

WinPOWER EXP

TXAEY 4400÷6660

Cooling capacity 379,1÷654,8 kW

Heating capacity 420,9÷706,2 kW



Features

Multi-purpose units with TER up to 8.19

Extended operating limits

Tax incentives*



EXPsystems - Air cooled multi-purpose ecological system with axial fans. Range with scroll hermetic compressors and R410A refrigerant gas.

Construction features

- Compressor: scroll type, rotary, hermetic complete with thermal protection and casing heater.
- Up to 6 capacity steps with high efficiency at partial loads.
- Main and secondary heat exchangers: crossed flow stainless steel plate exchangers, complete with antifreeze heater, closed cell polyurethane foam rubber insulation and water flow differential pressure switch.
- Air side heat exchanger: finned coil with copper pipes and aluminium fins.
- Fan: external rotor axial type electric fans, equipped with internal thermal protection, accident protection grilles and a proportional electronic device for continuous fan rotation speed regulation (T version; fans with an EC motor are standard in the Q version)
- Control: microprocessor electronic control with Adaptive Function Plus logic.
- Structure: load-bearing structure made of galvanised and painted steel plate with polyester powder coating.
- The unit is also complete with:

- fan and compressor thermal magnetic circuit breakers, heat exchanger antifreeze heater;
- display of cooling circuit high and low pressure;
- electronic expansion valve;
- clock board;
- Master/Slave control up to 4 units in parallel;
- control of Variable Primary Flow (VPF_R).

Versions

- T - High efficiency version.
- Q - Super silenced version complete with compressor technical compartment soundproofing, fans with EC motor at reduced speed.

Models

- TXAEY: EXPsystems unit.

- TXAEQY: super silenced EXPsystems unit.

Factory fitted accessories

- Tube and shell main and secondary heat exchangers.
- PUMP with single or double electric pump, one of which automatic in standby. The electric pumps are available in the main and secondary/recovery heat exchanger low or high head set-ups.
- TANK&PUMP with 700-1000 litre integrated buffer tank (depending on models) and single or double electric pump, complete with expansion tank, air vent valves, safety valve and water side pressure gauge.
- Inverter pump control for unit start-up (TXAEQY).
- Recovery side VPF_R control.
- Desuperheater.
- Condensing control with fans with EC motor (standard in Q versions).
- Condensing control with over-pressure fans (T version only).
- Power factor correction capacitors ($\cos\phi > 0.94$).
- Forced limit of power consumption.
- Forced noise limit.
- Energy parameter measuring device.
- Soft starter.
- Compressor box and soundproofed cooling circuit.
- Compressor soundproof enclosures.
- Cooling circuit outlet and inlet valves.
- Refrigerant leak detector.
- Cooling circuit high and low pressure gauges.
- Double safety valves.
- Coil protection nets or metal filters.
- Bottom compartment protection nets.
- Pre-painted copper/aluminium or copper/copper coils.
- Digital input for double set-point.
- 4-20 mA analogue signal for shifting set-point.
- Electrical panel antifreeze heater, buffer tank, electric pumps and desuperheater, if applicable.
- Interfaces for serial communication with other devices.
- Spring anti-vibration mounts.

Separately supplied accessories

- Remote keypad with display.
- Thermostat with display.
- Rhoss supervisors for unit monitoring and remote management.
- Rhoss sequencer for integrated management of multiple chillers.

Technical data

TXAETY MODEL		4400	4440	6520	6580	6660
COOLING OPERATIONS (AUTOMATIC 1 MODE)						
① Nominal cooling capacity	kW	397	434,8	525,4	577,4	648,1
① Absorbed power	kW	131,9	145	176,4	198,5	218,3
① E.E.R.		3,01	3	2,98	2,91	2,97
COOLING OPERATIONS + TOTAL RECOVERY (AUTOMATIC 2 MODE)						
② Nominal cooling capacity	kW	409,2	446,4	533,5	586,9	657,4
② Recovery heating capacity	kW	520,2	571,4	688,1	762,6	848,6
② T.E.R.		8,19	7,98	7,75	7,52	7,72
HEATING OPERATIONS (MODE SELECT 1-2 AUTOMATIC 3)						
② Nominal heating capacity	kW	426,1	470,4	569,8	629,9	706,2
② Absorbed power	kW	131,2	144,3	177	195,1	217,3
② C.O.P.		3,25	3,26	3,22	3,23	3,25
TXAEQY MODEL		4400	4440	6520	6580	6660
COOLING OPERATIONS (AUTOMATIC 1 MODE)						
① Nominal cooling capacity	kW	379,1	408,9	497,6	540,7	609,4
① Absorbed power	kW	136,4	150,9	182,9	213,7	224,9
① E.E.R.		2,78	2,71	2,72	2,53	2,71
COOLING OPERATIONS + TOTAL RECOVERY (AUTOMATIC 2 MODE)						
② Nominal cooling capacity	kW	405,8	451,6	535	589,1	659,9
② Recovery heating capacity	kW	519,1	574,7	689,4	764,4	850,7
② T.E.R.		7,99	8,16	7,76	7,55	7,75
HEATING OPERATIONS (MODE SELECT 1-2 AUTOMATIC 3)						
② Nominal heating capacity	kW	420,9	462,7	569,1	622,1	696,2
② Absorbed power	kW	126,8	138,9	170,9	186,8	208,4
② C.O.P.		3,32	3,33	3,33	3,33	3,34
TXAETY -TXAEQY MODEL		4400	4440	6520	6580	6660
④ TXAETY sound pressure	dB(A)	76	76,5	76,5	76,5	76,5
④ TXAEQY sound pressure	dB(A)	54,5	55,5	55,5	55,5	57,5
⑤ TXAETY sound power	dB(A)	96	97	97	97	98
⑤ TXAEQY sound power	dB(A)	87	88	88	88	90
Scroll compressors/steps	n.	4/4	4/4	6/6	6/6	6/6
Circuits	n.	2	2	2	2	2
Electrical supply	V-ph-Hz	400-3-50	400-3-50	400-3-50	400-3-50	400-3-50
DIMENSIONS AND WEIGHTS		4400	4440	6520	6580	6660
L – Width	mm	4840	4840	5940	5940	6840
H – Height	mm	2450	2450	2450	2450	2450
P – Depth	mm	2260	2260	2260	2260	2260
⑥ TXAETY weight	kg	3650	3760	4480	4580	5250
⑥ TXAEQY weight	kg	4340	4360	5270	5370	6070
SEASONAL ENERGY PERFORMANCE		4400	4440	6520	6580	6660
TXAETY MODEL SEASONAL PERFORMANCE IN COOLING MODE						
① Pdesignc (EN 14825)	kW	-	434,8	525,4	577,4	648,1
① SEER (EN 14825)		-	4,63	4,64	4,61	4,63
② ηs,c	%	-	182	183	182	182
TXAEQY MODEL SEASONAL PERFORMANCE IN COOLING MODE						
① Pdesignc (EN 14825)	kW	-	-	497,6	540,7	609,4
① SEER (EN 14825)		-	-	4,76	4,79	4,77
② ηs,c	%	-	-	188	189	188
TXAETY MODEL SEASONAL PERFORMANCE IN HEATING MODE						
③ Pdesignh (EN 14825)	kW	361	-	-	-	-
③ SCOP (EN 14825)		3,63	-	-	-	-
④ ηs	%	142	-	-	-	-
TXAEQY MODEL SEASONAL PERFORMANCE IN HEATING MODE						
③ Pdesignh (EN 14825)	kW	358	397	-	-	-
③ SCOP (EN 14825)		3,73	3,74	-	-	-
④ ηs	%	146	147	-	-	-

Data at the following conditions:

- ① Air: 35°C – Water: 12/7°C.

- ② Air: 7°C D.B. – 6°C W.B. – Water: 40/45°C.
- ③ Evaporator output water: 7°C, nominal flow rate. Recovery output water: 45°C, nominal flow rate.
- ④ In open field (Q = 2) at 10 m from the unit.
- ⑤ Total sound power level in dB(A) based on measurements carried out in accordance with regulation UNI EN-ISO 9614.
- ⑥ Weight refers to the unit without load.
Performance according to EN 14511.
T.E.R.: Total efficiency ratio
- ① Low temperature application (7°C)
- ② Seasonal energy efficiency: low temperature cooling (EU Regulation 2016/2281)
- ③ In Average climatic conditions, low temperature application (35°C)
- ④ Seasonal energy efficiency: low temperature heating in Average climate (EU Regulations No.811/2013 and No.813/2013)



RHOSS S.P.A.
Via Oltre Ferrovia, 32
33033 Codroipo (UD) - ITALY
tel. [+39 0432 911611](tel:+390432911611)
rhoss@rhoss.com

rhoss.com

RHOSS S.P.A. non si assume alcuna responsabilità per eventuali errori del presente stampato e si ritiene libera di variare senza preavviso le caratteristiche dei propri prodotti.