

Comfortmaker®

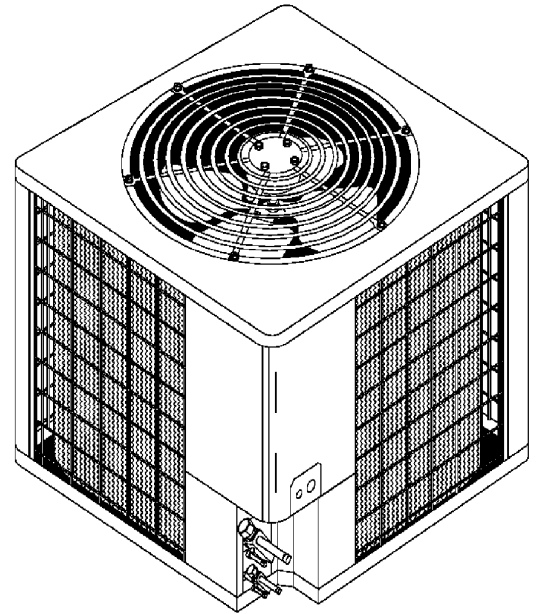
Air Conditioning & Heating

YG Series

12.0 SEER 8.0 HSPF
HEAT PUMP SYSTEM
1¹/₂ thru 5 Ton
SPECIFICATIONS

FEATURES

- Copeland® Compliant Scroll® Compressor
- Suction Line Accumulators on All Models
- External Sweat Valve Refrigerant Connection
- Copper Tube/Aluminum Fin Coil Employing "State of the Art" High Efficiency Design
- Prepainted Condenser Fins For Enhanced Corrosion Protection
- Non-bleed Thermostatic Expansion Valve
- Auto Reset Low Pressure Switch
- External High and Low Refrigerant Service Ports
- Discharge Muffler
- Bi-Flow Liquid Line Filter Drier
- Factory Charged with R-22
- Top Discharge for Quieter Operation
- Integrated 24V Defrost Control Includes Anti-Short Cycle Timer and Soft Changeover Feature
- Fan Motor In-Line Disconnect Plug
- 10 Year Limited Compressor Warranty



31-30-31d



EPA POLLUTION PREVENTER



Rated in accordance with ARI Standard 240. Certification applies only when used with proper components as listed with ARI.



Listed By
Underwriters'
Laboratories

International Comfort Products Corporation (USA)
650 Heil Quaker Avenue
Lewisburg, Tn. 37091

428 41 2401 03
January, 1997
Replaces 428 41 2401 01,02

UNIT SPECIFICATIONS

Model Number		YG018GA	YG024GA	YG030GA	YG036GA	YG042GA	YG048GA	YG060GA
Electrical Data	Voltage-Phase-Hz	208/230-1-60						
	Voltage Range (Min-Max)	197/253						
	Minimum Circuit Ampacity	12.0	13.8	17.8	21.3	23.8	31.0	37.5
	Wire Size / Max. Length (AWG Cu)	#14/20'	#14/20'	#12/25'	#10/30'	#10/30'	#8/40'	#8/40'
	Time Delay Fuse (Amps)	15	20	25	30	30	40	45
	Max. Fuse or HACR Breaker Size (Amps)	20	20	30	35	40	50	60
Compressor Data	Voltage-Phase-Hz	208/230-1-60						
	Full Running / Lock Rotor Amps	10/14.8	11.4/56.0	15.0/72.5	17.9/88.0	20/104	26.4/129	32.1/169
	Crankcase Heater (Type)	NONE						
	Start Device	NONE						
Fan Data	Voltage-Phase-Hz	208/230-1-60						
	Horsepower/Type	1/8 PSC	1/6 PSC	1/6 PSC	1/3 PSC	1/4 PSC	1/4 PSC	1/4 PSC
	Full Load/Lock Rotor Amps.	.75/1.6	1.0/1.86	1.0/1.86	1.3/3.56	1.4/3.24	1.4/3.24	1.4/3.24
	Speeds / CFM (Max)	1 / 2600	1 / 3100	1 / 3100	1 / 3100	1 / 3100	1 / 3100	1 / 3100
	Outdoor Coil Data	Total Face Area (Sq. Ft.)	14.8	17.8	17.8	17.8	20	26.7
Fins Per Inch/Rows		16/1			16/2		18/2	20/2
Tube Diameter (OD)		3/8"						
Control Device		TXV						
Refrigerant Connection		Suction (I.D.)	3/4"				7/8"	
	Liquid (I.D.)	5/16"				3/8"		
And Charge Data	Factory Charge R-22 (Oz)	87	109	106	149	189	214	264
Weights	Shipping/Net (Lbs)	N/A	N/A	N/A	N/A	N/A	N/A	N/A

PERFORMANCE DATA SINGLE PHASE

Outdoor Model	Indoor Model	Cooling					47 Heating			17 Heating		CFM	dBels
		BTUH	SEER	EER	S/T	WATTS	BTUH	COP	HSPF	BTUH	COP		
YG018GA	EP*30(B15,F19)AZ + TXV	18,000	12.05	10.6	.73	1698	17,600	3.26	7.05	10,600	2.08	600	72
	EX*18B15AZ + TD1	18,000	12.00	10.6	.73	1698	17,400	3.12	7.50	10,600	2.08	600	
	EX*24(B15,F19)AZ + TD1	18,000	12.00	10.6	.73	1698	17,400	3.12	7.50	10,600	2.08	600	
	H24PSA + .051 orifice	17,800	11.30	10.5	.76	1695	17,000	3.28	7.40	10,100	2.18	650	
	H24PSA + TD1 + .051 orifice	17,800	11.50	10.5	.76	1695	17,000	3.28	7.40	10,100	2.18	650	
	H24PSA + TXV	17,800	12.00	10.5	.76	1695	17,000	3.28	7.40	10,100	2.18	650	
	FCX2400AZ	17,200	12.00	10.3	.73	1670	17,400	3.16	7.50	10,400	2.10	600	
YG024GA	EX*24(B15)AZ + TD1	22,800	12.05	10.4	.77	2192	23,800	3.40	8.00	14,200	2.20	800	74
	EP*36(B15,F19,J22)AZ + TXV	22,400	12.05	10.4	.78	2153	22,400	3.34	7.50	13,600	2.16	800	
	EP*42(F19,J22)AZ + TXV	22,800	12.05	10.5	.78	2171	22,400	3.34	7.50	13,600	2.16	800	
	H24PSA + .061 orifice	22,800	11.20	10.6	.77	2150	23,000	3.40	7.65	14,200	2.24	800	
	H24PSA + TD1 + .061 orifice	22,800	11.50	10.6	.77	2150	23,000	3.40	7.65	14,200	2.24	800	
	H24PSA + TXV	22,800	12.05	10.7	.77	2130	23,000	3.40	7.65	14,200	2.24	800	
	FCX2400AZ	22,800	12.05	10.4	.77	2192	23,800	3.42	8.00	14,200	2.24	800	
YG030GA	EX*36(F19,J22)AZ + TD1	28,600	12.05	10.2	.77	2803	28,400	3.40	8.00	17,000	2.22	1000	76
	EP*42(F19,J22)AZ + TXV + TD1	28,400	11.50	10.1	.75	2811	28,400	3.42	7.50	17,000	2.22	1000	
	H36PSA + .067 orifice	28,800	11.20	10.3	.77	2796	28,200	3.50	8.00	16,900	2.28	1000	
	H36PSA + TD1 + .067 orifice	28,800	11.50	10.3	.77	2796	28,200	3.50	8.00	16,900	2.28	1000	
	H36PSA + TXV	28,800	12.05	10.5	.77	2742	28,200	3.50	8.00	16,900	2.28	1000	
	FCX3600AZ	28,600	12.05	10.2	.77	2804	28,600	3.46	8.00	17,000	2.20	1000	
YG036GA	EX*36(F19,J22)AZ + TD1	34,600	12.05	10.6	.76	3264	36,000	3.26	8.00	21,400	2.12	1200	76
	EP*48(F19,J22,N26)AZ + TXV	34,600	12.05	10.6	.74	3264	36,000	3.26	7.50	21,200	2.14	1200	
	H36PSA + .073 orifice	34,600	11.20	10.8	.74	3203	36,000	3.38	8.00	21,000	2.28	1200	
	H36PSA + TD1 + .073 orifice	34,600	11.50	10.8	.74	3203	36,000	3.38	8.00	21,000	2.28	1200	
	H36PSA + TXV	34,600	11.50	10.8	.74	3174	36,000	3.38	8.00	21,000	2.28	1200	
	FCX3600AZ	34,600	12.05	10.6	.76	3264	36,000	3.26	8.00	21,400	2.12	1200	

= Installer Must Change Pin To Size Indicated. Pin shipped with outdoor unit. **PIN** = Refrigerant Orifice PIN size. **TD1** = ZAMA001TDA Indoor Blower Time Delay Kit, required to make seer indicated. ST9120, FCP, FCX, and EF fan controls also satisfy TD1 requirements. **TXV** = Thermostatic Expansion Valve, use TXV153 (ZAMF153TKA) on 1-1/2 to 3 Tons, use TXV355 (ZAMF355TKA) on 3-1/2 to 5 Tons. For Electric Furnace (EF Series) ratings: EF08B1500AZ = EPA24B15AZ + TD1, EF12F1900AZ = EPA36F19AZ + TD1, EF16J2200AZ = EPA48J22AZ + TD1, EF20N2600AZ = EPA60N26Z + TD1.

Outdoor Model	Indoor Model	Cooling					47 Heating			17 Heating		CFM	dBels
		BTUH	SEER	EER	S/T	WATTS	BTUH	COP	HSPF	BTUH	COP		
YG042GA	EX*42(F19,J22)AZ + TD1	40,000	12.05	10.6	.75	3773	42,000	3.40	8.00	26,800	2.40	1400	76
	EP*48(F19,J22,N26)AZ + TXV	38,000	11.50	10.1	.74	3762	42,000	3.14	7.50	26,400	2.30	1400	
	H48PSA + .082 orifice	40,000	11.20	10.8	.75	3703	42,000	3.40	8.00	25,600	2.32	1400	
	H48PSA + TD1 + .082 orifice	40,000	11.50	10.8	.75	3703	42,000	3.40	8.00	25,600	2.32	1400	
	H48PSA + TXV	40,000	12.05	10.8	.75	3703	42,000	3.40	8.00	25,600	2.32	1400	
	FCX4800AZ	39,500	12.05	10.5	.75	3761	42,000	3.46	8.00	25,600	2.28	1400	
YG048GA	EX*48N26AZ	46,500	12.05	10.6	.76	4386	48,000	3.40	8.00	33,200	2.30	1600	76
	H48PSA + .090 orifice	46,500	11.20	10.7	.73	4345	48,000	3.40	8.00	33,200	2.30	1600	
	H48PSA + TD1 + .090 orifice	46,500	11.50	10.7	.73	4345	48,000	3.40	8.00	33,200	2.30	1600	
	H48PSA + TXV	46,500	12.05	10.8	.73	4305	48,000	3.40	8.00	33,200	2.30	1600	
	FCX6000AZ	47,000	12.05	10.6	.76	4434	48,000	3.40	8.00	33,200	2.30	1600	
YG060GA Requires 1 1/8" suction line set	EX*60N26AZ	59,500	12.05	10.9	.74	5458	60,000	3.32	8.00	38,000	2.28	1800	76
	H60PSA + .099 orifice	59,000	11.20	10.9	.73	5412	60,000	3.24	7.90	38,000	2.28	1800	
	H60PSA + TD1 + .099 orifice	59,000	11.50	10.9	.73	5412	60,000	3.24	7.90	38,000	2.28	1800	
	H60PSA + TXV	59,000	12.05	10.9	.73	5412	60,000	3.24	7.90	38,000	2.28	1800	
	FCX6000AZ	57,000	11.60	10.2	.74	5588	60,000	3.16	7.90	38,000	2.20	2000	

Replaces # = Installer Must Change Pin To Size Indicated. Pin shipped with outdoor unit. **PIN** = Refrigerant Orifice PIN size. **TD1** = AMA001TDA Indoor Blower Time Delay Kit, required to make seer indicated. ST9120, FCP, FCX, and EF fan controls also satisfy TD1 requirements. **TXV** = Thermostatic Expansion Valve, use TXV153 (AMF153TKA) on 1-1/2 to 3 Tons, use TXV355 (AMF355TKA) on 3-1/2 to 5 Tons. For Electric Furnace (EF Series) ratings: EF08B1500A = EPA24B15A + TD1, EF12F1900A = EPA36F19A + TD1, EF16J2200A = EPA48J22A + TD1, EF20N2600A = EPA60N26 + TD1.

EXTENDED REFRIGERANT LINE CORRECTION FACTORS

Varying Line Length in Feet (m) vs. Total Capacity Multiplier

25 (8)	50 (15)	75 (23)	100 (30)	125 (38)	150 (46)
1.00	.99	.98	.96	.94	.92

REFRIGERANT CHARGE DATA

All models are factory charged with R-22 for outdoor unit, 25' (8m) of refrigerant line and matching indoor section. Refrigerant charge correction per foot (305mm) of line:
 1/4" O.D. = .25 oz.; 5/16" O.D. = .45 oz.; 3/8" O.D. = .60 oz.;
 1/2" O.D. = 1.2 oz.

VOLTAGE CORRECTION FACTORS

Volts	Capacity	Watts
208	.98	.99

INDOOR AIRFLOW CORRECTION TABLE

% Rated Air	90	95	100	105	110
Total Cap. Mult.	.98	.99	1.00	1.01	1.03
Sens Cap. Mult.	.95	.98	1.00	1.03	1.05

INDOOR TEMPERATURE CORRECTION TABLE (Based on 95°F Ambient)

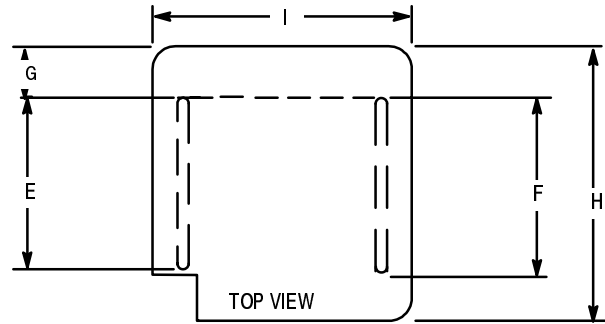
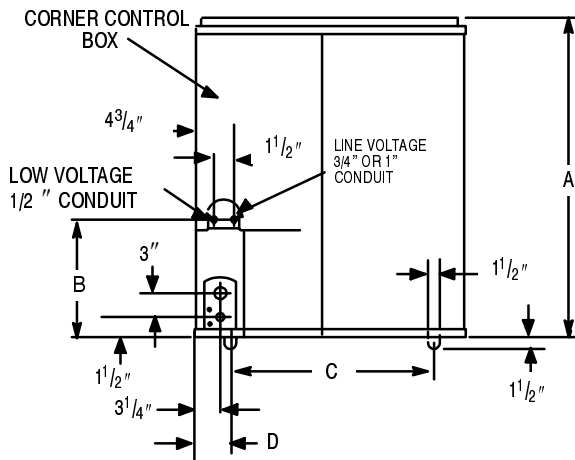
Indoor D.B. °F (°C).	Correction Factor	Entering Indoor Wet Bulb °F (°C).						
		59 (15)	61 (16)	63 (17)	65 (18)	67 (19)	69 (20)	71 (21)
70 (21)	Total Cap. Mult.	.90	.93	.96	.99	1.02	--	--
	Sens Cap. Mult.	.86	.85	.82	.77	.70	--	--
75 (24)	Total Cap. Mult.	.89	.92	.95	.98	1.01	1.04	--
	Sens Cap. Mult.	1.04	1.03	1.00	.95	.88	.78	--
80 (26)	Total Cap. Mult.	.88	.91	.94	.97	1.00	1.03	1.06
	Sens Cap. Mult.	1.18	1.17	1.14	1.08	1.00	.89	.73
85 (29)	Total Cap. Mult.	--	.90	.93	.96	.99	1.02	1.05
	Sens Cap. Mult.	--	1.29	1.26	1.20	1.11	.98	.81

Bold Type = approximately 50% Relative Humidity

MODEL NUMBER IDENTIFICATION GUIDE

MODEL NUMBER	Y	G	024	G	A	REVISION LEVEL
PRODUCT TYPE	Y = Heat Pump A = Air Conditioning					
SERIES	J = 10 SEER K = 11 SEER G = 12 SEER H = 14 SEER					ELECTRICAL 208 / 230 - 1 - 60
						CAPACITY MBTUH 0 24 = 24,000

UNIT DIMENSIONS



Model	A	B	C	D	E	F	G	H	I
YG018GA	25	14-3/4	21-3/4	4	17-5/8	18-3/4	5-1/2	30	30
YG024GA	30	14-3/4	21-3/4	4	17-5/8	18-3/4	5-1/2	30	30
YG030GA	30	14-3/4	21-3/4	4	17-5/8	18-3/4	5-1/2	30	30
YG036GA	30	14-3/4	21-3/4	4	17-5/8	18-3/4	5-1/2	30	30
YG042GA	30	14-3/4	25-1/2	4-1/4	23-1/2	24-1/2	5-1/2	36	34
YG048GA	40	24-3/4	25-1/2	4-1/4	23-1/2	24-1/2	5-1/2	36	34
YG060GA	40	24-3/4	25-1/2	4-1/4	23-1/2	24-1/2	5-1/2	36	34

ALL DIMENSIONS IN INCHES

ACCESSORIES

Part Number	Description	Use With
ZAMA001TDA	Indoor Blower Time Delay	All Models
708938	Compressor Start Device Solid State PTCR Type	All 1 Phase Models
ZAXWR01DFA	Fossil Fuel Kit	All Models
ZAXB002TKA *	TXV2	1 ¹ / ₂ & 2 TON A/C & H/P Evaporator Applications
ZAXB003TKA *	TXV3	2 ¹ / ₂ & 3 TON A/C & H/P Evaporator Applications
ZAXB004TKA *	TXV4	3 ¹ / ₂ & 4 TON A/C & H/P Evaporator Applications
ZAXB005TKA *	TXV5	5 TON A/C & H/P Evaporator Applications
AMF153TKAZ	TXV153	1 ¹ / ₂ – 3 TON A/C & H/P Evaporator Applications (RH Thread for new coils)
AMF355TKAZ	TXV355	3 ¹ / ₂ – 5 TON A/C & H/P Evaporator Applications (RH Thread for new coils)

* Use until inventory depleted.