

Air Handler Diagnostic Codes

Circuit Board LED Display		Communicating Display Message		Status
Green CFM LED	Red Diag. LED	Scrolled Message	Temp Display Message	
ON	ON	Not Displayed	N/A	Power Up
OFF	ON	Not Displayed	N/A	Standby
OFF	1 Flash	HTR TOO LARGE	Ec	Invalid Heater Kit
		HTR TOO SMALL	Ec	
		NO HTR MATCH	Ec	
OFF	5 Flashes	Not Displayed	N/A	Fuse Open
OFF	OFF	INTERNAL FAULT	EE	Board Misoperation
N/A	N/A	Not Displayed	Not Displayed	Data 1 and Data 2 Miswire
OFF	9 Flashes	NO NET DATA	d0	Data not yet on Network
OFF	11 Flashes	INVALID MC DATA	d4	Invalid Memory Card Data
Flash @ 1 Blink/100CFM	ON	Not Displayed	N/A	Motor Running Normal
OFF	6 Flashes	MOTOR NOT RUN	b0	Blower Motor Not Running
OFF	6 Flashes	MOTOR COMM	b1	Blower Communication Error
OFF	6 Flashes	MOTOR MISMATCH	b2	Blower Motor HP Mis-Match
Flash @ 1 Blink/100CFM	6 Flashes	MOTOR LIMITS	b3	Blower Motor Operating in Power, Temperature, or Speed Limit
OFF	6 Flashes	MOTOR TRIPS	b4	Blower Motor Current Trip or Lost Rotor
OFF	6 Flashes	MTR LCKD ROTOR	b5	Blower Motor Locked Rotor (bit 12)
OFF	6 Flashes	MOTOR VOLTS	b6	Over/Under Voltage Trip or Over Temperature Trip (bits 7, 8 & 9)
OFF	6 Flashes	MOTOR PARAMS	b7	Incomplete Parameters Sent to Motor (bit 10)
Flash @ 1 Blink/100CFM	6 Flashes	LOW ID AIRFLOW	b9	Inadequate Airflow
Flash @ 1 Blink/100CFM	ON	Cool + On + Low Icons	Actual Temp	Low Cool
Flash @ 1 Blink/100CFM	ON	Cool + On + High Icons	Actual Temp	High Cool
Flash @ 1 Blink/100CFM	ON	Heat + On + Low Icons	Actual Temp	Low Heat Pump
Flash @ 1 Blink/100CFM	ON	Heat + On + High Icons	Actual Temp	High Heat Pump
Flash @ 1 Blink/100CFM	ON	Heat + On + High + Auxiliary Heat Icons	Actual Temp	High Stage HP + 1st Stage Auxiliary Heat
Flash @ 1 Blink/100CFM	ON	Heat + On + High + Auxiliary Heat Icons	Actual Temp	High Stage HP + 2nd Stage Auxiliary Heat
Flash @ 1 Blink/100CFM	ON	EM + On + Low + Auxiliary Heat Icons	Actual Temp	Low Stage Emergency Heat
Flash @ 1 Blink/100CFM	ON	EM + On + High + Auxiliary Heat Icons	Actual Temp	High Stage Emergency Heat
Flash @ 1 Blink/100CFM	ON	Fan + On or Fan + Auto Icons	Actual Temp	Continuous Fan

Blink Rates / Notes:

- (1) Green CFM LED for CFM demand - ON 1 second for every 100 CFM; OFF for 0.100 seconds between CFM demand pulses with 10 seconds between CFM demand.
- (2) Green CFM LED for motor faults - ON for 0.5 seconds and OFF for 0.5 seconds with a 2 second pause between codes.
- (3) Red diagnostic LED for system faults - ON for 0.250 seconds and OFF for 0.250 seconds with a 2 second pause between codes.
- (4) Green CFM and Red diagnostic LED's - Fast flash rate is ON for 0.100 seconds and OFF for 0.100 seconds.
- (1) Codes for these modes of operation are alternated with the CFM display every 2 seconds.
- (6) Red Comm Status LED - Fast is 0.250 seconds ON; 0.250 seconds OFF.
- (7) Network priority for error conditions is based on the following: Priority 1 is safety related; priority 2 is non-operating system; priority 3 is system operating in a limiting condition; priority 4 is abnormal condition present but system is safe and operating as expected.
- (8) The Red COMM STATUS LED will display 1 slow flash at startup.
- (9) A constant ON green COMM RX LED is an indication that Data 1 and Data 2 wires are reversed.

Furnace Diagnostic Codes

Circuit Board LED Display		Communicating Display Message		Status
7 Segment #2	7 Segment #1	Scrolled Message	Temp Display Message	
8	8	Not Displayed	Not Displayed	Power Up
O	P	Not Displayed	Not Displayed	Normal/Standby
OFF	OFF	INTERNAL FAULT	EE	Internal Control Fault/No Power
E	0	LOCKOUT	E0	Lockout Due to Excessive Retries
E	1	PS1 CLOSED	E1	Low Stage Pressure Switch Stuck Closed at Start of Heating Cycle
E	2	PS1 OPEN	E2	Low Stage Pressure Switch Stuck Open
E	3	HIGH LIMIT OPEN	E3	Open High Limit Switch
E	4	IMPROPER FLAME	E4	Flame Detected When no Flame Should be Present
E	5	Not Displayed	Not Displayed	Open Fuse
E	6	WEAK FLAME	E6	Low Flame Signal
E	7	IGNITER FAULT	E7	Igniter Fault or Improper Grounding
E	8	PS2 CLOSED	E8	High Stage Pressure Switch Stuck Closed at Start of Heating Cycle
E	9	PS2 OPEN	E9	High Stage Pressure Switch Stuck Open
E	A	REVERSED PLTY	EA	Reversed 115VAC Polarity
N/A	N/A	Not Displayed	Not Displayed	Data 1 and Data 2 Miswire
d	0	NO NET DATA	d0	Data not yet on Network
d	4	INVALID MC DATA	d4	Invalid Memory Card Data
Most Significant Digit of CFM Demand Rounded to the Nearest 100 CFM	Second Most Significant Digit of CFM Demand Rounded to the Nearest 100 CFM	Not Displayed	Not Displayed	Motor Running Normal
b	0	MOTOR NOT RUN	b0	Blower Motor Not Running
b	1	MOTOR COMM	b1	Blower Communication Error
b	2	MOTOR MISMATCH	b2	Blower Motor HP Mis-Match
b	3	MOTOR LIMITS	b3	Blower Motor Operating in Power, Temperature, or Speed Limit
b	4	MOTOR TRIPS	b4	Blower Motor Current Trip or Lost Rotor
b	5	MTR LCKD ROTOR	b5	Blower Motor Locked Rotor
b	6	MOTOR VOLTS	b6	Over/Under Voltage Trip or Over Temperature Trip
b	7	MOTOR PARAMS	b7	Incomplete Parameters Sent to Motor (bit 10)
b	9	LOW ID AIRFLOW	b9	Inadequate Airflow
C	1	Cool + On + Low Icons	Actual Temp	Low Stage Cool ⁽¹⁾
C	2	Cool + On + High Icons	Actual Temp	High Stage Cool ⁽¹⁾
L	O	Heat + On + Low Icons	Actual Temp	Low Stage Heat ⁽¹⁾
H	I	Heat + On + High Icons	Actual Temp	High Stage Heat ⁽¹⁾
None	F	Fan + On or Fan + Auto Icons	Actual Temp	Continuous Fan ⁽¹⁾

Blink Rates / Notes:

- (1) Codes for these modes of operation are alternated with the CFM display every 2 seconds.
- (2) Network priority for error conditions is based on the following: Priority 1 is safety related; priority 2 is non-operating system; priority 3 is system operating in a limiting condition; priority 4 is abnormal condition present but system is safe and operating as expected.
- (3) The Red COMM STATUS LED will display 1 slow flash at startup.
- (4) A constant ON green COMM RX LED is an indication that Data 1 and Data 2 wires are reversed.

Outdoor Unit Diagnostic Codes

Circuit Board LED Display				Comm T-Stat Message		Status
Yellow Diag. LED	Red Active Prot. LED	Green Status Led	Red Y1 LED	Scrolled Message	Temp Display Message	
ON	ON	ON	ON	Not Displayed	Not Displayed	Power Up
OFF	OFF	ON	OFF	Not Displayed	Not Displayed	Standby
OFF	OFF	1 - 4 Flashes	Slow Flash	Not Displayed	Not Displayed	Short Cycle Timer
OFF	OFF	1 Flash	ON	Cool + On + Low Icons	Actual Temp	Low Cool
OFF	OFF	2 Flashes	ON	Cool + On + High Icons	Actual Temp	High Cool
OFF	OFF	3 Flashes	ON	Heat + On + Low Icons	Actual Temp	Low Heat
OFF	OFF	4 Flashes	ON	Heat + On + High Icons	Actual Temp	High Heat
OFF	OFF	Slow Flash	ON	Not Displayed	Actual Temp	Defrost
OFF	OFF	Fast Flash	ON	Not Displayed	None	Max Defrost Time
Fast Flash	Fast Flash	Fast Flash	ON	Not Displayed	None	Field Test Mode
ON	OFF	1 Flash	ON if Y1 Present, OFF if Y1 not Present	AIR SENSOR FLT	A2	Outdoor Air Temp Sensor Fault
ON	OFF	2 Flashes	ON if Y1 Present, OFF if Y1 not Present	COIL SENSOR FLT	A3	Outdoor Coil Temp Sensor Fault
ON	OFF	5 Flashes	OFF	BLOWN FUSE	E5	Open Fuse
ON	OFF	6 Flashes	OFF	INTERNAL FAULT	EE	Board Misoperation
ON	OFF	7 Flashes	ON if Y1 Present, OFF if Y1 not Present	NO ID AIRFLOW	b0	No Indoor Airflow
ON	OFF	8 Flashes	ON if Y1 Present, OFF if Y1 not Present	LOW ID AIRFLOW	b9	Inadequate Airflow
N/A	N/A	N/A	N/A	Not Displayed	Not Displayed	Data 1 and Data 2 Miswire
1 Flash	OFF	1 Flash	OFF	NOT NET DATA	d0	Data not yet on Network
2 Flashes	OFF	2 Flashes	OFF	INVALID DATA	d1	Invalid Data on Network
3 Flashes	OFF	3 Flashes	OFF	INVALID SYSTEM	d2	System Mis-Match
4 Flashes	OFF	4 Flashes	OFF	INVALID CONFIG	d3	Configuration Mis-Match
5 Flashes	OFF	5 Flashes	OFF	INVALID MC DATA	d4	Invalid Memory Card Data
1 Flash	OFF	OFF	ON if Y1 Present, OFF if Y1 not Present	LOW SIDE FAULT	01	Low Side Fault
1 Flash	OFF	ON	ON if Y1 Present, OFF if Y1 not Present	LPS OPEN	01	Low Pressure CO Trip
1 Flash	ON	ON	ON if Y1 Present, OFF if Y1 not Present	LPS LOCKOUT	01	LPCO Lockout (3 Trips)
2 Flashes	OFF	OFF	ON if Y1 Present, OFF if Y1 not Present	HIGH SIDE FAULT	02	High Side Fault
2 Flashes	OFF	ON	ON if Y1 Present, OFF if Y1 not Present	HPS OPEN	02	High Pressure CO Trip
2 Flashes	ON	ON	ON if Y1 Present, OFF if Y1 not Present	HPS LOCKOUT	02	HPCO Lockout (3 Trips)
3 Flashes	OFF	OFF	ON if Y1 Present, OFF if Y1 not Present	CMPR SHRT CYCLE	03	Short Cycling
4 Flashes	ON	OFF	ON if Y1 Present, OFF if Y1 not Present	LOCKED ROTOR	04	Locked Rotor
5 Flashes	OFF	OFF	ON if Y1 Present, OFF if Y1 not Present	OPEN CIRCUIT	05	Open Circuit
6 Flashes	OFF	OFF	ON if Y1 Present, OFF if Y1 not Present	OPEN START	06	Open Start Circuit
6 Flashes	ON	OFF	ON if Y1 Present, OFF if Y1 not Present	OPEN START LOCK	06	Open Start Circuit Lockout
7 Flashes	OFF	OFF	ON if Y1 Present, OFF if Y1 not Present	OPEN RUN	07	Open Run Circuit
7 Flashes	ON	OFF	ON if Y1 Present, OFF if Y1 not Present	OPEN RUN LOCK	07	Open Run Circuit Lockout
8 Flashes	OFF	OFF	ON if Y1 Present, OFF if Y1 not Present	LOW LINE VOLT	08	Low Line Voltage
8 Flashes	OFF	ON	ON if Y1 Present, OFF if Y1 not Present	HIGH LINE VOLT	08	High Line Voltage
9 Flashes	OFF	OFF	ON if Y1 Present, OFF if Y1 not Present	LOW SECOND VOLT	09	Low Pilot Voltage
ON	ON	OFF	ON if Y1 Present, OFF if Y1 not Present	Not Displayed	N/A	Comp Protector Open

Blink Rates:

- (1) Green, Red, and Yellow LED's - Normal flash rate is ON for 0.250 seconds and OFF for 0.250 seconds with a 2 second pause between codes.
- (2) Green, Red, and Yellow LED's - Slow flash rate is ON for 2 seconds and OFF for 2 seconds.
- (3) Green, Red, and Yellow LED's - Fast flash rate is ON for 0.100 seconds and OFF for 0.100 seconds.
- (4) Network priority for error conditions is based on the following: Priority 1 is safety related; priority 2 is non-operating system; priority 3 is system operating in a limiting condition; priority 4 is abnormal condition present but system is safe and operating as expected.
- (5) The Red COMM STATUS LED will display 1 slow flash at startup.
- (6) A constant ON green COMM RX LED is an indication that Data 1 and Data 2 wires are reversed.