

Waters Corporation - Test Record

Part Number: 210000345

Product:

Operator: testerStart Time: 12/06/2017, 14:55:Serial Number: 090317047CEnd Time: 12/06/2017, 14:59:Test System: TE82988-4

Name	LSL	Measurement	USL	Unit	Outcome
DC VOLTAGE AND CURRENT INPUT					PASS
Test 24 VDC Input Voltage (J26)	23	24.007	25	VDC	PASS
Test 24 VDC Input Current (J26)	0.2	1.017	1.5	Amp	PASS
COMMUNICATIONS					PASS
Test Communications on CPU2K RS232 Port		Response = CONSOLE:>			PASS
FUSES					PASS
Test Fuses F1-F8		Response Expected= FF . Received= FF			PASS
VOLTAGE MONITOR					PASS
Test +5V Vcc Voltage Monitor Readback	4.5	5.029	5.5	VDC	PASS
Test +15V Voltage Monitor Readback	14	15.274	16	VDC	PASS
Test -15V Voltage Monitor Readback	-16	-14.668	-14	VDC	PASS
Test +24V Voltage Monitor Readback	23.5	23.932	24.5	VDC	PASS
Test 5V Gnd Voltage Monitor Readback	-0.5	0	0.5	VDC	PASS
FANS OUTPUT					PASS
Test Fan1 Output (J32_1 J32_3)	23	23.985	25	VDC	PASS
Test Fan2 Output (J33_1 J33_3)	23	23.985	25	VDC	PASS
EVENTS IN					PASS
Test Event In 1 Closed Input (J18_1 to J18_2 Shorted)		Response Expected= 01 . Received= 01			PASS
Test Event In 1 Open Input (J18_1 to J18_2 Opened)		Response Expected= 00 . Received= 00			PASS
Test Event In 2 Closed Input (J18_5 to J18_6 Shorted)		Response Expected= 02 . Received= 02			PASS
Test Event In 2 Open Input (J18_5 to J18_6 Opened)		Response Expected= 00 . Received= 00			PASS
LEAK DETECTOR					PASS
Test Leak Detect - Not Connected State (J30_2 to J30_3 1Kohm)		Response Expected= 00 . Received= 00			PASS
Test Leak Detect - Connected State (J30_2 to J30_3 1Kohm, J30_1 Input High State)		Response Expected= 02 . Received= 02			PASS
Test Leak Detect - Leak State (J30_2 to J30_3 1Kohm, J30_2 Input Low State)		Response Expected= 01 . Received= 01			PASS
FRONT CHASSIS STATUS LEDs					PASS
Test Status LEDs Vcc J8_1	4.5	5.031	5.5	VDC	PASS
Test Status LEDs J8_2 High		Expected High Received High			PASS
Test Status LEDs J8_2 Low		Expected Low Received Low			PASS
Test Status LEDs J8_3 High		Expected High Received High			PASS
Test Status LEDs J8_3 Low		Expected Low Received Low			PASS
GPV					PASS
Test GPV A Output ON (J21_5 to J21_1)	3.5	4.376	5.5	VDC	PASS
Test GPV A Output OFF (J21_5 to J21_1)	-1	0	1	VDC	PASS
Test GPV B Output ON (J21_6 to J21_2)	3.5	4.377	5.5	VDC	PASS
Test GPV B Output OFF (J21_6 to J21_2)	-1	0	1	VDC	PASS

Test GPV C Output ON (J21_7 to J21_3)	3.5	4.38	5.5	VDC	PASS
Test GPV C Output OFF (J21_7 to J21_3)	-1	0	1	VDC	PASS
Test GPV D Output ON (J21_8 to J21_4)	3.5	4.381	5.5	VDC	PASS
Test GPV D Output OFF (J21_8 to J21_4)	-1	0	1	VDC	PASS
SEAL WASH PUMP OUTPUT					PASS
Test Seal Wash Output ON (J27_1 to J27_2)	23	23.91	25	VDC	PASS
Test Seal Wash Output OFF (J27_1 to J27_2)	-1	0	1	VDC	PASS
ACTIVE CHECK VALVE (i2V)					PASS
Test i2V Connected Input OPEN state (J28_5 to J28_6 Open)	Response Expected= 00 . Received= 00				PASS
Test i2V Connected Input SHORT state (J28_5 to J28_6 Short)	Response Expected= 01 . Received= 01				PASS
Test i2V Output ON, Curent 0 Amps ((TP388) J28_1(+) to (TP386) J28_3(-))	-0.1	0.017	0.1	VDC	PASS
Test i2V Output ON, Curent 0.2 Amps ((TP388) J28_1(+) to (TP386) J28_3(-))	0.8	1.234	1.5	VDC	PASS
Test i2V Output ON, Curent 0.45 Amps ((TP388) J28_1(+) to (TP386) J28_3(-))	3.3	3.752	4.1	VDC	PASS
Test i2V Output ON, Curent 0.3 Amps ((TP388) J28_1(+) to (TP386) J28_3(-))	1.8	2.239	2.6	VDC	PASS
Test i2V Output ON, Watchdog Timed-Out ((TP388) J28_1(+) to (TP386) J28_3(-))	-0.1	0	0.1	VDC	PASS
DEGASSER					PASS
Test Degasser Motor Drive (J29 pins 1-6)	1550	1606	1650	Counts	PASS
Test Degasser Status Atmospheric PSI Readback (J22 pins 1-6 (TP288, 214, 1104, 405, 399, 1104))	14	14.6	15.74	PSIA	PASS
Test Degasser Status Vacuum PSI Readback (J22 pins 1-6 (TP288, 214, 1104, 405, 399, 1104))	-0.1	0.01	0.9	PSIA	PASS
TRANSDUCERS					PASS
Test Right Transducer (Accumulator) Low PSI Readback (J31_7, J31_1, J31_6)	-100	0	100	PSI	PASS
Test Right Transducer (Accumulator) High PSI Readback (J31_7, J31_1, J31_6)	9100	9339.12	9500	PSI	PASS
Test Left Transducer (Primary) Low PSI Readback (J31_9, J31_5, J31_10)	-100	0	100	PSI	PASS
Test Left Transducer (Primary) High PSI Readback (J31_9, J31_5, J31_10)	9100	9351.23	9500	PSI	PASS
PRIMARY MOTOR DRIVE AND ENCODER					PASS
Test Primary Motor Step Error Check (J10_5-8, J12_1-10)	Response= OK				PASS
Test Primary Motor Step Check (J10_5-8, J12_1-10)	14980	15000	15020	Steps	PASS
ACCUMULATOR MOTOR DRIVE AND ENCODER					PASS
Test Accumulator Motor Step Error Check (J10_1-4, J13_1-10)	Response= OK				PASS
Test Accumulator Motor Step Check (J10_1-4, J13_1-10)	14980	14999	15020	Steps	PASS
VENT VALVE					PASS
Test Vent Valve Home Position Error Check (J19 and J20)	Response= OK				PASS
Test Vent Valve Positive Step Check (J19 and J20)	24	24.542	25	Steps	PASS
SIX PORT SSVALVE					PASS
Test SSValve Home Position Error Check (J24 and J25)	Response= OK				PASS
Test SSValve Positive Step Check (J24 and J25)	24	24.542	25	Steps	PASS

210000345 Overall Result - PASS

Signed:	Date:
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END OF DATA