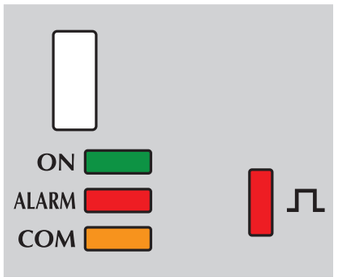
8 Technical Characteristics

Electrical characteristics (Auxiliary power supply)	
AC voltage	110-230 VAC ±15 % (Ph/N ou Ph/Ph) Cat III
Frequency	50/60 Hz
Consumption	< 2 VA without display < 6 .3VA with display
Connection	Removable spring-cage terminal, 2 x 2 positions, 0.5 … 2.5 mm² solid cable or 0.25 … 1.5 mm² stranded cable with ferrule
Communication characteristics	
Link	Wireless
Protocol	LoRaWAN
Bandwidth	863 - 870 MHz
Use	Europe
Port	2
Class	Class C
Power Level	14 dBm
Version	1.0.3
Spreading Factor	SF7 to SF12
Activation Method	OTAA

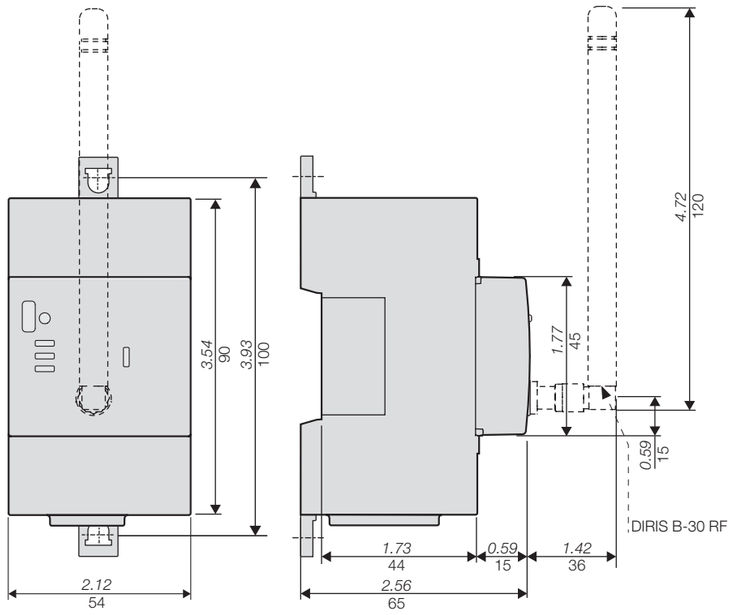
USB	
Type	USB 2
Protocol	Modbus RTU over USB
Function	- Firmware upgrade via Product Upgrade Tool software - Configuration via Eay Config System software
Connection	Type B micro USB connector
Environmental characteristics	
Operating temperature	-10 … +70 °C
Storage temperature	-25 … +85 °C
Operating humidity	55 °C / 97% relative humidity
Operating altitude	≤ 2000 m
Vibration	1G from 10 to 100Hz
Measurement accuracy	
Standard	According to IEC 61557-12 PMD DD classification in association with specific current sensors (TE, TR /iTR, TF)
Active energy and active power accuracy	Class 0.2 (DIRIS B-10L alone) Class 0.5 with TE, iTR and TF sensors Class 1 with TR sensors

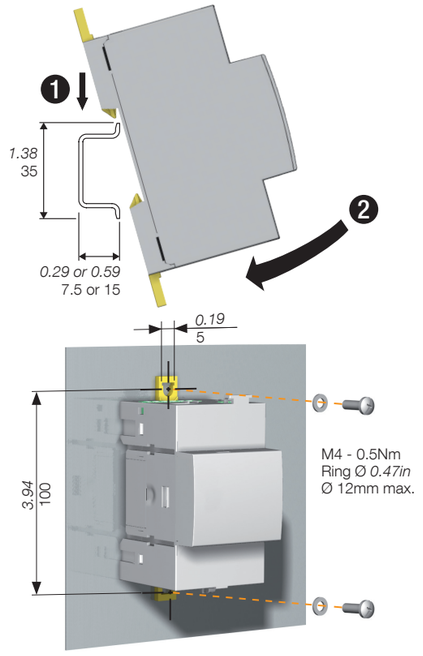
9 LEDs

LED	OFF	FLASHING	STABLE
ON (Green)	Device is off	- 10 sec during startup - Manual blinking command	Product ON
ALARM (Red)	No active alarm	System alarm active on a device	-
COM (Orange)	LoRa card not started or not connected to LoRa network	LoRa card is pairing	LoRa card is connected and operational
⎍ (Red)	No energy flowing	Energy is flowing (corresponds to the metrological pulse weight)	-



Dimensions *in*/mm





CORPORATE HQ CONTACT: SOCOMEC SAS, 1-4 RUE DE WESTHOUSE, 67235 BENFELD, FRANCE.
Print: 70 g/m² - A3 > 70 x 100 mm - R/V - B&W - The bar code must be visible once the document is folded. Non contractual document.

QUICK START GUIDE EN

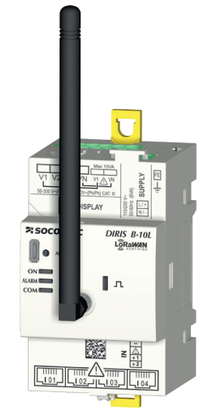
socomec
Innovative Power Solutions

551173C

Power Monitoring Device with wireless LoRaWAN communication

DIRIS B-10L

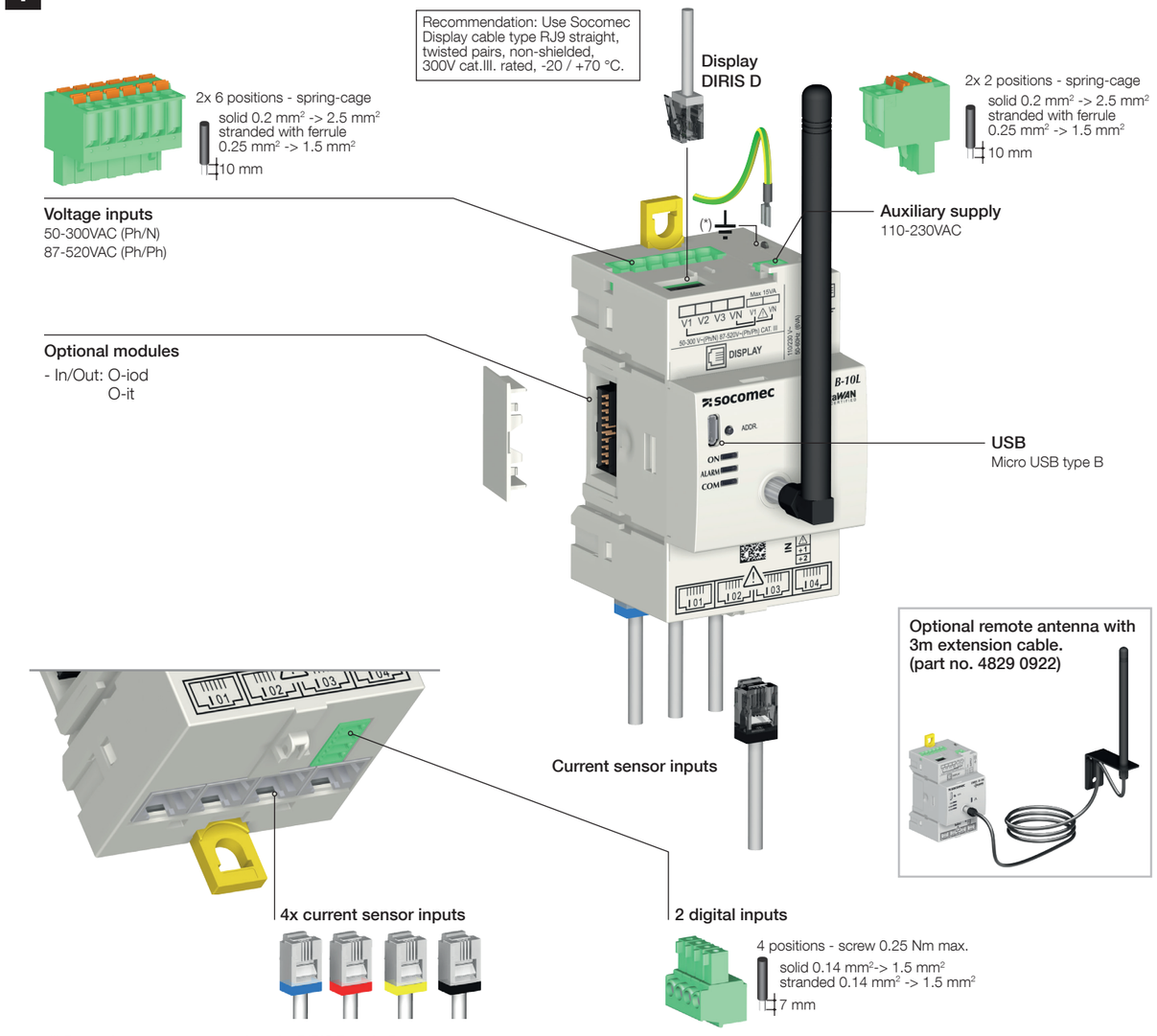
DIRIS B-10L
Ref. 4829 0900



Full user manual:
www.socomec.com/
operating-instructions
www.socomec.com

LoRaWAN CERTIFIED

1

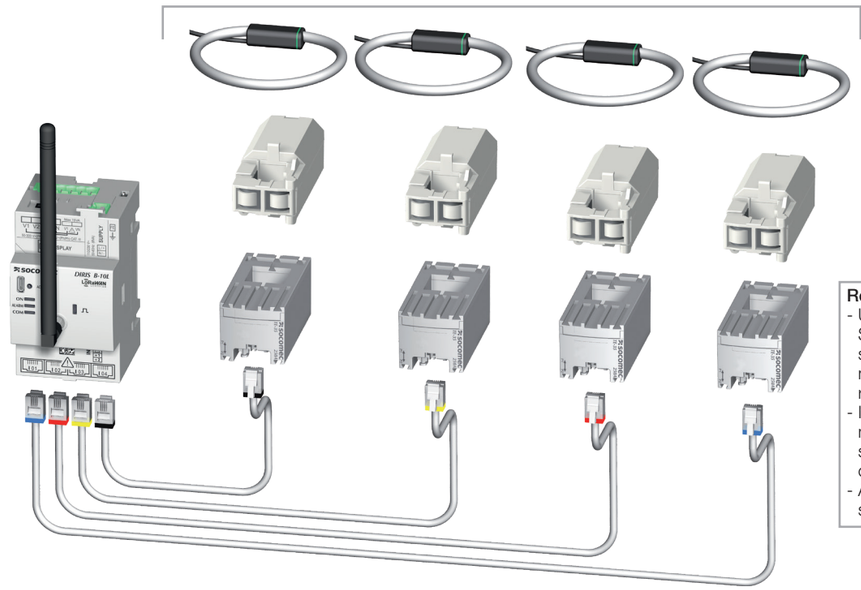


2 LoRa Key Recovery

- Go to www.socomec.com/activate-lora-product/ or flash the following QR code
- Fill in the form
- Retrieve your LoRa Keys

3 Current sensors

Current sensors TE / TR/iTR / TF

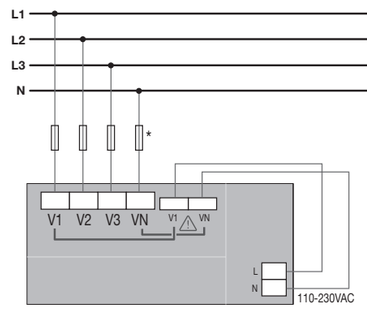


DIRIS B-10L

Recommendations:
- Use Socomec Current Sensors cables type RJ12 straight, twisted pairs, non-shielded, 300V cat.III. rated, -20 / +70 °C.
- It is recommended to mount all the current sensors with the same orientation.
- Always start with current sensor input 1.

4 Auxiliary supply

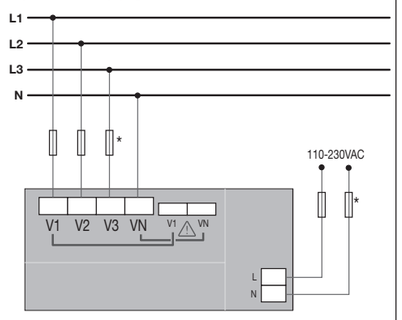
Self-supply



Fuse on Neutral is mandatory for self-supply configuration.

* Fuse 0.5 A gG / BS 88 2A gG / 0.5 A class CC

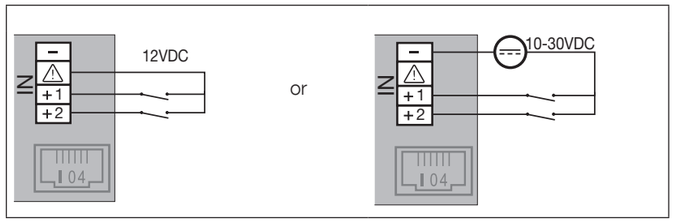
Separate supply



* Fuse 0.5 A gG / BS 88 2A gG / 0.5 A class CC

5 Auxiliary supply

Inputs



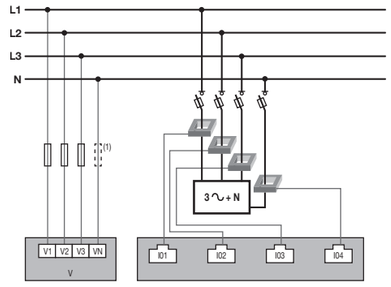
6 Main network connections and loads

(1) See step **4**
Each current input setting is individual, see below some examples:

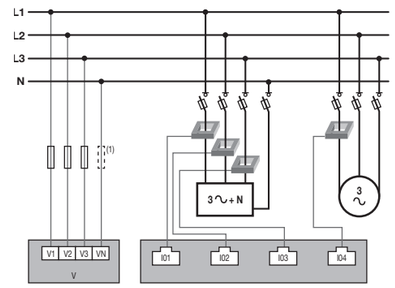
= Current sensor **CT** = Balanced load = Unbalanced load

Fuse 0.5 A gG / BS 88 2A gG / 0.5 A class CC

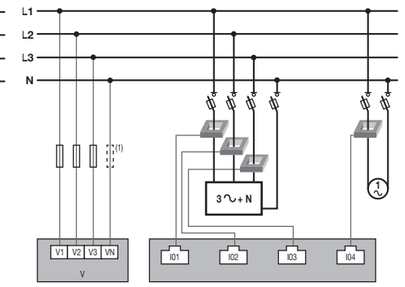
3P+N – 4CT



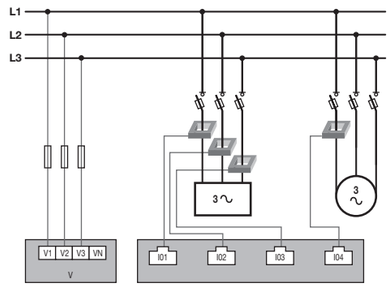
3P+N – 3CT & 3P – 1CT



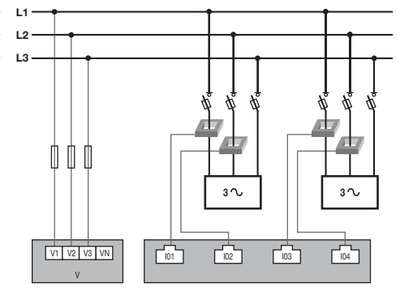
3P+N – 3CT & 1P+N – 1CT



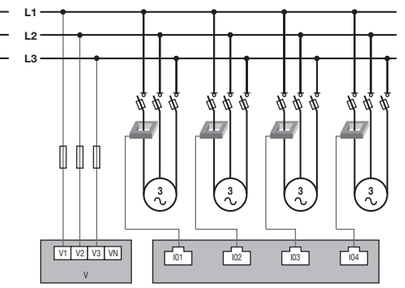
3P – 3CT & 3P – 1CT



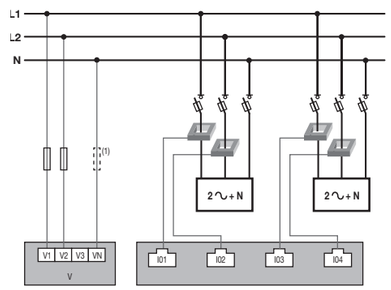
3P – 2CT (x2)



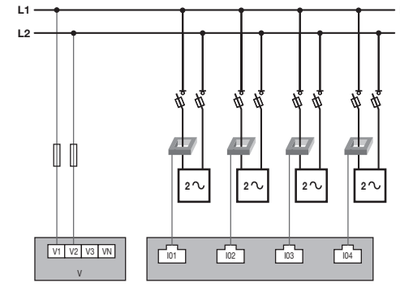
3P – 1CT (x4)



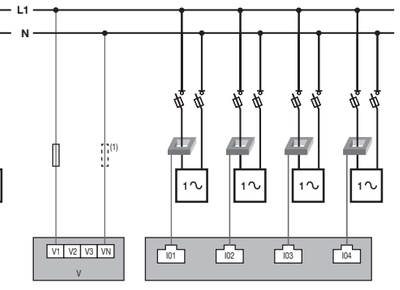
2P+N – 2CT (x2)



2P – 1CT (x4)



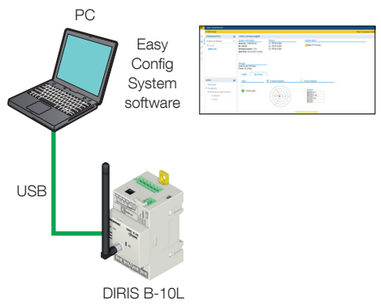
1P+N – 1CT (x4)



7 Configuration

Easy Config System software

USB



www.socomec.com/easy-config-system_en.html

DIRIS D-30 display

RJ9