



48250500

General information	
Product Range:	DIRIS A-40
Long Description:	DIRIS A-40; Power Metering and Monitoring Device; 110-400 VAC 50/60 Hz; 120-300 VDC; Class 0.5 for the global measurement chain; 3 Digital inputs / 2 Digital outputs; RS485 output; Modbus RTU
Short Description:	DIRIS A-40 RS485 Modbus 3I 2O

Certificates and declaration

Conformity to standard #2:	#N/A
Conformity to standard #4:	-

Container Information

EAN13:	3596033009129
Package Level 1 Units:	B

Main

Reference:	48250500
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General product characteristics

Device type:	Power Metering and Monitoring Device
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Ordering

country of origin:	FR
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Standards and regulations

Electromagnetic compatibility

Immunity to conducted disturbances:	IEC 61000-4-6
Immunity to electrical fast transients/bursts:	IEC 61000-4-4
Immunity to electrostatic fields in the air:	IEC 61000-4-2
Immunity to power frequency magnetic fields:	IEC 61000-4-8
Immunity to radiated electromagnetic fields:	IEC 61000-4-3
Radiated emissions:	CISPR11 GROUP 1 - CLASS A
Surge immunity in common mode:	IEC 61000-4-5

PMD

IEC 61557-12:	Class 0.5 for the global measurement chain
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Safety

Safety standards:	IEC/EN 61010-1 UL 61010-2-030 CSA C22.2 No. 61010-2-030
UL file number:	E257746

Safety standard

UL product category:	PICQ/PICQ7/FTRZ/FTRZ7
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Technical characteristics**Communication characteristics**

Communication Ports:	RS485 output
Communication Protocols:	Modbus RTU
Communication speed:	9600-115200 bauds
Physical layer:	RS485 2-3 half duplex wires - SELV
USB port interface:	1 Type B micro USB; Upgrade and configuration of the module

Electrical characteristics

Input voltage:	110-400 VAC 50/60 Hz; 120-300 VDC
Power supply type:	AC / DC

Environnement

Relative humidity:	70 °C / 158 °F / 97% RH (IEC 60068-2-30)
Storage temperature:	-25 ... +85 °C (IEC 60068-2-1/IEC 60068-2-2)

Environmental characteristics

Impact resistance:	Front panel: 5J - casing: 1J (IEC 61010-1 Ed 3.0)
Maximum operating altitude:	6560 feet / 2000 m
Operating temperature:	-10 ... +70 °C / +14 °F ... +158 °F (IEC 60068-2-1/IEC 60068-2-2)
PEP ecopassport - ISO 14025:	SOCO-000007-V01.01-EN
Vibration:	0.35 mm, 25 Hz, 20 min/axe (IEC 61557-12)

Measurement characteristics

Accuracy class:	Class 0.5
Active Power accuracy: Class 0.2 ANSI C12.20 Class 0.5 for the global measurement chain according to IEC 61557-12 from 2% up to 120% of the rated current (with TE/TF sensors)	
Current measurement type:	AC
External sensors association:	TE Solid Core; TR/iTR split Core; TF Flexible
Frequency accuracy:	Class 0.02
Frequency range:	45-65 Hz
Frequency rating:	50/60 Hz
Load type:	To be configured in the module: 1P+N - 1CT 2P - 1CT 2P+N - 2CT 3P - 1CT 3P - 2CT 3P - 3CT 3P+N - 1CT 3P+N - 3CT
Measurement level:	Power Quality Analysis
Network type:	To be configured in the module: 1P+N 2P 2P+N 3P 3P+N
Number of current inputs:	3
Number of Digital inputs/outputs:	3 Digital inputs / 2 Digital outputs
Number of measurement points:	1
Pulse counter:	Yes, 3 Digital inputs
Voltage connection: Removable spring-cage terminal, 2 x 6 positions, 0.5 ... 2.5 mm ² solid cable or 0.25 ... 1.5 mm ² stranded cable with ferrule	
Voltage measurement accuracy:	Class 0.2
Voltage measurement range Ph/N:	50-300 VAC

Voltage measurement range Ph/Ph:	87-520VAC
Voltage measurement type:	AC
Voltage Sampling rate:	9.6 kHz
Voltage transformer:	Optional
Voltage transformer primary:	To be configured
Voltage transformer secondary:	To be configured
Mechanical characteristics	
Cut-out type:	92mm x 92mm
Display type:	Display with 10 capacitive keys
Integrated keyboard:	Yes
Number of function buttons:	10
Number of pixels, horizontal:	350
Number of pixels, vertical:	160
RS485 connection:	Removable screw terminal, 3 positions, 0.14 to 1.5 mm ² stranded or solid cable