



Badger Meter

Industrial Flow Computer

FC-5000 Flow Computer

Cox 4020 to FC-5000 Flow Computer Wiring Interchange

4020 TO FC-5000 CONNECTION EQUIVALENTS

- Function: Flow Computer
- FC-5000 Part Number: FC5-FM-P2-AC6A-*

⚠ CAUTION

AC POWER INPUT RANGE FOR THE FC-5000 IS 9...28V AC. DO NOT APPLY 120V AC OR 240V AC.

DC POWER INPUT RANGE FOR THE FC-5000 IS 10...40V DC.

FC-5000			4020		
Terminal Block	Connection Pin and Function	Ref. Pin #	Terminal Block	Function	Ref. Pin #
TB1 - Power Input	1 - Positive (L+), Line(L)	1	TB2 - 24V DC Input	V+ IN	6
	2 - Shield (Chassis GND)	2		—	—
	3 - Negative(-), Neutral(N)	3		Common	5
	4 - Digital I/O GND	4		Safety Ground	TB1 - Pin 6
TB2 - Digital I/O	1 - Excitation Voltage (5V DC Output)	5	TB5	—	—
	2 - Digital I/O Ch 1	6		Control Input 1	4
	3 - Digital I/O Ch 2	7		Control Input 2	5
	4 - Digital I/O Ch 3	8		Control Input 3	6
	5 - Digital I/O Ch 4	9		—	—
	6 - Digital I/O Ch 5	10		—	—
	7 - Digital I/O Ch 6	11		—	—
	8 - Digital I/O GND	12		Common	7
TB3 - Relay 1 (Form C)	1 - Normally Open (N.O.)	13	TB3	K1 NO	1
	2 - Signal Common	14		K1 Common	3
	3 - Normally Closed (N.C.)	15		K1 NC	2
TB4 - Relay 2	Form C	1 - Normally Open (N.O.)		—	—
		2 - Signal Common		—	—
		3 - Normally Closed (N.C.)		—	—
	Form A	1 - Connection Point 1		—	—
		2 - Not Used (No Contact)		—	—
		3 - Connection Point 2		—	—
TB5 - Dual Pulse Input	1 - Sensor Excitation (12V DC Output)	19	TB4	+V Signal Conditioner	TB2 - Pin 7
	2 - Sensor Input (+)	20		Flow Meter Input Signal A	3
	3 - Sensor Input/Common (-)	21		Flow Meter Return Signal	4
	4 - Shield (Chassis GND)	22		Inhibit Input B	5
	5 - Shield	23		—	—
TB6 - Single Temperature Input	1 - T1 Excitation (+)	24	TB4	RTD +	8
	2 - T1 Sensor Input (+)	25		RTD Out	9
	3 - T1 Sensor Input (-)	26		Flow Input GND	4
	4 - T1 Excitation (-)	27		RTD -	7
	Not Available	28-31	—	—	—
TB7 - Analog Output	1 - Output 1 Signal	32	TB4	Monitoring Equipment +	2
	2 - Output 2 Signal	33		—	—
	3 - Output GND	34		Monitoring Equipment -	TB2 Pin 5
	4 - Shield (Chassis GND)	35		—	—
TB8 - RS485 Comms	1 - Shield (Chassis GND)	36	TB5	Shield	1
	2 - Negative Terminal (-)	37		Comm -	2
	3 - Positive Terminal (+)	38		Comm +	3
	4 - Output Ground	39		—	—

⚠ CAUTION

TB1 FROM THE 4020 IS 120/240V AC INPUT. DO NOT HOOK UP 120V AC OR 240V AC TO THE FC-5000 POWER INPUT TERMINAL.

NOTE: Transistor Outputs are unused but could be used on the open Digital I/O channels.

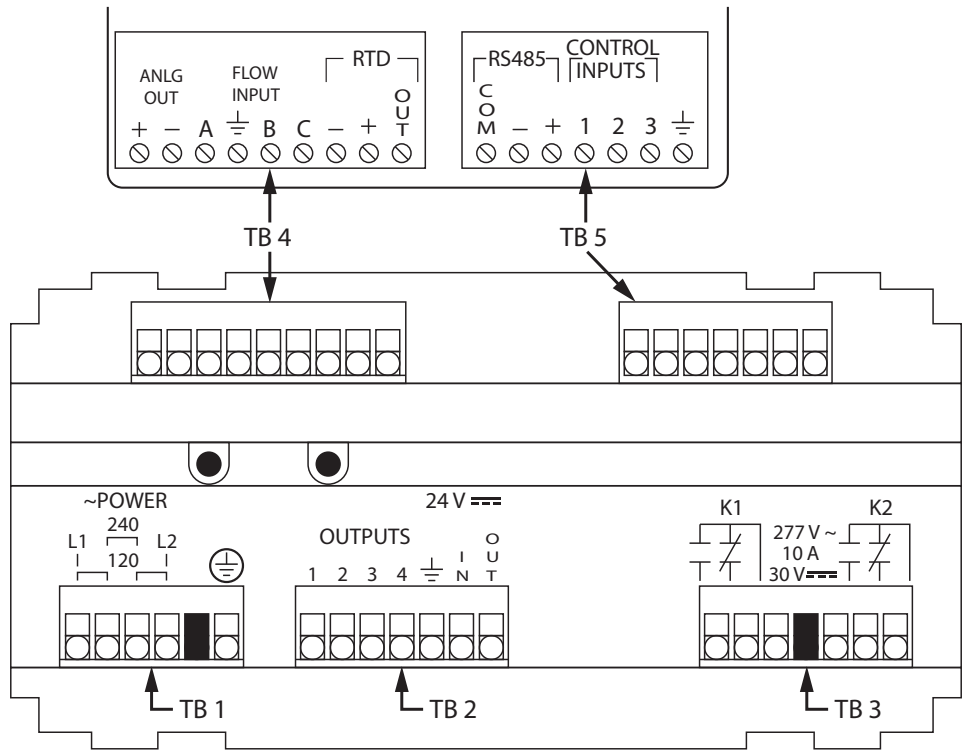


Figure 1: 4020 Flow Computer back panel

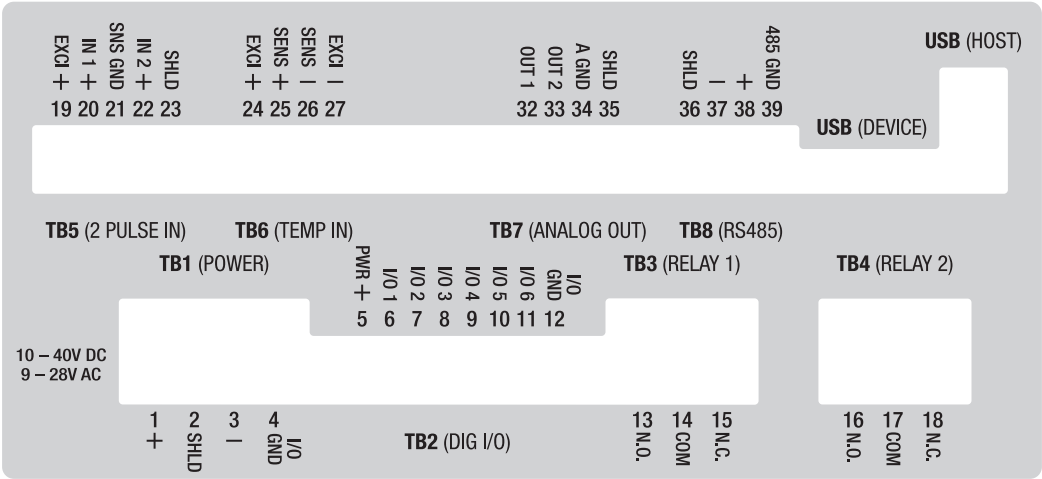


Figure 2: FC-5000 Flow Computer back panel - dual pulse, temperature compensation

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