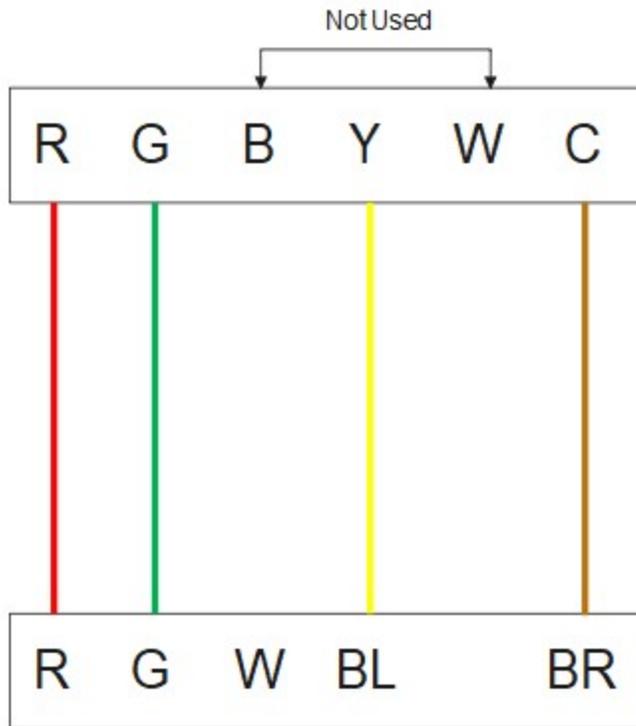


This packet contains the thermostat wiring diagrams and other important wiring schematics for the Marine AC units. For further assistance please contact Freedom Medical and Marine Solutions.

Marine Unit Thermostat Wiring (Honeywell Thermostat)

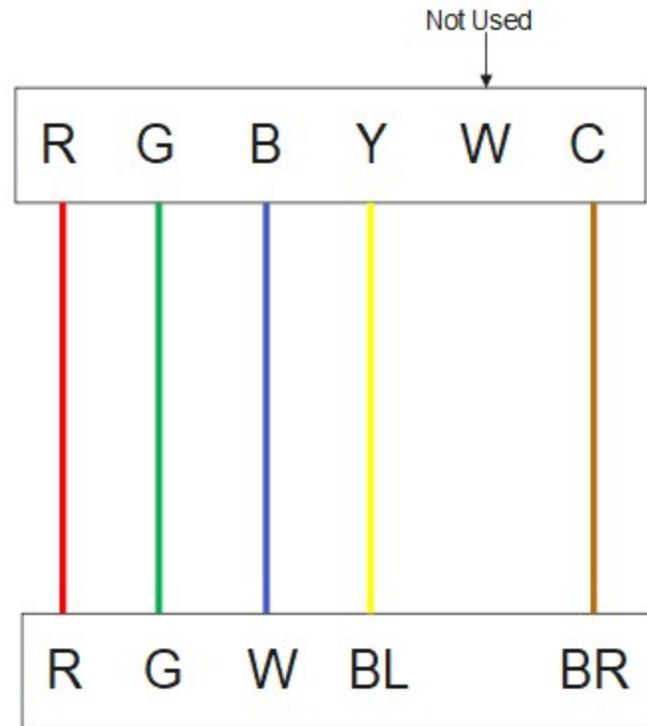
Cool Only



R-R
G-G
Y-BL
C-BR

Thermostat

Reverse Cycle



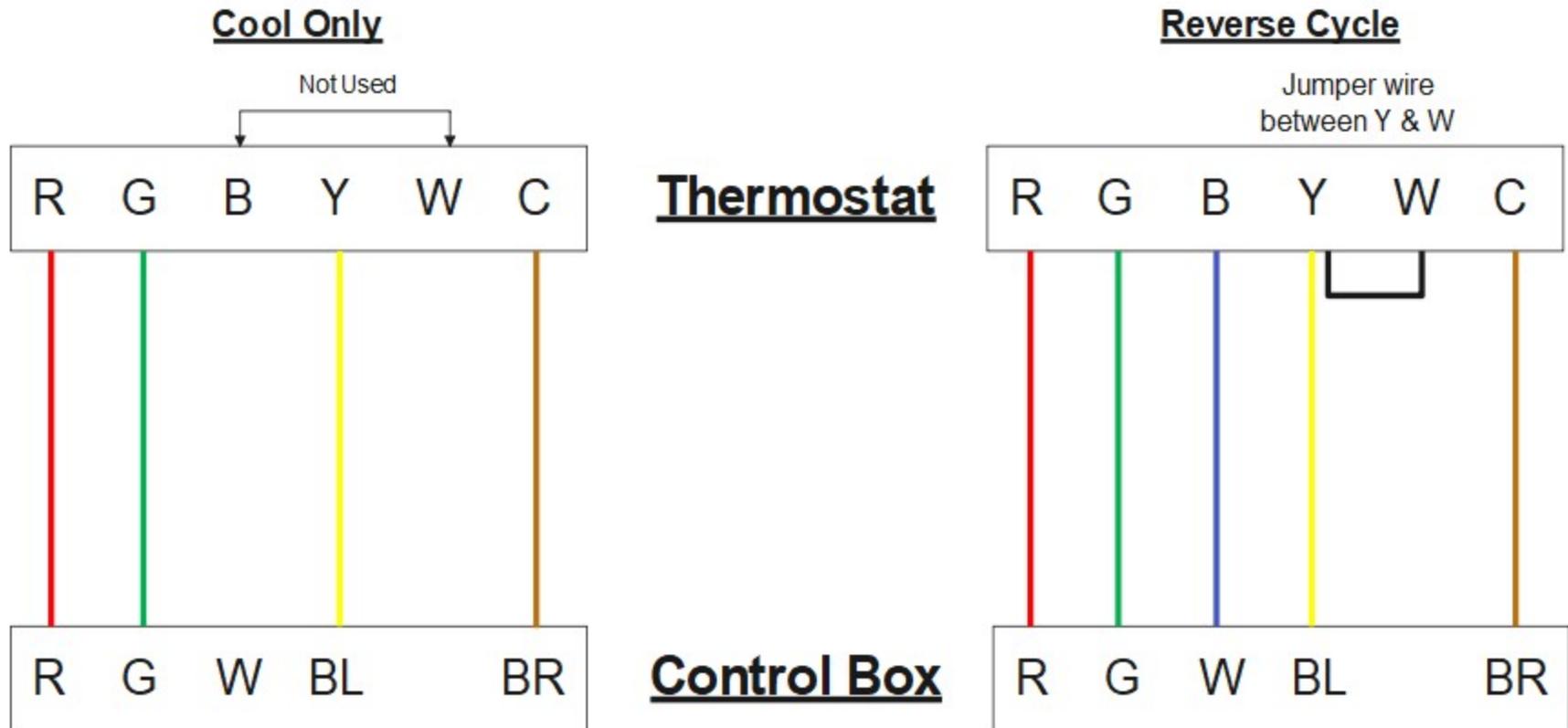
R-R
G-G
B-W
Y-BL
C-BR

Control Box

Notes:

- C/BR is an optional wire and not all thermostats will require it or have the terminal available. This wire is required for WFI/Smart thermostats. See thermostat user manual for more information
- For reverse cycle thermostat has to be setup to run in heat pump mode. See included installation manual for thermostat setup

Marine Unit Thermostat Wiring (Luxpro Thermostat)



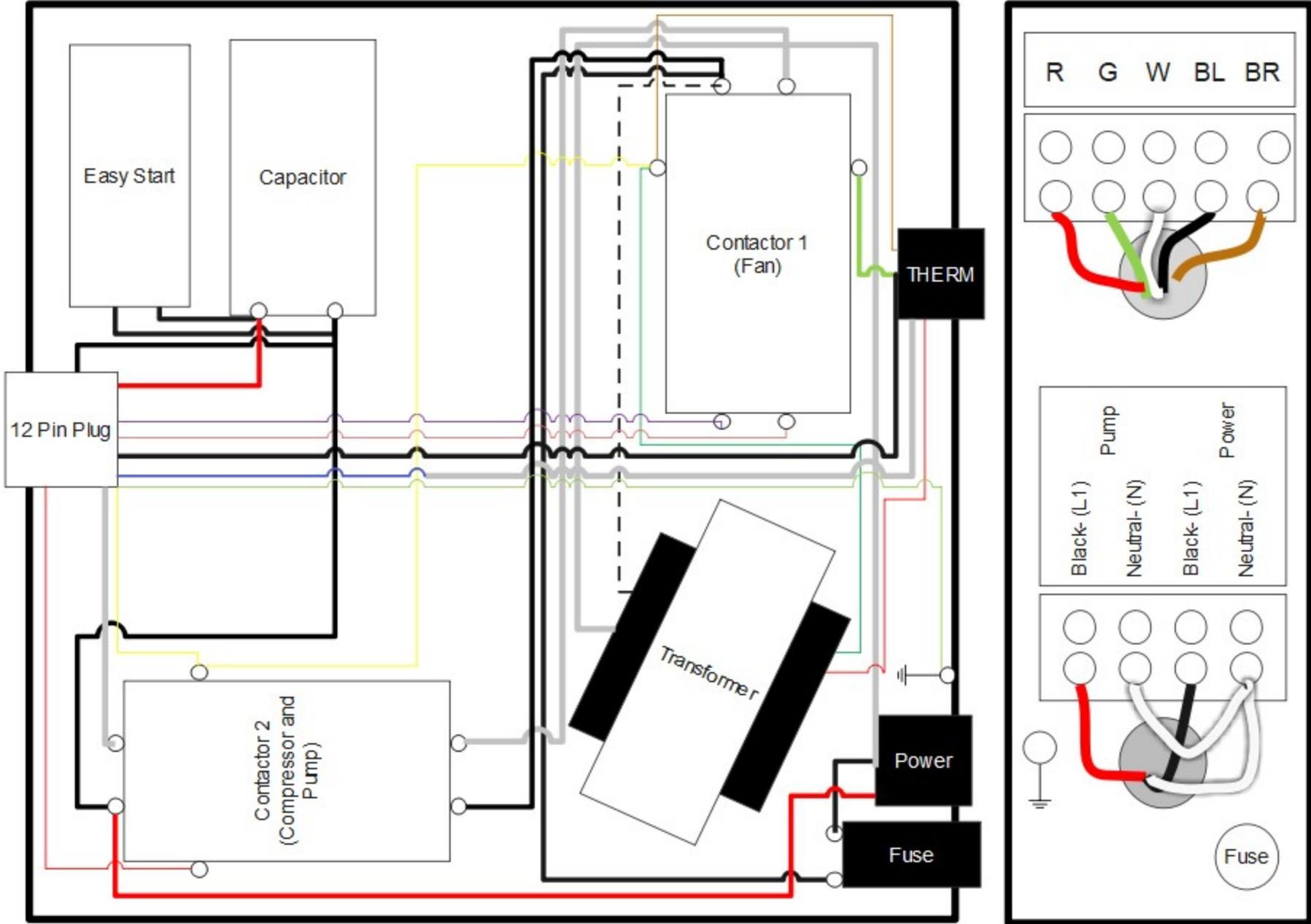
R-R
G-G
Y-BL
C-BR

Note:

C/BR is an optional wire and not all thermostats will require it or have the terminal available. For any WIFI/Smart Thermostat the C/BR connection is essential for 24V power to run the thermostat when the unit has power. If thermostat requires 24V power to operate it will turn off if unit is disconnected from high voltage power in any way

R-R
G-G
B-W
W-Y-BL
C-BR

Control Box Schematic Page 1



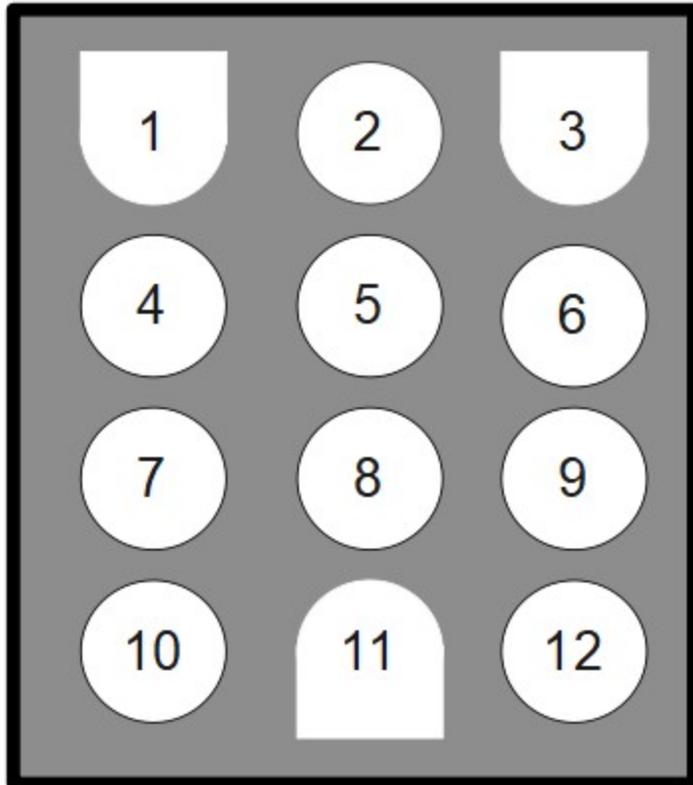
Control Box Schematic Page 2

Back of Control
Box



- 1: 24V Power to reversing valve (White wire from "W")
 - 2: Compressor S (Red wire from capacitor)
 - 3: High pressure switch (Black from "BL")
 - 4: Compressor C (White wire from Contactor 2)
 - 5: 24V Common from reversing valve (Yellow wire to common)
 - 6: Ground (Green wire to grounding screw)
 - 7: High pressure switch (Red from contactor 2 coil)
 - 8: Fan line (Purple wire from contactor 1)
 - 9: Fan common (Pink wire from contactor 1)
 - 10: Empty
 - 11: Compressor R (Black wire from Capacitor)
 - 12: EBM Wire (Brown wire to EMB capacitor)*
- *If equipped

Plug Pinout Diagram

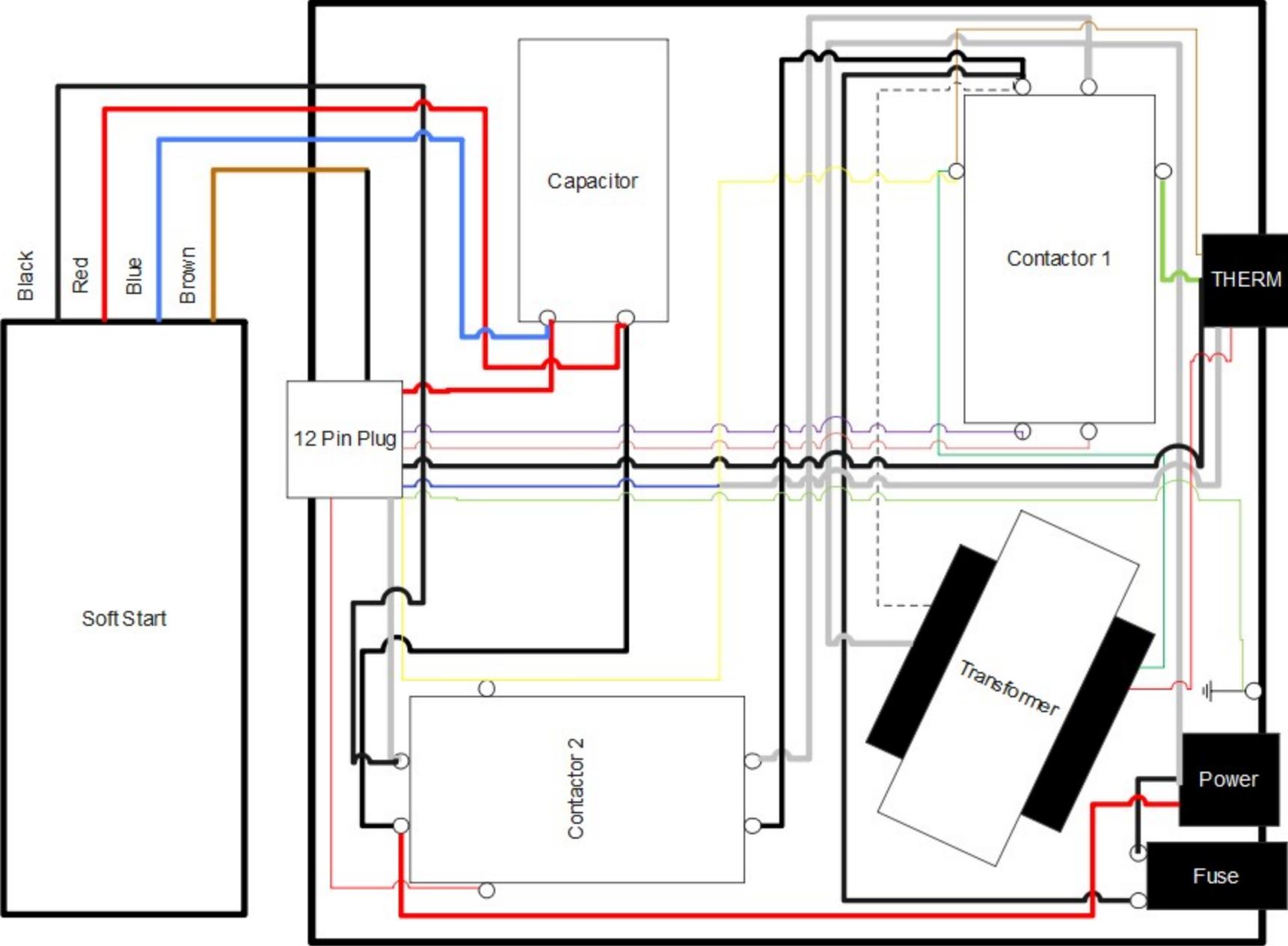


- 1: 24V power to reversing valve (Blue wire)
- 2: Compressor S (Red wire)
- 3: High pressure switch (Black wire)
- 4: Compressor C (White wire)
- 5: 24V common from reversing valve (Yellow wire)
- 6: Ground (Green Wire)
- 7: High pressure switch (Red wire)
- 8: Fan line (Purple wire)
- 9: Fan common (Pink wire)
- 10: Empty
- 11: Compressor R (Black wire)
- 12: EBM wire (Brown wire)*
*If Equipped

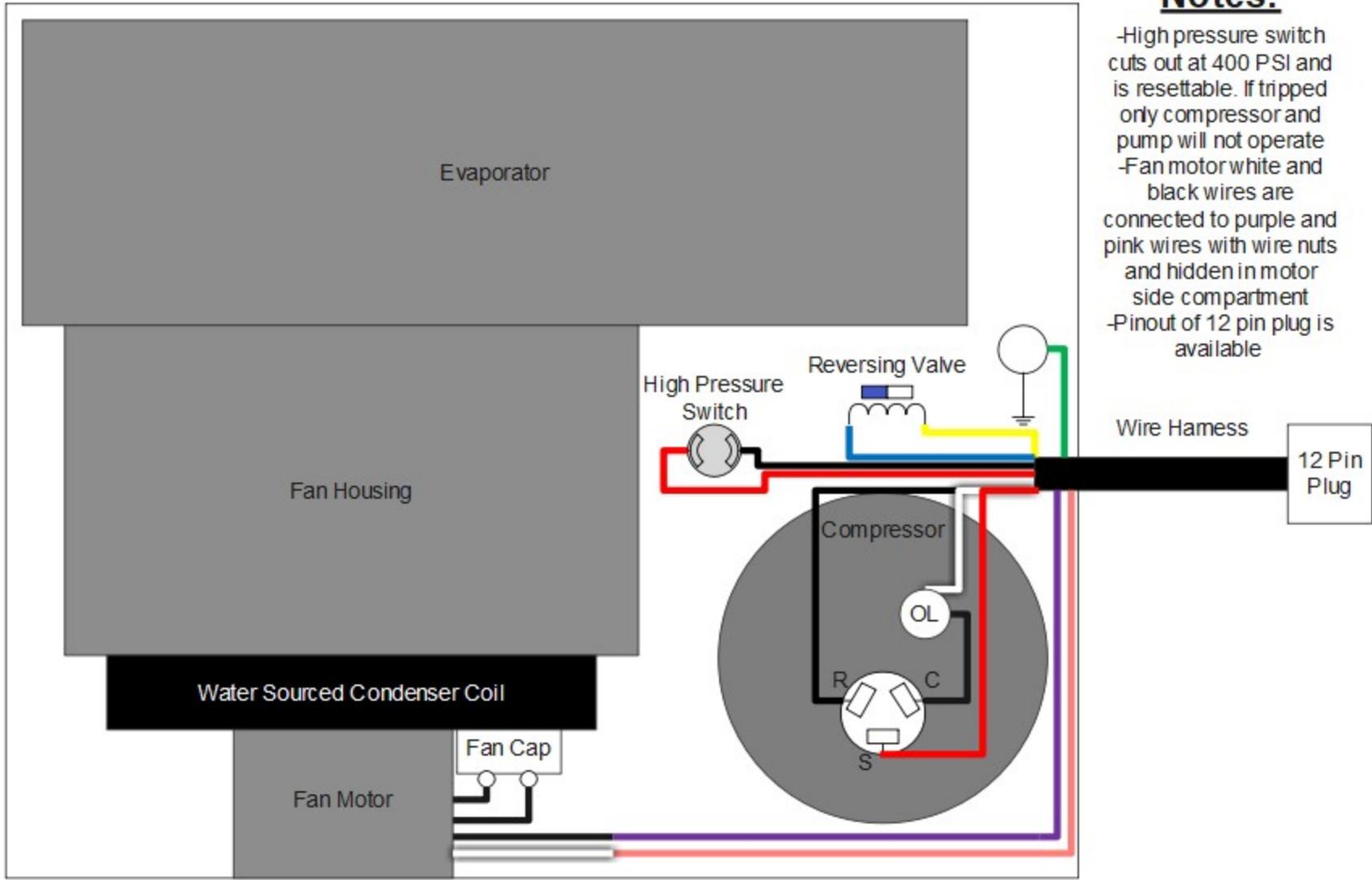
Notes:

- This pinout is for the male end of the plug leading to the air conditioner
 - The pinout for the control box female plug is the reverse of this pinout
- *SEE CONTROL BOX PAGE 2*

Control Box With Soft Start Schematic



Marine Unit Wiring



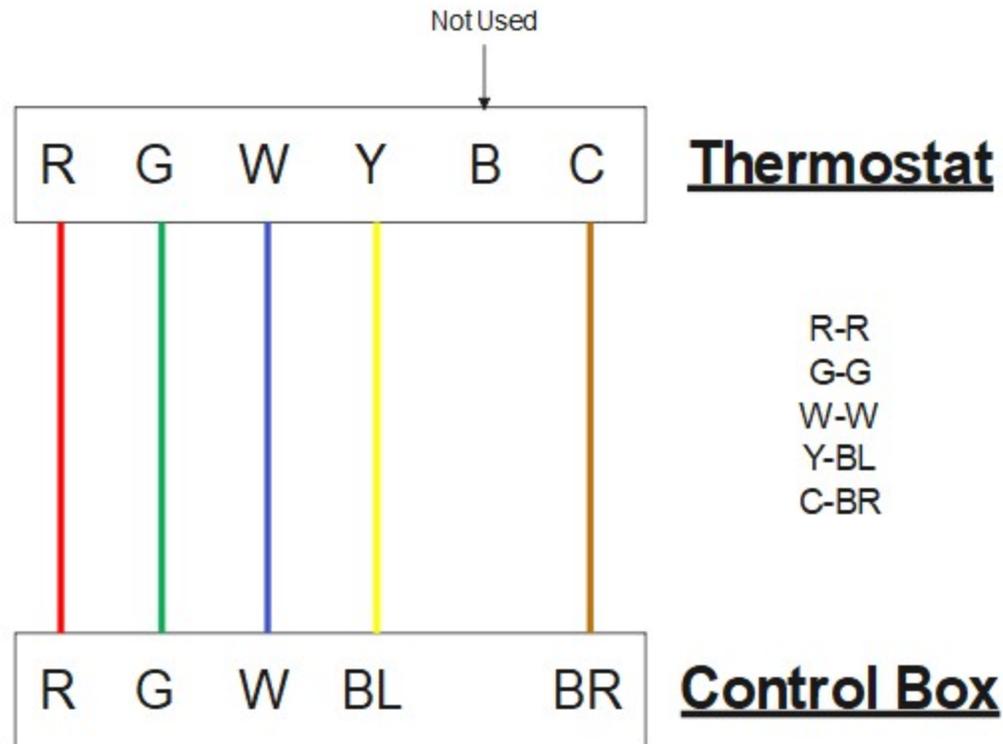
Notes:

- High pressure switch cuts out at 400 PSI and is resettable. If tripped only compressor and pump will not operate
- Fan motor white and black wires are connected to purple and pink wires with wire nuts and hidden in motor side compartment
- Pinout of 12 pin plug is available

Warning! Please Read!

This section is for electric heat equipped marine units. Any attempt to wire a cool-only or reverse cycle unit in this way may result in damage or personal injury.

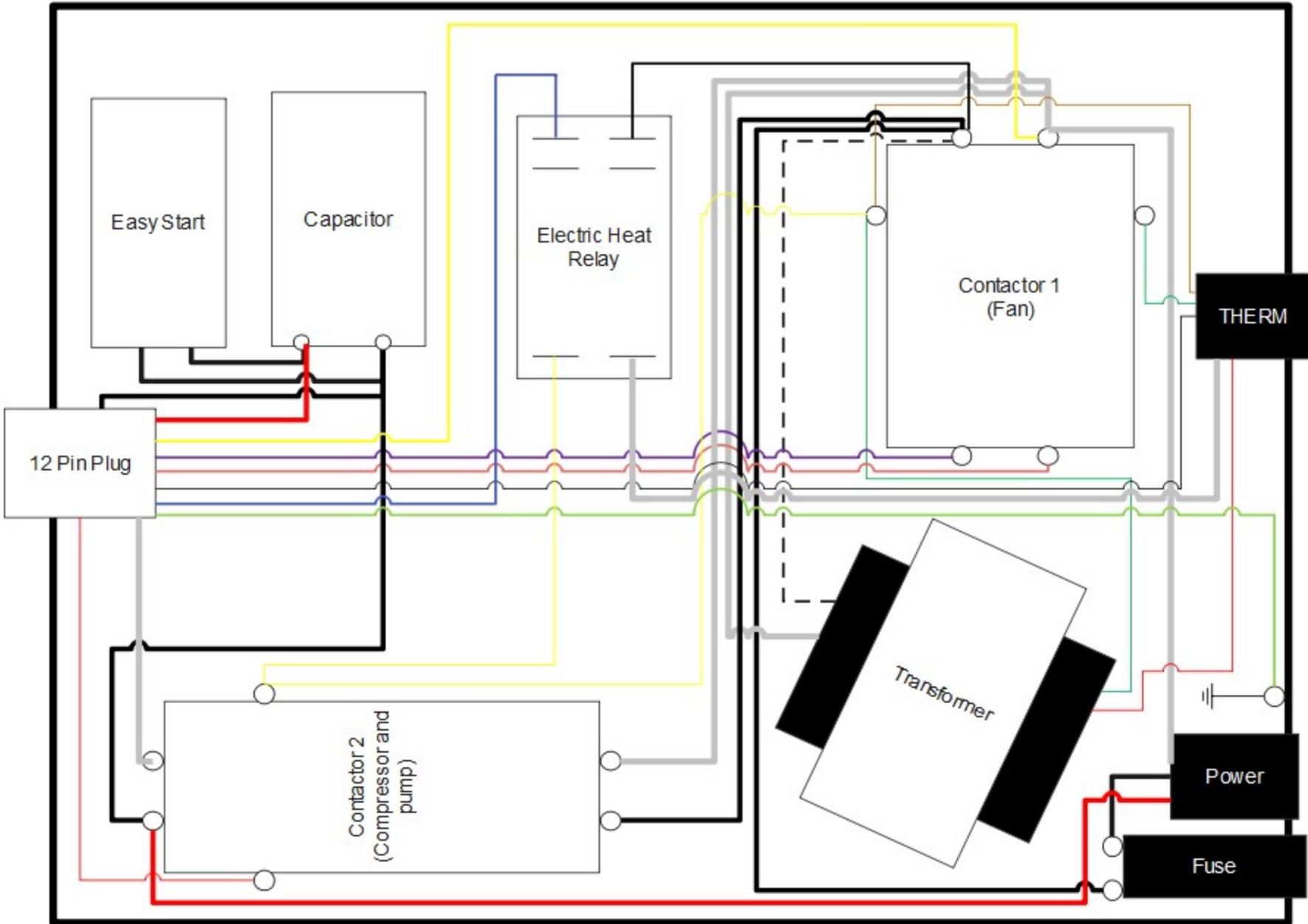
Marine Unit Thermostat Wiring (Electric Heat Only)



Note:

C/BR is an optional wire and not all thermostats will require it or have the terminal available. For any WIFI/Smart Thermostat the C/BR connection is essential for 24V power to run the thermostat when the unit has power. If thermostat requires 24V power to operate it will turn off if unit is disconnected from high voltage power in any way

Control Box Schematic (Electric Heat Only)



Wiring Harness Connections (Electric Heat Only)

- 1: Heat Strip Neutral (Yellow Wire to Contactor 1)
 - 2: Compressor S (Red wire from capacitor)
 - 3: High pressure switch (Black from "BL")
 - 4: Compressor C (White wire from Capacitor)
 - 5: Heat Strip Line (Blue wire from Electric Heat Relay)
 - 6: Ground (Green wire to grounding screw)
 - 7: High pressure switch (Red from contactor 2 coil)
 - 8: Fan line (Purple wire from contactor 1)
 - 9: Fan common (Pink wire from contactor 1)
 - 10: Empty
 - 11: Compressor R (Black wire to contactor 2)
 - 12: EBM Wire (Brown wire to EMB capacitor)*
- *If equipped

Female End
(On Control Box)



Male End
(Wiring Harness)

