



## TECHNICAL GUIDE

### SPLIT-SYSTEM AIR CONDITIONERS

10 SEER – R-22/R-407C – 1 Phase 50 Hz

#### MODELS:

GCGA18 THRU 36

(1.5 THRU 3 NOMINAL TONS)



Due to continuous product improvement, specifications are subject to change without notice.

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Additional rating information can be found at [www.ahridirectory.org](http://www.ahridirectory.org)

## DESCRIPTION

The 10 SEER Series unit is the outdoor part of a versatile climate system. It is designed with a matching indoor coil component from Johnson Controls Unitary Products. Available for typical applications this climate system is supported with accessories and documents to serve specific functions.

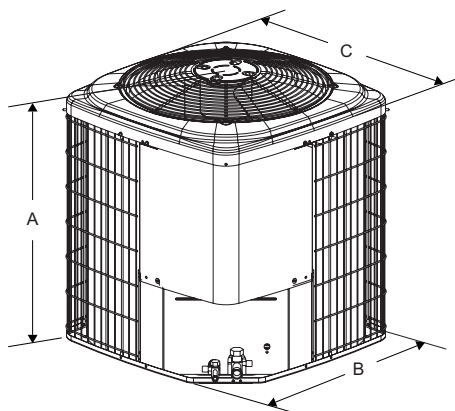
## FEATURES

- **QUALITY CONDENSER COILS** - The coil is constructed of copper tubing and enhanced aluminum fins for increased efficiency and corrosion protection.
- **Protected Compressor** - The compressor is internally protected against high pressure and temperature. This is accomplished by the simultaneous operation of high pressure relief valve and a temperature sensor which protects the compressor if undesirable operating conditions occur. A liquid line filter-drier further protects the compressor.
- **Durable Finish** - The cabinet is made of pre-painted steel. The pre-treated galvanized steel provides a better paint to steel bond, which resists corrosion and rust creep. Special primer formulas and matted-textured finish insure less fading when exposed to sunlight.
- **Lower Installed Cost** - Installation time and costs are reduced by easy power and control wiring connections. Available in sweat connect models only. The small base dimension means less space is required on the ground or roof.
- **Top Discharge** - The warm air from the top mounted fan is blown up away from the structure and any landscaping. This allows compact location on multi-unit applications.
- **Low Operating Sound Level** - The upward air flow carries the normal operating noise away from the living area. The rigid top panel effectively isolates any motor sound. Isolator mounted compressor and the rippled fins of the condenser coil muffle the normal fan motor and compressor operating sounds.
- **Low Maintenance** - Long life permanently lubricated motor-bearings need no annual servicing.
- **Easy Service Access** - Fully exposed refrigerant connections, and a single panel covering the electrical controls make for easy servicing of the unit.
- **Secured Service Valves** - Secured re-usable service valves are provided on both the liquid and vapor sweat connections for ease of evacuating and charging.

**Physical and Electrical Data**

Model	GCGA18S22S3	GCGA24S22S3	GCGA30S22S3	GCGA36S22S3
Unit Supply Voltage	220 - 240V, 1 $\phi$ , 50Hz			
Normal Voltage Range <sup>1</sup>	207 to 253			
Minimum Circuit Ampacity	9.5	14.9	20.8	24.2
Max. Overcurrent Device Amps <sup>2</sup>	15	25	35	40
Min. Overcurrent Device Amps <sup>3</sup>	15	15	25	25
Multi-Stage Compressor	No	No	No	No
Compressor Type	Recip	Recip	Recip	Recip
Compressor Amps	Rated Load	7.2	11.6	15.2
	Locked Rotor	42.0	58.0	85.0
Crankcase Heater	No	No	No	No
Fan Diameter Inches	18	18	18	18
Fan Motor	Rated HP	1 / 12	1 / 12	1 / 4
	Rated Load Amps	0.50	0.50	1.80
	Nominal RPM	920	920	900
	Nominal CFM	1700	1700	1950
Coil	Face Area Sq. Ft.	8.0	8.0	9.6
	Rows Deep	1	1	1
	Fin / Inches	14	14	18
Liquid Line Set OD (Field Installed)	3/8	3/8	3/8	3/8
Vapor Line Set OD (Field Installed)	3/4	3/4	3/4	3/4
R-22 Indoor Orifice	0.049	0.059	0.066	0.068
R-22 Unit Charge (Lbs. - Oz.) <sup>4</sup>	3 - 9	3 - 14	4 - 9	5 - 10
R-22 Charge Per Foot, Oz.	0.68	0.68	0.68	0.68
R-407C Indoor Orifice	0.048	0.058	0.065	0.067
R-407C Unit Charge (Lbs. - Oz.) <sup>4</sup>	3 - 10	3 - 15	4 - 9	5 - 12
R-407C Charge Per Foot, Oz.	0.63	0.63	0.63	0.63
Operating Weight Lbs.	115	120	135	145

1. Rated in accordance with ARI Standard 110, utilization range "A".
2. Dual element fuses or HACR circuit breaker.
3. Dual element fuses or HACR circuit breaker.
4. Since these products will operate with either R-22 or R-407C, they have been shipped from the factory without refrigerant. Charge weights shown are for 15' of interconnecting linesets and must be added by the technician installing the product.



All dimensions are in inches. They are subject to change without notice. Certified dimensions will be provided upon request.

Unit Model	Dimensions (Inches)			Refrigerant Connection Service Valve Size	
	A <sup>1</sup>	B	C	Liquid	Vapor
18	24	23-1/2	23-1/2	3/8"	3/4"
24	24	23-1/2	23-1/2		
30	28	23-1/2	23-1/2		
36	32	23-1/2	23-1/2		

1. Including Fan Guard.

**COOLING CAPACITY (R-22) – With Air Handler Coils**

Unit Model	Air Handler		Rated CFM	Cooling		KW
	Model	W		Net MBH		
				Total	Sensible	
<b>GCGA &amp; FRP (Single Phase)</b>						
GCGA18S22S3	F2RP024H93	18	700	17.2	13.0	1.77
GCGA24S22S3	F2RP024H93	18	800	23.2	16.4	2.48
GCGA30S22S3	F2RP036H93	21-1/2	1000	29.0	20.4	3.63
GCGA36S22S3	F2RP036H93	21-1/2	1100	33.0	23.0	3.91

Rated in accordance with DOE test procedures (Federal Register 12-27-79 and 3-18-88) and ARI Standards 210.

Cooling MBH based on 80°F entering air temperature, 50% RH, and rated air flow.

EER (Energy Efficiency Ratio) is the total cooling output in BTU's at 95°F outdoor ambient divided by the total electric power in watt-hours at those conditions.

SEER (Seasonal Energy Efficiency Ratio) is the total cooling output in BTU's during a normal annual usage period for cooling divided by the total electric power input in watt-hours during the same period.

**COOLING CAPACITY (R-407C) – With Air Handler Coils**

Unit Model	Air Handler		Rated CFM	Cooling		KW
	Model	W		Net MBH		
				Total	Sensible	
<b>GCGA &amp; FRP (Single Phase)</b>						
GCGA18S22S3	F2RP024N93	18	700	16.5	12.6	1.76
GCGA24S22S3	F2RP024N93	18	800	23.0	16.4	2.54
GCGA30S22S3	F2RP036N93	21-1/2	1000	28.8	20.2	3.60
GCGA36S22S3	F2RP036N93	21-1/2	1100	31.7	22.4	3.82

Rated in accordance with DOE test procedures (Federal Register 12-27-79 and 3-18-88) and ARI Standards 210.

Cooling MBH based on 80°F entering air temperature, 50% RH, and rated air flow.

EER (Energy Efficiency Ratio) is the total cooling output in BTU's at 95°F outdoor ambient divided by the total electric power in watt-hours at those conditions.

SEER (Seasonal Energy Efficiency Ratio) is the total cooling output in BTU's during a normal annual usage period for cooling divided by the total electric power input in watt-hours during the same period.

**SOUND POWER RATINGS**

UNIT MODEL	(dBA)*
18	76.0
24	78.0
30	78.0
36	78.0

\* Rated in accordance with ARI 270-95 Standards.

## CONDENSER TABLES

Model	Saturated Suction @ Compressor		Outdoor Ambient Temperature (R-22)													
			65 F		75 F		85 F		95 F		105 F		115 F		125 F	
	T	P	MBH	KW	MBH	KW	MBH	KW	MBH	KW	MBH	KW	MBH	KW	MBH	KW
GCGA18S22S3	35	61.5	16.8	1.43	15.5	1.50	14.2	1.57	13.0	1.63	11.7	1.68	10.4	1.73	9.1	1.76
	40	68.6	18.8	1.46	17.4	1.53	16.0	1.61	14.7	1.68	13.3	1.74	12.0	1.80	10.6	1.84
	45	76.1	20.8	1.48	19.3	1.56	17.9	1.65	16.4	1.73	15.0	1.80	13.5	1.87	12.1	1.92
	50	84.1	22.9	1.50	21.3	1.59	19.8	1.68	18.2	1.77	16.7	1.85	15.2	1.93	13.7	2.00
	55	92.6	25.1	1.51	23.4	1.61	21.7	1.71	20.1	1.81	18.5	1.90	16.8	1.99	15.3	2.07
GCGA24S22S3	35	61.5	24.3	2.02	22.4	2.08	20.5	2.13	18.5	2.18	16.6	2.22	14.8	2.26	13.2	2.30
	40	68.6	26.8	2.06	24.9	2.15	22.9	2.22	20.9	2.29	19.0	2.36	17.1	2.41	15.3	2.47
	45	76.1	29.4	2.10	27.5	2.22	25.5	2.32	23.4	2.41	21.4	2.50	19.5	2.58	17.6	2.66
	50	84.1	32.1	2.13	30.2	2.28	28.2	2.42	26.1	2.54	24.0	2.66	22.0	2.76	20.1	2.86
	55	92.6	35.0	2.17	33.1	2.35	31.0	2.52	28.9	2.68	26.8	2.82	24.7	2.95	22.7	3.08
GCGA30S22S3	35	61.5	29.8	2.89	27.8	3.00	25.8	3.10	23.7	3.19	21.7	3.27	19.6	3.33	17.7	3.39
	40	68.6	33.2	3.01	31.1	3.13	28.9	3.25	26.6	3.35	24.4	3.44	22.2	3.52	20.1	3.60
	45	76.1	36.8	3.13	34.5	3.27	32.1	3.40	29.8	3.52	27.4	3.63	25.0	3.73	22.7	3.82
	50	84.1	40.6	3.26	38.1	3.42	35.6	3.57	33.0	3.71	30.4	3.84	27.9	3.95	25.4	4.06
	55	92.6	44.6	3.41	41.9	3.59	39.2	3.75	36.5	3.91	33.7	4.05	31.0	4.18	28.3	4.31
GCGA36S22S3	35	61.5	34.3	3.17	31.8	3.28	29.7	3.40	27.7	3.54	25.8	3.67	23.7	3.78	21.5	3.86
	40	68.6	38.1	3.30	35.4	3.42	33.1	3.56	30.9	3.70	28.7	3.84	26.5	3.95	24.0	4.05
	45	76.1	42.0	3.43	39.2	3.56	36.6	3.71	34.2	3.87	31.8	4.01	29.4	4.13	26.7	4.24
	50	84.1	46.1	3.57	42.9	3.72	40.3	3.87	37.6	4.03	35.0	4.18	32.4	4.31	29.5	4.43
	55	92.6	50.4	3.72	47.1	3.87	44.0	4.03	41.1	4.20	38.3	4.36	35.4	4.49	32.4	4.61

Model	Saturated Suction @ Compressor		Outdoor Ambient Temperature (R-407C)													
			65 F		75 F		85 F		95 F		105 F		115 F		125 F	
	T	P	MBH	KW	MBH	KW	MBH	KW	MBH	KW	MBH	KW	MBH	KW	MBH	KW
GCGA18S22S3	35	56.2	15.1	1.44	13.6	1.48	12.1	1.51	10.6	1.54	9.2	1.55	7.7	1.54	6.3	1.51
	40	63.2	17.1	1.47	15.5	1.52	13.9	1.57	12.4	1.61	10.9	1.63	9.4	1.63	7.9	1.61
	45	70.8	19.2	1.50	17.5	1.56	15.9	1.62	14.3	1.67	12.7	1.70	11.1	1.71	9.5	1.70
	50	78.8	21.3	1.52	19.6	1.60	17.8	1.66	16.2	1.72	14.5	1.76	12.8	1.79	11.2	1.79
	55	87.5	23.5	1.54	21.7	1.62	19.9	1.70	18.1	1.77	16.3	1.82	14.6	1.86	12.9	1.87
GCGA24S22S3	35	56.2	22.2	1.97	20.4	2.04	18.5	2.09	16.5	2.12	14.5	2.15	12.6	2.18	10.6	2.22
	40	63.2	25.1	2.05	23.0	2.14	20.9	2.20	18.8	2.24	16.7	2.27	14.6	2.31	12.5	2.36
	45	70.8	28.1	2.14	25.8	2.24	23.6	2.31	21.3	2.36	19.0	2.40	16.7	2.45	14.5	2.51
	50	78.8	31.3	2.25	28.9	2.36	26.4	2.43	23.9	2.49	21.5	2.54	19.0	2.59	16.6	2.66
	55	87.5	34.7	2.38	32.0	2.49	29.4	2.57	26.7	2.63	24.1	2.68	21.4	2.75	18.8	2.81
GCGA30S22S3	35	56.2	28.0	2.77	25.5	2.88	23.5	3.03	21.5	3.17	19.1	3.26	16.1	3.27	12.4	3.18
	40	63.2	31.1	2.88	28.6	3.00	26.4	3.14	24.2	3.29	21.7	3.39	18.6	3.42	14.9	3.36
	45	70.8	34.4	3.01	31.9	3.12	29.6	3.27	27.2	3.41	24.5	3.51	21.2	3.56	17.4	3.52
	50	78.8	37.9	3.15	35.3	3.26	32.9	3.40	30.3	3.54	27.3	3.64	23.9	3.69	19.9	3.68
	55	87.5	41.5	3.32	38.9	3.42	36.3	3.55	33.5	3.68	30.3	3.78	26.7	3.83	22.6	3.83
GCGA36S22S3	35	56.2	30.9	3.00	28.5	3.09	26.1	3.19	23.6	3.28	21.2	3.36	18.9	3.41	16.6	3.45
	40	63.2	34.8	3.15	32.1	3.25	29.4	3.35	26.7	3.44	24.1	3.53	21.6	3.59	19.2	3.63
	45	70.8	38.9	3.30	35.9	3.40	32.9	3.51	30.0	3.61	27.2	3.70	24.4	3.77	21.7	3.82
	50	78.8	43.2	3.46	39.9	3.56	36.6	3.67	33.4	3.78	30.4	3.87	27.4	3.95	24.4	4.01
	55	87.5	47.7	3.62	44.1	3.73	40.7	3.84	37.2	3.94	33.9	4.03	30.6	4.12	27.2	4.20

1. For condensing unit performance only. Data does not include the effects of air handler power or heat.
2. Performance based on 15°F subcooling and 15°F superheat at the condensing unit base valves.
  - a. increase capacity by 1% for each 2°F increase in subcooling.
  - b. Decrease capacity by 1% for each 2°F decrease in subcooling.
3. Maximum recommended condensing temperature is 140°F.

<b>COOLING PERFORMANCE DATA (R-22)</b>																
<b>AIR CONDITIONER MODEL NO.</b>		<b>GCGA18S22S3</b>														
<b>INDOOR COIL MODEL NO.</b>		<b>F2RP024H93</b>														
<b>CONDENSING ENTERING AIR TEMPERATURE</b>	<b>IDCFM</b>	<b>550</b>					<b>700</b>					<b>850</b>				
	<b>ID DB (°F)</b>	80	80	75	80	80	80	80	75	80	80	80	80	75	80	80
	<b>ID WB (°F)</b>	57	62	62	67	72	57	62	62	67	72	57	62	62	67	72
65	T.C.	16.1	17.7	17.1	18.2	18.6	17.4	18.4	17.6	18.5	19.2	17.8	18.7	17.9	18.8	19.2
	S.C.	16.1	14.8	12.4	11.9	9.4	17.4	16.2	13.3	12.4	9.8	17.8	17.1	13.8	12.7	10.4
	KW	1.40	1.43	1.43	1.44	1.46	1.45	1.47	1.46	1.48	1.49	1.48	1.50	1.49	1.50	1.52
75	T.C.	16.4	17.4	16.8	18.0	18.8	17.3	18.1	17.4	18.5	19.4	17.9	18.2	17.7	18.8	19.4
	S.C.	16.4	15.2	12.5	12.1	9.6	17.3	17.0	13.7	13.0	10.1	17.9	17.8	14.6	13.4	10.5
	KW	1.50	1.52	1.52	1.54	1.56	1.55	1.56	1.56	1.57	1.60	1.58	1.59	1.59	1.60	1.62
85	T.C.	16.0	16.6	16.3	17.6	18.4	16.8	17.3	16.6	17.9	19.0	17.6	17.7	17.1	18.4	19.3
	S.C.	16.0	15.4	12.5	12.2	9.4	16.8	17.1	13.7	13.2	10.3	17.6	17.7	14.8	14.0	10.8
	KW	1.60	1.62	1.61	1.64	1.66	1.64	1.65	1.64	1.67	1.70	1.68	1.69	1.68	1.71	1.74
95	T.C.	15.1	15.5	15.2	16.6	18.0	16.3	16.4	15.8	17.2	18.1	17.0	16.8	16.3	17.6	18.8
	S.C.	15.1	15.0	12.0	11.9	9.2	16.3	16.4	13.6	13.0	9.8	17.0	16.8	15.0	14.2	10.4
	KW	1.69	1.70	1.69	1.73	1.78	1.75	1.74	1.74	1.77	1.80	1.79	1.78	1.78	1.81	1.85
105	T.C.	14.2	14.3	14.1	15.8	17.0	15.5	14.9	14.7	16.4	17.4	16.3	16.7	15.0	16.5	17.9
	S.C.	14.2	14.3	11.6	11.6	8.8	15.5	14.9	13.1	13.1	9.4	16.3	16.7	14.5	14.2	10.2
	KW	1.78	1.78	1.78	1.83	1.88	1.84	1.83	1.83	1.88	1.92	1.89	1.90	1.86	1.91	1.96
115	T.C.	13.3	13.0	12.6	14.3	16.1	14.4	14.8	13.2	14.8	16.5	15.2	15.2	13.4	15.1	16.8
	S.C.	13.3	13.0	10.9	11.1	8.5	14.4	14.8	12.6	12.5	9.2	15.2	15.2	13.4	13.8	9.9
	KW	1.87	1.87	1.86	1.92	1.99	1.93	1.94	1.90	1.97	2.03	1.99	2.00	1.94	2.01	2.07
125	T.C.	12.3	12.6	11.5	13.1	14.8	13.2	13.5	11.9	13.6	15.2	13.9	14.3	12.1	13.8	15.5
	S.C.	12.3	12.6	10.5	10.5	8.0	13.2	13.5	11.9	12.0	8.8	13.9	14.3	12.1	13.4	9.6
	KW	1.96	1.97	1.93	2.00	2.08	2.03	2.04	1.98	2.05	2.13	2.08	2.10	2.01	2.09	2.17

<b>COOLING PERFORMANCE DATA (R-407C)</b>																
<b>AIR CONDITIONER MODEL NO.</b>		<b>GCGA18S22S3</b>														
<b>INDOOR COIL MODEL NO.</b>		<b>F2RP024H93</b>														
<b>CONDENSING ENTERING AIR TEMPERATURE</b>	<b>IDCFM</b>	<b>550</b>					<b>700</b>					<b>850</b>				
	<b>ID DB (°F)</b>	80	80	75	80	80	80	80	75	80	80	80	80	75	80	80
	<b>ID WB (°F)</b>	57	62	62	67	72	57	62	62	67	72	57	62	62	67	72
65	T.C.	16.3	17.5	17.2	18.2	19.0	17.0	17.7	17.7	18.5	19.1	17.5	18.1	17.9	18.8	19.7
	S.C.	15.9	14.6	12.4	11.7	10.0	16.9	15.3	13.1	12.1	10.2	17.5	16.4	13.7	12.5	10.1
	KW	1.42	1.45	1.44	1.46	1.47	1.49	1.50	1.50	1.51	1.52	1.55	1.56	1.56	1.57	1.59
75	T.C.	16.2	16.7	16.5	17.9	18.9	16.7	17.2	17.0	18.3	19.2	17.1	17.3	17.5	18.5	19.1
	S.C.	16.2	14.7	12.4	11.9	9.5	16.7	16.3	13.4	12.5	9.7	17.1	17.1	14.4	13.0	10.1
	KW	1.50	1.51	1.50	1.53	1.55	1.56	1.57	1.57	1.59	1.61	1.62	1.62	1.63	1.65	1.66
85	T.C.	15.7	15.6	15.8	17.1	18.3	16.3	16.7	16.1	17.5	18.5	16.7	17.0	16.3	17.9	18.5
	S.C.	15.7	14.8	12.4	11.9	9.3	16.3	15.4	13.5	12.6	9.6	16.7	16.0	14.1	13.4	9.7
	KW	1.58	1.59	1.59	1.62	1.65	1.65	1.66	1.65	1.68	1.71	1.72	1.73	1.71	1.75	1.76
95	T.C.	14.6	14.8	14.5	16.2	17.2	15.7	15.8	15.0	16.5	17.7	16.0	16.1	15.3	16.8	17.7
	S.C.	14.6	13.6	11.9	11.7	9.1	15.7	15.0	13.2	12.6	9.5	16.0	15.5	14.5	13.6	9.6
	KW	1.65	1.66	1.65	1.70	1.73	1.74	1.74	1.71	1.76	1.80	1.80	1.80	1.78	1.82	1.85
105	T.C.	14.1	14.3	13.1	14.9	16.3	14.5	14.8	14.2	15.4	16.5	15.3	15.3	14.5	15.2	16.7
	S.C.	14.1	13.3	11.2	11.3	8.6	14.5	14.3	13.0	12.7	9.2	15.3	15.3	13.1	13.7	9.5
	KW	1.71	1.72	1.70	1.76	1.81	1.80	1.81	1.76	1.83	1.87	1.89	1.88	1.85	1.88	1.92
115	T.C.	12.4	12.8	12.2	14.0	15.0	13.9	13.9	12.6	13.9	15.3	14.0	13.9	13.3	13.9	15.5
	S.C.	12.4	12.3	10.8	11.0	8.2	13.9	13.6	12.3	12.2	8.8	14.0	13.9	12.3	13.4	9.3
	KW	1.77	1.77	1.73	1.79	1.86	1.84	1.85	1.79	1.86	1.92	1.94	1.93	1.89	1.93	1.98
125	T.C.	11.8	12.0	10.4	12.0	13.6	12.3	12.3	11.0	12.5	13.9	12.9	12.8	11.4	13.2	13.9
	S.C.	11.8	11.6	9.5	10.1	7.6	12.3	12.3	10.3	11.6	8.4	12.9	12.8	10.9	12.0	8.9
	KW	1.79	1.79	1.79	1.82	1.89	1.89	1.88	1.86	1.89	1.97	1.97	1.95	1.93	1.98	2.02

NOTE: ALL CAPACITIES INCLUDE INDOOR FAN HEAT AT 1250 BTUH/1000 CFM.

**Multipliers for determining the performance with other indoor sections.**

NOTE: For dry bulb temperatures different than those listed (between 73-87 F), sensible capacity increases by 1060 BTUH per 1000 CFM per degree above the listed temperature and decreases by 1060 BTUH per 1000 CFM per degree below the listed temperature.

<b>COOLING PERFORMANCE DATA (R-22)</b>																
<b>AIR CONDITIONER MODEL NO.</b>		<b>GCGA24S22S3</b>														
<b>INDOOR COIL MODEL NO.</b>		<b>F2RP024H93</b>														
<b>CONDENSING ENTERING AIR TEMPERATURE</b>	<b>IDCFM</b>	<b>600</b>					<b>800</b>					<b>1000</b>				
	<b>ID DB (°F)</b>	80	80	75	80	80	80	80	75	80	80	80	80	75	80	80
	<b>ID WB (°F)</b>	57	62	62	67	72	57	62	62	67	72	57	62	62	67	72
65	T.C.	20.0	21.9	23.1	24.6	25.6	20.9	22.9	24.0	25.3	26.9	22.2	23.1	24.5	25.5	27.4
	S.C.	20.0	17.6	16.1	15.6	13.1	20.9	19.4	17.7	16.8	13.9	22.2	20.4	18.5	17.5	14.1
	KW	1.98	2.02	1.97	2.00	1.99	2.06	2.09	2.04	2.07	2.07	2.14	2.15	2.10	2.12	2.13
75	T.C.	19.1	21.3	22.3	24.1	25.9	21.3	22.4	23.4	25.1	26.6	22.2	23.0	23.7	25.6	27.2
	S.C.	19.1	17.4	15.8	15.4	13.3	21.3	19.7	17.5	17.1	14.2	22.2	21.3	18.4	17.8	14.5
	KW	2.05	2.11	2.06	2.11	2.13	2.18	2.20	2.15	2.20	2.20	2.26	2.27	2.21	2.26	2.27
85	T.C.	17.9	20.4	21.3	23.1	25.1	20.5	21.4	22.6	24.4	26.2	21.5	22.1	23.1	25.0	26.8
	S.C.	17.9	17.2	15.3	15.1	13.1	20.5	19.7	17.3	16.7	13.7	21.5	21.6	18.7	18.0	14.2
	KW	2.13	2.22	2.16	2.23	2.27	2.30	2.32	2.27	2.33	2.37	2.40	2.40	2.34	2.42	2.45
95	T.C.	17.5	19.0	20.0	22.4	24.3	19.6	20.4	21.5	23.2	25.3	20.8	20.7	21.7	23.9	26.0
	S.C.	17.5	16.5	14.7	14.8	12.3	19.6	19.3	16.8	16.4	13.1	20.8	20.7	18.5	17.9	13.9
	KW	2.26	2.32	2.27	2.38	2.43	2.42	2.43	2.38	2.48	2.54	2.55	2.53	2.47	2.57	2.63
105	T.C.	16.6	17.6	18.6	21.1	23.3	18.5	18.6	19.8	22.3	24.3	19.6	19.3	20.3	22.2	24.8
	S.C.	16.6	15.9	14.0	14.2	11.6	18.5	18.6	16.1	16.3	12.6	19.6	19.3	17.9	17.4	13.6
	KW	2.38	2.42	2.37	2.51	2.60	2.56	2.55	2.49	2.64	2.71	2.69	2.65	2.59	2.71	2.80
115	T.C.	15.6	16.2	17.1	19.5	22.3	17.3	17.1	18.1	20.5	22.7	18.6	17.7	18.7	21.4	23.4
	S.C.	15.6	15.3	13.3	13.5	11.1	17.3	17.1	15.4	15.5	12.1	18.6	17.7	17.2	17.3	13.1
	KW	2.51	2.54	2.48	2.64	2.78	2.70	2.67	2.61	2.77	2.87	2.86	2.77	2.71	2.88	2.98
125	T.C.	14.5	14.7	15.6	18.0	20.8	16.2	15.6	16.5	19.1	21.9	17.4	17.7	16.9	19.6	22.2
	S.C.	14.5	14.7	12.7	12.9	10.6	16.2	15.6	14.7	14.9	11.7	17.4	17.7	16.5	16.7	12.6
	KW	2.65	2.65	2.59	2.78	2.94	2.86	2.78	2.73	2.91	3.09	3.02	3.02	2.83	3.03	3.18

**COOLING PERFORMANCE DATA (R-407C)**

<b>AIR CONDITIONER MODEL NO.</b>		<b>GCGA24S22S3</b>														
<b>INDOOR COIL MODEL NO.</b>		<b>F2RP024H93</b>														
<b>CONDENSING ENTERING AIR TEMPERATURE</b>	<b>IDCFM</b>	<b>600</b>					<b>800</b>					<b>1000</b>				
	<b>ID DB (°F)</b>	80	80	75	80	80	80	80	75	80	80	80	80	75	80	80
	<b>ID WB (°F)</b>	57	62	62	67	72	57	62	62	67	72	57	62	62	67	72
65	T.C.	22.6	23.8	23.9	25.9	26.7	24.1	25.2	25.0	26.7	28.1	25.0	26.1	25.9	27.1	27.8
	S.C.	21.6	19.1	16.6	16.2	13.8	23.7	21.3	18.2	17.5	14.5	25.0	23.0	19.4	18.1	14.5
	KW	1.98	2.02	2.02	2.10	2.12	2.08	2.12	2.12	2.17	2.23	2.17	2.21	2.21	2.25	2.27
75	T.C.	21.5	23.1	23.0	25.0	26.4	23.4	24.0	23.8	26.1	27.3	24.3	25.0	24.8	26.5	27.9
	S.C.	20.8	19.1	16.3	16.1	13.3	23.4	21.4	17.9	17.4	14.1	24.3	23.1	19.3	18.3	14.5
	KW	2.09	2.15	2.15	2.23	2.28	2.22	2.25	2.24	2.33	2.38	2.31	2.34	2.34	2.40	2.47
85	T.C.	20.6	21.7	21.7	23.5	25.1	22.3	22.9	22.8	24.9	26.1	23.7	23.2	23.1	25.3	26.7
	S.C.	20.3	18.4	15.7	15.3	13.0	22.3	21.1	17.7	17.0	13.6	23.7	23.0	18.6	18.0	13.8
	KW	2.20	2.25	2.25	2.33	2.41	2.34	2.36	2.36	2.45	2.51	2.46	2.44	2.43	2.53	2.60
95	T.C.	19.5	19.9	19.9	22.2	24.1	21.0	20.9	21.0	23.0	24.9	22.4	22.6	21.5	23.9	25.1
	S.C.	19.4	17.6	14.8	14.8	12.0	21.0	20.4	16.8	16.4	12.9	22.4	21.2	18.5	18.0	13.4
	KW	2.27	2.33	2.33	2.45	2.54	2.45	2.45	2.44	2.54	2.64	2.57	2.58	2.53	2.65	2.72
105	T.C.	17.6	18.3	18.3	20.4	22.1	19.7	20.3	20.0	21.5	23.2	21.0	20.8	19.5	21.8	23.6
	S.C.	17.6	16.8	14.0	14.0	11.2	19.7	19.0	16.4	16.1	12.3	21.0	20.1	17.7	17.5	12.7
	KW	2.37	2.39	2.39	2.53	2.63	2.55	2.56	2.48	2.66	2.75	2.68	2.68	2.60	2.73	2.84
115	T.C.	16.7	15.9	15.8	18.3	20.5	18.4	19.0	16.7	19.5	21.4	19.4	19.2	17.8	19.7	21.6
	S.C.	16.7	15.8	12.9	13.2	10.5	18.4	18.2	15.0	15.3	11.5	19.4	18.8	17.1	16.9	12.2
	KW	2.44	2.47	2.47	2.60	2.75	2.61	2.61	2.58	2.72	2.87	2.77	2.78	2.65	2.82	2.95
125	T.C.	14.4	14.5	13.0	15.8	18.6	16.3	16.4	14.1	17.5	19.3	18.1	17.9	15.8	16.9	19.6
	S.C.	14.4	14.0	11.7	12.1	9.6	16.3	16.1	13.9	14.4	10.8	18.1	17.9	15.8	15.9	11.7
	KW	2.61	2.62	2.56	2.70	2.88	2.74	2.74	2.66	2.78	3.00	2.85	2.85	2.70	2.90	3.08

**NOTE:** ALL CAPACITIES INCLUDE INDOOR FAN HEAT AT 1250 BTUH/1000 CFM.

**Multipliers for determining the performance with other indoor sections.**

**NOTE:** For dry bulb temperatures different than those listed (between 73-87 F), sensible capacity increases by 1060 BTUH per 1000 CFM per degree above the listed temperature and decreases by 1060 BTUH per 1000 CFM per degree below the listed temperature.

<b>COOLING PERFORMANCE DATA (R-22)</b>																
<b>AIR CONDITIONER MODEL NO.</b>		<b>GCGA30S22S3</b>														
<b>INDOOR COIL MODEL NO.</b>		<b>F2RP036H93</b>														
<b>CONDENSING ENTERING AIR TEMPERATURE</b>	IDCFM	800					1000					1200				
	ID DB (°F)	80	80	75	80	80	80	80	75	80	80	80	80	75	80	80
	ID WB (°F)	57	62	62	67	72	57	62	62	67	72	57	62	62	67	72
65	T.C.	27.0	29.7	28.7	31.2	32.2	29.2	30.3	29.7	32.0	32.9	30.2	30.8	30.2	32.1	33.2
	S.C.	27.0	24.1	20.1	19.9	16.7	29.2	25.7	21.7	21.1	16.8	30.2	27.3	22.6	21.8	17.1
	KW	2.77	2.83	2.79	2.89	2.91	2.97	2.99	2.97	3.05	3.07	3.15	3.15	3.13	3.20	3.22
75	T.C.	26.1	29.0	28.2	30.7	32.2	29.0	29.8	29.0	31.5	32.5	29.9	30.0	29.6	31.6	33.3
	S.C.	26.1	24.1	20.1	19.7	16.0	29.0	26.2	21.6	21.2	16.8	29.9	27.6	23.0	22.0	17.3
	KW	2.89	3.00	2.97	3.07	3.13	3.16	3.17	3.14	3.26	3.29	3.35	3.32	3.31	3.40	3.47
85	T.C.	25.9	27.5	27.1	29.5	31.4	27.6	28.7	28.1	30.4	32.1	29.2	29.1	28.4	30.7	32.4
	S.C.	25.9	23.5	19.5	19.4	15.7	27.6	26.2	21.4	20.8	16.1	29.2	28.3	22.8	21.8	16.8
	KW	3.08	3.15	3.13	3.25	3.34	3.33	3.36	3.32	3.44	3.52	3.54	3.52	3.48	3.60	3.68
95	T.C.	24.6	25.9	25.4	28.5	29.9	26.5	27.0	26.2	29.0	30.6	28.0	27.6	27.0	29.4	31.4
	S.C.	24.6	22.8	18.6	18.8	14.7	26.5	25.5	20.6	20.4	15.7	28.0	27.6	22.3	21.5	16.0
	KW	3.23	3.29	3.26	3.44	3.52	3.50	3.50	3.47	3.63	3.71	3.73	3.68	3.66	3.79	3.91
105	T.C.	23.2	24.1	23.5	26.8	28.8	25.1	25.0	24.4	27.6	29.4	26.4	25.4	24.8	27.7	29.5
	S.C.	23.2	22.0	17.9	18.0	14.3	25.1	24.7	19.8	19.8	15.0	26.4	25.4	21.5	21.3	15.7
	KW	3.39	3.42	3.39	3.61	3.73	3.66	3.64	3.61	3.82	3.92	3.91	3.83	3.79	3.98	4.09
115	T.C.	21.8	22.0	21.6	24.6	27.2	23.5	22.9	22.5	25.6	27.7	24.7	23.3	22.9	25.9	28.0
	S.C.	21.8	21.1	17.0	17.1	13.4	23.5	22.9	18.9	19.0	14.4	24.7	23.3	20.6	20.7	15.0
	KW	3.54	3.55	3.52	3.75	3.92	3.82	3.76	3.73	3.97	4.11	4.08	3.95	3.91	4.15	4.29
125	T.C.	20.2	20.0	19.6	22.6	25.4	21.8	21.8	20.2	23.3	25.9	23.0	23.0	20.6	23.8	26.1
	S.C.	20.2	20.0	16.1	16.4	12.7	21.8	21.8	18.0	18.2	13.6	23.0	23.0	19.7	19.9	14.5
	KW	3.70	3.66	3.63	3.88	4.10	4.00	3.96	3.84	4.10	4.31	4.25	4.23	4.03	4.31	4.49

<b>COOLING PERFORMANCE DATA (R-407C)</b>																
<b>AIR CONDITIONER MODEL NO.</b>		<b>GCGA30S22S3</b>														
<b>INDOOR COIL MODEL NO.</b>		<b>F2RP036H93</b>														
<b>CONDENSING ENTERING AIR TEMPERATURE</b>	IDCFM	800					1000					1200				
	ID DB (°F)	80	80	75	80	80	80	80	75	80	80	80	80	75	80	80
	ID WB (°F)	57	62	62	67	72	57	62	62	67	72	57	62	62	67	72
65	T.C.	28.5	30.2	29.9	32.3	33.5	29.8	31.1	31.0	33.1	34.1	30.3	31.5	31.6	33.4	35.0
	S.C.	27.5	24.4	20.9	20.5	17.4	29.4	26.2	22.3	21.6	17.5	30.3	27.5	23.4	22.5	18.0
	KW	2.74	2.81	2.80	2.90	2.95	2.94	2.99	2.99	3.08	3.11	3.09	3.15	3.15	3.23	3.31
75	T.C.	27.3	28.9	28.8	31.3	32.9	28.7	29.8	29.6	32.1	33.7	29.2	30.5	30.4	32.6	34.3
	S.C.	26.7	24.0	20.5	20.1	16.7	28.7	26.3	21.9	21.5	17.2	29.2	28.0	23.3	22.3	17.3
	KW	2.90	2.97	2.97	3.08	3.14	3.10	3.15	3.14	3.26	3.33	3.27	3.33	3.33	3.42	3.51
85	T.C.	26.1	27.4	27.5	29.8	32.0	27.6	28.5	28.4	31.0	32.6	28.8	28.9	28.8	31.1	33.0
	S.C.	25.8	23.5	19.9	19.5	16.0	27.6	26.1	21.7	21.0	16.4	28.8	28.1	23.0	21.9	17.1
	KW	3.08	3.15	3.15	3.25	3.36	3.30	3.35	3.33	3.46	3.53	3.49	3.51	3.50	3.60	3.70
95	T.C.	24.9	25.7	25.5	28.4	30.2	26.2	26.4	26.3	28.8	31.0	27.6	27.8	26.7	29.3	31.0
	S.C.	24.8	22.7	19.0	19.0	15.2	26.2	25.2	20.8	20.2	15.8	27.6	25.9	22.4	21.6	16.0
	KW	3.23	3.31	3.31	3.44	3.52	3.49	3.49	3.49	3.60	3.71	3.69	3.70	3.65	3.77	3.86
105	T.C.	23.8	23.9	23.9	26.1	28.5	24.7	25.0	24.7	26.8	28.9	25.8	25.9	24.5	27.2	29.2
	S.C.	23.8	21.9	18.2	18.0	14.2	24.7	23.3	20.2	19.8	14.9	25.8	24.6	21.7	21.1	15.6
	KW	3.36	3.41	3.41	3.57	3.67	3.64	3.65	3.58	3.74	3.84	3.84	3.84	3.77	3.90	4.01
115	T.C.	20.6	21.1	20.1	23.6	25.9	23.0	23.3	20.6	24.6	26.6	23.6	23.6	22.1	24.0	26.5
	S.C.	20.6	19.8	16.6	17.0	13.2	23.0	22.1	18.5	19.0	14.0	23.6	23.0	20.7	20.3	14.6
	KW	3.53	3.55	3.51	3.64	3.78	3.70	3.71	3.67	3.80	3.96	3.92	3.92	3.80	3.97	4.10
125	T.C.	17.9	18.0	16.4	19.6	23.3	19.3	19.2	17.7	19.9	23.0	21.1	21.1	18.4	20.2	23.4
	S.C.	17.9	17.4	15.0	15.4	12.0	19.3	18.9	16.3	17.2	12.8	21.1	21.0	17.3	18.9	13.7
	KW	3.61	3.62	3.55	3.68	3.79	3.81	3.81	3.75	3.84	4.01	3.95	3.95	3.91	4.00	4.16

NOTE: ALL CAPACITIES INCLUDE INDOOR FAN HEAT AT 1250 BTUH/1000 CFM.

**Multipliers for determining the performance with other indoor sections.**

NOTE: For dry bulb temperatures different than those listed (between 73-87 F), sensible capacity increases by 1060 BTUH per 1000 CFM per degree above the listed temperature and decreases by 1060 BTUH per 1000 CFM per degree below the listed temperature.

<b>COOLING PERFORMANCE DATA (R-22)</b>																
<b>AIR CONDITIONER MODEL NO.</b>		<b>GCGA36S22S3</b>														
<b>INDOOR COIL MODEL NO.</b>		<b>F2RP036H93</b>														
<b>CONDENSING ENTERING AIR TEMPERATURE</b>	IDCFM	900					1100					1300				
	ID DB (°F)	80	80	75	80	80	80	80	75	80	80	80	80	75	80	80
	ID WB (°F)	57	62	62	67	72	57	62	62	67	72	57	62	62	67	72
65	T.C.	27.9	31.3	32.6	34.6	36.6	28.6	32.3	33.4	35.5	36.8	29.8	32.7	33.9	35.3	37.6
	S.C.	27.9	25.4	23.0	22.4	19.2	28.6	27.1	24.1	23.5	18.5	29.8	28.4	25.2	23.5	19.7
	KW	3.04	3.07	3.04	3.11	3.22	3.20	3.25	3.21	3.28	3.35	3.41	3.41	3.36	3.41	3.55
75	T.C.	26.9	30.9	31.9	34.3	36.7	28.9	31.7	32.9	35.1	37.5	30.0	31.9	33.1	35.7	37.6
	S.C.	26.9	25.8	22.9	22.1	18.4	28.9	27.7	24.3	23.4	19.3	30.0	28.9	25.3	24.2	19.4
	KW	3.19	3.28	3.22	3.31	3.44	3.43	3.44	3.40	3.49	3.62	3.63	3.59	3.55	3.65	3.76
85	T.C.	26.6	29.8	31.1	33.6	36.2	28.5	30.6	31.9	34.1	36.9	29.2	31.0	32.1	34.3	37.0
	S.C.	26.6	25.5	22.6	22.2	18.2	28.5	27.8	24.2	23.2	18.8	29.2	29.4	25.2	24.0	19.4
	KW	3.41	3.47	3.43	3.53	3.67	3.65	3.65	3.60	3.69	3.84	3.83	3.80	3.74	3.85	3.99
95	T.C.	25.5	28.2	29.4	32.5	34.8	27.4	29.1	30.5	33.0	35.6	28.5	29.8	31.0	33.3	35.6
	S.C.	25.5	24.7	21.6	21.6	17.7	27.4	27.2	23.6	23.0	18.3	28.5	29.7	25.4	24.0	18.5
	KW	3.61	3.64	3.60	3.74	3.88	3.86	3.83	3.79	3.91	4.06	4.06	4.01	3.96	4.07	4.21
105	T.C.	24.2	26.6	27.7	30.9	33.3	25.9	27.3	28.5	31.4	33.9	27.1	27.9	29.1	31.8	33.9
	S.C.	24.2	24.0	21.0	21.1	16.9	25.9	26.5	22.7	22.6	17.7	27.1	27.9	24.5	23.8	17.9
	KW	3.78	3.80	3.76	3.93	4.09	4.04	4.00	3.95	4.10	4.27	4.26	4.18	4.14	4.27	4.41
115	T.C.	22.9	24.5	25.5	28.9	31.8	24.5	25.3	26.4	29.7	32.1	25.4	25.7	26.9	30.1	32.5
	S.C.	22.9	23.1	20.0	20.1	16.2	24.5	25.3	21.9	21.9	17.0	25.4	25.7	23.5	23.4	17.3
	KW	3.94	3.93	3.89	4.09	4.29	4.21	4.13	4.09	4.28	4.46	4.44	4.31	4.26	4.45	4.63
125	T.C.	21.3	22.2	23.2	26.5	29.8	22.6	22.8	23.9	27.1	30.1	23.7	25.0	24.1	27.6	30.3
	S.C.	21.3	22.2	19.0	19.1	15.2	22.6	22.8	20.8	20.9	16.1	23.7	25.0	22.4	22.6	16.6
	KW	4.10	4.04	3.99	4.22	4.46	4.35	4.23	4.18	4.40	4.63	4.59	4.54	4.36	4.59	4.81

<b>COOLING PERFORMANCE DATA (R-407C)</b>																
<b>AIR CONDITIONER MODEL NO.</b>		<b>GCGA36S22S3</b>														
<b>INDOOR COIL MODEL NO.</b>		<b>F2RP036H93</b>														
<b>CONDENSING ENTERING AIR TEMPERATURE</b>	IDCFM	900					1100					1300				
	ID DB (°F)	80	80	75	80	80	80	80	75	80	80	80	80	75	80	80
	ID WB (°F)	57	62	62	67	72	57	62	62	67	72	57	62	62	67	72
65	T.C.	31.4	33.2	33.0	35.3	37.2	32.6	33.7	33.5	35.9	37.7	33.2	34.6	34.2	36.6	37.9
	S.C.	30.3	26.9	23.3	22.7	19.0	32.2	28.2	24.2	23.5	19.3	33.2	29.7	25.1	24.3	19.3
	KW	2.98	3.05	3.04	3.13	3.21	3.16	3.21	3.20	3.30	3.37	3.33	3.38	3.37	3.47	3.52
75	T.C.	30.5	32.1	32.0	34.4	36.0	31.8	32.9	33.0	35.4	36.6	32.5	33.3	33.4	35.2	36.9
	S.C.	29.9	26.7	23.0	22.4	18.4	31.8	28.6	24.5	23.4	18.9	32.5	29.9	25.4	23.9	19.3
	KW	3.13	3.19	3.19	3.30	3.37	3.32	3.37	3.39	3.49	3.54	3.50	3.53	3.54	3.62	3.70
85	T.C.	29.0	30.4	30.4	33.1	35.2	30.4	31.4	31.3	33.8	35.5	31.6	31.6	31.6	34.0	36.0
	S.C.	28.9	26.3	22.3	21.8	17.7	30.4	28.7	23.9	23.1	18.2	31.6	30.6	25.2	23.8	18.6
	KW	3.29	3.36	3.36	3.49	3.59	3.50	3.55	3.55	3.67	3.75	3.71	3.71	3.71	3.82	3.92
95	T.C.	27.7	28.4	28.5	31.2	33.2	28.9	29.2	29.1	31.7	33.7	30.1	30.9	29.5	31.9	34.1
	S.C.	27.7	25.5	21.4	21.1	16.8	28.9	28.2	23.1	22.4	17.5	30.1	28.9	24.6	23.6	17.8
	KW	3.41	3.50	3.49	3.65	3.75	3.68	3.69	3.69	3.82	3.94	3.89	3.92	3.85	3.98	4.11
105	T.C.	26.4	25.6	25.5	29.0	31.3	27.2	27.2	27.1	29.5	31.8	28.4	28.6	26.7	29.6	31.9
	S.C.	26.4	24.2	20.1	20.2	15.8	27.2	27.1	22.3	21.8	16.6	28.4	27.2	23.6	23.2	17.1
	KW	3.53	3.60	3.61	3.79	3.91	3.84	3.76	3.75	3.96	4.08	4.05	4.05	3.95	4.13	4.24
115	T.C.	25.3	23.9	22.9	27.2	29.1	25.5	25.9	23.4	26.9	29.4	26.2	26.3	23.5	27.3	29.5
	S.C.	25.3	22.4	18.9	19.5	15.1	25.5	24.6	20.7	20.9	15.7	26.2	25.5	22.3	22.5	16.0
	KW	3.69	3.76	3.70	3.84	4.04	3.92	3.93	3.88	4.07	4.21	4.15	4.16	4.03	4.23	4.37
125	T.C.	21.2	21.4	19.8	23.3	26.5	22.5	22.6	20.2	25.0	26.9	24.4	24.1	20.2	25.4	26.8
	S.C.	21.2	20.5	17.6	17.9	14.0	22.5	22.1	19.4	20.1	14.8	24.4	23.8	20.2	21.8	15.5
	KW	3.87	3.88	3.79	3.96	4.16	4.08	4.08	3.96	4.11	4.33	4.24	4.23	4.11	4.26	4.49

NOTE: ALL CAPACITIES INCLUDE INDOOR FAN HEAT AT 1250 BTUH/1000 CFM.

**Multipliers for determining the performance with other indoor sections.**

NOTE: For dry bulb temperatures different than those listed (between 73-87 F), sensible capacity increases by 1060 BTUH per 1000 CFM per degree above the listed temperature and decreases by 1060 BTUH per 1000 CFM per degree below the listed temperature.

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**Johnson Controls Unitary Products**  
5005 York Drive  
Norman, OK 73069