



EQPU

Cooling only

EQPHU

Heat pump



AIR-WATER CHILLERS | AXIAL SCROLL

Low power scroll

Reversible monobloc water chillers and heat pumps with air condensation and axial fans. Series with hermetic scroll compressors and refrigerant R410A.

MAIN CHARACTERISTICS

- Cooling capacities: 100.6 to 345 kW
- Heating capacities: 110.5 to 357 kW
- Compressor: hermetic rotary type scroll with thermal protection and crankcase heater
- 2, 3 or 4 stages of Partialisation with high efficiency with partial loads
- Water side exchanger: stainless steel plates, with closed cell expanded polyurethane rubber insulation and water flow differential pressure switch
- Air side exchanger: microchannel or battery operated fins with copper tubes and aluminium fins, depending on models/sizes
- Fan: axial type electric fans with external rotor and internal thermal protection and protection grilles
- Control: electronic microprocessor with Adaptive Function Plus logic
- Structure: load-bearing structure made of galvanised sheet steel and painted with polyester powders

In addition, the unit includes:

- Magnetothermic switches in compressors and fans
- High and low pressure display of the refrigeration circuit
- Electronic expansion valve
- Master/Slave management up to 4 units in parallel
- Clock card

ADVANTAGES

- Chillers and heat pumps in class A
- ESEER up to 4,32
- Electronic expansion valve as standard
- Versatile for 2 pipe + DHW installations (with option RC100)
- Integrated MASTER/SLAVE management

VERSIONS

- Efficiency version with increased condensation section (EQPU-EQPHU)
- SS - Super-silenced version, with compressor sound insulation, super-reduced speed fans and increased condensation section (EQPUSS-EQPHUSS)

MODELS

- **EQPU**: high-efficiency unit intended for cooling only
- **EQPUSS**: super-silenced unit intended for cooling only
- **EQPHU**: heat pump unit
- **EQPHUSS**: super-silenced heat pump unit

REGULATION

Integrated control:
MINI PGD



Remote control accessory:
PGD



See regulation and control on page 107

SERIES EQPU / EQPUSS

EQPU MODEL			2110	2120	2140	2150	2170	2200	2220	4240	4270	4310	4340
(1)	Nominal refrigeration capacity	kW	110.5	121.5	138.4	156.4	175.4	200.3	223.2	241.3	276.3	309.1	345.1
(1)	E.E.R.		3.13	3.1	3.13	3.11	3.1	3.11	3.1	3.1	3.1	3.1	3.1
(1)	Power consumption	kW	35.3	39.2	44.2	50.3	56.6	64.4	72	77.8	88.8	99.7	111.3
EQPUSS MODEL													
(1)	Nominal refrigeration capacity	kW	100.6	108.6	126.5	140.5	155.5	181.4	199.4	218.4	251.4	280.2	318.2
(1)	E.E.R.		2.73	2.6	2.69	2.65	2.6	2.64	2.61	2.56	2.68	2.62	2.63
(1)	Power consumption	kW	36.8	41.8	47	53	59.8	68.7	76.4	85	93.8	106.9	121
EQPU MODEL - SEASONAL COOLING PERFORMANCE													
(Δ)	Pdesignc (EN 14825)	kW	110.5	121.5	138.4	156.3	175.3	200.2	223.1	241.3	276.2	309.1	345
(Δ)	SEER (EN 14825)		4.21	4.26	4.1	4.22	4.27	4.21	4.24	4.29	4.3	4.29	4.3
(□)	ηs,c	%	165	167	161	166	168	165	167	169	169	168	169
EQPUSS MODEL - SEASONAL COOLING PERFORMANCE													
(Δ)	Pdesignc (EN 14825)	kW	100.6	108.6	126.5	140.5	155.4	181.3	199.3	218.4	251.4	280.2	318.2
(Δ)	SEER (EN 14825)		4.13	3.99	4.01	4.07	3.95	4.08	4	4.09	4.17	4.17	4.13
(□)	ηs,c	%	162	157	157	160	155	160	157	160	164	164	162
SOUND LEVEL													
(3)	EQPU sound pressure	dB(A)	55	56	57	57	58	59	59	58	60	60	62
(3)	Sound pressure EQPUSS	dB(A)	47	47	48	48	49	50	50	51	53	53	54
(4)	Sound power EQPU	dB(A)	87	88	89	89	90	91	91	90	92	92	94
(4)	Sound power EQPUSS	dB(A)	79	79	80	80	81	82	82	83	85	85	86
OTHER DETAILS													
	Scroll compressor/stages	n.	2/3	2/3	2/2	2/3	2/2	2/3	2/2	4/4	4/4	4/4	4/4
	Circuits	n.	1	1	1	1	1	1	1	2	2	2	2
	Electric power 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	400-3-50	400-3-50	400-3-50

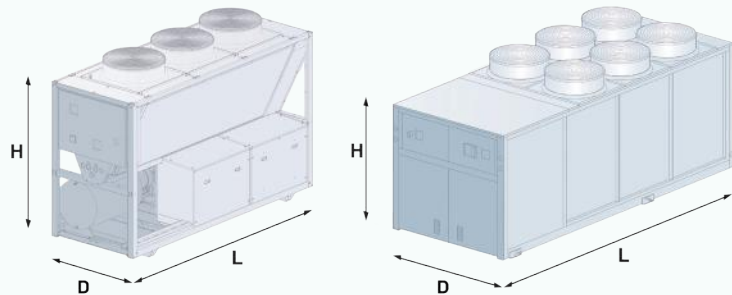
SERIES EQPHU / EQPHUSS

EQPHU MODEL			2110	2120	2140	2150	2170	2200	2220	4240	4270	4310	4340
(2)	Nominal heating power	kW	114.5	124.5	141.6	161.6	181.7	204.8	233.9	249.8	282.8	321	357
(2)	C.O.P.		3.22	3.22	3.21	3.22	3.23	3.22	3.21	3.2	3.2	3.2	3.2
(1)	Nominal refrigeration capacity		101.6	112.6	126.5	145.4	161.4	186.3	209.3	231.3	263.3	301.1	334.1
(2)	Power consumption	kW	35.6	38.7	44.1	50.2	56.3	63.6	72.9	78.1	88.4	100.3	111.6
EQPHUSS MODEL													
(2)	Nominal heating power	kW	110.5	118.5	136.5	153.6	171.6	194.7	221.8	236.7	266.7	301	341.9
(2)	C.O.P.		3.28	3.29	3.27	3.26	3.26	3.23	3.26	3.12	3.11	2.95	3.08
(1)	Nominal refrigeration capacity	kW	91.6	100.6	118.6	130.6	144.5	169.5	187.4	206.5	238.4	270.3	302.3
(2)	Power consumption	kW	33.7	36	41.7	47.1	52.6	60.3	68	75.9	85.8	102	111
EQPHU MODEL - SEASONAL HEATING PERFORMANCE													
(▲)	Pdesignh (EN 14825)	kW	96	104	118	135	150	173	201	211	242	273	302
(▲)	SCOP (EN 14825)		3.53	3.51	3.75	3.49	3.76	3.39	3.57	3.64	3.62	3.64	3.63
(■)	ηs	%	138	138	147	137	148	133	140	142	142	143	142
EQPHUSS MODEL - SEASONAL HEATING PERFORMANCE													
(▲)	Pdesignh (EN 14825)	kW	91	98	113	127	141	165	190	199	227	254	288
(▲)	SCOP (EN 14825)		3.62	3.61	3.84	3.59	3.87	3.53	3.65	3.56	3.54	3.37	3.52
(■)	ηs	%	142	141	151	141	152	138	143	139	139	132	138
SOUND LEVEL													
(3)	Sound pressure EQPHU	dB(A)	53	54	55	55	56	57	57	58	60	60	62
(3)	Sound pressure EQPHUSS	dB(A)	47	47	48	48	49	50	50	51	53	53	54
(3)	Sound power EQPHU	dB(A)	85	86	87	87	88	89	89	90	92	92	94
(4)	Sound power EQPHUSS	dB(A)	79	79	80	80	81	82	82	83	85	85	86
OTHER DETAILS													
	Scroll compressor/stages	n.	2/3	2/3	2/2	2/3	2/2	2/3	2/2	4/4	4/4	4/4	4/4
	Circuits	n.	1	1	1	1	1	1	1	2	2	2	2
	Electric power 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	400-3-50	400-3-50	400-3-50

See legend on page 24

MODEL EQPU / EQPUSS		2110	2120	2140	2150	2170	2200	2220	4240	4270	4310	4340	
DIMENSIONS AND WEIGHTS													
	L - Length	mm	3,600	3,600	3,600	3,600	4,550	4,550	4,550	4,800	4,800	5,300	5,300
	H - Height	mm	2,440	2,440	2,440	2,440	2,440	2,440	2,440	2,030	2,030	2,030	2,030
	D - Depth	mm	1,350	1,350	1,350	1,350	1,350	1,350	1,350	2,090	2,090	2,090	2,090
(5)	Weight EQPU	Kg	1,090	1,100	1,110	1,130	1,280	1,300	1,320	2,290	2,390	2,520	2,640
(5)	Weight EQPUSS	Kg	1,250	1,260	1,270	1,290	1,440	1,460	1,480	2,420	2,520	2,650	2,770
MODEL EQPHU / EQPHUSS		2110	2120	2140	2150	2170	2200	2220	4240	4270	4310	4340	
DIMENSIONS AND WEIGHTS													
	L - Length	mm	3,600	3,600	3,600	3,600	4,550	4,550	4,550	4,800	4,800	5,300	5,300
	H - Height	mm	2,440	2,440	2,440	2,440	2,440	2,440	2,440	2,030	2,030	2,030	2,030
	D - Depth	mm	1,350	1,350	1,350	1,350	1,350	1,350	1,350	2,090	2,090	2,090	2,090
(5)	Weight EQPHU	kg	1,380	1,410	1,420	1,500	1,670	1,690	1,780	2,470	2,570	2,720	2,840
(5)	Weight EQPHUSS	kg	1,420	1,450	1,460	1,540	1,710	1,730	1,820	2,600	2,700	2,850	2,970

- (1) Air: 35°C - Water: 12/7 °C.
 (2) Air: 7 °C B.S. 6°C B.H.- Water: 40/45°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 UNI EN ISO 9614.
 (5) Weight referring to empty unit without accessories.
 In accordance with EN 14511:2013.
 (Δ) Low temperature application (7°C).
 (□) Seasonal energy efficiency: low temperature cooling (Regulation (EU) 2016/2281).
 (▲) In medium climatic conditions, low temperature application (35°C).
 (■) Seasonal energy efficiency: low-temperature heating in medium climate (EU Regulations No. 811/213 and No. 813/2013).



AVAILABLE OPTIONS

FACTORY-ASSEMBLED ACCESSORIES

- Shell & tubes evaporator
- PUMP, single or double of which one is in stand-by with automatic operation. The electric pumps are available in low or high pressure versions
- TANK & PUMP with integrated buffer tank from 300 a 700 litres (depending on models) and single or double electric pump, with expansion vessel, air vent valves, safety valve and pressure gauges on the water side
- Variable flow management in primary circuit VPF
- Desuperheater
- 100% heat recovery
- Condensation control -10°C
- Condensation control -15 °C with fans with EC motor (standard in SS version)
- Condensation control with fans with EC motor with overpressure
- Power factor correction capacitors (Cosφ > 0.94)
- Forced limitation of electrical absorption
- Forced noise limitation
- Energy Parameter Meter
- Optimisation of energy efficiency
- Soft starter
- Compressor sound insulation
- Compressor insulation
- Keys in suction and impulsion of the refrigerating circuit
- Refrigerant leak detector
- High and low pressure gauges of the refrigeration circuit
- Double safety valve
- Metal filters or coil, protection screens
- Microchannel coils with E-coating treatment
- Pre-painted copper/copper or copper/aluminium coils
- Control min./max. supply voltage
- Double setpoint via digital signal
- Variable setpoint via analogue signal 4-20 mA
- Evaporator anti-freeze heater, control panel, tank accumulators, electric pumps and heat exchangers for heat recovery if present
- Complementary electric heater in buffer
- Low-temperature water production
- Serial interfaces for communication with other devices
- Anti-vibration supports

ACCESSORIES SUPPLIED SEPARATELY

- Remote keyboard with display
- Thermostat with display
- Hitecsa supervising systems for remote monitoring and management of the unit
- Hitecsa sequencer for the integrated management of several chillers