

Air-Cooled Condensing Units

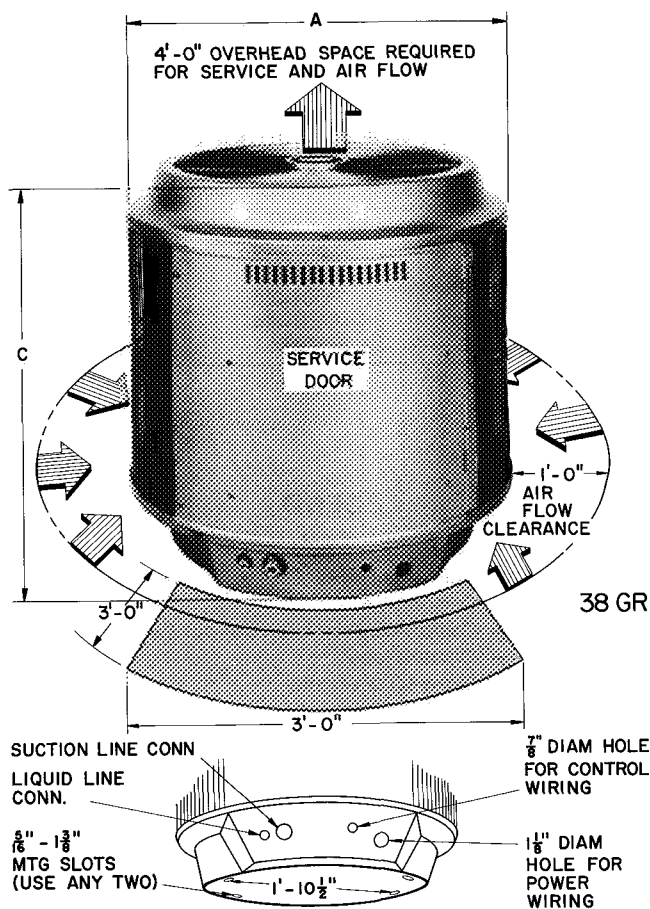
50-Hertz

This booklet supplements 38GR Installation, Start-Up and Service Instructions for 60-Hz units.

Table 1 — Installation Data

CONDENSING UNIT	38GR002*	38GR004	38GR005	38GR006
OPER WT (lb)	156	188	239	265
DIMENSIONS (ft-in.)				
Diam A	2-5 $\frac{1}{4}$			
Height C	2-4	2-8	2-8	2-8

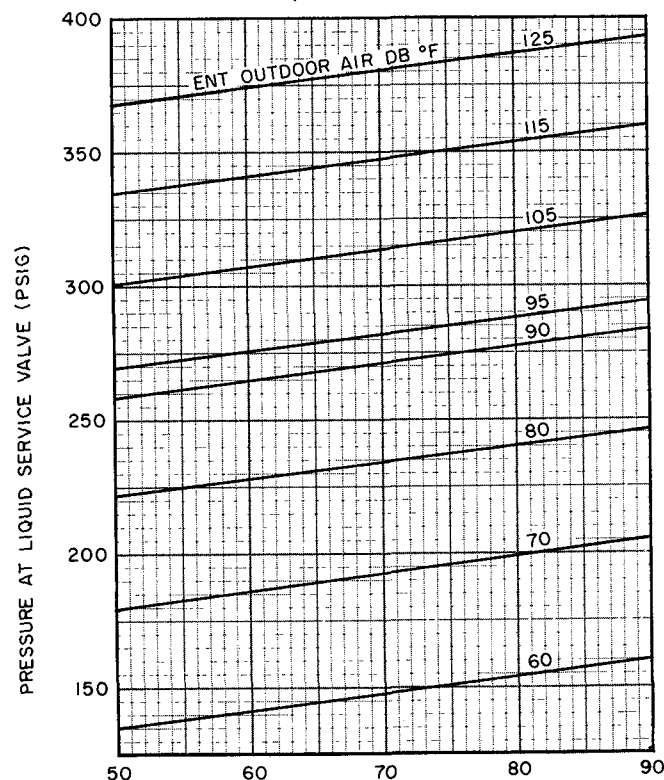
*Suction line connection on 50-Hz 38GR002 is 5/8-in. ODF. Remaining unit connections same as shown in 60-Hz instructions



□ SPACE REQUIRED FOR SERVICE

Fig. 1 — Dimensions and Connections

SERVICE DATA AND CHARGING CHARTS (50-Hz)



PRESSURE AT SUCTION SERVICE VALVE (PSIG)

Fig. 2 — 38GR002 Charging Chart — TXV Systems

Table 2 — Service Data

COND UNIT	38GR002	38GR004	38GR005	38GR006
R-22 CHG (lb-oz)	4-11	6-2	6-10	6-13
COMPRESSOR				
Single Phase	RN3522CJ	—	—	—
Three Phase	230 v RL3522CJ	RL5422CJ	RL7022BJ	RL7722BJ
	400 v RM3522CJ	RM5422CJ	RM7022BJ	RM7722BJ
OIL RECHG (oz)	43.2	72.0	72.0	72.0
CONDENSER FAN	Propeller Type, Direct Drive; 20-in. Diam			
Rpm	Hi	1050	1070	1070
	Lo	850	870	870
Cfm	Hi	2800	3700	3700
	Lo	2300	3200	3200

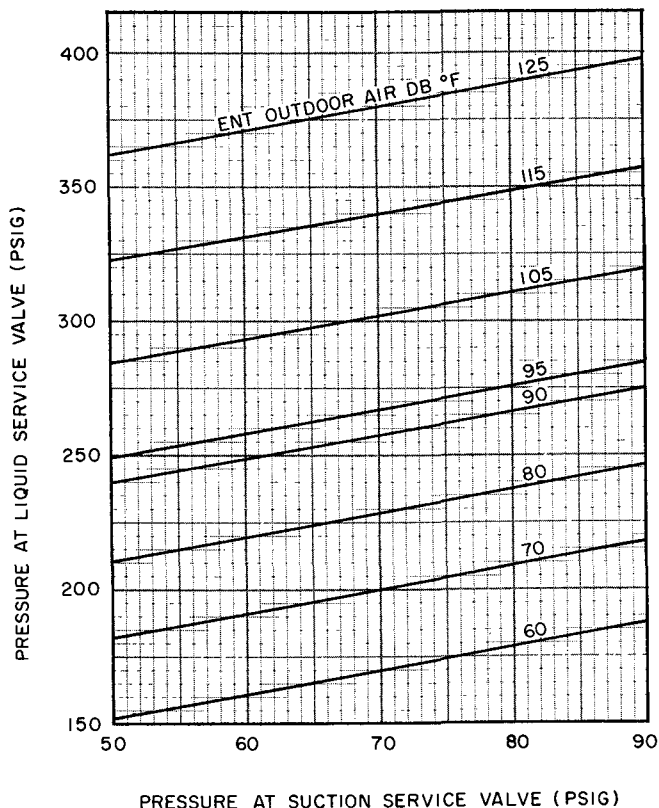


Fig. 3 – 38GR004,005,006 Charging Chart – TXV Systems

ELECTRICAL DATA AND WIRING

Table 3 – Electrical Data (50-Hz)

COND UNIT	V/PH	COMPR		FAN	BRANCH CIRCUIT			
		LRA	FLA	FLA	Wire Size* (AWG)	Max Ft Wire	Fuse Amps†	
38GR002	230/1	70.0	16.5	1.0	10	8	57	30
38GR002		46.0	8.5	1.0	14	12	53	15
38GR004	230/3	67.0	11.8	1.0	12	10	63	20
38GR005		95.0	17.8	1.7	10	8	66	30
38GR006		96.6	25.2	1.7	8	6	84	40
38GR002	400/3	25.0	5.0	1.0	14	12	153	10
38GR004		36.5	7.1	1.0	14	12	116	17
38GR005		46.5	10.7	1.7	12	10	136	20
38GR006		54.0	15.1	1.7	10	8	140	25

 Corresponding wire sizes and wire lengths

FLA – Full Load Amps

LRA – Locked Rotor Amps

*Copper wire sizes and lengths

†Maximum dual element fuse size.

NOTE:

Motors and controls will operate satisfactorily from 10% above to 10% below unit voltage. Control circuit voltage is 24 volts on all units. On 3-phase units, phases must be balanced within 2%.

Line Power – Neutral line on 400-volt, 3-phase, 50-Hz units is connected to white and black pigtails supplied with units. See Label Diagram, Fig. 6.

Table 4 – Index

MODEL		VOLTS/PHASE (50-Hz)	LABEL DIAGRAM	
			Fig.	No.
38GR	002700	230/1	4	38GR502504
	002800	230/3	5	38GR502514
	004800			
	005800			
	006800			
	002900	400/3	6	38GR502524
	004900			
	005900			
	006900			

NOTES

1. Compressor and fan motor thermally protected.
2. Power required for control relay on 24-volt, NEC Class 2 circuit is 10 va.
3. Compressor Protection Control System (CPCS) set to trip at 140% compressor FLA.

MODEL	CPCS NO.	TRIP AMPS
38GR002700	38GR501444	23.1
38GR002800	38GR501454	11.9
38GR004800	38GR501474	16.5
38GR005800	38GR501494	24.9
38GR006800	38GR501514	35.3

LEGEND

- C** – Contactor
- CH** – Crankcase Heater
- Comp** – Compressor
- CPCS** – Compressor Protection Control System
- CR** – Control Relay
- CT** – Current Transformer
- FC** – Fan Capacitor
- FM** – Fan Motor
- FT** – Fan Thermostat
- HPS** – High-Pressure Switch
- IFR** – Indoor Fan Relay
- IP** – Internal Protector
- LPS** – Low-Pressure Switch
- QT** – Quad Terminal
- RC** – Run Capacitor
- Recp** – Receptacle
- Res** – Resistor
- SC** – Start Capacitor
- SR** – Start Relay
- Tran** – Transformer

 Marked Component Connections

 Unmarked Component Connections

 Field Splice

 Junction

 Field Power Wiring

 Field Control Wiring

 To indicate common potential only. Not to represent wire.

 Plug – Receptacle Connection

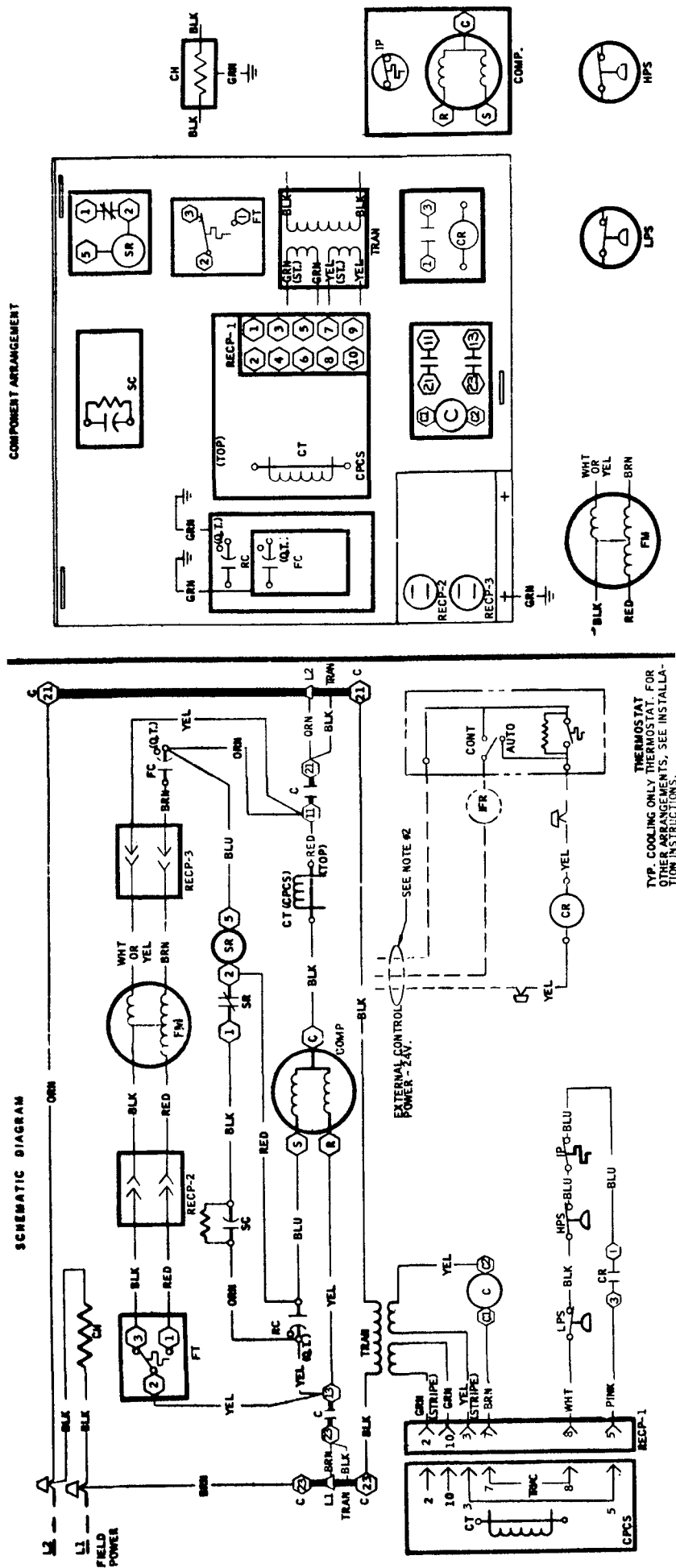


Fig. 4 — 38GR002 Label Diagram; 230-1-50

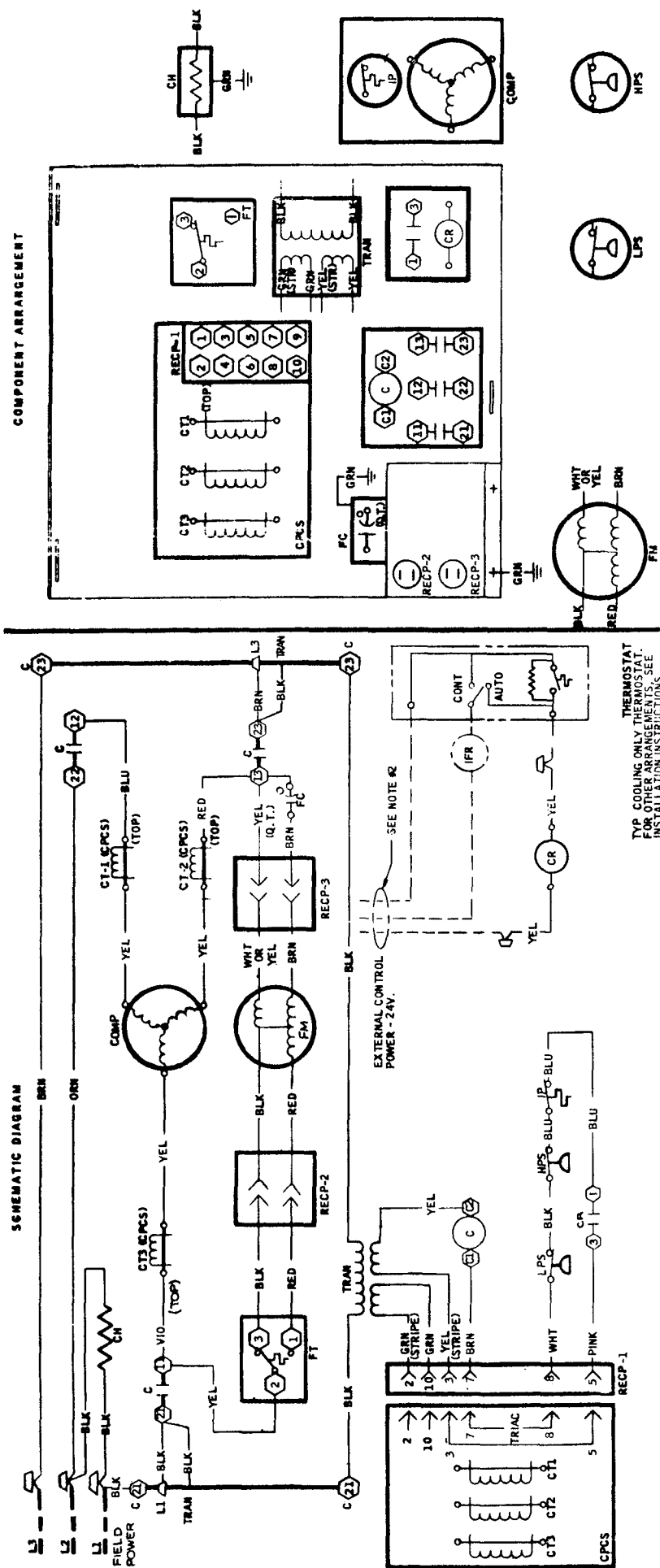


Fig. 5 - 38GR002,004,005,006 Label Diagram; 230-3-50

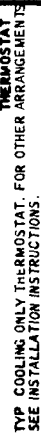


Fig. 6 – 38GR002,004,005,006 Label Diagram; 400-3-50

For replacement items use Carrier Specified Parts.

Manufacturer reserves the right to change any product specifications without notice.

CARRIER AIR CONDITIONING COMPANY • SYRACUSE, NEW YORK