



Certificate of Conformity No 213-01950

<i>Object</i>	Power metering and monitoring device (PMD) DIRIS A-40 with sensors TE-18, TE-25, TE-35, TE-45, TE-55, TF-55, TF-120, TF-300 (see description on page 2)
<i>Applicant</i>	Socomec Rue de Westhouse 1 67235 Benfeld France
<i>Requirements</i>	Certification according to IEC 61557-12:2018 Type PMD-III, Direct connected PMD (PMD DD) Partial certification according to IEC 62053-22:2003 Partial certification according to IEC 62053-24:2014
<i>Confirmation</i>	See pages 2 and 3
<i>Date of Examination</i>	14 May 2018 to 20 September 2019
	3003 Bern-Wabern, 6 August 2020
<i>For the Examination</i>	Christian Santschi
<i>Approved by</i>	Dr Cédric Blaser, Head of Laboratory Laboratory Electrical Energy and Power

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Type description

Type Socomec DIRIS A-40
 Classification PMD-III, Direct connected PMD (PMD DD)
 Performance classes See tables below
 Rated operating range -10 °C to +70 °C
 Mode of connection Direct insertion (PMD DD)

Sensor type	TE-18	TE-18	TE-25	TE-35	TE-45 ¹	TE-55 ¹	TF-55 ¹	TF-120 ¹	TF-300 ¹
Number of phases	3								
Connection to power lines	3P+N								
Nominal voltage	230 V / 120 V								
Frequency	50 Hz / 60 Hz								
Nominal current	20 A	63 A	160 A	250 A	630 A	1000 A	600 A	2000 A	6000 A
Maximum current	24 A	75.6 A	192 A	300 A	756 A	1200 A	720 A	2400 A	7200 A

¹ The full performance of the device is subject to the respect of the installation instructions outlined in the DIRIS A-40 and sensors documentation.

Hardware version Indice B
 Firmware version 1.4.0

Conformity assessment against IEC 61557-12:2018

PMD function	Subclause	Compliance 230 V - 50 Hz 120 V - 60 Hz	Laboratory	Performance class
Active power and active energy measurements	4.8.2	Yes	METAS	0,5
Reactive power measurements	4.8.3	Yes	METAS	1
Reactive energy measurements	4.8.3	Yes	METAS	2
Apparent power and apparent energy measurement	4.8.4	Yes	METAS	0,5
Frequency measurements	4.8.5	Yes	METAS	0,02
RMS phase current and neutral current measurements	4.8.6	Yes ²	METAS	0,5
RMS voltage measurements	4.8.7	Yes	METAS	0,5
Power factor measurements	4.8.8	Yes	METAS	0,5
Short term flicker and long term flicker measurements	4.8.9	N/A	---	---
Voltage dip and voltage swell measurements	4.8.10	Yes	METAS	0,5
Voltage interruption measurements	4.8.11	Yes	METAS	0,5
Transient overvoltage measurements	4.8.12	N/A	---	---

² Neutral current measurements not executed

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PMD function	Subclause	Compliance 230 V - 50 Hz 120 V - 60 Hz	Laboratory	Performance class
Voltage unbalance measurements	4.8.13	Yes	METAS	0,2
Voltage harmonics and voltage THD measurements	4.8.14	Yes	METAS	1
Current unbalance measurements	4.8.15	Yes	METAS	0,2
Current harmonics and current THD measurements	4.8.16	Yes	METAS	1
Maximum measurements	4.8.17	Yes	METAS	0,5
General mechanical requirements	4.9	Yes	EUROFINS	---
Safety requirements	4.10	Yes	UL LLC UL Norhbrook	---
EMC requirements	4.11	Yes	EUROCEM	---
Inputs and/or outputs	4.12	Not executed	---	---
Marking and operating instructions	5	Not executed	---	---

Assessment of active energy

Test points according to IEC 62053-22:2003

Active energy	Subclause	Compliance 230 V - 50 Hz	Laboratory	Accuracy class
Limits of error due to variation of the current	8.1	Yes	METAS	0,5 S

Assessment of reactive energy

Test points according to IEC 62053-24:2014

Reactive energy	Subclause	Compliance 230 V - 50 Hz	Laboratory	Accuracy class
Limits of error due to variation of the current	8.2	Yes	METAS	0,5 S