

EasyFLOW ECO HT

EasyFLOW ECOA1 HT

TCHET HPH 160÷2190



Features

Cooling capacity 60,1÷192,5 kW
Heating capacity 68÷219,6 kW

Efficient and eco-friendly range in R1234ze and R515B

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

Extended operating limits, with Temperature of the produced water up to 70°C

Touch interface (optional)

Integrated MASTER/SLAVE control



Tax incentives*

Packaged water-cooled reversible heat pumps on the hydraulic circuit. Series with scroll hermetic compressors and R1234ze or R515B refrigerant gas.

Construction features

- Compressor: hermetic rotary scroll complete with thermal protection and crankcase 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.
- The unit is also complete with:
 - compressor circuit breaker switches;
 - 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 control performed by external device;
- control of Variable Primary Flow (VPF_R).

Versions

- T - High efficiency version

Models

- TCHETE+HPH: heat pump unit reversible on hydraulic side with R1234ze gas.
- TCHETO+HPH: heat pump unit reversible on hydraulic

side with R515B gas.

Factory fitted accessories

- Primary side (user) PUMP: with single or double electric pump, one of which automatic in standby. The electric pumps are available in the low or high pressure head versions. →
- PUMP disposal side (well, mains, geothermal probes or dry cooler): with single or double electric pump (possibly regulated via inverter) including an automatic actuation pump in standby. The electric pumps are available in the low or high pressure head versions. →
- Cooling floor application.
- Primary side (user) inverter pump management.
- Power factor correction capacitors ($\cos\phi > 0.94$).
- Soft-starter.
- Energy parameter measuring device.
- Cooling circuit outlet and intake valves.
- Refrigerant leak detector.
- Forced limit of power consumption.
- Cooling circuit high and low pressure gauges.
- Double safety valves.
- Technical compartment soundproofing.
- Compressor soundproof enclosures
- Control of min/max power supply voltage and backup battery.
- Low temperature water production.
- Digital input for double set-point.
- 4-20mA analogue signal for shifting set-point.
- Heat exchanger antifreeze heaters, electrical panel and electric pumps if applicable.
- Interfaces for serial communication with other devices.
- Colour touch user keypad (fitted on the machine or remotely) with 7" display.
- Set-up for outdoor installation.
- Anti-vibration mounts.

Separately supplied accessories

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

TCHETE-TCHETO + HPH MODEL		160	170	190	2115	2125	2140	2155	2170
② Heating capacity	kW	68	81,9	102,6	130,5	144,9	159,4	177,5	197,2
② Absorbed power	kW	15,9	19,8	24,5	31,4	35,4	38,7	43,9	48,5
② C.O.P.		4,28	4,14	4,19	4,15	4,09	4,12	4,04	4,07
① Cooling capacity	kW	60,1	71,8	90,2	115	127,3	140,1	155,3	172,6
① Absorbed power	kW	12,6	15,6	19,4	24,9	28	30,7	34,7	38,4
① E.E.R.		4,77	4,59	4,64	4,61	4,55	4,57	4,47	4,49
TCHETE-TCHETO + HPH MODEL		160	170	190	2115	2125	2140	2155	2170
④ Sound pressure	dB(A)	44	47	49	47	49	50	51	52
④ Sound power	dB(A)	76	79	81	79	81	82	83	84
④ Sound power with soundproofing set-up	dB(A)	73,5	76,5	78,5	76,5	78,5	79,5	80,5	81,5
Scroll compressor/steps	n.	1/1	1/1	1/1	2/2	2/3	2/2	2/3	2/2
Circuits	n.	1	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	400-3+N-50
DIMENSIONS AND WEIGHTS		160	170	190	2115	2125	2140	2155	2170
⑤ L – Width	mm	1500	1500	1500	2510	2510	2510	2510	2510
⑥ L – Width	mm	2460	2460	2460	3740	3740	3740	3740	3740
H – Height	mm	1860	1860	1860	1860	1860	1860	1860	1860
P – Depth	mm	870	870	870	870	870	870	870	870
⑦ TCHETE-TCHETO + HPH weight	kg	620	630	685	1030	1040	1075	1115	1205
SEASONAL ENERGY PERFORMANCE		160	170	190	2115	2125	2140	2155	2170
TCHETE-TCHETO + HPH MODEL SEASONAL PERFORMANCE IN HEATING MODE									
③ Pdesignh (EN 14825)	kW	81	97	121	154	171	188	210	233
③ SCOP (EN 14825)		5,91	5,87	5,75	6,82	6,85	6,77	6,81	6,72
④ ηs	%	229	227	222	265	266	263	264	261
TCHETE-TCHETO + HPH MODEL									2190
② Heating capacity	kW								219,6
② Absorbed power	kW								53,4
② C.O.P.									4,11
① Cooling capacity	kW								192,5
① Absorbed power	kW								42,7
① E.E.R.									4,51
TCHETE-TCHETO + HPH MODEL									2190
④ Sound pressure	dB(A)								53
④ Sound power	dB(A)								85
④ Sound power with soundproofing set-up	dB(A)								82,5
Scroll compressor/steps	n.								2/3
Circuits	n.								1
Electrical supply	V-ph-Hz								400-3+N-50
DIMENSIONS AND WEIGHTS									2190
⑤ L – Width	mm								2510
⑥ L – Width	mm								3740
H – Height	mm								1860
P – Depth	mm								870
⑦ TCHETE-TCHETO + HPH weight	kg								1225
SEASONAL ENERGY PERFORMANCE									2190
TCHETE-TCHETO + HPH MODEL SEASONAL PERFORMANCE IN HEATING MODE									
③ Pdesignh (EN 14825)	kW								259
③ SCOP (EN 14825)									6,76
④ ηs	%								263

Data at the following conditions:

- ① Chilled water: 12/7°C – Condenser water: 30/35°C.
- ② Hot water: 40/45°C. – Evaporator water: 10/7°C.
- ③ In open field (Q = 2) at 10 m from the unit.
- ④ Total sound power level in dB(A) based on measurements carried out in accordance with regulation UNI EN-ISO 9614.
- ⑤ Width referred to a unit with standard set up.
- ⑥ Width referring to the PUMP setup, up to a maximum of 2 pumps in 160÷190 models and up to a maximum of 4 pumps in 2115÷2190 models.

- ⑦ Weight refers to the unit empty with soundproofing.
Performance according to EN 14511.
- 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.