Product Data

Split System Heat Pump

4TWR6018H1000A
4TWR6024H1000A
4TWR6030H1000A
4TWR6036H1000A
4TWR6042H1000A
4TWR6048H1000A
4TWR6060H1000A

Note: “Graphics in this document are for representation only. Actual model may differ in appearance.”

June 2019

22-1865-1E-EN
# Product Specifications

<table>
<thead>
<tr>
<th>Model No. (a)</th>
<th>4TWR6018H1000A</th>
<th>4TWR6024H1000A</th>
<th>4TWR6030H1000A</th>
<th>4TWR6036H1000A</th>
</tr>
</thead>
<tbody>
<tr>
<td>POWER CONNS. — V/PH/Hz (b)</td>
<td>208/230/1/60</td>
<td>208/230/1/60</td>
<td>208/230/1/60</td>
<td>208/230/1/60</td>
</tr>
<tr>
<td>MIN. BRCH. CIR. AMPACITY</td>
<td>12</td>
<td>14</td>
<td>17</td>
<td>18</td>
</tr>
<tr>
<td>BR. CIR. PROT. RTG. — MAX. (AMPS)</td>
<td>20</td>
<td>25</td>
<td>25</td>
<td>30</td>
</tr>
<tr>
<td>COMPRESSOR</td>
<td>CLIMATUFF®- SCROLL</td>
<td>CLIMATUFF®- SCROLL</td>
<td>CLIMATUFF®- SCROLL</td>
<td>CLIMATUFF®- SCROLL</td>
</tr>
<tr>
<td>RL AMPS — LR AMPS</td>
<td>9 — 56</td>
<td>10.9 — 62.9</td>
<td>12.8 — 67.8</td>
<td>14.1 — 72.2</td>
</tr>
<tr>
<td>Outdoor Fan FL AMPS</td>
<td>0.64</td>
<td>0.64</td>
<td>0.71</td>
<td>0.64</td>
</tr>
<tr>
<td>Fan HP</td>
<td>1/8</td>
<td>1/8</td>
<td>1/8</td>
<td>1/8</td>
</tr>
<tr>
<td>Fan Dia (inches)</td>
<td>23</td>
<td>23</td>
<td>27.5</td>
<td>27.5</td>
</tr>
<tr>
<td>Coil</td>
<td>SPINE FIN™</td>
<td>SPINE FIN™</td>
<td>SPINE FIN™</td>
<td>SPINE FIN™</td>
</tr>
<tr>
<td>Refrigerant R-410A</td>
<td>6 LBS., 9 OZ</td>
<td>7 LBS., 5 OZ</td>
<td>7 LBS., 2 OZ</td>
<td>8 LBS., 5 OZ</td>
</tr>
<tr>
<td>LINE SIZE — IN. O.D. GAS (c)(d)</td>
<td>3/4</td>
<td>3/4</td>
<td>3/4</td>
<td>3/4</td>
</tr>
<tr>
<td>Charge Spec. Subcooling</td>
<td>8°F</td>
<td>10°F (see charging info)</td>
<td>10°F</td>
<td>10°F</td>
</tr>
<tr>
<td>Dimensions H x W X D Crated (IN.)</td>
<td>38 x 30.1 x 33</td>
<td>38 x 30.1 x 33</td>
<td>42 x 35.1 x 38.7</td>
<td>42 x 35.1 x 38.7</td>
</tr>
<tr>
<td>Weight — Shipping (lbs.)</td>
<td>208</td>
<td>208</td>
<td>245</td>
<td>246</td>
</tr>
<tr>
<td>Weight — Net (lbs.)</td>
<td>174</td>
<td>174</td>
<td>198</td>
<td>199</td>
</tr>
</tbody>
</table>

**Optional Accessories:**

- Anti-short Cycle Timer: TAYASCT501A
- Evaporator Defrost Control: NA
- Rubber Isolator Kit: BAYISLTL01
- Extreme Condition Mount Kit: BAYECMT023
- Start Kit: BAYSKT263
- Crankcase Heater Kit: BAYCCHT302
- Seacoast Kit: BAYSEAC001
- Low Ambient Kit: BAYLOAM107
- Refrigerant Lineset (e): TAYREFLN7*
- Service Valve Panel Cover: TAYSVPLS343AA

(a) Certified in accordance with the Unitary Air-conditioner equipment certification program which is based on AHRI standard 210/240.
(b) Calculated in accordance with N.E.C. Only use HACR circuit breakers or fuses.
(c) Reference the outdoor unit ship-with literature for refrigerant piping length and lift guidelines. Reference the refrigerant piping software pub # 32-3312-xx or refrigerant piping application guide SS-APG006-xx for long line sets or specialty applications (xx denotes latest revision).
(d) Trane outdoor condensing units are factory charged with the system charge required for the outdoor condensing unit and 15 feet of tested connecting lines. If connecting line length exceeds 15 feet, then final refrigerant charge adjustment is necessary. Each additional foot over 15 feet requires 0.6 ozs of refrigerant. See the Installer’s Guide for full charging instructions.
(e) * = 15, 20, 25, 30, 40 and 50 foot lineset available.
<table>
<thead>
<tr>
<th>Model No. (a)</th>
<th>4TWR6042H1000A</th>
<th>4TWR6048H1000A</th>
<th>4TWR6060H1000A</th>
</tr>
</thead>
<tbody>
<tr>
<td>POWER CONNS. — V/PH/HZ (b)</td>
<td>280/230/1/60</td>
<td>280/230/1/60</td>
<td>280/230/1/60</td>
</tr>
<tr>
<td>MIN. BRCH. CIR. AMPACITY</td>
<td>22</td>
<td>26</td>
<td>31</td>
</tr>
<tr>
<td>BR. CIR. PROT. RTG. — MAX. (AMPS)</td>
<td>35</td>
<td>40</td>
<td>50</td>
</tr>
<tr>
<td>COMRESSOR</td>
<td>CLIMATUFF®- SCROLL</td>
<td>CLIMATUFF®- SCROLL</td>
<td>CLIMATUFF®- SCROLL</td>
</tr>
<tr>
<td>RL AMPS — LR AMPS</td>
<td>16.7 — 109</td>
<td>18.5 — 124</td>
<td>23.7 — 152.5</td>
</tr>
<tr>
<td>Outdoor Fan FL AMPS</td>
<td>2.80</td>
<td>2.80</td>
<td>2.80</td>
</tr>
<tr>
<td>Fan HP</td>
<td>1/3</td>
<td>1/3</td>
<td>1/3</td>
</tr>
<tr>
<td>Fan Dia (inches)</td>
<td>26.6</td>
<td>26.7</td>
<td>26.7</td>
</tr>
<tr>
<td>Coil</td>
<td>SPINE FIN™</td>
<td>SPINE FIN™</td>
<td>SPINE FIN™</td>
</tr>
<tr>
<td>Refrigerant R-410A</td>
<td>10 LBS., 5 OZ</td>
<td>10 LBS., 9 OZ</td>
<td>11 LBS., 12 OZ</td>
</tr>
<tr>
<td>LINE SIZE — IN. O.D. GAS (c) (d)</td>
<td>7/8</td>
<td>7/8</td>
<td>7/8</td>
</tr>
<tr>
<td>LINE SIZE — IN. O.D. LIQ.</td>
<td>3/8</td>
<td>3/8</td>
<td>3/8</td>
</tr>
<tr>
<td>Charge Spec. Subcooling</td>
<td>12°F</td>
<td>8°F</td>
<td>8°F</td>
</tr>
<tr>
<td>Dimensions H x W X D Crated (IN.)</td>
<td>51 x 35.1 x 38.7</td>
<td>51 x 35.1 x 38.7</td>
<td>51 x 35.1 x 38.7</td>
</tr>
<tr>
<td>Weight — Shipping (lbs.)</td>
<td>277</td>
<td>300</td>
<td>301</td>
</tr>
<tr>
<td>Weight — Net (lbs.)</td>
<td>227</td>
<td>250</td>
<td>251</td>
</tr>
</tbody>
</table>

**Optional Accessories:**

| Anti-short Cycle Timer | TAYASCT501A | TAYASCT501A | TAYASCT501A |
| Rubber Isolator Kit | BAYISLT101 | BAYISLT101 | BAYISLT101 |
| Extreme Condition Mount Kit | BAYECMT004 | BAYECMT004 | BAYECMT004 |
| Start Kit | BAYSKT263 | BAYSKT263 | BAYSKT263 |
| Crankcase Heater Kit | BAYCCHT301 | BAYCCHT301 | BAYCCHT301 |
| Seacoast Kit | BAYSEAC001 | BAYSEAC001 | BAYSEAC001 |
| Low Ambient Kit | BAYLOAM103 | BAYLOAM103 | BAYLOAM103 |
| Refrigerant Lineset (e) | * = TAYREFLN3* | * = TAYREFLN3* | * = TAYREFLN3* |
| Service Valve Panel Cover | TAYSVPLAN0046AA | TAYSVPLAN0046AA | TAYSVPLAN0046AA |

(a) Certified in accordance with the Unitary Air-conditioner equipment certification program which is based on AHRI standard 210/240.
(b) Calculated in accordance with N.E.C. Only use HACR circuit breakers or fuses.
(c) Reference the outdoor unit ship-with literature for refrigerant piping length and lift guidelines. Reference the refrigerant piping software pub # 32-3312-xx or refrigerant piping application guide SS-APG006-xx for long line sets or specialty applications (xx denotes latest revision).
(d) Trane outdoor condensing units are factory charged with the system charge required for the outdoor condensing unit and 15 feet of tested connecting lines. If connecting line length exceeds 15 feet, then final refrigerant charge adjustment is necessary. Each additional foot over 15 feet requires 0.6 ozs of refrigerant. See the Installer’s Guide for full charging instructions.
(e) * = 15, 20, 25, 30, 40 and 50 foot lineset available.
### Sound Power Level

<table>
<thead>
<tr>
<th>MODEL</th>
<th>A-Weighted Sound Power Level [dB(A)]</th>
<th>Full Octave Sound Power (dB)</th>
<th>63 Hz*</th>
<th>125 Hz</th>
<th>250 Hz</th>
<th>500 Hz</th>
<th>1000 Hz</th>
<th>2000 Hz</th>
<th>4000 Hz</th>
<th>8000 Hz</th>
</tr>
</thead>
<tbody>
<tr>
<td>4TWR6018H1</td>
<td>74</td>
<td></td>
<td>72</td>
<td>69</td>
<td>63</td>
<td>70</td>
<td>70</td>
<td>67</td>
<td>56</td>
<td>49</td>
</tr>
<tr>
<td>4TWR6024H1</td>
<td>71</td>
<td></td>
<td>77</td>
<td>72</td>
<td>68</td>
<td>68</td>
<td>69</td>
<td>60</td>
<td>53</td>
<td>47</td>
</tr>
<tr>
<td>4TWR6030H1</td>
<td>70</td>
<td></td>
<td>75</td>
<td>69</td>
<td>68</td>
<td>68</td>
<td>66</td>
<td>62</td>
<td>57</td>
<td>51</td>
</tr>
<tr>
<td>4TWR6036H1</td>
<td>70</td>
<td></td>
<td>75</td>
<td>69</td>
<td>68</td>
<td>68</td>
<td>66</td>
<td>62</td>
<td>57</td>
<td>51</td>
</tr>
<tr>
<td>4TWR6042H1</td>
<td>72</td>
<td></td>
<td>77</td>
<td>75</td>
<td>72</td>
<td>70</td>
<td>67</td>
<td>62</td>
<td>59</td>
<td>52</td>
</tr>
<tr>
<td>4TWR6048H1</td>
<td>72</td>
<td></td>
<td>77</td>
<td>75</td>
<td>72</td>
<td>70</td>
<td>67</td>
<td>62</td>
<td>59</td>
<td>52</td>
</tr>
<tr>
<td>4TWR6060H1</td>
<td>72</td>
<td></td>
<td>77</td>
<td>75</td>
<td>72</td>
<td>70</td>
<td>67</td>
<td>62</td>
<td>59</td>
<td>52</td>
</tr>
</tbody>
</table>

Note: Rated in accordance with AHRI Standard 270–2008 *For Reference Only
Accessory Description and Usage

Anti-Short Cycle Timer — Solid state timing device that prevents compressor recycling until five (5) minutes have elapsed after satisfying call or power interruptions. Use in area with questionable power delivery, commercial applications, long lineset, etc.

Evaporation Defrost Control — SPST Temperature actuated switch that cycles the condenser off as indoor coil reaches freeze-up conditions. Used for low ambient cooling to 30°F with TXV.

Rubber Isolators — Five (5) large rubber donuts to isolate condensing unit from transmitting energy into mounting frame or pad. Use on any application where sound transmission needs to be minimized.

Hard Start Kit — Start capacitor and relay to assist compressor motor startup. Use in areas with marginal power supply, on long linesets, low ambient conditions, etc.

Extreme Condition Mount Kit — Bracket kits to securely mount condensing unit to a frame or pad without removing any panels. Use in areas with high winds, or on commercial roof tops, etc.

AHRI Standard Capacity Rating Conditions

AHRI Standard 210/240 Rating Conditions
1. Cooling 80°F DB, 67°F WB air entering indoor coil, 95°F DB air entering outdoor coil.
2. High Temperature Heating 47°F DB, 43°F WB air entering outdoor coil, 70°F DB air entering indoor coil.
3. Low Temperature Heating 17°F DB air entering indoor coil.
4. Rated indoor airflow for heating is the same as for cooling.

AHRI Standard 270 Rating Conditions — (Noise rating numbers are determined with the unit in cooling operations.) Standard Noise Rating number is at 95°F outdoor air.

Model Nomenclature

Outdoor Units

Refrigerant Type
2 = R-22
4 = R-410A

TRANE

Product Type
W = Split Heat Pump
T = Split Cooling

Product Family
V = Variable Speed
Z = Leadership – Two Stage
X = Leadership
R = Replacement/Retail

Family SEER
3 = 13 6 = 16 0 = 20
4 = 14 8 = 18
5 = 15 9 = 19

Split System Connections 1-6 Tons
0 = Brazed

Nominal Capacity in 000s of BTUs

Major Design Modifications

Power Supply
1 = 208-230/1/60 or 208-230/1/60
3 = 200-230/3/60
4 = 460/3/60

Secondary Function

Minor Design Modifications

Unit Parts Identifier
Figure 1. 1.5, 2.5 and 3.0 Ton Models
Figure 2. 2.0, 3.5, 4.0 and 5.0 Ton Models

TO POWER SUPPLY PER UNIT NAMEPLATE AND LOCAL CODES

LEGEND

ACR  A/C RECEIVER
CB  CIRCUIT BREAKER
CBH  CIRCUIT BREAKER
CH  CHLORIDE
CLR  CONNECTOR
CPR  COMPRESSOR
CR  CAPACITOR
CSS  STARTING CAPACITOR
CRB  CONTACTOR RELAY
CRL  STARTER LOCKOUT
CRS  STARTER RELAY
CRS  STARTER RELAY
CPS  CONTACTOR RELAY
CM  COMPRESSOR MOUNTING
CP  COMPRESSOR
E  ELECTRONIC EXPANSION
EF  ELECTRONIC EXPANSION
ER  EXPANDER RELAY
F  EXPANSION RELAY
HTML  FAN PRESSURE SWITCH
L  LIMIT SWITCH
LCP  LIQUID CIRCUIT PRESSURE SWITCH
LRP  LIQUID RESERVOIR PRESSURE SWITCH
LP  LOAD PRESSURE SWITCH
PS  PROPORTIONAL SWITCH
PPT  PRESSURE TRANSDUCER
PT  PRESSURE TRANSDUCER
R  RELAY
RF  RECORDING FAN RELAY
RS  RECORDING RELAY
S  SENSOR
SS  STARTING STATER
T  THERMOMETER
RC  REVERSE CYCLE
RCB  REVERSE CYCLE RELAY
SRS  SERVICE READY SIGNAL
ST  SHORTTIME
SW  SWITCH
SX  SPEED CONTROL
TSC  THERMOSTAT
CC  CONTACTOR
W  WIRING
X  XACTRA
Y  YIELD
Z  ZONE

WARNING

HAZARDOUS VOLTAGE

NON-PURPOSE OR INADEQUATE INSTALLATION OR MISUSE MAY CAUSE DEATH OR INJURY.

A CAUTION

THE COMPONENTS MENTIONED IN THE DIAGRAM MAY BE PART OF THE EQUIPMENT INSTALLATION BUT NOT ALL THE COMPONENTS MENTIONED IN THE DIAGRAM ARE INCLUDED IN THIS EQUIPMENT.

drw. D158596P03 Rev A
Outline Drawing

<table>
<thead>
<tr>
<th>Model</th>
<th>Base</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
<th>H</th>
<th>J</th>
<th>K</th>
</tr>
</thead>
<tbody>
<tr>
<td>4TWR6018H</td>
<td>3</td>
<td>832</td>
<td>829</td>
<td>756</td>
<td>3/4</td>
<td>3/8</td>
<td>127</td>
<td>76</td>
<td>197</td>
<td>60</td>
<td>508</td>
</tr>
<tr>
<td>4TWR6024H</td>
<td>3</td>
<td>832</td>
<td>829</td>
<td>756</td>
<td>3/4</td>
<td>3/8</td>
<td>127</td>
<td>76</td>
<td>197</td>
<td>60</td>
<td>508</td>
</tr>
<tr>
<td>4TWR6030H</td>
<td>4</td>
<td>943</td>
<td>946</td>
<td>870</td>
<td>3/4</td>
<td>3/8</td>
<td>143</td>
<td>98</td>
<td>219</td>
<td>86</td>
<td>508</td>
</tr>
<tr>
<td>4TWR6036H</td>
<td>4</td>
<td>943</td>
<td>946</td>
<td>870</td>
<td>3/4</td>
<td>3/8</td>
<td>143</td>
<td>98</td>
<td>219</td>
<td>86</td>
<td>508</td>
</tr>
<tr>
<td>4TWR6042H</td>
<td>4</td>
<td>1147</td>
<td>946</td>
<td>870</td>
<td>3/4</td>
<td>3/8</td>
<td>152</td>
<td>98</td>
<td>219</td>
<td>86</td>
<td>813</td>
</tr>
<tr>
<td>4TWR6048H</td>
<td>4</td>
<td>1147</td>
<td>946</td>
<td>870</td>
<td>3/4</td>
<td>3/8</td>
<td>152</td>
<td>98</td>
<td>219</td>
<td>86</td>
<td>813</td>
</tr>
<tr>
<td>4TWR6060H</td>
<td>4</td>
<td>1147</td>
<td>946</td>
<td>870</td>
<td>3/4</td>
<td>3/8</td>
<td>152</td>
<td>98</td>
<td>219</td>
<td>86</td>
<td>813</td>
</tr>
</tbody>
</table>
Mechanical Specification Options

General
The Outdoor Units are fully charged from the factory for up to 15 feet of piping. This unit is designed to operate at outdoor ambient temperatures as high as 115°F. Cooling capacities are matched with a wide selection of air handlers and furnace coils that are AHRI certified. The unit is certified to UL 1995. Exterior is designed for outdoor application.

Casing
Unit casing is constructed of heavy gauge, galvanized steel and painted with a weather-resistant powder paint finish. The corner panels are prepainted. All panels are subjected to our 1,000 hour salt spray test.

Refrigerant Controls
Refrigeration system controls include condenser fan, compressor contactor and low and high pressure switches. A factory supplied, field installed liquid line drier is standard.

Compressor
The compressor features internal over temperature and pressure protection. Other features include: Centrifugal oil pump and low vibration and noise.

Condenser Coil
The outdoor coil provides low airflow resistance and efficient heat transfer. The coil is protected on all four sides by louvered panels.

Low Ambient Cooling
As manufactured, this system has a cooling capacity to 55°F. The addition of an evaporator defrost control permits operation to 40°F. The addition of an evaporator defrost control with TXV permits low ambient cooling to 30°F.

The addition of the BAYLOAM107A low ambient kit permits ambient cooling to 20°F.

Thermostats—Cooling only and heat/cooling (manual and automatic change over). Sub-base to match thermostat and locking thermostat cover.
Ingersoll Rand (NYSE: IR) advances the quality of life by creating comfortable, sustainable and efficient environments. Our people and our family of brands — including Club Car®, Ingersoll Rand®, Thermo King® and Trane® — work together to enhance the quality and comfort of air in homes and buildings; transport and protect food and perishables; and increase industrial productivity and efficiency. We are a global business committed to a world of sustainable progress and enduring results.

Ingersoll Rand has a policy of continuous product and product data improvements and reserves the right to change design and specifications without notice. We are committed to using environmentally conscious print practices.

ingersollrand.com