212014

AANDERAA INSTRUMENTS
5852 Bergen, Norway. Tel. +47 55 10 99 00

Test and Specification Sheet
Recording Current Meter,
RCM 9, Mk II ☐
RCM 11 ☑
Serial No. 62

Main Components

Component	Serial No.	Remarks
Electronic Board 3623	807	Reference reading: 735
Data Storage Unit 2990	12439	Standard ☒ Extended ☐
Doppler Current Sensor ~~3920~~/3820	62	
Temperature Sensor 3621	823	
Conductivity Cell ~~3610~~/3819	28	
Pressure sensor 3815 E	156	
Turbidity sensor 3612		
Oxygen Sensor 3675		

Mechanical Checks:
Sensors fixed in correct position ☑
Wire harness, screws and sensor plugs ☑
Epoxy coating intact ☑
Zinc anode installed ☑
Clean and inspect O-ring groove ☑

Performance Tests of complete instrument:
Tune the transducer so that the acoustic output of 16.384 KHz is equal to the output of 15.7 KHz ☐
Current consumption at continuous operation, maximum 100 mA ... 99.6 mA
Current consumption between measurements at 120 min. interval. Maximum 1.0 mA average ... 0.65 mA
Field test 8 hours, 5 min. interval recording in DSU 2990 ☑
Check operation with Test Unit 3731, -5°C to +35°C, (all channels tested, 16 hour run, data stored in DSU 2990 ☑
Check remote start, PDC-4 output and external powering ☑
Electrical isolation between system ground and Top end-plate ☑
Test of Operation in Burst Mode, 2 minutes interval ☑

Date. 19/4-01 Sign. T. Heltne

Final Check prior to Shipment:
Doppler Current Sensor is tested with Test Unit 3731 ☒
Temperature readings correspond to room temperature ☒
Conductivity Sensor reads correct with sea water loop ☒
Pressure Sensor gives correct reading at air pressure ☒
Turbidity reading increases when a reflector is placed 20cm in front of it ☐
The oxygen sensor reads maximum in air ☐

Optional Sensor checked by:(sign.) .....

Set temperature range switch to "Low" and conductivity range to 0-74 mS ☒
Set interval switch to 10 minutes and turn channel selector switch to OFF position ☒
Erased DSU installed ☒
Install fresh battery, type Alkaline 3614, Open loop voltage: >9,5 Voltage with 100ohms load: >9,2
Inspect O-ring groove and clean and grease O-ring ☒
Check that the pressure sensor is oil filled ☒

Date 19/4-01 Sign L Seljeflot

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Calibration Sheet
Recording Current Meter,
RCM 9, Mk II ☐
RCM 11 ☒
Serial No.: 62
Reference(channel 1): 735

The calibration coefficients listed below are valid for the sensors with the following serial numbers

Sensor	Range	Serial No.
Doppler Current Sensor ~~3920~~/3820	[redacted]	62
Temperature Sensor 3621	[redacted]	823
Conductivity cell ~~3619~~/3819	[redacted]	28
Pressure sensor 3815 E	0-60 MPa	156
Turbidity sensor 3612		
Oxygen Sensor 3675		

Calibration Coefficients:

Ch.No.	Parameter	A	B	C	D	Unit
1	Reference	0	1.000E+00	0	0	
2	Current Speed	0	2.933E-01	0	0	cm/s
3	Current Direction	0	3.516E-01	0	0	Deg.M
4	Temperature					
	Wide range	-6,036 E-01	3,416 E-02	-6.292E-06	4.800E-09	Deg.C
	Low range	-2,682 E+00	2,407E-02	-2.238E-06	2.056E-09	Deg.C
	High range	9,815 E+00	2,390 E-02	-5.941E-07	2.820E-09	Deg.C
	Arctic range	-2,956 E+00	8,948 E-03	-3.476E-07	1.134E-10	Deg.C
5	Conductivity					
	0-74mS/cm	6,745 E-02	6,745E-02	0	0	mS/cm
	24-38mS/cm	2,224 E+01	1,521 E-02	0	0	mS/cm
	0-2mS/cm			0	0	mS/cm
6	Pressure	-1,771 E+00	6,272 E-02	-8,975E-07	0	~~kPa~~/MPa
7	Turbidity					NTU
	Oxygen			0	0	% *

*
Oxygen saturation with respect to nominal air pressure (1013.2 hPa)
To obtain the density of oxygen in mg/l, see calibration sheet for the Oxygen Sensor, Form 533

Date: 19/4-2001 Sign. Roar Dagmes