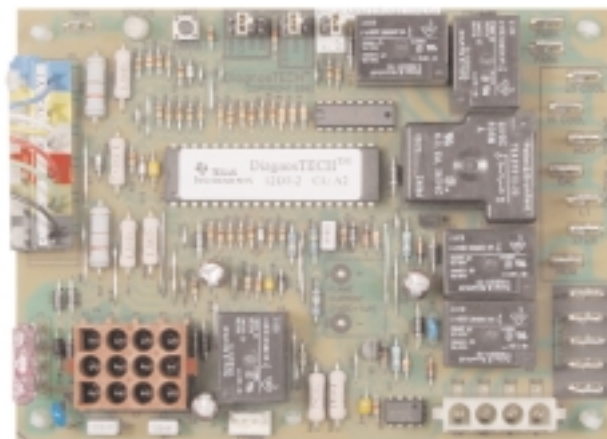# DiagnosTECH™

Integrated Furnace Control

DiagnosTECH™ is an innovative integrated furnace ignition control board with enhanced diagnostic and monitoring capabilities. The control monitors the flame current, thermal limit, pressure switch and thermostat inputs in order to insure safe operation, while also logging any error code history with a relative time stamp. The control is capable of retaining the last five error codes, even after the loss of power, which can be accessed through a push button and individualized LED blink codes or with a PDA device through the communications port.

Patents Pending

Enhanced Diagnostics

- Single button error retrieval of last five error codes (even with power loss)
- Defined on board test pads for easy flame current monitoring

- Automatic flame current sensing with early cautionary error code warning
- Advanced flash codes with tri-color LED
- Communications port

Comfort Enhancements

- Selectable heat blower off delay
- Selectable continuous fan speed
- Two speed cooling option for multistage compressors
- Electronic air cleaner and humidifier terminals (115 VAC)

General Specifications

Input Voltage:	24 VAC ±20%; 50/60 Hz
Max. Input Current (at 24 VAC):	0.15 amp
Minimum Current for Flame detection:	1 µa DC*
Maximum Current for Flame Non-Detection:	0.1 µa DC*
Humidity Range:	0% to 95% Relative Humidity
Physical Dimensions:	5.8 in x 4.26 in x 1.25 in
Communications:	Standard RS485 Modbus Protocol
Tri-Color LED:	Red/Amber/Green (1/4 sec. on & 1/4 sec. off)
Operating Temperature Range:	-40°F to 158°F (40°C to 70°C)

* Measured with a DC Voltmeter on Specified Test Pads

For further information, write or call:

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Timing Specifications

Pre-Purge	0 sec.
Trial for Ignition	7 sec.
Ignition Activatin Period	5 sec.
Retries	2 times
Recycles	4 times
Valve Sequence Period	22 sec.
Interpurge	15 sec.
Heat Delay for Blower On	30 sec.
Heat Delay for Blower Off (selectable)	60/90/120/180 sec.
Cool Delay for Blower On	3 sec.
Cool Delay for Blower Off	60 sec.
Auto Reset	60 min.

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TEXAS INSTRUMENTS