

# DIRIS Digiware S

Current measurement module with integrated sensors



DIRIS Digiware S



## Function

DIRIS Digiware S current acquisition modules have 3 integrated current sensors for measuring, monitoring, and analyzing electrical circuits up to 63 A.

Positioned directly downstream protective devices, they offer exclusive technologies:

VirtualMonitor which provides real time status of protective devices (ON/OFF/TRIP).

AutoCorrect which detects wiring errors even under no load-conditions, and enables software correction without the hassle of reworking the physical wiring.

Multiple DIRIS Digiware S modules can be daisy chained by simply clicking in an RJ45 cable. This allows great flexibility to the user who wishes to add more metering points in the future.

## Advantages

### Plug & Play

- Save wiring time: the current sensors are integrated in the module
- Quick RJ45 connection between modules
- Direct mounting, upstream or downstream of the protective device

### Multi-circuit

Multiple DIRIS Digiware S modules can be daisy chained to monitor multiple loads

### Compact

- The best compactness/performance ratio on the market
- Current inputs spaced at 3/4" center intervals, aligning perfectly with protective devices

### Accurate

- Class 0.5 for active energy (kWh) from 2 - 120% of nominal current

## The solution for

- > Data center
- > Building
- > Industry



## Strong points

- > Plug & Play
- > Multi-circuit
- > Compact
- > Accurate

## Integrated technologies



For more information see our website [www.socomec.us](http://www.socomec.us)

## Conformity to standards

- > UL 61010-1  
CSA-C22.22  
No. 61010-1  
Guide FTRZ/PICQ  
File E257746



- > IEC 61557-12

- > ISO 14025



## Create your project

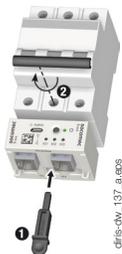
- > Find the best DIRIS Digiware configuration:  
[www.meter-selector.com](http://www.meter-selector.com)



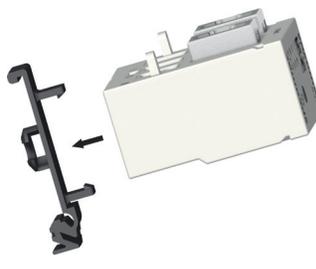
Application	Current measurement module with integrated sensors	
	Metering	Analysis
<i>DIRIS Digiware S</i>		
General	S-130	S-135
Number of integrated sensors	3	3
Maximum current for integrated sensors	63 A	63 A
Breaker pitch / center spacing	18 mm	18 mm
<b>Metering</b>		
± kWh, ± kvarh, kVAh	•	•
ΣP (kW), ΣQ (kvar), ΣS (kVA), PF	•	•
P (kW), Q (kvar), S (kVA), PF per phase		•
Predictive Power		•
Load curves / demand profiles		•
Peak Demand		•
Multi-tariff (max 8)	•	•
<b>Multi-measurement</b>		
I1, I2, I3, In	•	•
I system		•
Current unbalance (Inba, Idir, Iinv, Ihom, Inb)		•
Phi, cos Phi, tan Phi	•	•
<b>Power Quality</b>		
THD I1, I2, I3, In		•
Individual harmonics I (up to 63rd)		•
Crest factors I1, I2, I3, In		•
K Factor		•
<b>Alarms</b>		
Overcurrents		•
Measurement thresholds		•
System alarms	•	•
Protective device	•	•
<b>History</b>		
Average values		•
Reference	4829 0160	4829 0161

### Mounting accessories

Temporary MCB insert  
(for use during panel assembly)



DIN rail and back plate mounting



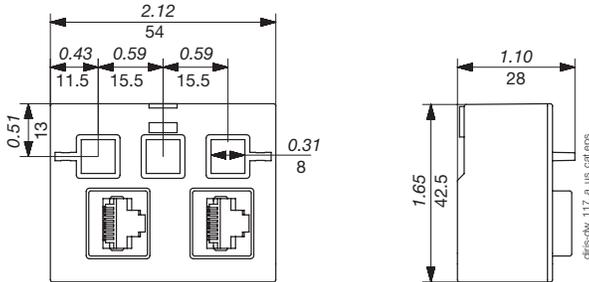
Cable tie



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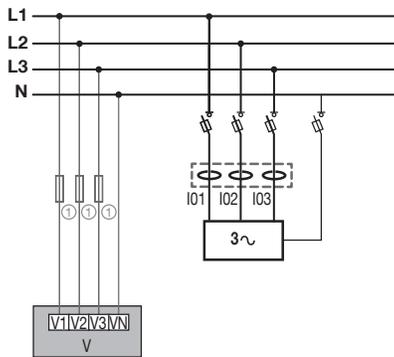
## Dimensions (in/mm)



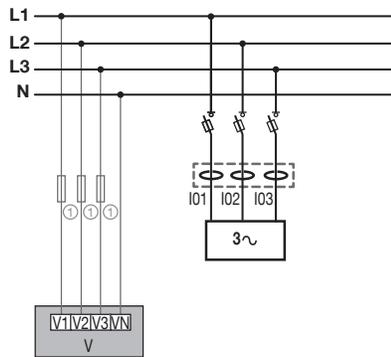
## Connections

Current is measured by the integrated inputs IO1, IO2 and IO3 on the DIRIS Digiware S module.

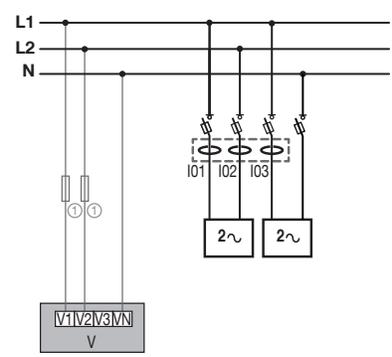
### 3P+N - 3CT



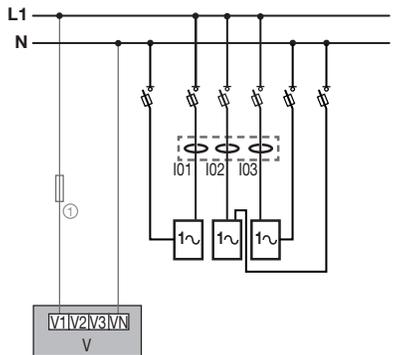
### 3P - 3 CT



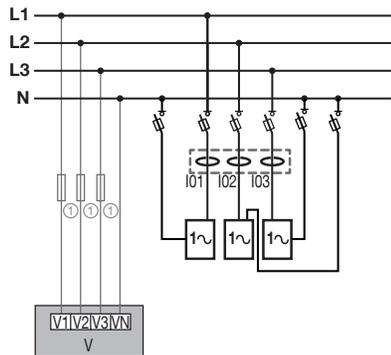
### 2P+N - 2CT & 2P+N - 1CT



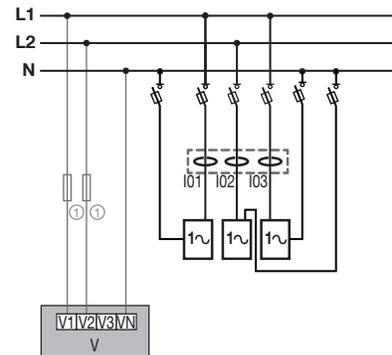
### 1P+N - 1 CT (3x)



### 3P+N - 1 CT (3x)



### 2P+N - 1 CT (3x)



DIRIS Digiware S

Load

Fuses: 0.5 A gG/BS 88 2 A gG/0.5 A class CC

## Technical characteristics

### Measurement characteristics

Measurement of current	
Number of current inputs	3
Associated current sensors	Integrated in the product
Basic current I <sub>b</sub>	10 A
Maximum current I <sub>max</sub>	63 A
Current measurement accuracy	Class 0.5 IEC 61557-12

Measurement of energy	
Accuracy of active energy	Class 0.5 IEC 61557-12
Accuracy of reactive energy	Class 1 IEC 61557-12

### Mechanical characteristics

Mounting	DIN rail or back plate
Protection degree	IP20, front face
Power consumption	0.35 VA

### Communication characteristics

Digiware Bus	
Connection type	Socomec RJ45 cable
Function	Proprietary bus connecting Digiware units
USB	
Connection type	USB Type Micro-B
Protocol	Modbus RTU over USB
Function	Firmware upgrade and configuration

### Environmental characteristics

Operating temperature	+14 ... +131 °F / -10 ... +55 °C
Storage temperature	-13 ... +158 °F / -25 ... +70 °C
Operating humidity	0% to 97% RH / +131 °F / 55 °C, non condensing
Operating altitude	≤ 6560 feet / 2000 m

## References

DIRIS Digiware S		Reference
S-130	Metering - 3 integrated current sensors	4829 0160
S-135	Analysis - 3 integrated current sensors	4829 0161

Accessories		Reference
DIN rail mounting clips (10 pieces)		4829 0195
Temporary MCB insert		4829 0196
Digiware Bus terminating resistor (already supplied with DIRIS Digiware C, M & D)		4829 0180
6.5-ft USB Cable for configuration - Type A to Type Micro-B		4829 0050

Digiware bus cables <sup>(1)</sup>		Reference
RJ45 cables for Digiware Bus	Length 0.20 ft / 0.06 m	4829 0189
	Length 0.32 ft / 0.10 m	4829 0181
	Length 0.66 ft / 0.20 m	4829 0188
	Length 1.64 ft / 0.50 m	4829 0182
	Length 3.28 ft / 1 m	4829 0183
	Length 6.56 ft / 2 m	4829 0184
	Length 9.84 ft / 3 m	4829 0190
	Length 16.4 ft / 5 m	4829 0186
	Length 32.8 ft / 10 m	4829 0187
	164.04 ft / 50 m reel + 100 connectors	4829 0185

*(1) To guarantee the proper operation of the DIRIS Digiware system, do not substitute Socomec Digiware bus cables with standard Ethernet RJ45 cables.*

Commissioning		Reference
1/2 day remote commissioning	Remote commissioning including installation verification, programming and communication testing	9230100027
1/2 day on-site commissioning	On-site commissioning including installation verification, programming and communication testing	9230100004

## Expert Services

Our service engineers are an essential part of our team, and they are dedicated to ensuring your power monitoring system provides accurate and reliable measurements to your EPMS software or SCADA system.

Our services include:

- > Site audits to verify the proper wiring of your system
- > Personnel training on how to configure, operate and maintain power monitoring equipment and associated software
- > Remote and on-site commissioning to ensure that your system is up and running quickly, with peace of mind.

For further information, please contact your nearest SOCOMEC branch.

