

WDB400 Specifications

1. Measurement Performance

Conductivity Range	0 - 10,000 μ S/cm (microSiemens/centimeter)
Conductivity Resolution	1 μ S/cm
Conductivity Accuracy	10 - 10,000 μ S/cm \pm 1% of reading 0 - 10 μ S/cm \pm 20% of reading
Temperature Range	32 - 392°F (0 - 200°C)
Temperature Resolution	0.1°C
Temperature Accuracy	\pm 1% of reading

2. Electrical: Input/Output

Input Power	100-240 VAC, 50/60 Hz, 8A Fuse: 1.0 ampere, 5 x 20 mm
Input Signals	
Conductivity electrode	1.0 cell constant, Pt1000 RTD
Flow Meter (optional)	Isolated, dry contact closure required (i.e. relay,reed switch)
Flow Switch (optional)	Isolated, dry contact closure required (i.e. reed switch)
Outputs	
Mechanical Relays	Pre-powered on circuit board switching line voltage 6 A (resistive), 1/8 HP All relays are fused together as one group, total current for this group must not exceed 6A.
4 - 20 mA (1 or 2 optional)	Internally powered Fully isolated 600 Ohm max resistive load Resolution .001% of span Accuracy \pm 1% of reading
Agency Approvals	
UL	ANSI/UL 61010-1:2004, 2 nd Edition*
CAN/CSA	C22,2 No.61010-1:2004 2 nd Edition*
CE Safety	EN 61010-1 2 nd Edition (2001)*
CE EMC	EN 61326 :1998 Annex A*

Note: For EN61000-4-6,-3 the controller met performance criteria B.

*Class A equipment: Equipment suitable for use in establishments other than domestic, and those directly connected to a low voltage (100-240 VAC) power supply network which supplies buildings used for domestic purposes.

3. Mechanical

Enclosure Material	Polycarbonate
NEMA Rating	NEMA 4X
Dimensions	8.5" x 6.5" x 5.5"
Display	2 x 16 character backlit liquid crystal
Operating Ambient Temp	32 – 122°F (0 – 50°C)
Storage Temperature	-20 – 180°F (-29 – 80°C)
Electrode mounting	¾" NPTF
Electrode rating	250 psi at 392°F (17.2 bars at 200°C)
Electrode material	316 SS and PEEK

4. WDB Variables and their Limits

		Low Limit	High Limit
Conductivity menu			
	PPM Conversion Factor	0.200 ppm/ μ S/cm	1.000 ppm/ μ S/cm
	Interval Time (sampling)	5 minutes	24:00 hours
	Duration Time (sampling)	1 minute	59 min: 59 sec
	Hold Time	1 second	499 min: 59 sec
	Blowdown Time	1 minute	8 hrs: 20 min
	Max Proportional Time	1 minute	8 hrs: 20 min
	Proportional Band	0	10,000 μ S/cm
	% Calibration Range	-50%	+50%
Temperature Menu		No variables	
BlowdownMenu			
	Set Point	0 μ S/cm	10,000 μ S/cm
	Dead Band	5 μ S/cm	500 μ S/cm
	Blowdown Limit Time (set in hours/minutes)	1 minute	8 hrs: 20 min (enabled) 0=unlimited (disabled)
Feed Menu			
	Feed Lockout Timer (Mode A)	1 second	99 min: 59 sec
	Percent of Blowdown (Mode B)	5 %	99 %
	Feed Time Limit (Mode B)	1 minute	99 min: 59 sec
	Percent of Time (Mode C)	5 %	99 %
	Feed Cycle Time (Mode C)	10 minutes	59 min: 59 sec
	Time per Contact (Mode D)	1 second	59 min: 59 sec
	Divider Count (Mode D)	1 contact	100 contacts
	Feed Time Accumulate (Mode D)	1 minute	99 min: 59 sec
	Time Limit (Mode D)	1 minute	99 min: 59 sec
4-20 mA Menu	4 & 20 mA Settings	0 μ S/cm	10,000 μ S/cm
Access Code Menu	New Value	0	9999
Alarm Menu*	High & Low (set to zero to disable)	1%	50%
Datalog Menu (Optional)		No variables	
Config Menu (Optional)		No variables	
Upgrade Menu		No variables	

*Note: The Alarm relay is non-programmable. Refer to the Main Menu diagram on page 16 for the list of error conditions that trigger the alarm relay.

5. Model Code

WDB400	-	1	4	5	N
WCM400	-				
		Voltage	Output	Sensor	USB

VOLTAGE

1 = 120 VAC, prewired

5 = 100-240 VAC, conduit

OUTPUT

N = No data output

4 = Isolated 4-20 mA output

2 = Two isolated 4-20 mA outputs

SENSOR

N = No electrodes

5 = Standard electrodes (up to 250 psi)

USB FEATURES

N = Software upgrade capability only

U = Integrated datalogging, event/reset logging, and configuration file import/export