

TECH NOTES

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Model 244W/244E Touchscreen Control Panel PRODUCT LAUNCH

Introducing our Model 244W/244E touchscreen control panel. The new touchscreen is available with all ignition system options for both the open and enclosed flares.

The touch screen is rated Class 1 div 2 Group A,B,C,D provided inside a standard NEMA 4/4X Control panel enclosure. The control panel is PLC based. Its use will simplify start-up and operation of the flare.

The unit uses minimal relays and no indicating light bulbs which means there are fewer parts to service and maintain.

The panel is easy to read day or night for operator convenience.

The flare ignition system still operates in the same manner as previous system utilizing our controller and relay-based logic:



OPERATING SEQUENCE

1. At start-up, the solenoid valves controlling the continuous pilot line and flame retention line are open and gas is flowing to both nozzles.
2. The Air Blower turns on. Touchscreen shows blower is on.
3. The system purges for the Spark Purge Time and the system sparks for the Spark On Time and is indicated on the touchscreen panel. Touchscreen shows the purge timer.
4. The Retention Nozzle catches the Flame Front and lights the Continuous Nozzle.
5. The Pilot Thermocouple heats beyond its set point. The Retention Solenoid Valve is closed and the Continuous Nozzle is lit. Touchscreen shows retention solenoid valve is closed and PILOT is ON.
6. (Optional) The main line gas valve is opened and the burner burns the waste gas. Typical is through a three-way solenoid valve installed on the Varec Model 386/440 Pressure Regulator. The touch screen will indicate if the three-way solenoid valve is energized.
7. If the Pilot Thermocouple cools below its set point, the main line gas valve is closed and the pilot attempts to reignite. Touchscreen will show PILOT OFF. If remote start permissive is present then

re-ignition will be attempted.

8. If the flare system fails to reignite in a set amount of Spark On attempts, the flare goes into system failure. The solenoid valves close, the blower shuts down, and, if installed, the System Failure Dry Contact changes state. Touch screen will show spark on timer and SYSTEM FAILURE ON if the above sequence occurs.
9. If the Pilot Thermocouple exceeds its safe operating temperature set point, the flare system will go into failure. Touchscreen will indicate SYSTEM FAILURE.
10. If the Pilot Thermocouple is disconnected the flare will go into failure and the Pilot Thermocouple indicators will flash.

LOCAL START OPERATION

- The Remote Start Simulator Switch is ON - flare system will operate in AUTO Mode without the need for a Remote Start Permissive signal.

REMOTE START OPERATION

- The remote start simulator switch is in OFF - The flare system will be in stand-by until it receives the Remote Start Permissive signal.
- As long as it has the Remote start permissive signal it will operate in AUTO Mode
- If the Remote Start Permissive signal goes away, the Remote Start Time Delay starts to time. When it has timed out, the flare goes into stand by (Retention and Continuous Solenoid Valves close, and the blower shuts down) and waits for the Permissive signal to start up again.

Contact your local sales representative for additional information on our new Touch Screen Control Panel available with our Model 244W/244E waste gas burners.

