AANDERAA a xylem brand

TEST & SPECIFICATIONS

Form No. 712 V3, May 2020

Program Version: V5.1.1

Product: Oxygen Optode 4831

Serial No: 884

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)	23.2	mA
2.2	CANBus Current drain at 0.5 Hz sampling (Max.: 33 mA)		mA
2.3	Current drain in sleep (Max.: 270 µA)	262	µA
2.4	CANBus Current drain in sleep (Max.: 180 µA)		µA
2.5	DSP IO voltage, J4.18 (3.3 ±0.15V)	3.30	V
2.6	DSP Core voltage, J4.17(1.8 ±0.05 V)	1.81	V
2.7	Excitation driver voltage, C4 Analog Board (4.3 ±0.1 V)	4.34	V

Performance test:	Channel:	Blue		Red	
3.1	Average of Receiver readings (0±150mV)	-2.7	mV	-4.9	mV
3.2	Standard Deviation of Receiver readings (Max.: 45mV/10mV)	4.21	mV	2.08	mV
3.3	Amplitude measurement with non-fluorescence foil (<60mV/650-1200mV)	11.8	mV	1035.8	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 >550 mV)	789.8	mV	777.3	mV
4.2	Maximum amplitude measurement (Blue: <1600 mV, Red <1400 mV)	1190.1	mV	1172.7	mV
4.3	Minimum phase measurement (Blue: >32°, Red: >3°)	34.13	°	7.69	°
4.4	Maximum phase measurement (Blue: <45°, Red: <10°)	40.33	°	8.42	°
4.5	Maximum standard deviation of Phase measurement: (< 0.07°)	0.05	°	0.03	°
4.6	Minimum temperature raw data measurement: (<-200 mV)			-464	mV
4.7	Maximum temperature raw data measurement: (>450 mV)			668.4	mV

Date: 29 Jun 2020

Sign:

Vidar Selsvik, Production Engineer

PRESSURE CERTIFICATE

Form No. 667, Sept 2009

Product: Oxygen Optode 4831
Serial No: 884
Date: 03.06.2020

Certificate No: 173001260884

This is to certify that this product has been pressure tested with the following instrument, and we confirm that no irregularities were found during the test:

Autoklav 800 bar – sn: 0210005

Pressure readings:

Pressure (Bar)	Pressure time (hour)
600	1

Date: 13 Jul 2020

Sign:

Vidar Selsvik, Production Engineer