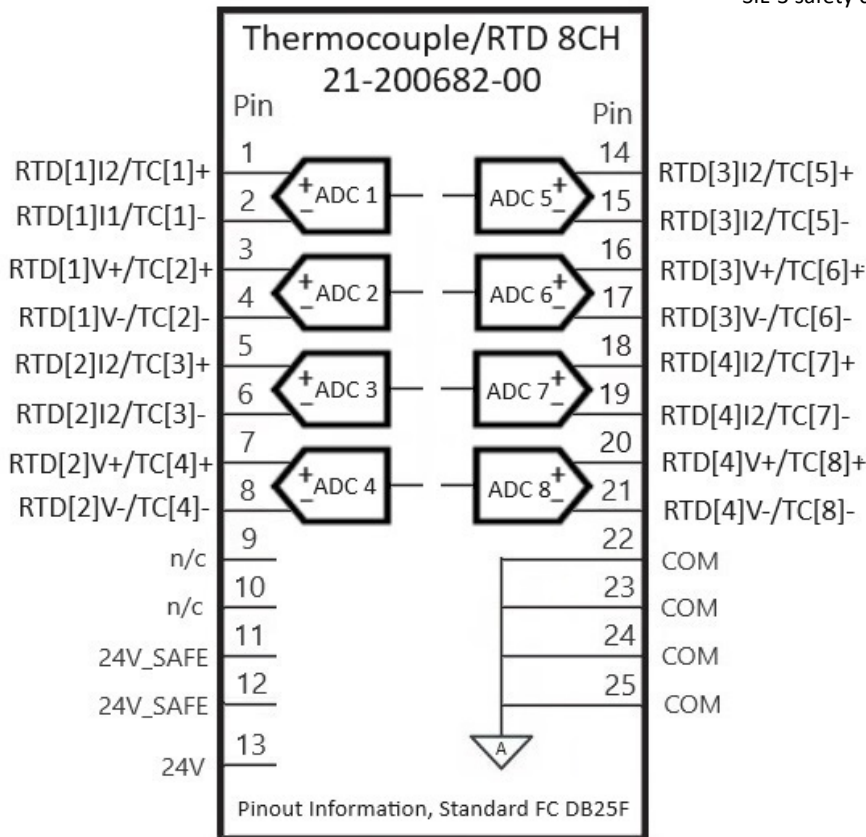




Description

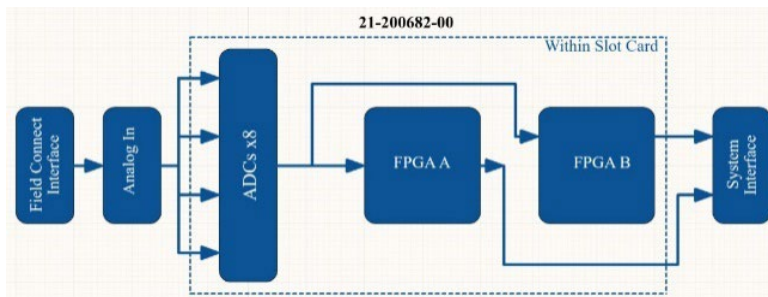
The SIL3-rated Analog Input slot card provides eight differential input channels with 16-bit resolution and supports B, E, J, K, N, R, S, and T type thermocouples as well as PT100 and PT1000 RTDs. The card supports either eight TCs or a mix of four RTDs and four TCs. In addition to TC and RTD based temperature measurements, the card also supports the following features:

- Configurable digital lowpass and notch filters
- Configurable Over/Under Temperature alarm levels; can be used to trigger interlocks
- Open circuit detection for thermocouples; can be used to trigger interlocks
- Sensor types, filter settings, over/under temp alarm levels configurable per channel
- SIL-3 safety certification per IEC61508 (pending)

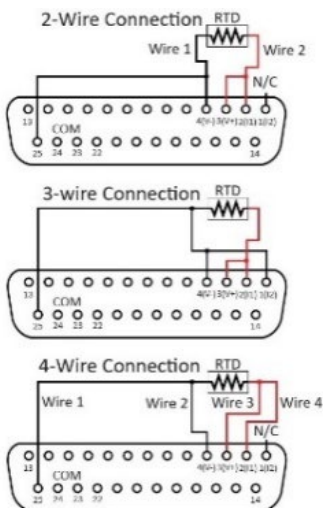


Specifications

Electrical	
Slot Card Type	Analog Input
No. of Channels	8
Input Type	Differential
Power Consumption	1.6W (typical)
Input Voltage Protection Limits	-15V to +24V
Thermocouple Sensors	
Supported Types	B, E, J, K, N, R, S, T
Cold Junction Sensor Support	External, +/- 2° C accuracy
Measurement Accuracy	+/- 8uV
Measurement Range	+/- 64mV
RTD Sensors	
Supported Types	PT100, P1000
Supported Wiring Types	2-Wire, 3-Wire, 4-Wire
Measurement Accuracy	± 2° C
Excitation Current	50µA
Measurement System	
Channel Configuration Options	8 channels: 8x TC 4 channels: 4x RTD 4 channels: RTD + TC
Sample Rate	8 ch: 250Hz 4 ch: 333 Hz
ADC Resolution	16 Bits
Input Impedance	5 MΩ
Environmental	
Operating temp	0°C to 55°C
Storage temp	-40°C to 85°C
Relative Humidity, operating	10% to 90%, non-condensing
Certifications and Standards	
*SIL-3 per IEC61508 pending	



Pinout Standard Field Connect			
DSUB pin	Function	DSUB pin	Function
1	RTD[1]I2/TC[1]+	14	RTD[3]I2/TC[5]+
2	RTD[1]I1/TC[1]-	15	RTD[3]I1/TC[5]-
3	RTD[1]V+/TC[2]+	16	RTD[3]V+/TC[6]+
4	RTD[1]V-/TC[2]-	17	RTD[3]V-/TC[6]-
5	RTD[2]I2/TC[3]+	18	RTD[4]I2/TC[7]+
6	RTD[2]I1/TC[3]-	19	RTD[4]I1/TC[7]-
7	RTD[2]V+/TC[4]+	20	RTD[4]V+/TC[8]+
8	RTD[2]V-/TC[4]-	21	RTD[4]V-/TC[8]-
9	n/c	22	COM
10	n/c	23	COM
11	24V_SAFE	24	COM
12	24V_SAFE	25	COM
13	24V		



Not Customer Configurable

Factory Configuration A

Thermocouples	8
RTDs	0

Factory Configuration B

Thermocouples	3
RTDs	1

Factory Configuration C

Thermocouples	2
RTDs	2

Factory Configuration D

Thermocouples	1
RTDs	3

Factory Configuration E

Thermocouples	0
RTDs	4

If an RTD is added to the configurations, the total number of TCs and RTDs is limited to four.