

**Model BD200 Modbus Register List**

**Process Value and Status Functions**

<b>Absolute Address</b>	<b>Modbus register</b>	<b>Parameter</b>	<b>Operation</b>	<b>Description</b>
1	40002	Process Value	Read Only	Displayed Input Value
2	40003/30003	Unit Status	Read Only	Bit Type Data:
			[High Byte]	bit 7: Not used
				bit 6: Comm. Mode 0=Local 1=Remote
				bit 5: Not used
				bit 4: 1=Error Present, read register 40004
				bit 3: Alarm 1 Output 0=Off 1=On
				bit 2: Alarm 2 Output 0=Off 1=On
				bit 1: Not used
				bit 0: Not used
			[Low Byte]	bit 7: NAT (No Activity Timer) Error
				Bits 4-6 are Process Value Decimal Point Location
				bit 6      bit 5      bit 4
				0          0          0      = 0
				0          0          1      = 0.0
				0          1          0      = 0.00
				0          1          1      = 0.000
				bit 3: Not used
				bit 2: Not used
				bit 1: Not used
				bit 0: Not used
3	40004/30004	Error Status	Read Only	Bit Type Data:
			[High Byte]	bit 7: Unit Failed Self Test
				bit 6: Not Used
				bit 5: Calibration Bad
				bit 4: Input Overflow
				bit 3: Input Underflow
				bit 2: Alarm 2 Output 0=Off 1=On
				bit 1: Not used
				bit 0: Not used
			[Low Byte]	bit 7: Pump 1 Seal Failure (P1SF) 1=Error
				bit 6: Pump 2 Seal Failure (P2SF) 1=Error
				bit 5: Pump 1 Overtemp (P1Ot) 1=Error
				bit 4: Pump 2 Overtemp (P2Ot) 1=Error
				bit 3: Not used
				bit 2: Not used
				bit 1: Not used
				bit 0: Not used

## Set Point Functions

Absolute Address	Modbus register	Parameter	Operation	Description
257	40258	SP1H	R/W	Set Point 1 "ON" (see note*)
258	40259	SP1L	R/W	Set Point 1 "OFF" (see note*)
259	40260	SP2H	R/W	Set Point 2 "ON" (see note*)
260	40261	SP2L	R/W	Set Point 2 "OFF" (see note*)
327	40328	SPL	R/W	Sets lowest Set Point value that can be entered
328	40329	SPH	R/W	Sets highest Set Point value that can be entered
795	40796/30796	SP1SETUP	R/W	Bit Type Data:
			[High Byte]	Bit 0-7 Not used
			[Low Byte]	Bit 7: Not used
				Bit 6: Not used
				Bit 5: S1iH 1=On 0=Off
				Bit 4: S1Pi 1=On 0=Off
				Bit 3: Not used
				Bit 2: Not used
				Bit 1: S1ST 1=Pump In 0=Pump Out
				Bit 0: Not used
796	40797/30797	SP2SETUP	R/W	Bit Type Data:
			[High Byte]	Bit 0-7 Not used
			[Low Byte]	Bit 7: Not used
				Bit 6: Not used
				Bit 5: S2iH 1=On 0=Off
				Bit 4: S2Pi 1=On 0=Off
				Bit 3: Not used
				Bit 2: Not used
				Bit 1
				Bit 2
				S2St
			0	0 Pin
			0	1 Pout
			1	0 OFF

## Alarm Functions

Absolute Address	Modbus register	Parameter	Operation	Description
262	40263	A1LO	R/W	Alarm 1 LO Setting (see note)*
263	40264	A1HI	R/W	Alarm 1 HI Setting (see note)*
264	40265	A2LO	R/W	Alarm 2 LO Setting (see note)*
265	40266	A2HI	R/W	Alarm 2 HI Setting (see note)*
797	40798	AL1	R/W	0=OFF 1=LO 2=HI 3=HILO 4=Seal failure 5=Overtemp 6=Seal failure OR Overtemp
798	40799/30799	AL1SETUP	R/W	Bit Type Data:
			[High Byte]	Bit 0-7 Not used
			[Low Byte]	Bit 7: Not used
				Bit 6: Not used
				Bit 5: A1iH 1=On 0=Off
				Bit 4: A1Pi 1=On 0=Off
				Bit 3: A1rE 1=OnOf 0=Hold
				Bit 2: A1LP 1=Oon 0=OoFF
				Bit 1: A1St 1=OPEn 0=CLOS
				Bit 0: A1t 1=AbS 0=dE
799	40800	AL2	R/W	0=OFF 1=LO 2=HI 3=HILO 4=Seal failure 5=Overtemp 6=Seal failure OR Overtemp
800	40801/30801	AL2SETUP	R/W	Bit Type Data:
			[High Byte]	Bit 0-7 Not used
			[Low Byte]	Bit 7: Not used
				Bit 6: Not used
				Bit 5: A2iH 1=On 0=Off
				Bit 4: A2Pi 1=On 0=Off
				Bit 3: A2rE 1=OnOf 0=Hold
				Bit 2: A2LP 1=Oon 0=OoFF
				Bit 1: A2St 1=OPEn 0=CLOS
				Bit 0: A2t 1=AbS 0=dE
292	40293	A1td	R/W	Alarm 1 Time Delay
294	40295	A2td	R/W	Alarm 2 Time Delay
1027	41028	ACK AL1	Write only	Resets Alarm 1
1028	41029	ACK AL2	Write only	Resets Alarm 2
1029	41030	ACK AL1,2	Write only	Resets Alarm 1 and 2

## Pump Functions

Absolute Address	Modbus register	Parameter	Operation	Description
813	40814	LdLg	Read Only	Lead/Lag 0=OFF Non 0 =ON
1097	41098	LdLg On	Write Only	Lead/Lag = ON
1098	41099	LdLg Off	Write Only	Lead/Lag = OFF
288	40289	P1rn	Read Only	Pump 1 Run time
290	40291	P2rn	Read Only	Pump 2 Run time
811	40812	PrSt	Read Only	Pump Run Time Reset 0=OFF Non 0 =ON
1105	41106	PrSt Off	Write Only	PrSt = OFF
1106	41107	PrSt On	Write Only	PrSt = ON
1095	41096	P1rn reset	Write Only	Reset Pump 1 Run Time to 0
1096	41097	P2rn Reset	Write Only	Reset Pump 2 Run Time to 0
298	40299	SFS1	R/W	Pump 1 Seal Failure Set Point
300	40301	SFS2	R/W	Pump 2 Seal Failure Set Point
808	40809	PSF	Read Only	Seal Failure Reset 0=Auto 1=Manual
1101	41102	PSF Manual	Write Only	Set Seal Failure Reset to Manual
1102	41103	PSF Auto	Write Only	Set Seal Failure Reset to Auto
1091	41092	P1SF Reset	Write Only	Reset Seal Failure Error on Pump 1
1092	41093	P2SF Reset	Write Only	Reset Seal Failure Error on Pump 2
807	40808	Pot	Read Only	Pump Over Temperature Reset 0=Auto 1=Manual
1099	41100	POt Manual	Write Only	Set Pump Over Temperature Reset to Manual
1100	41101	POt Auto	Write Only	Set Pump Over Temperature Reset to Auto
1093	41094	P1Ot Reset	Write Only	Reset Pump Over Temp. Error on Pump 1
1094	41095	P2Ot Reset	Write Only	Reset Pump Over Temp. Error on Pump 2
306	40307	S2ti	R/W	Pump 2 Power On Time Delay Value

## DISPLAY FUNCTIONS

Absolute Address	Modbus register	Parameter	Operation	Description
320	40321	INPC	R/W	Input Correction
325	40326	SCAL	R/W	Set the Value for the Low End of Scale
326	40327	SCAH	R/W	Set the Value for the High End of Scale
791	40792	INPUT	R/W	Input Type 15 = Current 16 = Voltage
790	40791	FILT	R/W	Digital Input Filter Value
792	40793	OSUP	R/W	Zero Suppression 0=OFF Non 0 = ON
1058	41059	OSUPON	Write Only	Zero Suppression = ON
1059	41060	OSUPOFF	Write Only	Zero Suppression = OFF
794	40795	DPT	R/W	Decimal Point Position
				0 = 0
				1 = 0.0
				2 = 0.00
				3 = 0.000
285	40286	PEA	Read Only	Peak Value
286	40287	VAL	Read Only	Valley Value
1034	41035	Reset Peak	Write Only	Reset Peak Value to Current Process Value
1035	41036	Reset Valley	Write Only	Reset Valley Value to Current Process Value
<b>Communication Functions</b>				
804	40805	LOrE	R/W	Local/Remote 0 = Local Non 0 = remote
805	40806	nAt	R/W	No Activity Timer Value
812	40813	STOR	R/W	0 = Store RAM Non 0 = Store to EEPROM
1088	41089	STORYES	Write Only	Store to EEPROM
1089	41090	STORNO	Write Only	Store to RAM
1090	41091	STOREALL	Write Only	Copy RAM to EEPROM
<b>Misc. Functions</b>				
322	40323	SECR	R/W	Security Level - refer to Instructions for changing
333	40334	POL	R/W	Displayed Value for Retransmission output = 4mA
334	40335	POH	R/W	Displayed Value for Retransmission output = 20mA
810	40811	tEST	Read Only	System Test 0 = OFF Non 0 = ON
1103	40104	tEST On	Write Only	tEST = ON
1104	41105	tEST Off	Write Only	tEST = OFF

**NOTE \* Apply the DPT Setting (Modbus Address 40795) to the register value**