



a xylem brand

TEST & SPECIFICATIONS

Form No. 712, July 2008

Layout No:
Circuit Diagram No:
Program Version: V4.4.8

Product: Oxygen Optode 4330
Serial No: 1532

Visual and Mechanical Checks:

- 1.1 Soldering quality
- 1.2 Visual surface
- 1.3 Galvanic isolation between housing and electronics

Current Drain and Voltages:

2.1	Average current drain at 0.5 Hz sampling (Max.: 33 mA)	23.0	mA
2.2	CANBus Current drain at 0.5 Hz sampling (Max.: 33 mA)	21.9	mA
2.3	Current drain in sleep (Max.: 180 μ A)	128	μ A
2.4	CANBus Current drain in sleep (Max.: 180 μ A)	112	μ A
2.5	DSP IO voltage, J4.18 (3.3 $\pm$ 0.15V)	3.28	V
2.6	DSP Core voltage, J4.17(1.8 $\pm$ 0.05 V)	1.81	V
2.7	Excitation driver voltage, C4 Analog Board (4.5 $\pm$ 0.15 V)	4.58	V

Performance test:

	Channel:	BLUE	RED
3.1	Average of Receiver readings (0 $\pm$ 150mV)	8.9 mv	5.8 mv
3.2	Standard Deviation of Receiver readings (Max.: 45mV/10mV)	14.64 mv	5.94 mv
3.3	Amplitude measurement with non- fluorescence foil (<60mV/650-1200mV)	13.7 mv	984.1 mv
3.4	Amplitude measurement with fluorescence foil (700-1200mV)	875.1 mv	946 mv
3.5	CANBus Output test		

Function test at 0°C Temperature (in air with reference foil):

	Channel:	BLUE	RED
4.1	Amplitude measurement (Blue: 150 – 500mV,Red 650-1800mV)	335.4 mv	1387.9 mv
4.2	Phase measurement (Blue: 4 $\pm$ 2°,Red: 4 $\pm$ 2°)	8.9 °	8.1 °
4.3	Standard deviation of Phase measurement: (Max: 0.02°)	0.005 °	0.002 °
4.4	Raw data temperature measurement: (600 $\pm$ 200mV)		716.5 mv

Function test at 20°C Temperature (in air with reference foil):

	Channel:	BLUE	RED
5.1	Amplitude measurement (Blue: 100 – 300mV,Red 650-1800mV)	310 mv	1020.5 mv
5.2	Phase measurement (Blue: 5 $\pm$ 2°,Red: 5 $\pm$ 2°)	9.4 °	8.7 °
5.3	Standard deviation of Phase measurement: (Max: 0.02°)	0.003 °	0.002 °
5.4	Raw data Temperature measurement: (0 $\pm$ 200mV)		15.2 mv

Function test at 40°C Temperature (in air with reference foil):

	Channel:	BLUE	RED
6.1	Amplitude measurement (Blue: 150 – 500mV,Red 650-1800mV)	287 mv	846.4 mv
6.2	Phase measurement (Blue: 5 $\pm$ 2°,Red: 5 $\pm$ 2°)	9.6 °	8.9 °
6.3	Standard deviation of Phase measurement: (Max: 0.02°)	0.005 °	0.003 °
6.4	Raw data Temperature measurement: (-400 $\pm$ 200mV)		-396.2 mv

Pressure test :

7.1	Pressure (IW version: 20MPa, DW version 60MPa)	60MPa
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Date: 15 Nov 2013

Sign:

Vidar Selsvik, Production Engineer