

For performance reasons we recommend not to connect earth on DIRIS A10 earth and on CT secondary but only on one of them. For IT systems, it is recommended not to connect the CT secondary to earth.

## TECHNICAL CHARACTERISTICS

### Caractéristiques techniques

**CASE / BOITIER**  
Dimensions according to DIN43880: L=73 x H=90 x H=87 mm  
DIN Rail mounted according to EN50022  
Connection via Terminal blocks for solid and stranded cables:  
4mm<sup>2</sup> (cable) and 2.5 mm<sup>2</sup> (other)

Maximal torque : 0.6 Nm  
IP Index: IP51 (front panel) and IP20 (case)  
Device Weight: 205g (48250010) or 215g (48250011)

**DISPLAY / ECRAN**  
Type : Electroluminescent backlit liquid Crystal Display  
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**NETWORK MEASUREMENTS FOR / MESURE DE RESEAU**  
Three-phase (3 or 4 wire), two-phase (2 wire) and single-phase

**VOLTAGE (TRMS) / TENSION**  
Direct measurement: from 50 to 520 V AC (phase/phase)  
from 28 to 300 V AC (phase/neutral)

**CURRENT (TRMS) / COURANT**  
Via CT with : Primary: from 5 to 9 999 A  
Secondary: 5 A

**FREQUENCY / FREQUENCE**  
From 45.0 to 65.0 Hz  
Update period: 1 second

**POWER / PUISSANCE**  
Total: 0 to 9999 kW/kvar/kVA  
Update period: 1 second

**POWER FACTOR / FACTEUR PUISSANCE (4 quadrants)**  
Update period: 1 second

**AUXILIARY POWER SUPPLY / ALIMENTATION AUXILIAIRE**  
200 to 277 V AC 50/60 Hz ± 15 %  
Consumption: < 5 VA

**ELECTROMAGNETIC COMPATIBILITY / COMPATIBILITE ELECTROMAGNETIQUE**  
Immunity according to IEC 61326-1 Table 2  
With conducted and radiated emissions: CISPR11 - Class B

**CLIMATE / CLIMAT**  
Storage-temperature range: IEC 60068-2-1/IEC 60068-2-2 : -10 °C to +55 °C  
Operating-temperature range: IEC 60068-2-1/IEC 60068-2-2 : -20 °C to +70 °C  
Humidity: IEC 60068-2-3: 35 % HR  
Salt mist: IEC 60068-2-52 : 2.5 % NaCl

**MECHANICAL CHARACTERISTICS / CARACTERISTIQUES MECANQUES**  
Vibration from 10 to 100 Hz: IEC 60068-2-6 : 2 G

**INSULATION / ISOLATION**  
Electric security: IEC 61010-1  
Installation category: III (300 Vac ph/n)  
Degree of pollution: 2

**CHARACTERISTICS OF THE INPUT / CARACTERISTIQUES DE L'ENTREE**  
OVAC: 11 / 200 to 277 Vac; 12

**CHARACTERISTICS OF THE PULSE OUTPUT / CARACTERISTIQUES DE LA SORTIE**  
According to IEC62053-31 Class A and Class B  
Maximum voltage: 300Vdc, maximum current: 27mA  
Open collector output / Load resistor: >10kOhms

**CHARACTERISTICS OF THE TEMPERATURE / CARACTERISTIQUES DE LA TEMPERATURE**  
External temperature measurement.

**CHARACTERISTICS OF THE LED / CARACTERISTIQUE DE LA LED**  
0.1W/h by impulse

**EC MARKING / MARQUAGE CE**  
The DIRIS A10 complies with European directive for :  
• The Electromagnetic compatibility no. 2004/108/CE dated 15th of December 2004.  
• Low voltage directive no. 2006/95/CE dated 12th of December 2006.

CONFORMITY IEC 61557-12 Edition 2 (07/2008)			
EMF SPECIFICATIONS	Type of specification	Examples of possible specific values	Other additional specifications
Supply quality evaluation function (optional)		90	
EMF immunity		90	
EMF Emission		90	
EMF Immunity		90	
Operating performance class for active power < active energy (if function available)		0.5	

Symbol for functions	Measurement range	Operating performance class, according to CEI 61557-12	Other additional specifications
I	45 to 65 Hz	0.1	
In	88 to 520Vac	0.2	50 to 300Vac Ph/n
PPA, PFV	6.5mV to 0.8kV	0.6	
Ph, Ph, Ph	Unavailable function on A10		
Usw1	Unavailable function on A10		
Usw2	Unavailable function on A10		
Usw3	Unavailable function on A10		
Usw4	Unavailable function on A10		
Usw5	Unavailable function on A10		
Usw6	Unavailable function on A10		
Usw7	Unavailable function on A10		
Usw8	Unavailable function on A10		
Usw9	Unavailable function on A10		
Usw10	Unavailable function on A10		
Usw11	Unavailable function on A10		
Usw12	Unavailable function on A10		
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Usw99	Unavailable function on A10		
Usw100	Unavailable function on A10		

Support : RS485  
Type : 2 wires half duplex  
Protocol : JBUS/MODBUS RTU  
Speed : 2400 bds ... 38400 bds  
Parity : no odd, even  
Stop bytes : 1 or 2

The information about the communication and the communication tables are available on Socomec website : [www.socomec.com](http://www.socomec.com)



