

Automation Products Group Modbus[®] Register Tables

Automation Products Group


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WARNING

As is typical with most instruments, the addition of serial communications carries an inherent risk; it allows a remote operator to change the operation and/or characteristics of the device being digitally communicated with (in this case, the meter). Inappropriate communication could have serious consequences in meter or system operation.

Ultimately, it is up to the system designer to provide for the safe operation of a process. But certainly, no single event should make the difference between a safe situation and a catastrophe. Please use the appropriate level of caution when implementing serial communication.

 **CAUTION:** If the Interlock Relay function is being used on the meter, its proper operation can be affected by inappropriate digital communications. Please take the steps necessary to provide for reliable interlock protection.

Disclaimer

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Introduction

This document describes how to communicate with the DDD, DBD, DDL, and DDX series of meters, **with firmware version 3.200 & greater**, using the Modbus® RTU Serial Communication Protocol. The user should be familiar with Modbus serial communication and the meters. Refer to the meter instruction manual and the serial communication adapters' manual for setup and wiring instructions.

Go to <http://www.modbus.org/> to obtain a copy of the Modbus Specifications and to find Modbus Technical Resources.

Note that although there are no specific 3x Registers, all 4x Registers are mirrored into 3x register space, and are therefore capable of being read by Modbus function 04 (Read Input Registers).

Register Overview

- 40001 – 40047: Process Value (PV), Max PV, Min PV, Total, and Grand Total in floating point and long integer formats, with interspersed relay status & digital I/O status, for block reading; Start & Stop batch, Relay acknowledge, Reset Max & Min, Reset Total, Grand Total & Batch count.
- 40051 – 40089: Manual control of relays, analog output, and digital outputs; Modbus input display settings to use the meter as a Modbus display.
- 40101 – 40125: Input selection, Decimal points, totalizer settings, display settings, and display intensity.
- 40126 – 40145: Adjust, RTD number to average, Filter & Bypass, Gate settings for pulse input, Serial communication settings, Transfer function, Number of points, Exponent, Round horizontal tank parameters, and Cutoff.
- 40171 – 40180: Passwords 1-3, Total & Grand Total Passwords.
- 40181 – 40187: Dual-scale model: PV2 settings and PV2 value, PV1 Percent.
- 40201 – 40220: Function keys & Digital I/O
- 40301 – 40372: Relays; Set & Reset points, Turn-on & Turn-off delays, Operating Mode.
- 40401 – 40413: Analog output value and setup parameters.
- 41001 – 41129: Remote Scaling for 4-20 mA input (Ch-A).
- 41201 – 41329: Remote Scaling for 4-20 mA input (Ch-B).
- 42001 – 42129: Remote Scaling for voltage input (Ch-A).
- 42201 – 42329: Remote Scaling for voltage input (Ch-B).
- 43001 – 43129: Remote Scaling for pulse input.
- 44001 – 44129: Remote Scaling for 4-20 mA input PV2 (Dual-scale, single input).
- 45001 – 45129: Remote Scaling for voltage input PV2 (Dual-scale, single input).
- 46001 – 46405: PV Channel B and additional dual-input parameters.
- 46201 – 46202: Channel C value (Math channel).
- 49901 – 49908: Product ID and Firmware Version.
- 49999: Load Factory Defaults

Automation Products Group Modbus® Register Tables

Serial Communication

Register ¹		Name	Access	Limits or Range ²	Units	Data Type ³	Function Code(s)	Comments																																
Number	Address (Hex)																																							
40001 – 40002	0 – 1 (0000 – 0001)	PV/Rate Display value	Read Only	-99999 to 999999	User defined	Floating point	03, 04	Represents the PV/Rate display value including the decimal point. Under Range = -99999, Over Range = 999999, and Open = -99999																																
40003	2 (0002)	Alarm and Relay status	Read Only	1 = In Alarm 1 = relay energized	None	Word; Bits	03, 04	Read alarm status and energized/non-energized status of relays. Alm = Alarm. Rly = Relay. <table border="1" style="width: 100%; text-align: center;"> <tr> <td>15</td><td>14</td><td>13</td><td>12</td><td>11</td><td>10</td><td>9</td><td>8</td><td>7</td><td>6</td><td>5</td><td>4</td><td>3</td><td>2</td><td>1</td><td>0</td> </tr> <tr> <td>Alm 8</td><td>Alm 7</td><td>Alm 6</td><td>Alm 5</td><td>Alm 4</td><td>Alm 3</td><td>Alm 2</td><td>Alm 1</td><td>Rly8</td><td>Rly7</td><td>Rly6</td><td>Rly5</td><td>Rly4</td><td>Rly3</td><td>Rly2</td><td>Rly1</td> </tr> </table>	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0	Alm 8	Alm 7	Alm 6	Alm 5	Alm 4	Alm 3	Alm 2	Alm 1	Rly8	Rly7	Rly6	Rly5	Rly4	Rly3	Rly2	Rly1
15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0																									
Alm 8	Alm 7	Alm 6	Alm 5	Alm 4	Alm 3	Alm 2	Alm 1	Rly8	Rly7	Rly6	Rly5	Rly4	Rly3	Rly2	Rly1																									
40004	3 (0003)	Digital Inputs and Outputs status	Read Only	1 = Input selected 1 = Output active	None	Word; Bits	03, 04	Read the state of the digital inputs and outputs. <table border="1" style="width: 100%; text-align: center;"> <tr> <td>15</td><td>14</td><td>13</td><td>12</td><td>11</td><td>10</td><td>9</td><td>8</td><td>7</td><td>6</td><td>5</td><td>4</td><td>3</td><td>2</td><td>1</td><td>0</td> </tr> <tr> <td>DI 8</td><td>DI 7</td><td>DI 6</td><td>DI 5</td><td>DI 4</td><td>DI 3</td><td>DI 2</td><td>DI 1</td><td>DO8</td><td>DO7</td><td>DO6</td><td>DO5</td><td>DO4</td><td>DO3</td><td>DO2</td><td>DO1</td> </tr> </table>	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0	DI 8	DI 7	DI 6	DI 5	DI 4	DI 3	DI 2	DI 1	DO8	DO7	DO6	DO5	DO4	DO3	DO2	DO1
15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0																									
DI 8	DI 7	DI 6	DI 5	DI 4	DI 3	DI 2	DI 1	DO8	DO7	DO6	DO5	DO4	DO3	DO2	DO1																									
40005 – 40006	4 – 5 (0004 – 0005)	Maximum Display value	Read Only	-99999 to 999999	User defined	Floating point	03, 04	Represents the Maximum display value, including the decimal point, since last power up or Max Value reset.																																
40007 – 40008	6 – 7 (0006 – 0007)	Minimum Display value	Read Only	-99999 to 999999	User defined	Floating point	03, 04	Represents the Minimum display value, including the decimal point, since last power up or Min Value reset.																																
40009 – 40010	8-9 (0008 – 0009)	Total value	Read Only	0 to 999999999	User defined	Floating point	03, 04	Represents the Total value, including the decimal point, since last Total reset.																																
40011 – 40012	10 – 11 (000A – 000B)	Grand Total value	Read Only	0 to 999999999	User defined	Floating point	03, 04	Represents the Grand Total value, including the decimal point, since last Grand Total reset.																																
40013 – 40014	12 – 13 (000C – 000D)	Total overflow value	Read Only	0 to 999	User defined	Floating point	03, 04	Represents the Total overflow value, since last Total reset.																																
40015 – 40016	14 – 15 (000E – 000F)	Total non-overflow value	Read Only	0 to 999999	User defined	Floating point	03, 04	Represents the Total non-overflow value, since last Total reset.																																
40017 – 40018	16 – 17 (0010 – 0011)	Grand Total overflow value	Read Only	0 to 999	User defined	Floating point	03, 04	Represents the Grand Total overflow value, since last Grand Total reset.																																
40019 – 40020	18 – 19 (0012 – 0013)	Grand Total non-overflow value	Read Only	0 to 999999	User defined	Floating point	03, 04	Represents the Grand Total non-overflow value, since last Grand Total reset.																																
40021	20 (0014)	PV/Rate Display value	Read Only	-99999 to 999999	User defined	Long Hi	03, 04	Represents the PV/Rate display value excluding the decimal point. Decimal point setting in 40102.																																
40022	21 (0015)	PV/Rate Display value	Read Only		User defined	Long Lo	03, 04	Must be read with 40021.																																

Register ¹		Name	Access	Limits or Range ²	Units	Data Type ³	Function Code(s)	Comments
Number	Address (Hex)							
40023	22 (0016)	Alarm and Relay status	Read Only	1 = In Alarm 1 = relay energized	None	Word; Bits	03, 04	Mirror of 40003. Read alarm status and energized/non-energized status of relays. Alm = Alarm. Rly = Relay. 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1 0 Alm 8 Alm 7 Alm 6 Alm 5 Alm 4 Alm 3 Alm 2 Alm 1 Rly8 Rly7 Rly6 Rly5 Rly4 Rly3 Rly2 Rly1
40024	23 (0017)	Digital Inputs and Outputs status	Read Only	1 = Input selected 1 = Output active	None	Word; Bits	03, 04	Mirror of 40004. Read the state of the digital inputs and outputs. 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1 0 DI 8 DI 7 DI 6 DI 5 DI 4 DI 3 DI 2 DI 1 DO8 DO7 DO6 DO5 DO4 DO3 DO2 DO1
40025	24 (0018)	Maximum Display value	Read Only	-99999 to 999999	User defined	Long Hi	03, 04	Represents the Maximum display value, excluding the decimal point, since last power up or Max Value reset.
40026	25 (0019)	Maximum Display value	Read Only		User defined	Long Lo	03, 04	Must be read with 40025.
40027	26 (001A)	Minimum Display value	Read Only	-99999 to 999999	User defined	Long Hi	03, 04	Represents the Minimum display value, excluding the decimal point, since last power up or Min Value reset.
40028	27 (001B)	Minimum Display value	Read Only		User defined	Long Lo	03, 04	Must be read with 40027.
40029	28 (001C)	Total value	Read Only	0 to 999999999	User defined	Long Hi	03, 04	Represents the Total value, excluding the decimal point, since last Total reset. Decimal point setting in 40103.
40030	29 (001D)	Total value	Read Only		User defined	Long Lo	03, 04	Must be read with 40029.
40031	30 (001E)	Grand Total value	Read Only	0 to 999999999	User defined	Long Hi	03, 04	Represents the Grand Total value, excluding the decimal point, since last Total reset. Decimal point setting in 40104.
40032	31 (001F)	Grand Total value	Read Only		User defined	Long Lo	03, 04	Must be read with 40031.
40033	32 (0020)	Total overflow value	Read Only	0 to 999	User defined	Integer	03, 04	Represents the Total overflow value, since last Total reset.
40034	33 (0021)	Total non-overflow value	Read Only	0 to 999999	User defined	Long Hi	03, 04	Represents the Total non-overflow value, since last Total reset.
40035	34 (0022)	Total non-overflow value	Read Only		User defined	Long Lo	03, 04	Must be read with 40034.
40036	35 (0023)	Grand Total overflow value	Read Only	0 to 999	User defined	Integer	03, 04	Represents the Grand Total overflow value, since last Grand Total reset.
40037	36 (0024)	Grand Total non-overflow value	Read Only	0 to 999999	User defined	Long Hi	03, 04	Represents the Grand Total non-overflow value, since last Grand Total reset.
40038	37 (0025)	Grand Total non-overflow value	Read Only		User defined	Long Lo	03, 04	Must be read with 40037.
40039	38 (0026)	Start Batch	Write Only	Not applicable	None	Bit	06, 16	Set bit to 1 to start the batch process.

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Serial Communication

Register ¹		Name	Access	Limits or Range ²	Units	Data Type ³	Function Code(s)	Comments																																
Number	Address (Hex)																																							
40040	39 (0027)	Stop Batch	Read Write	Not applicable	None	Integer	06, 16	Send 1 to pause the batch process; send 1 again to stop batch process. Read Batch state: 1=Start, 2=Pause, 4=Stop, 8=Delay																																
40041	40 (0028)	Alarm Acknowledge	Write Only	Not applicable	None	Word; Bits	06, 16	Clear Relay <i>n</i> alarm condition. Set bit equal to 1 to acknowledge. Only has effect on relays programmed to allow manual acknowledging. Bits 0-7 mirror Bits 8-15, Alm = Alarm <table border="1" style="font-size: small; margin-top: 5px;"> <tr> <td>15</td><td>14</td><td>13</td><td>12</td><td>11</td><td>10</td><td>9</td><td>8</td><td>7</td><td>6</td><td>5</td><td>4</td><td>3</td><td>2</td><td>1</td><td>0</td> </tr> <tr> <td>Alm 8</td><td>Alm 7</td><td>Alm 6</td><td>Alm 5</td><td>Alm 4</td><td>Alm 3</td><td>Alm 2</td><td>Alm 1</td><td>Alm 8</td><td>Alm 7</td><td>Alm 6</td><td>Alm 5</td><td>Alm 4</td><td>Alm 3</td><td>Alm 2</td><td>Alm 1</td> </tr> </table>	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0	Alm 8	Alm 7	Alm 6	Alm 5	Alm 4	Alm 3	Alm 2	Alm 1	Alm 8	Alm 7	Alm 6	Alm 5	Alm 4	Alm 3	Alm 2	Alm 1
15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0																									
Alm 8	Alm 7	Alm 6	Alm 5	Alm 4	Alm 3	Alm 2	Alm 1	Alm 8	Alm 7	Alm 6	Alm 5	Alm 4	Alm 3	Alm 2	Alm 1																									
40042	41 (0029)	Reset Maximum Display value	Write Only	Not applicable	None	Bit	06, 16	Set bit to 1 to reset the Maximum Display value.																																
40043	42 (002A)	Reset Minimum Display value	Write Only	Not applicable	None	Bit	06, 16	Set bit to 1 to reset the Minimum Display value.																																
40044	43 (002B)	Reset Max/Min Display value	Write Only	Not applicable	None	Bit	06, 16	Set bit to 1 to reset the Maximum/ Minimum Display values.																																
40045	44 (002C)	Reset Total value	Write Only	Not applicable	None	Bit	06, 16	Set bit to 1 to reset the Total value.																																
40046	45 (002D)	Reset Grand Total value	Write Only	Not applicable	None	Bit	06, 16	Set bit to 1 to reset the Grand Total value.																																
40047	46 (002E)	Reset Batch Count value	Write Only	Not applicable	None	Bit	06, 16	Set bit to 1 to reset the Batch Count value. To read batch count use register 40152.																																
40048	47 (002F)	Reset Tare	Write Only	Not applicable	None	Bit	06, 16	Set bit to 1 to reset or clear the tare.																																
40049	48 (0030)	Tare Ch-A	Read Write	Not applicable	None	Bit	06, 16	Set bit to 1 to tare channel A Read tare state: 0 = No Tare																																
40050	49 (0031)	Tare Ch-B	Read Write	Not applicable	None	Bit	06, 16	Set bit to 1 to tare channel B Read tare state: 0 = No Tare																																
40051	50 (0032)	Control Mode	Read Write	Not applicable	None	Bit	03, 04, 06, 16	0 = auto, 1 = manual																																
40052	51 (0033)	Manual Control Analog Output Setting	Read Write	0 to 23999	µA	Integer	03, 04, 06, 16	Represents the Manual Control Analog Output value. Note: Register 40051 must be set to 1 = manual mode for registers 40052-40069 to take effect.																																

Automation Products Group Modbus® Register Tables

Serial Communication

Register ¹		Name	Access	Limits or Range ²	Units	Data Type ³	Function Code(s)	Comments
Number	Address (Hex)							
40054	53 (0035)	Manual Control Relay 1 Setting	Read Write	Not applicable	None	Bit	03, 04, 06, 16	Represents the Manual Control Relay 1 setting. 0 = off, 1 = on
40055	54 (0036)	Manual Control Relay 2 Setting	Read Write	Not applicable	None	Bit	03, 04, 06, 16	Represents the Manual Control Relay 2 setting. 0 = off, 1 = on
40056	55 (0037)	Manual Control Relay 3 Setting	Read Write	Not applicable	None	Bit	03, 04, 06, 16	Represents the Manual Control Relay 3 setting. 0 = off, 1 = on
40057	56 (0038)	Manual Control Relay 4 Setting	Read Write	Not applicable	None	Bit	03, 04, 06, 16	Represents the Manual Control Relay 4 setting. 0 = off, 1 = on
40058	57 (0039)	Manual Control Relay 5 Setting	Read Write	Not applicable	None	Bit	03, 04, 06, 16	Represents the Manual Control Relay 5 setting. 0 = off, 1 = on
40059	58 (003A)	Manual Control Relay 6 Setting	Read Write	Not applicable	None	Bit	03, 04, 06, 16	Represents the Manual Control Relay 6 setting. 0 = off, 1 = on
40060	59 (003B)	Manual Control Relay 7 Setting	Read Write	Not applicable	None	Bit	03, 04, 06, 16	Represents the Manual Control Relay 7 setting. 0 = off, 1 = on
40061	60 (003C)	Manual Control Relay 8 Setting	Read Write	Not applicable	None	Bit	03, 04, 06, 16	Represents the Manual Control Relay 8 setting. 0 = off, 1 = on
40062	61 (003D)	Manual Control DO 1 Setting	Read Write	Not applicable	None	Bit	03, 04, 06, 16	Represents the Manual Control Digital Output 1 setting. 0 = off, 1 = on
40063	62 (003E)	Manual Control DO 2 Setting	Read Write	Not applicable	None	Bit	03, 04, 06, 16	Represents the Manual Control Digital Output 2 setting. 0 = off, 1 = on
40064	63 (003F)	Manual Control DO 3 Setting	Read Write	Not applicable	None	Bit	03, 04, 06, 16	Represents the Manual Control Digital Output 3 setting. 0 = off, 1 = on
40065	64 (0040)	Manual Control DO 4 Setting	Read Write	Not applicable	None	Bit	03, 04, 06, 16	Represents the Manual Control Digital Output 4 setting. 0 = off, 1 = on
40066	65 (0041)	Manual Control DO 5 Setting	Read Write	Not applicable	None	Bit	03, 04, 06, 16	Represents the Manual Control Digital Output 5 setting. 0 = off, 1 = on
40067	66 (0042)	Manual Control DO 6 Setting	Read Write	Not applicable	None	Bit	03, 04, 06, 16	Represents the Manual Control Digital Output 6 setting. 0 = off, 1 = on
40068	67 (0043)	Manual Control DO 7 Setting	Read Write	Not applicable	None	Bit	03, 04, 06, 16	Represents the Manual Control Digital Output 7 setting. 0 = off, 1 = on
40069	68 (0044)	Manual Control DO 8 Setting	Read Write	Not applicable	None	Bit	03, 04, 06, 16	Represents the Manual Control Digital Output 8 setting. 0 = off, 1 = on
40070	69 (0045)	Modbus Big Display Setting	Read Write	Not applicable	None	Bit	03, 04, 06, 16	Represents the Modbus Big Display setting. 0 = display based on register 40072-40073. 1 = display based on register 40076-40081. Modbus display mode must be set to 18 in register 40117.

Automation Products Group Modbus® Register Tables

Serial Communication

Register ¹		Name	Access	Limits or Range ²	Units	Data Type ³	Function Code(s)	Comments
Number	Address (Hex)							
40071	70 (0046)	Modbus Little Display Setting	Read Write	Not applicable	None	Bit	03, 04, 06, 16	Represents the Modbus Little Display setting. 0 = display based on register 40074-40075. 1 = display based on register 40082-40087. Modbus display mode must be set to 18 in register 40118.
40072 – 40073	71 – 72 (0047 – 0048)	Modbus Big Display value	Read Write	-99999 to +999999	User defined	Long Hi Long Lo	03, 04, 06, 16	Represents the Modbus Big display value excluding the decimal point. Register 40088 contains the decimal point. Set Register 40070 = 0, Register 40117 = 18
40074 – 40075	73 – 74 (0049 – 004A)	Modbus Little Display value	Read Write	-99999 to +999999	User defined	Long Hi Long Lo	03, 04, 06, 16	Represents the Modbus Little display value excluding the decimal point. Register 40089 contains the decimal point. Register 40071 = 0, Register 40118 = 18
40076	75 (004B)	Modbus Big Display MSD value	Read Write	Not applicable	None	Byte	03, 04, 06, 16	Represents the Modbus Big Display MSD (Most Significant Digit) value. The hex value represents the allowable ASCII character, see Table 8. Register 40117 = 18 Register 40070 = 1 for registers 40076-81. Register 40088 contains the decimal point.
40077	76 (004C)	Modbus Big Display MSD-1 value	Read Write	Not applicable	None	Byte	03, 04, 06, 16	Represents the Modbus Big Display MSD-1 value. The hex value represents the allowable ASCII character.
40078	77 (004D)	Modbus Big Display MSD-2 value	Read Write	Not applicable	None	Byte	03, 04, 06, 16	Represents the Modbus Big Display MSD-2 value. The hex value represents the allowable ASCII character.
40079	78 (004E)	Modbus Big Display MSD-3 value	Read Write	Not applicable	None	Byte	03, 04, 06, 16	Represents the Modbus Big Display MSD-3 value. The hex value represents the allowable ASCII character.
40080	79 (004F)	Modbus Big Display MSD-4 value	Read Write	Not applicable	None	Byte	03, 04, 06, 16	Represents the Modbus Big Display MSD-4 value. The hex value represents the allowable ASCII character.
40081	80 (0050)	Modbus Big Display MSD-5 (LSD) value	Read Write	Not applicable	None	Byte	03, 04, 06, 16	Represents the Modbus Big Display MSD-5 (which is the LSD) value. The hex value represents the allowable ASCII character.
40082	81 (0051)	Modbus Little Display MSD value	Read Write	Not applicable	None	Byte	03, 04, 06, 16	Represents the Modbus Little Display MSD (Most Significant Digit) value. The hex value represents the allowable ASCII character, see Table 8. Register 40118 = 18 Register 40071 = 1 for registers 40082-87. Register 40089 contains the decimal point.
40083	82 (0052)	Modbus Little Display MSD-1 value	Read Write	Not applicable	None	Byte	03, 04, 06, 16	Represents the Modbus Little Display MSD-1 value. The hex value represents the allowable ASCII character.

Register ¹		Name	Access	Limits or Range ²	Units	Data Type ³	Function Code(s)	Comments
Number	Address (Hex)							
40084	83 (0053)	Modbus Little Display MSD-2 value	Read Write	Not applicable	None	Byte	03, 04, 06, 16	Represents the Modbus Little Display MSD-2 value. The hex value represents the allowable ASCII character.
40085	84 (0054)	Modbus Little Display MSD-3 value	Read Write	Not applicable	None	Byte	03, 04, 06, 16	Represents the Modbus Little Display MSD-3 value. The hex value represents the allowable ASCII character.
40086	85 (0055)	Modbus Little Display MSD-4 value	Read Write	Not applicable	None	Byte	03, 04, 06, 16	Represents the Modbus Little Display MSD-4 value. The hex value represents the allowable ASCII character.
40087	86 (0056)	Modbus Little Display MSD-5 (LSD) value	Read Write	Not applicable	None	Byte	03, 04, 06, 16	Represents the Modbus Little Display MSD-5 (which is the LSD) value. The hex value represents the allowable ASCII character.
40088	87 (0057)	Modbus Big Display decimal point	Read Write	0 to 5	None	Integer	03, 04, 06, 16	Selects based on number of digits to the right of the decimal point (e.g. 0 = no decimal point and 5 = d.ddddd). Register 40070 = 1 or 0
40089	88 (0058)	Modbus Little Display decimal point	Read Write	0 to 5	None	Integer	03, 04, 06, 16	Selects based on number of digits to the right of the decimal point (e.g. 0 = no decimal point and 5 = d.ddddd). Register 40071 = 1 or 0
40090	89 (0059)	Level Meter	Read Write	Not applicable	None	Bit	03, 04, 06, 16	Represents the selection for LEVEL meter with dual scale for PV1 and PV2. 0 = No, 1 = Yes
40091	90 (005A)	Total Mode	Read Write	Not applicable	None	Bit	03, 04, 06, 16	Represents the selection for Total. For SFT039 0 = No, 1 = Yes For SFT065 0 = None, 1 = Ch-A Total, 2 = Ch-B Total, 3 = Ch-A and Ch-B Total
40092	91 (005B)	Scale/KFactor, ICal/User Cal selector	Read Write	Not applicable	None	Bit	03, 04, 06, 16	For SFT039 (Single) Most significant byte is used for mA selection. Ical = 1, UserCal = 2, Scale = 4 Least significant byte is used for all other modes Ical = 1, UserCal = 2, Scale = 4, KFactor = 8 For SFT065 (Single) Most significant byte is used for Channel B selection. Ical = 1, UserCal = 2, Scale = 4, KFactor = 8 Least significant byte is used for Channel A selection Ical = 1, UserCal = 2, Scale = 4, KFactor = 8

Automation Products Group Modbus® Register Tables

Serial Communication

Register ¹		Name	Access	Limits or Range ²	Units	Data Type ³	Function Code(s)	Comments
Number	Address (Hex)							
40093	92 (005C)	Meter Model	Read Only	Not applicable	None	Integer	03, 04, 06, 16	Hex Value LSB for non dual and SFT 065 reg map revision 4 Hex Value LSB for SFT 065 reg map revision 0x20 and later 0 = Process/Temperature 1 = Process Total 2 = Pulse Total 3 = Dual-Input Process 4 = Reserve 5 = Process Batch 6 = Pulse Batch 7 = No Module Hex Value MSB is Register Map Revision 0 = Dual Process 1 = Dual Process Total 2 = Dual Pulse Total 3 = Dual Temperature 4 = Dual Process fixed VI 5 = Dual Process Batch 6 = Dual Pulse Batch 7 = No Module
40094	93 (005D)	Relay & Digital IO count	Read Only	Not applicable	None	Word; bytes	03, 04, 06, 16	Relay & Digital IO count LSByte = Relay count (4 or 8) MSByte = Digital IO count (0, 4, or 8)
40095	94 (005E)	Meter Output	Read Only	Not applicable	None	Bit	03, 04, 06, 16	Represents the meter options 0 = None, 1 = Installed Bit 0 = AOut Option, Bit 1 = F4 option, Bit 2 = Grand Total Non-Reset Password is set, Bit 3 = Meter input open indication
40096	95 (005F)	Miscellaneous Meter States	Read Only	Not applicable	None	Bit	03, 04, 06, 16	Miscellaneous meter State Indications Bit 0= Channel A or Single Channel Input Break fault Bit 0= Channel B Input Break fault
40097	96 (0031)	Zero Display	Write Only	Not applicable	None	Bit	06, 16	Set bit to 1 to Zero display Strain gauge meter only
40101	100 (0064)	Input Selection	Read Write	Not applicable	None	Word; bits	03, 04, 06, 16	See Table 1.
40102	101 (0065)	PV/Rate decimal point	Read Write	0 to 7	None	Integer	03, 04, 06, 16	Selects based on number of digits to the right of the decimal point (e.g. 0 = no decimal point and 5 = d.ddddd), also selections for Temp Decimal Point using 0 = dddd, 1 = dddd.d, 6 = dddd°u, and 7 = dddd.du, where "u" is the units (F or C).
40103	102 (0066)	Total decimal point	Read Write	0 to 5	None	Integer	03, 04, 06, 16	Selects based on number of digits to the right of the decimal point (e.g. 0 = no decimal point and 5 = d.ddddd).
40104	103 (0067)	Grand Total decimal point	Read Write	0 to 5	None	Integer	03, 04, 06, 16	Selects based on number of digits to the right of the decimal point (e.g. 0 = no decimal point and 5 = d.ddddd).

Register ¹		Name	Access	Limits or Range ²	Units	Data Type ³	Function Code(s)	Comments
Number	Address (Hex)							
40105	104 (0068)	Total time base	Read Write	0 to 4	None	Integer	03, 04, 06, 16	0 = sec, 1 = min, 2 = hour, 3 = day
40106 – 40107	105 – 106 (0069 – 006A)	Total Conversion Factor	Read Write	0.00001 to 999999	None	Floating point	03, 04, 06, 16	
40108	107 (006B)	Total Reset mode	Read Write	Not applicable	None	Bit	03, 04, 06, 16	0 = auto, 1 = manual
40109	108 (006C)	Total Reset Delay	Read Write	0 to 9999	1/10 of Seconds (0 to 999.9)	Integer	03, 04, 06, 16	
40110	109 (006D)	Grand Total time base	Read Write	0 to 4	None	Integer	03, 04, 06, 16	0 = sec, 1 = min, 2 = hour, 3 = day
40111 – 40112	110 – 111 (006E – 006F)	Grand Total Conversion Factor	Read Write	0.00001 to 999999	None	Floating point	03, 04, 06, 16	
40113	112 (0070)	Grand Total Reset mode	Read Write	Not applicable	None	Bit	03, 04, 06, 16	0 = auto, 1 = manual
40114	113 (0071)	Grand Total Reset Delay	Read Write	0 to 9999	1/10 of Seconds (0 to 999.9)	Integer	03, 04, 06, 16	
40115 – 40116	114 – 115 (0072 – 0073)	Pulse K- Factor	Read Write	0.00001 to 999999	None	Floating point	03, 04, 06, 16	
40117	116 (0074)	Big Display Setting	Read Write	0 to 53	None	Integer	03, 04, 06, 16	See Table 2.
40118	117 (0075)	Little Display Setting	Read Write	0 to 53	None	Integer	03, 04, 06, 16	See Table 2.
40119	118 (0076)	Units 1	Read Write	Not applicable	None	Byte	03, 04, 06, 16	Represents the Modbus Little Display MSD (Most Significant Digit) value. The hex value represents the allowable ASCII character.
40120	119 (0077)	Units 2	Read Write	Not applicable	None	Byte	03, 04, 06, 16	Represents the Modbus Little Display MSD-1 value. The hex value represents the allowable ASCII character.
40121	120 (0078)	Units 3	Read Write	Not applicable	None	Byte	03, 04, 06, 16	Represents the Modbus Little Display MSD-2 value. The hex value represents the allowable ASCII character.
40122	121 (0079)	Units 4	Read Write	Not applicable	None	Byte	03, 04, 06, 16	Represents the Modbus Little Display MSD-3 value. The hex value represents the allowable ASCII character.
40123	122 (007A)	Units 5	Read Write	Not applicable	None	Byte	03, 04, 06, 16	Represents the Modbus Little Display MSD-4 value. The hex value represents the allowable ASCII character.
40124	123 (007B)	Units 6	Read Write	Not applicable	None	Byte	03, 04, 06, 16	Represents the Modbus Little Display MSD-5 (which is the LSD) value. The hex value represents the allowable ASCII character.
40125	124 (007C)	Display Intensity	Read Write	1 to 8	None	Integer	03, 04, 06, 16	8 is the brightest level. Writing out of range data results in level 1 or 8.

Automation Products Group Modbus® Register Tables

Serial Communication

Register ¹		Name	Access	Limits or Range ²	Units	Data Type ³	Function Code(s)	Comments
Number	Address (Hex)							
40126	125 (007D)	Adjust Value	Read Write	-500 to 500	1/10 of °C or °F	Integer	03, 04, 06, 16	Actually represents -50.0 to +50.0. Offset value is only applied to temperature inputs. If Adjust is greater than 27.7°C and the temperature units are switched to °F, it will be set to 50.0 (lower than -27.7, set to -50.0).
40127	126 (007E)	RTD Total Value	Read Write	1 to 10	None	Integer	03, 04, 06, 16	Value represents the number of parallel RTDs connected to the signal input. Any other value than these results in a setting of 1.
40128	127 (007F)	Lo Gate Setting	Read Write	1 to 999	None	Integer	03, 04, 06, 16	Actually represents 0.1 to 99.9 setting.
40129	128 (0080)	High Gate Setting	Read Write	20 to 9999	None	Integer	03, 04, 06, 16	Actually represents 2.0 to 999.9 setting.
40130	129 (0081)	Filter Setting	Read Write	0, 2 to 199 or 202 to 250, 900	Unit-less	Integer	03, 04, 06, 16	Display filtering. 0 = no filtering. 2 to 199 = old + ((new - old)/Filter). For pulse input 900 = Hi-Speed, 202 to 250 = Lo-Speed where the range is 2 to 50.
40131	130 (0082)	Bypass Setting	Read Write	2 to 999	Percent of full scale or °F	Integer	03, 04, 06, 16	Actually represents 0.2 to 99.9. If the input steps greater than the bypass value, it will be displayed immediately, with no filtering occurring. The number represents percent of full-scale for process inputs and °F for temperature inputs. No effect if filter = 0.
40132	131 (0083)	Serial Address	Read Write	1 to 247	None	Integer	03, 04, 06, 16	Changes to this register are saved but don't take effect until next meter reset (Modbus command or power-up). Writing out of range data results in an address of 247.
40133	132 (0084)	Serial Baud Rate	Read Write	0 to 6	None	Integer	03, 04, 06, 16	0 = 300, 1 = 600, 2 = 1200, 3 = 2400, 4 = 4800, 5 = 9600, & 6 = 19200. Changes to this register are saved but don't take effect until next meter reset (Modbus command or power-up). Writing out of range data results in a baud rate of 2400.
40134	133 (0085)	Serial Transmit Delay	Read Write	0 to 199	ms	Integer	03, 04, 06, 16	Transmit delay to minimize collisions on the RS-485 network.
40135	134 (0086)	Serial Parity	Read Write	0 to 3	None	Integer	03, 04, 06, 16	0 = None with 1 stop bit, 1 = None with 2 stop bits, 2 = Odd, 3 = Even. Changes to this register are saved but don't take effect until next meter re-initialization (Writing 0xFF00 to 40299 or power-up). Writing out of range data results in a parity setting of Even.
40136	135 (0087)	Serial Byte-to-Byte Timeout	Read Write	0 to 254	1/100 of Seconds	Integer	03, 04, 06, 16	This is the timeout between bytes of a Modbus frame. Note that a value less than the minimum value for the present baud rate cannot be saved. Minimums are: 300 baud = 0.06 sec, 600 = 0.03, 1200 = 0.02 and 0.01 for 2400 to 19200. Changes to this register are saved but don't take effect until next meter reset (Modbus command or power-up). Writing out of range data results in a timeout of 2.54 seconds.
40137	136 (0088)	Function Mode	Read Write	0 to 3	None	Integer	03, 04, 06, 16	0 = Linear, 1 = Square Root, 2 = Exponent, 3 = Round Horizontal Tank
40138	137 (0089)	PV/Rate mA Number of Points	Read Write	2 to 32	None	Integer	03, 04, 06, 16	This register is only used when register 40137 = 0 Linear. Ch-A voltage input number of points uses register 40188.

Register ¹		Name	Access	Limits or Range ²	Units	Data Type ³	Function Code(s)	Comments
Number	Address (Hex)							
40139	138 (008A)	Exponent	Read Write	10001 to 29999	None	Integer	03, 04, 06, 16	Actually represents 1.0001 to 2.9999. Set register 40137 = 2
40140 – 40141	139 – 140 (008B – 008C)	Round Horizontal Tank Diameter	Read Write	0 to 999.999	Inch/cm	Floating point	03, 04, 06, 16	Decimal point is fixed. The unit of measure is inch or cm; the volume calculation is in US gallon or liter. The display may be re-scaled to represent the volume in any engineering units. Register 40137 = 3 RHT
40142 – 40143	141 – 142 (008D – 008E)	Round Horizontal Tank Length	Read Write	0 to 999.999	Inch/cm	Floating point	03, 04, 06, 16	Register 40190 Round horizontal tank units 0 = inch Volume: Gallon 1 = cm Volume: Liter
40144 – 40145	143 – 144 (008F – 0090)	Cutoff	Read Write	0 to 999999	User defined	Floating point	03, 04, 06, 16	Represents the cutoff value.
40146	145 (0091)	Batch Total Count Direction	Read Write	Not applicable	None	Bit	03, 04, 06, 16	0 = count up, 1 = count down
40147 – 40148	146 – 147 (0092 – 0093)	Batch Total Preset	Read Write	0 to 999999999	User defined	Floating point	03, 04, 06, 16	Same as 40302 – 40303 Relay 1 set point.
40149	148 (0094)	Grand Total Count Direction	Read Write	Not applicable	None	Bit	03, 04, 06, 16	0 = count up, 1 = count down
40150 – 40151	149 – 150 (0095 – 0096)	Grand Total Count Down Start	Read Write	0 to 999999999	User defined	Floating point	03, 04, 06, 16	
40152	151 (0097)	Batch Count	Read Only	0 to 999999	None	Integer	03, 04, 06, 16	Represents the number of completed batches. To reset the batch count use register 40047.
40153	152 (0098)	Dual Pulse Quad Mode	Read Write	0 to 7	None	Integer	03, 04, 06, 16	Dual Pulse Quad mode select DUAL=0, UDAB=1, UDAI=2, UDBI=3, UDABI=4, QUAD_1=5, QUAD_2=6, QUAD_4=7
40154	153 (99)	Ch-A Total Units 1	Read Write	Not applicable	None	Byte	03, 04, 06, 16	Represents the Modbus Little Display MSD (Most Significant Digit) value. The hex value represents the allowable ASCII character.
40155	154 (9A)	Ch- A Total Units 2	Read Write	Not applicable	None	Byte	03, 04, 06, 16	Represents the Modbus Little Display MSD-1 value. The hex value represents the allowable ASCII character.
40156	155 (9B)	Ch- A Total Units 3	Read Write	Not applicable	None	Byte	03, 04, 06, 16	Represents the Modbus Little Display MSD-2 value. The hex value represents the allowable ASCII character.
40157	156 (9C)	Ch- A Total Units 4	Read Write	Not applicable	None	Byte	03, 04, 06, 16	Represents the Modbus Little Display MSD-3 value. The hex value represents the allowable ASCII character.
40158	157 (9D)	Ch- A Total Units 5	Read Write	Not applicable	None	Byte	03, 04, 06, 16	Represents the Modbus Little Display MSD-4 value. The hex value represents the allowable ASCII character.

Register ¹		Name	Access	Limits or Range ²	Units	Data Type ³	Function Code(s)	Comments
Number	Address (Hex)							
40159	158 (9E)	Ch- A Total Units 6	Read Write	Not applicable	None	Byte	03, 04, 06, 16	Represents the Modbus Little Display MSD-5 (which is the LSD) value. The hex value represents the allowable ASCII character.
40160	159 (9F)	Ch-A Grand Total Units 1	Read Write	Not applicable	None	Byte	03, 04, 06, 16	Represents the Modbus Little Display MSD (Most Significant Digit) value. The hex value represents the allowable ASCII character.
40161	160 (A0)	Ch- A Grand Total Units 2	Read Write	Not applicable	None	Byte	03, 04, 06, 16	Represents the Modbus Little Display MSD-1 value. The hex value represents the allowable ASCII character.
40162	161 (A1)	Ch- A Grand Total Units 3	Read Write	Not applicable	None	Byte	03, 04, 06, 16	Represents the Modbus Little Display MSD-2 value. The hex value represents the allowable ASCII character.
40163	162 (A2)	Ch- A Grand Total Units 4	Read Write	Not applicable	None	Byte	03, 04, 06, 16	Represents the Modbus Little Display MSD-3 value. The hex value represents the allowable ASCII character.
40164	163 (A3)	Ch- A Grand Total Units 5	Read Write	Not applicable	None	Byte	03, 04, 06, 16	Represents the Modbus Little Display MSD-4 value. The hex value represents the allowable ASCII character.
40165	164 (A4)	Ch- A Grand Total Units 6	Read Write	Not applicable	None	Byte	03, 04, 06, 16	Represents the Modbus Little Display MSD-5 (which is the LSD) value. The hex value represents the allowable ASCII character.
40166 – 40167	166 – 167 (00A5 – 00A6)	Total Count Down Start	Read Write	0 to 999999999	User defined	Floating point	03, 04, 06, 16	
40171 – 40172	170 – 171 (00AA-00AB)	Password 1	Read Write	000000 to 999999	None	Floating point	03, 04, 06, 16	See Note 4.
40173 – 40174	172 – 173 (00AC-00AD)	Password 2	Read Write	000000 to 999999	None	Floating point	03, 04, 06, 16	See Note 4.
40175 – 40176	174 – 175 (00AE-00AF)	Password 3	Read Write	000000 to 999999	None	Floating point	03, 04, 06, 16	See Note 4.
40177 – 40178	176 – 177 (00B0 – 00B1)	Total Password	Read Write	000000 to 999999	None	Floating point	03, 04, 06, 16	See Note 4.
40179 – 40180	178 – 179 (00B2 – 00B3)	Grand Total Password	Read Write	000000 to 999999	None	Floating point	03, 04, 06, 16	See Note 4.
40181	180 (00B4)	PV2 Decimal Point	Read Write	0 to 5	None	Integer	03, 04, 06, 16	Selects based on number of digits to the right of the decimal point (e.g. 0 = no decimal point and 5 = d.ddddd).
40182	181 (00B5)	PV2 mA Number of Points	Read Write	2 to 8	None	Integer	03, 04, 06, 16	This register is only used when register 40137 is set to Linear. PV2 voltage input uses register 40189.

Automation Products Group Modbus® Register Tables

Serial Communication

Register ¹		Name	Access	Limits or Range ²	Units	Data Type ³	Function Code(s)	Comments
Number	Address (Hex)							
40183 – 40184	182 – 183 (00B6 – 00B7)	PV2 Display Value	Read Only	-99999 to 999999	User defined	Floating point	03, 04	Represents the PV2 display value including the decimal point. Under Range = -99999, Over Range = 999999, and Open = -99999
40185	184 (00B8)	PV2 Display value	Read Only	-99999 to 999999	User defined	Long Hi	03, 04	Represents the display value excluding the decimal point. Decimal point setting in 40181.
40186	185 (00B9)	PV2 Display value	Read Only		User defined	Long Lo	03, 04	Must be read with 40185.
40187	186 (00BA)	PV1% Display value	Read Only	-100 to 100	User defined	Integer	03, 04	Represents the PV1% display value.
40188	187 (00BB)	PV/Rate Volt Number of Points	Read Write	2 to 32	None	Integer	03, 04, 06, 16	This register is only used when register 40137 = 0 Linear. Ch-A mA input number of points uses register 40138.
40189	188 (00BC)	PV2 Volt Number of Points	Read Write	2 to 8	None	Integer	03, 04, 06, 16	This register is only used when register 40137 = 0 Linear. PV2 mA input uses register 40182.
40190	189 (00BD)	RHT Inch/cm Selection	Read Write	0 or 1	Inch or cm	Integer	03, 04, 06, 16	Round horizontal tank engineering units 0 = inch Volume: Gallon 1 = cm Volume: Liter This register is only used when register 40137 = 3 RHT. Tank diameter and length: Registers 40140-143.
40191 – 40192	190 – 191 (00BE – 00BF)	Programmed Tare Value	Read Write	0 to 999999	User defined	Floating point	03, 04, 06, 16	Programmed tare value. Must have Tare Programmed (40193) flag set to take effect
40193	192 (00C0)	Tare mode	Read Write	Not applicable	None	Integer	03, 04, 06, 16	0 = Tare off 1 = Use Capture Tare 2 = Use Programmed Tare
40194 – 40195	193 – 194 (00C1 – 00C2)	Auto Zero Threshold	Read Write	0 to 9.99	User defined	Floating point	03, 04, 06, 16	Auto Zero Threshold Full scale times this value is the threshold of the input difference below which Auto Zero is calculated
40196	195 (00C3)	Auto Zero On/Off	Read Write	0 to 1	None	Bit	03, 04, 06, 16	0 = Auto Zero Off 1 = Auto Zero On
40197	196 (00C4)	Strain Unipolar/Bipolar select	Read Write	0 to 1	None	Bit	03, 04, 06, 16	0 = Unipolar 1 = Bipolar
40198	197 (00C5)	Feet/Inch 1/8 or 1/16 resolution	Read Write	0 to 1	None	Bit	03, 04, 06, 16	0 = 1/8 th 1 = 1/16 th
40201	200 (00C8)	Programmable User F1 Setting	Read Write	0 to 71	User defined	Integer	03, 04, 06, 16	See Table 3.

Register ¹		Name	Access	Limits or Range ²	Units	Data Type ³	Function Code(s)	Comments
Number	Address (Hex)							
40202	201 (00C9)	Programmable User F2 Setting	Read Write	0 to 71	User defined	Integer	03, 04, 06, 16	See Table 3.
40203	202 (00CA)	Programmable User F3 Setting	Read Write	0 to 71	User defined	Integer	03, 04, 06, 16	See Table 3.
40204	203 (00CB)	Programmable User F4 Setting	Read Write	0 to 71	User defined	Integer	03, 04, 06, 16	See Table 3.
40205	204 (00CC)	Programmable User Digital Input 1 Setting	Read Write	0 to 71	User defined	Integer	03, 04, 06, 16	See Table 3.
40206	205 (00CD)	Programmable User Digital Input 2 Setting	Read Write	0 to 71	User defined	Integer	03, 04, 06, 16	See Table 3.
40207	206 (00CE)	Programmable User Digital Input 3 Setting	Read Write	0 to 71	User defined	Integer	03, 04, 06, 16	See Table 3.
40208	207 (00CF)	Programmable User Digital Input 4 Setting	Read Write	0 to 71	User defined	Integer	03, 04, 06, 16	See Table 3.
40209	208 (00D0)	Programmable User Digital Input 5 Setting	Read Write	0 to 71	User defined	Integer	03, 04, 06, 16	See Table 3.
40210	209 (00D1)	Programmable User Digital Input 6 Setting	Read Write	0 to 71	User defined	Integer	03, 04, 06, 16	See Table 3.
40211	210 (00D2)	Programmable User Digital Input 7 Setting	Read Write	0 to 71	User defined	Integer	03, 04, 06, 16	See Table 3.
40212	211 (00D3)	Programmable User Digital Input 8 Setting	Read Write	0 to 71	User defined	Integer	03, 04, 06, 16	See Table 3.
40213	212 (00D4)	Programmable User Digital Output 1 Setting	Read Write	0 to 38	User defined	Integer	03, 04, 06, 16	See Table 3.
40214	213 (00D5)	Programmable User Digital Output 2 Setting	Read Write	0 to 38	User defined	Integer	03, 04, 06, 16	See Table 3.
40215	214 (00D6)	Programmable User Digital Output 3 Setting	Read Write	0 to 38	User defined	Integer	03, 04, 06, 16	See Table 3.

Register ¹		Name	Access	Limits or Range ²	Units	Data Type ³	Function Code(s)	Comments
Number	Address (Hex)							
40216	215 (00D7)	Programmable User Digital Output 4 Setting	Read Write	0 to 38	User defined	Integer	03, 04, 06, 16	See Table 3.
40217	216 (00D8)	Programmable User Digital Output 5 Setting	Read Write	0 to 38	User defined	Integer	03, 04, 06, 16	See Table 3.
40218	217 (00D9)	Programmable User Digital Output 6 Setting	Read Write	0 to 38	User defined	Integer	03, 04, 06, 16	See Table 3.
40219	218 (00DA)	Programmable User Digital Output 7 Setting	Read Write	0 to 38	User defined	Integer	03, 04, 06, 16	See Table 3.
40220	219 (00DB)	Programmable User Digital Output 8 Setting	Read Write	0 to 38	User defined	Integer	03, 04, 06, 16	See Table 3.
40221	220 (00DC)	Rounding	Read Write	Not applicable	None	Integer	03, 04, 06, 16	Display Rounding Acceptable Index values are: 0=1, 1=2, 2=5, 3=10, 4=20, 5=50, and 6=100
40222	221 (00DD)	Units Code	Read Write	Not applicable	None		03, 04, 06, 16	This sets the meter units as follows: 0 = LB, 1= kG, 2 = Ounce, 3 = grams, 4 = Ton, 5 = Metric Ton, 6 = Custom. Custom is specified in reg 40119 thru 40124
40223 – 40224	222 – 223 (00DE – 00DF)	Gross Display Value	Read Only	-99999 to 999999	User defined	Floating point	03, 04	Represents the Gross display value including the decimal point. Under Range = -99999, Over Range = 999999
40225 – 40226	224 – 225 (00E0 – 00E1)	Net Display Value	Read Only	-99999 to 999999	User defined	Floating point	03, 04	Represents the Net display value including the decimal point. Under Range = -99999, Over Range = 999999
40227 – 40228	226 – 227 (00E2 – 00E3)	Millivolt Display Value	Read Only	-99999 to 999999	User defined	Floating point	03, 04	Represents the Net display value including the decimal point. Under Range = -210.00, Over Range = 210.00
40229	228 (00E5)	Custom Units 1	Read Write	Not applicable	None	Byte	03, 04, 06, 16	Represents the Custom Units Little Display MSD (Most Significant Digit) value. The hex value represents the allowable ASCII character.
40230	229 (00E6)	Custom Units 2	Read Write	Not applicable	None	Byte	03, 04, 06, 16	Represents the Custom Units Little Display MSD-1 value. The hex value represents the allowable ASCII character.
40231	230 (00E7)	Custom Units 3	Read Write	Not applicable	None	Byte	03, 04, 06, 16	Represents the Custom Units Little Display MSD-2 value. The hex value represents the allowable ASCII character.
40232	231 (00E8)	Custom Units 4	Read Write	Not applicable	None	Byte	03, 04, 06, 16	Represents the Custom Units Little Display MSD-3 value. The hex value represents the allowable ASCII character.
40233	232 (00E9)	Custom Units 5	Read Write	Not applicable	None	Byte	03, 04, 06, 16	Represents the Custom Units Little Display MSD-4 value. The hex value represents the allowable ASCII character.
40234	233 (00EA)	Custom Units 6	Read Write	Not applicable	None	Byte	03, 04, 06, 16	Represents the Custom Units Little Display MSD-5 value. The hex value represents the allowable ASCII character.

Register ¹		Name	Access	Limits or Range ²	Units	Data Type ³	Function Code(s)	Comments
Number	Address (Hex)							
40301	300 (012C)	Relay 1 Mode	Read Write	Not applicable	None	Word; bits	03, 04, 06, 16	See Table 4 for operating modes and bit assignments.
40302 – 40303	301 – 302 (012D – 012E)	Relay 1 Set Point	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
40304 – 40305	303 – 304 (012F – 0130)	Relay 1 Reset Point	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
40306	305 (0131)	Relay 1 On Delay	Read Write	0 to 1999	1/10 of Seconds	Integer	03, 04, 06, 16	
40307	306 (0132)	Relay 1 Off Delay	Read Write	0 to 1999	1/10 of Seconds	Integer	03, 04, 06, 16	
40308 – 40309	307 – 308 (0133 – 0134)	Relay 1 Sample Time	Read Write	0 to 59999	1/10 of Seconds	Floating point	03, 04, 06, 16	
40310	309 (0135)	Relay 2 Mode	Read Write	Not applicable	None	Word; bits	03, 04, 06, 16	See Table 4 for operating modes and bit assignments.
40311 – 40312	310 – 311 (0136 – 0137)	Relay 2 Set Point	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
40313 – 40314	312 – 313 (0138 – 0139)	Relay 2 Reset Point	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
40315	314 (013A)	Relay 2 On Delay	Read Write	0 to 1999	1/10 of Seconds	Integer	03, 04, 06, 16	
40316	315 (013B)	Relay 2 Off Delay	Read Write	0 to 1999	1/10 of Seconds	Integer	03, 04, 06, 16	
40317 – 40318	316 – 317 (013C – 013D)	Relay 2 Sample Time	Read Write	0 to 59999	1/10 of Seconds	Floating point	03, 04, 06, 16	
40319	318 (013E)	Relay 3 Mode	Read Write	Not applicable	None	Word; bits	03, 04, 06, 16	See Table 4 for operating modes and bit assignments.
40320 – 40321	319 – 320 (013F – 0140)	Relay 3 Set Point	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
40322 – 40323	321 – 322 (0141 – 0142)	Relay 3 Reset Point	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
40324	323 (0143)	Relay 3 On Delay	Read Write	0 to 1999	1/10 of Seconds	Integer	03, 04, 06, 16	
40325	324 (0144)	Relay 3 Off Delay	Read Write	0 to 1999	1/10 of Seconds	Integer	03, 04, 06, 16	
40326 – 40327	325 – 326 (0145 – 0146)	Relay 3 Sample Time	Read Write	0 to 59999	1/10 of Seconds	Floating point	03, 04, 06, 16	
40328	327 (0147)	Relay 4 Mode	Read Write	Not applicable	None	Word; bits	03, 04, 06, 16	See Table 4 for operating modes and bit assignments.

Register ¹		Name	Access	Limits or Range ²	Units	Data Type ³	Function Code(s)	Comments
Number	Address (Hex)							
40329 – 40330	328 – 329 (0148 – 0149)	Relay 4 Set Point	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
40331 – 40332	330 – 331 (014A – 014B)	Relay 4 Reset Point	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
40333	332 (014C)	Relay 4 On Delay	Read Write	0 to 1999	1/10 of Seconds	Integer	03, 04, 06, 16	
40334	333 (014D)	Relay 4 Off Delay	Read Write	0 to 1999	1/10 of Seconds	Integer	03, 04, 06, 16	
40335 – 40336	334 – 335 (014E – 014F)	Relay 4 Sample Time	Read Write	0 to 59999	1/10 of Seconds	Floating point	03, 04, 06, 16	
40337	336 (0150)	Relay 5 Mode	Read Write	Not applicable	None	Word; bits	03, 04, 06, 16	See Table 4 for operating modes and bit assignments.
40338 – 40339	337 – 338 (0151 – 0152)	Relay 5 Set Point	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
40340 – 40341	339 – 340 (0153 – 0154)	Relay 5 Reset Point	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
40342	341 (0155)	Relay 5 On Delay	Read Write	0 to 1999	1/10 of Seconds	Integer	03, 04, 06, 16	
40343	342 (0156)	Relay 5 Off Delay	Read Write	0 to 1999	1/10 of Seconds	Integer	03, 04, 06, 16	
40344 – 40345	343 – 344 (0157 – 0158)	Relay 5 Sample Time	Read Write	0 to 59999	1/10 of Seconds	Floating point	03, 04, 06, 16	
40346	345 (0159)	Relay 6 Mode	Read Write	Not applicable	None	Word; bits	03, 04, 06, 16	See Table 4 for operating modes and bit assignments.
40347 – 40348	346 – 347 (015A – 015B)	Relay 6 Set Point	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
40349 – 40350	348 – 349 (015C – 015D)	Relay 6 Reset Point	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
40351	350 (015E)	Relay 6 On Delay	Read Write	0 to 1999	1/10 of Seconds	Integer	03, 04, 06, 16	
40352	351 (015F)	Relay 6 Off Delay	Read Write	0 to 1999	1/10 of Seconds	Integer	03, 04, 06, 16	
40353 – 40354	352 – 353 (0160 – 0161)	Relay 6 Sample Time	Read Write	0 to 59999	1/10 of Seconds	Floating point	03, 04, 06, 16	
40355	354 (0162)	Relay 7 Mode	Read Write	Not applicable	None	Word; bits	03, 04, 06, 16	See Table 4 for operating modes and bit assignments.
40356 – 40357	355 – 356 (0163 – 0164)	Relay 7 Set Point	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	

Register ¹		Name	Access	Limits or Range ²	Units	Data Type ³	Function Code(s)	Comments
Number	Address (Hex)							
40358 – 40359	357 – 358 (0165 – 0166)	Relay 7 Reset Point	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
40360	359 (0167)	Relay 7 On Delay	Read Write	0 to 1999	1/10 of Seconds	Integer	03, 04, 06, 16	
40361	360 (0168)	Relay 7 Off Delay	Read Write	0 to 1999	1/10 of Seconds	Integer	03, 04, 06, 16	
40362 – 40363	361 – 362 (0169 – 016A)	Relay 7 Sample Time	Read Write	0 to 59999	1/10 of Seconds	Floating point	03, 04, 06, 16	
40364	363 (016B)	Relay 8 Mode	Read Write	Not applicable	None	Word; bits	03, 04, 06, 16	See Table 4 for operating modes and bit assignments.
40365 – 40366	364 – 365 (016C – 016D)	Relay 8 Set Point	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
40367 – 40368	366 – 367 (016E – 016F)	Relay 8 Reset Point	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
40369	368 (0170)	Relay 8 On Delay	Read Write	0 to 1999	1/10 of Seconds	Integer	03, 04, 06, 16	
40370	369 (0171)	Relay 8 Off Delay	Read Write	0 to 1999	1/10 of Seconds	Integer	03, 04, 06, 16	
40371 – 40372	370 – 371 (0172 – 0173)	Relay 8 Sample Time	Read Write	0 to 59999	1/10 of Seconds	Floating point	03, 04, 06, 16	
40373 – 40374	372 – 373 (0174 – 0175)	Relay 2 Pre-close Value	Read Write	0 to 999999	User define	Floating point	03, 04, 06, 16	See Table 4 for operating modes and bit assignments.
40375 – 40376	374 – 375 (0176 – 0177)	Relay 3 Pre-close Value	Read Write	0 to 999999	User define	Floating point	03, 04, 06, 16	
40377 – 40378	376 – 377 (0178 – 0179)	Relay 4 Pre-close Value	Read Write	0 to 999999	User define	Floating point	03, 04, 06, 16	
40379 – 40380	378 – 379 (017A – 017B)	Relay 5 Pre-close Value	Read Write	0 to 999999	User define	Floating point	03, 04, 06, 16	
40381 – 40382	380 – 381 (017C – 017D)	Relay 6 Pre-close Value	Read Write	0 to 999999	User define	Floating point	03, 04, 06, 16	
40383 – 40384	382 – 383 (017E – 017F)	Relay 7 Pre-close Value	Read Write	0 to 999999	User define	Floating point	03, 04, 06, 16	
40385 – 40386	384 – 385 (0180 – 0181)	Relay 8 Pre-close Value	Read Write	0 to 999999	User define	Floating point	03, 04, 06, 16	
40401	400 (0190)	Analog Output Value	Read Only	1 to 23000	µA	Integer	03, 04	

Register ¹		Name	Access	Limits or Range ²	Units	Data Type ³	Function Code(s)	Comments
Number	Address (Hex)							
40402	401 (0191)	Analog Output Source	Read Write	0 to 21	None	Integer	03, 04, 06, 16	See Table 5 for selection of the 4-20mA output source. This is analog channel "AOut_1" when multiple outputs are available
40403	402 (0192)	Analog Output Overrange value	Read Write	1 to 23000	µA	Integer	03, 04, 06, 16	
40404	403 (0193)	Analog Output Underrange value	Read Write	1 to 23000	µA	Integer	03, 04, 06, 16	
40405	404 (0194)	Analog Output Sensor Break value	Read Write	1 to 23000 or 32000	µA	Integer	03, 04, 06, 16	This is analog channel "AOut_1" when multiple outputs are available. Write 32000 to ignore sensor break
40406	405 (0195)	Analog Output Maximum value allowed	Read Write	1 to 23000	µA	Integer	03, 04, 06, 16	
40407	406 (0196)	Analog Output Minimum value allowed	Read Write	1 to 23000	µA	Integer	03, 04, 06, 16	
40408 – 40409	407 – 408 (0197 – 0198)	Analog Output Display Value 1	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	Analog Output scaling is only saved to memory after receiving the Output 2 – register 40413.
40410 – 40411	409 – 410 (0199 – 019A)	Analog Output Display Value 2	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	This is analog channel "AOut_1" when multiple outputs are available
40412	411 (019B)	Analog Output Output 1	Read Write	1 to 23000	µA	Integer	03, 04, 06, 16	DO NOT interleave channels when scaling AOut
40413	412 (019C)	Analog Output Output 2	Read Write	1 to 23000	µA	Integer	03, 04, 06, 16	
40418	417 (01A1)	Analog Output channel Number	Read Write	0 to 2		Integer	03, 04, 06, 16	
40422	421 (01A5)	Analog Output Channel AOut_2 Source	Read Write	0 to 21	None	Integer	03, 04, 06, 16	See Table 5 for selection of the 4-20mA output source. This is analog channel "AOut_2" when multiple outputs are available
40423	422 (01A6)	Analog Output Channel AOut_3 Source	Read Write	0 to 21	None	Integer	03, 04, 06, 16	See Table 5 for selection of the 4-20mA output source. This is analog channel "AOut_3" when multiple outputs are available

Automation Products Group Modbus® Register Tables

Serial Communication

Register ¹		Name	Access	Limits or Range ²	Units	Data Type ³	Function Code(s)	Comments
Number	Address (Hex)							
40424	423 (01A7)	Analog Output Channel AOut_2 Sensor Break value	Read Write	3 to 23000 or 32000	µA	Integer	03, 04, 06, 16	This is analog channel "AOut_2" when multiple outputs are available Write 32000 to ignore sensor break
40425	424 (01A8)	Analog Output Channel AOut_3 Sensor Break value	Read Write	3 to 23000 or 32000	µA	Integer	03, 04, 06, 16	This is analog channel "AOut_3" when multiple outputs are available Write 32000 to ignore sensor break
40426 – 40427	425 – 426 (01A9 – 01AA)	Analog Output Channel 2 Display Value 1	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	Channel 2 Analog Output scaling is only saved to memory after receiving the Output 2 – register 40431. DO NOT interleave channels when scaling AOut
40428 – 40429	427 – 428 (01AB – 01AC)	Analog Output Channel 2 Display Value 2	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
40430	429 (01AD)	Analog Output Channel 2 Output 1	Read Write	3 to 23000	µA	Integer	03, 04, 06, 16	
40431	430 (01AE)	Analog Output Channel 2 Output 2	Read Write	3 to 23000	µA	Integer	03, 04, 06, 16	
40432 – 40433	431 – 432 (01AF – 01B0)	Analog Output Channel 3 Display Value 1	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
40434 – 40435	433 – 434 (01B1 – 01B2)	Analog Output Channel 3 Display Value 2	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	Channel 3 Analog Output scaling is only saved to memory after receiving the Output 2 – register 40437. DO NOT interleave channels when scaling AOut
40436	435 (01B3)	Analog Output Channel 3 Output 1	Read Write	3 to 23000	µA	Integer	03, 04, 06, 16	
40437	436 (01B4)	Analog Output Channel 3 Output 2	Read Write	3 to 23000	µA	Integer	03, 04, 06, 16	
41001 – 41002	1000 – 1001 (3E8 – 3E9)	Scale mA Display 1	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	After all the Display and Input values have been sent, write 0xFF00 to register 41129. Otherwise an error will occur.
41003 – 41004	1002 – 1003 (3EA – 3EB)	Scale mA Display 2	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
41005 – 41006	1004 – 1005 (3EC – 3ED)	Scale mA Display 3	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	

Automation Products Group Modbus® Register Tables

Serial Communication

Register ¹		Name	Access	Limits or Range ²	Units	Data Type ³	Function Code(s)	Comments
Number	Address (Hex)							
41007 – 41008	1006 – 1007 (3EE – 3EF)	Scale mA Display 4	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
41009 – 41010	1008 – 1009 (3F0 – 3F1)	Scale mA Display 5	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
41011 – 41012	1010 – 1011 (3F2 – 3F3)	Scale mA Display 6	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
41013 – 41014	1012 – 1013 (3F4 – 3F5)	Scale mA Display 7	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
41015 – 41016	1014 – 1015 (3F6 – 3F7)	Scale mA Display 8	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
41017 – 41018	1016 – 1017 (3F8 – 3F9)	Scale mA Display 9	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
41019 – 41020	1018 – 1019 (3FA – 3FB)	Scale mA Display 10	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
41021 – 41022	1020 – 1021 (3FC – 3FD)	Scale mA Display 11	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
41023 – 41024	1022 – 1023 (3FE – 3FF)	Scale mA Display 12	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
41025 – 41026	1024 – 1025 (400 – 401)	Scale mA Display 13	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
41027 – 41028	1026 – 1027 (402 – 403)	Scale mA Display 14	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
41029 – 41030	1028 – 1029 (404 – 405)	Scale mA Display 15	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
41031 – 41032	1030 – 1031 (406 – 407)	Scale mA Display 16	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
41033 – 41034	1032 – 1033 (408 – 409)	Scale mA Display 17	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
41035 – 41036	1034 – 1035 (40A – 40B)	Scale mA Display 18	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
41037 – 41038	1036 – 1037 (40C – 40D)	Scale mA Display 19	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
41039 – 41040	1038 – 1039 (40E – 40F)	Scale mA Display 20	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
41041 – 41042	1040 – 1041 (410 – 411)	Scale mA Display 21	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
41043 – 41044	1042 – 1043 (412 – 413)	Scale mA Display 22	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	

Register ¹		Name	Access	Limits or Range ²	Units	Data Type ³	Function Code(s)	Comments
Number	Address (Hex)							
41045 – 41046	1044 – 1045 (414 – 415)	Scale mA Display 23	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
41047 – 41048	1046 – 1047 (416 – 417)	Scale mA Display 24	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
41049 – 41050	1048 – 1049 (418 – 419)	Scale mA Display 25	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
41051 – 41052	1050 – 1051 (41A – 41B)	Scale mA Display 26	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
41053 – 41054	1052 – 1053 (41C – 41D)	Scale mA Display 27	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
41055 – 41056	1054 – 1055 (41E – 41F)	Scale mA Display 28	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
41057 – 41058	1056 – 1057 (420 – 421)	Scale mA Display 29	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
41059 – 41060	1058 – 1059 (422 – 423)	Scale mA Display 30	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
41061 – 41062	1060 – 1061 (424 – 425)	Scale mA Display 31	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
41063 – 41064	1062 – 1063 (426 – 427)	Scale mA Display 32	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
41065 – 41066	1064 – 1065 (428 – 429)	Scale mA Input 1	Read Write	-99.999 to 99.999	mA	Floating point	03, 04, 06, 16	
41067 – 41068	1066 – 1067 (42A – 42B)	Scale mA Input 2	Read Write	-99.999 to 99.999	mA	Floating point	03, 04, 06, 16	
41069 – 41070	1068 – 1069 (42C – 42D)	Scale mA Input 3	Read Write	-99.999 to 99.999	mA	Floating point	03, 04, 06, 16	
41071 – 41072	1070 – 1071 (42E – 42F)	Scale mA Input 4	Read Write	-99.999 to 99.999	mA	Floating point	03, 04, 06, 16	
41073 – 41074	1072 – 1073 (430 – 431)	Scale mA Input 5	Read Write	-99.999 to 99.999	mA	Floating point	03, 04, 06, 16	
41075 – 41076	1074 – 1075 (432 – 433)	Scale mA Input 6	Read Write	-99.999 to 99.999	mA	Floating point	03, 04, 06, 16	
41077 – 41078	1076 – 1077 (434 – 435)	Scale mA Input 7	Read Write	-99.999 to 99.999	mA	Floating point	03, 04, 06, 16	
41079 – 41080	1078 – 1079 (436 – 437)	Scale mA Input 8	Read Write	-99.999 to 99.999	mA	Floating point	03, 04, 06, 16	
41081 – 41082	1080 – 1081 (438 – 439)	Scale mA Input 9	Read Write	-99.999 to 99.999	mA	Floating point	03, 04, 06, 16	

Register ¹		Name	Access	Limits or Range ²	Units	Data Type ³	Function Code(s)	Comments
Number	Address (Hex)							
41083 – 41084	1082 – 1083 (43A – 43B)	Scale mA Input 10	Read Write	-99.999 to 99.999	mA	Floating point	03, 04, 06, 16	
41085 – 41086	1084 – 1085 (43C – 43D)	Scale mA Input 11	Read Write	-99.999 to 99.999	mA	Floating point	03, 04, 06, 16	
41087 – 41088	1086 – 1087 (43E – 43F)	Scale mA Input 12	Read Write	-99.999 to 99.999	mA	Floating point	03, 04, 06, 16	
41089 – 41090	1088 – 1089 (440 – 441)	Scale mA Input 13	Read Write	-99.999 to 99.999	mA	Floating point	03, 04, 06, 16	
41091 – 41092	1090 – 1091 (442 – 443)	Scale mA Input 14	Read Write	-99.999 to 99.999	mA	Floating point	03, 04, 06, 16	
41093 – 41094	1092 – 1093 (444 – 445)	Scale mA Input 15	Read Write	-99.999 to 99.999	mA	Floating point	03, 04, 06, 16	
41095 – 41096	1094 – 1095 (446 – 447)	Scale mA Input 16	Read Write	-99.999 to 99.999	mA	Floating point	03, 04, 06, 16	
41097 – 41098	1096 – 1097 (448 – 449)	Scale mA Input 17	Read Write	-99.999 to 99.999	mA	Floating point	03, 04, 06, 16	
41099 – 41100	1098 – 1099 (44A – 44B)	Scale mA Input 18	Read Write	-99.999 to 99.999	mA	Floating point	03, 04, 06, 16	
41101 – 41102	1100 – 1101 (44C – 44D)	Scale mA Input 19	Read Write	-99.999 to 99.999	mA	Floating point	03, 04, 06, 16	
41103 – 41104	1102 – 1103 (44E – 44F)	Scale mA Input 20	Read Write	-99.999 to 99.999	mA	Floating point	03, 04, 06, 16	
41105 – 41106	1104 – 1105 (450 – 451)	Scale mA Input 21	Read Write	-99.999 to 99.999	mA	Floating point	03, 04, 06, 16	
41107 – 41108	1106 – 1107 (452 – 453)	Scale mA Input 22	Read Write	-99.999 to 99.999	mA	Floating point	03, 04, 06, 16	
41109 – 41110	1108 – 1109 (454 – 455)	Scale mA Input 23	Read Write	-99.999 to 99.999	mA	Floating point	03, 04, 06, 16	
41111 – 41112	1110 – 1111 (456 – 457)	Scale mA Input 24	Read Write	-99.999 to 99.999	mA	Floating point	03, 04, 06, 16	
41113 – 41114	1112 – 1113 (458 – 459)	Scale mA Input 25	Read Write	-99.999 to 99.999	mA	Floating point	03, 04, 06, 16	
41115 – 41116	1114 – 1115 (45A – 45B)	Scale mA Input 26	Read Write	-99.999 to 99.999	mA	Floating point	03, 04, 06, 16	
41117 – 41118	1116 – 1117 (45C – 45D)	Scale mA Input 27	Read Write	-99.999 to 99.999	mA	Floating point	03, 04, 06, 16	
41119 – 41120	1118 – 1119 (45E – 45F)	Scale mA Input 28	Read Write	-99.999 to 99.999	mA	Floating point	03, 04, 06, 16	

Register ¹		Name	Access	Limits or Range ²	Units	Data Type ³	Function Code(s)	Comments
Number	Address (Hex)							
41121 – 41122	1120 – 1121 (460 – 461)	Scale mA Input 29	Read Write	-99.999 to 99.999	mA	Floating point	03, 04, 06, 16	
41123 – 41124	1122 – 1123 (462 – 463)	Scale mA Input 30	Read Write	-99.999 to 99.999	mA	Floating point	03, 04, 06, 16	
41125 – 41126	1124 – 1125 (464 – 465)	Scale mA Input 31	Read Write	-99.999 to 99.999	mA	Floating point	03, 04, 06, 16	
41127 – 41128	1126 – 1127 (466 – 467)	Scale mA Input 32	Read Write	-99.999 to 99.999	mA	Floating point	03, 04, 06, 16	
41129	1128 (468)	Remote Scale mA Flag	Write Only	0xFF00 to execute remote scaling.	None	Unsigned integer	06, 16	Used to remote scale the mA input. Caution! See Note 5.
41201 – 41202	1200 - 1201 (4B0 - 4B1)	Ch-B Scale mA Display 1	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	After all the Display and Input values have been sent, write 0xFF00 to register 41329. Otherwise an error will occur.
41203 – 41204	1202 - 1203 (4B2 - 4B3)	Ch-B Scale mA Display 2	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
41205 – 41206	1204 - 1205 (4B4 - 4B5)	Ch-B Scale mA Display 3	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
41207 – 41208	1206 - 1207 (4B6 - 4B7)	Ch-B Scale mA Display 4	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
41209 – 41210	1208 - 1209 (4B8 - 4B9)	Ch-B Scale mA Display 5	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
41211 – 41212	1210 - 1211 (4BA - 4BB)	Ch-B Scale mA Display 6	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
41213 – 41214	1212 - 1213 (4BC - 4BD)	Ch-B Scale mA Display 7	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
41215 – 41216	1214 - 1215 (4BE - 4BF)	Ch-B Scale mA Display 8	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
41217 – 41218	1216 - 1217 (4C0 - 4C1)	Ch-B Scale mA Display 9	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
41219 – 41220	1218 - 1219 (4C2 - 4C3)	Ch-B Scale mA Display 10	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
41221 – 41222	1220 - 1221 (4C4 - 4C5)	Ch-B Scale mA Display 11	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
41223 – 41224	1222 - 1223 (4C6 - 4C7)	Ch-B Scale mA Display 12	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
41225 – 41226	1224 - 1225 (4C8 - 4C9)	Ch-B Scale mA Display 13	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	

Automation Products Group Modbus® Register Tables

Serial Communication

Register ¹		Name	Access	Limits or Range ²	Units	Data Type ³	Function Code(s)	Comments
Number	Address (Hex)							
41227 – 41228	1226 - 1227 (4CA - 4CB)	Ch-B Scale mA Display 14	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
41229 – 41230	1228 - 1229 (4CC - 4CD)	Ch-B Scale mA Display 15	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
41231 – 41232	1230 - 1231 (4CE - 4CF)	Ch-B Scale mA Display 16	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
41233 – 41234	1232 - 1233 (4D0 - 4D1)	Ch-B Scale mA Display 17	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
41235 – 41236	1234 - 1235 (4D2 - 4D3)	Ch-B Scale mA Display 18	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
41237 – 41238	1236 - 1237 (4D4 - 4D5)	Ch-B Scale mA Display 19	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
41239 – 41240	1238 - 1239 (4D6 - 4D7)	Ch-B Scale mA Display 20	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
41241 – 41242	1240 - 1241 (4D8 - 4D9)	Ch-B Scale mA Display 21	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
41243 – 41244	1242 - 1243 (4DA - 4DB)	Ch-B Scale mA Display 22	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
41245 – 41246	1244 - 1245 (4DC - 4DD)	Ch-B Scale mA Display 23	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
41247 – 41248	1246 - 1247 (4DE - 4DF)	Ch-B Scale mA Display 24	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
41249 – 41250	1248 - 1249 (4E0 - 4E1)	Ch-B Scale mA Display 25	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
41251 – 41252	1250 - 1251 (4E2 - 4E3)	Ch-B Scale mA Display 26	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
41253 – 41254	1252 - 1253 (4E4 - 4E5)	Ch-B Scale mA Display 27	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
41255 – 41256	1254 - 1255 (4E6 - 4E7)	Ch-B Scale mA Display 28	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
41257 – 41258	1256 - 1257 (4E8 - 4E9)	Ch-B Scale mA Display 29	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
41259 – 41260	1258 - 1259 (4EA - 4EB)	Ch-B Scale mA Display 30	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
41261 – 41262	1260 - 1261 (4EC - 4ED)	Ch-B Scale mA Display 31	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
41263 – 41264	1262 - 1263 (4EE - 4EF)	Ch-B Scale mA Display 32	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	

Register ¹		Name	Access	Limits or Range ²	Units	Data Type ³	Function Code(s)	Comments
Number	Address (Hex)							
41265 – 41266	1264 - 1265 (4F0 - 4F1)	Ch-B Scale mA Input 1	Read Write	-99.999 to 99.999	mA	Floating point	03, 04, 06, 16	
41267 – 41268	1266 - 1267 (4F2 - 4F3)	Ch-B Scale mA Input 2	Read Write	-99.999 to 99.999	mA	Floating point	03, 04, 06, 16	
41269 – 41270	1268 - 1269 (4F4 - 4F5)	Ch-B Scale mA Input 3	Read Write	-99.999 to 99.999	mA	Floating point	03, 04, 06, 16	
41271 – 41272	1270 - 1271 (4F6 - 4F7)	Ch-B Scale mA Input 4	Read Write	-99.999 to 99.999	mA	Floating point	03, 04, 06, 16	
41273 – 41274	1272 - 1273 (4F8 - 4F9)	Ch-B Scale mA Input 5	Read Write	-99.999 to 99.999	mA	Floating point	03, 04, 06, 16	
41275 – 41276	1274 - 1275 (4FA - 4FB)	Ch-B Scale mA Input 6	Read Write	-99.999 to 99.999	mA	Floating point	03, 04, 06, 16	
41277 – 41278	1276 - 1277 (4FC - 4FD)	Ch-B Scale mA Input 7	Read Write	-99.999 to 99.999	mA	Floating point	03, 04, 06, 16	
41279 – 41280	1278 - 1279 (4FE - 4FF)	Ch-B Scale mA Input 8	Read Write	-99.999 to 99.999	mA	Floating point	03, 04, 06, 16	
41281 – 41282	1280 - 1281 (500 - 501)	Ch-B Scale mA Input 9	Read Write	-99.999 to 99.999	mA	Floating point	03, 04, 06, 16	
41283 – 41284	1282 - 1283 (502 - 503)	Ch-B Scale mA Input 10	Read Write	-99.999 to 99.999	mA	Floating point	03, 04, 06, 16	
41285 – 41286	1284 - 1285 (504 - 505)	Ch-B Scale mA Input 11	Read Write	-99.999 to 99.999	mA	Floating point	03, 04, 06, 16	
41287 – 41288	1286 - 1287 (506 - 507)	Ch-B Scale mA Input 12	Read Write	-99.999 to 99.999	mA	Floating point	03, 04, 06, 16	
41289 – 41290	1288 - 1289 (508 - 509)	Ch-B Scale mA Input 13	Read Write	-99.999 to 99.999	mA	Floating point	03, 04, 06, 16	
41291 – 41292	1290 - 1291 (50A - 50B)	Ch-B Scale mA Input 14	Read Write	-99.999 to 99.999	mA	Floating point	03, 04, 06, 16	
41293 – 41294	1292 - 1293 (50C - 50D)	Ch-B Scale mA Input 15	Read Write	-99.999 to 99.999	mA	Floating point	03, 04, 06, 16	
41295 – 41296	1294 - 1295 (50E - 50F)	Ch-B Scale mA Input 16	Read Write	-99.999 to 99.999	mA	Floating point	03, 04, 06, 16	
41297 – 41298	1296 - 1297 (510 - 511)	Ch-B Scale mA Input 17	Read Write	-99.999 to 99.999	mA	Floating point	03, 04, 06, 16	
41299 – 41300	1298 - 1299 (512 - 513)	Ch-B Scale mA Input 18	Read Write	-99.999 to 99.999	mA	Floating point	03, 04, 06, 16	
41301 – 41302	1300 - 1301 (514 - 515)	Ch-B Scale mA Input 19	Read Write	-99.999 to 99.999	mA	Floating point	03, 04, 06, 16	

Register ¹		Name	Access	Limits or Range ²	Units	Data Type ³	Function Code(s)	Comments
Number	Address (Hex)							
41303 – 41304	1302 - 1303 (516 - 517)	Ch-B Scale mA Input 20	Read Write	-99.999 to 99.999	mA	Floating point	03, 04, 06, 16	
41305 – 41306	1304 - 1305 (518 - 519)	Ch-B Scale mA Input 21	Read Write	-99.999 to 99.999	mA	Floating point	03, 04, 06, 16	
41307 – 41308	1306 - 1307 (51A - 51B)	Ch-B Scale mA Input 22	Read Write	-99.999 to 99.999	mA	Floating point	03, 04, 06, 16	
41309 – 41310	1308 - 1309 (51C - 51D)	Ch-B Scale mA Input 23	Read Write	-99.999 to 99.999	mA	Floating point	03, 04, 06, 16	
41311 – 41312	1310 - 1311 (51E - 51F)	Ch-B Scale mA Input 24	Read Write	-99.999 to 99.999	mA	Floating point	03, 04, 06, 16	
41313 – 41314	1312 - 1313 (520 - 521)	Ch-B Scale mA Input 25	Read Write	-99.999 to 99.999	mA	Floating point	03, 04, 06, 16	
41315 – 41316	1314 - 1315 (522 - 523)	Ch-B Scale mA Input 26	Read Write	-99.999 to 99.999	mA	Floating point	03, 04, 06, 16	
41317 – 41318	1316 - 1317 (524 - 525)	Ch-B Scale mA Input 27	Read Write	-99.999 to 99.999	mA	Floating point	03, 04, 06, 16	
41319 – 41320	1318 - 1319 (526 - 527)	Ch-B Scale mA Input 28	Read Write	-99.999 to 99.999	mA	Floating point	03, 04, 06, 16	
41321 – 41322	1320 - 1321 (528 - 529)	Ch-B Scale mA Input 29	Read Write	-99.999 to 99.999	mA	Floating point	03, 04, 06, 16	
41323 – 41324	1322 - 1323 (52A - 52B)	Ch-B Scale mA Input 30	Read Write	-99.999 to 99.999	mA	Floating point	03, 04, 06, 16	
41325 – 41326	1324 - 1325 (52C - 52D)	Ch-B Scale mA Input 31	Read Write	-99.999 to 99.999	mA	Floating point	03, 04, 06, 16	
41327 – 41328	1326 - 1327 (52E - 52F)	Ch-B Scale mA Input 32	Read Write	-99.999 to 99.999	mA	Floating point	03, 04, 06, 16	
41329	1328 (530)	Ch-B Remote Scale mA Flag	Write Only	0xFF00 to execute remote scaling.	None	Unsigned integer	06, 16	Used to remote scale the mA input. Caution! See Note 5.
42001 – 42002	2000 – 2001 (7D0 – 7D1)	Scale Volts Display 1	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	After all the Display and Input values have been sent, write 0xFF00 to register 42129.
42003 – 42004	2002 – 2003 (7D2 – 7D3)	Scale Volts Display 2	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
42005 – 42006	2004 – 2005 (7D4 – 7D5)	Scale Volts Display 3	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
42007 – 42008	2006 – 2007 (7D6 – 7D7)	Scale Volts Display 4	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	

Automation Products Group Modbus® Register Tables

Serial Communication

Register ¹		Name	Access	Limits or Range ²	Units	Data Type ³	Function Code(s)	Comments
Number	Address (Hex)							
42009 – 42010	2008 – 2009 (7D8 – 7D9)	Scale Volts Display 5	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
42011 – 42012	2010 – 2011 (7DA – 7DB)	Scale Volts Display 6	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
42013 – 42014	2012 – 2013 (7DC – 7DD)	Scale Volts Display 7	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
42015 – 42016	2014 – 2015 (7DE – 7DF)	Scale Volts Display 8	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
42017 – 42018	2016 – 2017 (7E0 – 7E1)	Scale Volts Display 9	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
42019 – 42020	2018 – 2019 (7E2 – 7E3)	Scale Volts Display 10	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
42021 – 42022	2020 – 2021 (7E4 – 7E5)	Scale Volts Display 11	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
42023 – 42024	2022 – 2023 (7E6 – 7E7)	Scale Volts Display 12	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
42025 – 42026	2024 – 2025 (7E8 – 7E9)	Scale Volts Display 13	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
42027 – 42028	2026 – 2027 (7EA – 7EB)	Scale Volts Display 14	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
42029 – 42030	2028 – 2029 (7EC – 7ED)	Scale Volts Display 15	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
42031 – 42032	2030 – 2031 (7EE – 7EF)	Scale Volts Display 16	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
42033 – 42034	2032 – 2033 (7F0 – 7F1)	Scale Volts Display 17	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
42035 – 42036	2034 – 2035 (7F2 – 7F3)	Scale Volts Display 18	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
42037 – 42038	2036 – 2037 (7F4 – 7F5)	Scale Volts Display 19	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
42039 – 42040	2038 – 2039 (7F6 – 7F7)	Scale Volts Display 20	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
42041 – 42042	2040 – 2041 (7F8 – 7F9)	Scale Volts Display 21	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
42043 – 42044	2042 – 2043 (7FA – 7FB)	Scale Volts Display 22	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
42045 – 42046	2044 – 2045 (7FC – 7FD)	Scale Volts Display 23	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	

Automation Products Group Modbus® Register Tables

Serial Communication

Register ¹		Name	Access	Limits or Range ²	Units	Data Type ³	Function Code(s)	Comments
Number	Address (Hex)							
42047 – 42048	2046 – 2047 (7FE – 7FF)	Scale Volts Display 24	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
42049 – 42050	2048 – 2049 (800 – 801)	Scale Volts Display 25	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
42051 – 42052	2050 – 2051 (802 – 803)	Scale Volts Display 26	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
42053 – 42054	2052 – 2053 (804 – 805)	Scale Volts Display 27	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
42055 – 42056	2054 – 2055 (806 – 807)	Scale Volts Display 28	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
42057 – 42058	2056 – 2057 (808 – 809)	Scale Volts Display 29	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
42059 – 42060	2058 – 2059 (80A – 80B)	Scale Volts Display 30	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
42061 – 42062	2060 – 2061 (80C – 80D)	Scale Volts Display 31	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
42063 – 42064	2062 – 2063 (80E – 80F)	Scale Volts Display 32	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
42065 – 42066	2064 – 2065 (810 – 811)	Scale Volts Input 1	Read Write	-99.999 to 99.999	Volt	Floating point	03, 04, 06, 16	
42067 – 42068	2066 – 2067 (812 – 813)	Scale Volts Input 2	Read Write	-99.999 to 99.999	Volt	Floating point	03, 04, 06, 16	
42069 – 42070	2068 – 2069 (814 – 815)	Scale Volts Input 3	Read Write	-99.999 to 99.999	Volt	Floating point	03, 04, 06, 16	
42071 – 42072	2070 – 2071 (816 – 817)	Scale Volts Input 4	Read Write	-99.999 to 99.999	Volt	Floating point	03, 04, 06, 16	
42073 – 42074	2072 – 2073 (818 – 819)	Scale Volts Input 5	Read Write	-99.999 to 99.999	Volt	Floating point	03, 04, 06, 16	
42075 – 42076	2074 – 2075 (81A – 81B)	Scale Volts Input 6	Read Write	-99.999 to 99.999	Volt	Floating point	03, 04, 06, 16	
42077 – 42078	2076 – 2077 (81C – 81D)	Scale Volts Input 7	Read Write	-99.999 to 99.999	Volt	Floating point	03, 04, 06, 16	
42079 – 42080	2078 – 2079 (81E – 81F)	Scale Volts Input 8	Read Write	-99.999 to 99.999	Volt	Floating point	03, 04, 06, 16	
42081 – 42082	2080 – 2081 (820 – 821)	Scale Volts Input 9	Read Write	-99.999 to 99.999	Volt	Floating point	03, 04, 06, 16	
42083 – 42084	2082 – 2083 (822 – 823)	Scale Volts Input 10	Read Write	-99.999 to 99.999	Volt	Floating point	03, 04, 06, 16	

Register ¹		Name	Access	Limits or Range ²	Units	Data Type ³	Function Code(s)	Comments
Number	Address (Hex)							
42085 – 42086	2084 – 2085 (824 – 825)	Scale Volts Input 11	Read Write	-99.999 to 99.999	Volt	Floating point	03, 04, 06, 16	
42087 – 42088	2086 – 2087 (826 – 827)	Scale Volts Input 12	Read Write	-99.999 to 99.999	Volt	Floating point	03, 04, 06, 16	
42089 – 42090	2088 – 2089 (828 – 829)	Scale Volts Input 13	Read Write	-99.999 to 99.999	Volt	Floating point	03, 04, 06, 16	
42091 – 42092	2090 – 2091 (82A – 82B)	Scale Volts Input 14	Read Write	-99.999 to 99.999	Volt	Floating point	03, 04, 06, 16	
42093 – 42094	2092 – 2093 (82C – 82D)	Scale Volts Input 15	Read Write	-99.999 to 99.999	Volt	Floating point	03, 04, 06, 16	
42095 – 42096	2094 – 2095 (82E – 82F)	Scale Volts Input 16	Read Write	-99.999 to 99.999	Volt	Floating point	03, 04, 06, 16	
42097 – 42098	2096 – 2097 (830 – 831)	Scale Volts Input 17	Read Write	-99.999 to 99.999	Volt	Floating point	03, 04, 06, 16	
42099 – 42100	2098 – 2099 (832 – 833)	Scale Volts Input 18	Read Write	-99.999 to 99.999	Volt	Floating point	03, 04, 06, 16	
42101 – 42102	2100 – 2101 (834 – 835)	Scale Volts Input 19	Read Write	-99.999 to 99.999	Volt	Floating point	03, 04, 06, 16	
42103 – 42104	2102 – 2103 (836 – 837)	Scale Volts Input 20	Read Write	-99.999 to 99.999	Volt	Floating point	03, 04, 06, 16	
42105 – 42106	2104 – 2105 (838 – 839)	Scale Volts Input 21	Read Write	-99.999 to 99.999	Volt	Floating point	03, 04, 06, 16	
42107 – 42108	2106 – 2107 (83A – 83B)	Scale Volts Input 22	Read Write	-99.999 to 99.999	Volt	Floating point	03, 04, 06, 16	
42109 – 42110	2108 – 2109 (83C – 83D)	Scale Volts Input 23	Read Write	-99.999 to 99.999	Volt	Floating point	03, 04, 06, 16	
42111 – 42112	2110 – 2111 (83E – 83F)	Scale Volts Input 24	Read Write	-99.999 to 99.999	Volt	Floating point	03, 04, 06, 16	
42113 – 42114	2112 – 2113 (840 – 841)	Scale Volts Input 25	Read Write	-99.999 to 99.999	Volt	Floating point	03, 04, 06, 16	
42115 – 42116	2114 – 2115 (842 – 843)	Scale Volts Input 26	Read Write	-99.999 to 99.999	Volt	Floating point	03, 04, 06, 16	
42117 – 42118	2116 – 2117 (844 – 845)	Scale Volts Input 27	Read Write	-99.999 to 99.999	Volt	Floating point	03, 04, 06, 16	
42119 – 42120	2118 – 2119 (846 – 847)	Scale Volts Input 28	Read Write	-99.999 to 99.999	Volt	Floating point	03, 04, 06, 16	
42121 – 42122	2120 – 2121 (848 – 849)	Scale Volts Input 29	Read Write	-99.999 to 99.999	Volt	Floating point	03, 04, 06, 16	

Register ¹		Name	Access	Limits or Range ²	Units	Data Type ³	Function Code(s)	Comments
Number	Address (Hex)							
42123 – 42124	2122 – 2123 (84A – 84B)	Scale Volts Input 30	Read Write	-99.999 to 99.999	Volt	Floating point	03, 04, 06, 16	
42125 – 42126	2124 – 2125 (84C – 84D)	Scale Volts Input 31	Read Write	-99.999 to 99.999	Volt	Floating point	03, 04, 06, 16	
42127 – 42128	2126 – 2127 (84E – 84F)	Scale Volts Input 32	Read Write	-99.999 to 99.999	Volt	Floating point	03, 04, 06, 16	
42129	2128 (850)	Remote Scale Volts Flag	Write Only	0xFF00 to execute remote scaling.	None	Unsigned integer	06, 16	Used to remote scale the Volt input. Caution! See Note 5.
42201 – 42202	2200 – 2201 (898 - 899)	Ch-B Scale Volts Display 1	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	After all the Display and Input values have been sent, write 0xFF00 to register 42329. Otherwise an error will occur.
42203 – 42204	2202 – 2203 (89A - 89B)	Ch-B Scale Volts Display 2	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
42205 – 42206	2204 – 2205 (89C - 89D)	Ch-B Scale Volts Display 3	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
42207 – 42208	2206 - 2207 (89E - 89F)	Ch-B Scale Volts Display 4	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
42209 – 42210	2208 - 2209 (8A0 - 8A1)	Ch-B Scale Volts Display 5	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
42211 – 42212	2210 - 2211 (8A2 - 8A3)	Ch-B Scale Volts Display 6	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
42213 – 42214	2212 - 2213 (8A4 - 8A5)	Ch-B Scale Volts Display 7	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
42215 – 42216	2214 - 2215 (8A6 - 8A7)	Ch-B Scale Volts Display 8	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
42217 – 42218	2216 - 2217 (8A8 - 8A9)	Ch-B Scale Volts Display 9	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
42219 – 42220	2218 - 2219 (8AA - 8AB)	Ch-B Scale Volts Display 10	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
42221 – 42222	2220 - 2221 (8AC - 8AD)	Ch-B Scale Volts Display 11	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
42223 – 42224	2222 - 2223 (8AE - 8AF)	Ch-B Scale Volts Display 12	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
42225 – 42226	2224 - 2225 (8B0 - 8B1)	Ch-B Scale Volts Display 13	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
42227 – 42228	2226 - 2227 (8B2 - 8B3)	Ch-B Scale Volts Display 14	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	

Register ¹		Name	Access	Limits or Range ²	Units	Data Type ³	Function Code(s)	Comments
Number	Address (Hex)							
42229 – 42230	2228 - 2229 (8B4 - 8B5)	Ch-B Scale Volts Display 15	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
42231 – 42232	2230 - 2231 (8B6 - 8B7)	Ch-B Scale Volts Display 16	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
42233 – 42234	2232 - 2233 (8B8 - 8B9)	Ch-B Scale Volts Display 17	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
42235 – 42236	2234 - 2235 (8BA - 8BB)	Ch-B Scale Volts Display 18	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
42237 – 42238	2236 - 2237 (8BC - 8BD)	Ch-B Scale Volts Display 19	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
42239 – 42240	2238 - 2239 (8BE - 8BF)	Ch-B Scale Volts Display 20	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
42241 – 42242	2240 - 2241 (8C0 - 8C1)	Ch-B Scale Volts Display 21	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
42243 – 42244	2242 - 2243 (8C2 - 8C3)	Ch-B Scale Volts Display 22	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
42245 – 42246	2244 - 2245 (8C4 - 8C5)	Ch-B Scale Volts Display 23	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
42247 – 42248	2246 - 2247 (8C6 - 8C7)	Ch-B Scale Volts Display 24	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
42249 – 42250	2248 - 2249 (8C8 - 8C9)	Ch-B Scale Volts Display 25	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
42251 – 42252	2250 - 2251 (8CA - 8CB)	Ch-B Scale Volts Display 26	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
42253 – 42254	2252 - 2253 (8CC - 8CD)	Ch-B Scale Volts Display 27	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
42255 – 42256	2254 - 2255 (8CE - 8CF)	Ch-B Scale Volts Display 28	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
42257 – 42258	2256 - 2257 (8D0 - 8D1)	Ch-B Scale Volts Display 29	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
42259 – 42260	2258 - 2259 (8D2 - 8D3)	Ch-B Scale Volts Display 30	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
42261 – 42262	2260 - 2261 (8D4 - 8D5)	Ch-B Scale Volts Display 31	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
42263 – 42264	2262 - 2263 (8D6 - 8D7)	Ch-B Scale Volts Display 32	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
42265 – 42266	2264 - 2265 (8D8 - 8D9)	Ch-B Scale Volts Input 1	Read Write	-99.999 to 99.999	Volt	Floating point	03, 04, 06, 16	

Register ¹		Name	Access	Limits or Range ²	Units	Data Type ³	Function Code(s)	Comments
Number	Address (Hex)							
42267 – 42268	2266 - 2267 (8DA - 8DB)	Ch-B Scale Volts Input 2	Read Write	-99.999 to 99.999	Volt	Floating point	03, 04, 06, 16	
42269 – 42270	2268 - 2269 (8DC - 8DD)	Ch-B Scale Volts Input 3	Read Write	-99.999 to 99.999	Volt	Floating point	03, 04, 06, 16	
42271 – 42272	2270 - 2271 (8DE - 8DF)	Ch-B Scale Volts Input 4	Read Write	-99.999 to 99.999	Volt	Floating point	03, 04, 06, 16	
42273 – 42274	2272 - 2273 (8E0 - 8E1)	Ch-B Scale Volts Input 5	Read Write	-99.999 to 99.999	Volt	Floating point	03, 04, 06, 16	
42275 – 42276	2274 - 2275 (8E2 - 8E3)	Ch-B Scale Volts Input 6	Read Write	-99.999 to 99.999	Volt	Floating point	03, 04, 06, 16	
42277 – 42278	2276 - 2277 (8E4 - 8E5)	Ch-B Scale Volts Input 7	Read Write	-99.999 to 99.999	Volt	Floating point	03, 04, 06, 16	
42279 – 42280	2278 - 2279 (8E6 - 8E7)	Ch-B Scale Volts Input 8	Read Write	-99.999 to 99.999	Volt	Floating point	03, 04, 06, 16	
42281 – 42282	2280 - 2281 (8E8 - 8E9)	Ch-B Scale Volts Input 9	Read Write	-99.999 to 99.999	Volt	Floating point	03, 04, 06, 16	
42283 – 42284	2282 - 2283 (8EA - 8EB)	Ch-B Scale Volts Input 10	Read Write	-99.999 to 99.999	Volt	Floating point	03, 04, 06, 16	
42285 – 42286	2284 - 2285 (8EC - 8ED)	Ch-B Scale Volts Input 11	Read Write	-99.999 to 99.999	Volt	Floating point	03, 04, 06, 16	
42287 – 42288	2286 - 2287 (8EE - 8EF)	Ch-B Scale Volts Input 12	Read Write	-99.999 to 99.999	Volt	Floating point	03, 04, 06, 16	
42289 – 42290	2288 - 2289 (8F0 - 8F1)	Ch-B Scale Volts Input 13	Read Write	-99.999 to 99.999	Volt	Floating point	03, 04, 06, 16	
42291 – 42292	2290 - 2291 (8F2 - 8F3)	Ch-B Scale Volts Input 14	Read Write	-99.999 to 99.999	Volt	Floating point	03, 04, 06, 16	
42293 – 42294	2292 - 2293 (8F4 - 8F5)	Ch-B Scale Volts Input 15	Read Write	-99.999 to 99.999	Volt	Floating point	03, 04, 06, 16	
42295 – 42296	2294 - 2295 (8F6 - 8F7)	Ch-B Scale Volts Input 16	Read Write	-99.999 to 99.999	Volt	Floating point	03, 04, 06, 16	
42297 – 42298	2296 - 2297 (8F8 - 8F9)	Ch-B Scale Volts Input 17	Read Write	-99.999 to 99.999	Volt	Floating point	03, 04, 06, 16	
42299 – 42300	2298 - 2299 (8FA - 8FB)	Ch-B Scale Volts Input 18	Read Write	-99.999 to 99.999	Volt	Floating point	03, 04, 06, 16	
42301 – 42302	2300 - 2301 (8FC - 8FD)	Ch-B Scale Volts Input 19	Read Write	-99.999 to 99.999	Volt	Floating point	03, 04, 06, 16	
42303 – 42304	2302 - 2303 (8FE - 8FF)	Ch-B Scale Volts Input 20	Read Write	-99.999 to 99.999	Volt	Floating point	03, 04, 06, 16	

Register ¹		Name	Access	Limits or Range ²	Units	Data Type ³	Function Code(s)	Comments
Number	Address (Hex)							
42305 – 42306	2304 - 2305 (900 - 901)	Ch-B Scale Volts Input 21	Read Write	-99.999 to 99.999	Volt	Floating point	03, 04, 06, 16	
42307 – 42308	2306 - 2307 (902 - 903)	Ch-B Scale Volts Input 22	Read Write	-99.999 to 99.999	Volt	Floating point	03, 04, 06, 16	
42309 – 42310	2308 - 2309 (904 - 905)	Ch-B Scale Volts Input 23	Read Write	-99.999 to 99.999	Volt	Floating point	03, 04, 06, 16	
42311 – 42312	2310 - 2311 (906 - 907)	Ch-B Scale Volts Input 24	Read Write	-99.999 to 99.999	Volt	Floating point	03, 04, 06, 16	
42313 – 42314	2312 - 2313 (908 - 909)	Ch-B Scale Volts Input 25	Read Write	-99.999 to 99.999	Volt	Floating point	03, 04, 06, 16	
42315 – 42316	2314 - 2315 (90A - 90B)	Ch-B Scale Volts Input 26	Read Write	-99.999 to 99.999	Volt	Floating point	03, 04, 06, 16	
42317 – 42318	2316 - 2317 (90C - 90D)	Ch-B Scale Volts Input 27	Read Write	-99.999 to 99.999	Volt	Floating point	03, 04, 06, 16	
42319 – 42320	2318 - 2319 (90E - 90F)	Ch-B Scale Volts Input 28	Read Write	-99.999 to 99.999	Volt	Floating point	03, 04, 06, 16	
42321 – 42322	2320 - 2321 (910 - 911)	Ch-B Scale Volts Input 29	Read Write	-99.999 to 99.999	Volt	Floating point	03, 04, 06, 16	
42323 – 42324	2322 - 2323 (912 - 913)	Ch-B Scale Volts Input 30	Read Write	-99.999 to 99.999	Volt	Floating point	03, 04, 06, 16	
42325 – 42326	2324 - 2325 (914 - 915)	Ch-B Scale Volts Input 31	Read Write	-99.999 to 99.999	Volt	Floating point	03, 04, 06, 16	
42327 – 42328	2326 - 2327 (916 - 917)	Ch-B Scale Volts Input 32	Read Write	-99.999 to 99.999	Volt	Floating point	03, 04, 06, 16	
42329	2328 (918)	Ch-B Remote Scale Volts Flag	Write Only	0xFF00 to execute remote scaling.	None	Unsigned integer	06, 16	Used to remote scale the Volt input. Caution! See Note 5.
43001 – 43002	3000 – 3001 (BB8 – BB9)	Scale Pulse Display 1	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	After all the Display and Input values have been sent, write 0xFF00 to register 43129.
43003 – 43004	3002 – 3003 (BBA – BBB)	Scale Pulse Display 2	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
43005 – 43006	3004 – 3005 (BBC – BBD)	Scale Pulse Display 3	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
43007 – 43008	3006 – 3007 (BBE – BBF)	Scale Pulse Display 4	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
43009 – 43010	3008 – 3009 (BC0 – BC1)	Scale Pulse Display 5	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	

Register ¹		Name	Access	Limits or Range ²	Units	Data Type ³	Function Code(s)	Comments
Number	Address (Hex)							
43011 – 43012	3010 – 3011 (BC2 – BC3)	Scale Pulse Display 6	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
43013 – 43014	3012 – 3013 (BC4 – BC5)	Scale Pulse Display 7	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
43015 – 43016	3014 – 3015 (BC6 – BC7)	Scale Pulse Display 8	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
43017 – 43018	3016 – 3017 (BC8 – BC9)	Scale Pulse Display 9	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
43019 – 43020	3018 – 3019 (BCA – BCB)	Scale Pulse Display 10	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
43021 – 43022	3020 – 3021 (BCC – BCD)	Scale Pulse Display 11	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
43023 – 43024	3022 – 3023 (BCE – BCF)	Scale Pulse Display 12	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
43025 – 43026	3024 – 3025 (BD0 – BD1)	Scale Pulse Display 13	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
43027 – 43028	3026 – 3027 (BD2 – BD3)	Scale Pulse Display 14	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
43029 – 43030	3028 – 3029 (BD4 – BD5)	Scale Pulse Display 15	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
43031 – 43032	3030 – 3031 (BD6 – BD7)	Scale Pulse Display 16	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
43033 – 43034	3032 – 3033 (BD8 – BD9)	Scale Pulse Display 17	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
43035 – 43036	3034 – 3035 (BDA – BDB)	Scale Pulse Display 18	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
43037 – 43038	3036 – 3037 (BDC – BDD)	Scale Pulse Display 19	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
43039 – 43040	3038 – 3039 (BDE – BDF)	Scale Pulse Display 20	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
43041 – 43042	3040 – 3041 (BE0 – BE1)	Scale Pulse Display 21	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
43043 – 43044	3042 – 3043 (BE2 – BE3)	Scale Pulse Display 22	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
43045 – 43046	3044 – 3045 (BE4 – BE5)	Scale Pulse Display 23	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
43047 – 43048	3046 – 3047 (BE6 – BE7)	Scale Pulse Display 24	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	

Register ¹		Name	Access	Limits or Range ²	Units	Data Type ³	Function Code(s)	Comments
Number	Address (Hex)							
43049 – 43050	3048 – 3049 (BE8 – BE9)	Scale Pulse Display 25	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
43051 – 43052	3050 – 3051 (BEA – BEB)	Scale Pulse Display 26	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
43053 – 43054	3052 – 3053 (BEC – BED)	Scale Pulse Display 27	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
43055 – 43056	3054 – 3055 (BEE – BEF)	Scale Pulse Display 28	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
43057 – 43058	3056 – 3057 (BF0 – BF1)	Scale Pulse Display 29	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
43059 – 43060	3058 – 3059 (BF2 – BF3)	Scale Pulse Display 30	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
43061 – 43062	3060 – 3061 (BF4 – BF5)	Scale Pulse Display 31	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
43063 – 43064	3062 – 3063 (BF6 – BF7)	Scale Pulse Display 32	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
43065 – 43066	3064 – 3065 (BF8 – BF9)	Scale Pulse Input 1	Read Write	0.0 to 99999.9	Hz	Floating point	03, 04, 06, 16	
43067 – 43068	3066 – 3067 (BFA – BFB)	Scale Pulse Input 2	Read Write	0.0 to 99999.9	Hz	Floating point	03, 04, 06, 16	
43069 – 43070	3068 – 3069 (BFC – BFD)	Scale Pulse Input 3	Read Write	0.0 to 99999.9	Hz	Floating point	03, 04, 06, 16	
43071 – 43072	3070 – 3071 (BFE – BFF)	Scale Pulse Input 4	Read Write	0.0 to 99999.9	Hz	Floating point	03, 04, 06, 16	
43073 – 43074	3072 – 3073 (C00 – C01)	Scale Pulse Input 5	Read Write	0.0 to 99999.9	Hz	Floating point	03, 04, 06, 16	
43075 – 43076	3074 – 3075 (C02 – C03)	Scale Pulse Input 6	Read Write	0.0 to 99999.9	Hz	Floating point	03, 04, 06, 16	
43077 – 43078	3076 – 3077 (C04 – C05)	Scale Pulse Input 7	Read Write	0.0 to 99999.9	Hz	Floating point	03, 04, 06, 16	
43079 – 43080	3078 – 3079 (C06 – C07)	Scale Pulse Input 8	Read Write	0.0 to 99999.9	Hz	Floating point	03, 04, 06, 16	
43081 – 43082	3080 – 3081 (C08 – C09)	Scale Pulse Input 9	Read Write	0.0 to 99999.9	Hz	Floating point	03, 04, 06, 16	
43083 – 43084	3082 – 3083 (C0A – C0B)	Scale Pulse Input 10	Read Write	0.0 to 99999.9	Hz	Floating point	03, 04, 06, 16	
43085 – 43086	3084 – 3085 (C0C – C0D)	Scale Pulse Input 11	Read Write	0.0 to 99999.9	Hz	Floating point	03, 04, 06, 16	

Register ¹		Name	Access	Limits or Range ²	Units	Data Type ³	Function Code(s)	Comments
Number	Address (Hex)							
43087 – 43088	3086 – 3087 (C0E – C0F)	Scale Pulse Input 12	Read Write	0.0 to 99999.9	Hz	Floating point	03, 04, 06, 16	
43089 – 43090	3088 – 3089 (C10 – C11)	Scale Pulse Input 13	Read Write	0.0 to 99999.9	Hz	Floating point	03, 04, 06, 16	
43091 – 43092	3090 – 3091 (C12 – C13)	Scale Pulse Input 14	Read Write	0.0 to 99999.9	Hz	Floating point	03, 04, 06, 16	
43093 – 43094	3092 – 3093 (C14 – C15)	Scale Pulse Input 15	Read Write	0.0 to 99999.9	Hz	Floating point	03, 04, 06, 16	
43095 – 43096	3094 – 3095 (C16 – C17)	Scale Pulse Input 16	Read Write	0.0 to 99999.9	Hz	Floating point	03, 04, 06, 16	
43097 – 43098	3096 – 3097 (C18 – C19)	Scale Pulse Input 17	Read Write	0.0 to 99999.9	Hz	Floating point	03, 04, 06, 16	
43099 – 43100	3098 – 3099 (C1A – C1B)	Scale Pulse Input 18	Read Write	0.0 to 99999.9	Hz	Floating point	03, 04, 06, 16	
43101 – 43102	3100 – 3101 (C1C – C1D)	Scale Pulse Input 19	Read Write	0.0 to 99999.9	Hz	Floating point	03, 04, 06, 16	
43103 – 43104	3102 – 3103 (C1E – C1F)	Scale Pulse Input 20	Read Write	0.0 to 99999.9	Hz	Floating point	03, 04, 06, 16	
43105 – 43106	3104 – 3105 (C20 – C21)	Scale Pulse Input 21	Read Write	0.0 to 99999.9	Hz	Floating point	03, 04, 06, 16	
43107 – 43108	3106 – 3107 (C22 – C23)	Scale Pulse Input 22	Read Write	0.0 to 99999.9	Hz	Floating point	03, 04, 06, 16	
43109 – 43110	3108 – 3109 (C24 – C25)	Scale Pulse Input 23	Read Write	0.0 to 99999.9	Hz	Floating point	03, 04, 06, 16	
43111 – 43112	3110 – 3111 (C26 – C27)	Scale Pulse Input 24	Read Write	0.0 to 99999.9	Hz	Floating point	03, 04, 06, 16	
43113 – 43114	3112 – 3113 (C28 – C29)	Scale Pulse Input 25	Read Write	0.0 to 99999.9	Hz	Floating point	03, 04, 06, 16	
43115 – 43116	3114 – 3115 (C2A – C2B)	Scale Pulse Input 26	Read Write	0.0 to 99999.9	Hz	Floating point	03, 04, 06, 16	
43117 – 43118	3116 – 3117 (C2C – C2D)	Scale Pulse Input 27	Read Write	0.0 to 99999.9	Hz	Floating point	03, 04, 06, 16	
43119 – 43120	3118 – 3119 (C2E – C2F)	Scale Pulse Input 28	Read Write	0.0 to 99999.9	Hz	Floating point	03, 04, 06, 16	
43121 – 43122	3120 – 3121 (C30 – C31)	Scale Pulse Input 29	Read Write	0.0 to 99999.9	Hz	Floating point	03, 04, 06, 16	
43123 – 43124	3122 – 3123 (C32 – C33)	Scale Pulse Input 30	Read Write	0.0 to 99999.9	Hz	Floating point	03, 04, 06, 16	

Register ¹		Name	Access	Limits or Range ²	Units	Data Type ³	Function Code(s)	Comments
Number	Address (Hex)							
43125 – 43126	3124 – 3125 (C34 – C35)	Scale Pulse Input 31	Read Write	0.0 to 99999.9	Hz	Floating point	03, 04, 06, 16	
43127 – 43128	3126 – 3127 (C36 – C37)	Scale Pulse Input 32	Read Write	0.0 to 99999.9	Hz	Floating point	03, 04, 06, 16	
43129	3128 (C38)	Remote Scale Pulse Flag	Write Only	0xFF00 to execute remote scaling.	None	Unsigned integer	06, 16	Used to remote scale the Pulse input. Caution! See Note 5.
43201 – 43202	3200 - 3201 (C80 - C81)	Ch-B Scale Pulse Display 1	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	After all the Display and Input values have been sent, write 0xFF00 to register 43329.
43203 – 43204	3202 - 3203 (C82 - C83)	Ch-B Scale Pulse Display 2	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
43205 – 43206	3204 - 3205 (C84 - C85)	Ch-B Scale Pulse Display 3	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
43207 – 43208	3206 - 3207 (C86 - C87)	Ch-B Scale Pulse Display 4	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
43209 – 43210	3208 - 3209 (C88 - C89)	Ch-B Scale Pulse Display 5	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
43211 – 43212	3210 - 3211 (C8A - C8B)	Ch-B Scale Pulse Display 6	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
43213 – 43214	3212 - 3213 (C8C - C8D)	Ch-B Scale Pulse Display 7	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
43215 – 43216	3214 - 3215 (C8E - C8F)	Ch-B Scale Pulse Display 8	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
43217 – 43218	3216 - 3217 (C90 - C91)	Ch-B Scale Pulse Display 9	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
43219 – 43220	3218 - 3219 (C92 - C93)	Ch-B Scale Pulse Display 10	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
43221 – 43222	3220 - 3221 (C94 - C95)	Ch-B Scale Pulse Display 11	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
43223 – 43224	3222 - 3223 (C96 - C97)	Ch-B Scale Pulse Display 12	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
43225 – 43226	3224 - 3225 (C98 - C99)	Ch-B Scale Pulse Display 13	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
43227 – 43228	3226 - 3227 (C9A - C9B)	Ch-B Scale Pulse Display 14	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
43229 – 43230	3228 - 3229 (C9C - C9D)	Ch-B Scale Pulse Display 15	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	

Register ¹		Name	Access	Limits or Range ²	Units	Data Type ³	Function Code(s)	Comments
Number	Address (Hex)							
43231 – 43232	3230 - 3231 (C9E - C9F)	Ch-B Scale Pulse Display 16	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
43233 – 43234	3232 - 3233 (CA0 - CA1)	Ch-B Scale Pulse Display 17	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
43235 – 43236	3234 - 3235 (CA2 - CA3)	Ch-B Scale Pulse Display 18	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
43237 – 43238	3236 - 3237 (CA4 - CA5)	Ch-B Scale Pulse Display 19	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
43239 – 43240	3238 - 3239 (CA6 - CA7)	Ch-B Scale Pulse Display 20	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
43241 – 43242	3240 - 3241 (CA8 - CA9)	Ch-B Scale Pulse Display 21	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
43243 – 43244	3242 - 3243 (CAA - CAB)	Ch-B Scale Pulse Display 22	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
43245 – 43246	3244 - 3245 (CAC - CAD)	Ch-B Scale Pulse Display 23	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
43247 – 43248	3246 - 3247 (CAE - CAF)	Ch-B Scale Pulse Display 24	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
43249 – 43250	3248 - 3249 (CB0 - CB1)	Ch-B Scale Pulse Display 25	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
43251 – 43252	3250 - 3251 (CB2 - CB3)	Ch-B Scale Pulse Display 26	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
43253 – 43254	3252 - 3253 (CB4 - CB5)	Ch-B Scale Pulse Display 27	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
43255 – 43256	3254 - 3255 (CB6 - CB7)	Ch-B Scale Pulse Display 28	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
43257 – 43258	3256 - 3257 (CB8 - CB9)	Ch-B Scale Pulse Display 29	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
43259 – 43260	3258 - 3259 (CBA - CBB)	Ch-B Scale Pulse Display 30	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
43261 – 43262	3260 - 3261 (CBC - CBD)	Ch-B Scale Pulse Display 31	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
43263 – 43264	3262 - 3263 (CBE - CBF)	Ch-B Scale Pulse Display 32	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
43265 – 43266	3264 - 3265 (CC0 - CC1)	Ch-B Scale Pulse Input 1	Read Write	0.0 to 99999.9	Hz	Floating point	03, 04, 06, 16	
43267 – 43268	3266 - 3267 (CC2 - CC3)	Ch-B Scale Pulse Input 2	Read Write	0.0 to 99999.9	Hz	Floating point	03, 04, 06, 16	

Register ¹		Name	Access	Limits or Range ²	Units	Data Type ³	Function Code(s)	Comments
Number	Address (Hex)							
43269 – 43270	3268 - 3269 (CC4 - CC5)	Ch-B Scale Pulse Input 3	Read Write	0.0 to 99999.9	Hz	Floating point	03, 04, 06, 16	
43271 – 43272	3270 - 3271 (CC6 - CC7)	Ch-B Scale Pulse Input 4	Read Write	0.0 to 99999.9	Hz	Floating point	03, 04, 06, 16	
43273 – 43274	3272 - 3273 (CC8 - CC9)	Ch-B Scale Pulse Input 5	Read Write	0.0 to 99999.9	Hz	Floating point	03, 04, 06, 16	
43275 – 43276	3274 - 3275 (CCA - CCB)	Ch-B Scale Pulse Input 6	Read Write	0.0 to 99999.9	Hz	Floating point	03, 04, 06, 16	
43277 – 43278	3276 - 3277 (CCC - CCD)	Ch-B Scale Pulse Input 7	Read Write	0.0 to 99999.9	Hz	Floating point	03, 04, 06, 16	
43279 – 43280	3278 - 3279 (CCE - CCF)	Ch-B Scale Pulse Input 8	Read Write	0.0 to 99999.9	Hz	Floating point	03, 04, 06, 16	
43281 – 43282	3280 - 3281 (CD0 - CD1)	Ch-B Scale Pulse Input 9	Read Write	0.0 to 99999.9	Hz	Floating point	03, 04, 06, 16	
43283 – 43284	3282 - 3283 (CD2 - CD3)	Ch-B Scale Pulse Input 10	Read Write	0.0 to 99999.9	Hz	Floating point	03, 04, 06, 16	
43285 – 43286	3284 - 3285 (CD4 - CD5)	Ch-B Scale Pulse Input 11	Read Write	0.0 to 99999.9	Hz	Floating point	03, 04, 06, 16	
43287 – 43288	3286 - 3287 (CD6 - CD7)	Ch-B Scale Pulse Input 12	Read Write	0.0 to 99999.9	Hz	Floating point	03, 04, 06, 16	
43289 – 43290	3288 - 3289 (CD8 - CD9)	Ch-B Scale Pulse Input 13	Read Write	0.0 to 99999.9	Hz	Floating point	03, 04, 06, 16	
43291 – 43292	3290 - 3291 (CDA - CDB)	Ch-B Scale Pulse Input 14	Read Write	0.0 to 99999.9	Hz	Floating point	03, 04, 06, 16	
43293 – 43294	3292 - 3293 (CDC - CDD)	Ch-B Scale Pulse Input 15	Read Write	0.0 to 99999.9	Hz	Floating point	03, 04, 06, 16	
43295 – 43296	3294 - 3295 (CDE - CDF)	Ch-B Scale Pulse Input 16	Read Write	0.0 to 99999.9	Hz	Floating point	03, 04, 06, 16	
43297 – 43298	3296 - 3297 (CE0 - CE1)	Ch-B Scale Pulse Input 17	Read Write	0.0 to 99999.9	Hz	Floating point	03, 04, 06, 16	
43299 – 43300	3298 - 3299 (CE2 - CE3)	Ch-B Scale Pulse Input 18	Read Write	0.0 to 99999.9	Hz	Floating point	03, 04, 06, 16	
43301 – 43302	3300 - 3301 (CE4 - CE5)	Ch-B Scale Pulse Input 19	Read Write	0.0 to 99999.9	Hz	Floating point	03, 04, 06, 16	
43303 – 43304	3302 - 3303 (CE6 - CE7)	Ch-B Scale Pulse Input 20	Read Write	0.0 to 99999.9	Hz	Floating point	03, 04, 06, 16	
43305 – 43306	3304 - 3305 (CE8 - CE9)	Ch-B Scale Pulse Input 21	Read Write	0.0 to 99999.9	Hz	Floating point	03, 04, 06, 16	

Automation Products Group Modbus® Register Tables

Serial Communication

Register ¹		Name	Access	Limits or Range ²	Units	Data Type ³	Function Code(s)	Comments
Number	Address (Hex)							
43307 – 43308	3306 - 3307 (CEA - CEB)	Ch-B Scale Pulse Input 22	Read Write	0.0 to 99999.9	Hz	Floating point	03, 04, 06, 16	
43309 – 43310	3308 - 3309 (CEC - CED)	Ch-B Scale Pulse Input 23	Read Write	0.0 to 99999.9	Hz	Floating point	03, 04, 06, 16	
43311 – 43312	3310 - 3311 (CEE - CEF)	Ch-B Scale Pulse Input 24	Read Write	0.0 to 99999.9	Hz	Floating point	03, 04, 06, 16	
43313 – 43314	3312 - 3313 (CF0 - CF1)	Ch-B Scale Pulse Input 25	Read Write	0.0 to 99999.9	Hz	Floating point	03, 04, 06, 16	
43315 – 43316	3314 - 3315 (CF2 - CF3)	Ch-B Scale Pulse Input 26	Read Write	0.0 to 99999.9	Hz	Floating point	03, 04, 06, 16	
43317 – 43318	3316 - 3317 (CF4 - CF5)	Ch-B Scale Pulse Input 27	Read Write	0.0 to 99999.9	Hz	Floating point	03, 04, 06, 16	
43319 – 43320	3318 - 3319 (CF6 - CF7)	Ch-B Scale Pulse Input 28	Read Write	0.0 to 99999.9	Hz	Floating point	03, 04, 06, 16	
43321 – 43322	3320 - 3321 (CF8 - CF9)	Ch-B Scale Pulse Input 29	Read Write	0.0 to 99999.9	Hz	Floating point	03, 04, 06, 16	
43323 – 43324	3322 - 3323 (CFA - CFB)	Ch-B Scale Pulse Input 30	Read Write	0.0 to 99999.9	Hz	Floating point	03, 04, 06, 16	
43325 – 43326	3324 - 3325 (CFC - CFD)	Ch-B Scale Pulse Input 31	Read Write	0.0 to 99999.9	Hz	Floating point	03, 04, 06, 16	
43327 – 43328	3326 - 3327 (CFE - CFF)	Ch-B Scale Pulse Input 32	Read Write	0.0 to 99999.9	Hz	Floating point	03, 04, 06, 16	
43329	3328 (D00)	Ch-B Remote Scale Pulse Flag	Write Only	0xFF00 to execute remote scaling.	None	Unsigned integer	06, 16	Used to remote scale the Pulse input. Caution! See Note 5.
44001 – 44002	4000 – 4001 (FA0 – FA1)	Scale PV2 mA Display 1	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	After all the Display and Input values have been sent, write 0xFF00 to register 44129.
44003 – 44004	4002 – 4003 (FA2 – FA3)	Scale PV2 mA Display 2	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
44005 – 44006	4004 – 4005 (FA4 – FA5)	Scale PV2 mA Display 3	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
44007 – 44008	4006 – 4007 (FA6 – FA7)	Scale PV2 mA Display 4	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
44009 – 44010	4008 – 4009 (FA8 – FA9)	Scale PV2 mA Display 5	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
44011 – 44012	4010 – 4011 (FAA – FAB)	Scale PV2 mA Display 6	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	

Register ¹		Name	Access	Limits or Range ²	Units	Data Type ³	Function Code(s)	Comments
Number	Address (Hex)							
44013 – 44014	4012 – 4013 (FAC – FAD)	Scale PV2 mA Display 7	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
44015 – 44016	4014 – 4015 (FAE – FAF)	Scale PV2 mA Display 8	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
44017 – 44018	4016 – 4017 (FB0 – FB1)	Scale PV2 mA Input 1	Read Write	-99.999 to 99.999	mA	Floating point	03, 04, 06, 16	
44019 – 44020	4018 – 4019 (FB2 – FB3)	Scale PV2 mA Input 2	Read Write	-99.999 to 99.999	mA	Floating point	03, 04, 06, 16	
44021 – 44022	4020 – 4021 (FB4 – FB5)	Scale PV2 mA Input 3	Read Write	-99.999 to 99.999	mA	Floating point	03, 04, 06, 16	
44023 – 44024	4022 – 4023 (FB6 – FB7)	Scale PV2 mA Input 4	Read Write	-99.999 to 99.999	mA	Floating point	03, 04, 06, 16	
44025 – 44026	4024 – 4025 (FB8 – FB9)	Scale PV2 mA Input 5	Read Write	-99.999 to 99.999	mA	Floating point	03, 04, 06, 16	
44027 – 44028	4026 – 4027 (FBA – FBB)	Scale PV2 mA Input 6	Read Write	-99.999 to 99.999	mA	Floating point	03, 04, 06, 16	
44029 – 44030	4028 – 4029 (FBC – FBD)	Scale PV2 mA Input 7	Read Write	-99.999 to 99.999	mA	Floating point	03, 04, 06, 16	
44031 – 44032	4030 – 4031 (FBE – FBF)	Scale PV2 mA Input 8	Read Write	-99.999 to 99.999	mA	Floating point	03, 04, 06, 16	
44129	4128 (1020)	Remote Scale PV2 mA Flag	Write Only	0xFF00 to execute remote scaling.	None	Unsigned integer	06, 16	Used to remote scale the PV2 mA input. Caution! See Note 5.
45001 – 45002	5000 – 5001 (1388 – 1389)	Scale PV2 Volts Display 1	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	After all the Display and Input values have been sent, write 0xFF00 to register 45129.
45003 – 45004	5002 – 5003 (138A – 138B)	Scale PV2 Volts Display 2	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
45005 – 45006	5004 – 5005 (138C – 138D)	Scale PV2 Volts Display 3	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
45007 – 45008	5006 – 5007 (138E – 138F)	Scale PV2 Volts Display 4	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
45009 – 45010	5008 – 5009 (1390 – 1391)	Scale PV2 Volts Display 5	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
45011 – 45012	5010 – 5011 (1392 – 1393)	Scale PV2 Volts Display 6	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	
45013 – 45014	5012 – 5013 (1394 – 1395)	Scale PV2 Volts Display 7	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16	

Register ¹		Name	Access	Limits or Range ²	Units	Data Type ³	Function Code(s)	Comments																																
Number	Address (Hex)																																							
45015 – 45016	5014 – 5015 (1396 – 1397)	Scale PV2 Volts Display 8	Read Write	-99999 to 999999	User defined	Floating point	03, 04, 06, 16																																	
45017 – 45018	5016 – 5017 (1398 – 1399)	Scale PV2 Volts Input 1	Read Write	-99.999 to 99.999	Volt	Floating point	03, 04, 06, 16																																	
45019 – 45020	5018 – 5019 (139A – 139B)	Scale PV2 Volts Input 2	Read Write	-99.999 to 99.999	Volt	Floating point	03, 04, 06, 16																																	
45021 – 45022	5020 – 5021 (139C – 139D)	Scale PV2 Volts Input 3	Read Write	-99.999 to 99.999	Volt	Floating point	03, 04, 06, 16																																	
45023 – 45024	5022 – 5023 (139E – 139F)	Scale PV2 Volts Input 4	Read Write	-99.999 to 99.999	Volt	Floating point	03, 04, 06, 16																																	
45025 – 45026	5024 – 5025 (13A0 – 13A1)	Scale PV2 Volts Input 5	Read Write	-99.999 to 99.999	Volt	Floating point	03, 04, 06, 16																																	
45027 – 45028	5026 – 5027 (13A2 – 13A3)	Scale PV2 Volts Input 6	Read Write	-99.999 to 99.999	Volt	Floating point	03, 04, 06, 16																																	
45029 – 45030	5028 – 5029 (13A4 – 13A5)	Scale PV2 Volts Input 7	Read Write	-99.999 to 99.999	Volt	Floating point	03, 04, 06, 16																																	
45031 – 45032	5030 – 5031 (13A6 – 13A7)	Scale PV2 Volts Input 8	Read Write	-99.999 to 99.999	Volt	Floating point	03, 04, 06, 16																																	
45129	5128 (1408)	Remote Scale PV2 Volts Flag	Write Only	0xFF00 to execute remote scaling.	None	Unsigned integer	06, 16	Used to remote scale the PV2 Volts input. Caution! See Note 5.																																
46001-46002	6000 - 6001 (1770 - 1771)	Ch-B Display Value	Read Only	-99.999 to 99.999	User defined	Floating point	03, 04, 06, 16																																	
46003	6002 (1772)	Alarm and Relay status	Read Only	1 = In Alarm 1 = relay energized	None	Word; Bits	03, 04	Mirror of 40003. Read alarm status and energized/non-energized status of relays. Alm = Alarm. Rly = Relay. <table border="1" style="width:100%; text-align:center; font-size:small;"> <tr> <td>15</td><td>14</td><td>13</td><td>12</td><td>11</td><td>10</td><td>9</td><td>8</td><td>7</td><td>6</td><td>5</td><td>4</td><td>3</td><td>2</td><td>1</td><td>0</td> </tr> <tr> <td>Alm 8</td><td>Alm 7</td><td>Alm 6</td><td>Alm 5</td><td>Alm 4</td><td>Alm 3</td><td>Alm 2</td><td>Alm 1</td><td>Rly8</td><td>Rly7</td><td>Rly6</td><td>Rly5</td><td>Rly4</td><td>Rly3</td><td>Rly2</td><td>Rly1</td> </tr> </table>	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0	Alm 8	Alm 7	Alm 6	Alm 5	Alm 4	Alm 3	Alm 2	Alm 1	Rly8	Rly7	Rly6	Rly5	Rly4	Rly3	Rly2	Rly1
15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0																									
Alm 8	Alm 7	Alm 6	Alm 5	Alm 4	Alm 3	Alm 2	Alm 1	Rly8	Rly7	Rly6	Rly5	Rly4	Rly3	Rly2	Rly1																									
46004	6003 (1773)	Digital Inputs and Outputs status	Read Only	1 = Input selected 1 = Output active	None	Word; Bits	03, 04	Mirror of 40004. Read the state of the digital inputs and outputs. <table border="1" style="width:100%; text-align:center; font-size:small;"> <tr> <td>15</td><td>14</td><td>13</td><td>12</td><td>11</td><td>10</td><td>9</td><td>8</td><td>7</td><td>6</td><td>5</td><td>4</td><td>3</td><td>2</td><td>1</td><td>0</td> </tr> <tr> <td>DI 8</td><td>DI 7</td><td>DI 6</td><td>DI 5</td><td>DI 4</td><td>DI 3</td><td>DI 2</td><td>DI 1</td><td>DO8</td><td>DO7</td><td>DO6</td><td>DO5</td><td>DO4</td><td>DO3</td><td>DO2</td><td>DO1</td> </tr> </table>	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0	DI 8	DI 7	DI 6	DI 5	DI 4	DI 3	DI 2	DI 1	DO8	DO7	DO6	DO5	DO4	DO3	DO2	DO1
15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0																									
DI 8	DI 7	DI 6	DI 5	DI 4	DI 3	DI 2	DI 1	DO8	DO7	DO6	DO5	DO4	DO3	DO2	DO1																									
46005 – 46006	6004 - 6005 (1774 - 1775)	Ch-B Maximum Display value	Read Only	-99999 to 999999	User defined	Floating point	03, 04	Represents the Maximum display value, including the decimal point, since last power up or Max Value reset.																																

Register ¹		Name	Access	Limits or Range ²	Units	Data Type ³	Function Code(s)	Comments																																
Number	Address (Hex)																																							
46007 – 46008	6006 - 6007 (1776 - 1777)	Ch-B Minimum Display value	Read Only	-99999 to 999999	User defined	Floating point	03, 04	Represents the Minimum display value, including the decimal point, since last power up or Min Value reset.																																
46009 – 46010	6008 - 6009 (1778 - 1779)	Ch-B Total value	Read Only	0 to 999999999	User defined	Floating point	03, 04	Represents the Total value, including the decimal point, since last Total reset.																																
46011 – 46012	6010 - 6011 (177A - 177B)	Ch-B Grand Total value	Read Only	0 to 999999999	User defined	Floating point	03, 04	Represents the Grand Total value, including the decimal point, since last Grand Total reset.																																
46013 – 46014	6012 - 6013 (177C - 177D)	Ch-B Total overflow value	Read Only	0 to 999	User defined	Floating point	03, 04	Represents the Total overflow value, since last Total reset.																																
46015 – 46016	6014 - 6015 (177E - 177F)	Ch-B Total non-overflow value	Read Only	0 to 999999	User defined	Floating point	03, 04	Represents the Total non-overflow value, since last Total reset.																																
46017 – 46018	6016 - 6017 (1780 - 1781)	Ch-B Grand Total overflow value	Read Only	0 to 999	User defined	Floating point	03, 04	Represents the Grand Total overflow value, since last Grand Total reset.																																
46019 – 46020	6018 - 6019 (1782 - 1783)	Ch-B Grand Total non-overflow value	Read Only	0 to 999999	User defined	Floating point	03, 04	Represents the Grand Total non-overflow value, since last Grand Total reset.																																
46021	6020 (1784)	Ch-B PV/Rate Display value	Read Only	-99999 to 999999	User defined	Long Hi	03, 04	Represents the PV/Rate display value excluding the decimal point. Decimal point setting in 46102.																																
46022	6021 (1785)	Ch-B PV/Rate Display value	Read Only		User defined	Long Lo	03, 04	Must be read with 46021.																																
46023	6022 (1786)	Alarm and Relay status	Read Only	1 = In Alarm 1 = relay energized	None	Word; Bits	03, 04	Mirror of 40003. Read alarm status and energized/non-energized status of relays. Alm = Alarm. Rly = Relay. <table border="1" style="font-size: small;"> <tr> <td>15</td><td>14</td><td>13</td><td>12</td><td>11</td><td>10</td><td>9</td><td>8</td><td>7</td><td>6</td><td>5</td><td>4</td><td>3</td><td>2</td><td>1</td><td>0</td> </tr> <tr> <td>Alm 8</td><td>Alm 7</td><td>Alm 6</td><td>Alm 5</td><td>Alm 4</td><td>Alm 3</td><td>Alm 2</td><td>Alm 1</td><td>Rly8</td><td>Rly7</td><td>Rly6</td><td>Rly5</td><td>Rly4</td><td>Rly3</td><td>Rly2</td><td>Rly1</td> </tr> </table>	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0	Alm 8	Alm 7	Alm 6	Alm 5	Alm 4	Alm 3	Alm 2	Alm 1	Rly8	Rly7	Rly6	Rly5	Rly4	Rly3	Rly2	Rly1
15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0																									
Alm 8	Alm 7	Alm 6	Alm 5	Alm 4	Alm 3	Alm 2	Alm 1	Rly8	Rly7	Rly6	Rly5	Rly4	Rly3	Rly2	Rly1																									
46024	6023 (1785)	Digital Inputs and Outputs status	Read Only	1 = Input selected 1 = Output active	None	Word; Bits	03, 04	Mirror of 40004. Read the state of the digital inputs and outputs. <table border="1" style="font-size: small;"> <tr> <td>15</td><td>14</td><td>13</td><td>12</td><td>11</td><td>10</td><td>9</td><td>8</td><td>7</td><td>6</td><td>5</td><td>4</td><td>3</td><td>2</td><td>1</td><td>0</td> </tr> <tr> <td>DI 8</td><td>DI 7</td><td>DI 6</td><td>DI 5</td><td>DI 4</td><td>DI 3</td><td>DI 2</td><td>DI 1</td><td>DO8</td><td>DO7</td><td>DO6</td><td>DO5</td><td>DO4</td><td>DO3</td><td>DO2</td><td>DO1</td> </tr> </table>	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0	DI 8	DI 7	DI 6	DI 5	DI 4	DI 3	DI 2	DI 1	DO8	DO7	DO6	DO5	DO4	DO3	DO2	DO1
15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0																									
DI 8	DI 7	DI 6	DI 5	DI 4	DI 3	DI 2	DI 1	DO8	DO7	DO6	DO5	DO4	DO3	DO2	DO1																									
46025	6024 (1788)	Ch-B Maximum Display value	Read Only	-99999 to 999999	User defined	Long Hi	03, 04	Represents the Maximum display value, excluding the decimal point, since last power up or Max Value reset.																																

Register ¹		Name	Access	Limits or Range ²	Units	Data Type ³	Function Code(s)	Comments
Number	Address (Hex)							
46026	6025 (1789)	Ch-B Maximum Display value	Read Only		User defined	Long Lo	03, 04	Must be read with 40025.
46027	6026 (178A)	Ch-B Minimum Display value	Read Only	-99999 to 999999	User defined	Long Hi	03, 04	Represents the Maximum display value, excluding the decimal point, since last power up or Max Value reset.
46028	6027 (178B)	Ch-B Minimum Display value	Read Only		User defined	Long Lo	03, 04	Must be read with 40027.
46029	6028 (178C)	Ch-B Total value	Read Only	0 to 999999999	User defined	Long Hi	03, 04	Represents the Total value, excluding the decimal point, since last Total reset. Decimal point setting in 40103.
46030	6029 (178D)	Ch-B Total value	Read Only		User defined	Long Lo	03, 04	Must be read with 40029.
46031	6030 (178E)	Ch-B Grand Total value	Read Only	0 to 999999999	User defined	Long Hi	03, 04	Represents the Grand Total value, excluding the decimal point, since last Total reset. Decimal point setting in 40104.
46032	6031 (178F)	Ch-B Grand Total value	Read Only		User defined	Long Lo	03, 04	Must be read with 40031.
46033	6032 (1790)	Ch-B Total overflow value	Read Only	0 to 999	User defined	Integer	03, 04	Represents the Total overflow value, since last Total reset.
46034	6033 (1791)	Ch-B Total non- overflow value	Read Only	0 to 999999	User defined	Long Hi	03, 04	Represents the Total non-overflow value, since last Total reset.
46035	6034 (1792)	Ch-B Total non- overflow value	Read Only		User defined	Long Lo	03, 04	Must be read with 40034.
46036	6035 (1793)	Ch-B Grand Total overflow value	Read Only	0 to 999	User defined	Integer	03, 04	Represents the Grand Total overflow value, since last Grand Total reset.
46037	6036 (1794)	Ch-B Grand Total non- overflow value	Read Only	0 to 999999	User defined	Long Hi	03, 04	Represents the Grand Total non-overflow value, since last Grand Total reset.
46038	6037 (1795)	Ch-B Grand Total non- overflow value	Read Only		User defined	Long Lo	03, 04	Must be read with 40037.

Register ¹		Name	Access	Limits or Range ²	Units	Data Type ³	Function Code(s)	Comments
Number	Address (Hex)							
46039	6038 (1796)	Ch-B Start Batch	Write Only	Not applicable	None	Bit	06, 16	Set bit to 1 to start the batch process.
46040	6039 (1797)	Ch-B Stop Batch	Write Only	Not applicable	None	Bit	06, 16	Set bit to 1 to pause the batch process; set bit to 1 again to stop batch process.
46045	6044 (179C)	Reset Ch-B Total value	Write Only	Not applicable	None	Bit	06, 16	Set bit to 1 to reset the Ch-B Total value.
46046	6045 (179D)	Reset Ch-B Grand Total value	Write Only	Not applicable	None	Bit	06, 16	Set bit to 1 to reset the Ch-B Grand Total value.
46047	6046 (179E)	Reset Ch-B Batch Count value	Write Only	Not applicable	None	Bit	06, 16	Set bit to 1 to reset the Ch-B Batch Count value. To read batch count use register 46152.
46101	6100 (17D4)	Ch-B Input Selection	Read Write	Not applicable	None	Word; bits	03, 04, 06, 16	See Table 1.
46102	6101 (17D5)	Ch-B PV/Rate decimal point	Read Write	0 to 7	None	Integer	03, 04, 06, 16	Selects based on number of digits to the right of the decimal point (e.g. 0 = no decimal point and 5 = d.ddddd), also selections for Temp Decimal Point using 0 = dddd, 1 = dddd.d, 6 = dddd°u, and 7 = dddd.du, where "u" is the units (F or C).
46103	6102 (17D6)	Ch-B Total decimal point	Read Write	0 to 5	None	Integer	03, 04, 06, 16	Selects based on number of digits to the right of the decimal point (e.g. 0 = no decimal point and 5 = d.ddddd).
46104	6103 (17D7)	Ch-B Grand Total decimal point	Read Write	0 to 5	None	Integer	03, 04, 06, 16	Selects based on number of digits to the right of the decimal point (e.g. 0 = no decimal point and 5 = d.ddddd).
46105	6104 (17D8)	Ch-B Total time base	Read Write	0 to 4	None	Integer	03, 04, 06, 16	0 = sec, 1 = min, 2 = hour, 3 = day
46106 – 46107	6105 - 6106 (17D9 – 17DA)	Ch-B Total Conversion Factor	Read Write	0.00001 to 999999	None	Floating point	03, 04, 06, 16	
46108	6107 (17DB)	Ch-B Total Reset mode	Read Write	Not applicable	None	Bit	03, 04, 06, 16	0 = auto, 1 = manual
46109	6108 (17DC)	Ch-B Total Reset Delay	Read Write	0 to 9999	1/10 of Seconds (0 to 999.9)	Integer	03, 04, 06, 16	

Register ¹		Name	Access	Limits or Range ²	Units	Data Type ³	Function Code(s)	Comments
Number	Address (Hex)							
46111 – 46112	6109 – 6110 (17DD – 17DE)	Ch-B Grand Total Conversion Factor	Read Write	0.00001 to 999999	None	Floating point	03, 04, 06, 16	
46113	6111 (17DF)	Ch-B Grand Total Reset mode	Read Write	Not applicable	None	Bit	03, 04, 06, 16	0 = auto, 1 = manual
46114	6112 (17E0)	Ch-B Grand Total Reset Delay	Read Write	0 to 9999	1/10 of Seconds (0 to 999.9)	Integer	03, 04, 06, 16	
46115 – 46116	6113 – 6114 (17E1 – 17E2)	Ch-B Pulse K- Factor	Read Write	0.00001 to 999999	None	Floating point	03, 04, 06, 16	
46119	6118 (17E6)	Ch-B Units 1	Read Write	Not applicable	None	Byte	03, 04, 06, 16	Represents the Modbus Little Display MSD (Most Significant Digit) value. The hex value represents the allowable ASCII character.
46120	6119 (17E7)	Ch-B Units 2	Read Write	Not applicable	None	Byte	03, 04, 06, 16	Represents the Modbus Little Display MSD-1 value. The hex value represents the allowable ASCII character.
46121	6120 (17E8)	Ch-B Units 3	Read Write	Not applicable	None	Byte	03, 04, 06, 16	Represents the Modbus Little Display MSD-2 value. The hex value represents the allowable ASCII character.
46122	6121 (17E9)	Ch-B Units 4	Read Write	Not applicable	None	Byte	03, 04, 06, 16	Represents the Modbus Little Display MSD-3 value. The hex value represents the allowable ASCII character.
46123	6122 (17EA)	Ch-B Units 5	Read Write	Not applicable	None	Byte	03, 04, 06, 16	Represents the Modbus Little Display MSD-4 value. The hex value represents the allowable ASCII character.
46124	6123 (17EB)	Ch-B Units 6	Read Write	Not applicable	None	Byte	03, 04, 06, 16	Represents the Modbus Little Display MSD-5 (which is the LSD) value. The hex value represents the allowable ASCII character.
46126	6125 (17ED)	Ch-B Adjust Value	Read Write	-500 to 500	1/10 of °C or °F	Integer	03, 04, 06, 16	Actually represents -50.0 to +50.0. Offset value is only applied to temperature inputs. If Adjust is greater than 27.7°C and the temperature units are switched to °F, it will be set to 50.0 (lower than -27.7, set to -50.0).
46127	6126 (17EE)	Ch-B RTD Total Value	Read Write	1 to 10	None	Integer	03, 04, 06, 16	Value represents the number of parallel RTDs connected to the signal input. Any other value than these results in a setting of 1.
46128	6127 (17EF)	Ch-B Lo Gate Setting	Read Write	1 to 999	None	Integer	03, 04, 06, 16	Actually represents 0.1 to 99.9 setting.

Automation Products Group Modbus® Register Tables

Serial Communication

Register ¹		Name	Access	Limits or Range ²	Units	Data Type ³	Function Code(s)	Comments
Number	Address (Hex)							
46129	6128 (17F0)	Ch-B High Gate Setting	Read Write	20 to 9999	None	Integer	03, 04, 06, 16	Actually represents 2.0 to 999.9 setting.
46130	6129 (17F1)	Ch-B Filter Setting	Read Write	0, 2 to 199 or 202 to 250, 900	Unit-less	Integer	03, 04, 06, 16	Display filtering. 0 = no filtering. 2 to 199 = old + ((new - old)/Filter). For pulse input 900 = Hi-Speed, 202 to 250 = Lo-Speed where the range is 2 to 50.
46131	6130 (17F2)	Ch-B Bypass Setting	Read Write	2 to 999	Percent of full scale or °F	Integer	03, 04, 06, 16	Actually represents 0.2 to 99.9. If the input steps greater than the bypass value, it will be displayed immediately, with no filtering occurring. The number represents percent of full-scale for process inputs and °F for temperature inputs. No effect if filter = 0.
46137	6136 (17F8)	Ch-B Function Mode	Read Write	0 to 3	None	Integer	03, 04, 06, 16	0 = Linear, 1 = Square Root, 2 = Exponent, 3 = Round Horizontal Tank
46138	6137 (17F9)	Ch-B PV/Rate mA Number of Points	Read Write	2 to 32	None	Integer	03, 04, 06, 16	This register is only used when register 46137 = 0 Linear. Ch-B voltage input number of points uses register 46188.
46139	6138 (17FA)	Ch-B Exponent	Read Write	10001 to 29999	None	Integer	03, 04, 06, 16	Actually represents 1.0001 to 2.9999. Set register 46137 = 2
46140 – 46141	6139 - 6140 (17FB - 17FC)	Ch-B Round Horizontal Tank Diameter	Read Write	0 to 999.999	Inch/cm	Floating point	03, 04, 06, 16	Decimal point is fixed. The unit of measure is inches or cm; the volume calculation is in US gallons and liters. The display may be re-scaled to represent the volume in any engineering units. Register 46137 = 3 RHT.
46142 – 46143	6141 - 6142 (17FD - 17FE)	Ch-B Round Horizontal Tank Length	Read Write	0 to 999.999	Inch/cm	Floating point	03, 04, 06, 16	Register 46190 Round horizontal tank units 0 = inch Volume: Gallon 1 = cm Volume: Liter
46144 – 46145	6143 - 6144 (17FF - 1800)	Ch-B Cutoff	Read Write	0 to 999999	User defined	Floating point	03, 04, 06, 16	Represents the cutoff value.
46146	6145 (1801)	Ch-B Total Count Direction	Read Write	Not applicable	None	Bit	03, 04, 06, 16	0 = count up, 1 = count down
46147 – 46148	6146 – 6147 (1802 -1803)	Ch-B Batch Total Preset	Read Write	0 to 999999999	User defined	Floating point	03, 04, 06, 16	Same as 46302 – 46303 Relay 1 set point.
46149	6148 (1804)	Ch-B Grand Total Count Direction	Read Write	Not applicable	None	Bit	03, 04, 06, 16	0 = count up, 1 = count down

Register ¹		Name	Access	Limits or Range ²	Units	Data Type ³	Function Code(s)	Comments
Number	Address (Hex)							
46150 – 46151	6149 – 6150 (1805 – 1806)	Ch-B Grand Total Count Down Start	Read Write	0 to 999999999	User defined	Floating point	03, 04, 06, 16	
46152	6151 (1807)	Ch-B Batch Count	Read Only	0 to 999999	None	Integer	03, 04, 06, 16	Represents the number of completed batches. To reset the Ch-B batch count use register 46047.
46153 – 46154	6152 – 6153 (1808 – 1809)	Ch-B Gross Display Value	Read Only	-99999 to 999999	User defined	Floating point	03, 04	Represents the Gross display value including the decimal point. Under Range = -99999, Over Range = 999999
46155 – 46156	6154 – 6155 (180A – 180B)	Ch-B Net Display Value	Read Only	-99999 to 999999	User defined	Floating point	03, 04	Represents the Net display value including the decimal point. Under Range = -99999, Over Range = 999999
46157 – 46158	6156 – 6157 (180C – 180D)	Ch-B Millivolt Display Value	Read Only	-99999 to 999999	User defined	Floating point	03, 04	Represents the Net display value including the decimal point. Under Range = -210.00, Over Range = 210.00
46160	6159 (180F)	Ch-B Total Units 1	Read Write	Not applicable	None	Byte	03, 04, 06, 16	Represents the Modbus Little Display MSD (Most Significant Digit) value. The hex value represents the allowable ASCII character.
46161	6160 (1810)	Ch- B Total Units 2	Read Write	Not applicable	None	Byte	03, 04, 06, 16	Represents the Modbus Little Display MSD-1 value. The hex value represents the allowable ASCII character.
46162	6161 (1811)	Ch- B Total Units 3	Read Write	Not applicable	None	Byte	03, 04, 06, 16	Represents the Modbus Little Display MSD-2 value. The hex value represents the allowable ASCII character.
46163	6162 (1812)	Ch- B Total Units 4	Read Write	Not applicable	None	Byte	03, 04, 06, 16	Represents the Modbus Little Display MSD-3 value. The hex value represents the allowable ASCII character.
46164	6163 (1813)	Ch- B Total Units 5	Read Write	Not applicable	None	Byte	03, 04, 06, 16	Represents the Modbus Little Display MSD-4 value. The hex value represents the allowable ASCII character.
46165	6164 (1814)	Ch- B Total Units 6	Read Write	Not applicable	None	Byte	03, 04, 06, 16	Represents the Modbus Little Display MSD-5 (which is the LSD) value. The hex value represents the allowable ASCII character.
46166	6165 (1815)	Ch-B Grand Total Units 1	Read Write	Not applicable	None	Byte	03, 04, 06, 16	Represents the Modbus Little Display MSD (Most Significant Digit) value. The hex value represents the allowable ASCII character.
46167	6166 (1816)	Ch- B Grand Total Units 2	Read Write	Not applicable	None	Byte	03, 04, 06, 16	Represents the Modbus Little Display MSD-1 value. The hex value represents the allowable ASCII character.
46168	6167 (1817)	Ch- B Grand Total Units 3	Read Write	Not applicable	None	Byte	03, 04, 06, 16	Represents the Modbus Little Display MSD-2 value. The hex value represents the allowable ASCII character.

Register ¹		Name	Access	Limits or Range ²	Units	Data Type ³	Function Code(s)	Comments																																
Number	Address (Hex)																																							
46169	6168 (1818)	Ch- B Grand Total Units 4	Read Write	Not applicable	None	Byte	03, 04, 06, 16	Represents the Modbus Little Display MSD-3 value. The hex value represents the allowable ASCII character.																																
46170	6169 (1819)	Ch- B Grand Total Units 5	Read Write	Not applicable	None	Byte	03, 04, 06, 16	Represents the Modbus Little Display MSD-4 value. The hex value represents the allowable ASCII character.																																
46171	6170 (181A)	Ch- B Grand Total Units 6	Read Write	Not applicable	None	Byte	03, 04, 06, 16	Represents the Modbus Little Display MSD-5 (which is the LSD) value. The hex value represents the allowable ASCII character.																																
46172 – 46173	6171 – 6172 (181B – 181C)	Ch-B Total Count Down Start	Read Write	0 to 999999999	User defined	Floating point	03, 04, 06, 16																																	
46188	6187 (182B)	Ch-B PV/Rate Volt Number of Points	Read Write	2 to 32	None	Integer	03, 04, 06, 16	This register is only used when register 40137 = 0 Linear. Ch-B mA input number of points uses register 46138.																																
46190	6189 (182D)	Ch-B RHT Inch/cm Selection	Read Write	0 or 1	Inch or cm	Byte	03, 04, 06, 16	0 = Inch, 1 = centimeter Register 46137 = 3 RHT Tank diameter and length: Registers 46140-143.																																
46201-46202	6200 – 6201 (1838 - 1839)	Ch-C Display Value	Read Only	-99.999 to 99.999	User defined	Floating point	03, 04, 06, 16	Ch-C is the math channel																																
46203	6202 (183A)	Alarm and Relay status	Read Only	1 = In Alarm 1 = relay energized	None	Word; Bits	03, 04	Mirror of 40003. Read alarm status and energized/non-energized status of relays. Alm = Alarm. Rly = Relay. <table border="1" style="width: 100%; text-align: center;"> <tr> <td>15</td><td>14</td><td>13</td><td>12</td><td>11</td><td>10</td><td>9</td><td>8</td><td>7</td><td>6</td><td>5</td><td>4</td><td>3</td><td>2</td><td>1</td><td>0</td> </tr> <tr> <td>Alm 8</td><td>Alm 7</td><td>Alm 6</td><td>Alm 5</td><td>Alm 4</td><td>Alm 3</td><td>Alm 2</td><td>Alm 1</td><td>Rly8</td><td>Rly7</td><td>Rly6</td><td>Rly5</td><td>Rly4</td><td>Rly3</td><td>Rly2</td><td>Rly1</td> </tr> </table>	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0	Alm 8	Alm 7	Alm 6	Alm 5	Alm 4	Alm 3	Alm 2	Alm 1	Rly8	Rly7	Rly6	Rly5	Rly4	Rly3	Rly2	Rly1
15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0																									
Alm 8	Alm 7	Alm 6	Alm 5	Alm 4	Alm 3	Alm 2	Alm 1	Rly8	Rly7	Rly6	Rly5	Rly4	Rly3	Rly2	Rly1																									
46204	6203 (183B)	Digital Inputs and Outputs status	Read Only	1 = Input selected 1 = Output active	None	Word; Bits	03, 04	Mirror of 40004. Read the state of the digital inputs and outputs. <table border="1" style="width: 100%; text-align: center;"> <tr> <td>15</td><td>14</td><td>13</td><td>12</td><td>11</td><td>10</td><td>9</td><td>8</td><td>7</td><td>6</td><td>5</td><td>4</td><td>3</td><td>2</td><td>1</td><td>0</td> </tr> <tr> <td>DI 8</td><td>DI 7</td><td>DI 6</td><td>DI 5</td><td>DI 4</td><td>DI 3</td><td>DI 2</td><td>DI 1</td><td>DO8</td><td>DO7</td><td>DO6</td><td>DO5</td><td>DO4</td><td>DO3</td><td>DO2</td><td>DO1</td> </tr> </table>	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0	DI 8	DI 7	DI 6	DI 5	DI 4	DI 3	DI 2	DI 1	DO8	DO7	DO6	DO5	DO4	DO3	DO2	DO1
15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0																									
DI 8	DI 7	DI 6	DI 5	DI 4	DI 3	DI 2	DI 1	DO8	DO7	DO6	DO5	DO4	DO3	DO2	DO1																									
46205 – 46206	6204 - 6205 (183C - 183D)	Ch-C Maximum Display value	Read Only	-99999 to 999999	User defined	Floating point	03, 04	Represents the Maximum display value, including the decimal point, since last power up or Max Value reset.																																

Register ¹		Name	Access	Limits or Range ²	Units	Data Type ³	Function Code(s)	Comments																																
Number	Address (Hex)																																							
46207 – 46208	6206 - 6207 (183E - 183F)	Ch-C Minimum Display value	Read Only	-99999 to 999999	User defined	Floating point	03, 04	Represents the Minimum display value, including the decimal point, since last power up or Min Value reset.																																
46221	6220 (184C)	Ch-C Display value	Read Only	-99999 to 999999	User defined	Long Hi	03, 04	Represents the PV/Rate display value excluding the decimal point. Decimal point setting in 46102.																																
46222	6221 (184D)	Ch-C Display value	Read Only		User defined	Long Lo	03, 04	Must be read with 46221.																																
46223	6222 (184E)	Alarm and Relay status	Read Only	1 = In Alarm 1 = relay energized	None	Word; Bits	03, 04	Mirror of 40003. Read alarm status and energized/non-energized status of relays. Alm = Alarm. Rly = Relay. <table border="1" style="font-size: small;"> <tr> <td>15</td><td>14</td><td>13</td><td>12</td><td>11</td><td>10</td><td>9</td><td>8</td><td>7</td><td>6</td><td>5</td><td>4</td><td>3</td><td>2</td><td>1</td><td>0</td> </tr> <tr> <td>Alm 8</td><td>Alm 7</td><td>Alm 6</td><td>Alm 5</td><td>Alm 4</td><td>Alm 3</td><td>Alm 2</td><td>Alm 1</td><td>Rly8</td><td>Rly7</td><td>Rly6</td><td>Rly5</td><td>Rly4</td><td>Rly3</td><td>Rly2</td><td>Rly1</td> </tr> </table>	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0	Alm 8	Alm 7	Alm 6	Alm 5	Alm 4	Alm 3	Alm 2	Alm 1	Rly8	Rly7	Rly6	Rly5	Rly4	Rly3	Rly2	Rly1
15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0																									
Alm 8	Alm 7	Alm 6	Alm 5	Alm 4	Alm 3	Alm 2	Alm 1	Rly8	Rly7	Rly6	Rly5	Rly4	Rly3	Rly2	Rly1																									
46224	6223 (184F)	Digital Inputs and Outputs status	Read Only	1 = Input selected 1 = Output active	None	Word; Bits	03, 04	Mirror of 40004. Read the state of the digital inputs and outputs. <table border="1" style="font-size: small;"> <tr> <td>15</td><td>14</td><td>13</td><td>12</td><td>11</td><td>10</td><td>9</td><td>8</td><td>7</td><td>6</td><td>5</td><td>4</td><td>3</td><td>2</td><td>1</td><td>0</td> </tr> <tr> <td>DI 8</td><td>DI 7</td><td>DI 6</td><td>DI 5</td><td>DI 4</td><td>DI 3</td><td>DI 2</td><td>DI 1</td><td>DO8</td><td>DO7</td><td>DO6</td><td>DO5</td><td>DO4</td><td>DO3</td><td>DO2</td><td>DO1</td> </tr> </table>	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0	DI 8	DI 7	DI 6	DI 5	DI 4	DI 3	DI 2	DI 1	DO8	DO7	DO6	DO5	DO4	DO3	DO2	DO1
15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0																									
DI 8	DI 7	DI 6	DI 5	DI 4	DI 3	DI 2	DI 1	DO8	DO7	DO6	DO5	DO4	DO3	DO2	DO1																									
46225	6224 (1850)	Ch-C Maximum Display value	Read Only	-99999 to 999999	User defined	Long Hi	03, 04	Represents the Maximum display value, excluding the decimal point, since last power up or Max Value reset.																																
46226	6225 (1851)	Ch-C Maximum Display value	Read Only		User defined	Long Lo	03, 04	Must be read with 46025.																																
46227	6226 (1852)	Ch-C Minimum Display value	Read Only	-99999 to 999999	User defined	Long Hi	03, 04	Represents the Maximum display value, excluding the decimal point, since last power up or Max Value reset.																																
46228	6227 (1853)	Ch-C Minimum Display value	Read Only		User defined	Long Lo	03, 04	Must be read with 46027.																																
46302	6301 (189D)	Ch-C Decimal point	Read Write	0 to 7	None	Integer	03, 04, 06, 16	Selects based on number of digits to the right of the decimal point (e.g. 0 = no decimal point and 5 = d.ddddd), also selections for Temp Decimal Point using 0 = dddd, 1 = dddd.d, 6 = dddd°u, and 7 = dddd.du, where "u" is the units (F or C).																																
46319	6318 (18AE)	Ch-C Units 1	Read Write	Not applicable	None	Byte	03, 04, 06, 16	Represents the Modbus Little Display MSD (Most Significant Digit) value. The hex value represents the allowable ASCII character.																																

Register ¹		Name	Access	Limits or Range ²	Units	Data Type ³	Function Code(s)	Comments
Number	Address (Hex)							
46320	6319 (18AF)	Ch-C Units 2	Read Write	Not applicable	None	Byte	03, 04, 06, 16	Represents the Modbus Little Display MSD-1 value. The hex value represents the allowable ASCII character.
46321	6320 (18B0)	Ch-C Units 3	Read Write	Not applicable	None	Byte	03, 04, 06, 16	Represents the Modbus Little Display MSD-2 value. The hex value represents the allowable ASCII character.
46322	6321 (18B1)	Ch-C Units 4	Read Write	Not applicable	None	Byte	03, 04, 06, 16	Represents the Modbus Little Display MSD-3 value. The hex value represents the allowable ASCII character.
46323	6322 (18B2)	Ch-C Units 5	Read Write	Not applicable	None	Byte	03, 04, 06, 16	Represents the Modbus Little Display MSD-4 value. The hex value represents the allowable ASCII character.
46324	6323 (18B3)	Ch-C Units 6	Read Write	Not applicable	None	Byte	03, 04, 06, 16	Represents the Modbus Little Display MSD-5 (which is the LSD) value. The hex value represents the allowable ASCII character.
46401	6400 (1900)	Math Function	Read Write	0 to 19	None	Integer	03, 04, 06, 16	See Table 9
46402-46403	6401 - 6402 (1901 - 1902)	Constant P Adder	Read Write	-99999 to 999999	None	Floating point	03, 04, 06, 16	
46404-46405	6403 - 6404 (1903 - 1904)	Constant F Factor	Read Write	0.00001 to 999999	None	Floating point	03, 04, 06, 16	
49901 – 49904	9900-9903 (26AC – 26AF)	Product Identifier	Read Only	Not applicable	None	ASCII characters	03, 04	8 characters indicating the product digit software release number (for SFT039 this would be 039), three ASCII hex character value of the Main board input, and two ASCII hex characters of the Input card (see Table 6).
49905 – 49908	9904-9907 (26B0 – 26B3)	Firmware Version	Read Only	Not applicable	None	ASCII characters	03, 04	8 characters indicating the firmware version number
49917	9916 (26BC)	Product Number	Read Only	0 to 99999	None	Integer	03, 04	See Table 7.
49918	9917 (26BD)	Firmware Version	Read Only	0 to 99999	None	Integer	03, 04	Decimal point is not included (e.g. 2200 = v2.200)
49998	9997 (270D)	Init Meter Serial Comm	Write Only	0xFF00 to initialize	None	Unsigned integer	06, 16	Write 0xFF00 to initialize the meter serial port after changing serial port parameters
49999	9998 (270E)	Load Factory Defaults	Write Only	0xFF00 to initialize	None	Unsigned integer	06, 16	Write 0xFF00 to load factory defaults to the meter. Writing any other data has no effect.

Notes

Note 1. The Register numbers and addresses follow the Modbus format:

- 3xxxx are for Input Registers and are read – only.
- 4xxxx are for Holding Registers and are read/write.

Although there are no specific 3x Registers, all 4x Registers are mirrored into 3x register space, and are therefore capable of being read by Modbus function 04 (Read Input Registers). All data addresses in Modbus messages are referenced to zero (0), while Register addresses are referenced to one (1). For example, Register 40100 is sent in the Modbus message as 0x0063 (100 - 1 = 99 \equiv 63 hex). If two addresses are shown separated by a “ – ”, they form a register pair to make the parameter into a 4-byte (32 bit) value.

Note 2. Limits or Range: Writing a value that is outside the parameters range will force it to be limited to the closest value within the range. For example, if the range is -1.99 to +1.99 and the value sent is 3.21, the value used is 1.99. Likewise for the lower side of the range. Exceptions are noted in the comments.

Note 3. Data Types:

Data format is highest byte first (Byte order: 1234).

Word = 16 bit

Integer = -32768 to 32767

Unsigned integer = 0 to 65535

Long = -2,147,483,648 to 2,147,483,647

Float = IEEE floating point format, 4 bytes

For the complete floating point standard, see IEEE 754-1985 Standard for Binary Floating-Point Arithmetic.

Integers data: The values represent the number without regard to the decimal point. The decimal point setting can be found in Holding Register 40102.

For example, if the number 1234.56 is displayed, a read of both 40021 – 40022 together will return 1 – 23456 (0x0001 – 0xE240). Register 40102 will contain 2 (0x0002) to indicate a decimal point setting of two places to the right of the decimal point. A floating point version of the displayed number, with the decimal point included, is also available by accessing register 40001-40002.

Example (register values are shown in hexadecimal):

Process value displayed	Registers 40001 – 40002	Register 40021	Register 40022	Register 40102
123.456	42F6 – E979	0001	E240	0003
1234.56	449A – 51EC	0001	E240	0002
12345.6	4640 – E666	0001	E240	0001
-1234.5	C49A – 5000	FFFF	CFC7	0001

For the complete floating point standard, see IEEE 754-1985 Standard for Binary Floating-Point Arithmetic.

Note 4. A read of the Password register will return 0x000000 if the meter is unlocked, otherwise it will return 0xFFFFFFFF to indicate a locked meter. To unlock, the correct lock number must be written, which will then clear the lock number to 0x000000. If the wrong lock number is written, the reply will return 0xFFFFFFFF. If the correct lock number is written, the reply will be 0x000000. An unlocked meter can be locked by writing any non – zero value up to 0x999999.

Note 5. Remote scaling procedure:

- Write the desired values for the display, Display 1 & 2, for the active input type. The active input type is selected using the Input Selection register 40101 and Table 1.
- Write the desired values for the input, Input 1 & 2, for the active input type.
- Write to the remote scaling register for the active input type.

Warning!

The scaling process takes the input values and converts them to A/D counts. Therefore, do NOT execute a remote scaling register write without first writing the display and input registers. In a similar vein, don't write to the mA registers and then execute a remote scale command for the volts input.

Warning!

Always allow the meter and the signal input circuitry to warm – up at least 20 minutes prior to calibrations. The scaling process takes the input values in mA or volts and converts them to A/D counts. Therefore, do NOT execute a remote scaling register write without first writing the display and input registers. In a similar vein, don't write to the mA (volts) registers and then execute a remote scale command for the volts (mA) input.

Tables

Table 1. Input configuration (Ch-A: 40101, Ch-B: 46101)

Valid input configuration settings are dependent on the meter type (i.e. temperature type and unit settings are only valid when the meter has a temperature input – otherwise the bits are 0's for both read and write).

Bit(s)	15, 14, 13, 12, 11, 10, 9, 8	7	6, 5, 4	3, 2, 1, 0
Function	Input Setting	Temperature Unit Setting	Decimal Point Setting	Temperature Type Setting

00000000	Volts	0 °C	000 ddddd (dddd for temperature)	0000 Type J thermocouple
00010001	Current	1 °F	001 dddd.d (dddd.d for temperature)	0001 Type K thermocouple
00100010	RTD		010 dddd.dd	0010 Type T thermocouple
00100011	Thermocouple		011 ddd.ddd	0011 Type E thermocouple
10000000	Pulse		100 dd.dddd	0100 Type R thermocouple
01000000	Strain 15 mV w/ ratio		101 d.dddd	0101 Type S thermocouple
01000001	Strain 15 mV w/o ratio		110 dddd°u (° symbol displayed)	0110 Type B thermocouple
01000010	Strain 25/30 mV w/ ratio		111 dddd.du (temp unit displayed)	0111 Type N thermocouple
01000011	Strain 25/30 mV w/o ratio			1000 Type C thermocouple
01000100	Strain 150 mV w/ ratio			1001 100 Ω Platinum RTD (385)
01000101	Strain 150 mV w/o ratio			1010 100 Ω Platinum RTD (392)
01000110	Strain 250/300 mV w/ ratio			1011 1000 Ω Platinum RTD (385)
01000111	Strain 250/300 mV w/o ratio			1100 1000 Ω Platinum RTD (392)
				1101 10 Ω Copper RTD
				1110 120 Ω Nickel RTD

Table 2. Display Settings

Big Display Settings (40117)

Integer	Function
0	Display Process Value
1	Display Set Point 1
2	Display Set Point 2
3	Display Set Point 3
4	Display Set Point 4
5	Display Set Point 5
6	Display Set Point 6
7	Display Set Point 7
8	Display Set Point 8
9	Display Maximum Display Value
10	Display Minimum Display Value
11	Display Maximum / Minimum Display Value
12	Display Rate
13	Display Total
14	Display Grand Total
15	Display Rate / Total
16	Display Rate / Grand Total
17	Display Batch Counter
18	Modbus Display
19	Display PV2, single input/dual-scale
20	Display PCT (PV1 %), single input/dual-scale
21	N/A
22	Display Set 1 / Rate (Batch only)
23	N/A
24	Display Ch-B
25	Display Ch-A & B (Toggle)
26	Display Ch-C
27	Display max Ch-B
28	Display min Ch-B
29	Display max/min Ch-B
30	Display max Ch-C
31	Display min Ch-C
32	Display max/min Ch-C
33	Display Ch A Rate & Units
34	Display Ch B Rate & Units
35	Display Ch C Rate & Units

Little Display Settings (40118)

Integer	Function
0	Display Process Value
1	Display Set Point 1
2	Display Set Point 2
3	Display Set Point 3
4	Display Set Point 4
5	Display Set Point 5
6	Display Set Point 6
7	Display Set Point 7
8	Display Set Point 8
9	Display Maximum Display Value
10	Display Minimum Display Value
11	Display Maximum / Minimum Display Value
12	Display Rate
13	Display Total
14	Display Grand Total
15	Display Rate / Total
16	Display Rate / Grand Total
17	Display Batch Counter
18	Modbus Display
19	Display PV2
20	Display PCT (PV1 %)
21	Display Engineering Units (A, B, or C)*
22	Display Set 1 / Rate (Batch only)
23	Display OFF
24	Display Ch-B
25	Display Ch-A & B (Toggle)
26	Display Ch-C
27	Display max Ch-B
28	Display min Ch-B
29	Display max/min Ch-B
30	Display max Ch-C
31	Display min Ch-C
32	Display max/min Ch-C
33	Display Ch A Rate & Units
34	Display Ch B Rate & Units
35	Display Ch C Rate & Units

*Engineering units are associated with the top (Big) display assignment; if Ch-C is being displayed, the units on the bottom display will correspond to Ch-C.

Note: Parameters not identified as corresponding to channel B or C are either applicable to all channels or they belong to channel A for dual-input meters.

Table 2 continued on next page

Table 2 continued from previous page

Big Display Settings (40117)

36	Display Gross Ch-A
37	Display Net / Gross Ch-A
38	Display Millivolt (Strain Gauge)
39	Display Gross Ch-B
40	Display Net / Gross Ch-B
41	Display Ch-A & C
42	Display Ch-B & C
43	Display Ch-A, B, & C
44	Display Total Ch-B
45	Display Grand Total Ch-B
46	Display Rate / Total Ch-B
47	Display Rate / Grand Total Ch-B
48	Reserved Display Batch Counter Ch B
49	Reserved Display Set 3 / Rate Ch B (Dual-Batch)
50	Display Total Ch A & Ch B
51	Display Total CH A, Ch B, & Total A+B
52	Display Ch A Total & Units
53	Display Ch B Total & Units
54	Display Ch A Grand Total & Units
55	Display Ch B Grand Total & Units
56-67	Reserved for Modbus Scanner
68	Display Sum Total A + Total B
69	Display Diff Total A - Total B

Little Display Settings (40118)

36	Display Gross Ch-A
37	Display Net / Gross Ch-A
38	Display Millivolt (Strain Gauge)
39	Display Gross Ch-B
40	Display Net / Gross Ch-B
41	Display Ch-A & C
42	Display Ch-B & C
43	Display Ch-A, B, & C
44	Display Total Ch-B
45	Display Grand Total Ch-B
46	Display Rate / Total Ch-B
47	Display Rate / Grand Total Ch-B
48	Reserved Display Batch Counter Ch B
49	Reserved Display Set 3 / Rate Ch B (Dual-Batch)
50	Display Total Ch A & Ch B
51	Display Total CH A, Ch B, & Total A+B
52	Display Ch A Total & Units
53	Display Ch B Total & Units
54	Display Ch A Grand Total & Units
55	Display Ch B Grand Total & Units
56-67	Reserved for Modbus Scanner
68	Display Sum Total A + Total B
69	Display Diff Total A - Total B

Table 3. User Programmable Settings

Digital Inputs & Function Keys Setting (40201 – 40212)

Integer	Function
0	Disable Function
1	Menu Key
2	Right Arrow Key
3	Up Arrow Key
4	Enter Key
5	Acknowledge Alarms
6	Reset Tare
7	Reset Batch Counter
8	Reset Total
9	Reset Grand Total
10	Reset Maximum Value
11	Reset Minimum Value
12	Reset Max & Min Values
13	Tare A
14	Tare B
15	Relay Menu
16	Set Point 1 (Preset A) Programming
17	Set Point 2 Programming
18	Set Point 3 (Preset B) Programming
19	Set Point 4 Programming
20	Set Point 5 Programming
21	Set Point 6 Programming
22	Set Point 7 Programming
23	Set Point 8 Programming
24	Start Batch
25	Stop Batch
26	Display Hold while active
27	Relay Disable
28	Relay Enable
29	Relay Output Hold
30	Maximum Value on Little Display Ch-C
31	Minimum Value on Little Display Ch-C
32	Max/Min Value on Little Display Ch-C
33	Maximum Value on Big Display Ch-A
34	Minimum Value on Big Display Ch-A
35	Max/Min Value on Big Display Ch-A
36	Display A, B, C with units in sequence
37	Maximum Value on Little Display Ch-B
38	Minimum Value on Little Display Ch-B
39	Maximum/Minimum Value on Little Display Ch-B
40	Force ON Relay #1 (DI-1 to 8 Set Reg. 301 Action = Off)
41	Force ON Relay #2 (DI-1 to 8 Set Reg. 310 Action = Off)
42	Force ON Relay #3 (DI-1 to 8 Set Reg. 319 Action = Off)
43	Force ON Relay #4 (DI-1 to 8 Set Reg. 328 Action = Off)
44	Grand Total Value on Little Display
45	Batch Count Value on Little Display
46	Toggle Start/Stop Batch

Key/DI	Reg. No
F1	201
F2	202
F3	203
F4	204
DI-1	205
DI-2	206
DI-3	207
DI-4	208
DI-5	209
DI-6	210
DI-7	211
DI-8	212

DO	Reg. No.
DO-1	213
DO-2	214
DO-3	215
DO-4	216
DO-5	217
DO-6	218
DO-7	219
DO-8	220

Digital Outputs Settings (40213 – 40220)

Integer	Function
0	Disable Function
1	Alarms Acknowledged
2	End of Ch A Batch
3	Batch Counter Reset
4	Total Reset
5	Grand Total Reset
6	Maximum Value Reset
7	Minimum Value Reset
8	Maximum/Minimum Value Reset
9	Tare Ch-A Selected
10	Reset Tare Selected (Ch-A & B)
11	Alarm 1 Active
12	Alarm 2 Active
13	Alarm 3 Active
14	Alarm 4 Active
15	Alarm 5 Active
16	Alarm 6 Active
17	Alarm 7 Active
18	Alarm 8 Active
19	Start Batch Selected
20	Stop Batch Selected
21	Start / Stop Selected
22	Start Ch A Batch Selected
23	Stop Ch A Batch Selected
24	Start / Stop Ch A Batch Selected
25	Reset Ch A Batch Count
26	Start Ch B Batch Selected
27	Stop Ch B Batch Selected
28	Start / Stop Ch B Batch Selected
29	Reset Ch B Batch Count
30	Pause Batch Ch A and Ch B
31	Pause Batch Ch A
32	Pause Batch Ch B
33	Total Ch A Reset
34	Grand Total Ch A Reset
35	Total Ch B Reset
36	Grand Total Ch B Reset
37	End of Ch B Batch
38	Tare Ch B Selected

Note: Some of the functions listed are dependent on model being used. For example: the batch functions are only available with the batch controller model.

Table 3 continued on next page

Table 3 continued from previous page

Digital Inputs & Function Keys Setting (40201 – 40212)

47	Display Millivolt
48	Reset Total Ch A
49	Reset Grand Total Ch A
50	Reset Total Ch B
51	Reset Grand Total Ch B
52	Display Total A, B, C with units displayed in sequence
53	Display GT A, B, C with units displayed in sequence
54	Display Batch Count A, B displayed in sequence
55	Quad mode AI input ("qd AI") on this input
56	Quad mode BI input ("qd BI") on this input
57	Start Batch Ch A
58	Stop Batch Ch A
59	Start / Stop Batch Ch A Toggle
60	Reset Batch Count Ch A
61	Start Batch Ch B
62	Stop Batch Ch B
63	Start / Stop Batch Ch B Toggle
64	Reset Batch Count Ch B
65	Zero Display (Strain only)
66	Reset Menu
67	Control Menu
68-70	Reserved for Modbus Scanner
71	Factor Menu (Pulse Input)

Table 4. Relay Configuration Mode (40301, 310, ... 364)

Bit(s)	15 – 10	9 – 8	7	6	5 – 3	2 – 0
Function	Reserved	Sensor Break	Fail-Safe	Pre-close	Action	Assignment

000000	00 Ignore	0 Normal	0 Normal	000 Automatic reset	000 Process Value
	01 OFF	1 Failsafe	1 Pre-close	001 Auto & Manual reset	001 Total
	10 ON			010 Latching	010 Grand Total
				011 Latching with Clear	011 Modbus Input
				100 Pump Alternation	100 Ch-B Process Value
				101 Sample	101 Ch-B Total
				110 Unused	110 Ch-B Grand Total
				111 Off	111 Ch-C Math Value

Relay Registers
Rly1: 301
Rly2: 310
Rly3: 319
Rly4: 328
Rly5: 337
Rly6: 346
Rly7: 355
Rly8: 364

Table 5. 4-20 mA Output Data Source (40402)

Integer	Function
0	Process Value
1	Max Display Value
2	Min Display Value
3	Modbus Input
4	Total
5	Grand Total
6	Set Point 1
7	Set Point 2
8	Set Point 3
9	Set Point 4
10	Set Point 5
11	Set Point 6
12	Set Point 7
13	Set Point 8

Integer	Function
14	Ch-B Process Value
15	Ch-C Math Channel Value
16	Ch-B Max Display Value
17	Ch-B Min Display Value
18	Ch-A or B Max Display Value
19	Ch-A or B Min Display Value
20	Ch-B Total
21	Ch-B Grand Total

Table 6. Input Identification Configuration (49901 – 49904)

Firmware Identifier

Byte	Product
039	PD6000 Series
063	Reserved
065	Reserved
070	PDD6000 Demo
071	Reserved
106	Reserved

Main Board Configuration

Byte	Function
000	Process / Temp
100	Reserved
200	Reserved
300	Reserved
400	Reserved
500	Reserved
600	Reserved
700	Reserved

Input Board Configuration

Byte	Function
00	Reserved

Note: Each register holds two ASCII characters.

Example: PD6000 Process (SFT039)

49901: 0x3033 = 03

49902: 0x3930 = 90

49903: 0x3030 = 00

Table 7. Product Number & Description (49917)

Integer	Description
6000	Process
6060	Reserved: Dual Process
6100	Reserved: Strain Gauge/Load Cell
6110	Reserved: Strain Gauge/Load Cell Batch Controller
6200	Reserved: Process Totalizer
6210	Reserved: Process Batch Controller
6262	Reserved: Dual Process Totalizer
6272	Reserved: Dual Process Batch Controller
6300	Reserved: Pulse Totalizer
6310	Reserved: Pulse Batch Controller
6363	Reserved: Dual Pulse Totalizer
6373	Reserved: Dual Pulse Batch Controller
6400	Reserved: Dual AC/DC High Voltage and Current
7000	Reserved: Temperature

Table 8. Allowable ASCII Character Set (40076 – 81, 40082 – 87, 40119 – 124)

0	30	0	A	41	A	J	4A	J	U	56	V
1	31	1	b	62	b	H	4B	K	u	77	w
2	32	2	[	43	C	L	4C	L	H	58	X
3	33	3	c	63	c	m	6D	m	Y	59	Y
4	34	4	d	64	d	n	6E	n	Z	5A	Z
5	35	5	E	45	E	O	4F	O	-	2D	-
6	36	6	F	46	F	o	6F	o	/	2F	/
7	37	7	G	47	G	P	50	P	]	5B]
8	38	8	g	67	g	q	71	q	[	5D	[
9	39	9	H	48	H	r	72	r	=	3D	=
			h	68	h	S	53	S		20	SP
			I	49	I	t	74	t	°	3C	<
			i	69	i	u	75	u			

Table 9. Channel C Math Functions (46401)

Integer	Function		Integer	Function		Integer	Function	
0	Add	A + B	7	Min of A or B	A < B or B < A	14	Subtract Total	Ta - Tb
1	Subtract	A - B	8	Draw	((A / B) - 1) * F	15	Subtract Grand Total	GTa - GTb
2	Absolute Diff	ABS(A - B)	9	Weighted Avg.	((A - B) * F) + A	16	Total Ratio	(Ta / Tb) * F
3	Average	(A+B) / 2	10	Ratio	(A / B) * F	17	Total Percent	(Ta / (Ta + Tb)) * F
4	Multiply	A * B	11	Concentration	(A / (A + B)) * F	18	Total Ratio2	((Tb-Ta)/Ta)*F
5	Divide	A / B	12	Add Total	Ta + Tb	19	Ratio2	(B-A)/A)*F
6	Max of A or B	A > B or B > A	13	Add Grand Total	GTa + GTb			

Note:

Math channel for High voltage/current model is called Channel P and it only uses the multiply function to calculate the apparent power ($P = V * A$). Constant Factor (F) is available for power factor correction to obtain the real power.