

HEAT PUMP COMPONENT
1-1/2 THRU 5 TONS
208 / 230 Volt, 1-phase, 60 Hz

GRANDAIR[®]
Heating & Cooling Products



WCH32**

Model Number (Series 200/400)	Size (tons)	Nominal BTU/hr	Min. Circuit Ampacity	Max. Fuse or Breaker	Operating Dimensions height x width x depth in (mm)	Ship / Operat- ing Weight (lbs)
WCH3182GKR	1-1/2	18,000	10.9	15	28-7/16 x 23-1/8 x 23-1/8 (722 x 587 x 587)	129 / 119 (59 / 54)
WCH3242GKR	2	24,000	14.3	20	35-3/16 x 23-1/8 x 23-1/8 (894 x 587 x 587)	138 / 126 (63 / 57)
WCH3302GKR	2-1/2	30,000	18.4	30	28-7/16 x 31-3/16 x 31-3/16 (722 x 792 x 792)	178 / 161 (81 / 73)
WCH3362GKR	3	36,000	20.4	30	31-13/16 x 31-3/16 x 31-3/16 (808 x 792 x 792)	192 / 177 (87 / 80)
WCH3422GKR	3-1/2	42,000	25.4	40	38-5/8 x 31-3/16 x 31-3/16 (981 x 792 x 792)	216 / 198 (98 / 90)
WCH3482GKR	4	48,000	28.7	40	28-7/16 x 31-3/16 x 31-3/16 (722 x 792 x 792)	221 / 207 (100 / 94)
WCH3602GKR	5	60,000	33.0	50	42 x 31-3/16 x 31-3/16 (1067 x 792 x 792)	285 / 273 (129 / 124)

ALL MODELS

REFRIGERATION CIRCUIT

- Scroll compressors on all models
- Compressors contain proper charge of mineral oil
- Suction line accumulator factory installed
- Integrated solid state control with Time-Temperature Defrost
- Low pressure switch
- Copper tube / aluminum fin coil

EASY TO INSTALL AND SERVICE

- Easy Access service valves on all models
- External high and low refrigerant service ports
- Only two screws to access control panel
- Factory charged with dry nitrogen holding charge
 - For use with R-22 refrigerant

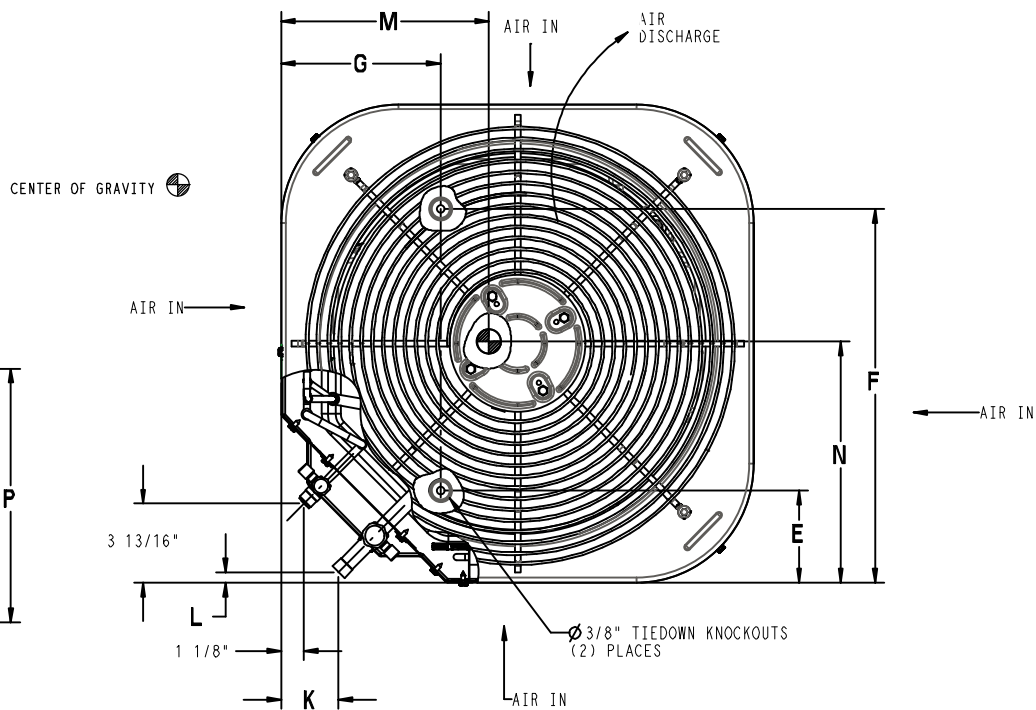
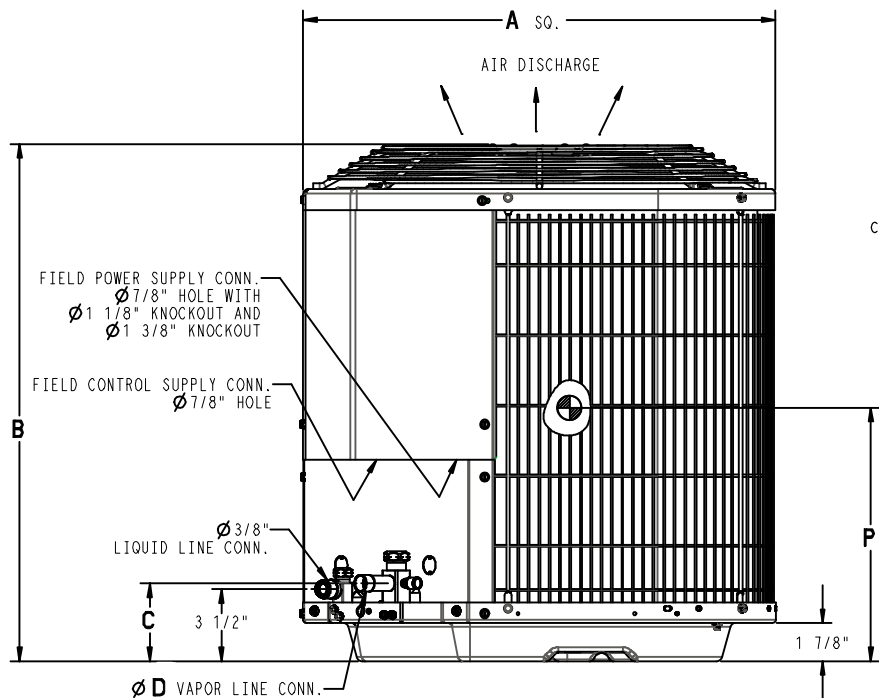
BUILT TO LAST

- Pre-painted cabinet finish over galvanized steel
- Coated inlet grille with 3/8" (10mm) grille spacing for extra protection (hail guard)

LIMITED WARRANTY*

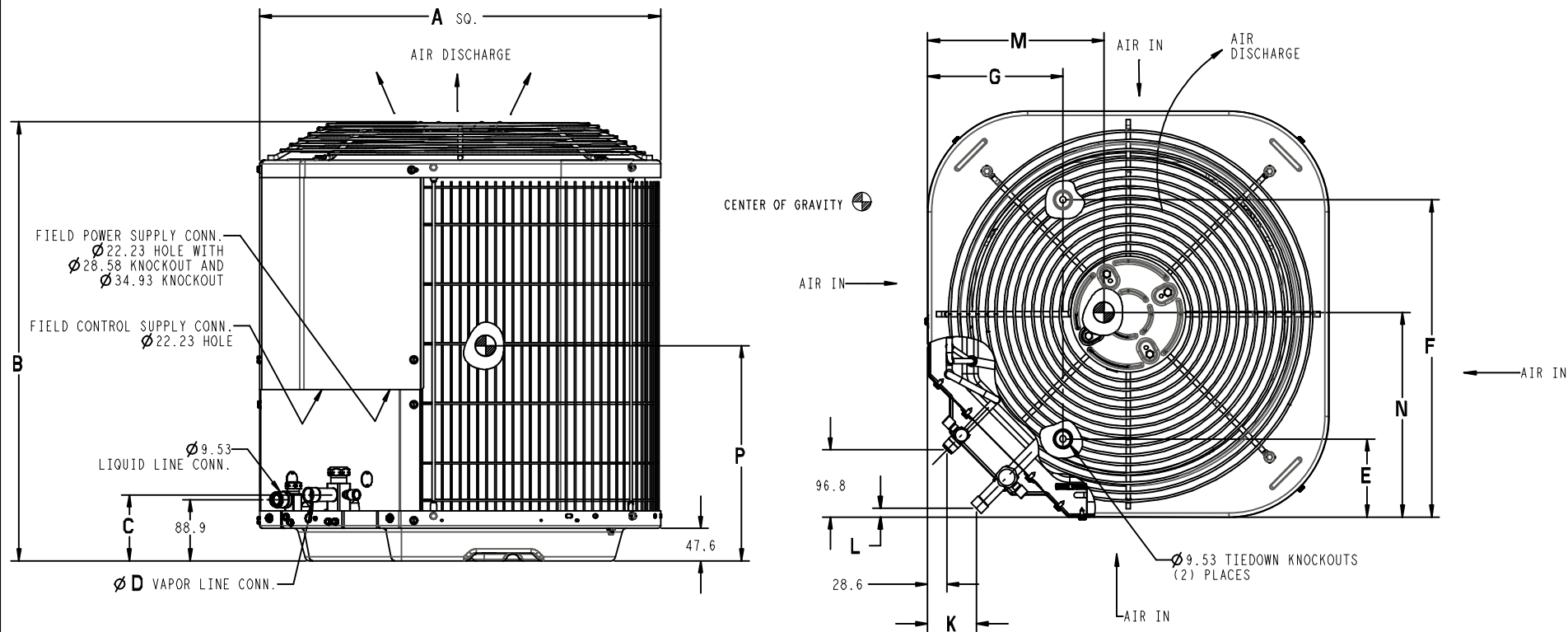
- 5 year parts limited warranty (including compressor and coil)
- *Applies to original purchaser/homeowner, some limitations may apply.
 See Warranty certificate for complete details.

Product Specifications



All Dimensions Inches (English)

Model (Series 200/400)	All Dimensions Inches (English)												Minimum Mounting Pad Size	Crated Dimensions H x W x D
	A	B	C	D	E	F	G	K	L	M	N	P		
WCH3182GKR	23-1/8	28-7/16	3-3/4	3/4	4-7/16	18-1/16	7-13/16	2-13/16	1/2	11-1/2	10-1/2	12-1/2	23-1/2 X 23-1/2	30-5/8 X 24-1/8 x 24-1/8
WCH3242GKR	23-1/8	35-3/16	3-3/4	3/4	4-7/16	18-1/16	7-13/16	2-13/16	1/2	11-1/2	10-1/2	14-1/2	23-1/2 X 23-1/2	37-7/16 X 24-1/8 x 24-1/8
WCH3302GKR	31-3/16	28-7/16	3-3/4	3/4	6-9/16	24-11/16	9-1/8	2-13/16	1/2	15	15	12	31-1/2 X 31-1/2	30-5/8 X 32-3/16 x 32-3/16
WCH3362GKR	31-3/16	31-13/16	3-7/8	7/8	6-9/16	24-11/16	9-1/8	2-15/16	5/8	15	15	11-1/2	31-1/2 X 31-1/2	34 X 32-3/16 x 32-3/16
WCH3422GKR	31-3/16	38-5/8	3-7/8	7/8	6-9/16	24-11/16	9-1/8	2-15/16	5/8	15	15	15-1/2	31-1/2 X 31-1/2	40-13/16 X 32-3/16 x 32-3/16
WCH3482GKR	31-3/16	28-7/16	3-7/8	7/8	6-9/16	24-11/16	9-1/8	2-15/16	5/8	15	15	12	31-1/2 X 31-1/2	30-5/8 X 32-3/16 x 32-3/16
WCH3602GKR	31-3/16	42	3-7/8	7/8	6-9/16	24-11/16	9-1/8	2-15/16	5/8	15	15	16	31-1/2 X 31-1/2	44-1/4 X 32-3/16 x 32-3/16



Model (Series 200/400)	All Dimensions mm (SI Metric)												Minimum Mounting Pad Size	Crated Dimensions H x W x D
	A	B	C	D	E	F	G	K	L	M	N	P		
WCH3182GKR	587	722	95	19	113	459	198	71	13	292	267	318	597 x 597	778 x 613 x 613
WCH3242GKR	587	894	95	19	113	459	198	71	13	292	267	368	597 x 597	951 x 613 x 613
WCH3302GKR	792	722	95	19	243	627	232	71	13	381	381	305	800 x 800	778 x 818 x 818
WCH3362GKR	792	808	98	22	243	627	232	75	16	381	381	292	800 x 800	864 x 818 x 818
WCH3422GKR	792	981	98	22	243	627	232	75	16	381	381	394	800 x 800	1037 x 818 x 818
WCH3482GKR	792	722	98	22	243	627	232	75	16	381	381	305	800 x 800	777 x 818 x 818
WCH3602GKR	792	1067	98	22	243	627	232	75	16	381	381	406	800 x 800	1124 x 818 x 818

PHYSICAL DATA							
Model Size (Series 200/400)	18	24	30	36	42	48	60
Nominal Cooling Capacity (BTU/hr)	18,000	24,000	30,000	36,000	42,000	48,000	60,000
Sound Rating (dBA)**	76	76	76	77	80	80	80
PSC Fan Motor HP	1/12	1/10	1/10	1/5	1/4	1/4	1/4
Fan RPM (single speed)	1100	1100	1100	1100	1100	1100	1100
Fan CFM	1700	2000	2600	3100	3400	3400	3400
Coil Face Area ft ² (m ²)	9.8 (0.91)	12.6 (1.17)	15.14 (1.41)	17.30 (1.61)	23.79 (2.21)	15.14 (1.41)	23.79 (2.21)
Coil Rows – fins per inch	1 – 25	1 – 20	1 – 20	1 – 25	1 – 25	2 – 20	2 – 20
Liquid Line Connection Size in. (mm)	3/8 (10)	3/8 (10)	3/8 (10)	3/8 (10)	3/8 (10)	3/8 (10)	3/8 (10)
Vapor Line Connection Size in. (mm)	3/4 (19)	3/4 (19)	3/4 (19)	7/8 (22)	7/8 (22)	7/8 (22)	7/8 (22)
Recommended Line Set Liquid Tube Diameter in. (mm)	3/8 (10)	3/8 (10)	3/8 (10)	3/8 (10)	3/8 (10)	3/8 (10)	3/8 (10)
Recommended Line Set Vapor Tube Diameter in. (mm)	3/4 (19)*	3/4 (19)*	3/4 (19)*	7/8 (22)*	7/8 (22)*	7/8 (22)*	1-1/8 (29)*
* Recommended Vapor Tube Line size is for standard installations. These recommendations may not apply to “Long Line” installations. When the total equivalent line length exceeds 80 feet (24.4m) or there is more than 20 feet (6.1m) vertical separation between indoor and outdoor units, consult the Long Line Application Guideline document before purchasing/installing line sets.							
Suggested Field R-22 Refrigerant Charge for 15 foot (4.6m) Lineset lbs. (kg)	5.35 (2.43)	4.68 (2.13)	5.29 (2.41)	6.50 (2.96)	7.50 (3.41)	9.13 (4.15)	13.03 (5.93)
Required Subcooling ° F (° C)	21 (12)	13 (7)	12 (7)	14 (8)	14 (8)	16 (9)	16 (9)
Weight, shipping lbs. (kg)	129 (59)	138 (63)	178 (81)	192 (87)	216 (98)	221 (100)	285 (129)
Weight, operating lbs. (kg)	119 (54)	126 (57)	161 (73)	177 (80)	198 (90)	207 (94)	273 (124)

ELECTRICAL DATA (208/230–1–60, voltage range 197V – 253V)							
Model Size (Series 200/400)	18	24	30	36	42	48	60
Minimum Circuit Ampacity – MCA (amps)	10.9	14.3	18.4	20.4	25.4	28.7	33.0
Maximum OverCurrent Protective device – MOCP (amps)	15	20	30	30	40	40	50
Compressor RLA (Rated Load Amps) LRA (Locked Rotor Amps)	8.3 40.3	10.8 56.0	14.1 75.0	15.4 87.0	19.2 112.0	21.8 137.0	25.3 146.0
Fan Motor FLA (Full Load Amps)	0.5	.77	0.8	1.1	1.4	1.4	1.4

**Sound Rating tested in accordance with ARI Standard 270–95 (not listed with ARI).

ACCESSORY USAGE GUIDELINES

Accessory	REQUIRED FOR APPLICATIONS IN SNOW-BELT REGION	REQUIRED FOR LOW-AMBIENT APPLICATIONS {Below 55°F (13°C)}	REQUIRED FOR LONG-LINE APPLICATIONS* {Over 80 Ft. (24.4m)}
Crankcase Heater	Standard (if required)	Yes	Yes
Evaporator Freeze Thermostat	No	Yes	No
Accumulator	Standard (factory installed)	Standard (factory installed)	Standard (factory installed)
Hard Start Kit (Capacitor & Relay)	No	Yes	Yes
Low Ambient Kit (Pressure Switch)	No	Yes	No
Support Feet, 4" (102mm) tall	Yes	Recommended	No
Liquid Line Solenoid Valve	No	No	See Long-Line Application Guideline

* For Line Set lengths between 80 and 200 ft (24.4 and 61m) horizontal. or more than 20 ft (6.1m) indoor-outdoor vertical separation, refer to the Long Line Application Guideline document.

ACCESSORIES

Part Number	Description	Used On Model Size
NASA001SC	Start Component – PTC Device	ALL
NASA001FS	Evaporator Freeze Thermostat	ALL
NASA001LS	Liquid Line Solenoid Valve	ALL
NASA001TD	Time Delay Relay, Indoor Blower	ALL
NASA001AC	Anti-Cycle Timer (5 minute delay)	ALL
NASA201LA	Low Ambient Kit (Pressure Switch)	ALL
AMF002OTA	Outdoor Thermometer Kit	ALL
NASA204PS	High Pressure Switch*	ALL
AXWR01DFC	Fossil Fuel Kit	ALL
NASA001SF	Support Feet, 4" tall	ALL
NASA003CH	Crankcase Heater for Compressor	18, 24
NASA001CH	Crankcase Heater for Compressor	30, 36, 42, 48, 60
NASA003SC	Hard Start Kit (Capacitor & Relay)	18, 24, 30, 36, 42, 48
NASA004SC	Hard Start Kit (Capacitor & Relay)	60
NASA002SJ	Sound Jacket, Compressor	18, 24, 30
NASA001SJ	Sound Jacket, Compressor	36, 42, 48
NASA003SJ	Sound Jacket, Compressor	60
AMF153TKB	TXV Kit, R-22 (converts R-22 piston coils to R-22 TXV)	18, 24, 30, 36
AMF355TKB	TXV Kit, R-22 (converts R-22 piston coils to R-22 TXV)	42, 48, 60

* Dual Fuel applications require High Pressure Switch.