Y-Flow EXP

TXHEY 245÷4410

Cooling capacity 44,2÷397,1 kW
Heating capacity 49,3÷459,3 kW

Features

Integrated MASTER/SLAVE control

Tax incentives*

EXPsystems - Polyvalent ecological water-cooled system. Range with scroll hermetic compressors and R410A refrigerant gas.

Construction features

• Compressor: scroll type, rotary, hermetic complete with thermal protection and casing heater.

• Primary side (user), secondary side (recovery) heat exchangers and disposal unit: crossed flow stainless steel plate exchangers, complete with antifreeze heater, closed cell polyurethane foam rubber insulation and water flow differential pressure switch.

• Control: microprocessor electronic control with Adaptive Function Plus logic.

• Structure: made of galvanised and painted steel plate with polyester powder coating.

• The unit is also complete with:

– compressor circuit breaker switches;

– electronic expansion valve;

– display of cooling circuit high and low pressure;

– clock board;

– outdoor temperature probe for set-point compensation;

– Master/Slave control up to 4 units in parallel;

– 0-10V analogue signal for condensing/evaporating control performed by external device;

– control of Variable Primary Flow (VPF_R).

Versions

• B - Standard version.

Models

• TXHEBY: EXPsystems unit.

Factory fitted accessories

- Cooling circuit high and low pressure gauges.
- Forced limit of power consumption.
- Soft starter.
- Silenced set up.
- Digital input for double set-point.
- 4-20 mA analogue signal for shifting set-point.
- Interfaces for serial communication with other devices.
- Anti-vibration mounts.

Separately supplied accessories

- 3-way modulating condensing control valve.
- 2-way modulating condensing control valve.
- Water filter.
- Remote keypad with display.
- Thermostat with display.
- Serial converter (RS485/USB).
- RHOSS supervisors for unit monitoring and remote management.
- Rhoss sequencer for integrated management of multiple chillers.

Technical data

TXHEBY MODEL		4180	4205	4235	4260	4290	4330	4360	4410
COOLING OPERATIONS (AUTOMATIC 1 MODE)									
❶ Nominal cooling capacity	kW	188,5	214,7	241,2	270,2	302,7	341,1	379,9	420,9
❷ Nominal cooling capacity	kW	176,4	201,7	226,7	253,6	280,2	317,9	354	397,1
❶ Absorbed power	kW	32,2	37,2	41,9	46,6	50,4	59,1	67,2	78,9
❷ Absorbed power	kW	37,4	42,9	48,2	54,1	60,2	69,3	79,1	90,5
❶ E.E.R.		5,85	5,77	5,76	5,8	6,01	5,77	5,65	5,33
❷ E.E.R.		4,72	4,71	4,71	4,69	4,66	4,59	4,48	4,39
COOLING OPERATIONS + TOTAL RECOVERY (AUTOMATIC 2 MODE)									
❸ Nominal cooling capacity	kW	158,5	180,1	201,2	227	252,1	286,1	320,6	356,8
❸ Recovery heating capacity	kW	203	232,2	260,4	293,8	327,4	373,5	420,4	470
❸ Absorbed power	kW	44,7	52,2	59,6	67,2	75,3	87,2	99,3	113
❸ T.E.R.		8,08	7,9	7,74	7,75	7,7	7,56	7,46	7,32
HEATING OPERATIONS (MODE SELECT 1-2 AUTOMATIC 3)									
❹ Nominal heating capacity	kW	198,8	227,5	255,4	288	320	367	412,6	459,3
❹ Total absorbed power	kW	43,9	51,1	58,4	65,6	72,9	84,6	95,9	109,4
❹ C.O.P.		4,52	4,45	4,37	4,39	4,39	4,34	4,3	4,2
TXHEBY MODEL		**4180**	**4205**	**4235**	**4260**	**4290**	**4330**	**4360**	**4410**
❺ Sound power	dB(A)	77	77	78	79	80	81	82	83
Scroll compressors/steps	n.	4/4	4/4	4/4	4/4	4/4	4/4	4/4	4/4
Circuits	n.	2	2	2	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	400-3-50	400-3-50	400-3-50
DIMENSIONS AND WEIGHTS		**4180**	**4205**	**4235**	**4260**	**4290**	**4330**	**4360**	**4410**
L – Width	mm	2600	2600	2600	2600	2600	2600	2600	2600
H – Height	mm	1860	1860	1860	1860	1860	1860	1860	1860
P – Depth	mm	870	870	870	870	870	870	870	870
❻ Weight	kg	1690	1730	1780	1820	1890	1960	2000	2070

SEASONAL ENERGY PERFORMANCE		4180	4205	4235	4260	4290	4330	4360	4410
TXHEBY MODEL SEASONAL PERFORMANCE IN COOLING MODE									
① Pdesignc (EN 14825)	kW	-	-	-	-	-	317,9	354	397,1
① SEER (EN 14825)		-	-	-	-	-	6,24	6,14	5,94
② ηs,c	%	-	-	-	-	-	247	242	234
TXHEBY MODEL SEASONAL PERFORMANCE IN HEATING MODE	**%**								
③ Pdesignh (EN 14825)	kW	234	267	300	340	379	-	-	-
③ SCOP (EN 14825)		6,75	6,65	6,54	6,6	6,68	-	-	-
④ ηs	%	262	258	253	256	259	-	-	-

Data at the following conditions:

❶ Chilled water (user): 12/7°C – Condenser water (disposal unit-source): 14/30°C. (Gross value)

❷ Chilled water (user): 12/7°C – Condenser water (disposal unit-source): 30/35°C

❸ Chilled water output (user): 7°C, nominal flow rate – Condenser water output (recovery unit): 45°C, nominal flow rate.

❹ Evaporator water (source): 10/7°C – Hot water (utility): 40/45°C.

❺ Total sound power level in dB(A) based on measurements carried out in accordance with regulation UNI EN-ISO 9614.

❻ Empty weight

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)

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