



APEX



YOUR TRUSTED COMPANION

Let us introduce ourselves. We are TOSOT Bathica. As your trusted companion, our role is to get you comfortably, efficiently, and reliably through the tough Canadian winters and the hot summer months. To achieve this, our team worked diligently identifying and analyzing four pillars of our global value package.

THOSE FOUR PILLARS ARE:

- 1. Reliable and efficient equipment
- 2. Support, Training and Education
- 3. Logistics
- 4. Communication

BENEFITS

- > ULTRA HEAT heatpumps are our most efficient heatpumps
- Complete residential and light commercial line-up
- Designed for the North American climate
- Smart defrost, pan heaters and crankcase heaters
- Certifications: AHRI and Energy Star

Each pillar represents several constituents that are constantly being improved to maximize value for our dealers and distribution partners. Aside from the equipment, this also sets us apart from the rest in terms of level of excellence.

In many cold-climate regions of the world, the husky represents performance and reliability in extreme conditions. Snow, our husky, represents these values and reminds you that TOSOT Bathica will be Your Trusted Companion.

GLOSSARY

AIRFLOW

A measure of the amount of air per unit of time that passes through the device. It is measured in CFM (cubic feet per minute).

COP

Stands for Coefficient of Performance. It is the ratio between the cooling or heating provided and the electrical power consumption.

EER

Stands for Energy Efficiency Rating. It measures the ratio of output power to the input power.

REFRIGERANT

A refrigerant is the substance used to «move» the heat outside (or inside) of the room where the device is. We use the refrigerant R-410A as it is environmentally friendly and allows for the design of smaller and more efficient systems compared to R-22.

BTU/h

BTU is the British thermal unit. It is the amount of energy needed to cool or heat 1 pound of water by 1° F. The BTU/h is the unit of power used in HVAC. It corresponds to approximately 0.29 Watt.

DEHUMIDIFICATION

A measure of the amount of water per unit of time that the device is able to extract from the ambient air. It is measured in litres per hour.

HSPF

Stands for Heating Seasonal Performance Factor. It is the ratio between the seasonal heating output and the electricity used.

SEER

Stands for Seasonal Energy Efficiency Ratio. It is the ratio between the seasonal cooling output and the electricity used.

SOUND PRESSURE LEVEL

Sound Pressure is the force of a sound on a surface perpenD-Icular to its D-Irection. It is measured in Pa (Pascal). The lowest sound pressure that can be heard is 2x10 Pa. The Sound Pressure Level is a comparison of the measured sound to the lowest sound pressure hearable. The units are expressed in terms of dB (decibel) which is not linear, that is, if the pressure is D-Oubled, the Sound Pressure Level increases by 6dB. For example, the lowest hearable sound is 0dB while a quiet room is 40dB.

INVERTER SIDE DISCHARGE CENTRAL HEAT PUMP



THE FUTURE OF THE HEAT PUMP



UP TO 20 SEER

INVERTER SIDE DISCHARGE CENTRAL HEAT PUMP



EXTREME CLIMATE PERFORMANCE

ULTRAHEAT & ULTRACOOL TECHNOLOGY

Heating Performance*:

100% Capacity at -5°F/-20°C and 78% Capacity at -22°F*/-30°C

Cooling Performance*:

100% Capacity at 115°F/46°C and 78% Capacity at 130°F/54°C

*based on 2 Ton model



THERMOSTAT COMPATIBILITY

UNIVERSAL THERMOSTAT OPTIONS

Compatible with any third party thermostat including NEST®



UNIVERSAL SYSTEM

INSTALL WITH ANY 3RD PARTY AIR HANDLER OR FURNACE

Replaces larger/louder outdoor unit and increase conventional heat pump performance ranges and efficiency for All-Climate applications.



RELIABLE COMFORT

INVERTER COMPRESSOR

The APEX DC Inverter moderates operating load, heating & cooling with less fluctuation for more comfortable climate control, extending component life for fewer breakdowns.



ENERGY EFFICIENT

UP TO 20 SEER

The APEX DC Inverter moderates operating load, increasing efficiency for lower operating costs for both cooling and heating.



SIDE DISCHARGE

NO CLOGGING/LESS SPACE

The APEX takes half the area and, unlike conventional condensers, doesn't fill up with leaves, snow and debris.



QUIET OPERATION

IDEAL FOR SOUND RESTRICTIONS AND OUTDOOR PIECE OF MIND.

For every 10 Decibels (dBa) a sound is twice as loud - making the APEX Series at 55 dB(a) less than half as loud as a conventional top discharge condenser at 73 dB(a).



CORROSION RESISTANT

GOLD FIN CONDENSER

Live on the coast? Don't worry, our condenser is built to resist long term corrosion.



SLIM DESIGN

IDEAL FOR ZERO LOT LINES

Side discharge design takes less than half the area of conventional condensers. Perfect for city lots and between building applications where access and space is limited.

20-17.5 SEER INVERTER

24,000 BTU TO 60,000 BTU

ULTRA HEAT







-) High And Low Pressure Protection Features
- > 24V Controls Compatibility
- Overload Protection Features
- > Field Adjustable Capacity
- Up to 100% Heating Capacity at -20° C/-4° F
- Universal Indoor Unit Compatibility
-) Up to 78% Heating Capacit at -30° C/-22° F
- > Built-In Drain Pan Heater
-) Intelligent Defrost



OUTDOOR UNIT			TU36-24	\$WADU	TU60-48WADU	
OUIDOOK UNII			24K	36K	48K	60K
Capacity (Min-Rated-Max)	Cooling	BTU/h	12,000-24,000-24,000	18,000-36,000-37,000	34,000-48,000-48,000	35,000-54,000-54,000
	Heating	BTU/h	12,000-24,000-30,000	18,000-36,000-38,000	34,000-48,000-52,000	35,000-48,000-52,000
SEER			20	18	18	17
EER		(BTU/h)/w	12.5	11	11	10.5
HSPF/COP			10		10.5	9
Refrigerant Charge		OZ	148		220.5	
Piping Connection	Liquid	in.	Ф 3/8		Ф 3/8	
riping connection	Gas	in.	Ф 3/4		Ф 3/4	
Max total piping		ft.	100		100	
Max. Elevation		ft.	50		50	
Sound Pressure Level		dB(A)	52/55		58/60	
Net Weight		lb	217		308	
Power Supply			208-230V/60Hz		208-230V/60Hz	
Wire Size			AWG 18/5		AWG 18/5	
MOP/MCA		Α	35/24		45/35	
Cooling Rated Amps		Α	21		30	
Heating Rated Amps		Α	25		31	
Compressor Type			Inverter Rotary		Inverter Rotary	
Dimensions (WxHxD)		in.	37 x 32 1/4 x 19 1/8		42 3/4 x 53 5/8 x 16 7/8	
AIR HANDLER			TUD24-24AH2ADU	TUD36-24AH2ADU	TUD48-24AH2ADU	TUD60-24AH2ADU
Cooling Capacity		BTU/h	24,000	36,000	48,000	54,000
Heating Capacity		BTU/h	24,000	36,000	48,000	60,000
Power Supply		V/Ph/Hz	208/230V~1~60Hz	208/230V~1~60Hz	208/230V~1~60Hz	208/230V~1~60Hz
Power Consumption		W	273	373	746	746
Airflow		PCM/CFM	960	1,000	1,380	1,600
ESP		in. W.G.	1.0	1.0	1.0	1.0
Sound Pressure Level		dB(A)	45	47	50	51
Dining Connection	Liquid	in.	Ф 3/8	Ф 3/8	Ф 3/8	Ф 3/8
Piping Connection	Gas	in.	Ф 3/4	Ф 3/4	Ф 3/4	Ф 3/4
Dimensions (WxHxD)		in.	211/4 x 481/4 x 211/4	211/4 x 481/4 x 211/4	24 3/4 x 57 x 24 1/4	24 3/4 x 57 x 24 1/4
Net Weight		lb	156	156	202	202

19.5-17 SEER INVERTER

24,000 BTU TO 60,000 BTU



CASED "A" COILS





General Features

- > Built-In TXV with check valve
- > Ideal for Dual Fuel applications
- > Universal mounting orientation
- > Pre-charged with 9oz. R410A
- > Flared service valve connections

COIL MODEL			TCAT24F/NaA	TCAT36F/NaA	TCAT48H/NaA	TCAT60H/NaA
OUTDOOR UNIT MODEL		TOSOT APEX	TUD36-24AH2ADU	TUD36-24AH2ADU	TUD60-24AH2ADU	TUD60-24AH2ADU
Rated Furnace Airflow		CFM	800	1000	1230	1510
Rated Blower Power		W	145	185	280	390
Capacity		Btu/h	24000	36000	48000	54000
EER	Cooling	Btu/(h·W)	12.5	12.2	11.7	11.7
SEER	Cooling	Btu/(h·W)	19.5	18	18	17
Pipe Size	Liquid	inch	3/8	3/8	3/8	3/8
	Gas	inch	3/4	3/4	3/4	3/4
Net Weight		lbs	64	64	95	95
Gross Weight		lbs	75	75	110	110
Loading Qty	40' GP	set	219	219	102	102
	40` HP	set	292	292	153	153

Note: The above performance data is tested at the "Rated Conditions" shown in the table

NOTES



