AANDERAA a xylem brand

TEST & SPECIFICATIONS

Form No. 712 V3, May 2020

Program Version: 5.1.1

Product: Oxygen Optode 4330F DW
Serial No: 4052

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)	22.5	mA
2.2	CANBus Current drain at 0.5 Hz sampling (Max.: 33 mA)	21.2	mA
2.3	Current drain in sleep (Max.: 270 µA)	115	µA
2.4	CANBus Current drain in sleep (Max.: 180 µA)	107	µA
2.5	DSP IO voltage, J4.18 (3.3 ±0.15V)	3.29	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)	4.34	V

Performance test:	Channel:	Blue		Red	
3.1	Average of Receiver readings (0±150mV)	-15.2	mV	-7.2	mV
3.2	Standard Deviation of Receiver readings (Max.: 45mV/10mV)	1.56	mV	0.25	mV
3.3	Amplitude measurement with non-fluorescence foil (<60mV/650-1200mV)	18.7	mV	1024.1	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 >550 mV)	801.9	mV	839.1	mV
4.2	Maximum amplitude measurement (Blue: <1600 mV, Red <1400 mV)	1249.5	mV	1340.4	mV
4.3	Minimum phase measurement (Blue: >32°, Red: >3°)	34.83	°	7.59	°
4.4	Maximum phase measurement (Blue: <45°, Red: <10°)	41.79	°	8.15	°
4.5	Maximum standard deviation of Phase measurement: (< 0.07°)	0.04	°	0.03	°
4.6	Minimum temperature raw data measurement: (<-200 mV)			-375.5	mV
4.7	Maximum temperature raw data measurement: (>450 mV)			780.1	mV

Date: 29 Sep 2022

Sign:

Erlend S. Lid

Erlend Lid, Production Engineer

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Program Version: 5.1.1

Product: Oxygen Optode 4330F DW
Serial No: 4053

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)	22.7	mA
2.2	CANBus Current drain at 0.5 Hz sampling (Max.: 33 mA)	21.5	mA
2.3	Current drain in sleep (Max.: 270 µA)	116	µA
2.4	CANBus Current drain in sleep (Max.: 180 µA)	106	µA
2.5	DSP IO voltage, J4.18 (3.3 ±0.15V)	3.31	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)	4.33	V

Performance test:		Channel:	Blue		Red	
3.1	Average of Receiver readings (0±150mV)		-15.1	mV	-7.2	mV
3.2	Standard Deviation of Receiver readings (Max.: 45mV/10mV)		1.72	mV	0.26	mV
3.3	Amplitude measurement with non-fluorescence foil (<60mV/650-1200mV)		17.9	mV	885.5	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)		803.8	mV	717	mV
4.2	Maximum amplitude measurement (Blue: <1600 mV, Red <1400 mV)		1261	mV	1155	mV
4.3	Minimum phase measurement (Blue: >32°, Red: >3°)		34.75	°	7.72	°
4.4	Maximum phase measurement (Blue: <45°, Red: <10°)		41.66	°	8.28	°
4.5	Maximum standard deviation of Phase measurement: (< 0.07°)		0.04	°	0.03	°
4.6	Minimum temperature raw data measurement: (<-200 mV)				-406.8	mV
4.7	Maximum temperature raw data measurement: (>450 mV)				750.3	mV

Date: 29 Sep 2022

Sign:

Erlend S. Lid

Erlend Lid, Production Engineer