



EQPUB

Cooling only

EQPHUB

Heat pump



AIR-WATER CHILLERS | AXIAL SCROLL

Compact, low-power version for replacement markets

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: 102.5 to 328.7 kW
- Heating capacities: 109.5 to 354.6 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 coil 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

- High performance range with wide operating limits
- Wide range of accessories
- Compact B version for replacement markets
- Versatile for 2 pipe + DHW installations (with option RC100)
- Integrated MASTER/SLAVE management

VERSIONS

- Basic version (EQPUB - EQPHUB)
- S - Silenced version with compressor sound insulation, reduced speed fans (EQPUBS - EQPHUBS)

MODELS

- **EQPUB:** base unit intended for cooling only
- **EQPUBS:** silenced unit intended for cooling only
- **EQPHUB:** heat pump unit
- **EQPHUBS:** heat pump silenced unit

REGULATION

Integrated control:
MINI PGD



Remote control accessory:
PGD



See regulation and control on page 107

SERIES EQPUB / EQPUBS

EQPUB MODEL			2110	2120	2140	2150	2170	2200	2220
(1)	Nominal refrigeration capacity	kW	106.5	114.4	127.4	147.3	165.2	188.1	212.1
(1)	E.E.R.		2.81	2.79	2.8	2.81	2.81	2.8	2.8
(1)	Power consumption	kW	37.9	41	45.5	52.4	58.8	67.2	75.8
EQPUBS MODEL									
(1)	Nominal refrigeration capacity	kW	102.5	110.4	122.4	142.3	159.2	183.2	205.1
(1)	E.E.R.		2.72	2.67	2.65	2.71	2.7	2.66	2.7
(1)	Power consumption	kW	37.7	41.3	46.2	52.5	59	68.9	76
EQPUB MODEL - SEASONAL COOLING PERFORMANCE									
(Δ)	Pdesignc (EN 14825)	kW	106.5	114.4	127.3	147.2	165.2	188.1	212
(Δ)	SEER (EN 14825)		3.85	3.87	3.89	3.84	3.91	4	3.89
(□)	ηs,c	%	151	152	153	150	153	157	153
EQPUBS MODEL - SEASONAL COOLING PERFORMANCE									
(Δ)	Pdesignc (EN 14825)	kW	102.5	110.4	122.4	142.3	159.2	183.2	205.1
(Δ)	SEER (EN 14825)		3.92	3.94	3.93	3.96	3.95	4	3.96
(□)	ηs,c	%	154	155	154	155	155	157	155
SOUND LEVEL									
(3)	Sound pressure EQPUB	dB(A)	55	56	56	57	58	58	59
(3)	Sound pressure EQPUBS	dB(A)	49	50	50	51	52	52	53
(4)	Sound power EQPUB	dB(A)	87	88	88	89	90	90	91
(4)	Sound power EQPUBS	dB(A)	81	82	82	83	84	84	85
OTHER DETAILS									
	Scroll compressor/stages	n.	2/3	2/3	2/2	2/3	2/2	2/3	2/2
	Circuits	n.	1	1	1	1	1	1	1
	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

EQPUB MODEL			4150	4170	4200	4220	4240	4270	4310	4340
(1)	Nominal refrigeration capacity	kW	146.3	166.4	189.2	213.2	229.2	256	299.9	328.7
(1)	E.E.R.		2.99	2.9	2.83	2.92	2.8	2.8	2.81	2.76
(1)	Power consumption	kW	48.9	57.4	66.9	73	81.9	91.4	106.7	119.1
EQPUBS MODEL										
(1)	Nominal refrigeration capacity	kW	142.3	161.4	182.3	207.2	224.2	250	291	319.7
(1)	E.E.R.		2.93	2.82	2.67	2.82	2.68	2.66	2.68	2.61
(1)	Power consumption	kW	48.6	57.2	68.3	73.5	83.7	94	108.6	122.5
EQPUB MODEL - SEASONAL COOLING PERFORMANCE										
(Δ)	Pdesignc (EN 14825)	kW	146.3	166.4	189.2	213.1	229.2	256	299.9	328.6
(Δ)	SEER (EN 14825)		4.05	4.09	4.09	4.12	4.04	4.1	4.02	4.03
(□)	ηs,c	%	159	161	161	162	159	161	158	158
EQPUBS MODEL - SEASONAL COOLING PERFORMANCE										
(Δ)	Pdesignc (EN 14825)	kW	142.3	161.4	182.3	207.2	224.2	250	291	319.7
(Δ)	SEER (EN 14825)		4.15	4.15	4.03	4.16	4.06	4.07	4.07	4.03
(□)	ηs,c	%	163	163	158	163	159	160	160	158
SOUND LEVEL										
(3)	Sound pressure EQPUB	dB(A)	57	57	57	58	60	60	60	61
(3)	Sound pressure EQPUBS	dB(A)	51	51	51	52	54	54	56	57
(4)	Sound power EQPUB	dB(A)	89	89	89	90	92	92	92	93
(4)	Sound power EQPUBS	dB(A)	83	83	83	84	86	86	88	89
OTHER DETAILS										
	Scroll compressor/stages	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
	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

(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 made in accordance with UNI EN ISO 9614.

In accordance with EN 14511:2013.

(Δ) Low temperature application (7°C).

(□) Seasonal energy efficiency: low temperature cooling (Regulation (EU) 2016/2281).

SERIES EQPHUB / EQPHUBS

EQPHUB MODEL			2110	2120	2140	2150	2170	2200	2220
(2)	Nominal heating power	kW	112.6	123.7	139.7	158.8	176.9	198	229.1
(2)	C.O.P.		3.05	3.08	3.08	3.04	3.06	3.07	3.07
(1)	Nominal refrigeration capacity	kW	99.5	110.4	123.4	142.3	159.3	182.2	206.1
(2)	Power consumption	kW	36.9	40.2	45.4	52.2	57.8	64.5	74.6

EQPHUBS MODEL			2110	2120	2140	2150	2170	2200	2220
(2)	Nominal heating power	kW	109.5	121.7	135.7	155.8	173.9	195.9	226
(2)	C.O.P.		3.1	3.13	3.1	3.13	3.1	3.09	3.13
(1)	Nominal refrigeration capacity	kW	97.6	106.5	117.5	136.4	152.3	175.3	199.2
(2)	Power consumption	kW	35.3	38.9	43.8	49.8	56.1	63.4	72.2

EQPHUB MODEL - SEASONAL HEATING PERFORMANCE			2110	2120	2140	2150	2170	2200	2220
(▲)	Pdesign (EN 14825)	kW	95	104	119	134	149	170	200
(▲)	SCOP (EN 14825)		3.38	3.4	3.67	3.36	3.63	3.34	3.53
(■)	ηs	%	132	133	144	131	142	131	138

EQPHUBS MODEL - SEASONAL HEATING PERFORMANCE			2110	2120	2140	2150	2170	2200	2220
(▲)	Pdesign (EN 14825)	kW	92	102	115	131	146	167	197
(▲)	SCOP (EN 14825)		3.47	3.49	3.71	3.5	3.72	3.39	3.62
(■)	ηs	%	136	136	145	137	146	133	142

SOUND LEVEL			2110	2120	2140	2150	2170	2200	2220
(3)	Sound pressure EQPHUB	dB(A)	53	54	54	55	56	56	57
(3)	Sound pressure EQPHUBS	dB(A)	49	50	50	51	52	52	53
(4)	Sound power EQPHUB	dB(A)	85	86	86	87	88	88	89
(4)	Sound power EQPHUBS	dB(A)	81	82	82	83	84	84	85

OTHER DETAILS			2110	2120	2140	2150	2170	2200	2220
	Scroll compressor/stages	n.	2/3	2/3	2/2	2/3	2/2	2/3	2/2
	Circuits	n.	1	1	1	1	1	1	1
	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

EQPHUB MODEL			4150	4170	4200	4220	4240	4270	4310	4340
(2)	Nominal heating power	kW	152.7	172.6	197.8	225.9	249	281.3	319.3	354.6
(2)	C.O.P.		3.09	3.14	3.04	3.04	3.03	3.01	3.01	2.98
(1)	Nominal refrigeration capacity	kW	141.3	163.4	186.2	209.1	227.1	253.9	295.9	324.7
(2)	Power consumption	kW	49.4	55	65.1	74.3	82.2	93.5	106.1	119

EQPHUBS MODEL			4150	4170	4200	4220	4240	4270	4310	4340
(2)	Nominal heating power	kW	152.7	167.6	192.8	219.9	245	278.3	315.2	345.5
(2)	C.O.P.		3.09	3.12	3.09	3.09	3.09	3.05	3.07	3.03
(1)	Nominal refrigeration capacity	kW	141.3	156.4	180.3	200.2	220.2	248	286.1	313.8
(2)	Power consumption	kW	49.4	53.7	62.4	71.2	79.3	91.2	102.7	114

EQPHUB MODEL - SEASONAL HEATING PERFORMANCE			4150	4170	4200	4220	4240	4270	4310	4340
(▲)	Pdesign (EN 14825)	kW	129	145	168	192	211	240	271	301
(▲)	SCOP (EN 14825)		3.41	3.47	3.33	3.33	3.35	3.34	3.35	3.32
(■)	ηs	%	133	136	130	130	131	130	131	130

EQPHUBS MODEL - SEASONAL HEATING PERFORMANCE			4150	4170	4200	4220	4240	4270	4310	4340
(▲)	Pdesign (EN 14825)	kW	125	140	164	187	207	238	267	292
(▲)	SCOP (EN 14825)		3.42	3.46	3.4	3.4	3.44	3.39	3.41	3.37
(■)	ηs	%	134	135	133	133	135	133	133	132

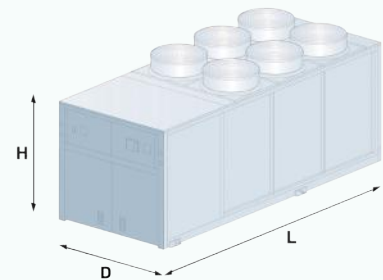
SOUND LEVEL			4150	4170	4200	4220	4240	4270	4310	4340
(3)	Sound pressure EQPHUB	dB(A)	54	54	56	56	58	60	60	61
(3)	Sound pressure EQPHUBS	dB(A)	50	50	52	52	54	55	56	57
(4)	Sound power EQPHUB	dB(A)	86	86	88	88	90	92	92	93
(4)	Sound power EQPHUBS	dB(A)	82	82	84	84	86	87	88	89

OTHER DETAILS			4150	4170	4200	4220	4240	4270	4310	4340
	Scroll compressor/stages	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
	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

See legend on page 28

MODEL EQPUB / EQPUBS		2110	2120	2140	2150	2170	2200	2220	4150	4170	4200	4220	4240	4270	4310	4340	
DIMENSIONS AND WEIGHTS																	
	L - Length	mm	2,650	2,650	2,650	3,600	3,600	3,600	4,550	3,600	3,600	3,600	4,550	4,550	4,550	4,800	4,800
	H - Height	mm	2,440	2,440	2,440	2,440	2,440	2,440	2,440	2,440	2,440	2,440	2,440	2,440	2,030	2,030	2,030
	D - Depth	mm	1,350	1,350	1,350	1,350	1,350	1,350	1,350	1,350	1,350	1,350	1,350	1,350	2,090	2,090	2,090
(5)	Weight EQPUB	kg	990	1,000	1,010	1,160	1,180	1,180	1,340	1,165	1,185	1,190	1,335	1,670	1,690	2,400	2,410
(5)	Weight EQPUBS	kg	1,110	1,120	1,130	1,280	1,300	1,300	1,460	1,300	1,320	1,325	1,470	1,830	1,850	2,440	2,450
MODEL EQPHUB / EQPHUBS		2110	2120	2140	2150	2170	2200	2220	4150	4170	4200	4220	4240	4270	4310	4340	
DIMENSIONS AND WEIGHTS																	
	L - Length	mm	2,650	2,650	2,650	3,600	3,600	3,600	4,550	3,450	3,450	3,700	3,700	4,800	4,800	4,800	4,800
	H - Height	mm	2,440	2,440	2,440	2,440	2,440	2,440	2,440	2,000	2,000	2,030	2,030	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	1,520	1,520	2,090	2,090	2,090	2,090	2,090	2,090
(5)	Weight EQPHUB	kg	1,250	1,310	1,320	1,470	1,480	1,565	1,730	1,450	1,525	1,725	1,800	2,375	2,460	2,580	2,595
(5)	Weight EQPHUBS	kg	1,250	1,310	1,320	1,470	1,480	1,565	1,730	1,475	1,550	1,765	1,840	2,415	2,500	2,620	2,635

- (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 made in accordance with UNI EN ISO 9614.
 (5) Weight referring to empty unit without accessories. In accordance with EN 14511:2013.
 (▲) 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
- Electronic expansion valve
- Condensation control -10°C (standard on S versions)
- Condensation control -15 °C with fans with EC motor
- 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