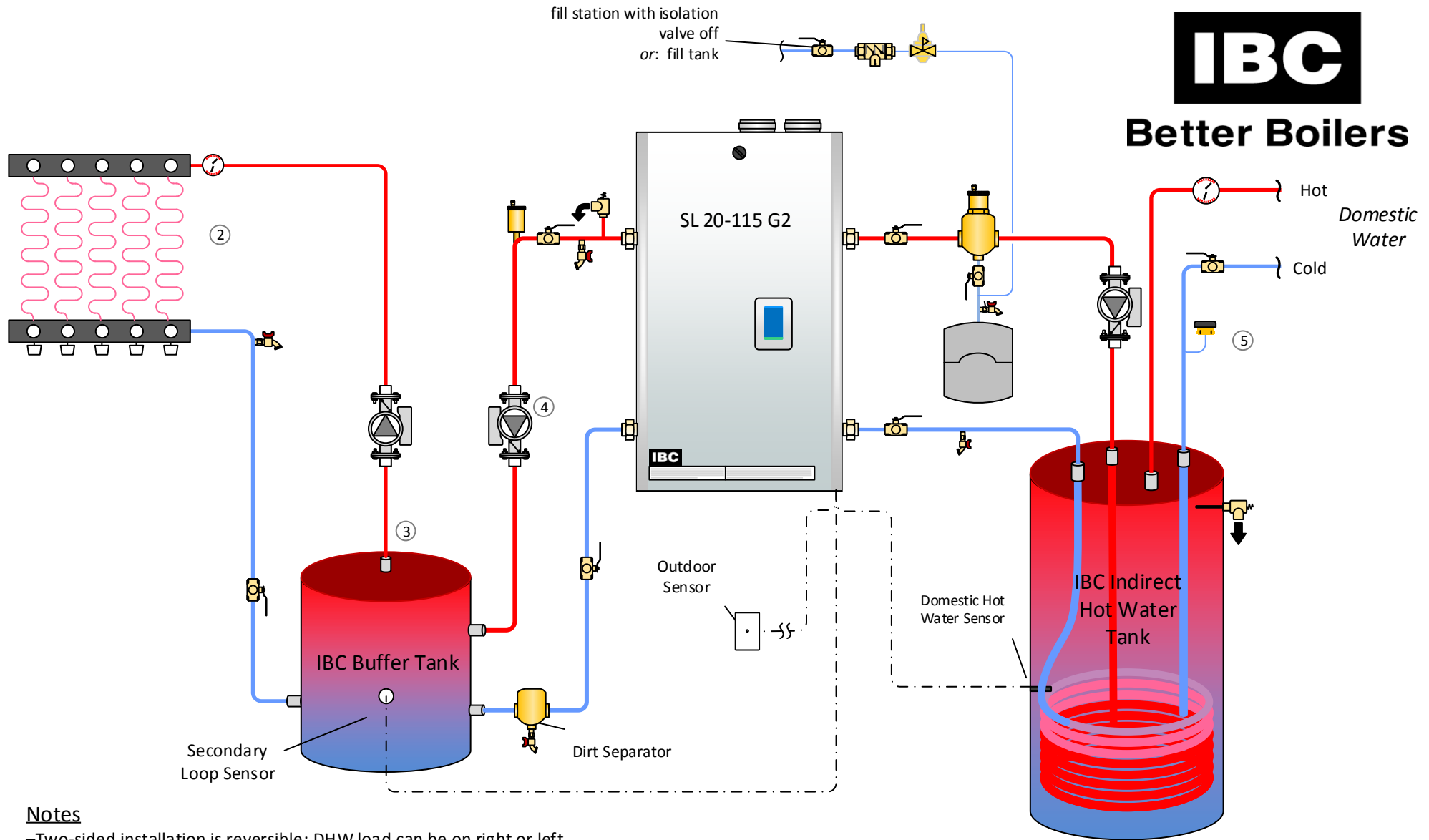




Better Boilers



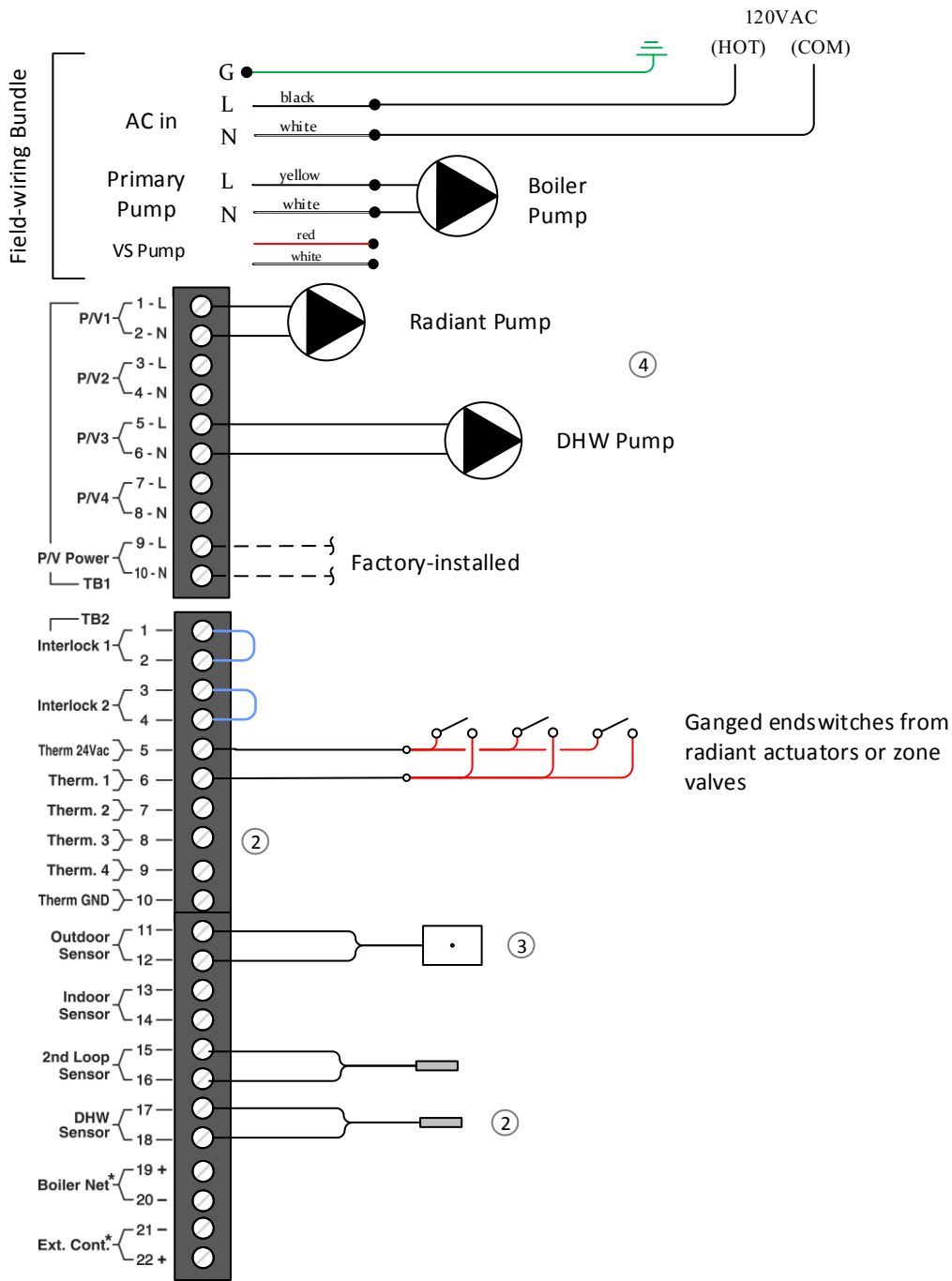
Notes

–Two-sided installation is reversible; DHW load can be on right or left.

- ① – When using two-sides piping option, DHW Load is configured for *Boiler Pump* to turn *Off* during domestic hot water operation; startup air removal may require temporary *Manual Pump Purge*.
- ② – Space heating will be paused during DHW call. If two loads of space heating are used see drawing *115 1.3.rfl* detailing load pairing option.
- ③ – Buffer tank prevents short-cycling of the radiant load and acts as a hydraulic separator
- ④ – Boiler pump is UPS 15-58 or equivalent; minimum flow is 2 gpm; inlet and outlet piping is 1" NPT.
- ⑤ – Vacuum relief valve on domestic line; thermal expansion tank on domestic hot water also recommended.

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.bufR1 | IBC SL 20-115 2 loads w/ buffer tank |
| DRAWN BY BRAD POULSEN | DATE 19/03/2015 |
| DESCRIPTION Two-sided installation with two loads. Domestic hot water gets priority operation. Radiant load with buffer tank operates by outdoor reset or on setpoint. | |
| 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 8 (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.

Programming Notes

- A – Any Load can be given any type of function (e.g. *DHW, Reset Heating*, etc.), but in regards wiring the Load number must agree with the control *Therm.* number, and with the *P/V* (pump) number.
- B – In *Installer Settings* Menu set Load 1 to *Reset Heating* or *Set Point* as desired. Change *Water ° From* to *Sec. Loop*. Set *Pump Purge Time* to 0 seconds.
- C – Set Load 3 to *DHW*, and for this load only set *Boiler Pump* to *Off*.

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.buf | IBC SL 20-115 2 loads w/ buffer tank | |
| DRAWN BY | DATE | |
| BRAD POULSEN | 19/03/2015 | |
| DESCRIPTION | | |
| Two-sided installation with two loads. Domestic hot water gets priority operation. Radiant load with buffer tank operates by outdoor reset or on setpoint. | | |
| PAGE | | 2 OF 2 |