

Electrical connections

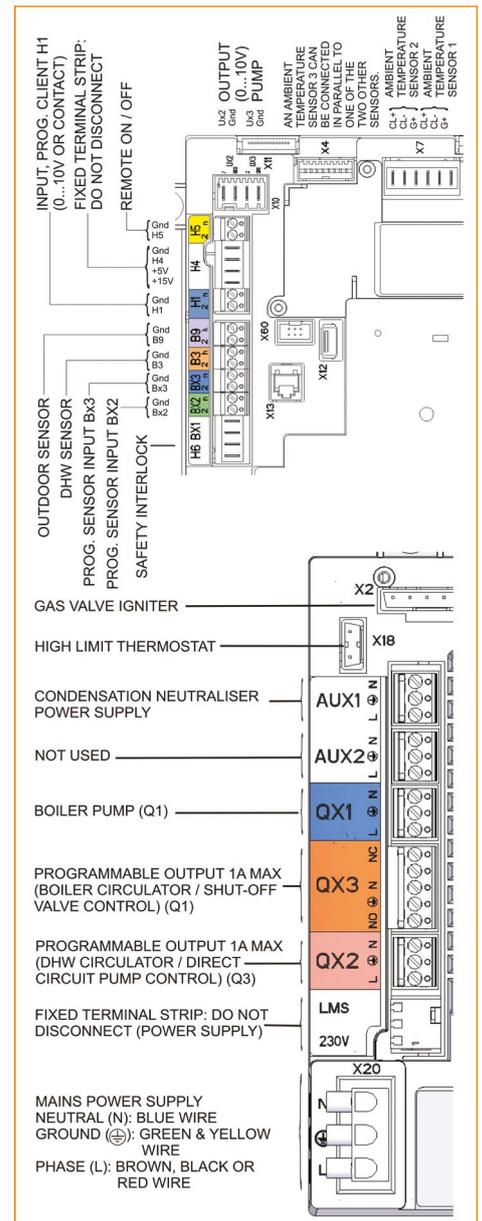
Connections to boiler

Low voltage connections

Terminal reference	Function	Electrical	Max load
H5	Remote On/Off (vfc switch)	24V DC	
H4	Not for customer use		
H1	Programmable input for: 1. 0-10V analog signal 2. Remote enable switch/time clock (vfc switch)	0-10V 24V DC	
B9	Input for outside air temperature sensor	Resistance input	
B3	Programmable input for DHW temperature: 1. QAZ36 DHW sensor kit input 2. Mechanical thermostat input (vfc switch)	Resistance input 24V DC	
BX3	Programmable input - spare		
BX2	Programmable input for: 1. Common flow sensor for master/slave sequence control (Master boiler only)	Resistance input	
BX1	Not for customer use		
H6	Safety interlock	5V DC	

High voltage connections

Terminal reference	Function	Electrical	Max load
AUX1	Power supply to condensate neutraliser where fitted	230v 50Hz 1Ph	1 Amp
AUX2	Power supply to optional controls kit for: 1. Optional volt free contacts (run and fault signal) 2. Optional heating circuit control kits	230v 50Hz 1Ph	
QX1	Programmable power supply for either: 1. Alarm - common fault 2. Non-Hamworthy boiler shunt pump/circulator	230v 50Hz 1Ph	1 Amp
QX3	Programmable power supply for either: 1. Boiler shut off valve 2. Non-Hamworthy boiler shunt pump/circulator 3. Direct uncompensated heating circuit pump	230v 50Hz 1Ph	
QX2	Programmable power supply for either: 1. DHW pump/circulator 2. Direct uncompensated heating circuit pump	230v 50Hz 1Ph	
LMS 230V	Not for customer use		
L N E	Main power supply	230v 50Hz 1Ph	6.3 Amp



Electrical Connections

There are three dedicated electrical conduit connections at the rear left hand side of each boiler module to accept cables for power supply and controls. These conduits are routed through the casing to the control panel located at the front of the boiler. Cables carrying mains voltage (230V 50Hz 1Ph) for electrical supply and pump outputs should be routed via a separate conduit to low voltage cables serving sensors and enable circuits.

Power Supply

An independent isolator and fused electrical supply is recommended for each boiler module. Supply 230 volt, 50Hz, single phase. Wiring external to the boiler must be installed in accordance with IET Regulations and any local regulations which apply. Wiring must be completed in heat resistant 3 core cable, (size 1.0 mm² c.s.a.) Fascia fuse rating is 2 amp. External fuses should be 6 amp for all single boiler sizes. To prevent drawing excessive current (>1 amp) through the boiler control panel, it is recommended that pumps are connected via contactors.

