded down the stream for the chosen integration period (1 to 60 min).
- ▶ 8 logic state leds for each input in real time.

Functions

- ▶ A pulse output associated with the internal totalling meter.
- ▶ A recording of the contents of the meters in case of power supply cut.

Applications

- ▶ Pulse centralisation to a supervision system.
- ▶ Counting of surges (eg: starting of gensets etc...)
- ▶ Watching of power draw.

External features

Protection: Case / terminals: IP 20

Case: Self - extinguishing grey Noryl UL 94VO.

Latching on symmetrical DIN rail.

Plug-off connector for screwed cables (2.5 mm², flexible or rigid)

Weight: 210 g

Operating temperature: -10°C to +55°C.

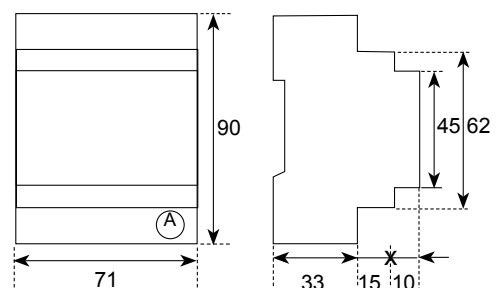
Storage temperature: -20°C to +70°C.

CE marking



Dimensions

Case: 71 x 90 x 58 mm



(A)  2 switches "ON" "OFF" to enable or disable the 120 Ω termination resistor and the internal polarisation resistors for the digital data link RS485.

Technical features

inputs

8 inputs with common GND

Type : contact closed by relay or open collector or TTL level

Duration : minimum duration of the pulse: 10ms for a high or low logic state

Input zero reset by external contact (optional).

outputs

RS485 ISOLATED OUTPUT

Type : 2 or 4-wire half duplex

Address : can be parametered from 1 to 255

Baud rate : 1200 to 19200 bauds

Protocole : MODBUS/JBUS RS 485 mode RTU
Materialisation of the exchanged sequences by a red led.

Configuration of the internal termination and polarisation resistance by switches (accessible near the terminal, see drawing A).

ISOLATED PULSE OUTPUT

Dedicated to the totalling meter

Type : 1 NO/NC (5A/250 Vac)

Weight : weight associated with the pulse, parametrable from 1 to 9 999 999

Duration : duration of the pulse, parametrable from 100ms to 500ms, in 100 ms increments

power supply

2 versions: high or low voltage (specify on order)

High voltage : 90...270 Vac 50/60/400 Hz
and 88...350 Vdc

Low voltage : 20...40 Vac 50/60/400Hz
and 20...64 Vdc

Power draw : 3W

general electrical data

ISOLATION:

Input/RS output : 2KV-50Hz-1min.

Inputs/pulse output : idem

Between outputs : idem

Between supply/inputs and outp. : idem

DISPLAY

Counter : 7 digits of 7 high-brightness segments

Height : 7.6 mm

Capacity : 0 to 9 999 999

Accuracy : +/- 1 digit

Logic state : (inputs): symbolised by a red display from 1 to 8.



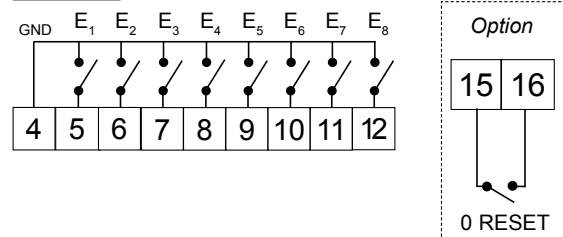
e-mail : info@ardetem.com
http : //www.ardetem.com

Route de Brindas
Parc d'activité d'Arbora N°2
69510 SOUCIEU EN JARREST
FRANCE

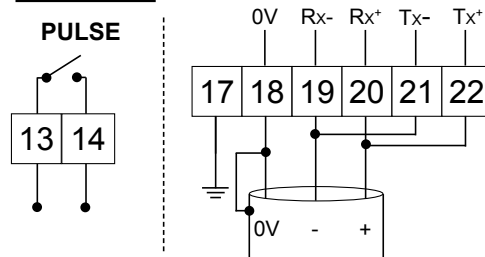
Tél. : 33 (0)4 72 31 31 30
Fax. : 33 (0)4 72 31 31 31

Wiring

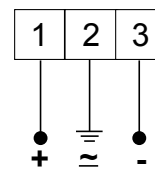
INPUTS



OUTPUTS



POWER SUPPLY



Coding

Types

ARDETEM reference: TNC

SFERE reference: CNT

Power supply:

High voltage [2]
Low voltage [3]

Order example:

For a TNC or a CNT with a 230 V / 50 Hz supply,
request the reference:
TNC/CNT 2

This appliance is designed for industrial applications. It has to be installed in an electrical cabinet, or equivalent.

your representative