Heat Pump Dry Charged 13 SEER 3 Phase

Split System Heat Pump

NITROGEN CHARGED

Form No. 2SHP13LC-100 (06/2012)

2SHP13 **Features and Benefits**

COMPRESSOR

- Nitrogen charged for replacement of R22 components only
- High-efficiency scroll compressor
- Grommet-mounted compressor for quiet operation
- Internally protected against high temperature motor overload conditions

COMPONENTS

- Full metal louvered panels remove with just two screws per panel for easy coil cleaning
- Bi-directional filter drier for long-lasting durability and system protection
- Discharge muffler for quiet operation
- Reliable, solid-state, time-initiated, temperature-terminated defrost system
- Service valves positioned for quick installation and easy service
- Low pressure switch for loss of charge system protection
- Trade-available components
- Defrost control features built-in diagnostics for easier service
- Defrost control has short cycle protection to protect compressor
- Defrost control is Quiet Shift™ capable
- Defrost cycle is field selectable 30/60/90 minutes

COIL

- Enhanced aluminum fins and copper tubing for high efficiency and capacity
- Raised coil prevents debris from collecting in bottom of coil and causing loss of airflow



DESIGN

• Designed for ambients up to 125°F

CABINET

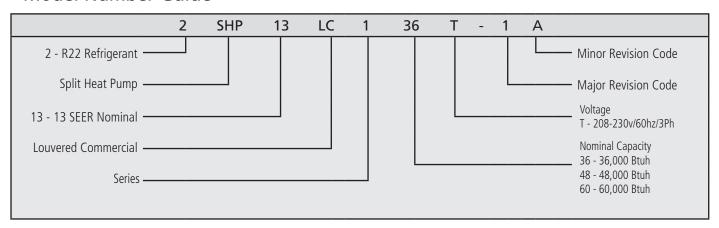
- Full metal louvered panel coil guard protection
- Controls located in corner post for easy installation and service
- Rounded corners for safety and attractive, clean appearance
- Baked polyester paint finish over galvanized steel for maximum durability
- External gauge ports for easy service
- Raised base pan with ports allows for excellent water and debris drainage

WARRANTIES

• 1 year parts; 5 year compressor



Model Number Guide



Electrical and Physical Data

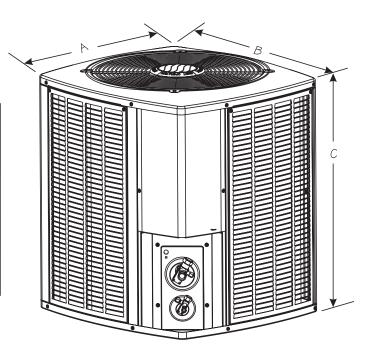
| | Voltage/ | | Min. | Max. | Comp | ressor | Outdo | door Fan Motor | | Field Supplied | Shipping | |
|--------------|--------------|------------------|-------------------|----------------|-------------------------|---------------------------|------------------------|----------------|-------------|------------------------|-----------------|--|
| Model | Hz/ Phase | Voltage Range | Circuit (Amps) | Fuse (Amps) | Rated Load (Amps) | Locked Rotor (Amps) | Full Load (Amps) | Rated HP | Nom. RPM | R22 Charge (oz.) | Weight (lbs) | |
| 2SHP13LC136T | 208-230/3/60 | 197-253 | 14.5 | 25 | 10.8 | 73 | 1.1 | 1/5 | 1075 | 138 | 192 | |
| 2SHP13LC148T | 208-230/3/60 | 197-253 | 20.8 | 35 | 15.4 | 114 | 1.7 | 1/4 | 825 | 188 | 248 | |
| 2SHP13LC160T | 208-230/3/60 | 197-253 | 21.0 | 35 | 15.4 | 114 | 1.8 | 1/4 | 825 | 224 | | |

Note:

Units are factory shipped with dry nitrogen holding charge

Unit Dimensions & Sound Ratings

| | | Sound | | | | |
|--------------|--------------------|--------------------|---------------------|------------------|--|--|
| Model | A - width (in.) | B - depth (in.) | C - height (in.) | Ratings (dBa) | | |
| 2SHP13LC136T | 24-3/4 | 26-3/4 | 33-3/4 | 76 | | |
| 2SHP13LC148T | 29-3/8 | 31-1/4 | 37-3/4 | 78 | | |
| 2SHP13LC160T | 35-3/4 | 37-3/4 | 37-3/4 | 80 | | |



Cooling Performance with Air Handlers and Furnaces

| | Indoor Model | Cooling | | | | Heating | | | | | Refrigerant Connection | | | Refrig. Line Size | | Indoor Coil Orifice | | | |
|------------------|--|---------|-----|--|------------------------------|---------|-------|-----|-------|-----|---------------------------|---------|--------|-------------------------|--------|------------------------|--------|--------------------------------|-----------------------|
| Outdoor Model | Evaporator | | | ARI | Rated | | 47 | | 17 | | CFM | Outdoor | | Indoor | | uo | pi | Required | Optional |
| | Coil or Air Handler ² | SEER | EER | Rated Capacity ¹ Btuh | Sensible Capacity Btuh | HSPF | Btuh | СОР | Btuh | СОР | | Suction | Liquid | Suction | Liquid | Suction | Liquid | Indoor Orifice ² | Field Inst. TXV |
| 2SHP13LC136T | BCS2M36C00NA-1P | 13 | 11 | 35200 | 26400 | 7.7 | 33800 | 3.5 | 21000 | 2.4 | 1200 | 7/8 | 3/8 | 7/8 | 3/8 | 7/8 | 3/8 | 0.074 | H2TXV02 |
| 2SHP13LC148T | BCS2M48C00NA-1P | 13 | 11 | 48000 | 35500 | 7.7 | 47500 | 3.4 | 30600 | 2.4 | 1600 | 7/8 | 3/8 | 7/8 | 3/8 | 7/8 | 3/8 | 0.088 | H2TXV02 |
| 2SHP13LC160T | BCS2M60C00NA-1P | 13 | 11 | 55000 | 41300 | 7.7 | 55000 | 3.6 | 35000 | 2.5 | 1800 | 7/8 | 3/8 | 7/8 | 3/8 | 1-1/8 | 3/8 | 0.09 | H2TXV03 |

Note: EPA rules prohibit system installations (condensing unit coupled with an air handler or evaporator coil).

Accessories

| Accessories | | | | | | | | | | |
|----------------------|--------------------------------|--------------|--|--|--|--|--|--|--|--|
| Catalog / Kit Number | Description | Used with | | | | | | | | |
| 58M81 | BLOWER OFF DELAY KIT | ALL 2SHP'S | | | | | | | | |
| 45F08 | COMPRESSOR LOW AMBIENT CUT-OFF | ALL 2SHP'S | | | | | | | | |
| 94J46 | HIGH PRESSURE SWITCH KIT | ALL 2SHP'S | | | | | | | | |
| 47J27 | COMPRESSOR TIME-OFF CONTROL | ALL 2SHP'S | | | | | | | | |
| 93M05 | CRANK CASE HEATER | ALL 2SHP'S | | | | | | | | |
| 33M07 | MILD AMBIENT KIT | ALL 2SHP'S | | | | | | | | |
| 27J00 | LOW AMBIENT KIT | ALL 2SHP'S | | | | | | | | |
| 84M23 | LOSS OF CHARGE KIT | ALL 2SHP'S | | | | | | | | |
| 93G35 | FREEZESTATS (3/8" TUBING) | ALL 2SHP'S | | | | | | | | |
| 50A93 | FREEZESTATS (5/8" TUBING) | ALL 2SHP'S | | | | | | | | |
| H2TX02 | TXV KIT | 2SHP 36 & 48 | | | | | | | | |
| H2TX03 | TXV KIT | 2SHP 60 | | | | | | | | |

Certified in accordance with Unitary Air Conditioner Certification Program, which is based on AHRI Standard 210/240
Required to achieve AHRI rating. If NA (Not Applicable) is in the piston column, then TXV is required
A blower time delay is required to achieve AHRI rating. This feature is standard on all Allied Air Enterprises furnaces and Air Handler products



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