VAISALA SERIAL WIND TRANSMITTER WAC155

Operating power voltage	9 ... 15.5 VDC
Operating power consumption	8 mA typical, 50mA with power-save mode disabled
Heating power voltage	16 ... 24 VAC or VDC
	32 ... 48 VAC or VDC (only when connected in series to both sensors)
Heating power consumption	500 mA per sensor
Output signals	RS-485 serial bus
Signal cable	4 wires minimum: VIN+, VIN-, RS-485 A(-), RS-485 B(+)

> **WARNING**   Make sure that you connect only de-energized wires.
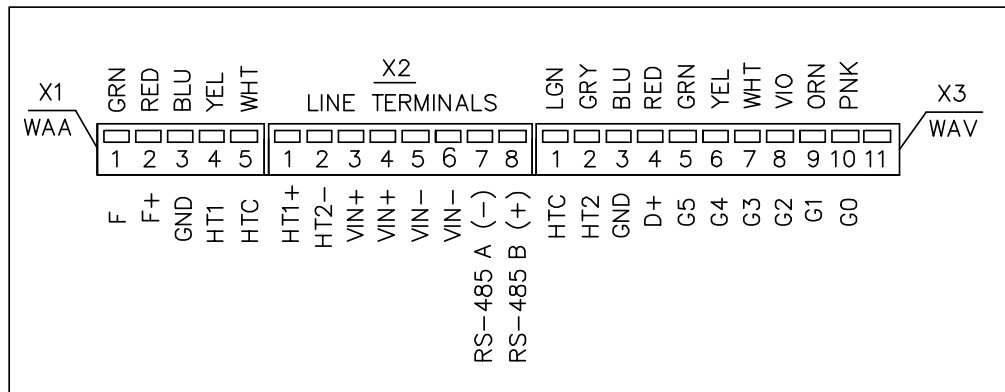
I/O connector pinout

Figure 1   I/O Connectors on the WAC155 component board

Table 1 Anemometer Connector (X1) Pinout

Pin	Signal	Description
1	F	Pulse input from sensor
2	F+	Supply voltage output to sensor
3	GND	Sensor ground
4	HT1	Heating supply-1 from connector X2
5	HTC	Heating common for heater serial connection

Table 2 Power/Control Connector (X2) Pinout

Pin	Signal	Description
1	HT1+	Heating supply-1 input
2	HT2-	Heating supply-2 input
3	Vin+	Supply voltage input
4	Vin+	Supply voltage input
5	Vin-	Ground
6	Vin-	Ground
7	RS-485 A (-)	RS-485 inverting I/O
8	RS-485 B (+)	RS-485 noninverting I/O

Table 3 Wind Direction Sensor Connector (X3) Pinout

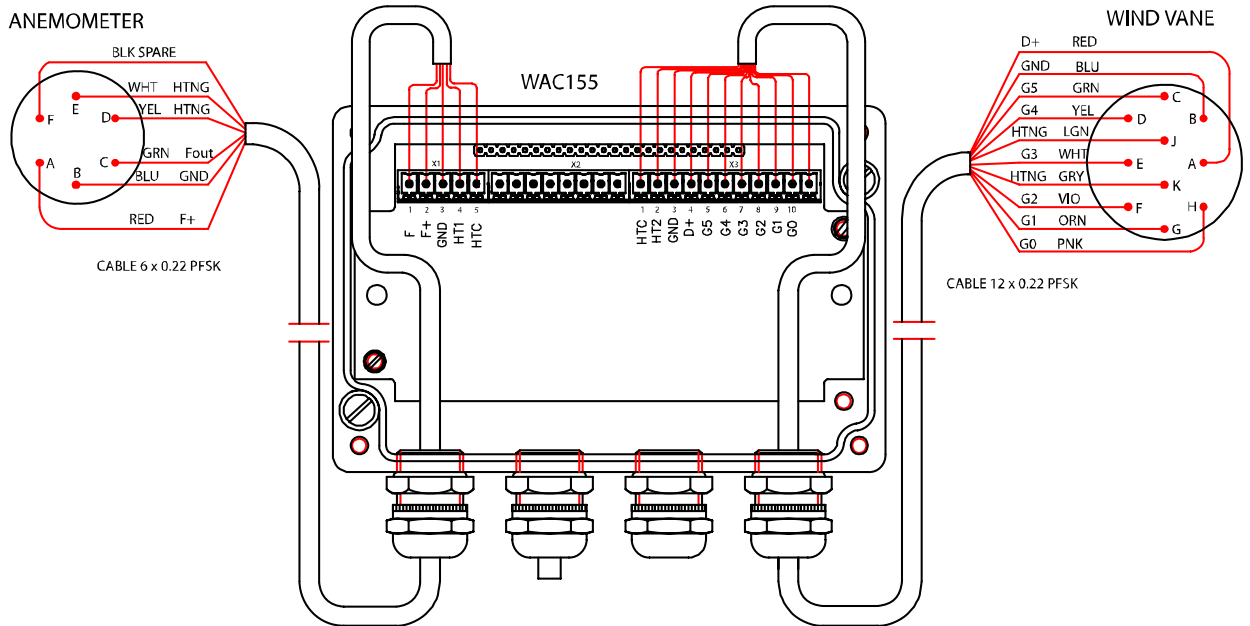| Pin	Signal	Description
1	HTC	Heating common for heater serial connection
2	HT2	Heating supply-2 from connector X2
3	GND	Sensor ground
4	D+	Supply voltage output to sensor
5	G5	Gray code input bit-5
6	G4	Gray code input bit-4
7	G3	Gray code input bit-3
8	G2	Gray code input bit-2
9	G1	Gray code input bit-1
10	G0	Gray code input bit-0
11	n.c.	Not connected

Sensor wiring

Figure 2   Sensor wiring

Refer to the User's Guide for additional wiring options and examples.
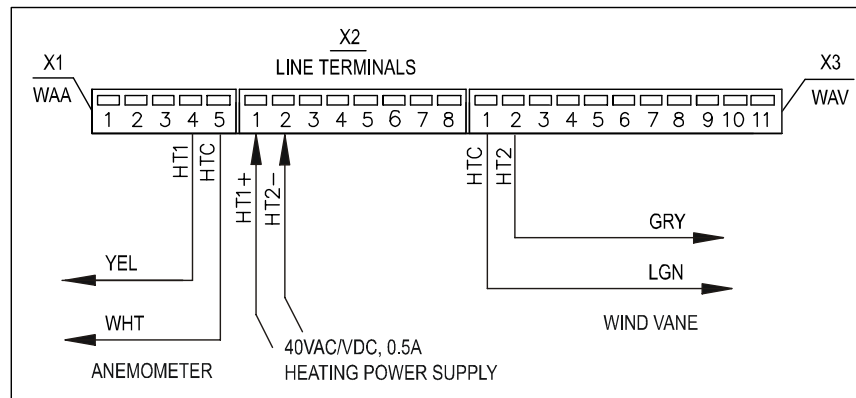
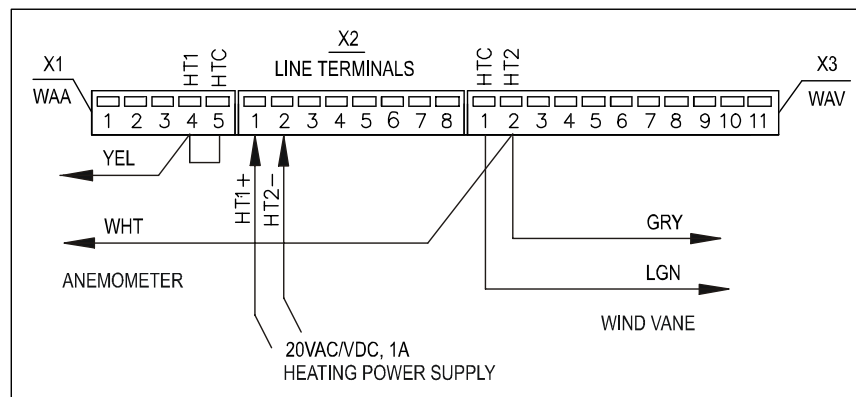# Heating power connection (optional)

Figure 3   Connection for 40 V heating power

Figure 4   Connection for 20 V heating power