3.14 PRTD Resistance Temperature Device Input Module

The following I/O pack and terminal board combinations are approved for use in hazardous locations:

- RTD input pack **IS220PRTDH1A** or **IS220PRTDH1B** with terminal board **IS200TRTDH2D**, **IS200SRTDH1A**, or **IS200SRTDH2A**
- Coated RTD input pack **IS221PRTDH1B** with terminal board **IS201TRTDH2D**, **IS201SRTDH1A**, or **IS201SRTDH2A**

3.14.1 Electrical Ratings

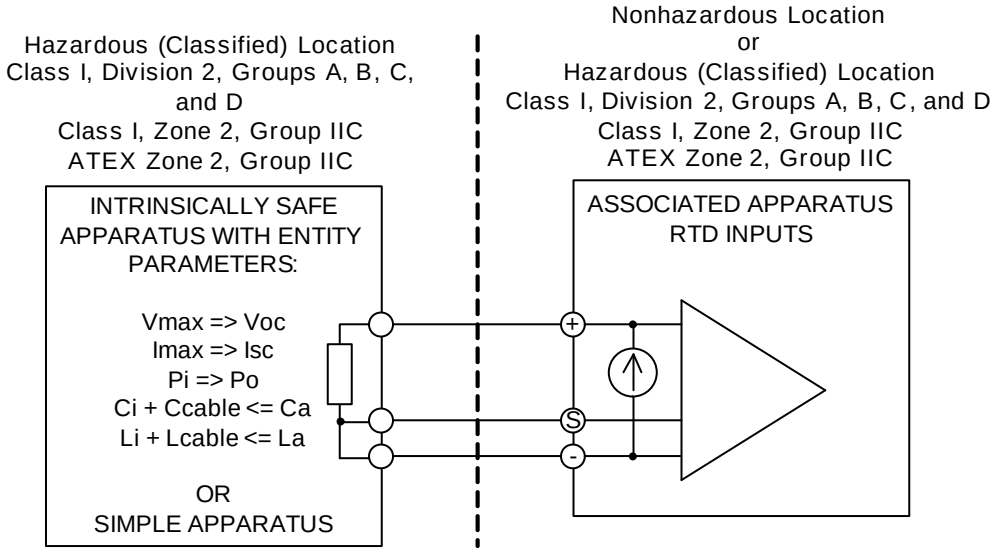
Item	Min	Nominal	Max	Units
Power Supply				
Voltage	27.4	28.0	28.6	V
Current	—	—	0.24	A
RTD Inputs				
Voltage	0	—	4.2	V
Current	—	10.0	—	mA

3.14.2 Field Wire Connections

Terminal Board	Terminal Block Type
SRTD	Refer to the table *Euro Style Box-type Terminal Blocks* for wire size and screw torques.
TRTD	Refer to the table *Barrier-type Terminal Blocks* for wire size and screw torques.

3.14.3 Intrinsic Safety “ic”

Wiring Diagram



Entity Parameters

RTD Inputs	Value	Unit
Voc or Uo	15	V
Isc or Io	10	mA
Po	0.15	W
Ca or Co	3	uF
La or Lo	100	mH

***Note** 1.* This associated apparatus may also be connected to simple apparatus as defined in Article 504.2 and installed and temperature classified in accordance with Article 504.10(B) of the National Electrical Code (ANSI/NFPA 70), or other local codes, as applicable.

***Note** 2.* Only resistive simple apparatus (such as RTDs) shall be connected to RTD inputs.

***Note** 3.* Each cable used to connect the simple apparatus must have suitable insulation as required by the applicable local electrical codes.

***Note** 4.* Signal terminal (S) may be grounded.

***Note** 5.* The maximum cable length connecting each RTD to the device shall not exceed 1000 ft.

Field Terminals

Accessory TB	Name	(+) Terminal	Name	(S) Terminal	Name	(-)Terminal
SCLS or TRTD	RTDEXC1	TB1.1	RTDSIG1	TB1.2	RTDRET1	TB1.3
	RTDEXC2	TB1.4	RTDSIG2	TB1.5	RTDRET2	TB1.6
	RTDEXC3	TB1.7	RTDSIG3	TB1.8	RTDRET3	TB1.9
	RTDEXC4	TB1.10	RTDSIG4	TB1.11	RTDRET4	TB1.12
	RTDEXC5	TB1.13	RTDSIG5	TB1.14	RTDRET5	TB1.15
	RTDEXC6	TB1.16	RTDSIG6	TB1.17	RTDRET6	TB1.18
	RTDEXC7	TB1.19	RTDSIG7	TB1.20	RTDRET7	TB1.21
	RTDEXC8	TB1.22	RTDSIG8	TB1.23	RTDRET8	TB1.24
TRTD	RTDEXC9	TB2.25	RTDSIG9	TB2.26	RTDRET9	TB2.27
	RTDEXC10	TB2.28	RTDSIG10	TB2.29	RTDRET10	TB2.30
	RTDEXC11	TB2.31	RTDSIG11	TB2.32	RTDRET11	TB2.33
	RTDEXC12	TB2.34	RTDSIG12	TB2.35	RTDRET12	TB2.36
	RTDEXC13	TB2.37	RTDSIG13	TB2.38	RTDRET13	TB2.39
	RTDEXC14	TB2.40	RTDSIG14	TB2.41	RTDRET14	TB2.42
	RTDEXC15	TB2.43	RTDSIG15	TB2.44	RTDRET15	TB2.45
	RTDEXC16	TB2.46	RTDSIG16	TB2.47	RTDRET16	TB2.48

3.15 PSCA Serial Communications Module

The following I/O pack and terminal board combinations are approved for use in hazardous locations:

- Serial communication I/O pack **IS220PSCAH1A** or **IS220PSCAH1B** with accessory terminal board **IS200SSCAH1A** or **IS200SSCAH2A**
- Coated serial communication I/O pack **IS221PSCAH1B** with accessory terminal board **IS201SSCAH1A** or **IS201SSCAH2A**
- Serial communication I/O pack **IS42yPSCAH1B** with accessory terminal board **IS40ySSCAH1A** or **IS40ySSCAH2A** (where y = 0 or 1)

3.15.1 Electrical Ratings

Power Supply

Item	Min	Nominal	Max	Units
Voltage	PSCAH1B: 22.5 PSCAH1A: 27.4	PSCAH1B: 24.0 / 28.0 PSCAH1A: 28.0	28.6	V
Current	—	—	0.36	A

3.15.2 Field Wire Connections

For serial communication terminal boards (accessories) certified for HazLoc, refer to the table *Euro Style Box-type Terminal Blocks* for wire size and screw torques.

3.16 PSVO Servo Control Module

The following hardware combination is approved for use in hazardous locations:

- Servo control I/O pack **IS220PSVOH1A**
- Terminal board (accessory) **IS200TSVCH2A**
- Servo driver (accessory) **IS210WSVOH1A**

- Servo control I/O pack **IS220PSVOH1B**
- Terminal board (accessory) **IS200TSVCH2A**
- Servo driver (accessory) **IS410WSVOH1A**

3.16.1 Electrical Ratings

Item	Min	Nominal	Max	Units
Power Supply				
Voltage	27.4	28.0	28.6	V dc
Current	—	—	1.0	A dc
LVDT Inputs				
Voltage	—	—	7.14	V ac
Frequency	—	3.2	—	KHz
Speed Inputs				
Voltage	-15	—	15	V dc
LVDT Excitation Outputs				
Voltage	6.86	7.00	7.14	V ac
Current	—	—	127	mA ac
Frequency	3.0	3.2	3.4	KHz
Servo Outputs				
Voltage	-10	—	10	V dc
Current	-120	—	120	mA dc
Speed Sensor Power Output				
Voltage	22.8	24.0	25.2	V dc
Current	—	40	—	mA dc

3.16.2 Field Wire Connections

For servo control terminal boards (accessories) certified for HazLoc, refer to the table *Euro Style Box-type Terminal Blocks* for wire size and screw torques.

The servo outputs require a minimum resistive load of 27 Ω (TSVO Req + external Rcoil) to operate as intrinsically safe.