KAPPA V ECHOS

166÷533 kW

Cod. 102160A02

Water chiller

KAPPA V ECHOS

Reversible heat pump

KAPPA V ECHOS/HP

Water chiller with storage tank and pumps

KAPPA V ECHOS/ST

Chiller with heat recovery condenser

KAPPA V ECHOS/DC

Chiller with desuperheaters

KAPPA V ECHOS/DS

Low noise chiller

KAPPA V ECHOS/LN

Super low noise unit

KAPPA V ECHOS/SLN

CE 1370

R407C

Water chiller

Air / Water

Axial fans and Screw compressors

BLUE BOX

condizionamento

Technical catalogue

TECHNICAL DATA

UNIT SIZE		16.1	20.1	27.1	32.2	36.1	36.2
COOLING (*)							
Nominal capacity	kW	165.6	198.3	266.4	328.3	359.1	358.1
Evaporator water flow	l/h	28434	34085	45762	56388	61680	61523
Basic version pressure drop	kPa	46.9	40.2	40.2	37.3	36.1	30.2
HEATING (**)							
Nominal capacity	kW	172.4	208.7	288.1	345.8	379.5	384.1
Condenser water flow	l/h	29958	36276	50067	60093	65957	66761
Cond. pressure drop	kPa	48.7	42.7	45.1	39.7	38.8	33.4
COMPRESSORS	**type**	**Vite**					
Quantity	n	1	1	1	2	1	2
Refrigerant circuits	n	1	1	1	2	1	2
Power consumption in cooling (*)	kW	57.8	74.3	96.1	115.2	119.5	131.4
Absorbed power heating (**)	kW	58.4	71.7	93.9	112.5	115.2	123.7
Capacity steps	%	Continue	Continue	Continue	Continue	Continue	Continue
FANS	**type**	**Axial**					
Air flow	m3/h	63000	61200	84000	126000	122400	124200
VERSION ST 2PS							
External available pressure	kPa	186	155	189	189	171	177
Tank capacity	l	450	450	585	740	740	740
BASIC UNIT SIZES AND WEIGHTS							
Length	mm	4246	4246	3246	4252	4246	4252
Width	mm	1246	1246	2316	2284	2316	2284
Height	mm	2368	2368	2368	2368	2368	2368
Functional weight	kg	1590	1658	2126	2978	2666	3080

UNIT SIZE		38.1	40.2	46.2	48.1	53.2	
COOLING (*)							
Nominal capacity	kW	374.6	397.6	473.2	503.3	532.5	
Evaporator water flow	l/h	64353	68331	81288	86441	91476	
Basic version pressure drop	kPa	32.2	37.1	44.3	43.4	48.5	
HEATING (**)							
Nominal capacity	kW	413.8	421.6	499.4	517.0	571.1	
Condenser water flow	l/h	71920	73273	52581	89845	99255	
Cond. pressure drop	kPa	37.6	40.1	61.1	36.3	44.3	
COMPRESSORS	**type**	**Vite**					
Quantity	n	1	2	2	1	2	
Refrigerant circuits	n	1	2	2	1	2	
Power consumption in cooling (*)	kW	141.4	148.8	166.3	175.1	192.4	
Absorbed power heating (**)	kW	134.6	137.1	165.7	168.6	187.5	
Capacity steps	%	Continue	Continue	Continue	Continue	Continue	
FANS	**type**	**Axial**					
Air flow	m3/h	122400	122400	169000	168000	168000	
VERSION ST 2PS							
External available pressure	kPa	233	221	211	203	187	
Tank capacity	l	740	740	740	740	740	
BASIC UNIT SIZES AND WEIGHTS							
Length	mm	4246	4252	5752	5746	5752	
Width	mm	2316	2284	2284	2316	2284	
Height	mm	2368	2368	2368	2368	2368	
Functional weight	kg	2858	3182	3818	3472	4084	

(*) ambient air temperature 35 °C; evaporator inlet-outlet temperature 12-7 °C.
(**) ambient air temperature 8 °C DB, 70% RH; condenser water inlet - outlet temperature 40-45 °C

ELECTRICAL DATA

ELECTRIC CHARACTERISTICS		16.1	20.1	27.1	32.2	36.1	36.2	38.1	40.2
Maximum absorbed power (1)	kW	74.9	92.2	120.8	149.8	157.5	167.1	177.9	184.4
		(77.9)	(95.2)	(126.3)	(155.3)	(163)	(172.6)	(187.1)	(193.6)
Maximum starting current	A	246	354	398	379	482	487	585	518
		(252.4)	(360.4)	(409.3)	(390.3)	(493.3)	(498.3)	(604)	(537)
Full load current (2)		133	164	222	266	286	297	321	328
		(139.4)	(170.4)	(233.3)	(277.3)	(297.3)	(308.3)	(340)	(347)
Fan motor nominal power	n x kW	3 x 2	3 x 2	4 x 2	6 x 2	6 x 2	6 x 2	6 x 2	6 x 2
Fan motor nominal absorbed current	n x A	3 x 4	3 x 4	4 x 4	6 x 4	6 x 4	6 x 4	6 x 4	6 x 4
Pump motor nominal power	kW	(1 x 3)	(1 x 3)	(1 x 5.5)	(1 x 5.5)	(1 x 5.5)	(1 x 5.5)	(1 x 9.2)	(1 x 9.2)
Pump motor nominal current	A	(1 x 6.37)	(1 x 6.37)	(1 x 11.3)	(1 x 11.3)	(1 x 11.3)	(1 x 11.3)	(1 x 19)	(1 x 19)
Power supply	V/f/Hz	400/3~/50 ±5%	400/3~/50 ±5%	400/3~/50 ±5%	400/3~/50 ±5%	400/3~/50 ±5%	400/3~/50 ±5%	400/3~/50 ±5%	400/3~/50 ±5%
Control power supply	V/f/Hz	230/~/50	230/~/50	230/~/50	230/~/50	230/~/50	230/~/50	230/~/50	230/~/50

ELECTRIC CHARACTERISTICS		46.2	48.1	53.2					
Maximum absorbed power (1)	kW	215.0	226.0	241.6					
		(224.2)	(235.2)	(250.8)					
Maximum starting current	A	566	676	620					
		(585)	(695)	(639)					
Full load current (2)		390	404	444					
		(409)	(423)	(463)					
Fan motor nominal power	n x kW	8 x 2	8 x 2	8 x 2					
Fan motor nominal absorbed current	n x A	8 x 4	8 x 4	8 x 4					
Pump motor nominal power	kW	(1 x 9.2)	(1 x 9.2)	(1 x 9.2)					
Pump motor nominal current	A	(1 x 19)	(1 x 19)	(1 x 19)					
Power supply	V/f/Hz	400/3~/50 ±5%	400/3~/50 ±5%	400/3~/50 ±5%					
Control power supply	V/f/Hz	230/~/50	230/~/50	230/~/50					

(1) mains power supply to allow unit operation

(2) maximum current before safety cut-outs stop the unit. This value is never exceeded and must be used to size the electrical supply cables and relevant safety devices (refer to electrical wiring diagram supplied with the unit).

Values in brackets refer to ST version units (units with storage tank and pumps or units with exclusively pumps)

COOLING CAPACITY

MODEL	T0	Ambient air temperature [°C]									
		27		32		35		40		43	
	[°C]	kWf	kWe	kWf	kWe	kWf	kWe	kWf	kWe	kWf	kWe
46.2	4	480.9	139.6	455.0	153.2	438.7	162.0	409.5	177.3	390.4	186.7
	6	503.5	142.8	477.8	156.3	461.7	164.9	432.3	179.6	-	-
	7	514.9	144.5	489.7	157.9	**473.2**	**166.3**	443.6	180.8	-	-
	8	525.7	146.0	500.8	159.4	484.7	167.8	455.1	182.1	-	-
	9	537.5	147.7	512.2	160.9	496.1	169.3	466.6	183.6	-	-
	10	547.8	149.1	523.0	162.4	507.2	170.8	478.1	185.3	-	-
48.1	4	505.1	147.7	480.0	161.0	464.3	169.5	436.1	184.4	418.8	193.7
	6	531.6	151.9	505.8	164.9	490.7	173.3	462.5	187.6	-	-
	7	544.8	154.0	519.0	166.9	**503.3**	**175.1**	475.8	189.3	-	-
	8	557.9	156.1	532.1	168.9	516.6	177.1	489.0	191.2	-	-
	9	571.4	158.2	545.8	171.0	529.8	179.1	501.6	193.1	-	-
	10	583.5	160.1	558.9	173.1	543.0	181.2	514.9	195.4	-	-
53.2	4	542.2	160.9	512.6	177.2	494.7	187.7	463.0	206.0	442.6	217.3
	6	567.6	164.6	538.3	180.6	519.9	190.8	488.1	208.3	-	-
	7	579.2	166.2	550.9	182.3	**532.5**	**192.4**	500.1	209.6	-	-
	8	591.1	167.9	563.4	184.0	545.1	194.0	512.7	211.1	-	-
	9	603.5	169.7	575.9	185.7	557.6	195.6	525.3	212.7	-	-
	10	615.7	171.4	588.2	187.4	570.1	197.4	537.9	214.6	-	-

kWf : cooling capacity [kW]
kWe : compressors power input [kW]
T0 : evaporator water outlet temperature [°C]

HEATING CAPACITY

MODEL	Ta	RH	Condenser water inlet / outlet temperature [°C]							
	[°C]	%	30 / 35		35 / 40		40 / 45		42 / 47	
			kWt	kWe	kWt	kWe	kWt	kWe	kWt	kWe
46.2	-5	90	384.0	126.9	377.7	139.5	-	-	-	-
	0	90	435.7	127.8	427.9	142.5	421.5	160.0	-	-
	5	80	487.9	130.7	479.7	146.1	471.7	164.1	468.5	172.0
	8	70	518.1	132.8	508.8	148.0	**499.4**	**165.7**	495.4	173.3
	10	70	545.1	134.9	534.5	149.8	523.6	166.9	519.0	174.2
	15	70	545.6	134.9	606.4	154.6	591.3	169.7	584.9	176.1
48.1	-5	90	383.8	128.1	379.7	141.4	-	-	-	-
	0	90	439.9	129.7	434.9	144.5	431.3	162.1	-	-
	5	80	498.9	133.7	492.0	148.8	486.4	166.5	484.5	174.4
	8	70	532.4	136.4	524.4	151.3	**517.0**	**168.6**	514.2	176.1
	10	70	562.2	139.1	552.8	153.6	544.0	170.2	540.6	177.4
	15	70	645.9	146.8	633.1	160.2	620.1	174.9	614.8	181.0
53.2	-5	90	441.7	144.8	435.4	158.8	-	-	-	-
	0	90	497.5	144.9	491.7	161.7	485.7	181.3	-	-
	5	80	554.8	147.5	547.0	165.1	540.8	185.8	538.8	194.9
	8	70	588.2	149.7	578.7	167.2	**571.1**	**187.5**	568.3	196.5
	10	70	617.8	151.7	607.2	168.9	597.7	188.8	594.0	197.3
	15	70	699.8	157.5	686.3	173.8	672.2	191.6	666.4	199.1

kWt : heating capacity [kW]
kWe : compressors power input [kW]
Ta : evaporator inlet air temperature dry bulb [°C]
RH : evaporator inlet air relative humidity [%]

TOTAL HEAT RECOVERY CAPACITY

MODEL	T0	Condenser water inlet / outlet temperature [°C]											
	[°C]	30 / 35			35 / 40			40 / 45			45 / 50		
		kWf	kWe	kWr	kWf	kWe	kWr	kWf	kWe	kWr	kWf	kWe	kWr
16.1	4	172.2	47.2	219.4	162.2	52.3	214.4	151.5	57.8	209.3	140.4	63.7	204.0
	7	187.2	48.4	235.5	177.0	53.3	230.3	**166.3**	**58.6**	**224.9**	154.9	64.3	219.2
	10	202.6	49.5	252.1	192.2	54.4	246.6	181.2	59.8	240.9	169.9	65.7	235.5
20.1	4	206.1	57.9	263.9	195.7	63.1	258.8	183.5	69.0	252.5	169.6	75.4	245.0
	7	222.1	59.4	281.5	212.2	64.6	276.8	**200.2**	**70.2**	**270.4**	186.6	76.2	262.9
	10	238.1	60.9	299.1	228.2	66.0	294.1	216.3	71.5	287.9	203.6	77.6	281.1
27.1	4	268.4	77.4	345.8	254.4	85.2	339.6	239.5	93.7	333.3	223.5	102.9	326.4
	7	288.4	79.3	367.6	274.5	86.8	361.3	**259.7**	**95.0**	**354.7**	243.3	103.7	347.1
	10	307.5	81.0	388.5	293.7	88.5	382.2	279.8	96.6	376.4	263.6	105.3	368.9
32.2	4	326.4	93.0	419.4	309.5	103.5	413.1	290.8	115.0	405.8	271.3	127.2	398.5
	7	351.8	95.0	446.8	334.7	105.2	439.9	**316.5**	**116.2**	**432.7**	296.9	127.8	424.7
	10	375.9	96.9	472.8	359.8	107.0	466.8	342.1	117.8	459.9	322.2	129.4	451.7
36.1	4	343.1	103.7	446.8	327.2	113.7	440.9	309.5	124.7	434.3	289.7	136.6	426.3
	7	369.3	106.6	475.9	353.4	116.3	469.8	**335.6**	**126.8**	**462.4**	316.0	138.1	454.1
	10	393.8	109.5	503.3	379.2	119.2	498.4	361.7	129.5	491.2	341.9	140.7	482.6
36.2	4	367.9	101.1	469.0	350.5	111.4	461.8	331.0	122.9	453.9	308.1	135.3	443.4
	7	395.4	103.4	498.7	378.4	113.4	491.8	**358.9**	**124.5**	**483.3**	336.9	136.3	473.2
	10	421.2	105.4	526.6	404.7	115.3	520.0	386.6	126.2	512.8	365.7	137.9	503.6
38.1	4	362.0	121.4	483.3	343.6	134.5	478.1	322.4	148.5	470.9	298.9	163.2	462.2
	7	388.4	124.1	512.5	370.1	136.8	506.8	**349.1**	**150.1**	**499.3**	326.2	164.1	490.3
	10	413.1	126.7	539.8	396.3	139.2	535.5	375.9	152.4	528.2	352.7	166.4	519.2
40.2	4	390.6	113.6	504.2	372.8	124.7	497.4	351.3	137.0	488.4	327.3	150.4	477.7
	7	417.0	116.2	533.2	400.6	127.1	527.6	**380.0**	**139.0**	**518.9**	356.6	151.6	508.2
	10	443.1	118.7	561.8	426.6	129.4	556.0	406.9	140.9	547.8	385.7	153.3	539.0
46.2	4	475.2	134.8	610.0	450.8	147.8	598.6	423.5	162.3	585.8	393.0	177.8	570.8
	7	511.2	138.2	649.4	487.3	150.9	638.2	**460.1**	**164.7**	**624.8**	430.4	179.4	609.8
	10	546.4	141.4	687.8	522.6	154.0	676.5	497.1	167.6	664.7	467.7	182.2	649.9
48.1	4	459.6	163.6	623.1	432.9	178.0	610.8	403.9	193.4	597.3	371.9	209.8	581.7
	7	497.8	169.5	667.3	471.0	183.3	654.4	**441.2**	**197.9**	**639.2**	409.2	213.5	622.7
	10	536.0	175.8	711.8	508.4	189.7	698.1	478.8	205.0	683.8	445.5	222.0	667.5
53.2	4	536.8	154.8	691.6	508.8	170.4	679.2	479.1	187.5	666.6	446.9	205.9	652.8
	7	576.7	158.5	735.2	548.9	173.7	722.6	**519.4**	**190.1**	**709.5**	486.7	207.4	694.1
	10	615.0	162.0	776.9	587.5	177.0	764.4	559.6	193.2	752.8	527.2	210.5	737.8

kWf : cooling capacity [kW]
kWe : compressors power input [kW]
kWr : total recovery heating capacity [kW]
T0 : evaporator water outlet temperature [°C]

SOUND LEVELS

STANDARD UNIT

MODEL	Octave bands (Hz)																**Total**	
	63 [db]		125 [db]		250 [db]		500 [db]		1000 [db]		2000 [db]		4000 [db]		8000 [db]		[db (A)]	
	Lw	Lp	Lw	Lp	Lw	Lp	Lw	Lp	Lw	Lp	Lw	Lp	Lw	Lp	Lw	Lp	Lw	Lp
16.1	88.0	69.0	86.0	67.0	91.0	72.0	90.0	71.0	90.0	71.0	85.0	66.0	79.0	60.0	72.0	53.0	93.0	74.0
20.1	88.0	69.0	86.0	67.0	91.0	72.0	90.0	71.0	90.0	71.0	85.0	66.0	79.0	60.0	72.0	53.0	93.0	74.0
27.1	86.0	67.0	90.0	71.0	91.0	72.0	88.0	69.0	92.0	73.0	88.0	69.0	82.0	63.0	73.0	54.0	95.0	76.0
32.2	91.0	71.0	89.0	69.0	94.0	74.0	93.0	73.0	93.0	73.0	88.0	68.0	82.0	62.0	75.0	55.0	96.0	76.0
36.1	91.0	71.0	89.0	69.0	94.0	74.0	93.0	73.0	93.0	73.0	88.0	68.0	82.0	62.0	75.0	55.0	96.0	76.0
36.2	91.0	71.0	89.0	69.0	94.0	74.0	93.0	73.0	93.0	73.0	88.0	68.0	82.0	62.0	75.0	55.0	96.0	76.0
38.1	91.0	71.0	89.0	69.0	94.0	74.0	93.0	73.0	93.0	73.0	88.0	68.0	82.0	62.0	75.0	55.0	96.0	76.0
40.2	91.0	71.0	89.0	69.0	94.0	74.0	93.0	73.0	93.0	73.0	88.0	68.0	82.0	62.0	75.0	55.0	96.0	76.0
46.2	89.0	69.0	93.0	73.0	94.0	74.0	91.0	71.0	95.0	75.0	91.0	71.0	85.0	64.0	76.0	56.0	98.0	78.0
48.1	89.0	69.0	93.0	73.0	94.0	74.0	91.0	71.0	95.0	75.0	91.0	71.0	85.0	64.0	76.0	56.0	98.0	78.0
53.2	89.0	69.0	93.0	73.0	94.0	74.0	91.0	71.0	95.0	75.0	91.0	71.0	85.0	64.0	76.0	56.0	98.0	78.0

Lw: sound power values in free field conditions are calculated in accordance with ISO 3746
Lp: sound pressure values measured at 1 meter from the unit in free field conditions in compliance with ISO 3746.

VALUES OF THEORETICAL NOISE ATTENUATION IN FUNCTION OF FREE FIELD DISTANCE

Distance	(m)	1	2	3	4	5	6	7	8	9	10
Attenuation	(dB)	0	6	9,5	12	14	15,5	17	18	19	20

SOUND LEVELS

LOW-NOISE UNITS

MODEL	Octave bands (Hz)																**Total**	
	63 [db]		125 [db]		250 [db]		500 [db]		1000 [db]		2000 [db]		4000 [db]		8000 [db]		[db (A)]	
	Lw	Lp	Lw	Lp	Lw	Lp	Lw	Lp	Lw	Lp	Lw	Lp	Lw	Lp	Lw	Lp	Lw	Lp
16.1	88.0	69.0	80.0	61.0	87.0	68.0	86.0	67.0	87.0	68.0	80.0	61.0	74.0	55.0	68.0	49.0	90.0	71.0
20.1	89.0	70.0	80.0	61.0	88.0	69.0	86.0	67.0	87.0	68.0	81.0	62.0	75.0	55.0	68.0	49.0	90.0	71.0
27.1	84.0	65.0	88.0	69.0	89.0	70.0	87.0	68.0	88.0	69.0	86.0	67.0	78.0	59.0	72.0	53.0	92.0	73.0
32.2	91.0	72.0	83.0	63.0	90.0	71.0	89.0	69.0	90.0	70.0	83.0	64.0	77.0	58.0	71.0	51.0	93.0	73.0
36.1	92.0	72.0	83.0	63.0	91.0	71.0	89.0	69.0	90.0	70.0	84.0	64.0	78.0	58.0	71.0	51.0	93.0	73.0
36.2	92.0	72.0	83.0	63.0	91.0	71.0	89.0	69.0	90.0	70.0	84.0	64.0	78.0	58.0	71.0	51.0	93.0	73.0
38.1	92.0	72.0	83.0	63.0	91.0	71.0	89.0	69.0	90.0	70.0	84.0	64.0	78.0	58.0	71.0	51.0	93.0	73.0
40.2	92.0	72.0	83.0	63.0	91.0	71.0	89.0	70.0	90.0	70.0	84.0	64.0	78.0	58.0	71.0	51.0	93.0	73.0
46.2	87.0	67.0	91.0	71.0	92.0	72.0	90.0	70.0	91.0	70.0	89.0	69.0	81.0	60.0	75.0	54.0	95.0	75.0
48.1	87.0	67.0	91.0	71.0	92.0	72.0	90.0	70.0	91.0	70.0	89.0	69.0	81.0	60.0	75.0	54.0	95.0	75.0
53.2	87.0	67.0	91.0	71.0	92.0	72.0	90.0	70.0	91.0	70.0	89.0	69.0	81.0	60.0	75.0	54.0	95.0	75.0

Lw: sound power values in free field conditions are calculated in accordance with ISO 3746
Lp: sound pressure values measured at 1 meter from the unit in free field conditions in compliance with ISO 3746.

SUPER LOW NOISE UNIT

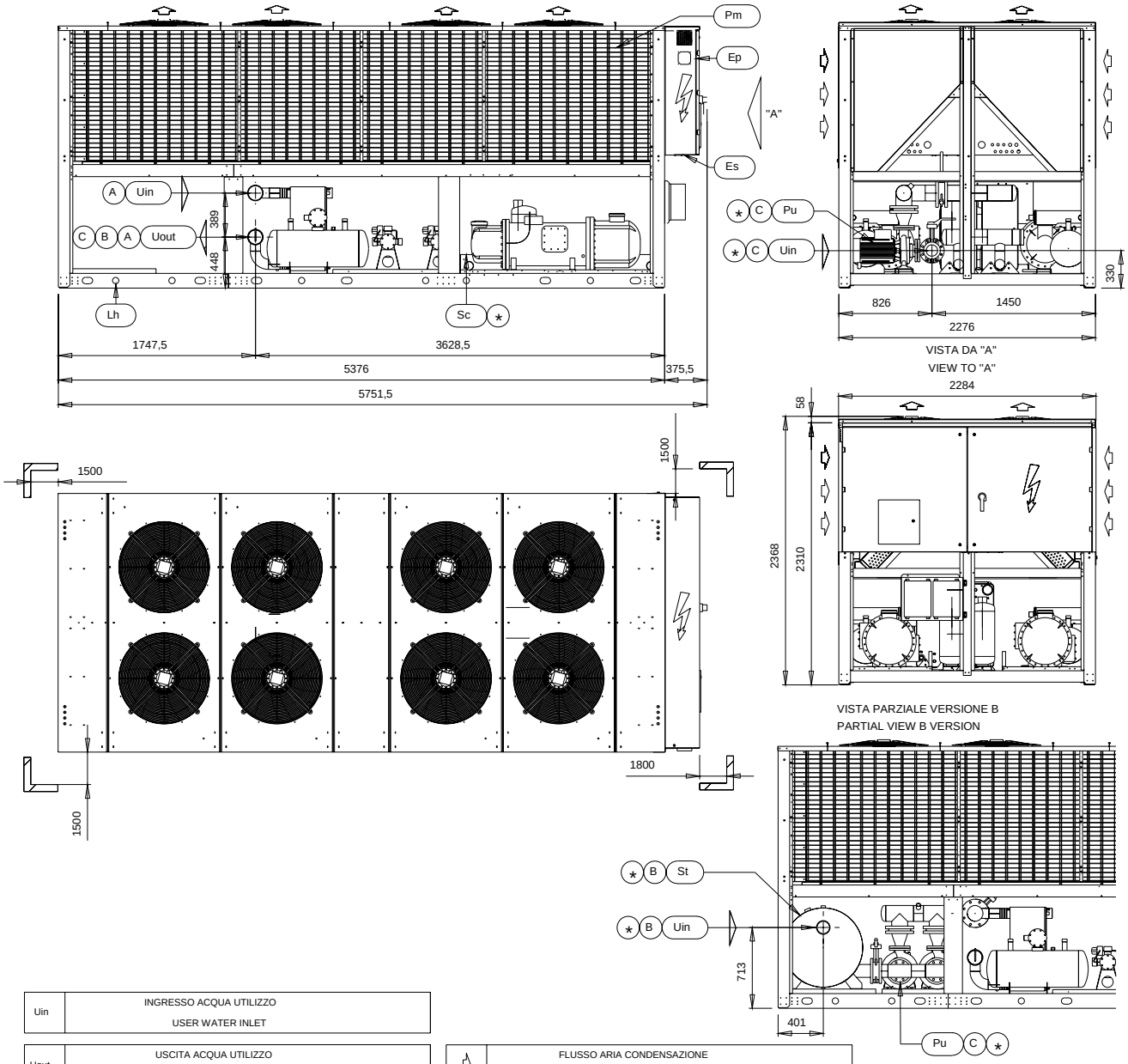
MODEL	Octave bands (Hz)																**Total**	
	63 [db]		125 [db]		250 [db]		500 [db]		1000 [db]		2000 [db]		4000 [db]		8000 [db]		[db (A)]	
	Lw	Lp	Lw	Lp	Lw	Lp	Lw	Lp	Lw	Lp	Lw	Lp	Lw	Lp	Lw	Lp	Lw	Lp
16.1	89.0	70.0	77.0	58.0	85.0	65.0	85.0	65.0	85.0	66.0	77.0	58.0	71.0	52.0	65.0	46.0	88.0	68.0
20.1	90.0	71.0	77.0	58.0	85.0	66.0	85.0	66.0	85.0	66.0	78.0	59.0	71.0	52.0	95.0	45.0	88.0	69.0
27.1	82.0	63.0	83.0	64.0	84.0	65.0	83.0	64.0	86.0	66.0	85.0	65.0	78.0	59.0	70.0	51.0	90.0	71.0
32.2	92.0	73.0	80.0	60.0	88.0	68.0	88.0	68.0	88.0	68.0	80.0	61.0	74.0	54.0	68.0	48.0	91.0	71.0
36.1	93.0	73.0	80.0	60.0	88.0	68.0	88.0	68.0	88.0	68.0	81.0	61.0	74.0	55.0	68.0	49.0	91.0	71.0
36.2	93.0	73.0	80.0	60.0	88.0	68.0	88.0	68.0	88.0	68.0	81.0	61.0	74.0	55.0	68.0	49.0	91.0	71.0
38.1	93.0	73.0	80.0	60.0	88.0	68.0	88.0	68.0	88.0	68.0	81.0	61.0	74.0	55.0	68.0	49.0	91.0	71.0
40.2	93.0	73.0	80.0	60.0	88.0	68.0	88.0	68.0	88.0	68.0	81.0	61.0	74.0	55.0	68.0	49.0	91.0	71.0
46.2	85.0	64.0	86.0	65.0	87.0	66.0	86.0	65.0	89.0	68.0	88.0	67.0	81.0	60.0	73.0	53.0	93.0	72.0
48.1	85.0	64.0	86.0	65.0	87.0	66.0	86.0	65.0	89.0	68.0	88.0	67.0	81.0	60.0	73.0	53.0	93.0	72.0
53.2	85.0	64.0	86.0	65.0	87.0	66.0	86.0	65.0	89.0	68.0	88.0	67.0	81.0	60.0	73.0	53.0	93.0	72.0

Lw: sound power values in free field conditions are calculated in accordance with ISO 3746
Lp: sound pressure values measured at 1 meter from the unit in free field conditions in compliance with ISO 3746.

OVERALL DIMENSIONS, WEIGHTS, CLEARANCES, AND HYDRAULIC CONNECTIONS

KAPPA V ECHOS; 46.2 - 53.2

KAPPA V ECHOS/HP; 46.2 - 53.2



Uin	INGRESSO ACQUA UTILIZZO USER WATER INLET				
Uout	USCITA ACQUA UTILIZZO USER WATER OUTLET		FLUSSO ARIA CONDENSAZIONE CONDENSING AIR FLOW		
Lh	FORI DI SOLLEVAMENTO LIFTING HOLES	Sc	CUFFIA INSONORIZZANTE SOUNDPROOF CASING		
Pm	GRIGLIE DI PROTEZIONE PROTECTIVE METAL MESH	St	SERBATOIO DI ACCUMULO STORAGE TANK		
Ep	QUADRO ELETTRICO ELECTRICAL PANEL	Pu	POMPA PUMP		
Es	INGRESSO ALIMENTAZIONE ELETTRICA ELECTRICAL SUPPLY INLET		SPAZI DI INSTALLAZIONE CLEARANCES	*	OPTIONAL