62AQ Energy$Recycler Energy Recovery Accessory For 3 to 12 1/2 Ton Rooftops

600, 1000, 2000, 3000 Nominal Cfm

Wiring Diagrams

DIAGRAM INDEX

UNIT LABEL DIAGRAM			
Unit 62AQ	**Voltage-Phase-Hertz**	**Label Diagram**	**Figure No.**
060	208/230-1-60	62AQ500130	1
100	208/230-1-60	62AQ500130	1
200	208/230-1-60	62AQ500312	2
	208/230-3-60	62AQ500313	3
	460-3-60	62AQ500314	4
300	208/230-3-60	62AQ500327	5
	460-3-60	62AQ500327	5

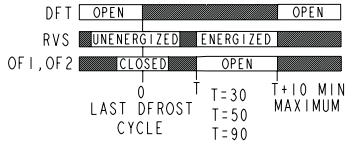
LEGEND (Fig. 1-5)

C — Contactor
CAP — Capacitor
CC — Compact Contactor
CH — Crankcase Heater
CER — Compressor Relay
COC — Cool Changeover Relay
COH — Heat Changeover Relay
COMP — Compressor Motor
CR — Control Relay
CTD — Compressor Time Delay
DB — Defrost Board
DFT — Defrost Thermostat
DM — Damper Motor
EFC — Exhaust Fan Contactor
FC — Supply Fan Contactor
FU — Fuse
FR — Fan Relay
GND — Ground
HM — Humidity Relay
HPS — High-Pressure Switch
HR — Heating Relay
LPS — Low-Pressure Switch
LTLO — Low Temp Cooling Lockout
OATC — Outdoor-Air Thermostat (COOL)
OATH — Outdoor-Air Thermostat (HEAT)
OCR — Occupied Relay
RVS — Reversing Valve Solenoid
TB — Terminal Block
TRAN — Transformer

Field Splice
Terminal (Marked)
Terminal (Unmarked)
Splice
Splice (Marked)
Factory Wiring
Field Control Wiring
Field Power Wiring
Accessory or Optional Wiring
To indicate common potential only, not to represent wiring.

NOTES FOR FIG. 1-5

1. If any of the original wire furnished must be replaced, it must be replaced with type 90 C or its equivalent.
2. Use copper conductors only.
3. TRAN is wired for a 230-v unit. If unit is to be run with 208-v power supply, disconnect BLK wire from 230-v terminal and connect to 208-v terminal.



OPERATING SEQUENCE

Energy$Recycler Units With Light Commercial Thermidistat Accessory — The Light Commercial Thermidistat is a 7-day programmable, wall mounted, low voltage field-installed control. It combines temperature and humidity control in a single unit and provides separate set points for heating and cooling. The control adds a dehumidification control function with separate set points for up to 2 occupied and unoccupied periods per day.

Different heating and cooling set points and times are programmable for up to 4 periods per day 7 days per week. In case of a power loss an internal memory stores programs and settings for unlimited time, and the clock continues to run for at least 8 hours. Batteries are not used.

The Light Commercial Thermidistat provides direct control of the 62AQ, rooftop unit fans, and rooftop unit compressor in response to the programmed time schedules and temperature settings. The dehumidification output signal controls the Energy$Recycler compressor to cool and dehumidify the supply air. A relay in the Energy$Recycler unit energizes the MoistureMi$er solenoid in the rooftop unit if it is equipped with the optional MoistureMi$er dehumidification package.

During occupied periods the 62AQ Energy$Recycler and the rooftop unit's fans run continuously to maintain proper airflow and ventilation rates. The compressors in the Energy$Recycler and the rooftop unit cycle in response to the dehumidification and thermostat output signals from the control to maintain proper temperature and humidity levels. During unoccupied periods the system fans and compression will cycle in response to the Light Commercial Thermidistat's temperature and humidity output signals to maintain space conditions at programmed set points. During mild weather, if the outdoor temperature is below the outside air thermostat (OAT) set point, the system operates in the economizer mode to provide first-stage cooling with compression as second stage.

SCHEMATIC

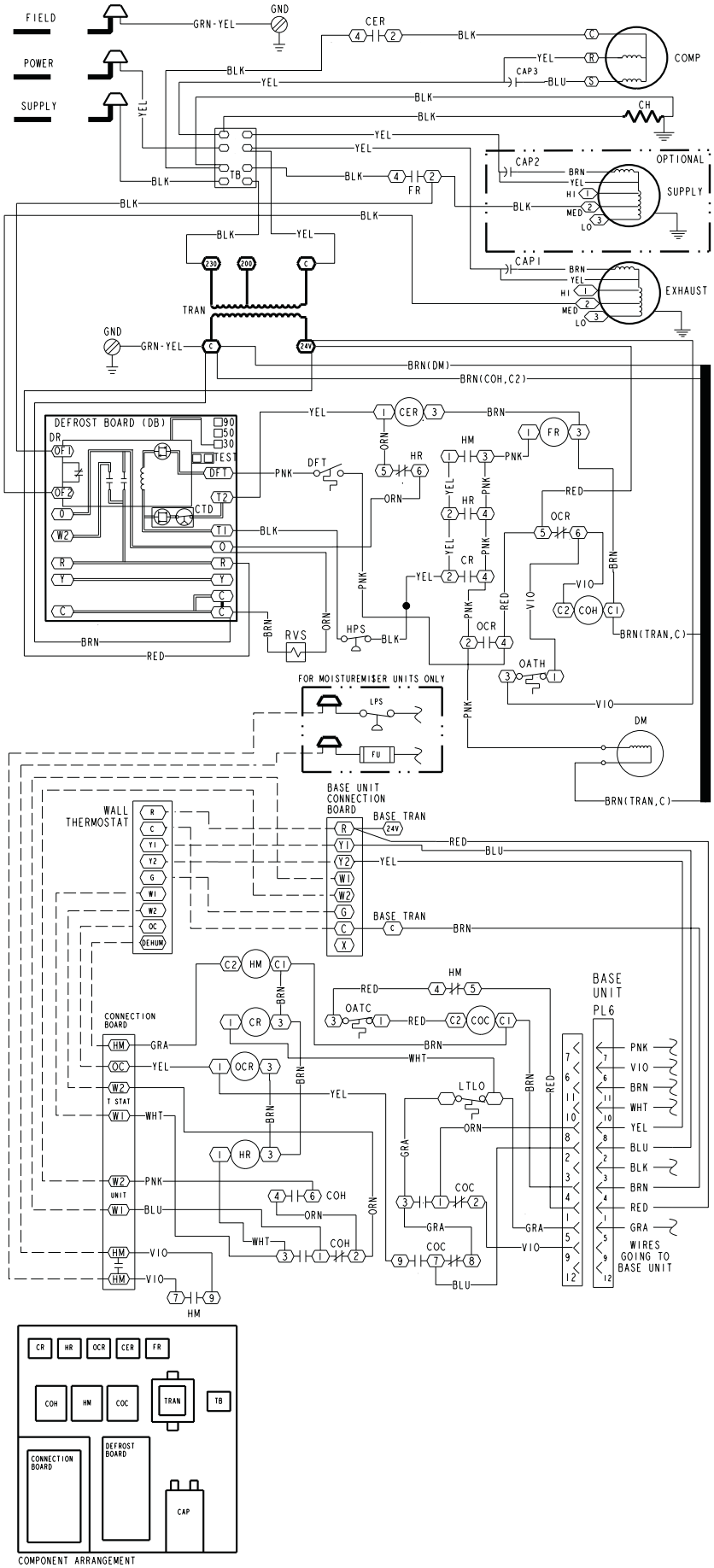


Fig. 1 — Label Diagram — 62AQ060,100 — 208/230-1-60 Units

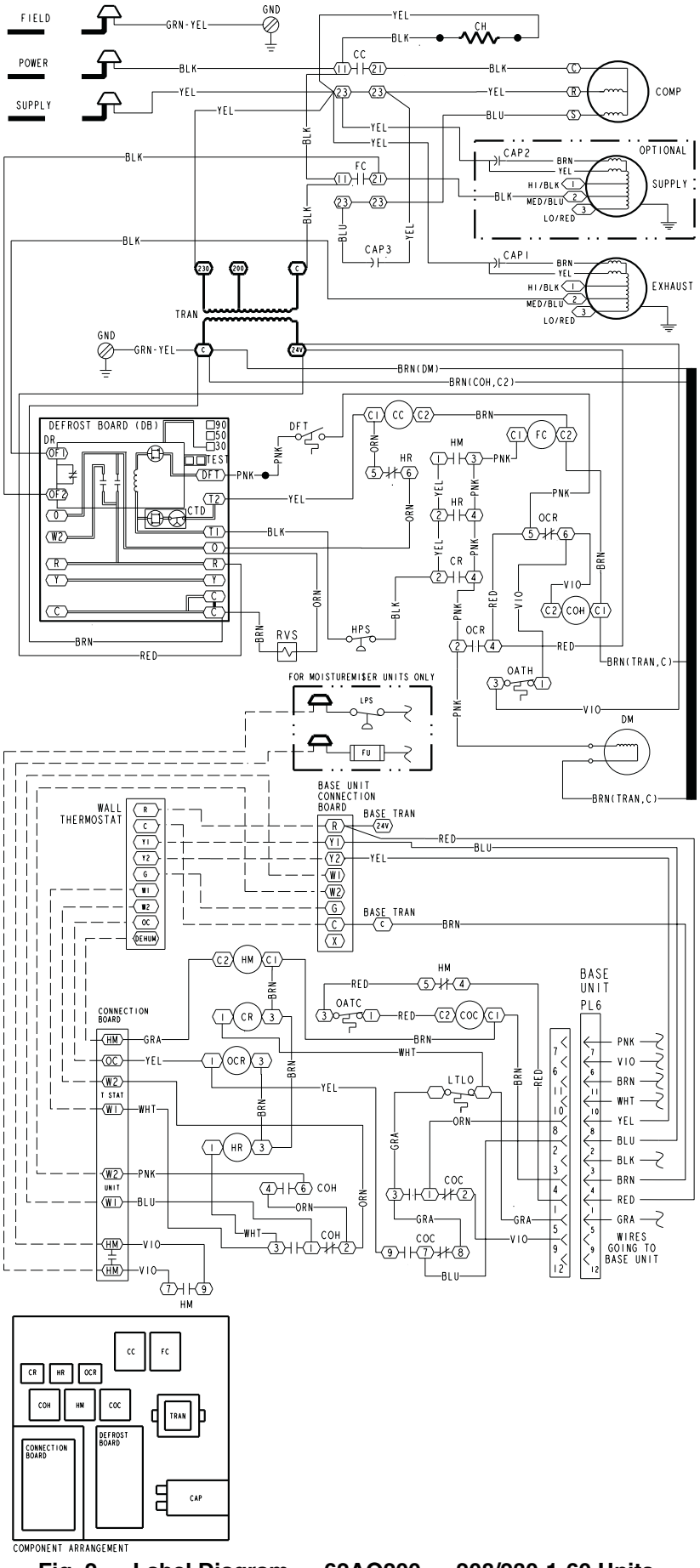


Fig. 2 — Label Diagram — 62AQ200 — 208/230-1-60 Units

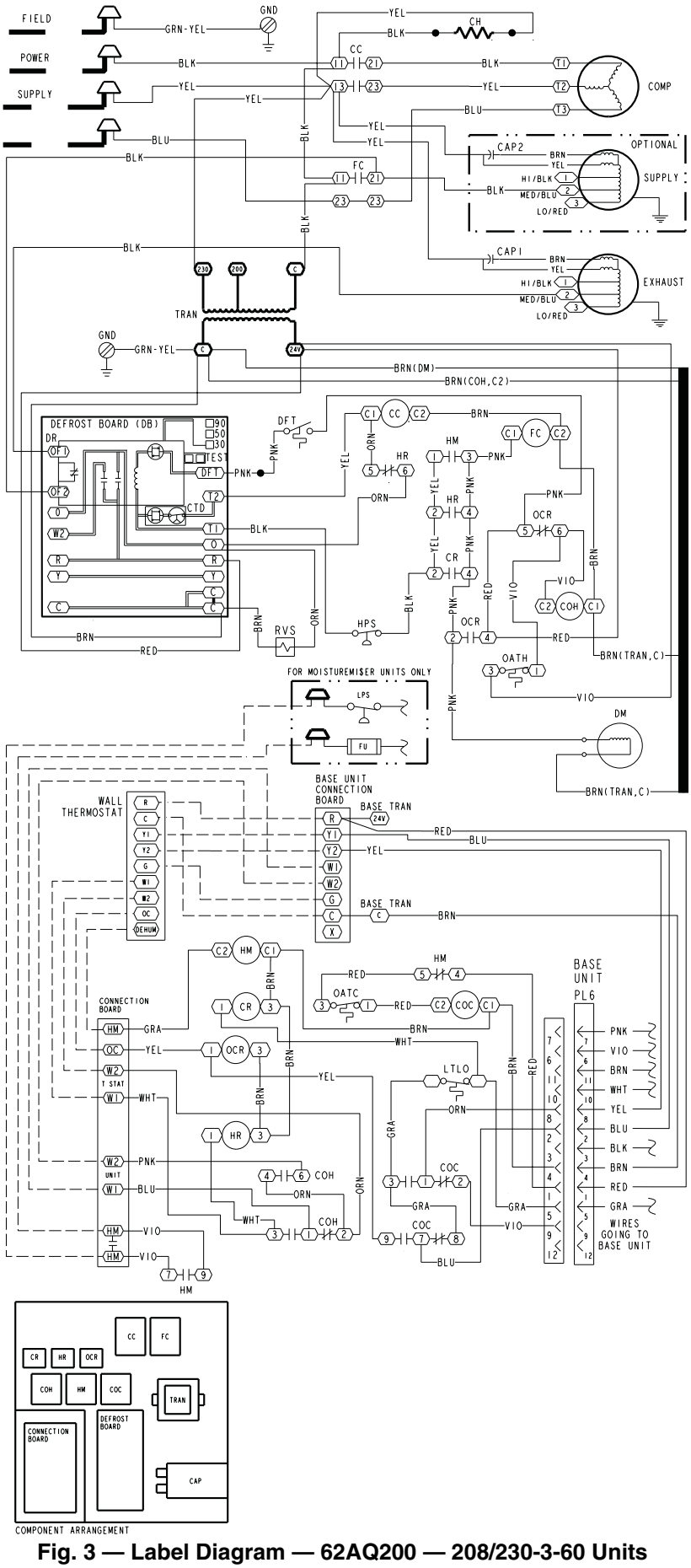


Fig. 3 — Label Diagram — 62AQ200 — 208/230-3-60 Units

SCHEMATIC

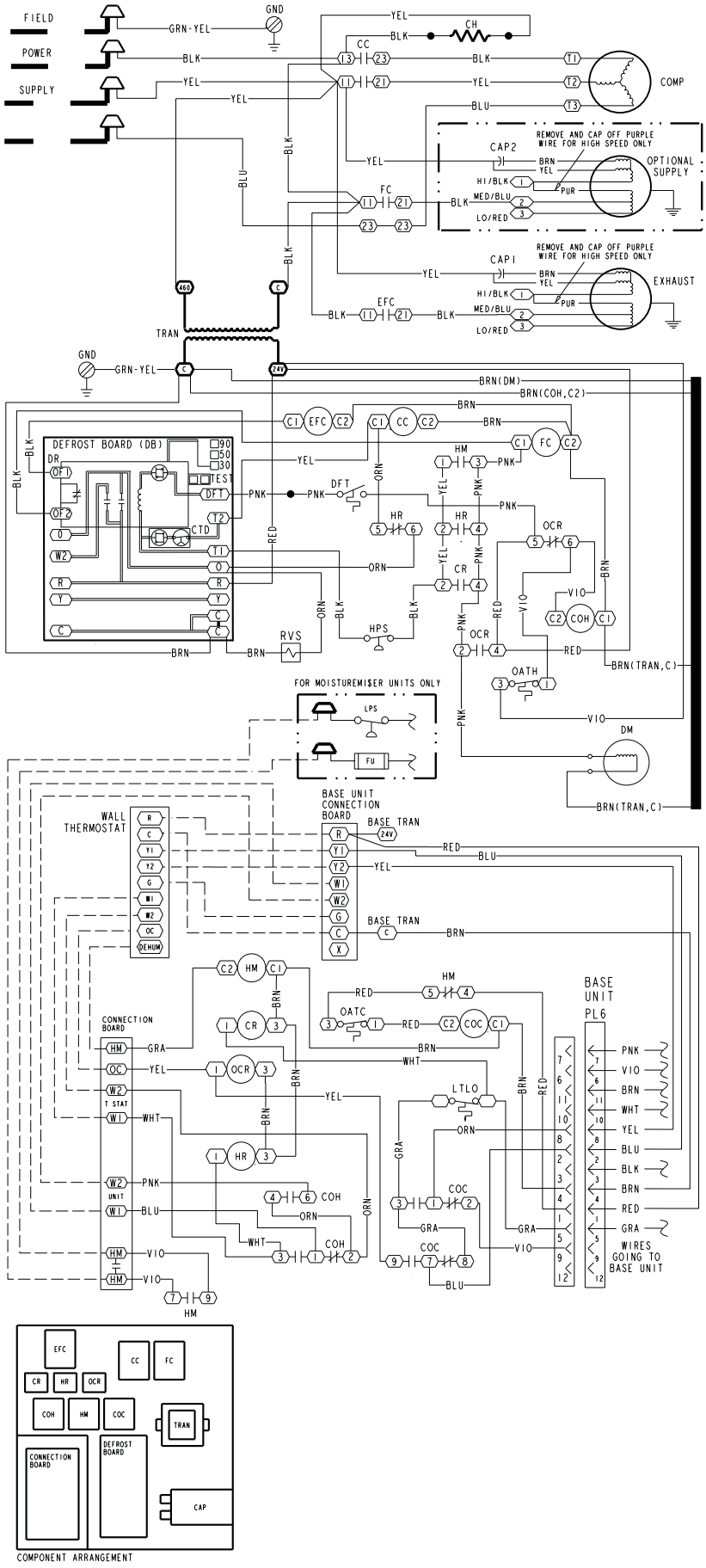


Fig. 4 — Label Diagram — 62AQ200 — 460-3-60 Units

SCHEMATIC

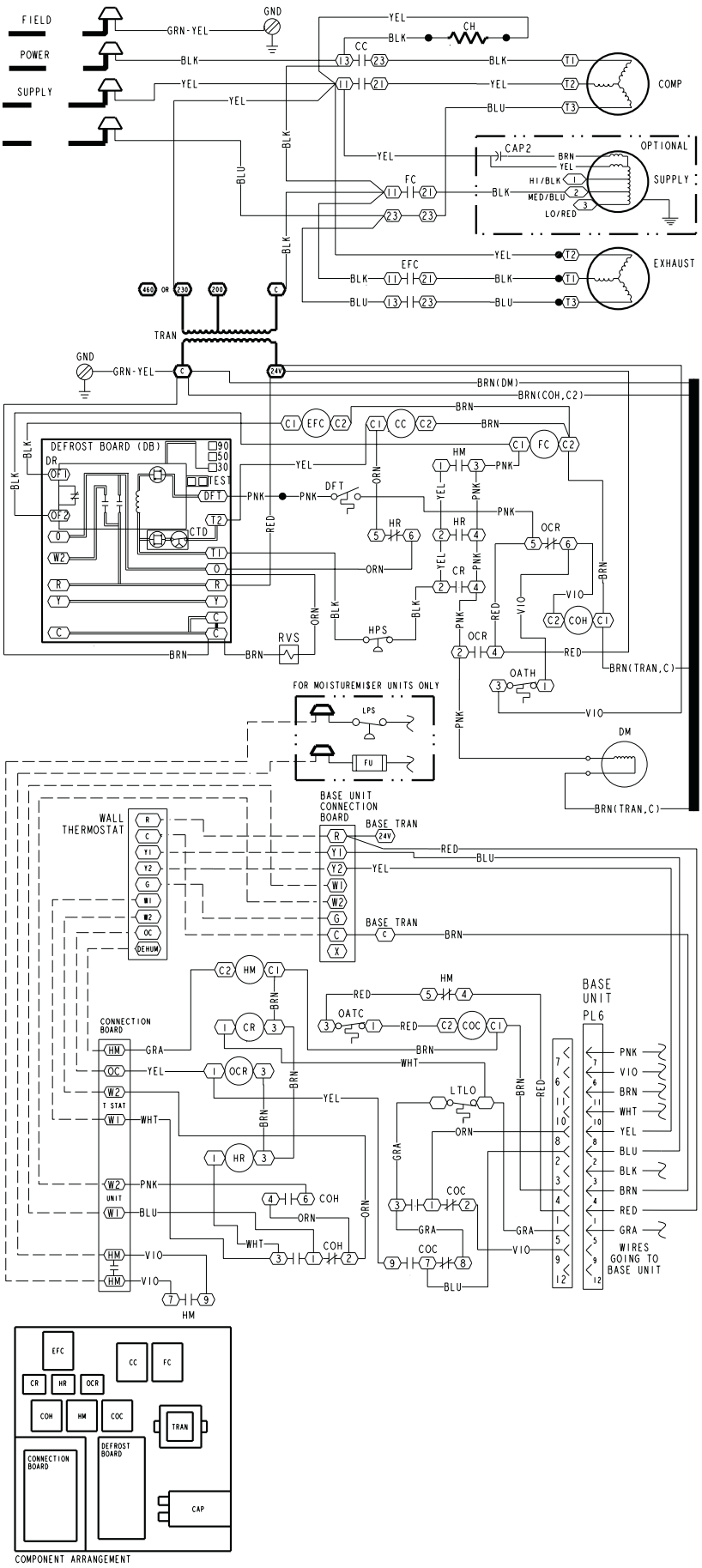


Fig. 5 — Label Diagram — 62AQ300 — 208/230-3-60 and 460-3-60 Units