

MidiFLOW-PI

TCHITP-THHITP 115÷145

Cooling capacity 15,2÷45,9 kW
Heating capacity 17,6÷51,2 kW



Features

Efficient and eco-friendly range in R290

Applications with well water, water mains, geothermal probes or dry cooler

Ventilated enclosure or outdoor installation

Plug&Play unit with integrated hydraulic module

Temperature of the produced water up to 80°C

Integrated MASTER/SLAVE control



Tax incentives*

Packaged water-cooled water chillers and reversible heat pumps on the cooling circuit with water-cooling system. Range with scroll hermetic compressors, DC inverter and R290 refrigerant gas.

Construction features

- Compressor: hermetic rotary, scroll type with inverter actuation, complete with thermal protection and casing heater.
- Primary side (user) heat exchanger: with stainless steel plates, complete with closed cell polyurethane foam rubber insulation and water flow differential pressure switch.
- Disposal side heat exchanger (well, mains, geothermal probes or dry cooler): with stainless steel plates, complete with 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.
- Refrigerant leak detector.
- The unit is also complete with:
 - electronic expansion valve;

- display of cooling circuit high and low pressure;
- Master/Slave control up to 4 units in parallel;
- clock board;
- 0-10V analogue signal for condensing/evaporating control performed by external device;
- automatic management of anti-legionella cycles.

Versions

- T - High efficiency version

Models

- TCHITP: unit designed for cooling only.
- THHITP: heat pump unit.

PUMP set up

Primary side (user): single electric pump, available with INVERTER operation.

Disposal side (well, mains, geothermal probes or dry cooler): single electric pump, available with INVERTER operation.

Factory fitted accessories

- Set-up for outdoor installation.
- Set-up for ventilated enclosure installation.
- Free-Cooling Management.
- Dry-Cooler Management.
- Setup for heat pump operation (only for TCHITP).
- Energy parameter measuring device.
- Forced limit of power consumption.
- Double safety valves.
- Silenced set up.
- Control of min/max power supply voltage.
- Low temperature water production.
- Digital input for double set-point.
- 4-20mA analogue signal for shifting set-point.
- Contacts for Smart Grid integration and photovoltaic system.
- Heat exchanger, electrical panel and electric pumps antifreeze heaters, if applicable.
- Interfaces for serial communication with other devices.
- Colour touch user keypad (remotely) with 7" display.

Separately supplied accessories

- 3-way modulating condensing control valve.
- 2-way modulating condensing control valve.
- 3-way valve for the production of domestic hot water, managed by the adjustment.
- Outdoor air temperature probe for set-point compensation.

- Rubber anti-vibration mounts.
- Water filter.
- Air inlet fitting.
- 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

TCHITP MODEL		115	120	125	130	135	140	145
❶ Cooling capacity	kW	16,6	20,1	28,2	32,5	35	40,6	45,9
❶ Absorbed power	kW	3,34	4,25	5,57	6,87	8,06	8,42	10,38
❶ E.E.R.		4,97	4,73	5,06	4,73	4,34	4,82	4,42
THHITP MODEL		115	120	125	130	135	140	145
❷ Heating capacity	kW	17,6	21,7	30,1	35,1	39,2	44,7	51,2
❷ Absorbed power	kW	4,23	5,34	7,02	8,54	9,97	10,44	12,8
❷ C.O.P.		4,16	4,06	4,29	4,11	3,93	4,28	4
❶ Cooling capacity	kW	15,2	18,6	26,1	30,2	33,1	38,9	44,4
❶ E.E.R.		4,56	4,41	4,7	4,44	4,12	4,64	4,3
TCHITP-THHITP MODEL		115	120	125	130	135	140	145
❸ Sound pressure	dB(A)	51,5	53,5	56,5	58	58	58	59,5
❹ Sound pressure	dB(A)	48,5	50,5	53,5	55	55	55	56,5
Scroll compressor/steps	no.	1 inverter	1 inverter	1 inverter	1 inverter	1 inverter	1 inverter	1 inverter
Circuits	no.	1	1	1	1	1	1	1
Electrical supply	V-ph-Hz	400-3+N-50	400-3+N-50	400-3+N-50	400-3+N-50	400-3+N-50	400-3+N-50	400-3+N-50
DIMENSIONS AND WEIGHTS		115	120	125	130	135	140	145
L – Width	mm	1265	1265	1265	1265	1265	1265	1265
❺ H – Height	mm	1350	1350	1350	1350	1350	1350	1350
❻ H – Height	mm	1460	1460	1460	1460	1460	1460	1460
P – Depth	mm	720	720	720	720	720	720	720
❼ TCHITP weight	kg	290	295	300	305	310	315	320
❼ THHITP weight	kg	295	300	305	310	315	320	325
SEASONAL ENERGY PERFORMANCE		115	120	125	130	135	140	145
TCHITP MODEL SEASONAL PERFORMANCE IN COOLING MODE								
❶ Pdesignc (EN 14825)	kW	16,6	20,1	28,2	32,5	35	40,6	45,9
❶ SEER (EN 14825)		6,62	6,72	7,24	7,29	6,89	7,13	6,92
❷ ηs,c	%	262	266	286	288	273	282	274
THHITP MODEL SEASONAL PERFORMANCE IN HEATING MODE – Low temperature application 35°C								
❸ Pdesignh (EN 14825)	kW	25	28	40	46	52	59	70
❸ SCOP (EN 14825)		6,55	6,57	7,17	7,04	6,94	7,32	7,13
❹ ηs	%	254	255	279	274	270	285	277
❹ Energy class		A+++	A+++	A+++	A+++	A+++	A+++	A+++
THHITP MODEL SEASONAL PERFORMANCE IN HEATING MODE – Medium temperature application 55°C								
❸ Pdesignh (EN 14825)	kW	22	25	35	41	45	52	61
❸ SCOP (EN 14825)		4,88	4,95	5,34	5,28	5,21	5,56	5,48
❹ ηs	%	187	190	206	203	201	214	211
❹ Energy class		A+++	A+++	A+++	A+++	A+++	A+++	A+++

Data at the following conditions:

- ❶ Chilled water: 12/7°C – Condenser water: 30/35°C.
- ❷ Hot water: 40/45°C. – Evaporator water: 10/7°C.
- ❸ In open field (Q = 2) at 1 m from the unit (not Eurovent certified).
- ❹ In open field (Q = 2) at 1 m from the unit, with VE-VEX accessory (not Eurovent certified).
- ❺ Height referred to a unit with standard set up.
- ❻ Height referring to a unit with VE-VEX accessories.
- ❼ Weight refers to the unit empty with soundproofing.
Performance according to EN 14511.
- ❶ Low temperature application (7°C)
- ❷ Seasonal energy efficiency: low temperature cooling (EU Regulation 2016/2281)
- ❸ In Average climatic conditions
- ❹ Seasonal energy efficiency: heating in Average climate (EU Regulations No.811/2013 and No.813/2013 – class between D and A+++)



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.