AANDERAA a xylem brand

TEST & SPECIFICATIONS

Form No. 712 V3, December 2018

Program Version: V5.0.4

Product: Oxygen Optode 4831

Serial No: 800

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)	20.8	mA
2.2	CANBus Current drain at 0.5 Hz sampling (Max.: 33 mA)		mA
2.3	Current drain in sleep (Max.: 270 µA)	211	µA
2.4	CANBus Current drain in sleep (Max.: 180 µA)		µA
2.5	DSP IO voltage, J4.18 (3.3 ±0.15V)		V
2.6	DSP Core voltage, J4.17(1.8 ±0.05 V)	1.82	V
2.7	Excitation driver voltage, C4 Analog Board (4.3 ±0.1 V)	4.38	V

Performance test:	Channel:	Blue		Red	
3.1	Average of Receiver readings (0±150mV)	-12.4	mV	-5.9	mV
3.2	Standard Deviation of Receiver readings (Max.: 45mV/10mV)	2.30	mV	0.32	mV
3.3	Amplitude measm. with non-fluorescence foil (<60mV/650-1200mV)	13.9	mV	1064	mV
3.4	CANBus Output test				

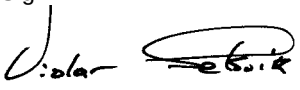
Function test from 0 to 40°C:	Channel:	Blue		Red	
4.1	Minimum amplitude measurement (Blue: >550 mV, Red >650 mV)	784.4	mV	795.8	mV
4.2	Maximum amplitude measurement (Blue: <1600 mV, Red <1400 mV)	1214	mV	1264.7	mV
4.3	Minimum phase measurement (Blue: >32°, Red: >3°)	34.31	°	5.96	°
4.4	Maximum phase measurement (Blue: <45°, Red: <10°)	40.07	°	7.61	°
4.5	Maximum standard deviation of Phase measurement: (< 0.05°)	0.06	°	0.06	°
4.6	Minimum temperature raw data measurement: (<-200 mV)			-456.3	mV
4.7	Maximum temperature raw data measurement: (>450 mV)			719.8	mV

Pressure test :

5.1	Pressure (IW version: 20MPa, DW version 60MPa)	60MPa

Date: 22 Jan 2019

Sign:



Vidar Selsvik, Production Engineer

AANDERAA a xylem brand

TEST & SPECIFICATIONS

Form No. 712 V3, December 2018

Program Version: V5.0.4

Product: Oxygen Optode 4831

Serial No: 801

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)	20.7	mA
2.2	CANBus Current drain at 0.5 Hz sampling (Max.: 33 mA)		mA
2.3	Current drain in sleep (Max.: 270 µA)	210	µA
2.4	CANBus Current drain in sleep (Max.: 180 µA)		µA
2.5	DSP IO voltage, J4.18 (3.3 ±0.15V)		V
2.6	DSP Core voltage, J4.17(1.8 ±0.05 V)	1.82	V
2.7	Excitation driver voltage, C4 Analog Board (4.3 ±0.1 V)	4.27	V

Performance test:	Channel:	Blue		Red	
3.1	Average of Receiver readings (0±150mV)	-23.8	mV	-16.2	mV
3.2	Standard Deviation of Receiver readings (Max.: 45mV/10mV)	1.48	mV	0.39	mV
3.3	Amplitude measm. with non-fluorescence foil (<60mV/650-1200mV)	13.5	mV	1055.1	mV
3.4	CANBus Output test				

Function test from 0 to 40°C:	Channel:	Blue		Red	
4.1	Minimum amplitude measurement (Blue: >550 mV, Red >650 mV)	819.5	mV	758.6	mV
4.2	Maximum amplitude measurement (Blue: <1600 mV, Red <1400 mV)	1283.2	mV	1271.1	mV
4.3	Minimum phase measurement (Blue: >32°, Red: >3°)	35.54	°	9.27	°
4.4	Maximum phase measurement (Blue: <45°, Red: <10°)	42.21	°	10.05	°
4.5	Maximum standard deviation of Phase measurement: (< 0.05°)	0.05	°	0.03	°
4.6	Minimum temperature raw data measurement: (<-200 mV)			-407.5	mV
4.7	Maximum temperature raw data measurement: (>450 mV)			768	mV

Pressure test :

5.1	Pressure (IW version: 20MPa, DW version 60MPa)	60MPa

Date: 22 Jan 2019

Sign:

Vidar Selsvik, Production Engineer