

D4509  
 nww  
 rev b 6/23/11

## DD Programming PXR Controller 4-20ma 5-30°C, .1 degree resolution

Several parameters are affected by the choice of temperature scale. Set these parameters to the values from the appropriate columns below. Select the temperature scale to match the scale used in the chiller description on the Shop Order. Set the SV at the temperature on the Shop Order.

1. Press and hold the SEL. button until the P-n1 menu appears (3-5 secs.)
2. Toggle through the P-n1 menu until dSP-1 appears.
3. Program the following values:

dSP1	119		parameter masking - used to prevent display of
dSP2	252		unused parameters
dSP3	240		
dSP4	61		
dSP5	152		
dSP6	255		
dSP7	255		
dSP8	255		
dSP9	143		
dSP10	111		
dSP11	127		
dSP12	255		
dSP13	127		

4. Push the PV/SV button, then SEL. P-n1 should appear. Set the following:

	<u>°F</u>	<u>°C</u>	
P-n1	1		output
Sv-L	4	3	set point lower limit
Sv-H	38	35	set point upper limit
Alhy	0		alarm 1 hysteresis
AlOp	000	000	alarm 1 options - relay opens in alarm condition
oUT1	xxx		cannot be set-shows value of output 1 in %

5. Push and hold the Sel button for 3-5 seconds. The P menu will appear. Program as follows:

	<u>°F</u>	<u>°C</u>	
P	20		proportional band - % of (P-SU minus P-SL)
i	30		integral time in seconds
d	0.0		derivative time in seconds
Ar	35	0	anti-reset windup - limits integration range
CTrL	PID		control type - PID
P-n2	1.0		input type - 100 ohm RTD (Pt100)
P-SL	38	3	input range lower limit
P-SU	95	35	input range upper limit
P-dp	0		numbers of characters to the right of the decimal point
P-F	F	C	display scale degrees C or F
P-df	0		input time filter
ALM1	6		alarm 1 type - high

Press and hold SEL until the process value display appears, then press and hold SEL for about 2 seconds until AT appears. Set the following:

	<u>°F</u>	<u>°C</u>	
AT	0.0		auto tuning off
A1-L	1	1	low alarm set point
A1-H	34	3	high alarm set point
LoC	2		can set only SV from keypad, can set all parameters via RS485

## DD Programming PXZ/PXR Controller 4-20 ma 4-35°C, .1 degree resolution

Several parameters are affected by the choice of temperature scale. Set these parameters to the values from the appropriate columns below. Select the temperature scale to match the scale used in the chiller description on the Shop Order. Set the SV at the temperature on the Shop Order.

Press and hold the SEL button until the P-n1 menu appears (3-5 secs.)

Toggle through the P-n1 menu until dSP-1 appears.

Program the following values:

d-SP1	65	Parameter masking - removes unused parameters from menus
d-SP2	253	
d-SP3	251	
d-SP4	255	
d-SP5	3	
d-SP6	136	
d-SP7	125	

Push the PV/SV button, then SEL. P-n1 should appear. Set the following:

	<u>EF</u>	<u>EC</u>	
P-n1	1		control action/sensor burnout - direct/fails to 100%
P-n2	1		input type - 100 ohm RTD
P-dF	4.0		input filter in seconds
P-SL	38°	3°	lower limit of setpoint range
P-SU	95°	35°	upper limit of setpoint range
P-AL	6		alarm 2 type - high & low absolute zone
P-AH	0		alarm 1 type - none
P-An	1		alarm hysteresis (degrees)
P-dP	0		places after the decimal point
PUOF	0		process variable offset
SUOF	0		setpoint variable offset
P-F	F	C	temperature scale
FUZY	OFF	OFF	fuzzy logic - on or off

Push and hold the Sel button for 3-5 seconds. The P menu will appear. Program as follows:

	<u>EF</u>	<u>EC</u>	
P	20.0		proportional band in percent of full scale
i	30		integral time in seconds
d	0.0		derivative time in seconds
AL	1°	4°	alarm setpoint - low
AH	34°	30°	alarm setpoint - high
Hys	0		hysteresis (N/A unless P = 0)
AT	0		autotuning
AR	35	0	anti-wind up
LOC	2		parameter lock (all but SV locked when LOC = 2)

