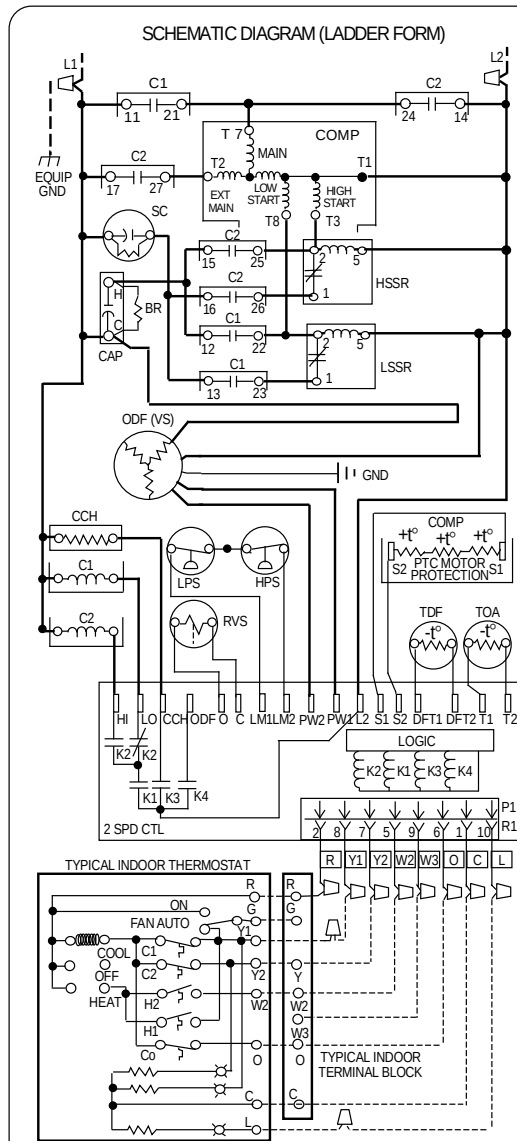


Wiring Diagrams



NOTES:

1. COMPRESSOR FURNISHED WITH INTERNAL PTC TYPE THERMAL OVERLOADS, SENSED BY EXTERNAL MEANS.
2. FAN MOTOR FURNISHED WITH INHERENT THERMAL PROTECTION.
3. TO BE WIRED IN ACCORDANCE WITH NATIONAL ELECTRIC CODE AND LOCAL CODES.
4. OUTDOOR UNIT CONTROL REQUIRES A MINIMUM OF 27VA, 24 VAC CONTROL POWER.
5. USE COPPER CONDUCTORS ONLY. USE CONDUCTORS SUITABLE FOR AT LEAST 75°C (167°F).
6. IF INDOOR SECTION HAS A TRANSFORMER WITH A GROUNDED SECONDARY, CONNECT THE GROUNDED SIDE TO THE BRN LEAD "C".
7. IF ANY OF THE ORIGINAL WIRE, AS SUPPLIED, MUST BE REPLACED, USE THE SAME OR EQUIVALENT WIRE.
8. CHECK ALL ELECTRICAL CONNECTIONS INSIDE CONTROL BOX FOR TIGHTNESS.
9. DO NOT ATTEMPT TO OPERATE UNIT UNTIL SERVICE VALVES HAVE BEEN OPENED (BACK SEATED)
10. MUST USE THERMOSTAT LISTED IN PRE-SALE LITERATURE.

UNIT OPERATION/SEE UNIT INSTALLATION INSTRUCTIONS FOR DETAILS

- 5 MINUTE TIME DELAY -**
UNIT WILL DELAY OPERATION UPON INITIAL START-UP OR SHORT CYCLING OF THE INDOOR THERMOSTAT. DELAY CAN BE BYPASSED BY MOMENTARILY TOUCHING A JUMPER WIRE BETWEEN SPEED-UP TERMINALS. (SHOWN AS SPEED-UP)
- 1 MINUTE TIME DELAY -**
WHEN CHANGING SPEEDS FROM LOW TO HIGH, OR HIGH TO LOW, THERE IS A ONE MINUTE TIME DELAY. NOTE, DURING SPEED CHANGE DELAY THE OUTDOOR FAN WILL REMAIN RUNNING.
- 2 MINUTE LOW SPEED MINIMUM -**
IF THE UNIT HAS NOT OPERATED WITHIN THE PAST 30 MINUTES, UPON THE NEXT COOLING DEMAND, IT WILL OPERATE FOR A MINIMUM OF TWO MINUTES ON LOW SPEED.
- CRANKCASE HEATER -**
ONLY OPERATES AT 75°F, OR BELOW, DURING OFF CYCLE.
- SECOND-STAGE LATCHING - (SHOWN AS SSL ON BOARD)** IF IT IS DESIRED, SYSTEM OPERATION CAN BE FIELD SELECTED TO HAVE HIGH SPEED REMAIN RUNNING UNTIL THE LOW SPEED (FIRST STAGE) OF THE INDOOR THERMOSTAT IS SATISFIED. SECOND-STAGE LATCHING CAN BE SELECTED BY ROTATING THE "SSL" TO THE DESIRED TEMPERATURE. THE OUTDOOR TEMPERATURES THAT CAN BE SELECTED ARE, 85, 90, 95, 100 AND 105°F.
- DEFROST TIME SELECTION - (SHOWN AS DT ON BOARD)**
THE DEFROST INTERVAL TIME CAN BE FIELD-SELECTED, DEPENDENT UPON LOCAL/GEOGRAPHIC REQUIREMENTS. IT IS FACTORY SET AT 90 MINUTES AND CAN BE CHANGED TO EITHER 30 OR 50 MINUTES BY ROTATING THE "DT" SELECTION POT.
- DEFROST -**
DEFROST WILL ONLY BE PERFORMED AT OUTDOOR TEMPERATURES LESS THAN 50°F. DEFROST WILL INITIATE WHEN THE COIL TEMPERATURE IS LESS THAN 30°F (±2°) AND WILL TERMINATE AT 80°F (±5°). UPON DEFROST TERMINATION THE OUTDOOR FAN WILL DELAY 20 SECONDS BEFORE STARTING. THE DEFROST FUNCTION WILL ONLY OCCUR AT HIGH-SPEED. IF DEFROST IS REQUIRED IN LOW-SPEED, THE UNIT WILL CHANGE TO HIGH-SPEED AFTER THE STANDARD 1 MINUTE SPEED CHANGE TIME DELAY.
- FIELD INITIATED FORCED DEFROST - (SHOWN AS SPEED-UP ON BOARD)**
BY PLACING A JUMPER ACROSS THE "SPEED-UP" TERMINALS FOR 5 SECONDS, OR LONGER, AND THEN REMOVING THE JUMPER, THE UNIT WILL INITIATE A DEFROST CYCLE REGARDLESS OF COIL TEMPERATURE. THE DEFROST CYCLE WILL TERMINATE AT 80°F (±5°) AND WILL ONLY INITIATE BELOW 50°F OUTDOOR TEMPERATURE.
- FURNACE INTERFACE - (SHOWN AS F1 ON BOARD)**
FIELD SELECTION OF THE FURNACE INTERFACE OPTION IS DONE BY CONNECTING THE FACTORY JUMPER TO THE "ON" TERMINALS. THE CONTROL WILL LOCK-OUT HEAT PUMP OPERATION ANY TIME THERE IS A CALL FOR W2 OR THE OUTDOOR TEMPERATURE IS BELOW THE "BALANCE POINT" SELECTION.
- BALANCE POINT SELECTION - (SHOWN AS BP ON BOARD)**
THIS FEATURE CAN BE USED IN TWO DIFFERENT OPTIONS: FURNACE INTERFACE OR ELECTRIC HEAT STAGING. FOR FURNACE INTERFACE, SELECT TEMPERATURE THAT IS DESIRED TO LOCK-OUT HEAT PUMP AND CHANGE TO AUXILIARY HEAT. FOR ELECTRIC HEAT STAGING, SELECT TEMPERATURE AT WHICH W3 IS DESIRED. ELECTRIC HEAT STAGING REPLACES THE NEED FOR OUTDOOR THERMOSTATS, SO BANKS OF RESISTANCE HEAT CAN BE DELAYED BY TEMPERATURE.

-LEGEND-

—	FACTORY POWER WIRING	CCH	CRANKCASE HEATER
---	FIELD POWER WIRING	COMP	COMPRESSOR
----	FIELD CONTROL WIRING	HPS	HIGH PRESSURE SWITCH
○	FACTORY CONTROL WIRING	HSSR	HIGH SPEED START RELAY
○	COMPONENT CONNECTION	LED	SYSTEM FUNCTION LIGHT
⏏	FIELD SPICE	LPS	LOW PRESSURE SWITCH
⏏	JUNCTION	LSSR	LOW SPEED START RELAY
2 SPD CONT	CONTACTOR WITH MECHANICAL INTERLOCK	ODF	OUTDOOR FAN MOTOR (VAR. SPEED)
C1	LOW SPEED (240V COIL)	RVS	REVERSING VALVE SOLENOID
C2	HIGH SPEED (240V COIL)	SC	START CAPACITOR
2 SPD CTL	TWO SPEED CONTROL	SSL	SECOND STAGE LATCHING
BR	BLEED RESISTOR	TDF	THERMISTOR DEFROST
CAP	CAPACITOR	TOA	THERMISTOR (OUTDOOR AIR)

325781-101 REV. A

FUNCTION LIGHT (LED)	LED LOCATION		DEFINITION
CODE	T*STAT	UNIT	
CONSTANT FLASH / NO PAUSE		✓	NO DEMAND / STAND BY
ONE FLASH W/ PAUSE		✓	LOW-SPEED OPERATION
TWO FLASHES W/ PAUSE		✓	HIGH-SPEED OPERATION
THREE FLASHES W/ PAUSE	✓	✓	OUTDOOR THERMISTOR FAILURE
FOUR FLASHES W/ PAUSE	✓	✓	COIL THERMISTOR FAILURE
FIVE FLASHES W/ PAUSE	✓	✓	PRESSURE SWITCH TRIP (LM1/LM2)
SIX FLASHES W/ PAUSE	✓	✓	COMPRESSOR PTC'S OUT OF LIMIT
CONSTANT LIGHT NO PAUSE / NO FLASH	✓	✓	BOARD FAILURE

Fig. 1—38YDA036, 048, 060
208-230v, 1 Phase, 60 Hertz Schematic

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