

SERVICE FACTS

Contains wiring and service information

Model: WCY036F100A

Single Package Heat Pump Convertible 3 Ton

IMPORTANT - This Document is customer property and is to remain with this unit. Please return to service information upon completion of work.

PRODUCT SPECIFICATIONS

MODEL	WCY036F100A	MODEL	WCY036F100A
RATED Volts/Ph/Hz	208-230/1/60	OUTDOOR FAN — TYPE	PROPELLER
RATINGS (COOLING) ①		No. Used/Dia. (in.)	1 / 18
BTUH	35600	Type Drive/No. Speeds	DIRECT / 1
Indoor Airflow (CFM)	1200	CFM @ 0.0 in. w.g. ④	2500
Power Input (KW)	3.42	No. Motors—HP	1 - 1/5
EER/SEER (BTU/Watt-Hr.) ⑤	10.40 / 12.00	Motor Speed R.P.M.	1080
Noise Rating No. ②	8.0	Volts/Ph/Hz	230/1/60
RATINGS (HEATING) ①		F.L. Amps—L.R. Amps	1.6 - 3.3
(High Temp.) BTUH	35200 - 3.38	INDOOR FAN—TYPE	CENTRIFUGAL
Power Input (KW)	3.05	Dia x Width (in.)	10 X 9
(Low Temp.) BTUH	17700 - 2.00	No. Used	1
Power Input (KW)	2.59	Drive / Speeds (No.)	DIRECT / 2
HSPF (BTU / Watt-Hr.) ⑤	7.3	CFM vs. in. w.g. ⑤	SEE FAN PERF. TABLE
POWER CONN.—V/Ph/Hz	208-230/1/60	No. Motors—HP	1 - 1/3
Min. Brch. Cir. Ampacity ③	25.9	Motor Speed R.P.M.	1080
Fuse Size—Max. (amps)	40	Volts/Ph/Hz	200-230/1/60
Fuse Size—Recmd. (Amps)	40	F.L. Amps—L.R. Amps	2.8/2.2 - 5.1
COMPRESSOR		FILTER / FURNISHED?	NO
No. Used—No. Speeds	1 - 1	Type Recommended	THROWAWAY
Volts/Ph/Hz	200-230/1/60	Min. Face Area ⑦	
R.L. Amps—L.R. Amps	14.1 - 91	Low Vel. (sq. ft.)	4.0
OUTDOOR COIL—TYPE	PLATE FIN	REFRIGERANT	
Rows/F.P.I.	2 / 22	Charge (lbs of r-22)	8 LBS. 10 OZ.
Face Area (sq.ft.)	11.35	DIMENSIONS	H X W X D
Tube Size (in.)	3/8 COPPER	Crated (in.)	35-1/4 X 38 X 64-5/8
Refrigerant Control	TXV-NB	Uncrated	SEE OUTLINE DRAWING
INDOOR COIL—TYPE	PLATE FIN	WEIGHT	
Rows/F.P.I.	4 / 15	Shipping (lbs.)	468 / 398
Face Area (sq.ft.)	4.28	Net (lbs.)	
Tube Size (in.)	3/8 COPPER		
Refrigerant Control	TXV-NB		
Drain Conn. Size (in.)	3/4 FEMALE NPT		
Duct Connections	SEE OUTLINE DRAWING		

- ① Rated in accordance with A.R.I. Standard 240.
 ② Rated in accordance with A.R.I. Standard 270.
 ③ Calculated in accordance with currently prevailing Nat'l Electrical Code.
 ④ Standard Air — Dry Coil — Outdoor.
 ⑤ Standard Air — Wet Coil — Indoor.
 ⑥ Rated in accordance with D.O.E. test procedure.
 ⑦ Filters must be installed in return air stream. Square footages listed are based on 300 f.p.m. face velocity. If permanent filters are used size per manufacturer's recommendation with a clean resistance of 0.05" W.C.

WARNING !

SAFETY NOTICE

THIS INFORMATION IS INTENDED FOR USE BY INDIVIDUALS POSSESSING ADEQUATE BACKGROUNDS OF ELECTRICAL AND MECHANICAL EXPERIENCE. ANY ATTEMPT TO REPAIR A CENTRAL AIR CONDITIONING PRODUCT MAY RESULT IN PERSONAL INJURY AND/OR PROPERTY DAMAGE. THE MANUFACTURER OR SELLER CANNOT BE RESPONSIBLE FOR THE INTERPRETATION OF THIS INFORMATION. NOR CAN IT ASSUME LIABILITY IN CONNECTION WITH ITS USE.

NOTICE: Since the manufacturer has a policy of continuous product improvement, it reserves the right to change specifications and design without notice.

HAZARDOUS VOLTAGE DISCONNECT POWER BEFORE SERVICING.

Failure to DISCONNECT POWER before servicing can cause severe personal injury or death.

IMPORTANT

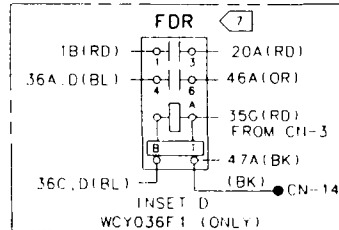
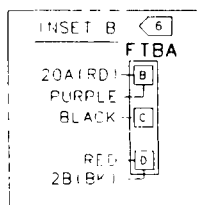
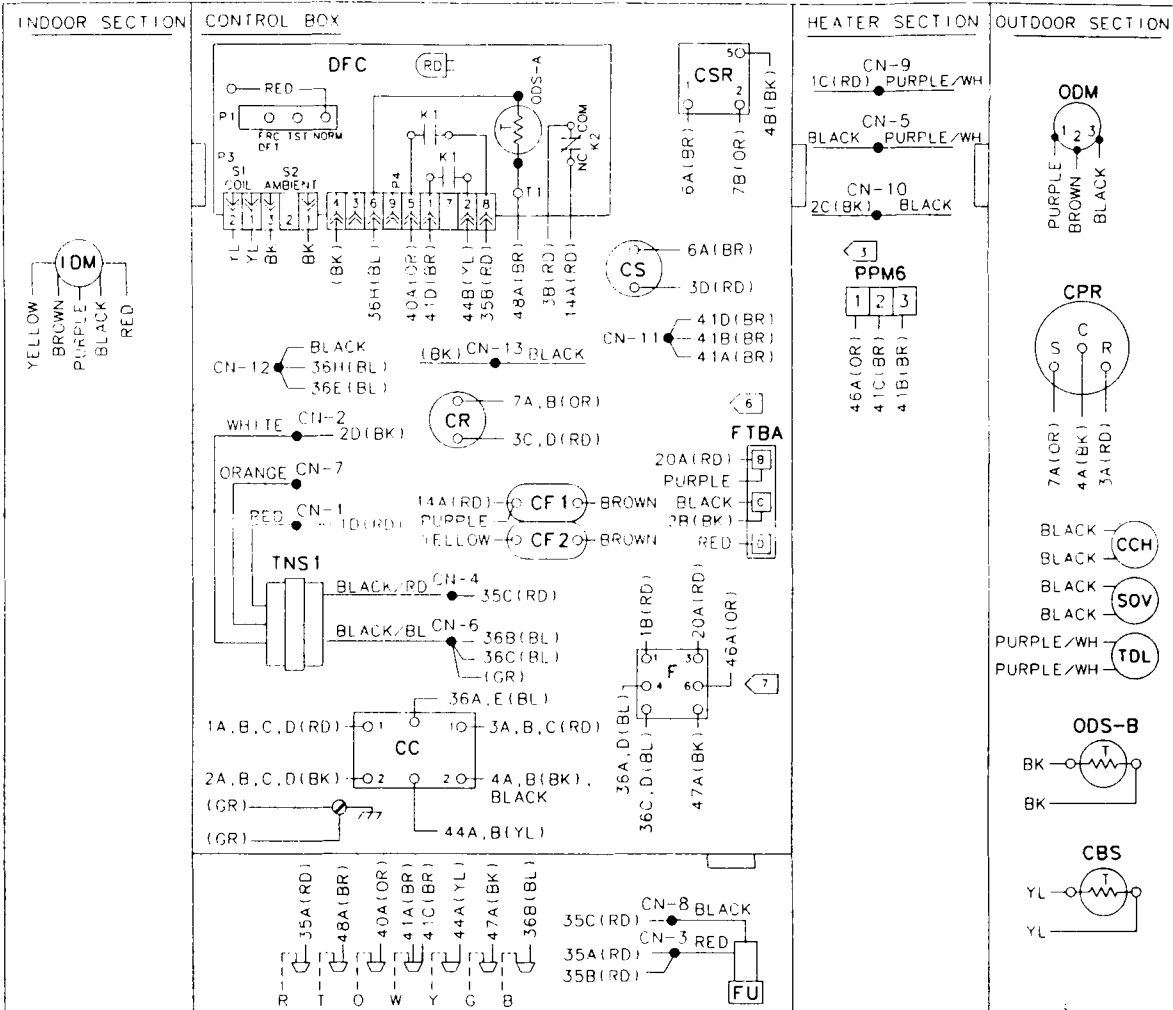
RECONNECT ALL GROUNDING DEVICES

ALL PARTS OF THIS PRODUCT CAPABLE OF CONDUCTING ELECTRICAL CURRENT ARE GROUNDED. IF GROUNDING WIRES, SCREWS, STRAPS, CLIPS, NUTS OR WASHERS USED TO COMPLETE A PATH TO GROUND ARE REMOVED FOR SERVICE, THEY MUST BE RETURNED TO THEIR ORIGINAL POSITION AND PROPERLY FASTENED.

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CM 3/12/94

WIRING DIAGRAM



WIRE	COLOR	DESIGNATION
ABBR	COLOR	ABBR
BK	BLACK	PR
BL	BLUE	RD
BR	BROWN	WH
GR	GREEN	YL
OR	ORANGE	

DEVICE	DESCRIPTION	LINE
AH, BH	CONTACTOR ELECTRIC HEAT	40, 41
CBS	COIL BOTTOM SENSOR	30
CC	COMPRESSOR CONTACTOR COIL	43
CCH	CRANKCASE HEATER	21
CF1	OUTDOOR FAN CAPACITOR	19
CF2	INDOOR MOTOR CAPACITOR	21
CN	CONNECTOR OR WIRE NUT	
CPR	COMPRESSOR	14
CR	COMPRESSOR RUN CAPACITOR	15
CS	COMPRESSOR START CAPACITOR	10
CSR	COMPRESSOR START RELAY COIL	10
DFC	DEFROST CONTROL	30-37
F	INDOOR FAN RELAY COIL	45
FDR	INDOOR FAN DELAY RELAY	47
FTB	FAN TERMINAL BLOCK	23-25
FU	FUSE	29
IDM	INDOOR FAN MOTOR	23
IOL	INTERNAL OVERLOAD	
ODM	OUTDOOR FAN MOTOR	18
ODS	OUTDOOR AMBIENT SENSOR	33
PCB	PRINTED CIRCUIT BOARD	47-51
PPM6	HEATER PLUG (FEMALE)	40, 41
SOV	SWITCHOVER VALVE	37
TDL	DISCHARGE LINE THERMOSTAT	21
TNS1	CONTROL POWER TRANSFORMER	28

NOTES:

- CONNECTIONS SHOWN ARE FOR A TYPICAL THERMOSTAT. SEE SCHEMATIC SUPPLIED WITH THERMOSTAT FOR PROPER CONNECTIONS. LOW VOLTAGE WIRING TO UNIT MAY BE NEC CLASS 2 AND MUST BE A MIN. OF 18 A.W.G.
- MAXIMUM ADDITIONAL EXTERNAL LOAD (PILOT DUTY) BETWEEN "B" AND "R" OF 0.5 AMPS. 24 VAC IS AVAILABLE WHEN A HEATER IS INSTALLED.
- SEE WIRING DIAGRAM WITH HEATER FOR DETAILS OF HEATER WIRING.
- FOR 208 VOLT OPERATION MAKE THE FOLLOWING WIRING CHANGES:
A: AT IDM, MOVE 20A(RD) LEAD FROM FTBA-B TO YELLOW LEAD AT CF2.
B: AT TNS1 MOVE 1D(RD) FROM RED WIRE AND CONNECT TO ORANGE WIRE.
THE RED WIRE MUST BE RE-TERMINATED TO AVOID ACCIDENTLY SHORTING.
- IF ANY OF THE ORIGINAL WIRE AS SUPPLIED IN THIS UNIT MUST BE REPLACED, REPLACE IT WITH APPLIANCE WIRING MATERIAL RATED AT 105° C.
- INDOOR BLOWER MOTOR CONNECTIONS SHOWN ARE FOR THE WCY024F1 AND -042F1 UNITS. FOR INDOOR BLOWER MOTOR CONNECTIONS FOR THE WCY030F1, -036F1, AND -048F1 UNITS SEE INSET A AND B.
- THE WCY036F1 HAS A FAN DELAY RELAY (FDR). SEE INSET C & D. UNIT IS FACTORY WIRED FOR FAN OFF DELAY. FOR INSTANT OFF OPERATION DISCONNECT 35D(RD) WIRE FROM FDR-A AND INSULATE. REMOVE CN-14 FROM 47B(BK) AND CONNECT TO FDR-A.

From Dwg. No. 21D757151

SCHEMATIC DIAGRAM

CAUTION-NOT SUITABLE FOR USE ON SYSTEMS EXCEEDING 150 VOLTS TO GROUND.
ATTENTION: NE CONVIENT PAS POUR LES INSTALLATIONS DE PLUS DE 150V. A TERRE.

UNIT FACTORY WIRE FOR 230V

SEE WIRING DIAGRAM NOTES FOR REQUIRED WIRING CHANGES WHEN INSTALLED ON A 208V POWER SUPPLY.

POWER SUPPLY PER LOCAL CODES
SEE NAMEPLATE FOR LINE VOLTAGE

WARNING

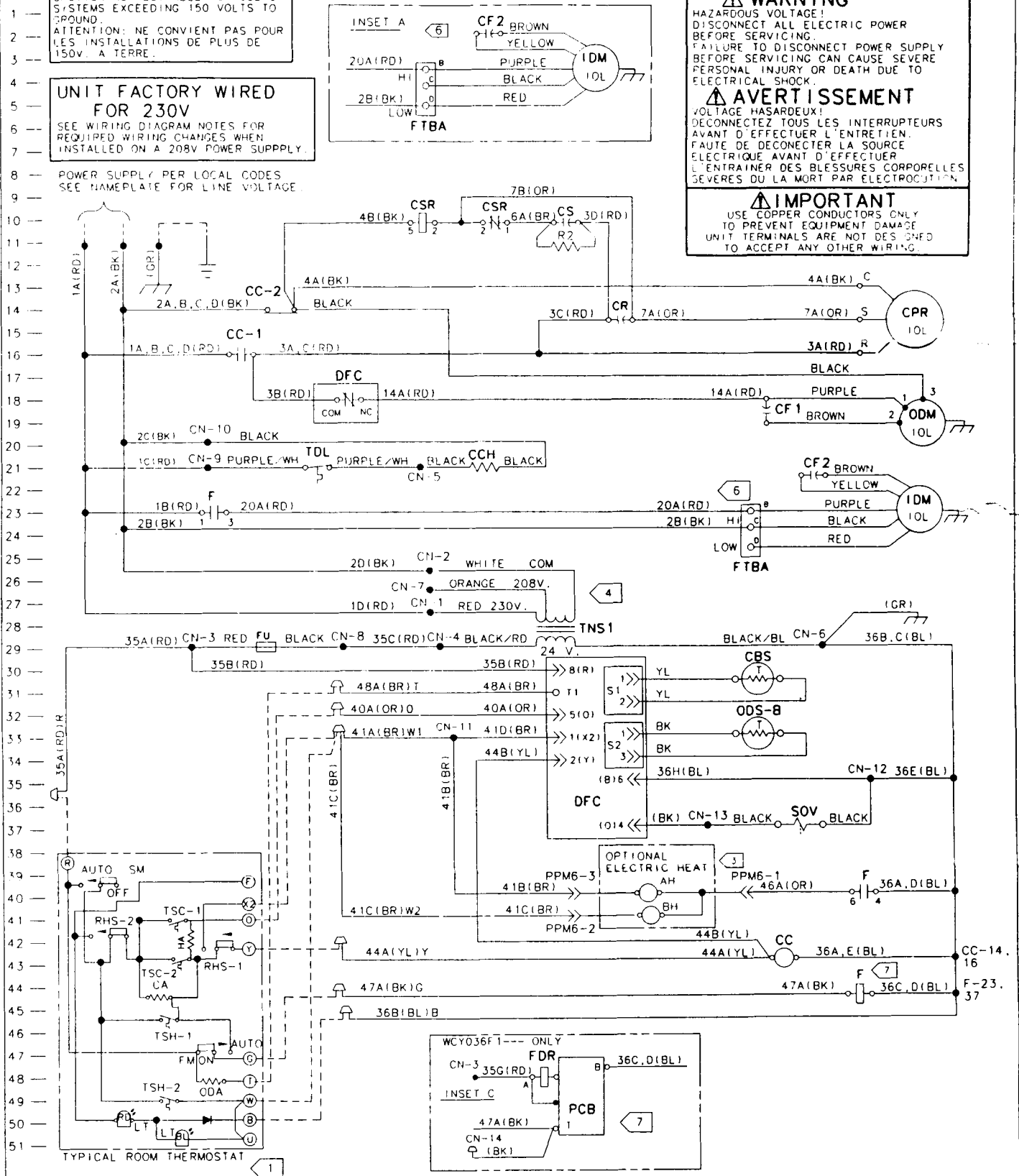
HAZARDOUS VOLTAGE!
DISCONNECT ALL ELECTRIC POWER BEFORE SERVICING.
FAILURE TO DISCONNECT POWER SUPPLY BEFORE SERVICING CAN CAUSE SEVERE PERSONAL INJURY OR DEATH DUE TO ELECTRICAL SHOCK.

AVERTISSEMENT

VOLTAGE HASARDEUX!
DECONNECTEZ TOUS LES INTERRUPTEURS AVANT D'EFFECTUER L'ENTRETIEN.
FAUTE DE DECONNECTER LA SOURCE ELECTRIQUE AVANT D'EFFECTUER L'ENTRETIEN DES BLESSURES CORPORELLES SEVERES OU LA MORT PAR ELECTROCUTION.

IMPORTANT

USE COPPER CONDUCTORS ONLY TO PREVENT EQUIPMENT DAMAGE.
UNIT TERMINALS ARE NOT DESIGNED TO ACCEPT ANY OTHER WIRING.



From Dwg. No. 21D757151