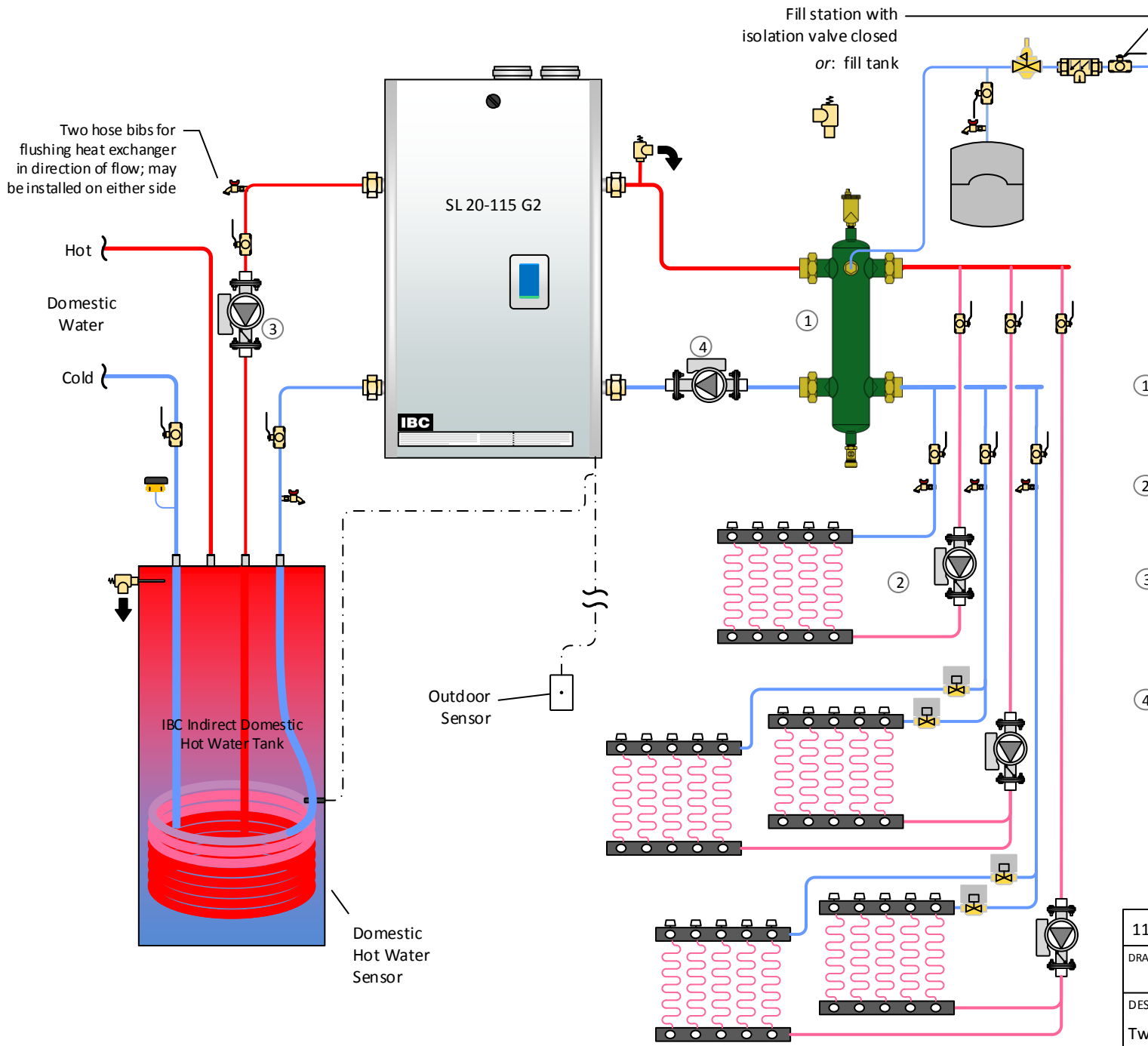




# Better Boilers



## Notes

- ① – Hydraulic Separator (Low Loss Header) uncouples flow through heat distribution system from flow through boiler, as well as providing air and dirt separation.
- ② – Boiler can supply a radiant floor temperature without a mixing valve; multiple pumps switched by boiler control using Zoning feature.
- ③ – DHW load receives priority operation. It is usually effective to use priority switching of loads between space heating and DHW (domestic hot water) because DHW can be met in a single short call.
- ④ – Boiler pump UPS 15-58 on speed 2, or equivalent. Inlet and outlet connections 1" NPT.

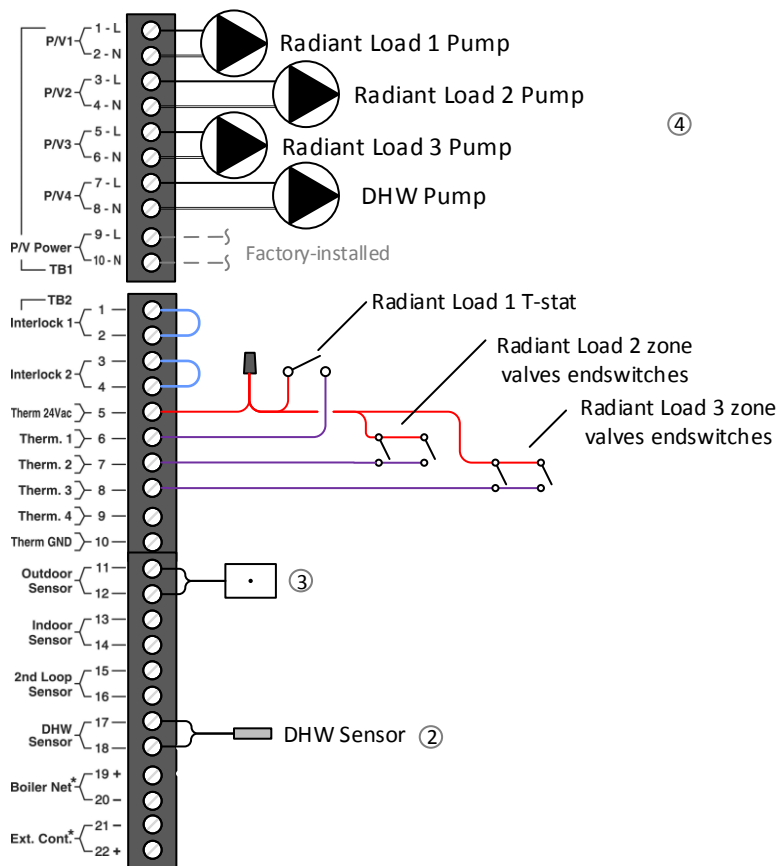
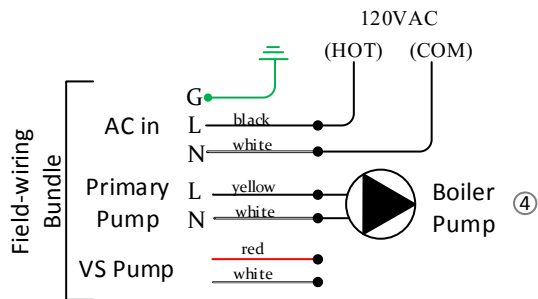
**CAUTION:** This drawing is a simple schematic guide to a successful installation. There may be many necessary components not shown here. We require that our boilers be installed by licensed and experienced trades people who are familiar with the applicable local and national codes. System design is 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.

115.1.2.2llh	IBC SL 20-115 2 loads low-loss header	
DRAWN BY	BRAD POULSEN	DATE 06/05/2015
DESCRIPTION Two-sided Installation with a low-loss header Domestic hot water receives priority operation. Space heating zoned by pump using boiler controller.		
	PAGE	1 OF 2

## Wiring Diagram



# Better Boilers



### Wiring Notes

- ① – No external voltages to be applied to TB2 control terminal strip connections 1-20.
- ② – DHW sensor from indirect tank to terminals 17 and 18; *if an aquastat is used connection will be to terminals 5 and 9 (Therm 4).*
- 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 recommended amperage draw is 4A per pump and 10A of simultaneous pump operation.

### Programming Notes

- Ⓐ – In *Main Menu / Installer Setup Menu*, change Load 1 from *Off to Reset Heating* (or *Set Point* or *External Control (requires DC signal)* if desired). Enter the temperature values desired, and *Save* the settings.
- Ⓑ – In *Installer Setup*, change Loads 2 and 3 from *Off to Zoned*. By selecting *Zone Of Load 1* Loads 2 and 3 will operate according to the settings of Load 1; all three loads can operate independently, or simultaneously as required.
- Ⓒ – For wiring as shown, the boiler's Loads 1-3 will serve the radiant floor, and Load 4 will serve Domestic Hot Water. Note other load configurations are possible, as long as *every Load number (1-4) is associated with a corresponding Therm. connection (1-4) and P/V pump connection (1-4).*
- Ⓓ – In *Installer Setup Menu*, under *4 DHW / Edit*, set *Boiler Pump to Off* (for 2-sided installation, where primary pump is not desired for DHW operation).

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 1.2.2lh	IBC SL 20-115 2 loads low-loss header		
DRAWN BY	BRAD POULSEN	DATE	13/06/2016
DESCRIPTION			
Two-sided Installation with a low-loss header Domestic hot water receives priority operation. Space heating zoned by pump using boiler controller.			
PAGE			2 OF 2