JWH 4÷40 S/K/P

WATERCOOLED LIQUID CHILLERS AND HEAT PUMPS WITH ROTARY/SCROLL COMPRESSOR AND PLATE EXCHANGERS.

AQUA PLUS

The JWH 4÷40 S/K/P liquid Chillers and Heat Pumps, with R410A refrigerant, are designed for small and medium domestic or industrial systems which require medium-low power, space-saving units and quiet operation. These units are ideal for indoor installation and, equipped with a self-contained structure, they reduce the overall dimensions to a minimum while making installation and maintenance operations easier.
These units can be combined with Fan Coil units or with intermediate heat exchangers for process cooling applications.
Equipped with prepainted plate structure, Rotary/Scroll compressor and plate exchangers, these units have cooling and hydraulic circuits complete with everything necessary for quick installation and high energy efficiency, even in tank and pump version.
A wide range of accessories, factory fitted or supplied separately, completes the outstanding versatility and functionality of the series.

FROM 5 KW TO 49 KW.

VERSION

JWH
Cooling only
JWH/WP
Reversible Heat Pump
JWH/SP
Cooling only with tank and pump
JWH/WP/SP
Reversible Heat Pump with tank and pump

FEATURES

- Self-supporting prepainted steel frame.
- Rotary/Scroll compressor with internal overheat protection and crankcase heater, if needed.
- Condenser AISI 316 stainless steel braze welded plates type, with pressostatic valve.
- Evaporator AISI 316 stainless steel braze welded plates type, complete with water differential pressure switch.
- R410A refrigerant.
- Electrical board includes: main switch with door lock device, fuses, compressor and pump remote control switch.
- Water circuit for SP version includes: insulated tank, circulating pump, safety valve, gauge and expansion vessel.
- Microprocessor control and regulation system.

ACCESSORIES

FACTORY FITTED ACCESSORIES:

BT	Low water temperature kit
PS	Single circulating pump
FE	Antifreeze heater for evaporator
FA	Antifreeze heater for tank

LOOSE ACCESSORIES:

CR	Remote control panel
IS	Modbus RTU protocol, RS485 serial interface
PV	Pressure valve (for cooling only versions)
VV	Pressure valve and solenoid valve (for WP versions)
AG	Rubber shock absorbers

TECHNICAL DATA - JWH 4÷40 S/K/P

MODEL			4	5	7	8	9	11	14
Cooling	Cooling capacity (1)	kW	4.6	5.8	7.1	8.3	9.6	11.6	14.3
	Absorbed power (1)	kW	1.1	1.4	1.8	2.0	2.3	2.9	3.4
	EER (1)		4.18	4.14	3.94	4.15	4.17	4.00	4.21
Cooling (EN14511)	Cooling capacity (1)	kW	4.6	5.7	7.0	8.2	9.5	11.5	14.2
	Absorbed power (1)	kW	1.2	1.5	2.0	2.2	2.5	3.2	3.7
	EER (1)		3.83	3.70	3.47	3.80	3.78	3.58	3.80
	ESEER		4.45	4.25	4.16	4.40	4.45	4.26	4.51
	SEER (2)		5.17	5.11	5.16	5.11	5.23	5.21	5.31
	Energy Efficiency (2)	%	199	196	198	196	201	200	204
Heating	Heating capacity (3)	kW	5.9	7.2	8.8	10.4	12.5	14.9	17.5
	Absorbed power (3)	kW	1.4	1.7	2.2	2.5	3.0	3.5	4.3
	COP (3)		4.21	4.24	4.00	4.16	4.17	4.26	4.07
Heating (EN14511)	Heating capacity (3)	kW	5.1	6.7	8.4	9.8	11.9	13.7	17.1
	Absorbed power (3)	kW	1.5	1.8	2.5	2.8	3.7	3.9	4.5
	COP (3)		3.38	3.64	3.31	3.51	3.25	3.56	3.81
	SCOP (4)		4.20	4.15	3.85	4.18	4.31	4.38	4.34
	Energy Efficiency (4)	%	160	158	146	159	164	167	166
	Energy Class (4)		A++	A++	A+	A++	A++	A++	A++
Compressor	Type		Rotary				Scroll		
	Quantity	n°	1	1	1	1	1	1	1
Evaporator	Water flow	l/s	0.22	0.28	0.34	0.40	0.46	0.55	0.68
	Pressure drops	kPa	21	30	44	26	30	45	42
	Water connections	"G	1"	1"	1"	1"	1"	1"	1"
Condenser	Water flow	l/s	0.07	0.09	0.11	0.12	0.14	0.17	0.21
	Pressure drops	kPa	3	4	5	6	8	10	5
	Water connections	"G	1"	1"	1"	1"	1"	1"	1"
Electrical characteristics	Power supply	V/Ph/Hz	230/1/50						400/3+N/50
	Max. running current	A	8	10	13	14	16	22	9
	Max. starting current	A	37	43	62	62	75	86	50
Unit SP versions	Water flow	l/s	0.22	0.28	0.34	0.40	0.46	0.55	0.68
	Pump available static pressure	kPa	40	33	38	55	50	35	128
	Tank water volume	l	50	50	50	50	50	50	50
	Water connections	"G	1"	1"	1"	1"	1"	1"	1"
Sound pressure	STD/SP version (5)	dB(A)	36	36	36	36	37	39	39
Weights	Transport weight (6)	Kg	77	78	80	84	87	90	93
	Operating weight (6)	Kg	78	79	81	85	88	91	95

MODEL			16	18	20	24	27	34	40
Cooling	Cooling capacity (1)	kW	17.1	20.0	23.0	27.7	33.6	39.7	49.2
	Absorbed power (1)	kW	4.1	4.8	5.5	6.8	7.9	9.3	11.5
	EER (1)		4.17	4.17	4.18	4.07	4.25	4.27	4.28
Cooling (EN14511)	Cooling capacity (1)	kW	17.0	19.8	22.8	27.5	33.3	39.4	48.8
	Absorbed power (1)	kW	4.4	5.2	6.0	7.4	8.7	10.1	12.1
	EER (1)		3.86	3.79	3.79	3.72	3.83	3.92	4.03
	ESEER		4.39	4.48	4.42	4.40	4.64	4.65	4.67
	SEER (2)		5.61	6.37	6.35	5.53	6.10	6.49	6.25
	Energy Efficiency (2)	%	216	247	246	213	236	252	242
Heating	Heating capacity (3)	kW	20.8	24.3	28.4	33.8	39.8	47.0	59.5
	Absorbed power (3)	kW	5.4	6.1	7.0	8.2	10.1	11.7	14.4
	COP (3)		3.85	3.98	4.06	4.12	3.94	4.02	4.13
Heating (EN14511)	Heating capacity (3)	kW	19.7	22.5	26.3	31.8	37.9	44.5	56.4
	Absorbed power (3)	kW	5.6	6.3	7.2	8.9	10.8	12.4	15.2
	COP (3)		3.50	3.59	3.67	3.56	3.50	3.58	3.71
	SCOP (4)		3.95	4.05	4.05	4.31	3.94	4.18	4.28
	Energy Efficiency (4)	%	150	154	154	164	150	159	163
	Energy Class (4)		A+	A++	A++	A++	A+	A++	A++
Compressor	Type		Scroll						
	Quantity	n°	1	1	1	1	1	1	1
Evaporator	Water flow	l/s	0.82	0.96	1.10	1.32	1.61	1.90	2.35
	Pressure drops	kPa	29	40	47	48	60	49	54
	Water connections	"G	1"	1"	1"	1"	1"	1"	1"
Condenser	Water flow	l/s	0.25	0.30	0.34	0.41	0.50	0.58	0.73
	Pressure drops	kPa	8	10	13	20	21	22	22
	Water connections	"G	1"	1"	1"	1"	1"	1"	1"
Electrical characteristics	Power supply	V/Ph/Hz	400/3+N/50						
	Max. running current	A	11	14	15	18	20	23	29
	Max. starting current	A	71	74	74	142	142	147	197
Unit SP versions	Water flow	l/s	0.82	0.96	1.10	1.32	1.61	1.90	2.35
	Pump available static pressure	kPa	131	100	93	187	160	131	155
	Tank water volume	l	50	50	50	150	150	150	150
	Water connections	"G	1"	1"	1"	1"	1"	1"	1"
Sound pressure	STD/SP version (5)	dB(A)	40	41	43	43	43	44	44
Weights	Transport weight (6)	Kg	96	98	100	190	198	204	218
	Operating weight (6)	Kg	98	100	102	193	201	207	221

DIMENSIONS

MODEL			4	5	7	8	9	11	14	16	18	20	24	27	34	40
L	STD	mm	550	550	550	550	550	550	550	550	550	550	550	550	550	550
	SP	mm	550	550	550	550	550	550	550	550	550	550	1100	1100	1100	1100
W	STD/SP	mm	550	550	550	550	550	550	550	550	550	550	550	550	550	550
H	STD/SP	mm	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200

CLEARANCE AREA

JWH 4÷40 S/K/P

500 | 800 | 800 | 800

JWH/SP 24÷40 S/K/P

500 | 800 | 800 | 800

Electrical board side

NOTES

1. Chilled water from 12 to 7 °C, water temperature at the condenser from 15 to 35 °C.
2. Seasonal energy efficiency of cooling at medium temperature. According to EU Regulation n. 2016/2281.
3. Heated water from 40 to 45 °C, water temperature at the evaporator from 15 to 10 °C.
4. Seasonal energy efficiency of heating at low temperature with average climatic conditions. According to EU Regulation n. 811/2013.
5. Sound pressure level measured in free field conditions at 1 m from the unit. According to ISO 3744.
6. Unit without tank and pump.

N.B. Weights of WP versions are specified on technical brochure.