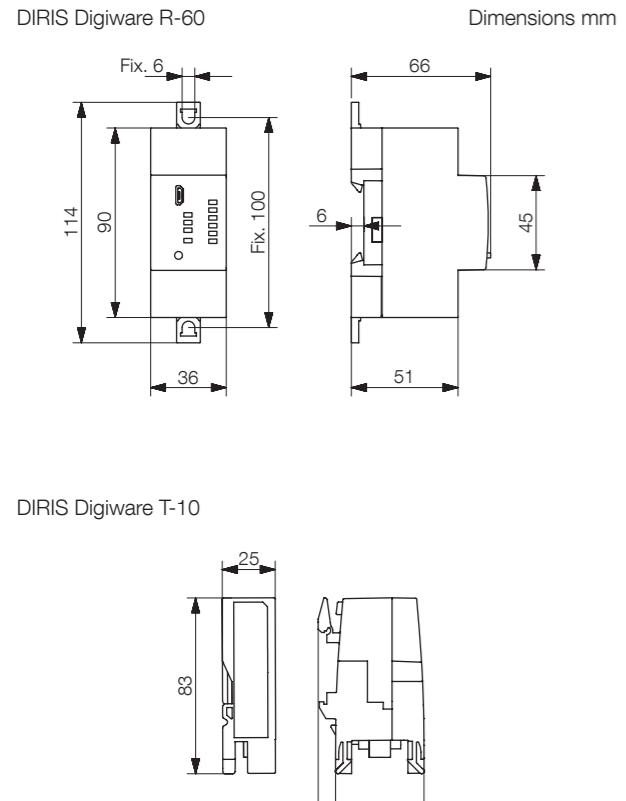
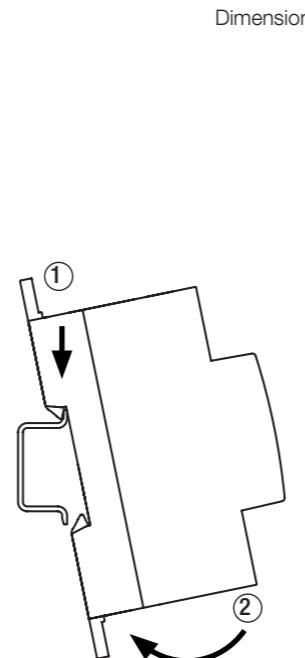


## 5 Dimensions



## 6 DIN rail mounting

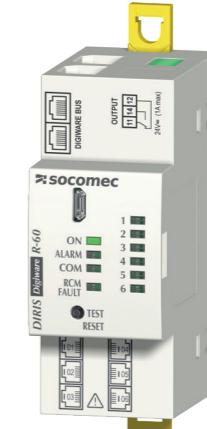


## DIRIS Digiware RCM

POWER AND RESIDUAL CURRENT MONITORING SYSTEM FOR TN-S AND TT ELECTRICAL INSTALLATIONS



Full user manual:  
[www.socomec.com/operating-instructions](http://www.socomec.com/operating-instructions)  
[www.socomec.com](http://www.socomec.com)



Residual Current Monitoring device  
**DIRIS Digiware R-60**  
4829 0114



RJ12 residual CT adaptor  
**DIRIS Digiware T-10**  
4829 0620

## 7 Technical characteristics

### STANDARDS

IEC 62020 - Residual Current Monitors (RCM)	Type A
IEC 60755 - Residual Current Devices (RCD)	Type A (§8.5)
IEC 61557-12 - Power metering and monitoring devices (PMD)	Overall performance class 0.5 for active power (with TE/iTR/TF)

### COMMUNICATION CHARACTERISTICS

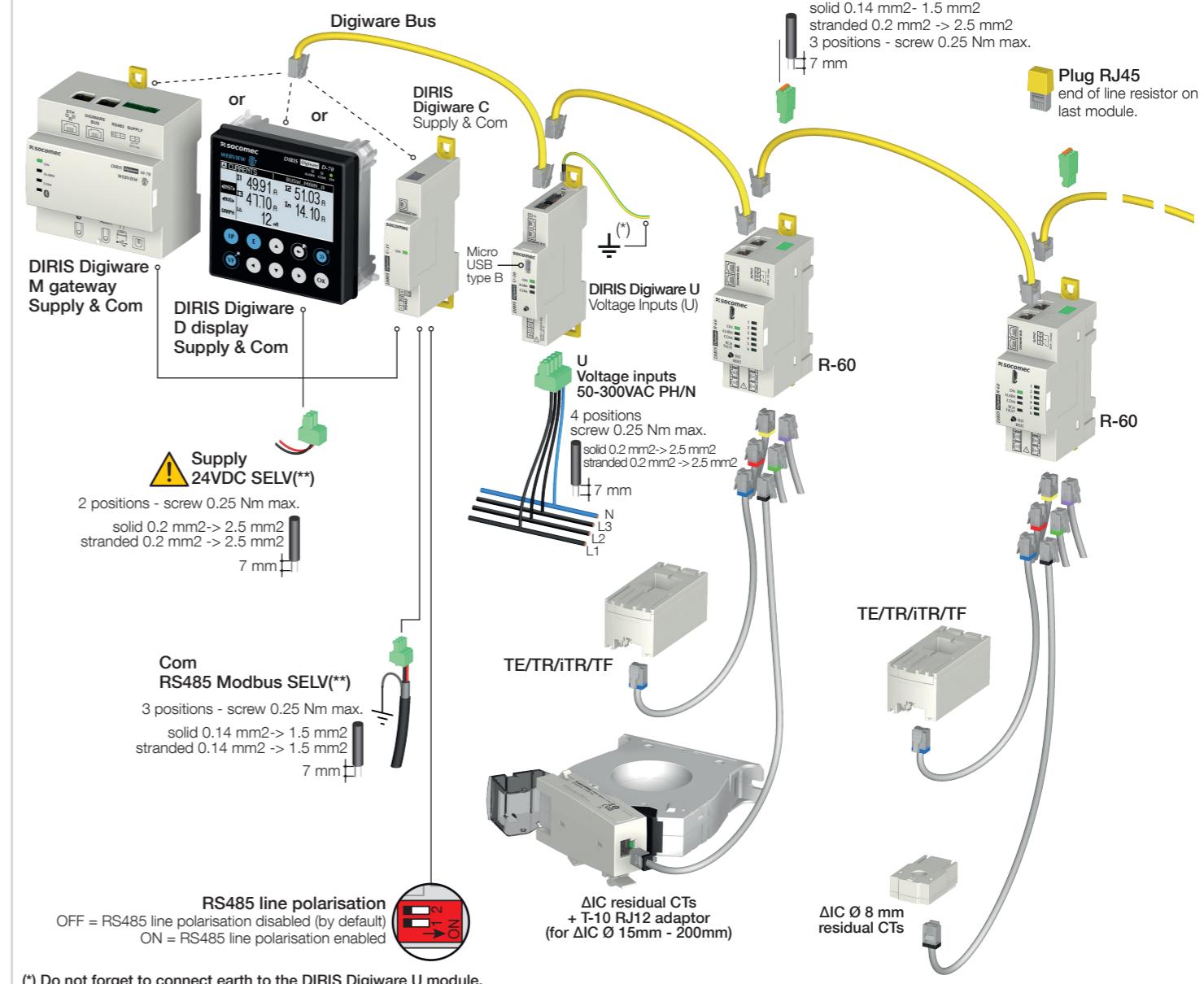
RJ45 Digiware bus	1 x Input / 1 x Output
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USB	Firmware upgrade via Product Upgrade Tool software Configuration via Easy Config System software
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### ENVIRONMENTAL CHARACTERISTICS

Storage temperature	-20 ... +70°C (IEC 60068-2-1 / IEC 60068-2-2)
Operating temperature	-10 ... +55°C (IEC 60068-2-1 / IEC 60068-2-2)
Humidity	+25°C / 97% RH & +55°C / 93 % RH (IEC 60068-2-30)
Operating altitude	≤ 2000 m
Pollution degree	2
Protection class	IP 40 (front face)
Overshoot category	CAT III

- 1** Use RJ45 Digiware Bus cables (UTP RJ45 straight, twisted pairs, unshielded, AWG24, 300V, cat.III. rated, -20 / +70 °C) between all DIRIS Digiware modules.
- ⚠** Do not connect RJ12 sensor cable to RJ45 Digiware Bus connector to avoid any risk of mechanical damage of this connector.



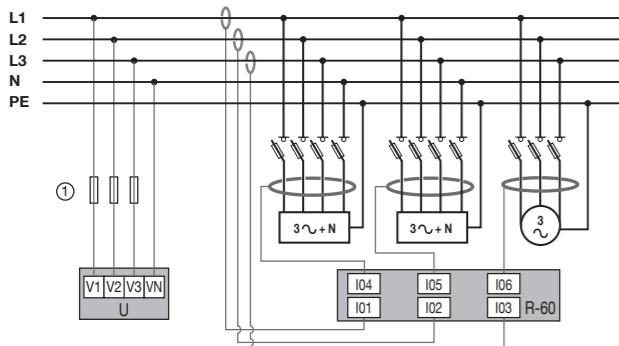
## 2 Main network and load connections

Each current input setting is individual and can be mixed (CT and/or residual CT). See below some examples: (for full PMD configurations, refer to DIRIS Digiware Quickstart).



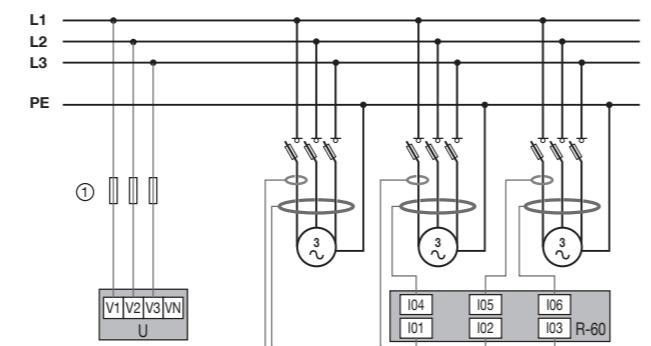
### 3 x 3-Ph loads

RCM ( $I_{\Delta}$ ) on each 3-Ph load  
Load current monitoring on upstream L1, L2, L3



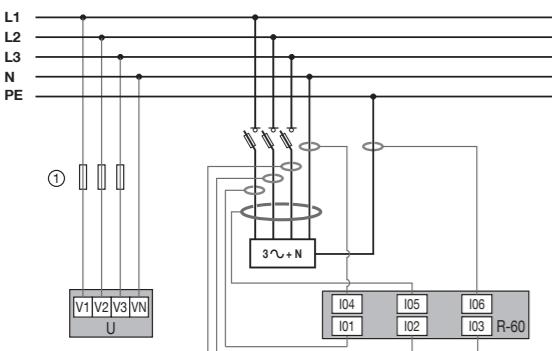
### 3 x 3-Ph loads

RCM ( $I_{\Delta}$ ) on each 3-Ph balanced load  
Load current monitoring on each 3-Ph balanced load



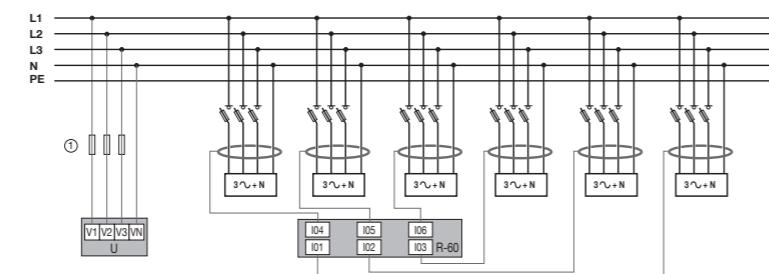
### 1 x 3-Ph loads

RCM ( $I_{\Delta} + I_{PE}$ )  
Load current monitoring (L1, L2, L3, N)



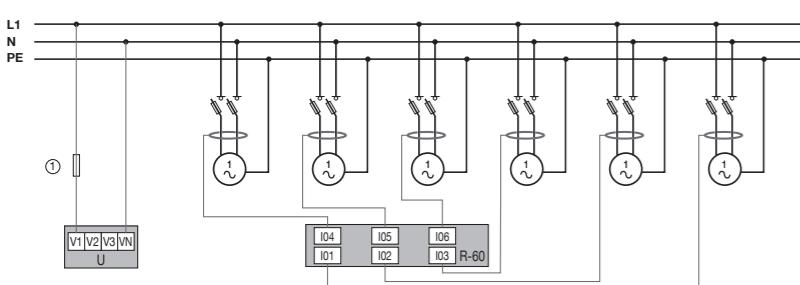
### 6 x 3-Ph loads

RCM ( $I_{\Delta}$ ) on each 3-Ph load



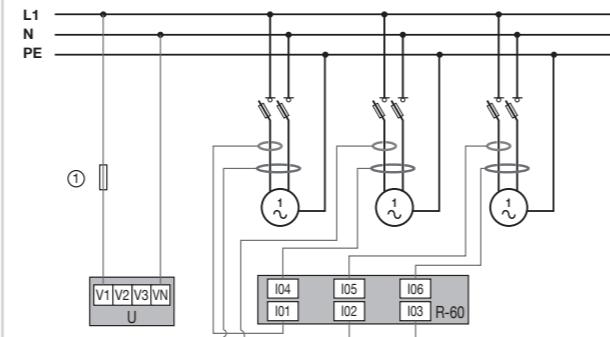
### 6 x 1-Ph loads

RCM ( $I_{\Delta}$ ) on each 1-Ph load



### 3 x 1-Ph loads

RCM ( $I_{\Delta}$ ) on each 1-Ph load  
Load current monitoring on each 1-Ph load



When combining load current monitoring with Residual Current Monitoring for the same circuit, always use the first available I<sub>0x</sub> current inputs of the DIRIS Digiware R-60 to connect TE, TR/iTR and TF current sensors directly followed by residual CTs.

#### Example for 1 load: 3P+N - 3 CT

- I<sub>01</sub> → Load current monitoring (I<sub>1</sub>)
- I<sub>02</sub> → Load current monitoring (I<sub>2</sub>)
- I<sub>03</sub> → Load current monitoring (I<sub>3</sub>)
- I<sub>04</sub> → Residual Current Monitoring (I<sub>Δ</sub>)
- I<sub>05</sub> → Residual Current Monitoring (I<sub>PE</sub>)

#### Example for 3 loads: 1P+N - 1 CT

- I<sub>01</sub> → Load 1 current monitoring (I<sub>1</sub>)
- I<sub>02</sub> → Residual Current Monitoring (I<sub>Δ</sub>)
- I<sub>03</sub> → Load 2 current monitoring (I<sub>1</sub>)
- I<sub>04</sub> → Residual Current Monitoring (I<sub>Δ</sub>)
- I<sub>05</sub> → Load 3 current monitoring (I<sub>1</sub>)
- I<sub>06</sub> → Residual Current Monitoring (I<sub>Δ</sub>)

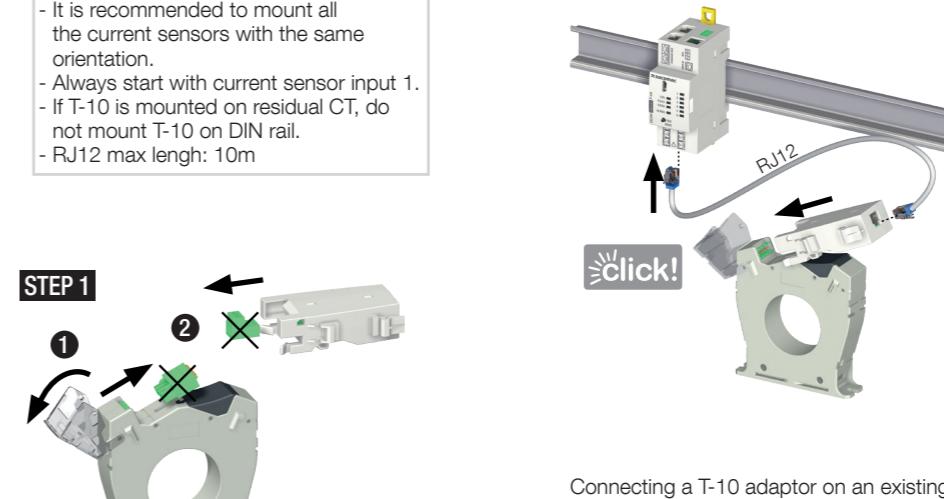
## 3 Residual CT & T-10 adaptor

### Important:

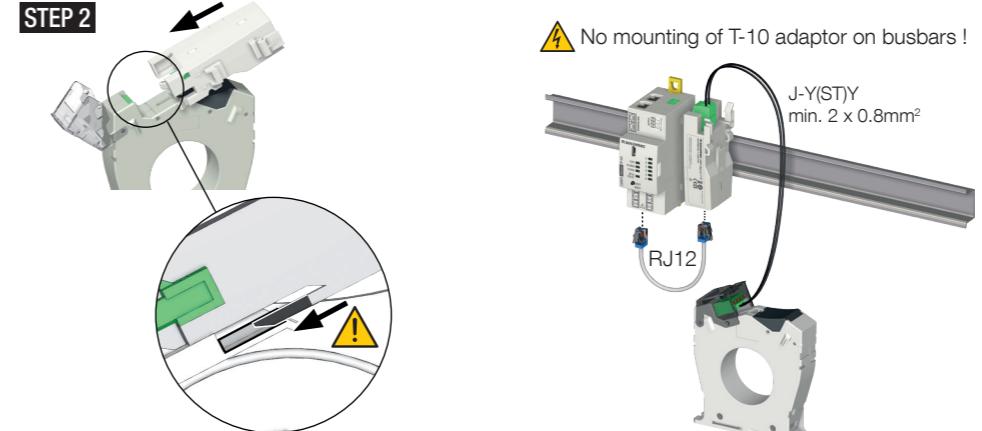
- Use only RJ12 SOCOMEC current Sensors cable (type RJ12 straight, twisted pairs, unshielded, 300V cat. III. rated, -40 / +85°C).
- It is recommended to mount all the current sensors with the same orientation.
- Always start with current sensor input 1.
- If T-10 is mounted on residual CT, do not mount T-10 on DIN rail.
- RJ12 max length: 10m

Connecting a T-10 adaptor on ΔIC residual CTs (ΔIC-30 and higher only)

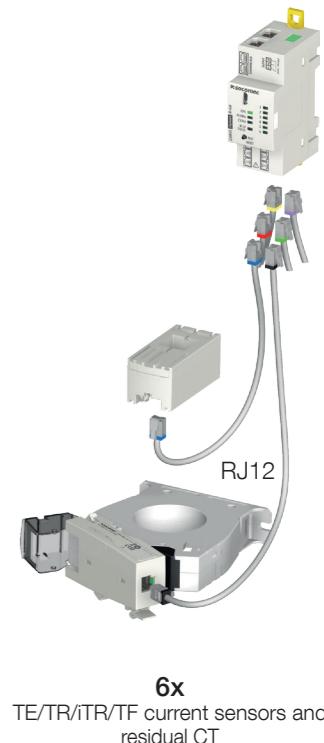
**⚠ No mounting of T-10 adaptor on busbars !**



Connecting a T-10 adaptor on an existing residual CT

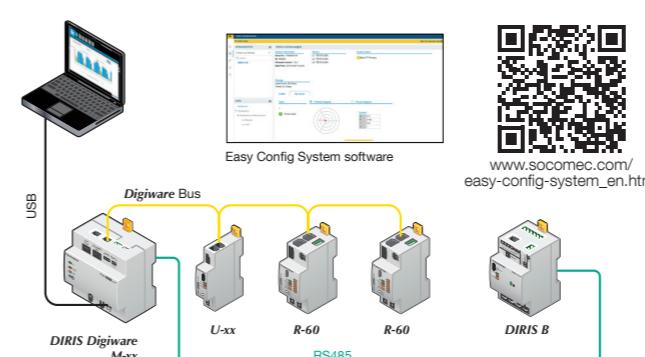


DIRIS Digiware R-60



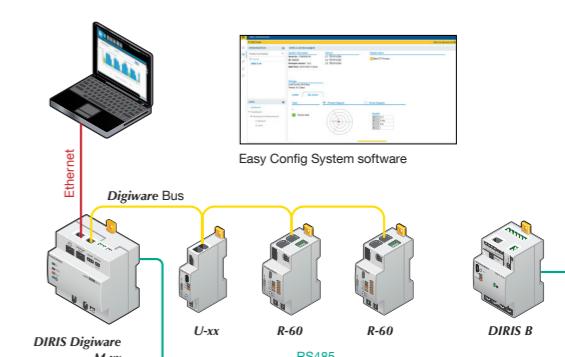
## 4 Configuration

### ● USB through M-xx gateway or D-xx display

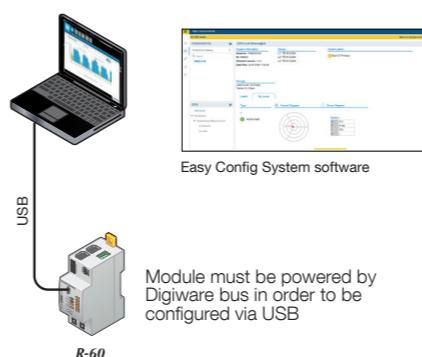


[www.socomec.com/easy-config-system\\_en.html](http://www.socomec.com/easy-config-system_en.html)

### ● Ethernet through M-xx gateway



### ● Direct USB to R-60 module



Module must be powered by Digiware bus in order to be configured via USB

### ● Manual via D-xx display

