



# DIRIS Digiware S

Current measurement module with integrated sensors

Multi-circuit metering  
and measurement



*DIRIS Digiware S*



Configuration  
with EasyConfig,  
see page 280.

## Function

**DIRIS Digiware S** current acquisition modules have 3 integrated current sensors for the measurement of electrical circuits up to 63 A.

Positioned directly above or below the protective devices, they are associated with the DIRIS Digiware U voltage measurement module to measure consumption, and to monitor the electrical installation and the quality of the power supply.

## Advantages

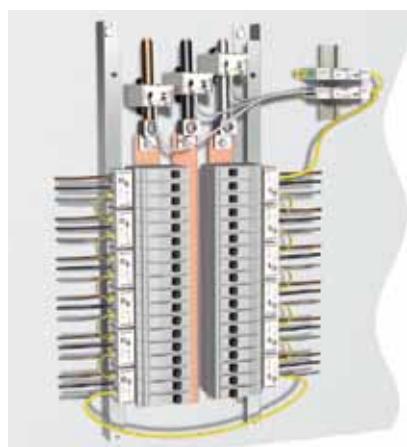
### Plug & Play

- Save wiring time: the current sensors are integrated in the module.
- Quick RJ45 connection between modules.
- Positioning possible upstream or downstream of the protective device.

### Multi-circuit

Multiple DIRIS Digiware S modules can be used within the measurement system enabling the monitoring of a large number of loads.

## Functional diagram



### Compact

- A measurement module offering the best compactness/performance ratio of the market.
- Current inputs spaced at 3/4" center intervals to align appropriately with the panelboard branch circuit breakers.

### Accurate

- Better than revenue grade: Class 0.5 for active energy (kWh) for the global measurement chain and on the full scale.

DIRIS Digiware S modules can be mounted directly on protective devices, on the left side or right side of the panelboard, solving issues of space constraints.

## The solution for

Panelboards in:

- Data center
- Building
- Industry



## Strong points

- Plug & Play
- Multi-circuit
- Compact



RJ45 (Digiware Bus)  
cables are available.

## Integrated technologies



## Conformity to standards

- UL 61010  
Guide FTRZ/PICQ  
file E257746



- IEC 61557-12



- ISO 14025



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Application	Current measurement module with integrated sensors		
	Metering	Analysis	Monitoring
<b>DIRIS Digiware S</b>	<b>S-130</b>	<b>S-135</b>	<b>S-Datacenter</b>
Number of current inputs	3	3	3
Basic current $I_b$	10 A	10 A	10 A
Maximum current $I_{max}$	63 A	63 A	63 A
Load type accepted	1P + N 2P / 2P + N 3P / 3P + N	1P + N 2P / 2P + N 3P / 3P + N	1P + N
<b>Metering</b>			
± kWh, ± kvarh, kWh	•	•	•
Multi-tariff (max 8)		•	
Demand profiles		•	•
<b>Multi-measurement</b>			
I1, I2, I3, In, $\Sigma P$ , $\Sigma Q$ , $\Sigma S$ , $\Sigma PF$	•	•	•
P, Q, S, PF per phase		•	•
Predictive power		•	
Current unbalance (Inba, Inb, Idir, inv, Ihom)		•	
Phi, cos Phi, tan Phi		•	•
<b>Quality</b>			
THDI1, THDI2, THDI3, THDin		•	•
Individual harmonics I (up to 63rd)		•	
Crest factors U, V, I		•	
K factor		•	
Overcurrents		•	
<b>Alarms</b>			
Thresholds and combinations		•	•
Load level			•
Wiring errors		•	•
Protective device		•	•
<b>Trends</b>			
Average values		•	•
<b>Format</b>			
Width	2.13 in		

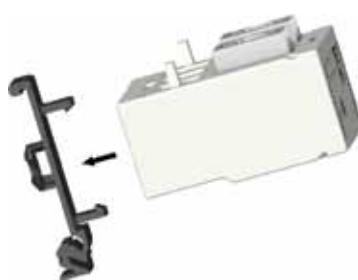
## Mounting accessories

Temporary MCB insert  
(for use during panel assembly)



diris-dw\_137\_a.eps

DIN rail and back plate mounting



diris-dw\_138\_a.eps

Cable tie tether

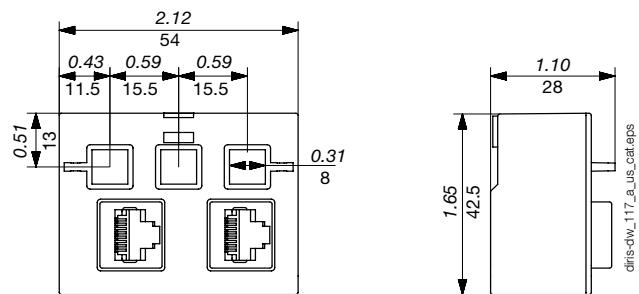


diris-dw\_139\_a.eps

# DIRIS Digiware S

Current measurement module with integrated sensors

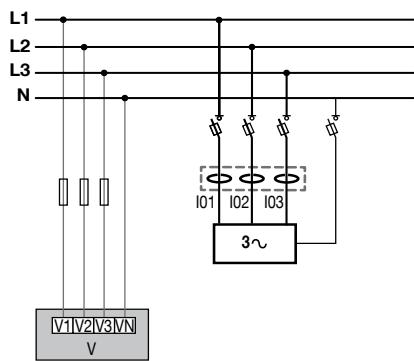
## Dimensions (in/mm)



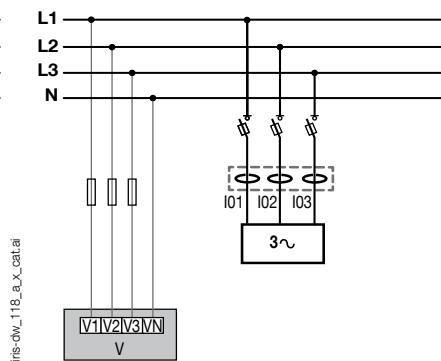
## Connections

Current is measured by the integrated inputs I01, I02 and I03 on the DIRIS Digiware S module.

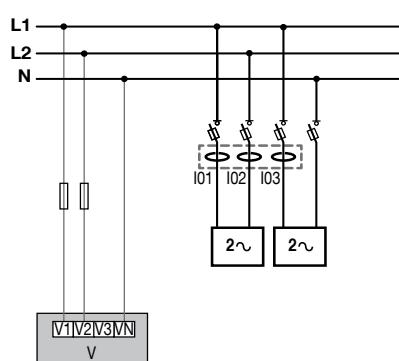
### 3P+N - 3CT



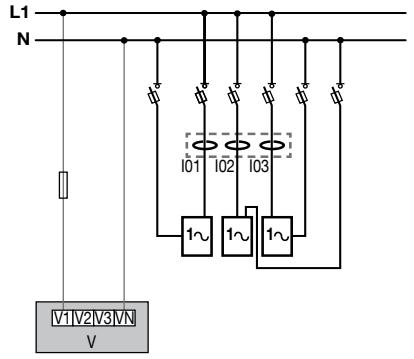
### 3P - 3 CT



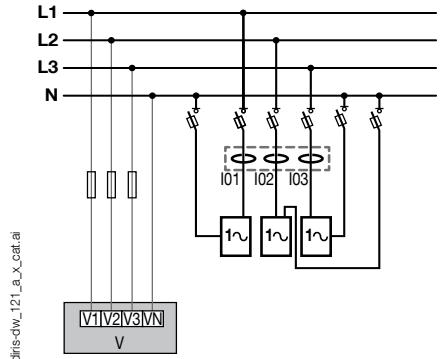
### 2P+N - 2CT & 2P+N - 1CT



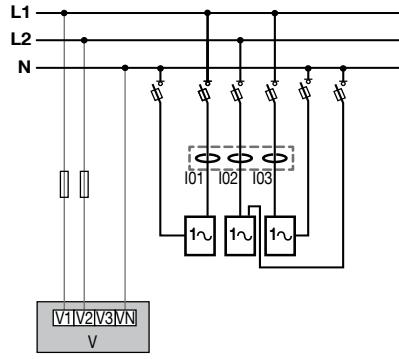
### 1P+N - 1 CT (3x)



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



### 2P+N - 1CT (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 Ib	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

Casing type	DIN rail or back plate mounting
Casing protection index	IP20/IK08
Weight	63 g / 2.22 oz
Module power consumption	0.35 VA

## Communication specifications

Digiware BUS	
Function	Connection between DIRIS Digiware S, U, I modules and system interfaces
Cable type	Specific Socomec cable with RJ45 connections
USB	
Protocol	MODBUS RTU on USB
Function	Configuration of DIRIS Digiware modules
Location	On each DIRIS Digiware module
Connection	Type B micro USB connector

## Environmental specifications

Ambient operating temperature	-10 ... +55 °C / +14 °F ... +131 °F
Storage temperature	-25 ... +70 °C / -13 °F ... +158 °F
Operating humidity	40 °C / 104 °F / 95% RH
Operating altitude	< 6560 feet / 2000 m

## References

DIRIS Digiware S	Reference
S-130	Metering - 3 integrated current inputs 4829 0160
S-135	Analysis - 3 integrated current inputs 4829 0161
S-Datacenter	Single-phase monitoring - 3 integrated current inputs 4829 0162
Accessories	Reference
DIN rail and back plate mounting clip (x10)	4829 0195
Temporary MCB insert (x10)	4829 0196

Digiware connection cables	Part number
RJ45 cables for Digiware Bus	Length 0.20 feet / 0.06 m <sup>(1)</sup> 4829 0189
	Length 0.32 feet / 0.10 m 4829 0181
	Length 0.64 feet / 0.20 m 4829 0188
	Length 1.64 feet / 0.50 m 4829 0182
	Length 3.28 feet / 1 m 4829 0183
	Length 6.56 feet / 2 m 4829 0184
	Length 16.4 feet / 5 m 4829 0186
	Length 32.8 feet / 10 m 4829 0187
	164 feet / 50 m reel + 100 connectors 4829 0185
	Termination for Digiware Bus (supplied with interfaces C and D) 4829 0180
USB configuration cable 4829 0050	

(1) The RJ45 0.20-ft cables can be used on 3-pole or 4-pole protective devices.



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