7.7. ANALOGUE INPUT MODULES

There are three different analogue input modules - the AI2, the AI3 and the AI4. These are supported by a number of terminal units, each optimised for different input sensors.

All these modules and channels function the same way and with similar channel parameters, differing only in electrical interface options and characteristics.

Note that some terminal units exclude certain input ranges, and it is possible to configure the AI module to an unsupported range. Care should be taken to ensure that only relevant ranges are configured.

For module specification see Appendix A.

7.7.1. AI2 Isolation Barriers

Isolation channel-channel:	Functional (basic insulation), 264Vac max
Isolation to system:	Reinforced (double insulation), 264Vac max

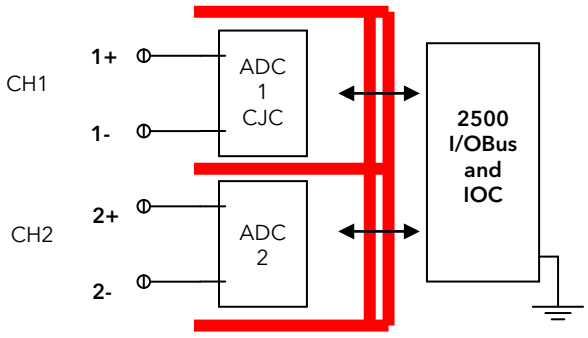


Figure 7-10: AI2 Isolation Barriers

7.7.2. AI2 Analogue Input Equivalent Circuits

The equivalent circuits below show details of analogue inputs, in particular sensor break circuits.

Thermocouple Input

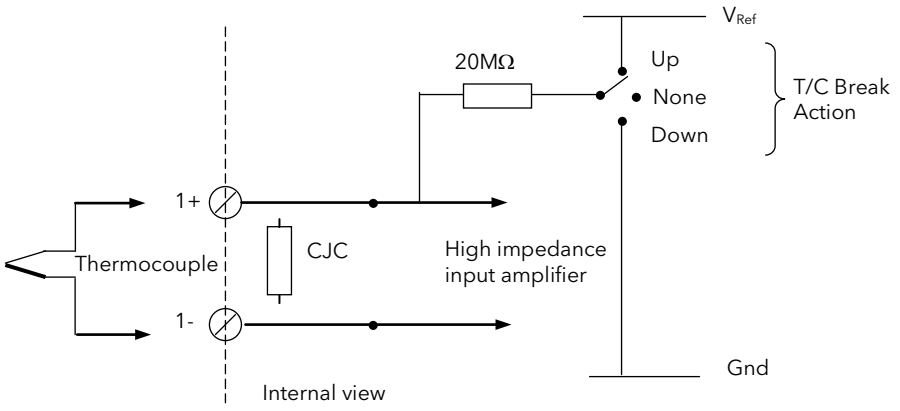


Figure 7-11: Thermocouple Input

3-Wire PRT Input

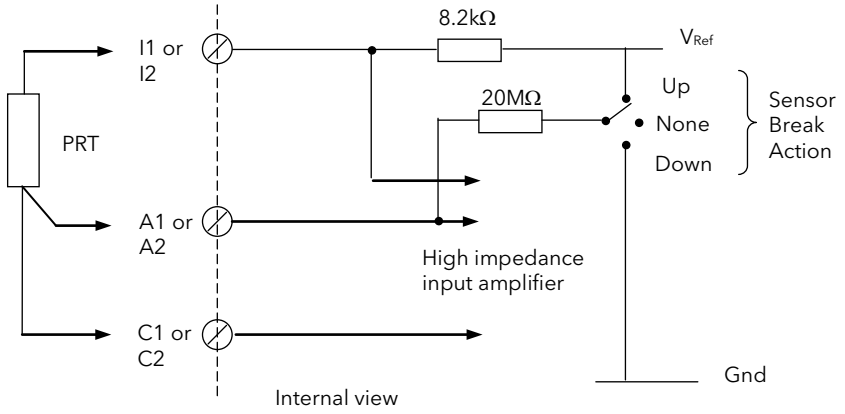


Figure 7-12: 3-Wire PRT Input

4-Wire PRT Input

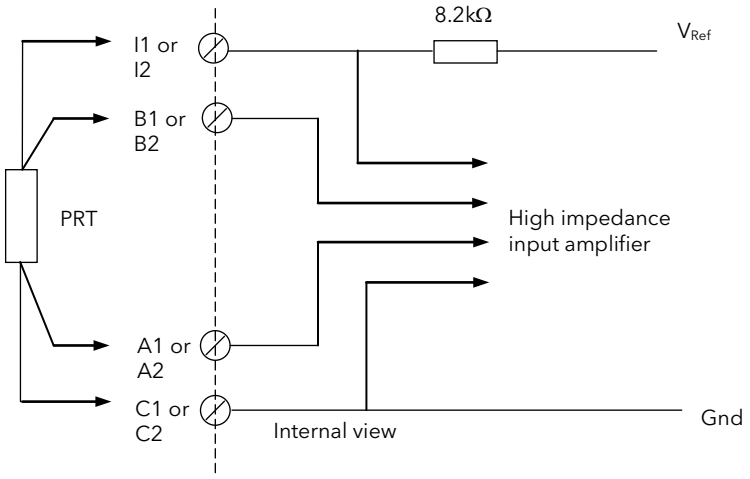


Figure 7-13: 4-Wire PRT Input

Pot Input

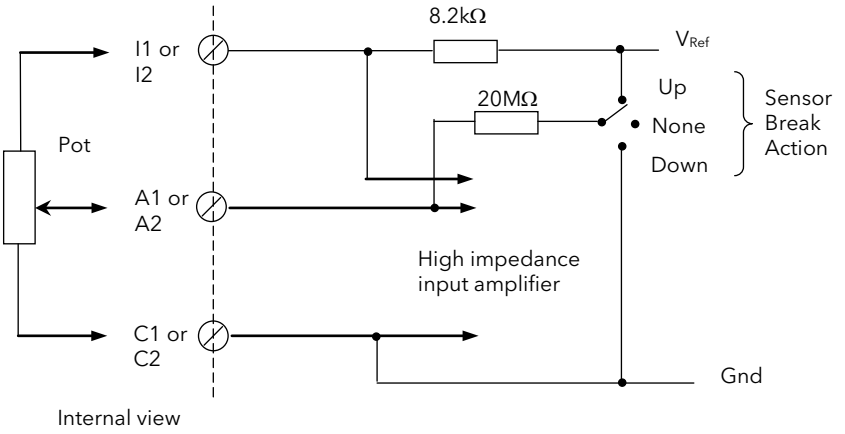


Figure 7-14: Pot Input

Milli-Volt Input

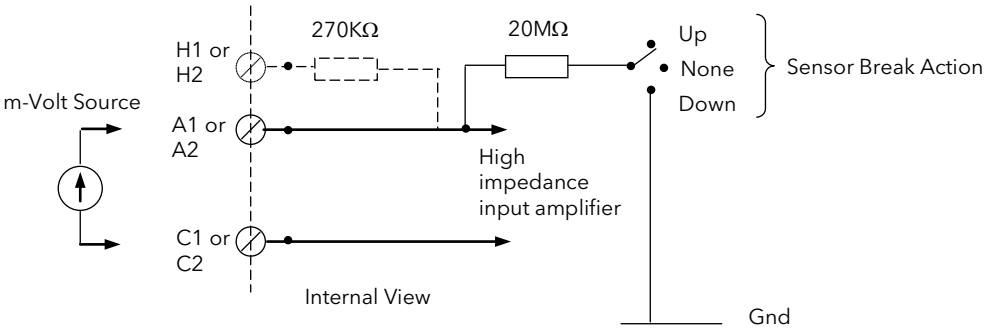


Figure 7-15: mV Input

Volts Input

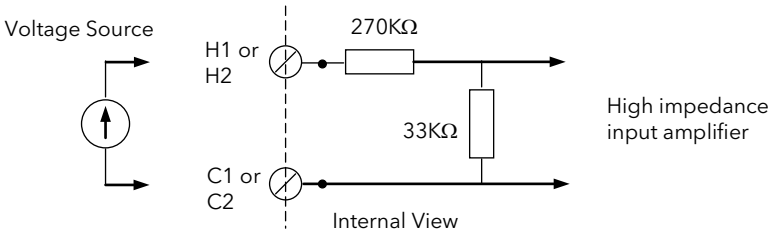


Figure 7-16: Volts Input

Milli-Amp Input

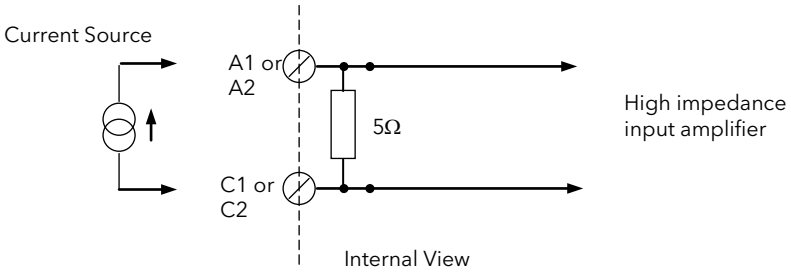


Figure 7-17: mA Input

7.7.3. AI2 Terminal Connections

Thermocouple

The dual TC AI2 Terminal Unit provides 4 screw terminals for channel wiring:

1+	1-	2+	2-

Other AI2 Terminals

Other AI2 Terminal Unit provides 12 screw terminals for channel wiring:

H1	B1	H2	B2
I1	D1	I2	D2
A1	C1	A2	C2