

PEGASUS

CLOSE CONTROL AIR CONDITIONERS / HEAT PUMPS





pegasus/under

GENERAL FEATURES

The **PEGASUS** air conditioners form a range of machines featuring advanced hi-tech characteristics, designed for a variety of applications, subject to strict requirements in terms of control of internal environmental conditions, continuous operation, reliability and energy saving.

Thanks to the possibility of interfacing to the Buildings Management Supervision system (BMS) where they are installed, to their silentness and to a wide range of accessories, the **PEGASUS** units represent the most suitable solution for Hi-Tech applications (EDP, UPS, control rooms), for post-industrial applications (shopping centres, banks) and for controlled atmosphere rooms (museums, libraries and archives).

PEGASUS air conditioners are available in Over and Under version, *with single or double circuit.*

VERSIONS:

DXA (R407C)

Cooling capacity 6,0 ÷ 90,8 kW

Direct expansion air conditioner in Under and Over versions, for remote air cooled condenser matching,

DXA.P (R407C)

Cooling capacity 6,5 ÷ 90,8 kW

Heating capacity 5,9 ÷ 86,8 kW

Heat pump air conditioner in Over versions, for remote air cooled condenser matching,

DXW (R407C)

Cooling capacity 6,3 ÷ 94,0 kW

Direct expansion air conditioner in Under and Over versions, with built-in water cooled condenser

DXW.P (R407C)

Cooling capacity 6,8 ÷ 40,7 kW

Heating capacity 6,5 ÷ 39,1 kW

Heat pump air conditioner in Over versions, with built-in water cooled condenser.

CW

Cooling capacity 5,7 ÷ 105,0 kW

Chilled water feeding air conditioner in Under and Over versions.

Upflow air delivery (Over)

The air distribution is from the top of the unit directly in to the room.

The air flow in each area is predetermined during the design stage and it is not dependent on the actual state of the load to be dissipated. The system is normally applied in Comfort plants and in those plants having a defined low/medium room thermal loads density.

Downflow air delivery (Under)

The air distribution is from the bottom by means of the plenum between the building floor and the raised floor. This solution is usually applied in hi-tech. room air conditioning and it is most favourable when load is uniformly distributed in all areas of the room.

MAIN COMPONENTS

- Housing in epoxy painted aluminium profile frame. Base and panels in galvanized steel sheet externally coated with PVC film.
- Centrifugal fans directly coupled to electric motor.
- Scroll compressor (DXA – DXW)
- Single or double refrigerant circuit
- Cycle reversing valve (DXA.P – DXW.P)
- 3-way proportional cooling valve with emergency manual control (CW)
- Main switch with door lock safety
- MP.2000 Graphic microprocessor control

MAIN OPTIONAL ACCESSORIES

- Serial port
- Remote air cooled condenser (DXA – DXA.P)
- Supply fans with belt drive system
- Electric or hot water heating system
- Humidification and dehumidification system
- Compressor capacity control (DXA – DXW)
- Free-cooling system (DXW)
- Extra-circuit system (DXA – DXW - CW)
- Hot gas re-heating system (DXA - DXW)
- Plenum on air delivery
- High efficiency filters F5/F6/F7/F9
- Compressor cap for noise reduction



pegasus/over



TECHNICAL DATA AND NOMINAL PERFORMANCES



PEGASUS.DXA under/over

MODEL		5(*) Z1	7(*) Z1	10 Z1	10 Z1	15 Z1	10 Z1	18 Z1	15 Z1	15 Z1	15 Z1	20 Z1	18 Z1	24 Z2	30 Z2
Size		S0	S0	S0	S1	S1	S2	S2	S3S	S3	S4	S4	S5	S5	S5
Cooling capacity (1)	kW	6,0	7,0	8,9	10,9	14,6	11,6	17,3	16,4	15,6	16,7	20,5	19,0	25,1	28,3
Air flow	m ³ /h	1580	1580	1580	3150	3150	3640	3640	5000	5000	5570	5570	6000	6000	6000
Compressors	n.	1	1	1	1	1	1	1	1	1	1	1	1	2	2
Weight	kg	158	163	168	212	217	225	245	300	312	245	255	320	370	375
Sound pressure (5)															
Over	dB(A)	51,5	51,5	51,5	52,0	52,0	54,0	54,0	55,0	55,0	54,5	54,5	55,6	55,6	55,6
Under	dB(A)	56,0	56,0	56,0	64,0	64,0	65,0	65,0	67,0	67,0	66,0	66,0	68,0	68,0	68,0

MODEL		20 Z1	24 Z2	30 Z2	36 Z2	30 Z2	40 Z2	40 Z2	52 Z2	52 Z2	60 Z2	74 Z2	88 Z2	60 Z2	74 Z2	88 Z2
Size		S6	S6	S6	S6	S7	S7	S8	S8	S9	S9	S9	S9	S10	S10	S10
Cooling capacity (1)	kW	22,9	27,0	30,3	35,2	32,2	40,2	43,8	52,9	57,7	63,3	78,1	84,7	68,0	84,4	90,8
Air flow	m ³ /h	8200	8200	8200	8200	10400	10400	13500	13500	17000	17000	17000	17000	22800	24500	24500
Compressors	n.	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Weight	kg	380	425	430	445	580	600	700	820	950	980	1000	1030	1290	1300	1315
Sound pressure (5)																
Over	dB(A)	58,0	58,0	58,0	58,0	59,0	59,0	60,0	60,0	61,5	62,5	62,5	62,5	63,5	65,5	65,5
Under	dB(A)	70,0	70,0	70,0	70,0	71,0	71,0	72,0	72,0	74,0	74,0	74,0	74,0	75,0	77,0	77,0



PEGASUS.DXA.P over - heat pump

MODEL		5(*) Z1	7(*) Z1	10 Z1	15 Z1	18 Z1	20 Z1	24 Z2
Size		S0	S0	S1	S1	S2	S4	S5
Cooling capacity (3)	kW	6,5	7,5	11,7	15,5	18,5	22,1	26,8
Heating capacity (4)	kW	5,9	7,1	10,7	14,9	17,1	19,7	23,7
Air flow	m ³ /h	1580	1580	3150	3150	3640	5570	6000
Compressors	n.	1	1	1	1	1	1	2
Weight	kg	145	150	205	210	265	235	380
Sound pressure (5)	dB(A)	51,5	51,5	52,0	52,0	54,0	54,5	55,6

MODEL		30 Z2	36 Z2	40 Z2	52 Z2	60 Z2	74 Z2	88 Z2
Size		S5	S6	S7	S8	S9	S9	S9
Cooling capacity (3)	kW	30,0	37,1	42,4	56,8	68,1	82,5	90,8
Heating capacity (4)	kW	27,2	33,9	38,0	48,8	57,2	79,0	86,8
Air flow	m ³ /h	6000	8200	10400	13500	17000	17000	17000
Compressors	n.	2	2	2	2	2	2	2
Weight	kg	385	460	615	840	1000	1020	1050
Sound pressure (5)	dB(A)	55,6	58,0	59,0	60,0	62,5	62,5	62,5

(1) Referred to entering air at 24°C with 50%RH and air to the condenser at 35°C

(3) Referred to entering air at 27°C with 47%RH and air to the condenser at 35°C

(4) Referred to entering air at 20°C with and outdoor air at 7°C

(5) Sound pressure 1m far in free field according to ISO3744 norm.

POWER SUPPLY: 400.3.50+N

(*) Power supply: 230.1.50

TECHNICAL DATA AND NOMINAL PERFORMANCES

PEGASUS.DXW under/over

MODEL		5(*) Z1	7(*) Z1	10 Z1	10 Z1	15 Z1	10 Z1	18 Z1	15 Z1	15 Z1	15 Z1	20 Z1	18 Z1	24 Z2	30 Z2
Size		S0	S0	S0	S1	S1	S2	S2	S3S	S3	S4	S4	S5	S5	S5
Cooling capacity (1)	kW	6,3	7,5	9,3	11,9	16,0	12,4	19,0	17,6	17,1	17,9	22,4	21,0	26,8	31,0
Air flow	m ³ /h	1580	1580	1580	3150	3150	3640	3640	5000	5000	5570	5570	6000	6000	6000
Compressors	n.	1	1	1	1	1	1	1	1	1	1	1	1	2	2
Weight	kg	160	165	170	200	215	220	240	295	295	255	265	330	385	390
Sound pressure (5)															
Over	dB(A)	51,5	51,5	51,5	52,0	52,0	54,0	54,0	55,0	55,0	54,5	54,5	55,6	55,6	55,6
Under	dB(A)	56,0	56,0	56,0	64,0	64,0	65,0	65,0	67,0	67,0	66,0	66,0	68,0	68,0	68,0

MODEL		20 Z1	24 Z2	30 Z2	36 Z2	30 Z2	40 Z2	40 Z2	52 Z2	52 Z2	60 Z2	74 Z2	88 Z2	60 Z2	74 Z2	88 Z2
Size		S6	S6	S6	S6	S7	S7	S8	S8	S9	S9	S9	S9	S10	S10	S10
Cooling capacity (1)	kW	25,2	28,7	33,8	37,8	35,4	44,9	48,5	57,4	60,0	68,7	82,5	91,0	71,1	88,1	94,0
Air flow	m ³ /h	8200	8200	8200	8200	10400	10400	13500	13500	17000	17000	17000	17000	22800	24500	24500
Compressors	n.	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Weight	kg	390	440	445	460	635	645	745	870	1000	1035	1055	1095	1350	1370	1410
Sound pressure (5)																
Over	dB(A)	55,6	55,6	58,0	58,0	58,0	58,0	58,0	59,0	59,0	60,0	60,0	61,5	62,5	62,5	62,5
Under	dB(A)	68,0	68,0	70,0	70,0	70,0	70,0	70,0	71,0	71,0	72,0	72,0	74,0	74,0	74,0	74,0

PEGASUS.DXW.P over - heat pump

MODEL		5(*) Z1	7(*) Z1	10 Z1	15 Z1	18 Z1	20 Z1	24 Z2	30 Z2	36 Z2
Size		S0	S0	S1	S1	S2	S4	S5	S5	S6
Cooling capacity (3)	kW	6,8	8,1	13,2	17,3	20,4	24,1	28,9	33,4	40,7
Heating capacity (4)	kW	6,5	8,2	11,9	16,9	20,0	23,4	27,7	33,3	39,1
Air flow	m ³ /h	1580	1580	3150	3150	3640	5570	6000	6000	8200
Compressors	n.	1	1	1	1	1	1	2	2	2
Weight	kg	160	165	205	220	250	275	395	400	475
Sound pressure (5)	dB(A)	51,5	51,5	52,0	52,0	54,0	54,5	55,6	55,6	58,0

(1) Referred to entering air at 24°C with 50%RH and water to the condenser 30-36°C

(3) Referred to entering air at 27°C with 47%RH and water to the condenser 15-30°C

(4) Referred to entering air at 20°C and water to the condenser 15-7°C

(5) Sound pressure 1m far in free field according to ISO3744 norm.

POWER SUPPLY: 400.3.50+N

(*) Power supply: 230.1.50

TECHNICAL DATA AND NOMINAL PERFORMANCES



PEGASUS.CW under/over

MODEL		6(*)	13	16	20	21	25	26
Size		S0	S1	S2	S3S	S3	S4	S5
Cooling capacity (1)	kW	5,7	12,9	15,8	18,7	20,0	23,9	25,0
Air flow	m ³ /h	1580	3150	3640	5000	5100	5570	6000
Weight	kg	130	160	180	235	235	200	270
Sound pressure (5)								
Over	dB(A)	51,0	52,0	53,0	54,0	54,0	53,5	54,6
Under	dB(A)	51,0	45,7	46,8	48,0	48,0	47,5	48,0

MODEL		34	44	58	71	100	109
Size		S6	S7	S8	S9	S10	S10T
Cooling capacity (1)	kW	32,8	42,6	55,8	68,6	96,6	105,0
Air flow	m ³ /h	8200	10400	13500	17000	22800	26400
Weight	kg	325	410	500	620	910	970
Sound pressure (5)							
Over	dB(A)	54,7	58,0	60,0	62,0	63,0	70,0
Under	dB(A)	51,0	53,0	55,2	57,0	58,3	--

(1) Referred to entering air at 24°C with 50%RH and chilled water temperature 7/12,5°C

(5) Sound pressure 1m far in free field according to ISO3744 norm.

POWER SUPPLY: 400.3.50+N

(*) Power supply: 230.1.50

DIMENSIONS (mm)

Size	a	b	c
S0	645	410	1.680
S1	645	645	1.930
S2	755	645	1.930
S3S	760	760	1.950
S3	900	860	1.950
S4	1.105	645	1.930
S5	1.125	860	1.950
S6	1.360	860	1.950
S7	1.750	860	1.950
S8	2.210	860	1.950
S9	2.680	860	1.950
S10	3.415	900	1.950

