

PUMPSMART CONTROL SOLUTIONS

Warranty Registration Worksheet

PumpSmart Commissioning Process

1. Complete the PumpSmart Warranty Registration form.

The warrantee registration is our method for determining if an installation has been commissioned properly and to identify how an application is configured.

Completion of the first page is mandatory for the extension of the warranty to 2 years. Except for the shaded boxes, all sections must be completed.

Comments to first page:

- **Drive Configuration Code:** This code may be found on the drive manufacturer nameplate. Typical examples are:

ACS800-U1-0050-4 (ABB ACS800 50 kvA drive)

20BD011A3AYNANA0 (AB PowerFlex 700 11 kvA drive)

- **Installation Checklist:** Refer to the configuration and installation manuals for acceptable qualities of these requirements.
- **Electrical Checks:** All information, except meggar and operation mode, must be completed. Mega-Ohm meter checks are recommended when PumpSmart is being applied upon existing motors or if any drive faults occur during commissioning.

The NOTES page is to be used for comments or exceptions that are not captured on the first page. Space is included for sketching of the system. This is recommended, however not mandatory.

Completion of the parameter listing is recommended for later references and submittal to the customer.

It is not necessary for PumpSmart certified personnel be present for the initial set-up/configuration of the drive. Inspection and completion of this registration is required within 20 days of initial start-up however.

2. Fax or mail to PumpSmart Control Solutions within 20 days of initial start-up:

PumpSmart Control Solutions

Warranty Registration

240 Fall Street - Main Office

Seneca Falls, NY 13148

Fax: 315 568 7145

Email: pumpsmart@itt.com (Subject Line: WARRANTY REGISTRATION)

3. Confirmation of warrantee extension may be made by calling the PumpSmart Control Solutions applications group at (315) 568 2811.



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MANDATORY PAGE

Company Name	
Address L1	
Address L2	
City / State / Zip	
Contact Name	
Telephone	

Purchased From	Sales Contact	Telephone
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Product <input type="checkbox"/> PS200 <input type="checkbox"/> PF700	Drive Configuration Code	ITT S/N	S/W Version:
		Drive S/N	

Application:

- | | | |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Application Macro
<input type="checkbox"/> Single Pump Process
<input type="checkbox"/> Multi-Pump Process
<input type="checkbox"/> Speed Control

Control Communication
<input type="checkbox"/> Discrete I/O - Analog I/O
<input type="checkbox"/> Profibus
<input type="checkbox"/> Modbus/Modbus +
<input type="checkbox"/> Other: _____ | Control Mode <i>(N/A Speed Control Macro)</i>
<input type="checkbox"/> Pressure
<input type="checkbox"/> Flow
<input type="checkbox"/> Level
<input type="checkbox"/> Other
<input type="checkbox"/> SMART ^{FLOW}

Setpoint Control
<input type="checkbox"/> Keypad
<input type="checkbox"/> Analog Input
<input type="checkbox"/> Offset / Multivariable Control
<input type="checkbox"/> System Curve Compensation | Protection
<input type="checkbox"/> Pump Protect Limit
<input type="checkbox"/> Advanced Pump Protection
<input type="checkbox"/> Secondary Protection

Protection Alarm Mode
<input type="checkbox"/> Alarm Only
<input type="checkbox"/> Alarm & Control |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

Pump Information:

Manufacturer: _____ Model Number: _____

Installation Checklist

- | | |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <input type="checkbox"/> Check out of direct sunlight
<input type="checkbox"/> Check proper ambient temperature
<input type="checkbox"/> Check proper grounding
<input type="checkbox"/> Check cable connections
<input type="checkbox"/> Check free flow of cooling air | <input type="checkbox"/> Check wire runs & conduit
<input type="checkbox"/> Check all mechanical connections
<input type="checkbox"/> Check I/O - Digital/Analog/Fieldbus
<input type="checkbox"/> Check motor rotation
<input type="checkbox"/> E-Stop/Permissive (DILL - Jumper) |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

Electrical Checks

Motor Data				Motor Cable Length	
HP	FLA	RPM	VAC	Approx:	
Input Voltage @ base RPM		Input Current @ base RPM		Mega-Ohm Meter Reading	
Phase A-B		Phase A		Meggarr type <input type="checkbox"/> 500 V <input type="checkbox"/> 1000 V	
Phase B-C		Phase B			
Phase C-A		Phase C			
Output Voltage @ base RPM		Output Current @ base RPM		Operation Mode	
Phase A-B		Phase A		<input type="checkbox"/> DTC [Default] <input type="checkbox"/> Scalar	
Phase B-C		Phase B			
Phase C-A		Phase C			

- Additional Notes Attached (Optional)
 Parameter Listing Attached (Optional)

Performed By	Registration Number
Customer Signature	Date




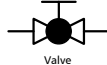


PUMPSMART CONTROL SOLUTIONS
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NOTES PAGE

Comments/Notes

System Sketch

Transmitters & Switches	Pump	Valves
 PT - Pressure FT - Flow LT - Level TT - Temperature	 C - Centrifugal P - Positive Displacement ## - Number Stages	 Check Valve  Valve

Page ____ of ____
ITT S/N:



PUMPSMART CONTROL SOLUTIONS Warranty Registration Worksheet

PARAMETER	DEFAULT	CURRENT
10.01 PARAMETER LOCK	LOCKED	AUTO LOCKS
10.02 PASS CODE	358	N/A
10.03 LOCAL LOCK	OFF	
10.04 PARAMETER SAVE	DONE	N/A
11.01 LANGUAGE	ENGLISH(AM)	
11.02 APPLICATION MACRO	SINGLE PUMP	
11.03 MODE SELECT	PRESSURE	
11.04 MOTOR NOM VOLTAGE	REQUIRED	
11.05 MOTOR NOM CURRENT	REQUIRED	
11.06 MOTOR NOM FREQ		
11.07 MOTOR FL RPM	REQUIRED	
11.08 MOTOR NOM POWER	REQUIRED	
11.09 MOTOR CTRL MODE	DTC	
11.10 MOTOR ID RUN	NO	
11.11 APPLICATION RESTORE	NO	
11.12 OTHER MOTOR VOLT ¹	0	
11.13 CTRL BOARD SUPPLY	INTERNAL 24	
12.01 START/STOP	2 WIRE DI1	
12.02 AUTO RESTART	OFF	
12.08 STOP FUNCTION	RAMP	
12.09 MOTOR JOG	DISABLED	N/A
12.10 START DELAY	0s	
12.11 SPEED OVERRIDE	DISABLED	
12.12 SPD OVERRIDE REF	KEYPAD	
12.13 SPD OVRD DFLT SP	0-3600 RPM	
12.14 SP OVRD PMP PROT	ENABLED	
13.01 ACCEL TIME	5S	
13.02 DECEL TIME	5S	
13.03 P-GAIN	PRESSURE-0.5 FLOW-0.2 DP FLOW-0.5 LVL/TEMP-2.5	
13.04 I-TIME	PRESSURE-0.75 FLOW-1.75 DP FLOW-3.0 LVL/TEMP-0.75	
13.05 D-TIME	0	
13.06 PID DERIV FILTER	1	
13.07 PID INTERGRATION	ON	
13.08 CONTROL PARAM	SPEED	
14.01 MAXIMUM SPEED	AUTO DEFAULT	
14.02 MINIMUM SPEED	AUTO DEFAULT	

PARAMETER	DEFAULT	CURRENT
14.03 MAXIMUM FREQ		
14.04 MINIMUM FREQ		
14.05 CONFIG SPEED MIN	0 RPM	
14.06 STP DELAYMIN SPD	0 SEC	
14.07 RESTART VALUE	100%	
14.08 RESTART DELAY	0 SEC	
14.09 PRIMING DELAY	0 SEC	
14.10 CRITICAL SPEED 1 ²	0	
14.11 CRITICAL SPEED 2 ²	0	
14.12NCR WIDTH ¹	0	
15.01 AI2 UNIT	PSIG	
15.02 AI1 UNIT	NONE	
15.03 AI3 UNIT	NONE	
16.01 SET1/SET2 SELECT	SETPOINT 1	
16.02 SETPOINT 1 SELECT	KEYPAD	
16.03 AI2 MAX	0	
16.04 AI2 MIN	0	
16.05 SETPOINT 2 SEL	KEYPAQD	
16.06 AI1 MAX	0	
16.07 AI1 MIN	0	
16.08 AI3 MAX	0	
16.09 AI3 MIN	0	
16.10 LOCAL REF SELECT	PROC VAR	
17.05 MINIMUM AI1	2 VDC	
17.06 MAXIMUM AI1	10 VDC	
17.07 SCALE AI1	100%	
17.08 FILTER AI1	0.1S	
17.09 INVERT AI1		
17.10 MINIMUM AI2	4 mA	
17.11 MAXIMUM AI2	20 mA	
17.12 SCALE AI2	100%	
17.13 FILTER AI2	0.1S	
17.14 INVERT AI2		
17.15 MINIMUM AI3	4 mA	
17.16 MAXIMUM AI3	20 mA	
17.17 SCALE AI3	100%	
17.18 FILTER AI3	0.1S	
17.19 INVERT AI3	NO	
17.20 AI1 CONFIG	NOT USED	
17.21 AI2 CONFIG	NOT USED	

PUMPSMART CONTROL SOLUTIONS Warranty Registration Worksheet

PARAMETER	DEFAULT	CURRENT
17.22 AI3 CONFIG	NOT USED	
19.01 RELAY RO1 OUTPUT	READY	
19.02 RO1 TON DELAY	0S	
19.03 RO1 TOFF DELAY	0S	
19.04 RELAY RO2 OUTPUT	RUNNING	
19.05 RO2 TON DELAY	0S	
19.06 RO2 TOFF DELAY	0S	
19.07 RELAY RO3 OUTPUT	FAULT	
19.08 RO3 TON RELAY	0S	
19.09 RO3 TOFF DELAY	0S	
20.01 ANALOG OUTPUT 1	NOT USED	
20.02 INVERT AO1	NO	
20.03 MINIMUM AO1	4 MA	
20.04 FILTER AO1	0.1S	
20.05 SCALE AO1	100%	
20.06 ANALOG OUTPUT 2	NOT USED	
20.07 INVERT AO2	NO	
20.08 MINIMUM AO2	4 MA	
20.09 FILTER AO2	0.1S	
20.10 SCALE AO2	100%	
21.01 REGULATION MODE	NORMAL	
21.02 MULTIVAR CTL	OFF	
21.03 LEVEL 1	0%	
21.04 SPT LO	0	
21.05 LO INTRCPT	0%	
21.06 LEVEL 2 %	100%	
21.07 SPT HI	0	
21.08 HI INTRCPT B%	0%	
21.09 PRESS INCR SPEED	1200 RPM	
21.10 PRESS INCR %	0%	
22.01 MODE	SYNCHRONOUS	
22.02 VALUE DECREASE	5%	
22.03 VALUE INCREASE	5%	
22.04 STAGE 2	98%	
22.05 STAGE 3	98%	
22.06 STAGE 4	98%	
22.07 SWITCH LEAD	48 HRS	
22.08 PROOF TIME	20 S	
22.09 DESTAGE 2	75%	
22.10 DESTAGE 3	85%	
22.11 DESTAGE 4	92%	
22.12 MIN PUMPS ON		

PARAMETER	DEFAULT	CURRENT
22.13 PUMP ADDRESS		
22.14 M/F COMM L DELAY	4S	
22.15 CHS COM LOS CTRL	COAST STOP	
22.16 MANUAL SWITCH	DISABLED	
22.17 TX CONFIG		
23.01 COND 1 SOURCE		
23.02 COND1 WRN LIM HI	0	
23.03 COND1 WRN LIM LO	0	
23.04 COND 1 ALARM	DISABLED	
23.05 COND1 ALRM LIM HI	0	
23.06 COND1 ALRM LIM LO	0	
23.07 COND 2 SOURCE		
23.08 COND 2 WRN LIM HI	0	
23.09 COND2 WRN LIM LO	0%	
23.10 COND 2 ALARM	DISABLED	
23.11 COND2 ALRM LIM HI	0	
23.12 COND2 ALRM LIM LO	0	
23.13 COND RESP DELAY	20S	
23.14 MIN SPD STP DLY	60S%	
24.01 PROC SNSR FAILURE	LAST SPEED	
24.02 COND SNSR FAILURE	WARNING	
24.03 KEYPAD FAILURE	FAULT	
24.04 DIGIT RST CONFIG	BOTH	
24.05 MOTOR THERM PROT	WARNING	
24.06 MOTOR THERM P MODE	DTC	
24.07 MOTOR THERM TIME		
24.08 MOTOR LOAD CURVE		
24.09 ZERO SPEED LOAD		
24.10 BREAK POINT		
24.11 STALL FUNCTION	NOT SEL	
24.12 STALL FREQ HI		
24.13 STALL TIME	10S	
24.14 UNDERLOAD FUNC	NOT SEL	
24.15 UNDERLOAD TIME		
24.16 UNDERLOAD CURVE		
24.17 MOTOR PHASE LOSS	NOT SEL	
24.18 GROUND FAULT		
24.19 COMM FLT FUNC		
24.20 MAIN REF DS T-OUT		
24.21 AUX DS T-OUT		
24.22 IO CONFIG FUNC		
25.01 PUMP PROTECT CTRL		

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PARAMETER	DEFAULT	CURRENT
25.02 PROTECTION LIMIT	97%	
25.03 PROTECTION DELAY	0 SEC	
25.04 ERROR RESET	0	
25.05 PUMP RESET DELAY	60S	
SECONDARY PROTECT A	DISABLED	
SECONDARY PROTECT B	DISABLED	
25.10 Q ACT SOURCE	SMARTFLOW	
25.11 MIN FLOW CTRL	DISABLED	
25.12 MIN FLOW	M3/HR	
25.13 DRY RUN CTRL	DISABLED	
25.15 NRUN OUT CTRL	DISABLED	
25.16 RUNOUT FLOW	0%	
25.20 MAXIMUM CURRENT	200%	
25.21 MAXIMUM TORQUE	300%	
25.22 OVERVOLTAGE CTRL	ACTIVATED	
25.23 UNDERVOLTAGE CTRL	ACTIVATED	
25.24 P MOTORING LIM		
25.25 P GENERATING LIM		
26.01 \$/kWh	0.00\$	
26.02 BASELINE POWER	0	
26.04 ENERGY SAVE METHOD	OP 1	
26.05 ENERGY SAVE RESET	DISABLED	
26.06 kWh AT RESET	VIEWABLE ONLY	N/A
26.07 OP HRS AT RESET	VIEWABLE ONLY	N/A
28.01 AUTO RESET TRIALS	0	
28.02 TRIAL TIME	180 S	
28.03 VFD RESET DELAY	15 S	
28.04 OVERCURRENT	DISABLED	
28.05 OVERVOLTAGE	DISABLED	
28.06 UNDERVOLTAGE	DISABLED	
28.07 PROCESS SENSR ERR	DISABLED	
29.01 TYPE	DISABLED	
29.02 BEP FLOW		
29.03 RATED SPD	14.01 MAX SPEED	
29.04 BEP POWER	80%	
29.05 SO PWR	36%	

PARAMETER	DEFAULT	CURRENT
29.06 HYD EFF FACTOR	0.7	
29.07 HYD EFF EXPNT	1	
29.08 CALC SO SOURCE	AFFINITY	
29.09 SO EXPNT	3	
29.10 P MAG CORR		
29.11 QACT FILTER	1.0S	
29.12 SG SELECT		
29.13 SG MIN (SG _{MIN})	0	
29.14 SG MAX (SG _{MAX})	1	
29.15 SG RATE (SG _{RATE})	1	
29.16 T MIN (T _{MIN})	0	
29.17 T MAX (T _{MAX})		
29.18 T RATE (T _{RATE})		
30.01 FIELDBUS	NO	
30.03 COMM PROFILE	CSA 2.8/3.0	
31.01 MODULE TYPE	AUTO DEFAULT	
50.01 START FUNCTION	DC MAGN	
52.01 STATION NUMBER	1	
52.02 BAUD RATE	600	
52.03 PARITY	ODD	
90.01 MAIN DS REF 2		
90.02 AUX DS REF3		
90.03 AUX DS REF4		
90.04 AUX DS REF5		
90.05 MAIN DS SOURCE		
90.06 AUX DS SOURCE		
92.01 MAIN DS STATUS WORD		
92.02 MAIN DS ACT1		
92.03 MAIN DS ACT2		
92.04 AUX DS ACT3		
92.05 AUX DS ACT4		
92.06 AUX DS ACT5		
97.01 AMB TEMP FUNC	YES	
97.02 CTRL BD MAX TEMP		
99.01 SOFTWARE VERSION 5.0		
99.02 SOFTWARE DATE:		

Shaded Parameters require a higher level passcode of 564 entered in Parameter 10.02 PASSCODE