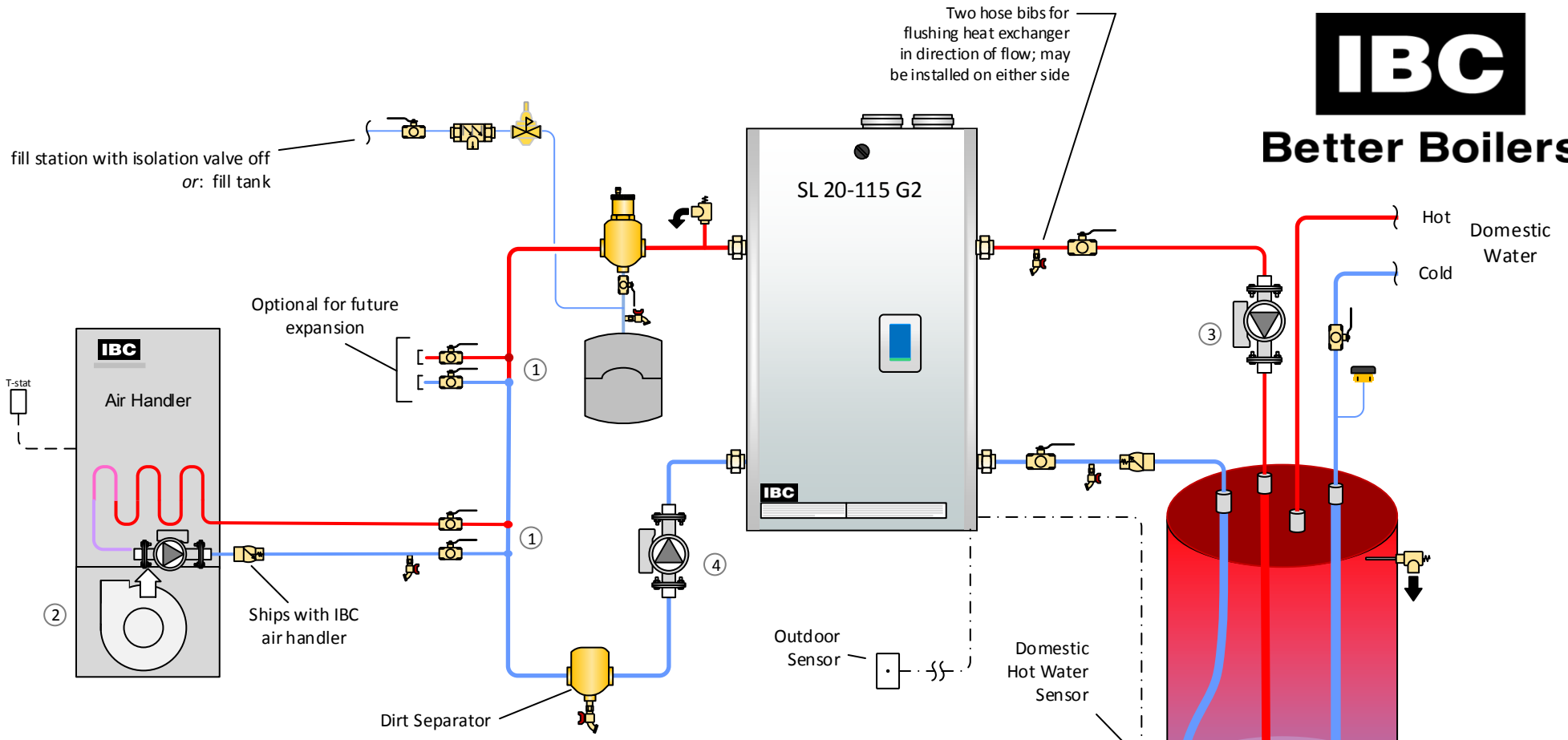




Better Boilers



Notes

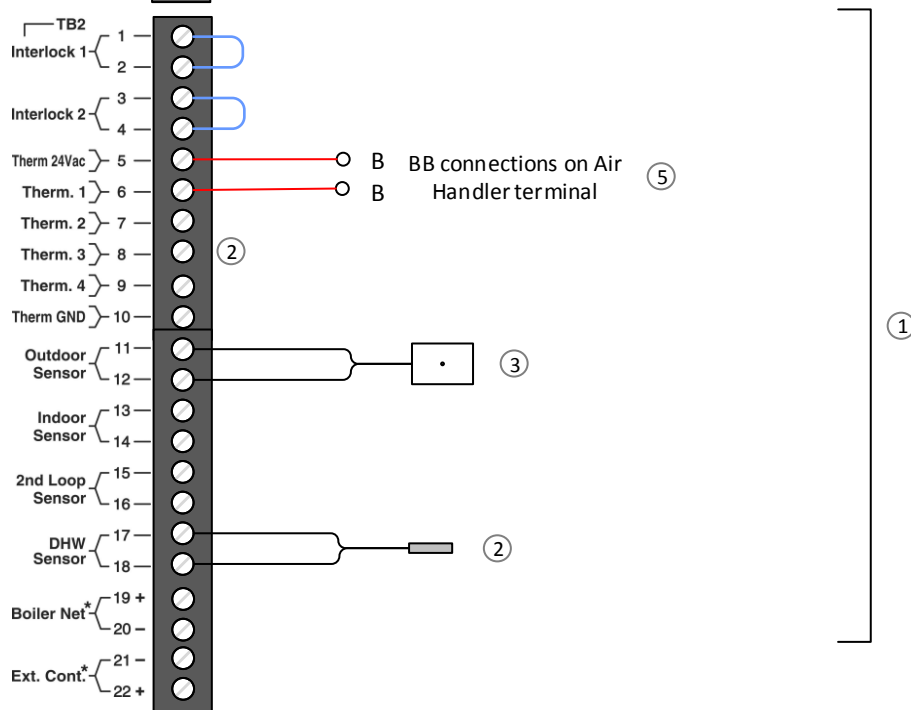
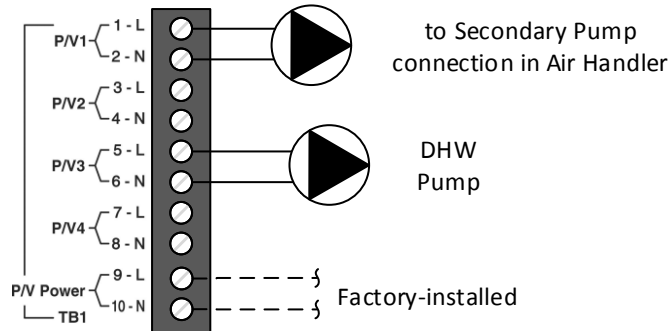
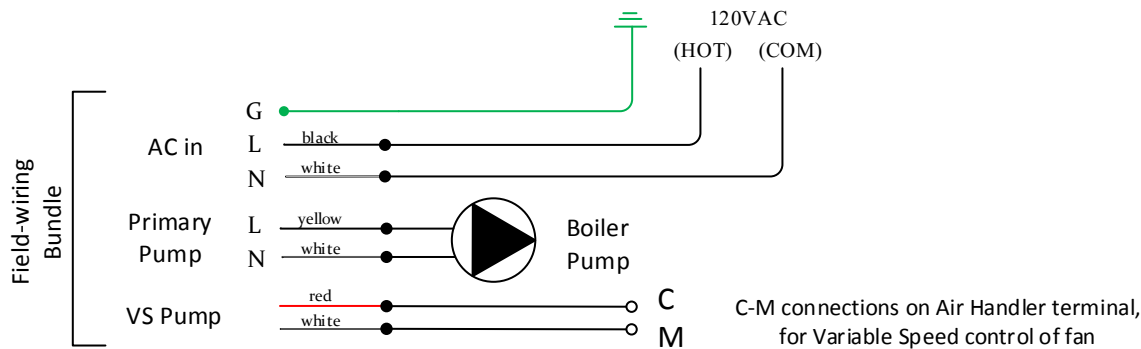
- Two-sided piping layout is reversible; DHW load can be on the right or on the left.
- ① - Closely spaced tees are maximum four primary circuit piping diameters apart, with a minimum of eight pipe diameters of straight tubing upstream of first tee and a minimum four pipe diameters straight tubing downstream of second tee.
- ② - IBC Air handler fan to be controlled by boiler's variable speed output. For systems with more than one type of heating emitter, see drawings detailing load pairing option, eg. 115 1.3.rfl
- ③ - Load is configured to turn the boiler pump off during priority domestic hot water operation; startup air removal may require temporary *Manual Pump Purge*.
- ④ -Boiler pump is UPS 15-58 or equivalent. Inlet and outlet connections 1" NPT. Note that if the air handler is positioned very near the boiler it may be possible to eliminate the need for a primary loop, provided that the supplied air handler pump can overcome the head loss of the air handler coil, the boiler heat exchanger, the boiler piping and all necessary components while maintaining the minimum flow through boiler of 2 gpm.

CAUTION: This drawing is a simple schematic guide to a successful installation. There may be many necessary components not shown here. We require that our boilers be installed by licensed and experienced trades people who are familiar with the applicable local and national codes. System design is to be completed by an experienced hydronic designer or Engineer. It is necessary to carefully read and follow the installation instructions that come with the boiler along with the application drawing that fits your system.

115 1.2.air	IBC SL 20-115 2 loads, air handler	
DRAWN BY	BRAD POULSEN	DATE 23/02/2015
DESCRIPTION Two-sided installation with DHW and IBC air handler with modulating fan. Domestic hot water receives priority operation. Space heating load on outdoor reset or setpoint.		
		PAGE 1 OF 2



Better Boilers



Wiring Notes

- ① – No external voltages to be applied to TB2 control terminal strip connections 1-20.
- ② – DHW sensor in indirect to terminals 17/18; if aquastat is used connect instead to terminals 5/8, Therm 24V / Therm 3.
- ③ – Outdoor sensor installed on North exterior wall, exposed to actual outdoor air temperature.
- ④ – Pump circuits are fused for a total draw of 5A; maximum amperage draw of 4A is recommended.
- ⑤ – Thermostat wiring to air handler terminal strip (not shown).

Programming Notes

- A – Only for IBC model Air Handler: in *Installer Settings / System Settings / Site Settings* enter the window for *VS Output* and select *Load 1 Fan*.
- B – In *Main Menu / Express Setup* enter the *Design Outdoor Temperature* for your locality (available online, from wholesaler's heating department or IBC Tech Support).
- C – Still in *Express Setup*, select *Load 1* and set as *Reset Heating*. Define the emitter as *Air Handler*. Enter the desired *Design Supply* temperature, etc. and *Save*.
- D – Back in *Express Setup*, select *Load 3* and set as *DHW*. As this is a two-sided layout, set *Boiler Pump* to *Off*.

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115 1.2.air	IBC SL 20-115 2 loads, air handler	
DRAWN BY	DATE	
BRAD POULSEN	23/02/2015	
DESCRIPTION		
Two-sided installation with DHW and IBC air handler with modulating fan. Domestic hot water receives priority operation. Space heating load on Outdoor Reset.		
PAGE		2 OF 2