

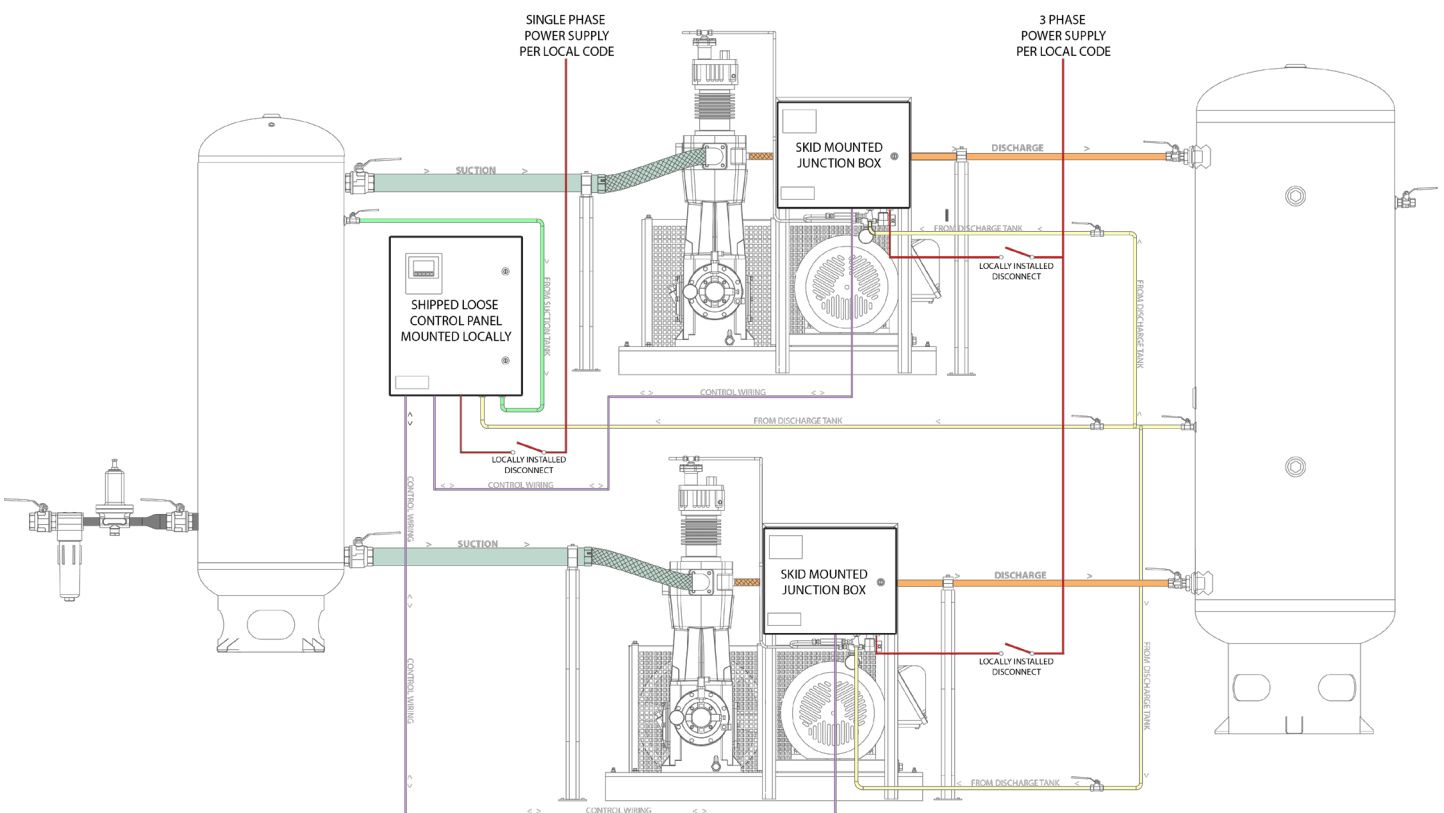


Duplex Option

Description

Duplex controls allow two units to operate in parallel, using a single controller. This is accomplished with a junction box mounted to each skid, and a single, shipped loose control panel that will operate both boosters. The shared controller offers advanced control over the timing and unloading, allowing the user to fine-tune the controls to the specific needs of their application. Lead and lag operation between the two units is controlled automatically based on user-adjustable intervals to ensure both units are being used equally. In the event of a fault on one unit, the controller will automatically set the other unit as lead to allow operation to continue as normal while steps are taken to get the faulted unit back on line.

Suction and discharge pressures are monitored and used to load and unload the boosters based upon field adjustable pressures. The panel will also unload the units at startup and shutdown, so they do not start loaded against a pressure.



Duplex Option

Benefits

The duplex configuration operates two boosters to act as one unit, and it offers some distinct benefits. By using two smaller units to do the job of a single, larger unit, the user has more control. Where a single unit is either on or off, a duplex system allows the user to primarily run the lead unit, while the lag unit runs only when necessary, providing an opportunity for significant energy savings. Additionally, a duplex configuration provides the user with full mechanical redundancy. This means that in the event that one unit requires maintenance, the other unit can continue to run, allowing operations to continue while maintenance is performed.

Installation

The duplex control panel is furnished shipped loose for local installation, while the junction boxes are factory mounted to their corresponding skids. The control panel has been fully factory tested with the junction boxes to ensure complete system cohesion.

The main control panel must be mounted in a suitable location within 100 feet of each skid. When installing the control panel, it must be field wired to all the skid components as indicated in the electrical schematic. Unless otherwise indicated, 16 AWG wire is sufficient for the control wiring and twisted pair shielded instrumentation cable, 20 AWG wire is recommended for all transmitters.

A 120 VAC, 6 amp power supply will be required for the control panel. Each junction box will require a 3-phase power supply based upon the power requirements of each booster unit. An electrical schematic is delivered with each duplex system to provide the installer with the necessary wiring information.

Consult the current National Electric Code (NEC) and local codes for proper wire and conduit sizing for connection to the electric motor. Proper grounding of the panel is also required and every control panel comes with properly sized grounding lugs.