

DC current sensors

Associated with DIRIS Digiware DC



Solid-core sensors 50 ... 600 A



Split-core sensors 50 ... 500 A



Solid-core sensors 500 ... 5000 A



Split-core sensors 800 ... 2000 A

Function

The **DC current sensors** measure the DC load currents of an electrical installation and transmit information to the Idc measurement modules via a connection cable with RJ12 module side and Molex sensor side.

The range comprises solid-core and split-core sensors ranging from 50 to 5000 A in various sizes enabling use for new or existing electrical installations.

Up to 3 distinct DC sensors can be connected to the same DIRIS Digiware Idc module.

Advantages

Plug & Play

- A quick RJ12 connection makes wiring easy and reliable and prevents wiring errors.
- Fast configuration of the sensor's rating.

Flexible

- A complete range of solid-core and split-core sensors from 50 to 5000 A designed for new or existing electrical installations.

Installation

- Easy to install.
- Ideal for installations with limited space available.
- Just 4 different sensor models cover a wide measurement range.
- Colour-coded cables for ease of identification, and to prevent wiring errors.

The solution for

- > Data centre
- > Telecommunication
- > Renewable power
- > Transportation



Strong points

- > Plug & Play
- > Wide selection of ratings
- > Simplified installation

Conformity to standards

- > IEC 61010-1

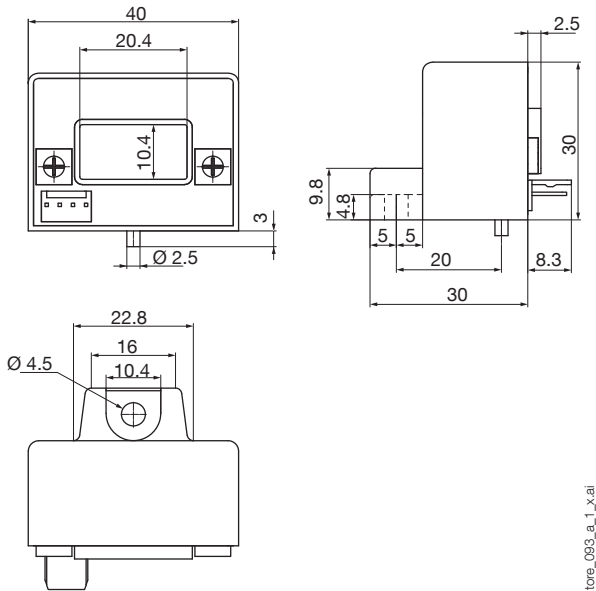


- > UL

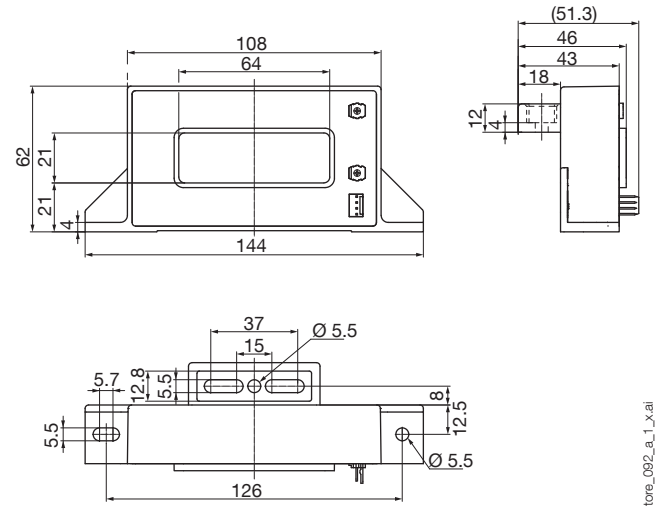


Dimensions (mm)

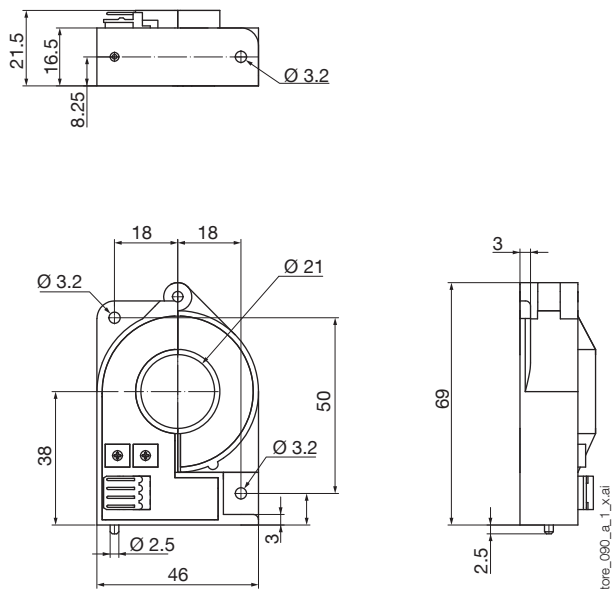
Solid-core sensors 50 ... 600 A (frame size 1)



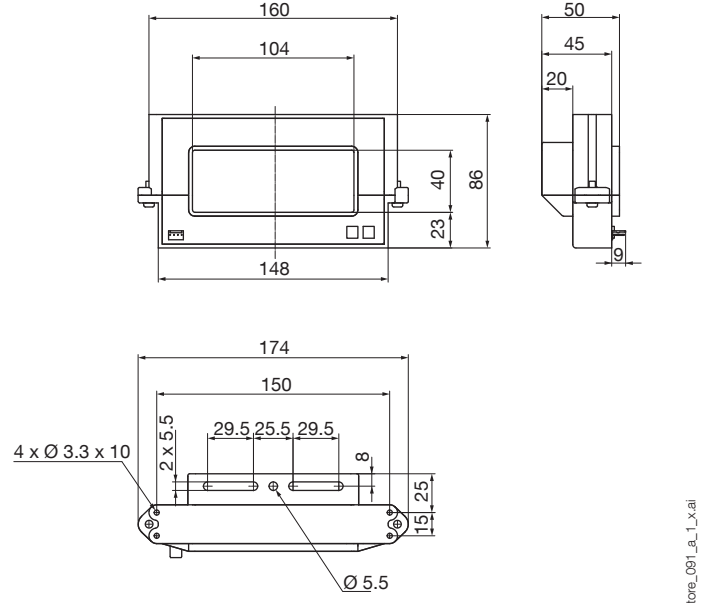
Solid-core sensors 850 ... 5000 A (frame size 2)



Split-core sensors 50 ... 500 A (frame size 1)



Split-core sensors 800 ... 2000 A (frame size 2)



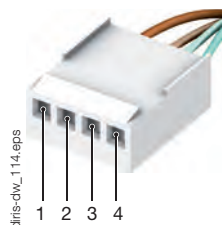
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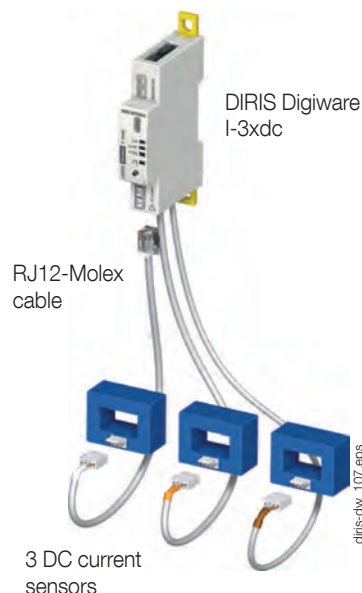
Connections

DC current is measured by external sensors connected to the DIRIS Digiware Idc modules via RJ12-Molex cables enabling quick connection without wiring errors. This varied range of solid-core or split-core current sensors can be adapted to all types of new or existing installation. The DC current sensors have the following technical characteristics:

- Open-loop Hall effect sensors.
- Solid-core or split-core.
- Power supply voltage: ± 15 V.
- Power supply current: ± 25 mA depending on the sensor.
- Output voltage: ± 4 V.
- 4-point male Molex terminal strip.
- Measurement range: 16 to 6000 A.
- Category III overvoltage.



- PIN 1: + 15 V (+ Vc)
- PIN 2: - 15 V (- Vc)
- PIN 3: sensor input (M)
- PIN 4: 0 V sensor (0)



Technical characteristics

Type of current sensor	Open-loop Hall effect
Connection	Specific Socomec cable with RJ12-Molex connectors
Current measurement accuracy	Solid-core sensors: 50 ... 600 A: < 1% Solid-core sensors: 850 ... 5000 A: < 1% Split-core sensors: 50 ... 500 A: < 2% Split-core sensors: 800 ... 2000 A: < 2%

Weight	Solid-core sensors 50 ... 600 A	60 g
	Solid-core sensors 800 ... 5000 A	450 g
	Split-core sensors 50 ... 500 A	80 g
	Split-core sensors 800 ... 2000 A	590 g
Operating temperature	Solid-core sensors 50 ... 600 A	-10 ... +80 °C
	Solid-core sensors 850 ... 5000 A	-25 ... +85 °C
	Split-core sensors 50 ... 500 A	-10 ... +70 °C
	Split-core sensors 800 ... 2000 A	-10 ... +70 °C
Storage temperature	Solid-core sensors 50 ... 600 A	-25 ... +80 °C
	Solid-core sensors 850 ... 5000 A	-25 ... +85 °C
	Split-core sensors 50 ... 500 A	-20 ... +85 °C
	Split-core sensors 800 ... 2000 A	-25 ... +85 °C

References

DC current sensors	Reference
Solid-core sensors (frame size 1)	
50 A	4829 0700
100 A	4829 0701
200 A	4829 0702
300 A	4829 0703
400 A	4829 0704
500 A	4829 0705
600 A	4829 0706
Solid-core sensors (frame size 2)	
850 A	4829 0707
1000 A	4829 0708
1500 A	4829 0709
2000 A	4829 0710
2500 A	4829 0711
5000 A	4829 0712
Split-core sensors (frame size 1)	
50 A	4829 0750
100 A	4829 0751
200 A	4829 0752
300 A	4829 0753
400 A	4829 0754
500 A	4829 0755
Split-core sensors (frame size 2)	
800 A	4829 0756
1000 A	4829 0757
1500 A	4829 0758
2000 A	4829 0759

RJ12-Molex cables		
Number of cables	Length of cables	Reference
3	0.3 m	4829 0782
3	0.5 m	4829 0783
3	1 m	4829 0784
3	2 m	4829 0785
1	5 m	4829 0786