



**AXIS**  
PORTABLE AIR

# AIR CONDITIONING

## TRANE 3.5 TON AC/HEAT

All units are factory assembled, piped, internally wired and fully charged with R-410A. Units are certified to UL Standard 1995. All units are factory run-tested to check cooling and heating operation, defrost operation, fan and blower rotation and control sequence. Units shall be designed to operate at ambient temperatures as high as 115°F. Cooling and heating performances are rated in accordance with AHRI standards. Units are designed for either rooftop or ground level installation. All units shall be dedicated horizontal airflow and are not convertible.



## Mechanical Specifications

### Unit Casing

All components are mounted in a weather-resistant steel cabinet with a baked-on enamel finish. Access panels are provided for unit controls, indoor coil and supply air fan. Top covers shall be removable for access or installation of electric heaters and outdoor fan and compressor. Indoor air section is completely insulated with fireproof, permanent, odorless glass fiber material. Knockouts are provided for utility and control connections. Drain connections are provided to accommodate indoor coil water runoff.

### Compressor

Hermetically sealed, high efficiency compressor designed for heat pump duty. Internal over current and over temperature protection, low pressure protection.

### Refrigerant Circuit

All units have thermostatic expansion valve refrigerant control for heating and cooling operation. Service pressure tap ports, check valves, solenoid-operated reversing valve, and refrigerant line filter driers are standard.

### Indoor and Outdoor Coil

Indoor and outdoor coils are constructed of aluminum plate fins mechanically bonded to 0.375 inch seamless copper tubing.



4WHC4042A-SUB-1C-EN

### Outdoor Fan

One, direct-drive, statically and dynamically balanced propeller fan is used in a top discharge configuration. Permanently lubricated weatherproof motors have built-in thermal overload protection.

### Indoor Fan

Forward-curved, centrifugal-type fan with multispeed, Direct-drive Constant Torque Motor on 2 – 3 ton models and a Direct-drive Variable Speed Motor on 3 1/2 ton models. Permanently lubricated with built-in overload protection.

### Demand Defrost Control

Microcomputer logic is used to sense the need for defrost and permits defrost cycles only when coil icing conditions begin to cause serious heat pump capacity reductions.

### Accessories

Supplemental Electric Heater-Heater module shall mount in unit discharge air passage. Each heater assembly includes automatically resetting heat limit switches for thermal protection. A polarized plug provides connection to unit low voltage control wiring.

### Indoor Thermostat

Two-stage heating, one-stage cooling thermostat is available in either manual or automatic changeover. Thermostat provides automatic or continuous fan operation and includes outdoor thermistor, emergency heat switch with indicator light, and auxiliary heat indicator light.

### Low Ambient Control Kit

Provides low ambient cooling operation to 0°F



## TRANE 3.5 TON AC/HEAT

SPECIFICATIONS	
<b>MODEL</b>	4WHC4042A1000B
RATED VOLTS/PH/HZ	208-230/1/60
<b>PERFORMANCE COOLING BTUH (A)</b>	39500
INDOOR AIRFLOW (CFM)	1200
POWER INPUT (KW)	3.27
EER/SEER (BTU/WATT-HR.) (B)	12.0 / 14.0
SOUND POWER RATING [DB(A)] (C)	75
<b>PERFORMANCE (HEATING)</b>	
(HIGH TEMP.) BTUH — C.O.P.	35000 — 4.37
POWER INPUT (KW)	2.94
(LOW TEMP.) BTUH — C.O.P.	21200 — 2.26
POWER INPUT (KW)	2.75
HSPF (BTU / WATT-HR.)	8
<b>POWER CONN. V/PH/HZ</b>	208-230/1/60
MIN. BRCH. CIR. AMPACITY (D)	30.5
FUSE SIZE — MAX. (AMPS)	45
FUSE SIZE — RECMD. (AMPS)	45
<b>COMPRESSOR</b>	SCROLL
NO. USED — NO. SPEEDS	1-1
VOLTS/PH/HZ	208-230/1/60
R.L. AMPS — L.R. AMPS	16.7 / 109
<b>OUTDOOR COIL — TYPE</b>	PLATE FIN
ROWS/F.P.I	2 / 22
FACE AREA (SQ. FT.)	12.3
TUBE SIZE (IN.)	3/8
REFRIGERANT CONTROL	TXV-NB
<b>INDOOR COIL — TYPE</b>	PLATE FIN
ROWS/F.P.I	5 / 15
FACE AREA (SQ. FT.)	3.44
TUBE SIZE (IN.)	3/8
REFRIGERANT CONTROL	TXV-NB
DRAIN CONN. SIZE (IN.)	3/4 FEMALE PVC
DUCT CONNECTIONS	SEE OUTLINE DRAWING

<b>OUTDOOR FAN — TYPE</b>	PROPELLER
NO. USED/DIA. (IN)	1 / 20
TYPE DRIVE/NO. SPEEDS	ECM / 1
CFM @ 0.0 IN. W.G. (E)	2600
NO. MOTORS — HP/RPM	1 / 1/3 / 850
VOLTS/PH/HZ	208-230/1/60
F.L. AMPS	2.8
<b>INDOOR FAN — TYPE</b>	CENTRIFUGAL
DIA. X WIDTH (IN.)	10 X 10
NO. USED	1
DRIVE / TYPE / SPEEDS (NO.)	DIRECT / VSPD / 3
CFM @ 0.0 IN. W.G. (F)	SEE FAN PERF TABLE
MOTOR — HP/R.P.M.	1/ 0.75 / VARIABLE
VOLTS/PH/HZ	208-230/1/60
F.L. AMPS	6.8
<b>FILTER / FURNISHED</b>	NO
TYPE RECOMMENDED	THROWAWAY
RECMD. FACE AREA (SQ. FT) (G)	4.67
<b>REFRIGERANT</b>	R-410
CHARGE (LBS.)	8.7
SUBCOOLING	10° F
<b>DIMENSIONS</b>	H X D X W
CRATED (IN.)	36 X 33-13/16 X 48
<b>WEIGHT</b>	
SHIPPING (LBS.) / NET (LBS.)	353 / 306

(a) Rated in accordance with AHRI Standard 210/240.

(b) Rated in accordance with D.O.E. test procedure.

(c) Sound Power values are not adjusted for AHRI 270-95 tonal corrections.

(d) Calculated in accordance with currently prevailing Nat'l Electrical Code.

(e) Standard Air — Dry Coil — Outdoor.

(f) Standard Air — Dry Coil — Indoor

(g) Filters must be installed in return air stream. Square footages listed are based on 300 f.p.m. face velocity. If permanent filters are used size per manufacturer's recommendation with a clean resistance of 0.05" W.C.



# INDOOR FAN PERFORMANCE

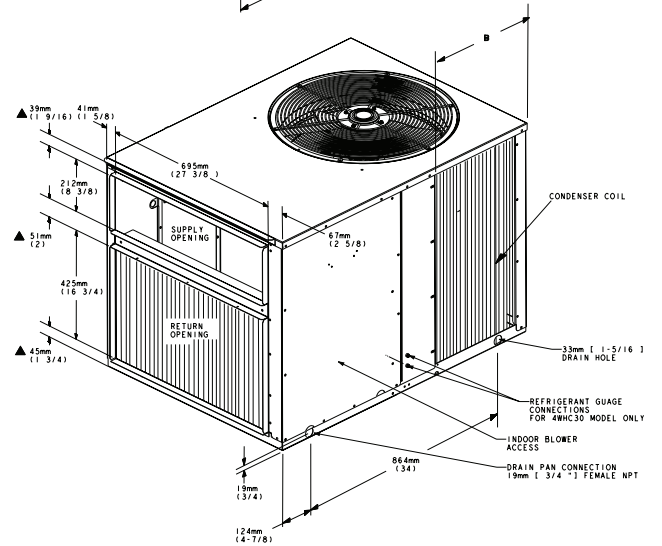
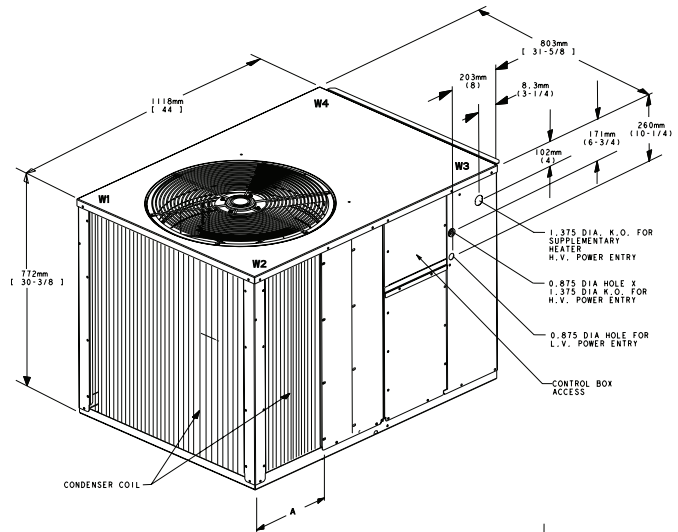
4WHC4042A1					EXTERNAL STATIC PRESSURE (IN. WG)											
AIRFLOW	DIPSWITCH SETTINGS				.20		.30		.40		.50		.60		.70	
SETTING	1	2	3	4	CFM	WATTS	CFM	WATTS	CFM	WATTS	CFM	WATTS	CFM	WATTS	CFM	WATTS
350 CFM/TON	Off	Off	Off	On	1235	356	1238	391	1246	433	1245	466	1247	500	1250	538
400 (A) CFM/TON	Off	Off	Off	On	1408	505	1410	529	1415	574	1415	609	1408	637	1380	633
450 CFM/TON	Off	Off	Off	On	1572	613	1576	651	1569	683	1545	700	1540	720	1531	738

WET COIL, NO FILTERS  
(a) FACTORY SETTING

## PRESSURE DROP TABLE

AIRFLOW	Number of Racks		
	1	2	3
CFM	AIR PRESSURE DROP (INCHES OF W.G.)		
600	0.02	0.04	0.06
700	0.03	0.05	0.07
800	0.03	0.06	0.09
900	0.04	0.08	0.12
1000	0.05	0.10	0.15
1100	0.06	0.12	0.18
1200	0.07	0.14	0.21
1300	0.08	0.17	0.25
1400	0.10	0.20	0.30
1500	0.12	0.23	0.35

HEATER MODEL	NO. OF RACKS
BAYHTRC106A	1
BAYHTRC109A	1
BAYHTRC111A	1
BAYHTRC117A	2



MODEL	APPROX. CORNER WEIGHT - KG(LBS)				TOTAL WEIGHT KG(LBS)	COIL DIMENSION - mm (in)	
	W1	W2	W3	W4		A	B
4WHC3024	47 (103)	30 (66)	30 (66)	29 (63)	135 (298)	356 (14)	406 (16)
4WHC3030	47 (103)	30 (66)	30 (66)	29 (63)	135 (298)	356 (14)	406 (16)
4WHC3036	47 (103)	30 (66)	30 (66)	29 (63)	135 (298)	356 (14)	406 (16)
4WHC3042	39 (87)	37 (81)	30 (66)	33 (72)	139 (306)	508 (20)	406 (16)
▲ 4WHC4024	35 (78)	33 (73)	27 (59)	30 (65)	125 (275)	356 (14)	406 (16)
▲ 4WHC4030	35 (78)	33 (73)	27 (59)	30 (65)	125 (275)	356 (14)	406 (16)
▲ 4WHC4036	35 (78)	33 (73)	27 (59)	30 (65)	125 (275)	356 (14)	406 (16)
▲ 4WHC4042	39 (87)	37 (81)	30 (66)	33 (72)	139 (306)	508 (20)	406 (16)