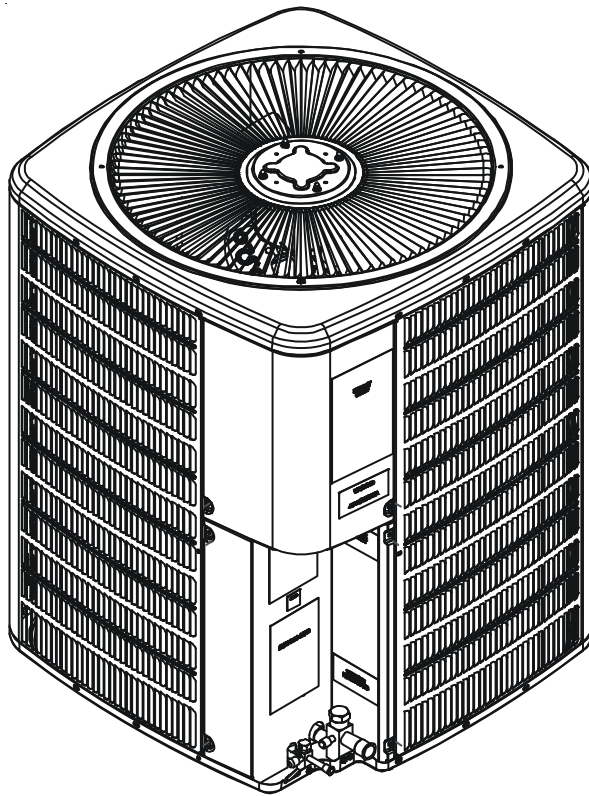




TECHNICAL MANUAL

GSZ13 SEER Split System Heat Pumps

- All safety information must be followed as provided in the installation instructions, the specification sheets and the technical manual.
- Refer to the appropriate Parts Catalog for part number information.
- Models listed on page 3.

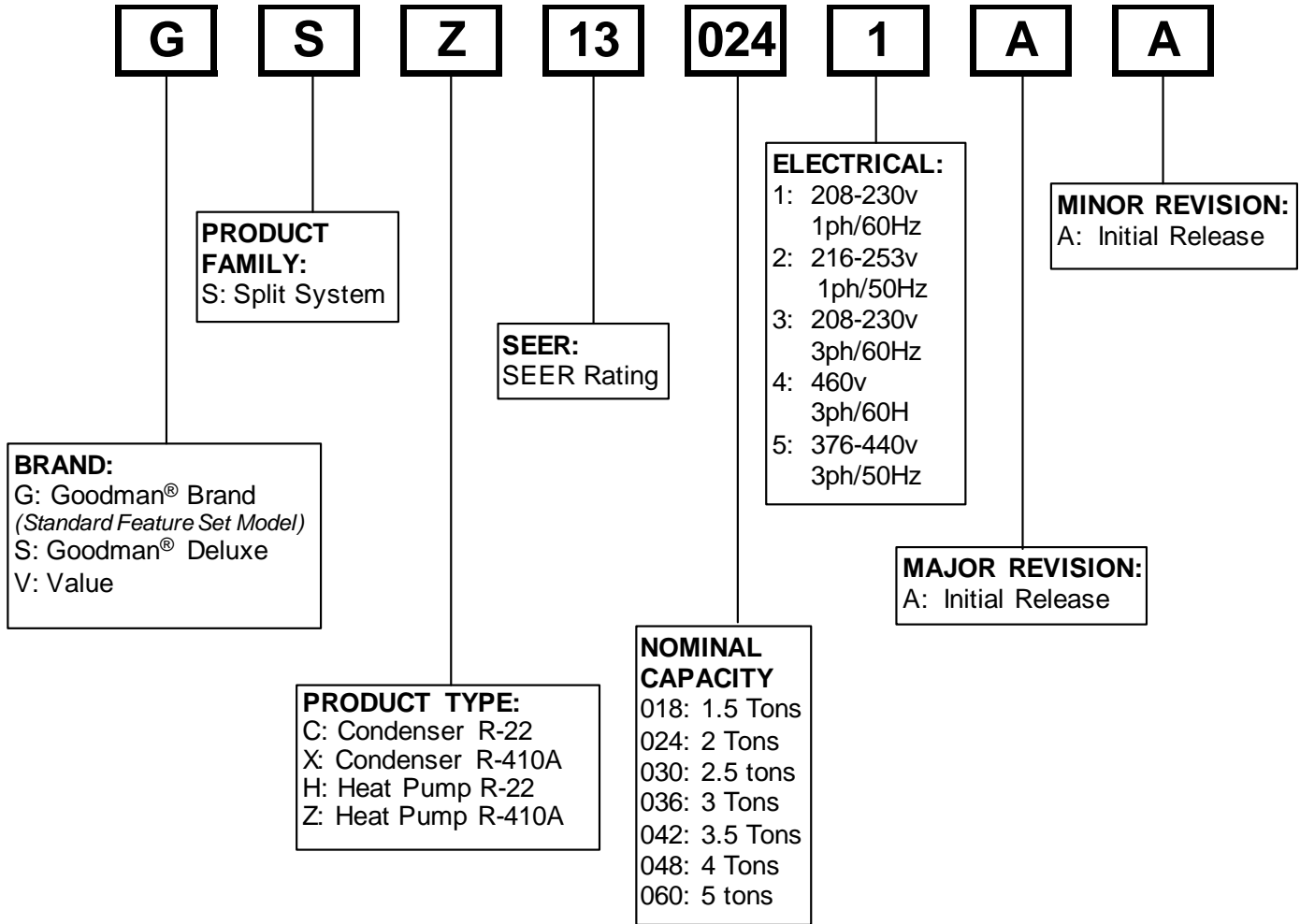


This manual is to be used by qualified, professionally trained HVAC technicians only. Goodman does not assume any responsibility for property damage or personal injury due to improper service procedures or services performed by an unqualified person.

RT6212012
September 2014

PRODUCT IDENTIFICATION

The model number is used for positive identification of component parts used in manufacturing. Please use this number when requesting service or parts information.



WARNING

HIGH VOLTAGE!

Disconnect ALL power before servicing or installing this unit. Multiple power sources may be present. Failure to do so may cause property damage, personal injury or death.

WARNING

Goodman will not be responsible for any injury or property damage arising from improper service or service procedures. If you install or perform service on this unit, you assume responsibility for any personal injury or property damage which may result. Many jurisdictions require a license to install or service heating and air conditioning equipment.

WARNING

Installation and repair of this unit should be performed ONLY by individuals meeting (at a minimum) the requirements of an "entry level technician", as specified by the Air-Conditioning, Heating, and Refrigeration Institute (AHRI). Attempting to install or repair this unit without such background may result in product damage, personal injury or death.

PRODUCT IDENTIFICATION

The model number is used for positive identification of component parts used in manufacturing. Please use this number when requesting service or parts information.

GSZ130242A*

GSZ130362A*

GSZ130365A*

GSZ130485A*

GSZ130605A*

** Indicates minor revision & is not used for order entry or inventory management*

Goodman Manufacturing Company, L.P. reserves the right to discontinue or change at any time, specifications or designs without notice or without incurring obligations.



The United States Environmental Protection Agency (“EPA”) has issued various regulations regarding the introduction and disposal of refrigerants introduced into this unit. Failure to follow these regulations may harm the environment and can lead to the imposition of substantial fines. These regulations may vary by jurisdiction. Should questions arise, contact your local EPA office.



Do not connect or use any device that is not design certified by Goodman for use with this unit. Serious property damage, personal injury, reduced unit performance and/or hazardous conditions may result from the use of such non-approved devices.



To prevent the risk of property damage, personal injury, or death, do not store combustible materials or use gasoline or other flammable liquids or vapors in the vicinity of this appliance.

PRODUCT DESIGN

The GSZ13 models use R-410A refrigerant and are available in single and 3-phase models. The single phase models are available in 2 and 3 ton sizes and are designed for 216-253 volt. The 3-phase models are available in 3, 4 and 5 ton sizes and are designed for 376-440 volt applications.

Select GSZ13 models are available in 208/230 and 460 volt 3-phase applications. These models use R-410A refrigerant.

The condenser air is pulled through the condenser coil by a direct drive propeller fan. This condenser air is then discharged out of the top of the cabinet.

These units are designed for free air discharge, so no additional resistance like duct work shall be attached.

The suction and liquid line connections on present models are of the sweat type for field piping with refrigerant type copper. Front seating valves are factory installed to accept the field run copper. The total refrigerant charge for a normal installation is factory installed in the condensing unit. GSZ units are charged for the matching evaporator coil and a 15 foot (4.57m) refrigerant line set.

Systems should be properly sized by heat gain and loss calculations made according to methods of the Air Conditioning Contractors Association (ACCA) or equivalent. It is the contractors responsibility to ensure the system has adequate capacity to heat or cool the conditioned space.

GSZ models use high-efficiency Copeland® Scroll "Ultratech" compressors which are specifically designed for R-410A refrigerant. There are a number of design characteristics which are different from the scroll compared to the traditional reciprocating compressor.

Due to their design Scroll compressors are inherently more tolerant of small quantities of liquid refrigerant.

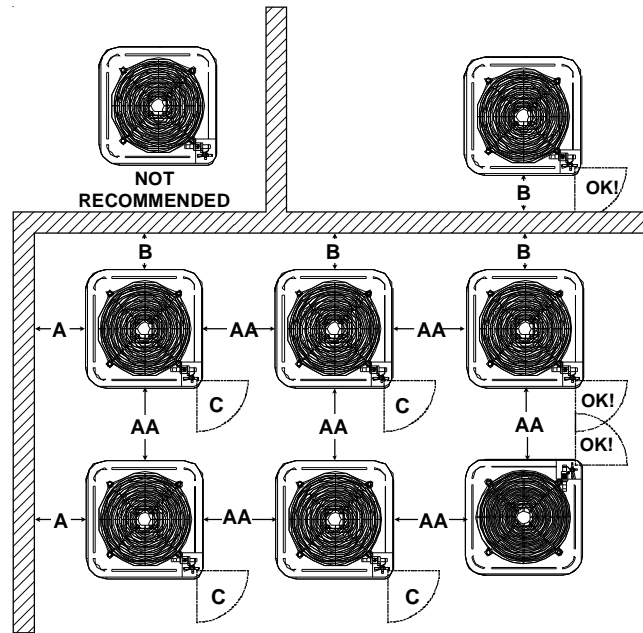
NOTE: Even though the compressor section of a Scroll compressor is more tolerant of liquid refrigerant, continued floodback or flooded start conditions may wash oil from the bearing surfaces causing premature bearing failure.

"Ultratech" Series scroll compressors use "POE" or polyolester oil which is **NOT** compatible with mineral oil based lubricants like 3GS. "POE" oil must be used if additional oil is required.

These clearances will help avoid air recirculation. If installing two or more units at the same location, allow at least 24 inches between units. If only one side is restricted (for example, against the outside wall of a house), the unit may be placed as close as 8" to that one wall.

DO NOT locate the unit:

- * Directly under a vent termination for a gas appliance.
- * Within 3 feet of a clothes drier vent
- * Where the refreezing of defrost water would create a hazard
- * Where water may rise into the unit.



Minimum Airflow Clearance				
Model Type	A	B	C	AA
Residential	10"	10"	18"	20"
Light Commercial	12"	12"	18"	24"

IMPORTANT NOTE: Because of the potential damage to compressors, do not allow suction pressure at service valve to drop below 20 PSIG when pumping unit system down for repair. Depending on line set length and amount of charge in system, the outdoor section may not be able to hold the entire system charge.

WARNING
To avoid possible injury, explosion or death, practice safe handling of refrigerants.

Operating pressures and amp draws may differ from standard reciprocating and/or scroll compressors. This information may be found in the "Cooling Performance Data" section.

This unit is for outdoor installation only. Refer to minimum figure for clearances from the sides of the unit to full walls and other objects.

NOTE: This unit cannot be completely enclosed. At least one side must be unrestricted.

PRODUCT DIMENSIONS

Model	Dimensions - W x D x H
GSZ130242	26 x 26 x 32¼
GSZ130362	29 x 29 x 32½
GSZ130365	29 x 29 x 32½
GSZ130485	29 x 29 x 34½
GSZ130605	35½ x 35½ x 34¼

HEAT PUMP SPECIFICATIONS

	GSZ130242A*	GSZ130362A*	GSZ130365A*	GSZ130485A*	GSZ130605A*
Nominal Capacities					
Cooling Capacity, BTUH	22,000	32,000	31,500	43,500	52,000
Heating Capacity, BTUH	22,000	32,000	31,500	43,500	52,000
Compressor					
R.L. Amps	11.2	16.0	6.0	6.8	8.5
L.R. Amps	60.0	87.0	46.0	51.5	67.1
Low Pressure Switch					
Open	22 PSIG	22 PSIG	22 PSIG	22 PSIG	22 PSIG
Close	50 PSIG	50 PSIG	50 PSIG	50 PSIG	50 PSIG
High Pressure Switch					
Open	610 PSIG	610 PSIG	610 PSIG	610 PSIG	610 PSIG
Close	420 PSIG	420 PSIG	420 PSIG	420 PSIG	420 PSIG
Condenser Fan Motor					
Horsepower	1/4	1/4	1/4	1/4	1/3
F.L. Amps	0.9	0.9	0.8	0.8	1.2
Liquid Line, Inches O.D.*	3/8"	3/8"	3/8"	3/8"	3/8"
Suction Line, Inches O.D.*	3/4"	3/4"	3/4"	7/8"	7/8"
Refrigerant Charge	122.0	127.0	171.0	222.0	245.0
Power Supply	216-253-50-1	216-253-50-1	376-440-50-3	376-440-50-3	376-440-50-3
Minimum Circuit Ampacity ⁽¹⁾	14.9	20.9	8.3	9.3	11.8
Maximum Overcurrent Device ⁽²⁾	25	35	15	15	20
Electrical Conduit Size					
Power Supply (Inches)	1/2 or 3/4	1/2 or 3/4	1/2 or 3/4	1/2 or 3/4	1/2 or 3/4
Approximate Shipping Weight	198	202	232	240	266

⁽¹⁾ Wire size should be determined in accordance with National Electrical Codes; extensive wire runs will require larger wire sizes.

⁽²⁾ Maximum Overcurrent Protection Device: **MUST** use Time Delay Fuse or HACR type Circuit Breaker of the same size as noted.

⁽³⁾ Tested and rated in accordance with AHRI Standard 210/240

NOTES:

- Always check the S & R plate for electrical data on the unit being installed.
- Installer will need to supply 7/8" to 1-1/8" adapters for suction line connections (4 & 5 ton units).
- Installer will need to supply 3/4" to 7/8" adapters for suction line connections (3 ton unit).
- Unit is charged with refrigerant for 15' of 3/8" liquid line. System charge must be adjusted per Installation Instructions Final Charge Procedure.

NOTE: This data is provided as a guide, it is important to electrically connect the unit and properly size fuses/circuit breakers and wires in accordance with all national and/or local electrical codes. Use copper wire only.

Unit specifications are subject to change without notice. **ALWAYS** refer to the unit's serial plate for the most up-to-date general and electrical information.

SPLIT SYSTEM HEATING PERFORMANCE

GSZ130242A*

EXPANDED PERFORMANCE DATA

MODEL: GSZ130242A* / A24-00-2RC

HEATING OPERATION

	Outdoor Ambient Temperature																	
	65	60	55	50	47	45	40	35	30	25	20	17	15	10	5	0.001	-5	-10
MBh	28.3	26.8	25.2	23.6	22.5	21.8	20.3	18.7	16.2	15.0	13.8	13.0	12.5	11.2	10.0	8.7	7.4	6.1
T/R	34.9	33.1	31.1	29.1	27.8	26.9	25.0	23.1	20.0	18.5	17.0	16.0	15.5	13.9	12.3	10.7	9.1	7.5
KW	1.94	1.90	1.87	1.83	1.81	1.80	1.76	1.72	1.53	1.49	1.46	1.44	1.43	1.40	1.37	1.34	1.30	1.27
AMPS	10.6	9.8	9.1	8.6	8.3	8.1	7.7	7.3	7.0	6.6	6.3	6.2	6.1	5.8	5.4	5.1	4.7	4.2
COP	3.78	3.64	3.49	3.32	3.20	3.12	2.95	2.77	2.67	2.51	2.36	2.25	2.18	2.00	1.80	1.60	1.40	1.17

High pressure is measured at the liquid service valve (the smaller valve).
 Low pressure is measured at the gauge port connection.
 Calculations are based on nominal CFM and 70 °F indoor dry bulb.

*Note: Shaded area is AHRI Rating Conditions at 47° outdoor ambient temperature

AMPS = Outdoor unit amps (comp.+fan)
 KW = Total system power

HEATING MODE

Pressures shown are for most popular match indoor unit WITH NO FROST ON OUTDOOR COIL. Due to factors like airflow, charge, indoor coil & frost, pressures will vary significantly. Liquid (small) service valve pressures should be ± 20 psig & suction (access port) pressures should be ±5 psig of the valves listed in this chart.

Indoor Air Flow Rate	Indoor Return Air Dry Bulb Temperature (°F)	Outdoor Air Dry Bulb Temperature (°F)																					
		Liquid Valve						Compressor Suction Pressure															
		Liq	Suct	Liq	Suct	Liq	Suct	Liq	Suct	Liq	Suct	Liq	Suct										
700	65	261	59	277	66	293	73	308	80	324	87	340	95	356	102	372	109	388	116	404	124	420	131
	70	280	58	297	66	313	73	329	80	346	87	362	94	378	102	395	109	411	116	427	123	444	130
	75	301	58	318	65	335	73	352	80	368	87	385	94	402	101	419	108	435	116	452	123	468	130
800	65	252	58	267	65	283	72	298	80	313	87	329	94	344	101	360	108	375	115	391	123	406	130
	70	271	58	287	66	303	73	318	80	334	87	350	94	366	101	381	109	397	116	413	123	429	130
	75	291	59	307	66	323	73	340	80	356	88	372	95	388	102	404	109	420	116	436	123	452	131
900	65	246	58	261	65	276	72	290	79	305	87	320	94	335	101	351	108	366	115	381	122	396	130
	70	264	58	280	66	295	73	310	80	326	87	341	94	356	101	372	108	387	116	403	123	418	130
	75	283	59	299	66	315	73	331	80	347	87	363	95	379	102	394	109	410	116	426	123	441	130

Label p/n: 0140R00243-C

SPLIT SYSTEM HEATING PERFORMANCE

GSZ130362A*

EXPANDED PERFORMANCE DATA

MODEL: GSZ130362A* / A36-00-2RC

HEATING OPERATION

	Outdoor Ambient Temperature																	
	65	60	55	50	47	45	40	35	30	25	20	17	15	10	5	0.001	-5	-10
MBh	38.3	36.3	34.2	31.9	30.5	29.6	27.5	25.3	19.9	18.4	16.9	16.0	15.4	13.8	12.3	10.7	9.1	7.5
T/R	31.1	29.5	27.7	25.9	24.8	24.0	22.3	20.6	16.2	14.9	13.8	13.0	12.5	11.2	10.0	8.7	7.4	6.1
KW	2.60	2.56	2.51	2.46	2.44	2.42	2.37	2.33	2.13	2.08	2.04	2.02	2.00	1.96	1.92	1.88	1.83	1.79
AMPS	14.1	13.1	12.3	11.6	11.1	10.9	10.3	9.8	9.4	9.0	8.6	8.4	8.3	7.9	7.4	6.9	6.4	5.8
COP	3.77	3.63	3.47	3.30	3.18	3.10	2.93	2.75	2.34	2.19	2.05	1.96	1.90	1.74	1.57	1.39	1.21	1.01

High pressure is measured at the liquid service valve (the smaller valve).
 Low pressure is measured at the gauge port connection.
 Calculations are based on nominal CFM and 70 °F indoor dry bulb.

AMPS = Outdoor unit amps (comp.+fan)
 KW = Total system power

*Note: Shaded area is AHRI Rating Conditions at 47° outdoor ambient temperature

HEATING MODE

Pressures shown are for most popular match indoor unit WITH NO FROST ON OUTDOOR COIL. Due to factors like airflow, charge, indoor coil & frost, pressures will vary significantly. Liquid (small) service valve pressures should be ± 20 psig & suction (access port) pressures should be ± 5 psig of the valves listed in this chart.

Indoor Air Flow Rate	Indoor Return Air Dry Bulb Temperature (°F)	Outdoor Air Dry Bulb Temperature (°F)																					
		17		22		27		32		37		42		47		52		57		62		67	
		Liq	Suct	Liq	Suct	Liq	Suct	Liq	Suct	Liq	Suct	Liq	Suct	Liq	Suct	Liq	Suct	Liq	Suct	Liq	Suct	Liq	Suct
1050	65	258	59	288	66	300	72	292	79	303	86	315	93	326	99	338	106	349	113	361	119	372	126
	70	277	59	288	66	300	72	312	79	323	86	335	92	347	99	358	106	370	112	381	119	393	126
	75	297	59	309	65	321	72	332	79	344	85	356	92	368	99	380	105	391	112	403	119	415	125
1200	65	249	59	260	65	271	72	282	78	293	85	304	92	315	98	326	105	337	112	349	118	360	125
	70	267	59	279	66	290	72	301	79	312	85	324	92	335	99	346	105	357	112	369	119	380	126
	75	287	59	298	66	310	73	321	79	333	86	344	93	356	99	367	106	378	112	390	119	401	126
1350	65	243	59	253	65	264	72	275	78	286	85	296	92	307	98	318	105	329	111	340	118	351	125
	70	261	59	272	66	283	72	294	79	305	85	315	92	326	99	337	105	348	112	359	118	370	125
	75	279	59	291	66	302	73	313	79	324	86	336	92	347	99	358	106	369	112	380	119	391	125

Label p/n: 0140R00246-C

SPLIT SYSTEM HEATING PERFORMANCE

GSZ130365A*

EXPANDED PERFORMANCE DATA

MODEL: GSZ130365A* / A36-00-2RC

HEATING OPERATION

	Outdoor Ambient Temperature																	
	65	60	55	50	47	45	40	35	30	25	20	17	15	10	5	0.001	-5	-10
MBh	39.0	36.9	34.7	32.5	31.0	30.0	27.9	25.7	21.2	19.6	18.0	17.0	16.4	14.7	13.0	11.4	9.7	7.9
T/R	31.6	30.0	28.2	26.4	25.2	24.4	22.7	20.9	17.2	15.9	14.6	13.8	13.3	11.9	10.6	9.2	7.9	6.4
KW	2.54	2.49	2.45	2.40	2.38	2.36	2.32	2.27	2.06	2.02	1.98	1.95	1.94	1.90	1.86	1.82	1.78	1.74
AMPS	13.8	12.8	12.0	11.3	10.9	10.7	10.1	9.6	9.2	8.8	8.4	8.2	8.1	7.7	7.2	6.8	6.3	5.7
COP	3.92	3.77	3.60	3.42	3.30	3.22	3.04	2.85	2.55	2.40	2.24	2.14	2.07	1.89	1.71	1.52	1.32	1.10

High pressure is measured at the liquid service valve (the smaller valve).
 Low pressure is measured at the gauge port connection.
 Calculations are based on nominal CFM and 70 °F indoor dry bulb.

AMPS = Outdoor unit amps (comp.+fan)
 KW = Total system power

*Note: Shaded area is AHRI Rating Conditions at 47° outdoor ambient temperature

HEATING MODE

Pressures shown are for most popular match indoor unit WITH NO FROST ON OUTDOOR COIL. Due to factors like airflow, charge, indoor coil & frost, pressures will vary significantly. Liquid (small) service valve pressures should be ± 20 psig & suction (access port) pressures should be ± 5 psig of the valves listed in this chart.

Indoor Return Air Flow Rate	Indoor Return Air Dry Bulb Temperature (°F)	Outdoor Air Dry Bulb Temperature (°F)																					
		Liquid Valve & Compressor Suction Pressure																					
		Liq	Suct	Liq	Suct	Liq	Suct	Liq	Suct	Liq	Suct	Liq	Suct	Liq	Suct	Liq	Suct	Liq	Suct				
1050	65	258	59	269	66	280	72	292	79	303	86	315	93	326	99	338	106	349	113	361	119	372	126
	70	277	59	288	66	300	72	312	79	323	86	335	92	347	99	358	106	370	112	381	119	393	126
	75	297	59	309	65	321	72	332	79	344	85	356	92	368	99	380	105	391	112	403	119	415	125
1200	65	249	59	260	65	271	72	282	78	293	85	304	92	315	98	326	105	337	112	349	118	360	125
	70	267	59	279	66	290	72	301	79	312	85	324	92	335	99	346	105	357	112	369	119	380	125
	75	287	59	298	66	310	73	321	79	333	86	344	93	356	99	367	106	378	112	390	119	401	126
1350	65	243	59	253	65	264	72	275	78	286	85	296	92	307	98	318	105	329	111	340	118	351	125
	70	261	59	272	66	283	72	294	79	305	85	315	92	326	99	337	105	348	112	359	118	370	125
	75	279	59	291	66	302	73	313	79	324	86	336	92	347	99	358	106	369	112	380	119	391	125

Label p/n: 0140R00246-C

SPLIT SYSTEM HEATING PERFORMANCE

GSZ130485A*

EXPANDED PERFORMANCE DATA

MODEL: GSZ130485A* / A48-00-2RC

HEATING OPERATION

	Outdoor Ambient Temperature																	
	65	60	55	50	47	45	40	35	30	25	20	17	15	10	5	0.001	-5	-10
MBh	59.7	56.5	53.2	49.7	47.5	46.0	42.8	39.4	39.9	36.8	33.9	32.0	30.8	27.6	24.5	21.4	18.2	14.9
T/R	42.5	40.3	37.9	35.4	33.8	32.8	30.4	28.1	28.4	26.2	24.1	22.8	21.9	19.7	17.5	15.2	13.0	10.6
KW	3.78	3.72	3.65	3.58	3.54	3.51	3.44	3.37	3.14	3.08	3.01	2.97	2.95	2.88	2.82	2.75	2.69	2.63
AMPS	20.6	19.1	17.8	16.8	16.2	15.9	15.0	14.2	13.6	13.0	12.4	12.1	11.9	11.3	10.6	10.0	9.2	8.3
COP	4.08	3.93	3.76	3.58	3.45	3.37	3.18	2.99	3.21	3.02	2.83	2.70	2.62	2.40	2.16	1.92	1.68	1.40

High pressure is measured at the liquid service valve (the smaller valve).
 Low pressure is measured at the gauge port connection.
 Calculations are based on nominal CFM and 70 °F indoor dry bulb.

AMPS = Outdoor unit amps (comp. +fan)
 KW = total system power

*Note: Shaded area is AHRI Rating Conditions at 47° outdoor ambient temperature

HEATING MODE

Pressures shown are for most popular match indoor unit WITH NO FROST ON OUTDOOR COIL. Due to factors like airflow, charge, indoor coil & frost, pressures will vary significantly. Liquid (small) service valve pressures should be ± 20 psig & suction (access port) pressures should be ±5 psig of the valves listed in this chart.

Indoor Return Air Dry Bulb Temperature (°F)	Outdoor Air Dry Bulb Temperature (°F)																					
	17	22	27	32	37	42	47	52	57	62	67											
	Liquid Valve						Compressor Suction Pressure															
1400	Liq	Suct	Liq	Suct	Liq	Suct	Liq	Suct	Liq	Suct	Liq	Suct										
	257	60	270	67	283	74	296	82	309	89	323	96	336	103	349	110	362	118	376	125	389	133
	70	276	60	289	67	303	74	316	81	330	89	343	96	357	103	370	110	384	118	397	125	411
1600	Liq	Suct	Liq	Suct	Liq	Suct	Liq	Suct	Liq	Suct	Liq	Suct										
	296	59	310	67	324	74	338	81	351	88	365	96	379	103	393	110	406	117	420	125	434	132
	65	248	59	261	66	273	74	286	81	299	88	312	95	324	102	337	110	350	117	363	124	376
1800	Liq	Suct	Liq	Suct	Liq	Suct	Liq	Suct	Liq	Suct	Liq	Suct										
	267	60	280	67	293	74	306	81	319	88	332	96	345	103	358	110	371	117	384	125	397	132
	75	242	59	254	66	267	74	279	81	291	88	304	95	316	102	329	110	341	117	354	124	367
	Liq	Suct	Liq	Suct	Liq	Suct	Liq	Suct	Liq	Suct	Liq	Suct										
	260	60	273	67	285	74	298	81	311	88	323	96	336	103	349	110	362	117	374	124	387	132
	75	279	60	292	67	305	74	318	82	331	89	344	96	357	103	370	111	383	118	396	125	408

Label p/n: 0140R00249-C

SPLIT SYSTEM HEATING PERFORMANCE

GSZ130605A*

EXPANDED PERFORMANCE DATA

MODEL: GSZ130605A* / A60-00-2RC

HEATING OPERATION

	Outdoor Ambient Temperature																	
	65	60	55	50	47	45	40	35	30	25	20	17	15	10	5	0.001	-5	-10
MBh	69.1	65.5	61.6	57.6	55.0	53.3	49.5	45.7	44.2	40.8	37.6	35.5	34.2	30.7	27.2	23.7	20.2	16.6
T/R	37.7	35.6	33.6	31.4	30.0	29.0	27.0	24.9	24.1	22.2	20.5	19.3	18.6	16.7	14.8	12.9	11.0	9.0
KW	4.15	4.07	4.00	3.92	3.88	3.85	3.77	3.70	3.36	3.29	3.22	3.18	3.16	3.09	3.02	2.96	2.89	2.83
AMPS	22.5	20.9	19.6	18.4	17.7	17.4	16.4	15.6	14.9	14.3	13.6	13.3	13.1	12.5	11.6	11.0	10.2	9.2
COP	4.27	4.11	3.93	3.73	3.60	3.51	3.32	3.11	3.28	3.08	2.88	2.75	2.67	2.44	2.20	1.95	1.70	1.42

High pressure is measured at the liquid service valve (the smaller valve).
 Low pressure is measured at the gauge port connection.
 Calculations are based on nominal CFM and 70 °F indoor dry bulb.

*Note: Shaded area is AHRI Rating Conditions at 47° outdoor ambient temperature

AMPS = Outdoor unit amps (comp.+fan)
 KW = Total system power

HEATING MODE

Pressures shown are for most popular match indoor unit WITH NO FROST ON OUTDOOR COLL. Due to factors like airflow, charge, indoor coil & frost, pressures will vary significantly. Liquid (small) service valve pressures should be ± 20 psig & suction (access port) pressures should be ± 5 psig of the valves listed in this chart.

Indoor Return Air Flow Rate	Indoor Return Air Dry Bulb Temperature (°F)	Outdoor Air Dry Bulb Temperature (°F)																					
		Liquid Valve & Compressor Suction Pressure																					
		17	22	27	32	37	42	47	52	57	62	67	72	77	82								
1580	65	Liq 257	Suct 58	Liq 279	Suct 66	Liq 301	Suct 73	Liq 324	Suct 81	Liq 346	Suct 88	Liq 369	Suct 95	Liq 391	Suct 103	Liq 414	Suct 110	Liq 436	Suct 118	Liq 459	Suct 125	Liq 482	Suct 133
	70	Liq 276	Suct 58	Liq 299	Suct 66	Liq 323	Suct 73	Liq 346	Suct 80	Liq 369	Suct 88	Liq 392	Suct 95	Liq 416	Suct 103	Liq 439	Suct 110	Liq 462	Suct 117	Liq 485	Suct 125	Liq 509	Suct 132
	75	Liq 296	Suct 58	Liq 320	Suct 65	Liq 345	Suct 73	Liq 369	Suct 80	Liq 393	Suct 87	Liq 417	Suct 95	Liq 441	Suct 102	Liq 465	Suct 110	Liq 489	Suct 117	Liq 513	Suct 125	Liq 537	Suct 132
1800	65	Liq 248	Suct 58	Liq 270	Suct 65	Liq 291	Suct 72	Liq 313	Suct 80	Liq 334	Suct 87	Liq 356	Suct 95	Liq 378	Suct 102	Liq 400	Suct 109	Liq 422	Suct 117	Liq 444	Suct 124	Liq 466	Suct 132
	70	Liq 267	Suct 58	Liq 289	Suct 65	Liq 312	Suct 73	Liq 334	Suct 80	Liq 357	Suct 88	Liq 379	Suct 95	Liq 402	Suct 102	Liq 424	Suct 110	Liq 446	Suct 117	Liq 469	Suct 125	Liq 491	Suct 132
	75	Liq 286	Suct 59	Liq 310	Suct 66	Liq 333	Suct 73	Liq 357	Suct 81	Liq 380	Suct 88	Liq 403	Suct 96	Liq 426	Suct 103	Liq 450	Suct 110	Liq 473	Suct 118	Liq 496	Suct 125	Liq 519	Suct 132
2030	65	Liq 242	Suct 58	Liq 263	Suct 65	Liq 284	Suct 72	Liq 305	Suct 80	Liq 326	Suct 87	Liq 347	Suct 95	Liq 368	Suct 102	Liq 390	Suct 109	Liq 411	Suct 117	Liq 433	Suct 124	Liq 454	Suct 131
	70	Liq 260	Suct 58	Liq 282	Suct 65	Liq 304	Suct 73	Liq 326	Suct 80	Liq 348	Suct 88	Liq 370	Suct 95	Liq 392	Suct 102	Liq 413	Suct 110	Liq 435	Suct 117	Liq 457	Suct 124	Liq 479	Suct 132
	75	Liq 279	Suct 58	Liq 302	Suct 66	Liq 325	Suct 73	Liq 348	Suct 81	Liq 370	Suct 88	Liq 393	Suct 95	Liq 416	Suct 103	Liq 438	Suct 110	Liq 461	Suct 118	Liq 483	Suct 125	Liq 506	Suct 132

Label p/n: 0140R00250-C

PERFORMANCE DATA

PERFORMANCE TEST

All data based upon listed indoor dry bulb temperature. .00 inches external static pressure on coil of outdoor section. Indoor air cubic feet per minute (CFM) as listed in the Performance Data Sheets:

If conditions vary from this, results will change as follows:

1. As indoor dry bulb temperatures increase, a slight increase will occur in indoor air temperature drop (Delta T). Low and high side pressures and power will not change.
2. As indoor CFM decreases, a slight increase will occur in indoor temperature drop (Delta T). A slight decrease will occur in low and high side pressures and power.

A properly operating unit should be within plus or minus **2 degrees** of the subcooling value shown in the Heat Pump Specifications.

A properly operating unit should be within plus or minus **3 degrees** of the typical (Delta T) value shown.

A properly operating unit should be within plus or minus **7 PSIG** of the **HI PR** shown.

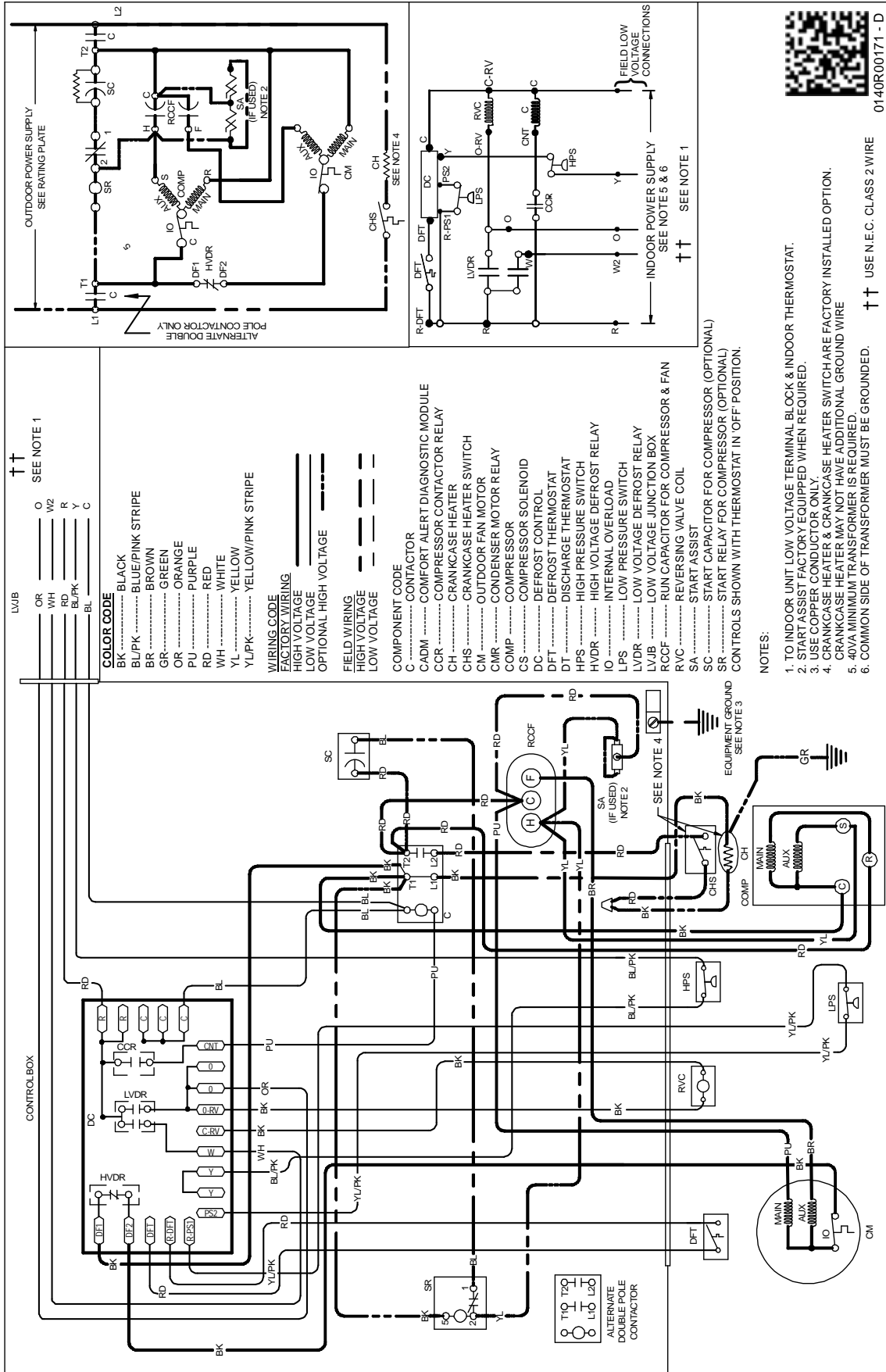
A properly operating unit should be within plus or minus **3 PSIG** of the **LO PR** shown.

A properly operating unit should be within plus or minus **3 Amps** of the typical value shown.

NOTE: Pressures are measured at the liquid and suction service valve ports.



WARNING
HIGH VOLTAGE!
 DISCONNECT ALL POWER BEFORE SERVICING OR INSTALLING THIS UNIT. MULTIPLE POWER SOURCES MAY BE PRESENT. FAILURE TO DO SO MAY CAUSE PROPERTY DAMAGE, PERSONAL INJURY OR DEATH.



↑↑ SEE NOTE 1

COLOR CODE
 BK BLACK
 BL/PK BLUE/PINK STRIPE
 BR BROWN
 GR GREEN
 OR ORANGE
 PU PURPLE
 RD RED
 WH WHITE
 YL YELLOW
 YL/PK YELLOW/PINK STRIPE

WIRING CODE
 FACTORY WIRING
 HIGH VOLTAGE
 LOW VOLTAGE
 OPTIONAL HIGH VOLTAGE

FIELD WIRING
 HIGH VOLTAGE
 LOW VOLTAGE

COMPONENT CODE
 C CONTACTOR
 CADM COMFORT/ALERT DIAGNOSTIC MODULE
 CCR COMPRESSOR CONTACTOR RELAY
 CH CRANKCASE HEATER
 CHS CRANKCASE HEATER SWITCH
 CM OUTDOOR FAN MOTOR
 CMR CONDENSER MOTOR RELAY
 COMP COMPRESSOR
 CS COMPRESSOR SOLENOID
 DC DEFROST CONTROL
 DFT DEFROST THERMOSTAT
 DT DISCHARGE THERMOSTAT
 HPS HIGH PRESSURE SWITCH
 HVDR HIGH VOLTAGE DEFROST RELAY
 IO INTERNAL OVERLOAD
 LPS LOW PRESSURE SWITCH
 LVDR LOW VOLTAGE DEFROST RELAY
 LVJB LOW VOLTAGE JUNCTION BOX
 RCFC RUN CAPACITOR FOR COMPRESSOR & FAN
 RVC REVERSING VALVE COIL
 SA START ASSIST
 SC START CAPACITOR FOR COMPRESSOR (OPTIONAL)
 SR START RELAY FOR COMPRESSOR (OPTIONAL)
 CONTROLS SHOWN WITH THERMOSTAT IN OFF POSITION.

NOTES:
 1. TO INDOOR UNIT LOW VOLTAGE TERMINAL BLOCK & INDOOR THERMOSTAT.
 2. START ASSIST FACTORY EQUIPPED WHEN REQUIRED.
 3. USE COPPER CONDUCTOR ONLY.
 4. CRANKCASE HEATER & CRANKCASE HEATER SWITCH ARE FACTORY INSTALLED OPTION.
 CRANKCASE HEATER MAY NOT HAVE ADDITIONAL GROUND WIRE
 5. 40VA MINIMUM TRANSFORMER IS REQUIRED.
 6. COMMON SIDE OF TRANSFORMER MUST BE GROUNDED.

↑↑ USE N.E.C. CLASS 2 WIRE



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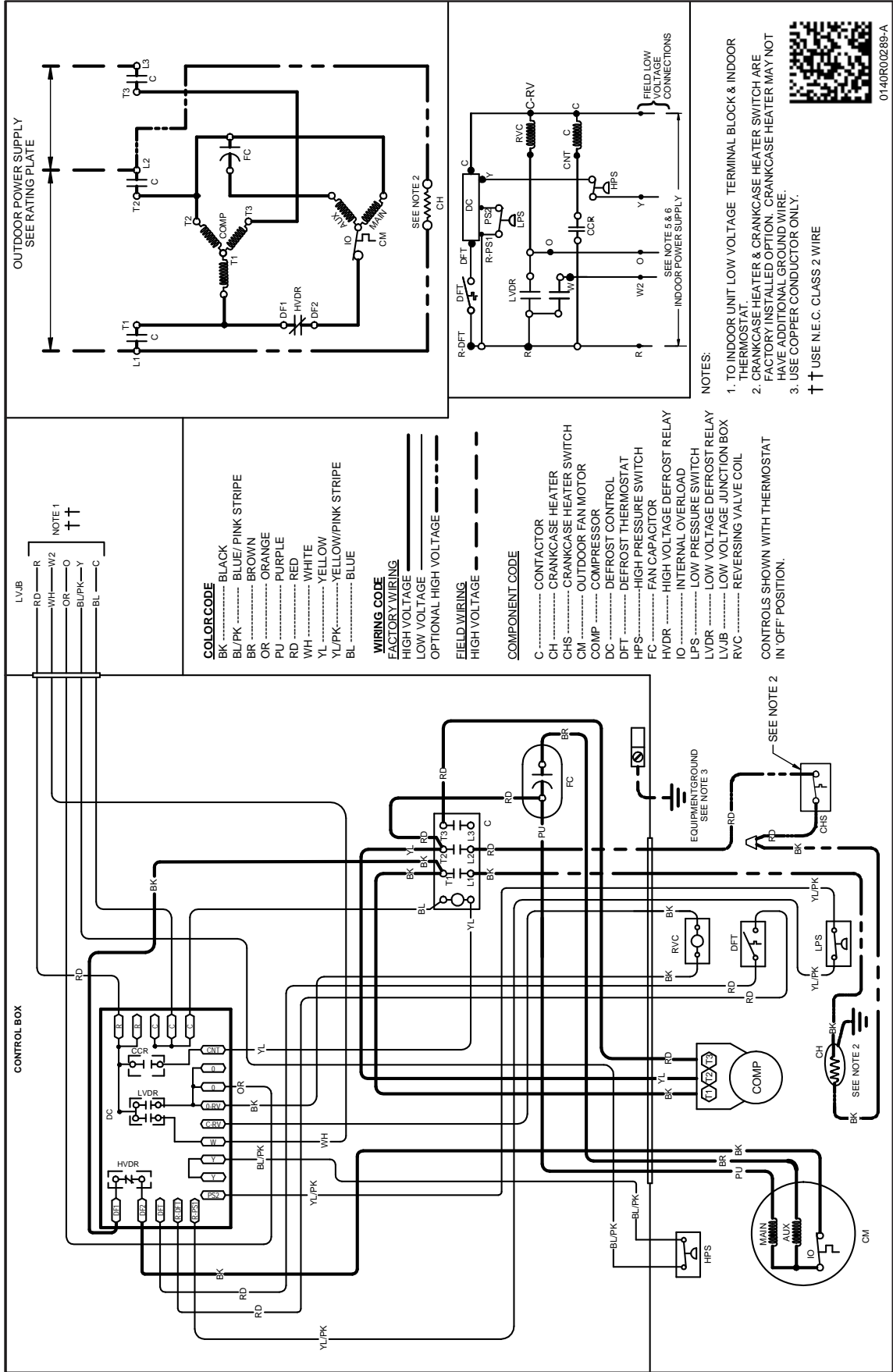
Wiring is subject to change, always refer to the wiring diagram on the unit for the most up-to-date wiring.

WIRING DIAGRAMS

GSZ130[36, 48, 60]5A*



WARNING
HIGH VOLTAGE!
 DISCONNECT ALL POWER BEFORE SERVICING OR INSTALLING THIS UNIT. MULTIPLE POWER SOURCES MAY BE PRESENT. FAILURE TO DO SO MAY CAUSE PROPERTY DAMAGE, PERSONAL INJURY OR DEATH.



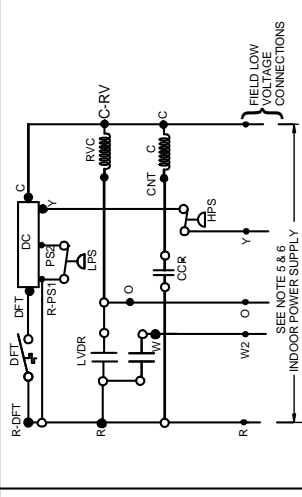
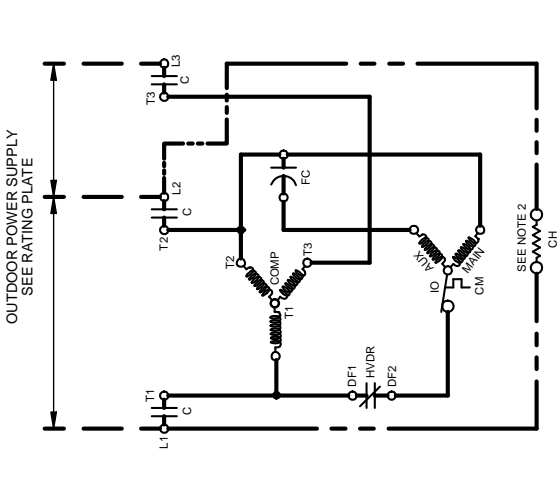
- LVJB**
 RD—R
 WH—W2
 OR—O
 BL/PK—Y
 BL—C
- NOTE 1
 † †

COLOR CODE
 BK BLACK
 BL/PK BLUE/PINK STRIPE
 BR BROWN
 OR ORANGE
 PU PURPLE
 RD RED
 WH WHITE
 YL YELLOW
 YL/PK YELLOW/PINK STRIPE
 BL BLUE

WIRING CODE
 FACTORY WIRING
 HIGH VOLTAGE
 LOW VOLTAGE
 OPTIONAL HIGH VOLTAGE
 FIELD WIRING
 HIGH VOLTAGE

COMPONENT CODE
 C CONTACTOR
 CH CRANKCASE HEATER
 CHS CRANKCASE HEATER SWITCH
 CM OUTDOOR FAN MOTOR
 COMP COMPRESSOR
 DC DEFROST CONTROL
 DFT DEFROST THERMOSTAT
 HPS HIGH PRESSURE SWITCH
 FC FAN CAPACITOR
 FPC HIGH VOLTAGE DEFROST RELAY
 IO INTERNAL OVERLOAD
 LPS LOW PRESSURE SWITCH
 LVDR LOW VOLTAGE DEFROST RELAY
 LVJB LOW VOLTAGE JUNCTION BOX
 RVC REVERSING VALVE COIL

CONTROLS SHOWN WITH THERMOSTAT IN 'OFF' POSITION.



NOTES:
 1. TO INDOOR UNIT LOW VOLTAGE TERMINAL BLOCK & INDOOR THERMOSTAT.
 2. CRANKCASE HEATER & CRANKCASE HEATER SWITCH ARE FACTORY INSTALLED OPTION. CRANKCASE HEATER MAY NOT HAVE ADDITIONAL GROUND WIRE.
 3. USE COPPER CONDUCTOR ONLY.
 † † USE N.E.C. CLASS 2 WIRE



01-40R00289-A

Wiring is subject to change, always refer to the wiring diagram on the unit for the most up-to-date wiring.