

PYXIS HP "U": Air / water reversible heat pumps
for outdoor installation, equipped with scroll compressors and axial fans

Cooling Capacity: **42,3 ÷ 195,0 kW**

Heating Capacity: **47,1 ÷ 222,0 kW**



NEW!!!
RC Hi-Tech



pyxis
rcgroupairconditioning



MAIN FEATURES

- Reversible heat pump.
- 32 models available, for a wide selection opportunity..
- Average step of 10kW.
- EER up to 3,10.
- COP up to 3,26.
- ESEER up to 4,58.
- Scroll compressors.
- R410A Refrigerant charge.
- Single, double refrigerant circuit.
- Plate type heat exchangers.
- AC Axial fans.
- Single, double air circuit.
- Suitable for outdoor installation.

MAIN BENEFITS

- IDEA® defrosting system.
- Units equipped with two scroll compressors for refrigerant circuit to reach an high efficiency.
- Units with single, double refrigerant circuits.
- Units with separated air circuits to grant the continuity of the working mode during the coils defrosting.
- Defrosting dynamics control system IDEA®.
- Electronic expansion valve.
- High EER, COP and ESEER.
- Availability of coil heat exchangers with hydrophilic treatment.
- Availability of kit for the reduction and the extreme reduction of the noise.
- Availability of pumping groups with low, medium, high prevalence.

- Extremely easily of maintenance.
- Complete set of components dedicated to the safety of the unity.
- Eurovent Certification.

IDEA® DEFROSTING SYSTEM

“Patented” defrosting system with dynamic reading of working parameters. Thanks to proprietary software it senses the real presence of brine on the coil starting defrosting cycles only in that situation. This brings a remarkable energy saving (more than 20-30% on the average) and a higher working continuity compared with traditional systems.

WORKING LIMITS IN COOLING MODE

Chilled water outlet temperature: -12÷20°C
Ambient temperature: -10÷45°C

WORKING LIMIT IN HEATING MODE (HEAT PUMP)

Hot water outlet temperature: 30÷60°C
Ambient temperature: -12÷30°C



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1 9 6 3 2 0 1 3
fiftycoolyears

MAIN COMPONENTS

FRAMEWORK

- Base, self supporting frame and panelling in steel plate with protective surfaces treatment in compliance with UNI ISO 9227/ASTMB117 and ISO 7253, and painted with epoxy powders.
- Colour: RAL 9002.

COMPRESSORS

- Orbiting spiral (SCROLL) hermetic compressors with spiral profile optimized for R410A refrigerant.
- ON / OFF capacity control (0 / 100% each compressor).
- 2-pole 3-phase electric motor with direct on line starting.
- Phase sequence electronic relay.
- Crankcase heater.
- Electric motor thermal protection via internal winding temperature sensors.
- Rubber supports.

PLANT HEAT EXCHANGER

- Copper brazed plate type with cover plates, plates and connections in AISI 316 stainless steel:
 - Single circuit on water side .
 - Single refrigerant circuit for S version machines.
 - Double refrigerant circuit for D version machines.
- Antic condensate insulation made of polyurethane.
- Temperature sensors on water inlet and outlet.
- Factory assembled differential water pressure switch for water flow control.
- Hydraulic connections with grooved end. Flexible joint not supplied (optional accessory).
- Antifreeze heater.

AIR/GAS HEAT EXCHANGER

- Heat exchanger coil with internally corrugated copper tubes and high efficiency aluminium fins, specifically developed to provide high heat transfer and lower pressure drops. The combination of two factors, special tubes and fins, allow to optimally combine the following aspects:
 - Maximum capacity relative to the size of the exchanger.
 - Minimum charge of refrigerant.
 - Reduction of the air flow required for the heat exchange.
- Particular circulation on refrigerant side, in order to optimize performance in heat pump mode.
- Frame in galvanized steel.
- Temperature sensor on ambient air.

FANS SECTION

- Axial fans with sickle-shaped blades, fan guard and optimized for low noise levels.
- AC type electric motor for condensing pressure control (in summer working mode) or evaporating pressure control (in winter working mode) with stepless variable speed of the axial fans.
- IP54 enclosure class.

REFRIGERANT CIRCUIT

Components for each refrigerant circuit:

- Reversing valve for refrigeration cycle inversion.
- Thermostatic expansion valve.
- Electromagnetic valve on liquid line.
- Sight glass.
- Filter dryer on liquid line.
- Liquid receiver with safety valve and service valve.
- Service valves on liquid line and gas discharge.
- Non-return valve.
- Safety valve on high and low pressure side.
- Pressure transducers with indication, control and protection functions, on low and high refrigerant pressure.
- High pressure safety switch with manual reset.
- Liquid separator on suction line.
- Oil drainage and oil recovery systems.

- IDEA® defrosting system.
RC Group patented defrosting system based on a dynamic reading of the evaporating parameters.
Through sensors the microprocessor realize the real ice presence on the gas/air heat exchanger and activates the defrosting cycle only when necessary, with consequent energy saving.
- Refrigerant circuit with copper tubing with antic condensate insulation of the suction line.
- Plastic capillary hoses for pressure sensors connection.
- R410A refrigerant charge.

ELECTRICAL PANEL

In accordance with EN60204-1 norms, suitable for outdoor installation, complete with:

- Main switch with door lock safety.
- Fuses for compressors.
- Magnetothermic switch for each fan and water pump (if scheduled).
- Contactors for each load.
- Transformer for auxiliary circuit and microprocessor supply.
- Panel with machine controls.
- Summer / Winter working mode selector.
- Power supply:
 - size U1 – U2 – U3L – U4L: 400/3/50+N
 - size U3 – U4: 400/3/50

CONTROL SYSTEM

- MP.COM microprocessor system with graphic symbol for control and monitor of operating and alarms status. The system includes:
 - Voltage free contact for remote general alarm.
 - Main components hour-meter.
 - Nonvolatile "Flash" memory for data storage.
 - Menu with protection password.
 - LAN connection.

HYDRAULIC CONNECTIONS OF HEAT EXCHANGERS

- The heat exchangers' threaded hydraulic connections are available up to a diameter of 3 " included, and correspond to ISO 228/1 – G M.
- The pipes' threaded hydraulic connections are available up to a diameter of 3 " included, and correspond to ISO 7/1 – R.
- The hydraulic connections with flange (FL) are not supplied with counter flange.
- The hydraulic connections with grooved end are not supplied with flexible joint (optional accessory).

OPTIONAL ACCESSORIES

PYXIS HP "U" - 1 GAS CIRCUIT, 1 AIR CIRCUIT	46 P2	54 P2	58 P2	66 P2	80 P2	102 P2	128 P2	146 P2	164 P2	186 P2	204 P2
SIZE	S U1	S U1	S U2	S U2	S U2	S U3	S U3	S U4	S U4	S U4	S U4
752 - Hydronic group (1 pump)	•	•	•	•	•	•	•	-	-	-	-
753 - Hydronic group (2 pumps)	•	•	•	•	•	•	•	-	-	-	-
722 - Low discharge head single pump	-	-	-	-	-	-	-	•	•	•	•
723 - Low discharge head twin pump	-	-	-	-	-	-	-	•	•	•	•
720 - Medium discharge head single pump	-	-	-	-	-	-	-	•	•	•	•
721 -Medium discharge head twin pump	-	-	-	-	-	-	-	•	•	•	•
719 - Pumping group, 1 pump high pressure	-	-	-	-	-	-	-	•	•	•	•
724 - Pumping group, 2 pumps high pressure	-	-	-	-	-	-	-	•	•	•	•
727 - Water tank+ 1 pump with low discharge head	-	-	-	-	-	-	-	•	•	•	•
728 - Water tank+2 pumps low press	-	-	-	-	-	-	-	•	•	•	•
725 - Water tank+1 pump with medium discharge head	-	-	-	-	-	-	-	•	•	•	•
726 - Water tank+2 pumps medium press	-	-	-	-	-	-	-	•	•	•	•
729 -Tank + Pumping group, 1 pump high pressure	-	-	-	-	-	-	-	•	•	•	•
730 -Tank + Pumping group, 2 pumps high pressure	-	-	-	-	-	-	-	•	•	•	•
449 - Voltage free contact for desuperheater water pump activation	•	•	•	•	•	•	•	•	•	•	•
1004 - Antifreezing heater for pumping group	•	•	•	•	•	•	•	•	•	•	•
150 - LNO kit (noise reduction)	•	•	•	•	•	•	•	•	•	•	•
151 - ELN kit (extremely noise reduction)	-	-	-	-	-	-	-	•	•	-	-
171 - Rubber antivibration holders (kit)	•	•	•	•	•	•	•	•	•	•	•
170 - Spring anti vibrating support (kit)	•	•	•	•	•	•	•	•	•	•	•
118 - Kit brine A	•	•	•	•	•	•	•	•	•	•	•
119 - Kit brine B	•	•	•	•	•	•	•	•	•	•	•
79 - Electrical panel heating system	•	•	•	•	•	•	•	•	•	•	•
122 - Nordik Kit	•	•	•	•	•	•	•	•	•	•	•
605 - Compr. power factor capacitor - 0,9	•	•	•	•	•	-	-	-	-	-	-
81 - Phase sequence electronic relay	•	•	•	•	•	•	•	•	•	•	•
83 - Compressor operation indicator	•	•	•	•	•	•	•	•	•	•	•
1002 - Soft Starter	•	•	•	•	•	•	•	•	•	•	•
101 - EC fan	-	-	-	-	-	•	•	•	•	•	•
220 - Electronic expansion valve	•	•	•	•	•	•	•	•	•	-	-
450 - Desuperheater	•	•	•	•	•	•	•	•	•	•	•
176 - Victaulic connections for plant HE	-	-	-	-	-	•	•	•	•	•	•
251 - Coils protection nets	•	•	•	•	•	•	•	•	•	•	•
252 - Anti-intrusion net	-	-	-	-	-	-	-	-	-	-	-
351 - Coils with pre-painted fins	•	•	•	•	•	•	•	•	•	•	•
459 - Shell and tube evaporator	-	-	-	-	-	•	•	•	•	•	•
1003 - Analogic flow switch	•	•	•	•	•	•	•	•	•	•	•
923 - RC-Com MBUS/JBUS Serial board	•	•	•	•	•	•	•	•	•	•	•
926 - LON Serial board	•	•	•	•	•	•	•	•	•	•	•
931 - BACnet Ethernet - SNMP - TCP/IP Serial board	•	•	•	•	•	•	•	•	•	•	•
932 - BACnet MS/TP Serial board	•	•	•	•	•	•	•	•	•	•	•
934 - MP.COM expansion card	•	•	•	•	•	•	•	•	•	•	•
942 - Serial card for GSM Modem	•	•	•	•	•	•	•	•	•	•	•
943 - Data Logger	•	•	•	•	•	•	•	•	•	•	•
85 - Demand limit	•	•	•	•	•	•	•	•	•	•	•
88 - Analog set point compensation	•	•	•	•	•	•	•	•	•	•	•
1005 - Power supply analyzer	•	•	•	•	•	•	•	•	•	•	•
84 - Additional external alarm	•	•	•	•	•	•	•	•	•	•	•
889 - Master plant SEQUENCER	•	•	•	•	•	•	•	•	•	•	•
962 - Kit modem GSM	•	•	•	•	•	•	•	•	•	•	•
957 - Plantwatch without modem	•	•	•	•	•	•	•	•	•	•	•
930 - Remote graphic terminal kit	•	•	•	•	•	•	•	•	•	•	•

• available accessory; - not available accessory

OPTIONAL ACCESSORIES

PYXIS HP "U" - 2 GAS CIRCUITS, 1 AIR CIRCUIT	46 P2	54 P2	58 P2	66 P2	80 P2	102 P2	128 P2	146 P2	164 P2	186 P2	204 P2
SIZE	D	D	D	D	D	D	D	D	D	D	D
	U1	U1	U2	U2	U2	U3	U3	U4	U4	U4	U4
752 - Hydronic group (1 pump)	•	•	•	•	•	•	•	-	-	-	-
753 - Hydronic group (2 pumps)	•	•	•	•	•	•	•	-	-	-	-
722 - Low discharge head single pump	-	-	-	-	-	-	-	•	•	•	•
723 - Low discharge head twin pump	-	-	-	-	-	-	-	•	•	•	•
720 - Medium discharge head single pump	-	-	-	-	-	-	-	•	•	•	•
721 -Medium discharge head twin pump	-	-	-	-	-	-	-	•	•	•	•
719 - Pumping group, 1 pump high pressure	-	-	-	-	-	-	-	•	•	•	•
724 - Pumping group, 2 pumps high pressure	-	-	-	-	-	-	-	•	•	•	•
727 - Water tank+ 1 pump with low discharge head	-	-	-	-	-	-	-	•	•	•	•
728 - Water tank+2 pumps low press	-	-	-	-	-	-	-	•	•	•	•
725 - Water tank+1 pump with medium discharge head	-	-	-	-	-	-	-	•	•	•	•
726 - Water tank+2 pumps medium press	-	-	-	-	-	-	-	•	•	•	•
729 -Tank + Pumping group, 1 pump high pressure	-	-	-	-	-	-	-	•	•	•	•
730 -Tank + Pumping group, 2 pumps high pressure	-	-	-	-	-	-	-	-	-	-	-
449 - Voltage free contact for desuperheater water pump activation	-	-	-	-	-	-	-	-	-	-	-
1004 - Antifreezing heater for pumping group	•	•	•	•	•	•	•	•	•	•	•
150 - LNO kit (noise reduction)	•	•	•	•	•	•	•	•	•	•	•
151 - ELN kit (extremely noise reduction)	-	-	-	-	-	-	-	-	-	-	-
171 - Rubber antivibration holders (kit)	•	•	•	•	•	•	•	•	•	•	•
170 - Spring anti vibrating support (kit)	•	•	•	•	•	•	•	•	•	•	•
118 - Kit brine A	•	•	•	•	•	•	•	•	•	•	•
119 - Kit brine B	•	•	•	•	•	•	•	•	•	•	•
79 - Electrical panel heating system	•	•	•	•	•	•	•	•	•	•	•
122 - Nordik Kit	•	•	•	•	•	•	•	•	•	•	•
605 - Compr. power factor capacitor - 0,9	•	•	•	•	•	-	-	-	-	-	-
81 - Phase sequence electronic relay	•	•	•	•	•	•	•	•	•	•	•
83 - Compressor operation indicator	•	•	•	•	•	•	•	•	•	•	•
1002 - Soft Starter	•	•	•	•	•	-	-	-	-	-	-
101 - EC fan	-	-	-	-	-	•	•	•	•	•	•
220 - Electronic expansion valve	•	•	•	•	•	•	•	•	•	-	-
450 - Desuperheater	-	-	-	-	-	-	-	-	-	-	-
176 - Victaulic connections for plant HE	-	-	-	-	-	-	-	-	-	-	•
251 - Coils protection nets	•	•	•	•	•	•	•	•	•	•	•
252 - Anti-intrusion net	-	-	-	-	-	-	-	-	-	-	-
351 - Coils with pre-painted fins	•	•	•	•	•	-	-	-	-	-	-
459 - Shell and tube evaporator	-	-	-	-	-	•	•	•	•	•	•
1003 - Analogic flow switch	•	•	•	•	•	•	•	•	•	•	•
923 - RC-Com MBUS/JBUS Serial board	•	•	•	•	•	•	•	•	•	•	•
926 - LON Serial board	•	•	•	•	•	•	•	•	•	•	•
931 - BACnet Ethernet - SNMP - TCP/IP Serial board	•	•	•	•	•	•	•	•	•	•	•
932 - BACnet MS/TP Serial board	•	•	•	•	•	•	•	•	•	•	•
934 - MP.COM expansion card	•	•	•	•	•	•	•	•	•	•	•
942 - Serial card for GSM Modem	•	•	•	•	•	•	•	•	•	•	•
943 - Data Logger	•	•	•	•	•	•	•	•	•	•	•
85 - Demand limit	•	•	•	•	•	•	•	•	•	•	•
88 - Analog set point compensation	•	•	•	•	•	•	•	•	•	•	•
1005 - Power supply analyzer	•	•	•	•	•	•	•	•	•	•	•
84 - Additional external alarm	•	•	•	•	•	•	•	•	•	•	•
889 - Master plant SEQUENCER	•	•	•	•	•	•	•	•	•	•	•
962 - Kit modem GSM	•	•	•	•	•	•	•	•	•	•	•
957 - Plantwatch without modem	•	•	•	•	•	•	•	•	•	•	•
930 - Remote graphic terminal kit	•	•	•	•	•	•	•	•	•	•	•

• available accessory; - not available accessory

OPTIONAL ACCESSORIES

PYXIS HP "U" - 2 GAS CIRCUITS, 2 AIR CIRCUITS	102 P2	120 P4	128 P2	140 P4	146 P2	160 P4	164 P2	180 P4	186 P2	204 P2
SIZE	D U3L	D U4L	D U3L	D U4L						
752 - Hydronic group (1 pump)	●	-	●	-	-	-	-	-	-	-
753 - Hydronic group (2 pumps)	●	-	●	-	-	-	-	-	-	-
722 - Low discharge head single pump	-	●	-	●	●	●	●	●	●	●
723 - Low discharge head twin pump	-	●	-	●	●	●	●	●	●	●
720 - Medium discharge head single pump	-	●	-	●	●	●	●	●	●	●
721 - Medium discharge head twin pump	-	●	-	●	●	●	●	●	●	●
719 - Pumping group, 1 pump high pressure	-	●	-	●	●	●	●	●	●	●
724 - Pumping group, 2 pumps high pressure	-	●	-	●	●	●	●	●	●	●
727 - Water tank+ 1 pump with low discharge head	-	●	-	●	●	●	●	●	●	●
728 - Water tank+2 pumps low press	-	●	-	●	●	●	●	●	●	●
725 - Water tank+1 pump with medium discharge head	-	●	-	●	●	●	●	●	●	●
726 - Water tank+2 pumps medium press	-	●	-	●	●	●	●	●	●	●
729 - Tank + Pumping group, 1 pump high pressure	-	●	-	●	●	●	●	●	●	●
730 - Tank + Pumping group, 2 pumps high pressure	-	-	-	-	-	-	-	-	-	-
449 - Voltage free contact for desuperheater water pump activation	●	●	●	●	●	●	●	●	●	●
1004 - Antifreezing heater for pumping group	●	●	●	●	●	●	●	●	●	●
150 - LNO kit (noise reduction)	●	●	●	●	●	●	●	●	●	●
151 - ELN kit (extremely noise reduction)	-	●	-	●	●	●	●	●	●	●
171 - Rubber antivibration holders (kit)	●	●	●	●	●	●	●	●	●	●
170 - Spring anti vibrating support (kit)	●	●	●	●	●	●	●	●	●	●
118 - Kit brine A	●	●	●	●	●	●	●	●	●	●
119 - Kit brine B	●	●	●	●	●	●	●	●	●	●
79 - Electrical panel heating system	●	●	●	●	●	●	●	●	●	●
122 - Nordik Kit	●	●	●	●	●	●	●	●	●	●
605 - Compr. power factor capacitor - 0,9	-	-	-	-	-	-	-	-	-	-
81 - Phase sequence electronic relay	●	●	●	●	●	●	●	●	●	●
83 - Compressor operation indicator	●	●	●	●	●	●	●	●	●	●
1002 - Soft Starter	●	-	●	-	-	-	-	-	-	-
101 - EC fan	●	●	●	●	●	●	●	●	●	●
220 - Electronic expansion valve	●	●	●	●	●	●	●	●	-	-
450 - Desuperheater	●	●	●	●	●	●	●	●	●	●
176 - Victaulic connections for plant HE	●	-	●	-	-	-	-	-	-	●
251 - Coils protection nets	●	●	●	●	●	●	●	●	●	●
252 - Anti-intrusion net	-	-	-	-	-	-	-	-	-	-
351 - Coils with pre-painted fins	●	-	●	-	-	-	-	-	-	-
459 - Shell and tube evaporator	●	-	●	-	-	-	●	-	●	●
1003 - Analogic flow switch	●	●	●	●	●	●	●	●	●	●
923 - RC-Com MBUS/JBUS Serial board	●	●	●	●	●	●	●	●	●	●
926 - LON Serial board	●	●	●	●	●	●	●	●	●	●
931 - BACnet Ethernet - SNMP - TCP/IP Serial board	●	●	●	●	●	●	●	●	●	●
932 - BACnet MS/TP Serial board	●	●	●	●	●	●	●	●	●	●
934 - MP.COM expansion card	●	●	●	●	●	●	●	●	●	●
942 - Serial card for GSM Modem	●	●	●	●	●	●	●	●	●	●
943 - Data Logger	●	●	●	●	●	●	●	●	●	●
85 - Demand limit	●	●	●	●	●	●	●	●	●	●
88 - Analog set point compensation	●	●	●	●	●	●	●	●	●	●
1005 - Power supply analyzer	●	●	●	●	●	●	●	●	●	●
84 - Additional external alarm	●	●	●	●	●	●	●	●	●	●
889 - Master plant SEQUENCER	●	●	●	●	●	●	●	●	●	●
962 - Kit modem GSM	●	●	●	●	●	●	●	●	●	●
957 - Plantwatch without modem	●	●	●	●	●	●	●	●	●	●
930 - Remote graphic terminal kit	●	●	●	●	●	●	●	●	●	●

● available accessory; - not available accessory

PYXIS HP "U" TECHNICAL DATA - SINGLE GAS CIRCUIT, SINGLE AIR CIRCUIT

PYXIS HP "U"		46 P2	54 P2	58 P2	66 P2	80 P2	102 P2	128 P2	146 P2	164 P2	186 P2	204 P2	
SIZE		S U1	S U1	S U2	S U2	S U2	S U3	S U3	S U4	S U4	S U4	S U4	
STANDARD	Summer working mode-Cooling capacity(1)	kW	42,3	47,8	57,6	64,3	71,8	96,3	117,0	138,0	155,0	175,0	194,0
	Unit power input	kW	16,1	19,7	20,7	23,7	28,7	37,0	46,2	51,7	57,6	65,5	74,0
	Plant exchanger water flow rate	m ³ /h	7,3	8,2	9,9	11,1	12,4	16,6	20,1	23,7	26,7	30,1	33,4
	Plant exchanger pressure drop	kPa	38	36	45	41	40	49	45	50	47	49	47
	Winter working mode-Heating capacity(2)	kW	47,1	54,0	63,6	70,7	80,7	107,0	132,0	153,0	173,0	197,0	218,0
	Unit power input	kW	16,3	18,9	21,6	23,6	27,4	37,0	44,3	52,6	58,4	66,1	73,6
	Compressors	scroll	scroll	scroll	scroll	scroll	scroll	scroll	scroll	scroll	scroll	scroll	scroll
	Quantity	n.	2	2	2	2	2	2	2	2	2	2	2
	Capacity steps	n.	2	2	2	2	2	2	2	2	2	2	2
	Axial fans	n.	4	4	6	6	6	2	2	3	3	3	3
	Total air flow	m ³ /h	16920	16920	25380	25380	25380	37800	36900	56700	56700	55350	55350
	Air circuits	n.	1	1	1	1	1	1	1	1	1	1	1
	Refrigerant		R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
	Total refrigerant charge (optional excluded)	kg	15,8	16,0	21,6	21,6	22,9	33,6	44,6	52,1	53,0	65,6	66,0
	Gas circuits	n.	1	1	1	1	1	1	1	1	1	1	1
	Power supply	V/Ph/Hz	400/3/50+N	400/3/50+N	400/3/50+N	400/3/50+N	400/3/50+N	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50
	Max unit operating current (FLA)	A	32,0	37,9	40,5	46,5	57,4	67,7	80,4	91,3	101,2	113,7	126,7
	Unit starting current (LRA)	A	136,7	144,7	150,1	178,1	215,1	313,8	328,8	370,7	332,7	484,7	502,7
	EER (1)	kW/kW	2,62	2,43	2,78	2,71	2,50	2,60	2,53	2,67	2,69	2,67	2,62
	COP (2)	kW/kW	2,89	2,86	2,94	2,99	2,95	2,89	2,98	2,91	2,96	2,98	2,96
ESEER		3,84	3,85	4,03	3,99	3,73	3,72	3,73	3,78	3,84	3,86	3,84	
Sound power level [Lw] (3)	dB(A)	84,0	84,0	84,3	85,1	86,1	88,2	92,2	92,2	93,2	95,2	96,2	
Average sound pressure level [Lpm] (4)	dB(A)	67,0	67,0	67,3	67,7	68,8	70,3	74,0	74,0	74,4	76,5	77,4	
Net weight	kg	571	574	697	703	709	910	1065	1160	1182	1277	1296	
Hydraulic connections													
Plant exchanger IN/OUT-ISO 7/1-R	Ø	2"	2"	2"	2"	2"	-	-	-	-	-	-	
Plant exchanger IN/OUT-OD (5)	Ø mm	-	-	-	-	-	76,1	76,1	76,1	76,1	76,1	76,1	
OPTIONAL	Partial heat recovery - Heating Capacity (6)	kW	15,5	17,5	21,1	23,6	26,4	35,4	42,8	50,5	56,9	64,2	71,3
	EC axial fans - Max external static pressure	Pa	-	-	-	-	-	60	60	60	60	60	60
	Pumping group												
	Low discharge head - Power input	kW	-	-	-	-	-	-	1,5	1,5	1,5	1,5	1,5
	Medium discharge head - Power input	kW	0,8	0,8	1,5	1,5	1,5	2,0	2,0	2,2	2,2	2,2	2,2
High discharge head - Power input	kW	-	-	-	-	-	-	3,0	3,0	3,0	3,0	3,0	
Water tank - volume	l	150	150	240	240	240	360	360	200	200	200	200	
LNO KIT 100%	Summer working mode - Cooling capacity (1)	kW	42,3	47,8	57,6	64,3	71,8	96,3	117,0	138,0	155,0	175,0	194,0
	Unit power input	kW	16,1	19,7	20,7	23,7	28,7	37,0	46,2	51,7	57,6	65,5	74,0
	Winter working mode - Heating capacity (2)	kW	47,1	54,0	63,6	70,7	80,7	107,0	132,0	153,0	173,0	197,0	218,0
	Unit power input	kW	16,3	18,9	21,6	23,6	27,4	37,0	44,3	52,6	58,4	66,1	73,6
	Total air flow	m ³ /h	16920	16920	25380	25380	25380	37800	36900	56700	56700	55350	55350
EER (1)	kW/kW	2,62	2,43	2,78	2,71	2,50	2,60	2,53	2,67	2,69	2,67	2,62	
COP (2)	kW/kW	2,89	2,86	2,94	2,99	2,95	2,89	2,98	2,91	2,96	2,98	2,96	
Sound power level [Lw] (3)	dB(A)	78,6	78,6	79,0	79,8	80,6	82,5	86,1	86,1	87,2	89,0	89,7	
Average sound pressure level [Lpm] (4)	dB(A)	61,6	61,6	62,0	62,4	63,2	64,4	67,9	67,9	68,4	70,2	71,0	
LNO KIT 85%	Summer working mode - Cooling capacity (1)	kW	41,2	46,1	56,2	62,6	69,6	93,9	113,0	134,0	151,0	170,0	188,0
	Unit power input	kW	16,6	20,4	21,1	24,4	29,6	38,0	47,9	52,8	59,2	67,5	76,4
	Winter working mode - Heating capacity (2)	kW	46,5	53,1	62,6	69,7	79,3	106,0	130,0	151,0	171,0	194,0	214,0
	Unit power input	kW	16,1	18,7	21,4	23,4	27,0	36,6	43,9	51,7	57,8	65,3	72,8
	Total air flow	m ³ /h	14382	14382	21573	21573	21573	32130	31365	48195	48195	47048	47048
EER (1)	kW/kW	2,48	2,26	2,66	2,57	2,35	2,47	2,36	2,54	2,55	2,52	2,46	
COP (2)	kW/kW	2,89	2,84	2,93	2,98	2,94	2,90	2,96	2,92	2,96	2,97	2,94	
Sound power level [Lw] (3)	dB(A)	75,6	75,6	75,8	76,7	77,9	80,6	84,6	84,6	85,5	87,7	88,8	
Average sound pressure level [Lpm] (4)	dB(A)	58,6	58,6	58,8	59,2	60,5	62,5	66,4	66,4	66,7	69,0	70,0	
LNO KIT 70%	Summer working mode - Cooling capacity (1)	kW	39,6	43,8	54,3	60,2	66,5	90,4	108,0	130,0	146,0	163,0	180,0
	Unit power input	kW	17,3	21,6	22,0	25,3	30,9	39,3	50,2	54,4	61,6	70,6	80,4
	Winter working mode - Heating capacity (2)	kW	45,6	51,9	61,6	68,3	77,5	104,0	127,0	148,0	167,0	189,0	209,0
	Unit power input	kW	15,9	18,5	21,2	23,1	26,7	36,0	43,3	51,0	57,0	64,5	72,1
	Total air flow	m ³ /h	11844	11844	17766	17766	17766	26460	25830	39690	39690	38745	38745
EER (1)	kW/kW	2,29	2,03	2,47	2,38	2,15	2,30	2,15	2,39	2,37	2,31	2,24	
COP (2)	kW/kW	2,86	2,80	2,91	2,96	2,90	2,89	2,93	2,90	2,93	2,93	2,90	
Sound power level [Lw] (3)	dB(A)	73,0	73,0	72,7	73,8	75,8	79,3	83,6	83,6	84,4	87,0	88,3	
Average sound pressure level [Lpm] (4)	dB(A)	56,1	56,1	55,7	56,4	58,4	61,2	65,5	65,5	65,6	68,3	69,5	
ELN KIT	Summer working mode - Cooling capacity (1)	kW	-	-	-	-	-	-	-	130,0	146,0	163,0	180,0
	Unit power input	kW	-	-	-	-	-	-	-	54,4	61,6	70,6	80,4
	Winter working mode - Heating capacity (2)	kW	-	-	-	-	-	-	-	148,0	167,0	189,0	209,0
	Unit power input	kW	-	-	-	-	-	-	-	51,0	57,0	64,5	72,1
	Total air flow	m ³ /h	-	-	-	-	-	-	-	39690	39690	38745	38745
EER (1)	kW/kW	-	-	-	-	-	-	-	2,39	2,37	2,31	2,24	
COP (2)	kW/kW	-	-	-	-	-	-	-	2,90	2,93	2,93	2,90	
Sound power level [Lw] (3)	dB(A)	-	-	-	-	-	-	-	81,6	82,4	85,0	86,3	
Average sound pressure level [Lpm] (4)	dB(A)	-	-	-	-	-	-	-	63,5	63,6	66,3	67,5	

1. Referred to chilled water temperature 12/7°C; 35°C ambient air temperature according to Eurovent standard.
2. Referred to hot water outlet temperature 45°C; 7°C ambient air temperature according to Eurovent standard.
3. Sound power level [Lw] according to ISO EN 9614 - 2.
4. Average sound pressure level [Lpm] 1m far according to ISO EN 3744.
5. Hydraulic connection with grooved end. The flexible joint is an optional accessory.
6. Referred to chilled water temperature 12/7°C; 35°C ambient air temperature; hot water temperature 40/45°C

PYXIS HP "U" TECHNICAL DATA - DOUBLE GAS CIRCUIT, SINGLE AIR CIRCUIT

PYXIS HP "U"		46 P2	54 P2	58 P2	66 P2	80 P2	102 P2	128 P2	146 P2	164 P2	186 P2	204 P2	
SIZE		D U1	D U1	D U2	D U2	D U2	D U3	D U3	D U4	D U4	D U4	D U4	
STANDARD	Summer working mode-Cooling capacity(1)	kW	42,4	47,8	57,5	64,3	71,7	96,2	117,0	138,0	155,0	175,0	195,0
	Unit power input	kW	16,2	19,8	20,8	23,9	28,7	37,0	46,2	51,7	57,6	65,5	74,1
	Plant exchanger water flow rate	m³/h	7,3	8,2	9,9	11,1	12,4	16,5	20,1	23,7	26,7	30,1	33,5
	Plant exchanger pressure drop	kPa	47	45	52	55	44	43	41	55	51	48	46
	Winter working mode-Heating capacity(2)	kW	47,3	54,2	63,9	71,0	81,1	110,0	132,0	153,0	177,0	201,0	222,0
	Unit power input	kW	15,9	18,3	21,1	23,1	26,7	35,7	44,1	52,6	58,0	65,7	73,0
	Compressors		scroll	scroll	scroll	scroll	scroll	scroll	scroll	scroll	scroll	scroll	scroll
	Quantity	n.	2	2	2	2	2	2	2	2	2	2	2
	Capacity steps	n.	2	2	2	2	2	2	2	2	2	2	2
	Axial fans	n.	4	4	6	6	6	2	2	3	3	3	3
	Total air flow	m³/h	16920	16920	25380	25380	25380	37800	36900	56700	56700	55350	55350
	Air circuits	n.	1	1	1	1	1	1	1	1	1	1	1
	Refrigerant		R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
	Total refrigerant charge (optional excluded)	kg	17,4	14,8	19,0	19,9	20,1	35,9	47,7	55,7	56,7	70,2	70,6
	Gas circuits	n.	2	2	2	2	2	2	2	2	2	2	2
	Power supply	V/Ph/Hz	400/3/50+N	400/3/50+N	400/3/50+N	400/3/50+N	400/3/50+N	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50
	Max unit operating current (FLA)	A	32,0	37,9	40,5	46,5	57,4	67,7	80,4	91,3	101,3	113,7	127,7
	Unit starting current (LRA)	A	136,7	144,7	150,1	178,1	215,1	272,8	328,3	370,2	332,2	485,1	502,3
	EER (1)	kW/kW	2,61	2,42	2,77	2,69	2,50	2,60	2,53	2,67	2,69	2,67	2,63
	COP (2)	kW/kW	2,97	2,96	3,03	3,07	3,04	3,08	2,99	2,91	3,05	3,06	3,04
ESEER		3,56	3,29	3,78	3,68	3,39	3,52	3,42	3,62	3,65	3,61	3,55	
Sound power level [Lw] (3)	dB(A)	84,0	84,0	84,3	85,1	86,1	88,2	92,2	92,2	93,2	95,2	96,2	
Average sound pressure level [Lpm] (4)	dB(A)	67,0	67,0	67,3	67,7	68,8	70,3	74,0	74,0	74,4	76,5	77,4	
Net weight	kg	574	574	700	706	713	938	1097	1194	1217	1316	1335	
Hydraulic connections													
Plant exchanger IN/OUT-ISO 7/1-R	Ø	2"	2"	2"	2"	2"	-	-	-	-	-	-	
Plant exchanger IN/OUT-OD (5)	Ø mm	-	-	-	-	-	76,1	76,1	76,1	76,1	76,1	76,1	
OPTIONAL	Partial heat recovery - Heating Capacity (6)	kW	-	-	-	-	-	-	-	-	-	-	
	EC axial fans - Max external static pressure	Pa	-	-	-	-	-	60	60	60	60	60	
	Pumping group												
	Low discharge head - Power input	kW	-	-	-	-	-	-	1,5	1,5	1,5	1,5	
	Medium discharge head - Power input	kW	0,8	0,8	1,5	1,5	1,5	2,0	2,0	2,2	2,2	2,2	
	High discharge head - Power input	kW	-	-	-	-	-	-	3,0	3,0	3,0	3,0	
Water tank - volume	l	150	150	240	240	240	360	360	200	200	200	200	
LNO KIT 100%	Summer working mode - Cooling capacity (1)	kW	42,4	47,8	57,5	64,3	71,7	96,2	117,0	138,0	155,0	175,0	195,0
	Unit power input	kW	16,2	19,8	20,8	23,9	28,7	37,0	46,2	51,7	57,6	65,5	74,1
	Winter working mode - Heating capacity (2)	kW	47,3	54,2	63,9	71,0	81,1	110,0	132,0	153,0	177,0	201,0	222,0
	Unit power input	kW	15,9	18,3	21,1	23,1	26,7	35,7	44,1	52,6	58,0	65,7	73,0
	Total air flow	m³/h	16920	16920	25380	25380	25380	37800	36900	56700	56700	55350	55350
	EER (1)	kW/kW	2,61	2,42	2,77	2,69	2,50	2,60	2,53	2,67	2,69	2,67	2,63
LNO KIT 85%	Summer working mode - Cooling capacity (1)	kW	41,2	46,1	56,1	62,6	69,5	93,7	113,0	135,0	151,0	170,0	188,0
	Unit power input	kW	16,6	20,5	21,2	24,5	29,6	37,8	47,7	52,7	59,2	67,5	76,4
	Winter working mode - Heating capacity (2)	kW	46,7	53,3	63,0	70,1	79,6	109,0	130,0	151,0	175,0	198,0	219,0
	Unit power input	kW	15,7	18,1	20,8	22,8	26,4	35,3	43,8	51,9	57,2	64,9	72,5
	Total air flow	m³/h	14382	14382	21573	21573	21573	32130	31365	48195	48195	47048	47048
	EER (1)	kW/kW	2,48	2,25	2,65	2,56	2,35	2,48	2,37	2,56	2,55	2,52	2,46
LNO KIT 70%	Summer working mode - Cooling capacity (1)	kW	39,6	43,7	54,1	60,1	66,3	90,2	108,0	130,0	146,0	163,0	180,0
	Unit power input	kW	17,4	21,6	22,0	25,4	31,0	39,2	50,0	54,6	61,6	70,6	80,4
	Winter working mode - Heating capacity (2)	kW	45,7	52,0	61,9	68,6	77,7	106,0	127,0	148,0	171,0	193,0	213,0
	Unit power input	kW	15,5	18,1	20,6	22,6	26,1	34,8	43,3	51,2	56,6	64,1	71,7
	Total air flow	m³/h	11844	11844	17766	17766	17766	26460	25830	39690	39690	38745	38745
	EER (1)	kW/kW	2,28	2,02	2,46	2,37	2,14	2,30	2,16	2,38	2,37	2,31	2,24
ELN KIT	Summer working mode - Cooling capacity (1)	kW	-	-	-	-	-	-	130,0	146,0	163,0	180,0	
	Unit power input	kW	-	-	-	-	-	-	54,6	61,6	70,6	80,4	
	Winter working mode - Heating capacity (2)	kW	-	-	-	-	-	-	148,0	171,0	193,0	213,0	
	Unit power input	kW	-	-	-	-	-	-	51,2	56,6	64,1	71,7	
	Total air flow	m³/h	-	-	-	-	-	-	39690	39690	38745	38745	
	EER (1)	kW/kW	-	-	-	-	-	-	2,38	2,37	2,31	2,24	
COP (2)	kW/kW	-	-	-	-	-	-	2,89	3,02	3,01	2,97		
Sound power level [Lw] (3)	dB(A)	-	-	-	-	-	-	81,6	82,4	85,0	86,3		
Average sound pressure level [Lpm] (4)	dB(A)	-	-	-	-	-	-	63,5	63,6	66,3	67,5		

1. Referred to chilled water temperature 12/7°C; 35°C ambient air temperature according to Eurovent standard.
2. Referred to hot water outlet temperature 45°C; 7°C ambient air temperature according to Eurovent standard.
3. Sound power level [Lw] according to ISO EN 9614 - 2.
4. Average sound pressure level [Lpm] 1m far according to ISO EN 3744.
5. Hydraulic connection with grooved end. The flexible joint is an optional accessory.
6. Referred to chilled water temperature 12/7°C; 35°C ambient air temperature; hot water temperature 40/45°C

PYXIS HP "U" TECHNICAL DATA - DOUBLE GAS CIRCUIT, DOUBLE AIR CIRCUIT

PYXIS HP "U"		102 P2	120 P4	128 P2	140 P4	146 P2	160 P4	164 P2	180 P4	186 P2	204 P2		
SIZE		D U3L	D U4L	D U3L	D U4L								
STANDARD	Summer working mode-Cooling capacity(1)	kW	98,4	120,0	117,0	133,0	141,0	151,0	156,0	163,0	172,0	188,0	
	Unit power input	kW	35,3	38,7	45,5	44,5	49,0	53,5	56,1	66,0	65,9	76,1	
	Plant exchanger water flow rate	m³/h	16,9	20,6	20,1	22,8	24,2	26,0	26,8	28,0	29,6	32,4	
	Plant exchanger pressure drop	kPa	45	43	41	50	57	49	51	45	46	43	
	Winter working mode-Heating capacity(2)	kW	113,0	135,0	132,0	151,0	157,0	172,0	177,0	186,0	198,0	217,0	
	Unit power input	kW	35,2	42,1	43,4	46,3	51,5	54,6	56,9	61,8	64,3	71,9	
	Compressors	scroll	scroll	scroll	scroll	scroll	scroll	scroll	scroll	scroll	scroll	scroll	
	Quantity	n.	2	4	2	4	2	4	2	4	2	2	
	Capacity steps	n.	2	4	2	4	2	4	2	4	2	2	
	Axial fans	n.	4	6	4	6	6	6	6	6	6	6	
	Total air flow	m³/h	36600	54900	36600	54900	54900	54900	54900	54900	54900	54900	
	Air circuits	n.	2	2	2	2	2	2	2	2	2	2	
	Refrigerant		R410A										
	Total refrigerant charge (optional excluded)	kg	35,0	55,2	46,0	56,1	57,9	57,0	58,8	60,5	60,1	60,4	
	Gas circuits	n.	2	2	2	2	2	2	2	2	2	2	
	Power supply	V/Ph/Hz	400/3/50+N	400/3/50	400/3/50+N	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	
	Max unit operating current (FLA)	A	63,6	70,9	77,9	82,1	85,5	103,2	97,0	118,9	111,9	128,9	
	Unit starting current (LRA)	A	270,2	200,9	326,2	240,9	366,4	283,9	328,4	340,9	481,3	498,5	
	EER (1)	kW/kW	2,79	3,10	2,57	2,99	2,88	2,82	2,78	2,47	2,61	2,47	
	COP (2)	kW/kW	3,21	3,21	3,04	3,26	3,05	3,15	3,11	3,01	3,08	3,02	
	ESEER		3,50	4,58	3,26	4,44	3,58	4,28	3,49	4,05	3,33	3,17	
	Sound power level [Lw] (3)	dB(A)	88,2	92,2	92,2	92,2	92,2	93,2	93,2	95,2	95,2	96,2	
	Average sound pressure level [Lpm] (4)	dB(A)	70,3	74,0	74,0	74,0	74,0	74,4	74,4	76,5	76,5	77,4	
	Net weight	kg	960	1147	1080	1162	1234	1167	1257	1401	1356	1375	
	Hydraulic connections												
	Plant exchanger IN/OUT-ISO 7/1-R	Ø	-	-	-	-	-	-	-	-	-	-	
	Plant exchanger IN/OUT-OD (5)	Ø mm	76,1	76,1	76,1	76,1	76,1	76,1	76,1	76,1	76,1	76,1	
	OPTIONAL	Partial heat recovery - Heating Capacity (6)	kW	36,1	44,1	42,9	48,8	51,6	55,5	57,2	59,7	63,2	68,9
		EC axial fans - Max external static pressure	Pa	0	0	0	0	0	0	0	0	0	0
		Pumping group											
		Low discharge head - Power input	kW	-	1,5	-	1,5	1,5	1,5	1,5	1,5	1,5	1,5
		Medium discharge head - Power input	kW	2,0	2,2	2,0	2,2	2,2	2,2	2,2	2,2	2,2	2,2
		High discharge head - Power input	kW	-	3,0	-	3,0	3,0	3,0	3,0	3,0	3,0	3,0
	Water tank - volume	l	360	200	360	200	200	200	200	200	200	200	
	LNO KIT 100%	Summer working mode - Cooling capacity (1)	kW	98,4	120,0	117,0	133,0	141,0	151,0	156,0	163,0	172,0	188,0
		Unit power input	kW	35,3	38,7	45,5	44,5	49,0	53,5	56,1	66,0	65,9	76,1
		Winter working mode - Heating capacity (2)	kW	113,0	135,0	132,0	151,0	157,0	172,0	177,0	186,0	198,0	217,0
		Unit power input	kW	35,2	42,1	43,4	46,3	51,5	54,6	56,9	61,8	64,3	71,9
		Total air flow	m³/h	36600	54900	36600	54900	54900	54900	54900	54900	54900	54900
		EER (1)	kW/kW	2,79	3,10	2,57	2,99	2,88	2,82	2,78	2,47	2,61	2,47
LNO KIT 85%	Summer working mode - Cooling capacity (1)	kW	96,0	118,0	113,0	130,0	138,0	147,0	152,0	157,0	167,0	181,0	
	Unit power input	kW	36,1	39,3	47,3	45,3	50,0	55,1	57,8	68,6	68,2	79,0	
	Winter working mode - Heating capacity (2)	kW	111,0	134,0	130,0	149,0	154,0	169,0	175,0	183,0	194,0	213,0	
	Unit power input	kW	34,7	41,5	43,2	45,8	51,0	54,0	56,3	61,2	63,8	71,2	
	Total air flow	m³/h	31110	46665	31110	46665	46665	46665	46665	46665	46665	46665	
	EER (1)	kW/kW	2,66	3,00	2,39	2,87	2,76	2,67	2,63	2,29	2,45	2,29	
LNO KIT 70%	Summer working mode - Cooling capacity (1)	kW	92,7	115,0	108,0	126,0	133,0	142,0	146,0	150,0	160,0	172,0	
	Unit power input	kW	37,4	40,6	49,8	46,8	52,0	57,0	60,6	72,5	71,7	83,9	
	Winter working mode - Heating capacity (2)	kW	109,0	131,0	127,0	146,0	151,0	166,0	171,0	179,0	190,0	208,0	
	Unit power input	kW	34,4	41,1	42,8	45,3	50,5	53,4	55,7	60,7	63,3	70,5	
	Total air flow	m³/h	25620	38430	25620	38430	38430	38430	38430	38430	38430	38430	
	EER (1)	kW/kW	2,48	2,83	2,17	2,69	2,56	2,49	2,41	2,07	2,23	2,05	
ELN KIT	Summer working mode - Cooling capacity (1)	kW	-	115,0	-	126,0	133,0	142,0	146,0	150,0	160,0	172,0	
	Unit power input	kW	-	40,6	-	46,8	52,0	57,0	60,6	72,5	71,7	83,9	
	Winter working mode - Heating capacity (2)	kW	-	131,0	-	146,0	151,0	166,0	171,0	179,0	190,0	208,0	
	Unit power input	kW	-	41,1	-	45,3	50,5	53,4	55,7	60,7	63,3	70,5	
	Total air flow	m³/h	-	38430	-	38430	38430	38430	38430	38430	38430	38430	
	EER (1)	kW/kW	-	2,83	-	2,69	2,56	2,49	2,41	2,07	2,23	2,05	
Sound power level [Lw] (3)	dB(A)	-	81,6	-	81,6	81,6	82,4	82,4	85,0	85,0	86,3		
Average sound pressure level [Lpm] (4)	dB(A)	-	63,5	-	63,5	63,5	63,6	63,6	66,3	66,3	67,5		

1. Referred to chilled water temperature 12/7°C; 35°C ambient air temperature according to Eurovent standard.
2. Referred to hot water outlet temperature 45°C; 7°C ambient air temperature according to Eurovent standard.
3. Sound power level [Lw] according to ISO EN 9614 - 2.
4. Average sound pressure level [Lpm] 1m far according to ISO EN 3744.
5. Hydraulic connection with grooved end. The flexible joint is an optional accessory.
6. Referred to chilled water temperature 12/7°C; 35°C ambient air temperature; hot water temperature 40/45°C

DIMENSIONS (mm)

SIZE U	a	b	c
U1	1930	1200	1630
U2	2510	1200	1630
U3	2960	1200	1950
U3L	2960	1800	1950
U4	4000	1200	1970
U4L	4000	1800	1950

