



TRANE®

Reversible Air-To-Water Screw Heat Pumps

Model RTX B

Cooling capacity 476-1052 kW

Heating capacity 545-1105 kW



IR Ingersoll Rand®

RTXB Heat Pump Chillers, a Sustainable Solution for Heating and Cooling

Unit description

- Screw compressors
- ECO-PROFILE axial fans statically and dynamically balanced
- Water side heat exchangers shell and tube type with water connections
- Air side heat exchangers high efficiency finned coils with seamless copper tubes expanded into corrugated aluminium
- Electronic expansion valve
- Intelligent microprocessor-based controller
- Casing and panels in galvanised and painted steel



ACOUSTIC AND HEAT RECOVERY VERSIONS

- (H): Desuperheater for partial heat recovery.
- (L): Low noise: Insulated compressor housing and two speed fan motors.
- (S): Super low noise: Insulated compressor housing, oversized coils and variable fan speed.

Options

- Single and dual water pump packages, with or without water tank
- EC motor brushless fans
- Compressors stepless capacity control
- Soft starter
- On/off condensing control
- Condensing control with variable fan speed modulation
- Power factor correction to $\cos \phi$ 0.91
- Automatic circuit breakers for compressors and/or fans
- Numbered wires
- Star - Delta
- Low outdoor temperature kit (cooling mode)
- Control panel electric heater with thermostat
- Phase failure protection relay
- Anti-intrusion and/or condensing coil protection grilles
- Gas gauges
- Pre painted condensing coils
- Epoxy coated condensing coil fins
- Copper/copper condensing coils
- Tinned copper/copper condensing coils
- High static pressure fans 100 Pa

Accessories

- Remote control display
- Serial card RS485 for Modbus
- Serial card with BACnet protocol TCP/IP or MS/TP
- Serial card for LonTalk
- Flow switch
- Automatic water filling
- Water strainer
- Kit flanges
- Victaulic kit
- Water gauges
- Rubber or spring anti vibration mounts



Sophisticated and user-friendly microprocessor-based controller, available with a choice of several optional serial cards for BMS connection.

General technical data

Model	RTXB	140	150	160	180	190	220	250	300
Cooling (1)									
Cooling capacity	kW	476	515	555	634	649	767	909	1052
Compressors power input	kW	164	180	188	177	183	217	259	318
Total EER (incl. fans)		2.62	2.60	2.66	3.15	3.14	3.14	3.14	3.00
Heating (2)									
Heating capacity	kW	545	568	614	671	710	815	958	1105
Compressors power input	kW	137	144	152	162	172	200	234	283
Total COP (incl. fans)		3.52	3.51	3.54	3.61	3.62	3.59	3.63	3.50
Number of refrigerant circuits		2	2	2	2	2	2	2	2
Number of compressors		2	2	2	2	2	2	2	2
Type of compressors		Screw							
Exchanger type		Shell & tube							
Sound pressure level (3)	dB(A)	60	61	61	62	62	62	62	63
Sound power level	dB(A)	93	94	94	95	95	95	95	96
Sound pressure level (L) (3)	dB(A)	57	58	58	60	60	60	60	61
Sound power level (L)	dB(A)	90	91	91	93	93	93	93	94
Sound pressure level (S) (3)	dB(A)	55	56	56	57	57	57	57	58
Sound power level (S)	dB(A)	88	89	89	90	90	90	90	91
Maximum power input	kW	204	234	237	250	277	329	372	440
Maximum full load current	A	361	414	420	444	491	582	658	778
Full load starting current	A	669	746	752	776	833	886	808	1008
Electrical power supply	V/Ph/Hz	400/3+n/50							

(1) Outdoor temperature 35°C - chilled water temperature 12/7°C

(2) Outdoor temperature 7°C 90% R.H. - hot water temperature 40/45°C

(3) Calculated according to ISO 3744 at 10 m distance from the unit

Advantages

- Eco-friendly and high efficient refrigerant R134a, with no negative impact on stratospheric ozone layer (ODP=0). A suitable refrigerant choice for high ambient temperature applications.
- Compact design for easy installation in new and existing buildings
- Sophisticated and user friendly microprocessor-based controller
- Several optional serial cards for BMS connection

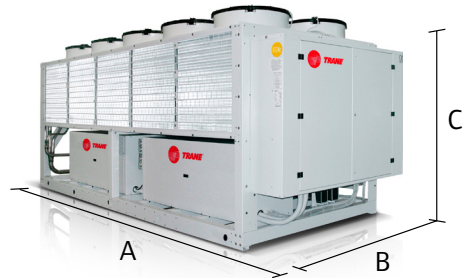


Dimensions and weights

RTXB	140	150	160	180	190	220	250	300
Dimensions (mm)								
A Standard/Low noise	6475	6475	7645	8610	8610	9580	10550	11520
A Super low noise	6475	6475	7645	8610	8610	9580	10550	12490
B	2260	2260	2260	2260	2260	2260	2260	2260
C	2400	2400	2400	2400	2400	2400	2400	2400
Unit shipping weight (kg)								
Standard	5446	5882	7009	7879	7981	9415	11160	11303
Low noise	5796	6232	7359	8279	8381	9815	11560	11703
Super low noise	6432	6867	7371	8287	8399	9835	11893	12832
Additional shipping weights for options (kg)								
Partial heat recovery	51	52	52	52	52	52	52	52
1	76	112	112	115	115	115	115	115
2	112	115	115	172	172	172	172	172
3	176	176	250	250	273	273	273	273
4	157	233	233	239	239	239	239	239
5	233	239	239	356	356	356	356	356
6	365	365	518	518	567	567	567	567

Hydraulic options

- (1): Single pump - Low head pressure
- (2): Single pump - Medium head pressure
- (3): Single pump - High head pressure
- (4): Dual pump - Low head pressure
- (5): Dual pump - Medium head pressure
- (6): Dual pump - High head pressure



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