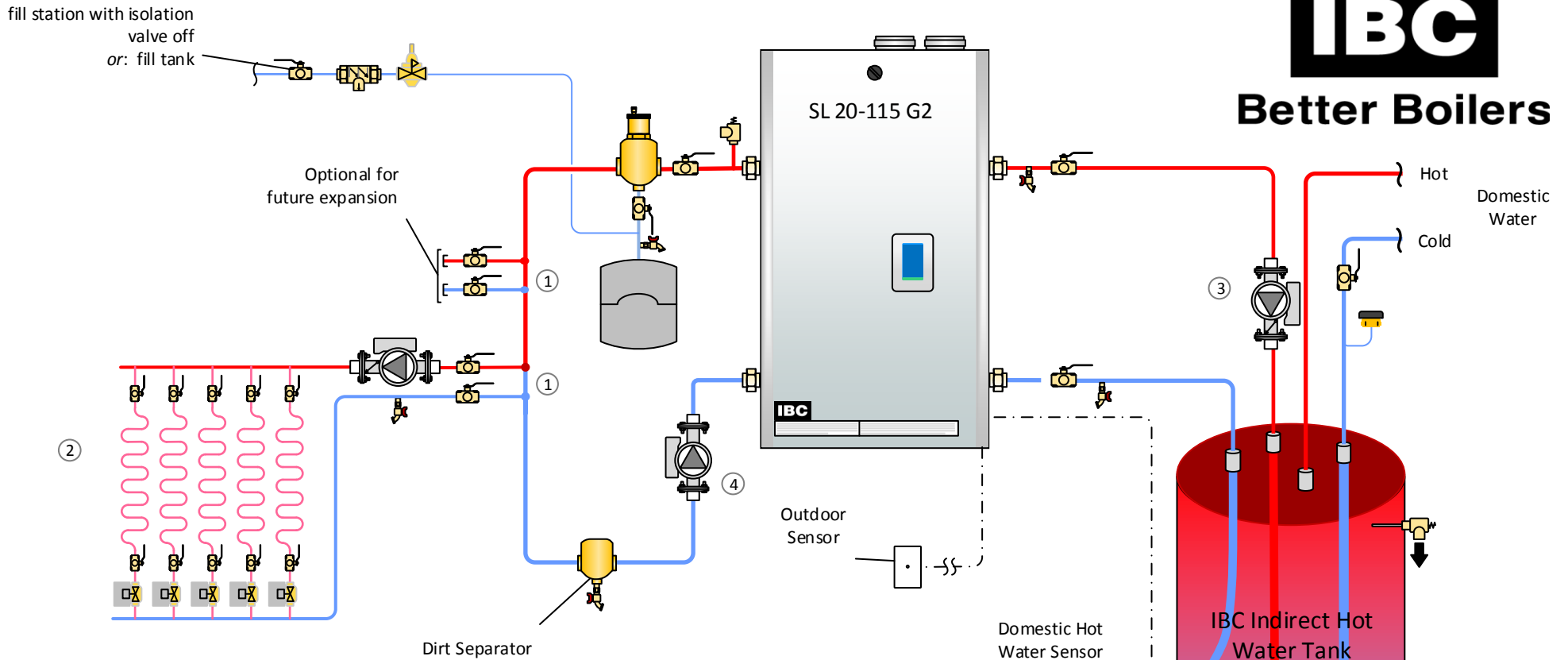




# Better Boilers



### Notes

- Two-sided installation is reversible; DHW load can be on right or 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 -Space heating will be paused during DHW call. If two temperatures of space heating emitters are used see drawing 115 1.3.rfl detailing load pairing option.
- ③ - When using two-sides piping option, DHW Load is configured for *Boiler Pump* to turn *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; minimum flow is 2 gpm; inlet and outlet piping is 1" NPT.

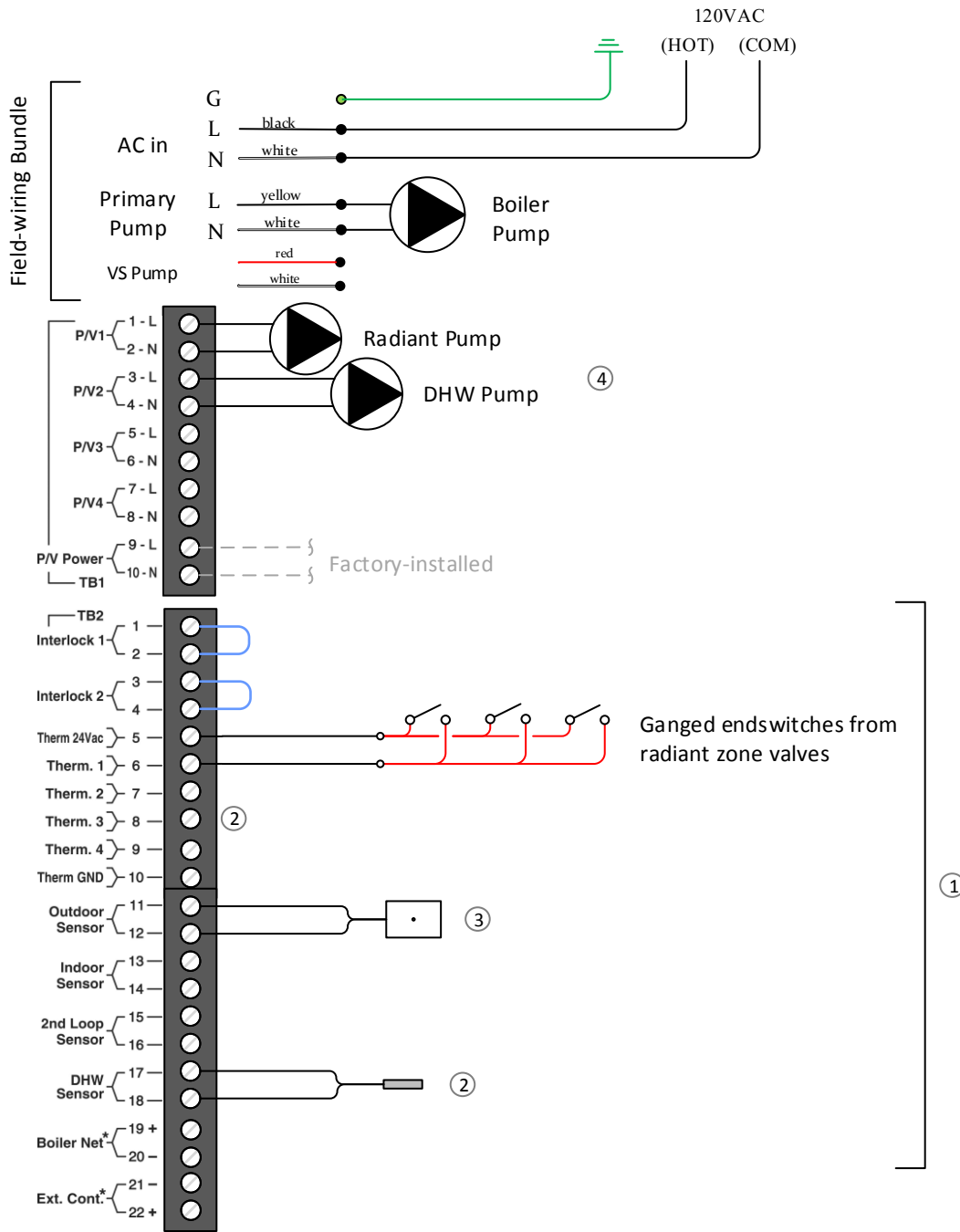
CAUTION: This drawing is a simple schematic guide to a successful installation. There may be many necessary components not shown here. We require that our boilers be installed by licensed and experienced trades people who are familiar with the applicable local and national codes. System design is to 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.rad	IBC SL 20-115 2 loads radiant	
DRAWN BY	BRAD POULSEN	DATE 11/09/2015
DESCRIPTION Two-sided installation with two loads. Domestic hot water gets priority operation. One space heating load operates by outdoor reset or on setpoint.		
		PAGE 1 OF 2



# Better Boilers

## Wiring Diagram



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.

### 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 7 (Therm 2).
- 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.

– Note that many other Therm. and P/V connections are possible, as long as the number (1-4) of the Therm. connection agrees with the number of the P/V (pump) connection and with the load (1-4) that the installer chooses for that number.

### Programming Notes

- ① – In *Express Setup* Menu set Load 1 to *Set Point* or *Reset Heating* as desired. If using *Reset Heating*, confirm that Outdoor Sensor is installed and enter the *Design Outdoor Temperature* for the installation locale, available from your wholesaler heating department, online or IBC Tech Support. The *Design Supply Temperature* will be the water temperature delivered when the outdoor temperature has dropped to design temperature.
- ② – In *Express Setup* Menu set Load 2 to *DHW*, and for this load only set *Boiler Pump* to *Off*. If using a DHW sensor adjust *Tank Setpoint* if desired (common value is 125°F / 52°C).

115 1.2.rad	IBC SL 20-115 2 loads radiant	
DRAWN BY	DATE	
BRAD POULSEN	11/09/2015	
DESCRIPTION		
Two-sided installation with two loads. Domestic hot water gets priority operation. One space heating load operates by outdoor reset or on setpoint.		
PAGE		2 OF 2