

Safety Procedures

WARNING

Dangerous environment. Highly flammable and explosive fuels are present. Failure to observe all safety precautions could result in serious injury or death. Observe all safety precautions as outlined in Gilbarco's manuals.

Installation Procedures

1. Install a single EMERGENCY POWER CUTOFF control to remove AC power from site dispensing equipment. (The control is an additional safety feature, and not a substitute for NEC/NFPA30 circuit breaker requirements.) Label the EMERGENCY POWER CUTOFF switch and instruct owner to keep area clear of obstacles.
 2. Connect an insulated grounding conductor from the dispenser power panel to the site grounding electrode (size per NEC).
 3. Install power breakers to each circuit leading to the dispensing unit and STP. They must be capable of simultaneously disconnecting hot and neutral conductors.
 4. Only field wiring connections are shown in the junction boxes. Cap all unused wires. Local and National Electrical Codes may apply.
 5. Install conduit per NEC for hazardous locations.
 6. Wires -all wires are 14AWG (stranded) unless otherwise noted. Pump/disp. ground - wire is 12AWG (stranded). Power loading and distance run may require larger wire size. Outputs from intercom and call button must be NEC Class 2. Twisted pair data wires (2-wire) (10-12 twists per foot) are recommended in areas with high lightning strikes.
 7. Consult mfg. specs. for wire nuts to determine maximum number of wires that may be used per nut.
 8. STP isolation relay boxes are required to:
 - a. Allow service of one unit safely without removing power from all dispensing equipment.
 - b. Prevent damage to equipment from cross-phasing. Damage caused by cross-phasing is not covered by warranty.
- Gilbarco STP Isolation Box PA0287 is not available for 220/230/240VAC units. (Use local supplier for Isolation Relay Boxes.)
9. For Infoscreen, install additional 'twisted pair' wires for each dispenser inside power conduit. Twisted pair video - wire is 18AWG (600V stranded annealed copper) twisted to 10-12 twists per foot, gas and oil resistant; UL/CSA rated; must meet qualifications of CSA -TR-64 with nylon jackets (any source that meets this video specification can be used).
 10. For VaporVac, VV+ and VV- are used only with field retrofit kits. See kit MDE for proper connections.
 11. For ATC option, ATC+ and ATC- connect to T-meter module assembly.
 12. For The Advantage and Optimum Dual units, connect wires labeled STP1 and STP2.

Notes: Wire all circuits NEC Class 1, except wiring to speaker (intercom) and call button which are NEC Class 2. Gilbarco two-wire is NEC Class 1 and may share the main power conduit. Call button not available on Optimum models.

In Canada switching neutral is contrary to the Canadian electrical code, reference part 1, rule 14-014.

Options: Some options shown are not available on Optimum models.

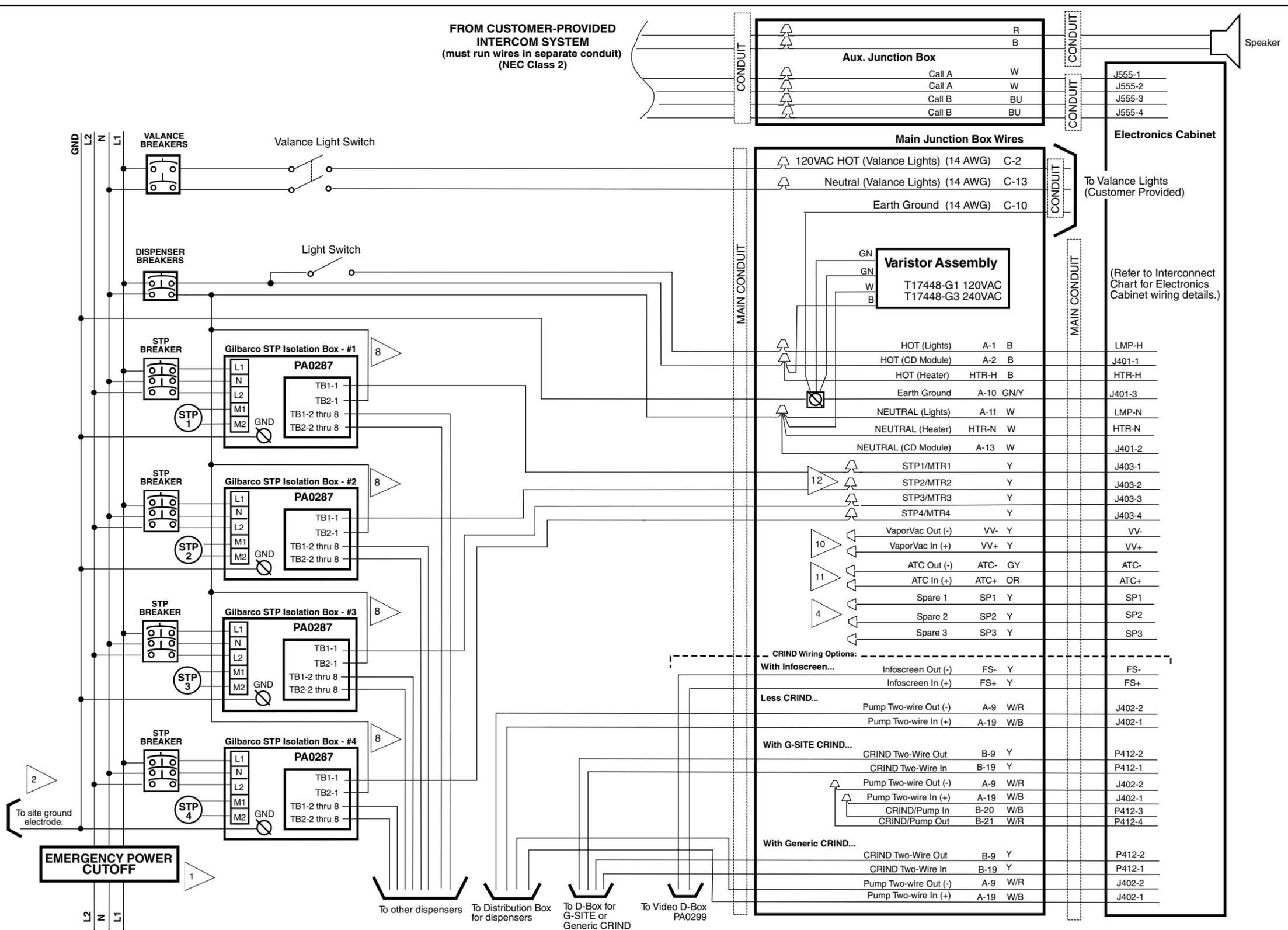
Electrical Rating

Includes all options except InfoScreen Heater
 6.0 AMP @ 120 VAC 60 Hz.
 3.0 AMP @ 240 VAC 50 Hz.

Infoscreen Heater - (Heater will cycle in extreme cold conditions)
 7.0 AMP @ 120 VAC 60 Hz. - 20 minutes max. on time
 3.5 AMP @ 240 VAC 50 Hz. - 20 minutes max. on time

Gilbarco recommends the use of one 15 AMP breaker per dispenser.

Gilbarco requires Valance Lights on a separate 15 AMP breaker.



EMERGENCY POWER CUTOFF

LOAD CENTER
 120/240 VAC
 SINGLE
 50/60 HZ

Active STP Connections

The Advantage and Optimum	STP1	STP2	STP3	STP4
MPD Two-Grade	. . . X . . . . .	. . . . .	. . . . .	X
MPD Three-Grade	. . . X . . . . .	. . . . .	. . . . .	X
MPD Four-Grade	. . . X . . . . .	. . . . .	. . . . .	X . . . X
MPD Single-Hose	. . . X . . . . .	. . . . .	. . . . .	X
MPD Single-Hose +1	. . . X . . . . .	. . . . .	. . . . .	X . . . X
Dual One-Grade	. . . . .	. . . . .	. . . . .	X
Quad Two-Grade	. . . . .	. . . . .	. . . . .	X
Blender Six-Hose	. . . . .	. . . . .	. . . . .	X
Blender Single-Hose	X . . . . .	. . . . .	. . . . .	X
Blender X+1 (48")	. . . . .	. . . . .	. . . . .	X . . . X
Blender X+0 (48")	. . . . .	. . . . .	. . . . .	X . . . X
Blender X+0 (36")	. . . . .	. . . . .	. . . . .	X . . . X
Super-Hi	. . . . .	. . . . .	. . . . .	X . . . X

Symbols Chart

Wire Nut	⚡
Earth Ground	⊕
No Connection	+
Connection	⚡

Wire Color Chart

Black	B
Brown	BR
Red	R
Orange	OR
Yellow	Y
Green	GN
Blue	B
Violet	V
Gray	GY
White	W

Reference Manuals

- MDE-2755 STP Isolation Box Install.
- MDE-3116 Distribution Box Install.
- MDE-2833 P & D Site Prep
- MDE-2530 P & D Install.

Gilbarco

FIELD WIRING DIAGRAM
 The Advantage™ Series and
 Optimum^a Dispensers
 120/240 VAC

08/97 **FE-270S**