PYXIS U: Packaged air cooled liquid chillers for outdoor installation equipped with scroll compressors and microchannel condensing coils
Cooling capacity: **44,9 ÷ 200,0 kW**

EUROVENT CERTIFIED PERFORMANCE
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NEW
RC Hi-Tech

pyxis U

rcgroupairconditioning

R410A PLATE

MAIN FEATURES

- Air cooled liquid chiller.
- 22 models available, for a wide selection opportunity.
- Average step of 15kW.
- EER up to 2,93.
- ESEER up to 4,17.
- Scroll compressors.
- R410A Refrigerant charge.
- Single or double refrigerant circuit.
- Plate type heat exchangers.
- AC Axial fans.
- Microchannel condensing coils.
- Electronic expansion valve.
- Single air circuit.
- Suitable for outdoor installation.

MAIN BENEFITS

- Units equipped with two scroll compressors for refrigerant circuit to reach a high efficiency.
- Units with single and double refrigerant circuits.
- Microchannel condensing coils in aluminium.
- Low refrigerant charge.
- High ESEER.
- Availability of kit for the reduction and the extreme reduction of the noise.
- Availability of hydronic group with medium discharge head.
- Availability of pumping groups with low, medium, high discharge head (size U4).
- Availability of total or partial heat recovery system.
- Availability of EC fans.
- Extremely easily of maintenance.
- Complete set of components dedicated to the safety of the unity.
- Eurovent Certification.

MICROCHANNEL CONDENSING COILS

The use of aluminium for the micro-channel condensers manufacture is able to offer the possibility for very light machinery: the coil weight is only 50% compared to traditional copper pipes and aluminium fins of the same capacity.
The reduced air resistance of the micro-channel coils allows to drastically reduce the fans motors electric energy consumption. At the same performances conditions, the micro-channels condensers require up-to less than 75% refrigerant when compared to the traditional heat exchangers.

WORKING LIMITS IN COOLING MODE

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

rcgroup.it
1 9 6 3 2 0 1 3
fifty cool years

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.

EVAPORATOR
- Copper brazed plate type with cover plates, plates and connections in AISI 316 stainless steel:
  - With single refrigerant circuit for S version machines.
  - With double refrigerant circuit for D version machines (option).
- Anticondensate insulation made of polyurethane.
- Temperature sensors on water inlet and outlet.
- Differential water pressure switch for water flow control factory assembled.
- Hydraulic connections with grooved end. Flexible joint not supplied (optional accessory).
- Antifreeze heater for machine size.

CONDENSING COIL
- Microchannel condensing coil in aluminium and they are perfectly suitable for the civil and industrial applications cooling, while the protection function of the oxide layer allows an optimum resistance to corrosion also in case of aggressive ambient conditions.
- Extremely light construction. The coil weight is only 50% compared to traditional copper pipes and aluminium fins of the same capacity.
- Low air side pressure drop and consequentially drastic reduction of the fans motors electric energy consumption.
- High heat exchange efficiency.
- Reduced internal volume capable of reducing the total refrigerant charge. At the same performances conditions, the micro-channels condensers require up-to less than 75% refrigerant when compared to the traditional heat exchangers.
- Frame in painted galvanized steel.

FANS SECTION
- Axial fans with sickle-shaped blades, fan guard and optimized for low noise levels.
- External rotor AC type electric motor with stepless variable speed for condensing pressure control.
- IP54 enclosure class.

REFRIGERANT CIRCUIT

Components for each refrigerant circuit:
- Thermostatic expansion valve.
- Electromagnetic valve on liquid line.
- Sight glass.
- Filter dryer on liquid line.
- Service valves on liquid line and gas discharge.
- 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.
- Refrigerant circuit with copper tubing with anticondensate 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.
- Power supply: 400/3/50+N

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 U	46 P2 S	46 P2 D	54 P2 S	54 P2 D	58 P2 S	58 P2 D	66 P2 S	66 P2 D	80 P2 S	80 P2 D	102 P2 S
SIZE	U1	U1	U1	U1	U1	U1	U2	U2	U2	U2	U3
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	-	-	-	-	-	-	-	-	-	-	-
720 - High discharge head single pump	-	-	-	-	-	-	-	-	-	-	-
721 - High discharge head twin pump	-	-	-	-	-	-	-	-	-	-	-
727 - Water tank+ 1 pump with low discharge head	-	-	-	-	-	-	-	-	-	-	-
728 - Water tank+2 pumps with low discharge head	-	-	-	-	-	-	-	-	-	-	-
725 - Water tank+1 pump with medium discharge head	-	-	-	-	-	-	-	-	-	-	-
726 - Water tank+2 pumps medium discharge head	-	-	-	-	-	-	-	-	-	-	-
729 - Water tank+1 pump with high discharge head	-	-	-	-	-	-	-	-	-	-	-
730 - Water tank+2 pumps with high discharge head	-	-	-	-	-	-	-	-	-	-	-
1004 - Antifreezing heater for pumping group	●	●	●	●	●	●	●	●	●	●	●
150 - LNO kit (noise reduction)	●	●	●	●	●	●	●	●	●	●	●
151 - ELN kit (extremely noise reduction)	-	-	-	-	-	-	-	-	-	-	●
170 - Spring antivibration holders (kit)	●	●	●	●	●	●	●	●	●	●	●
171 - Rubber antivibration holders (kit)	●	●	●	●	●	●	●	●	●	●	●
118 - Kit brine A	●	●	●	●	●	●	●	●	●	●	●
119 - Kit brine B	●	●	●	●	●	●	●	●	●	●	●
79 - Electrical panel heating system	●	●	●	●	●	●	●	●	●	●	●
101 - EC fan	-	-	-	-	-	-	-	-	-	-	●
Evaporator flexible joint with adapter pipe (solder type)	-	-	-	-	-	-	-	-	-	-	●
Evaporator flexible joint with adapter for flange connection	-	-	-	-	-	-	-	-	-	-	●
450 - Desuperheater	●	-	●	-	●	-	●	-	●	-	●
449 - Voltage free contact for partial heat recovery water pump activation	●	-	●	-	●	-	●	-	●	-	●
451 - 100% heat recovery	●	●	●	●	●	●	●	●	●	●	●
454 - Voltage free contact for total heat recovery water pump activation	●	●	●	●	●	●	●	●	●	●	●
Selection switch for operation mode for total heat recovery	●	●	●	●	●	●	●	●	●	●	●
Total heat recovery flexible joint with adapter pipe (solder type)	-	-	-	-	-	-	-	-	-	-	●
Total heat recovery flexible joint with adapter for flange connection	-	-	-	-	-	-	-	-	-	-	●
459 - Shell and tube evaporator	-	-	-	-	-	-	-	-	-	-	●
460 - Shell and tube evaporator for low temperature	-	-	-	-	-	-	-	-	-	-	●
1003 - Analogic flowmeter	●	●	●	●	●	●	●	●	●	●	●
350 -Kit TK PRO corrosion resistant painting treatment	●	●	●	●	●	●	●	●	●	●	●
250 - Coils protection nets (kit)	●	●	●	●	●	●	●	●	●	●	●
605 - Compr. power factor capacitor - 0,9	●	●	●	●	●	●	●	●	●	●	-
1002 - Soft Starter	●	●	●	●	●	●	●	●	●	●	●
Supply network control relay	●	●	●	●	●	●	●	●	●	●	●
83 - Compressor operation indicator	●	●	●	●	●	●	●	●	●	●	●
Magnetothermic switch for each compressor	●	●	●	●	●	●	●	●	●	●	●
Service valve on compressor group suction	●	●	●	●	●	●	●	●	●	●	●
Service valve on compressor group discharge	●	●	●	●	●	●	●	●	●	●	●
85 - Demand limit	●	●	●	●	●	●	●	●	●	●	●
88 - Analog set point compensation	●	●	●	●	●	●	●	●	●	●	●
1005 - Power supply analyzer	●	●	●	●	●	●	●	●	●	●	●
217 - Double safety valve	-	-	-	-	-	-	-	-	-	-	-
Pressure gauge on high and low pressure	●	●	●	●	●	●	●	●	●	●	●
220 - Electronic Expansion	●	●	●	●	●	●	●	●	●	●	●
Expansion valve energy reserve module	●	●	●	●	●	●	●	●	●	●	●
84 - Additional external alarm	●	●	●	●	●	●	●	●	●	●	●
Ambient temperature sensor	●	●	●	●	●	●	●	●	●	●	●
919 - Clock card	●	●	●	●	●	●	●	●	●	●	●
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	●	●	●	●	●	●	●	●	●	●	●
943 - Data Logger	●	●	●	●	●	●	●	●	●	●	●
934 - MP.COM expansion card	●	●	●	●	●	●	●	●	●	●	●
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 U	102 P2	128 P2	128 P2	146 P2	146 P2	164 P2	164 P2	186 P2	186 P2	204 P2	204 P2
	D	S	D	S	D	S	D	S	D	S	D
SIZE	U3	U3	U3	U3	U3	U4	U4	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	-	-	-	-	-	●	●	●	●	●	●
720 - High discharge head single pump	-	-	-	-	-	●	●	●	●	●	●
721 - High discharge head twin pump	-	-	-	-	-	●	●	●	●	●	●
727 - Water tank+ 1 pump with low discharge head	-	-	-	-	-	●	●	●	●	●	●
728 - Water tank+2 pumps with low discharge head	-	-	-	-	-	●	●	●	●	●	●
725 - Water tank+1 pump with medium discharge head	-	-	-	-	-	●	●	●	●	●	●
726 - Water tank+2 pumps medium discharge head	-	-	-	-	-	●	●	●	●	●	●
729 - Water tank+1 pump with high discharge head	-	-	-	-	-	●	●	●	●	●	●
730 - Water tank+2 pumps with high discharge head	-	-	-	-	-	●	●	●	●	●	●
1004 - Antifreezing heater for pumping group	●	●	●	●	●	●	●	●	●	●	●
150 - LNO kit (noise reduction)	●	●	●	●	●	●	●	●	●	●	●
151 - ELN kit (extremely noise reduction)	●	●	●	●	●	●	●	●	●	●	●
170 - Spring antivibration holders (kit)	●	●	●	●	●	●	●	●	●	●	●
171 - Rubber antivibration holders (kit)	●	●	●	●	●	●	●	●	●	●	●
118 - Kit brine A	●	●	●	●	●	●	●	●	●	●	●
119 - Kit brine B	●	●	●	●	●	●	●	●	●	●	●
79 - Electrical panel heating system	●	●	●	●	●	●	●	●	●	●	●
101 - EC fan	●	●	●	●	●	●	●	●	●	●	●
Evaporator flexible joint with adapter pipe (solder type)	●	●	●	●	●	●	●	●	●	●	●
Evaporator flexible joint with adapter for flange connection	●	●	●	●	●	●	●	●	●	●	●
450 - Desuperheater	●	●	●	●	●	●	●	●	●	●	●
449 - Voltage free contact for partial heat recovery water pump activation	-	●	-	●	-	●	-	●	-	●	-
451 - 100% heat recovery	●	●	●	●	●	●	●	●	●	●	●
454 - Voltage free contact for total heat recovery water pump activation	●	●	●	●	●	●	●	●	●	●	●
Selection switch for operation mode for total heat recovery	●	●	●	●	●	●	●	●	●	●	●
Total heat recovery flexible joint with adapter pipe (solder type)	●	●	●	●	●	●	●	●	●	●	●
Total heat recovery flexible joint with adapter for flange connection	●	●	●	●	●	●	●	●	●	●	●
459 - Shell and tube evaporator	●	●	●	●	●	●	●	●	●	●	●
460 - Shell and tube evaporator for low temperature	●	●	●	●	●	●	●	●	●	●	●
1003 - Analogic flowmeter	●	●	●	●	●	●	●	●	●	●	●
350 -Kit TK PRO corrosion resistant painting treatment	●	●	●	●	●	●	●	●	●	●	●
250 - Coils protection nets (kit)	●	●	●	●	●	●	●	●	●	●	●
605 - Compr. power factor capacitor - 0,9	●	●	●	●	●	●	●	●	●	●	●
1002 - Soft Starter	●	●	●	●	●	●	●	●	●	●	●
Supply network control relay	●	●	●	●	●	●	●	●	●	●	●
83 - Compressor operation indicator	●	●	●	●	●	●	●	●	●	●	●
Magnetothermic switch for each compressor	●	●	●	●	●	●	●	●	●	●	●
Service valve on compressor group suction	●	●	●	●	●	●	●	●	●	●	●
Service valve on compressor group discharge	●	●	●	●	●	●	●	●	●	●	●
85 - Demand limit	●	●	●	●	●	●	●	●	●	●	●
88 - Analog set point compensation	●	●	●	●	●	●	●	●	●	●	●
1005 - Power supply analyzer	●	●	●	●	●	●	●	●	●	●	●
217 - Double safety valve	-	-	-	-	-	-	-	●	-	●	-
Pressure gauge on high and low pressure	●	●	●	●	●	●	●	●	●	●	●
220 - Electronic Expansion	●	●	●	●	●	●	●	●	●	●	●
Expansion valve energy reserve module	●	●	●	●	●	●	●	●	●	●	●
84 - Additional external alarm	●	●	●	●	●	●	●	●	●	●	●
Ambient temperature sensor	●	●	●	●	●	●	●	●	●	●	●
919 - Clock card	●	●	●	●	●	●	●	●	●	●	●
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	●	●	●	●	●	●	●	●	●	●	●
943 - Data Logger	●	●	●	●	●	●	●	●	●	●	●
934 - MP.COM expansion card	●	●	●	●	●	●	●	●	●	●	●
889 - Master plant SEQUENCER	●	●	●	●	●	●	●	●	●	●	●
962 - Kit modem GSM	●	●	●	●	●	●	●	●	●	●	●
957 - Plantwatch without modem	●	●	●	●	●	●	●	●	●	●	●
930 - Remote graphic terminal kit	●	●	●	●	●	●	●	●	●	●	●

● available accessory; - not available accessory

TECHNICAL DATA PYXIS U

	PYXIS U		46 P2 S	46 P2 D	54 P2 S	54 P2 D	58 P2 S	58 P2 D	66 P2 S	66 P2 D
	SIZE		U1	U1	U1	U1	U1	U1	U2	U2
STANDARD	**Cooling capacity (1)**	kW	**44,9**	**44,9**	**51,1**	**51,2**	**58,4**	**58,4**	**65,7**	**65,7**
	Unit power input	kW	15,3	15,3	18,4	18,5	21,0	20,9	23,3	23,5
	Evaporator water flow rate	m³/h	7,7	7,7	8,8	8,8	10,0	10,0	11,3	11,3
	Evaporator pressure drop	kPa	49	52	50	51	55	53	48	57
	Compressors		Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll
	Quantity	n.	2	2	2	2	2	2	2	2
	Capacity steps	n.	2	2	2	2	2	2	2	2
	Axial fans	n.	4	4	4	4	4	4	4	4
	Total air flow	m³/h	15200	15200	15200	15200	19000	19000	19500	19500
	Max external static pressure	Pa	0	0	0	0	0	0	0	0
	Air circuits	n.	1	1	1	1	1	1	1	1
	Refrigerant		R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
	Total refrigerant charge (optional excluded)	kg	5,1	4,9	5,3	5,1	5,5	5,3	7,3	7,9
	Gas circuits	n.	1	2	1	2	1	2	1	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+N	400/3/50+N	400/3/50+N
	Max unit operating current (FLA)	A	44,5	44,5	46,5	46,5	54,7	54,7	66,7	66,7
	Unit starting current (LRA)	A	134,5	134,5	142,5	142,5	147,7	147,7	175,7	175,7
	EER (1)	kW/kW	2,93	2,93	2,77	2,77	2,78	2,79	2,82	2,80
	ESEER		4,15	3,64	4,17	3,55	4,07	3,55	4,09	3,53
	Sound power level [Lw] (2)	dB(A)	84,0	84,0	84,0	84,0	84,3	84,3	85,1	85,1
	Average sound pressure level [LPm] (3)	dB(A)	67,0	67,0	67,0	67,0	67,3	67,3	67,7	67,7
	Net weight	kg	530	530	530	530	539	539	642	642
	Hydraulic connections									
	Evaporator IN/OUT - ISO 7/1 – R	Ø	2"	2"	2"	2"	2"	2"	2"	2"
	Evaporator IN/OUT - OD (4)	Ø mm	-	-	-	-	-	-	-	-
OPTIONAL	**Partial heat recovery - Heating capacity (5)**	kW	**16,5**	**-**	**18,8**	**-**	**21,4**	**-**	**24,1**	**-**
	Total heat recovery - Heating capacity (6)	kW	**58,4**	**59,1**	**68,3**	**69,3**	**77,0**	**78,1**	**86,6**	**88,1**
	EC axial fans-Max external static pressure	Pa	0	0	0	0	0	0	0	0
	Pumping group									
	Low discharge head - Power input	kW	-	-	-	-	-	-	-	-
	Medium discharge head - Power input	kW	0,75	0,75	0,75	0,75	0,75	0,75	1,5	1,5
	High discharge head - Power input	kW	-	-	-	-	-	-	-	-
	Water tank - volume	l	150	150	150	150	150	150	240	240
LNO KIT 100%	**Cooling capacity (1)**	kW	**44,9**	**44,9**	**51,1**	**51,2**	**58,4**	**58,4**	**65,7**	**65,7**
	Unit power input	kW	15,3	15,3	18,4	18,5	20,9	20,9	23,2	23,5
	Total air flow	m³/h	15200	15200	15200	15200	19000	19000	19500	19500
	EER (1)	kW/kW	2,93	2,93	2,77	2,77	2,79	2,79	2,83	2,80
	Sound power level [Lw] (2)	dB(A)	78,6	78,6	78,6	78,6	79,0	79,0	79,8	79,8
	Average sound pressure level [LPm] (3)	dB(A)	61,6	61,6	61,6	61,6	62,0	62,0	62,4	62,4
LNO KIT 85%	**Cooling capacity (1)**	kW	**43,8**	**43,8**	**49,5**	**49,5**	**56,8**	**56,7**	**63,6**	**63,7**
	Unit power input	kW	15,8	15,8	19,3	19,3	21,7	21,6	24,2	24,2
	Total air flow	m³/h	12920	12920	12920	12920	16150	16150	16575	16575
	EER (1)	kW/kW	2,77	2,77	2,57	2,57	2,62	2,62	2,63	2,63
	Sound power level [Lw] (2)	dB(A)	75,6	75,6	75,6	75,6	75,8	75,8	76,7	76,7
	Average sound pressure level [LPm] (3)	dB(A)	58,6	58,6	58,6	58,6	58,8	58,8	59,2	59,2
LNO KIT 70%	**Cooling capacity (1)**	kW	**42,2**	**42,2**	**47,2**	**47,2**	**54,4**	**54,3**	**60,7**	**60,6**
	Unit power input	kW	16,6	16,6	20,4	20,4	22,9	22,9	25,5	25,6
	Total air flow		10640	10640	10640	10640	13300	13300	13650	13650
	EER (1)	kW/kW	2,54	2,54	2,31	2,31	2,38	2,37	2,38	2,37
	Sound power level [Lw] (2)	dB(A)	73,0	73,0	73,0	73,0	72,7	72,7	73,8	73,8
	Average sound pressure level [LPm] (3)	dB(A)	56,1	56,1	56,1	56,1	55,7	55,7	56,4	56,4
ELN KIT	**Cooling capacity (1)**	kW	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
	Unit power input	kW	-	-	-	-	-	-	-	-
	Total air flow		-	-	-	-	-	-	-	-
	EER (1)	kW/kW	-	-	-	-	-	-	-	-
	Sound power level [Lw] (2)	dB(A)	-	-	-	-	-	-	-	-
	Average sound pressure level [LPm] (3)	dB(A)	-	-	-	-	-	-	-	-

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

TECHNICAL DATA PYXIS U

	PYXIS U		80 P2 S	80 P2 D	102 P2 S	102 P2 D	128 P2 S	128 P2 D	146 P2 S	146 P2 D
	SIZE		U2	U2	U3	U3	U3	U3	U3	U3
STANDARD	**Cooling capacity (1)**	kW	**76,3**	**76,2**	**104,0**	**102,0**	**123,0**	**125,0**	**138,0**	**138,0**
	Unit power input	kW	27,4	27,3	35,9	35,7	44,7	44,8	52,3	52,3
	Evaporator water flow rate	m³/h	13,1	13,1	17,9	17,3	21,2	21,5	23,7	23,8
	Evaporator pressure drop	kPa	51	37	47	47	49	46	50	56
	Compressors		Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll
	Quantity	n.	2	2	2	2	2	2	2	2
	Capacity steps	n.	2	2	2	2	2	2	2	2
	Axial fans	n.	6	6	2	2	2	2	2	2
	Total air flow	m³/h	22800	22800	34000	34000	42360	42360	42360	42360
	Max external static pressure	Pa	0	0	0	0	0	0	0	0
	Air circuits	n.	1	1	1	1	1	1	1	1
	Refrigerant		R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
	Total refrigerant charge (optional excluded)	kg	7,7	8,4	10,5	11,5	12,3	12,3	12,3	12,5
	Gas circuits	n.	1	2	1	2	1	2	1	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+N	400/3/50+N	400/3/50+N
	Max unit operating current (FLA)	A	71,7	71,7	87,0	84,5	104,8	104,8	121,7	121,7
	Unit starting current (LRA)	A	211,7	211,7	310,5	269,5	328,3	328,3	366,3	366,3
	EER (1)	kW/kW	2,78	2,79	2,90	2,86	2,75	2,79	2,64	2,64
	ESEER		4,03	3,51	4,03	3,56	3,83	3,48	3,80	3,32
	Sound power level [Lw] (2)	dB(A)	86,1	86,1	88,2	88,2	92,2	92,2	92,2	92,2
	Average sound pressure level [L_{Pm}] (3)	dB(A)	68,8	68,8	70,3	70,3	74,0	74,0	74,0	74,0
	Net weight	kg	660	660	870	870	910	910	930	930
	Hydraulic connections									
	Evaporator IN/OUT - ISO 7/1 – R	Ø	2"	2"	-	-	-	-	-	-
	Evaporator IN/OUT - OD (4)	Ø mm	-	-	73,1	73,1	73,1	73,1	73,1	73,1
OPTIONAL	**Partial heat recovery - Heating capacity (5)**	kW	**28,0**	**-**	**38,3**	**-**	**45,3**	**-**	**50,6**	**-**
	Total heat recovery - Heating capacity (6)	kW	**102,0**	**103,0**	**135,0**	**134,0**	**159,0**	**160,0**	**182,0**	**182,0**
	EC axial fans-Max external static pressure	Pa	0	0	0	0	0	0	0	0
	Pumping group									
	Low discharge head - Power input	kW	-	-	-	-	-	-	-	-
	Medium discharge head - Power input	kW	1,5	1,5	2,0	2,0	2,0	2,0	2,0	2,0
	High discharge head - Power input	kW	-	-	-	-	-	-	-	-
	Water tank - volume	l	240	240	360	360	360	360	360	360
LNO KIT 100%	**Cooling capacity (1)**	kW	**76,3**	**76,2**	**104,0**	**102,0**	**123,0**	**125,0**	**138,0**	**138,0**
	Unit power input	kW	27,4	27,3	35,9	35,7	44,7	44,8	52,3	52,3
	Total air flow	m³/h	22800	22800	34000	34000	42360	42360	42360	42360
	EER (1)	kW/kW	2,78	2,79	2,90	2,86	2,75	2,79	2,64	2,64
	Sound power level [Lw] (2)	dB(A)	80,6	80,6	82,5	82,5	86,1	86,1	86,1	86,1
	Average sound pressure level [L_{Pm}] (3)	dB(A)	63,2	63,2	64,4	64,4	67,9	67,9	67,9	67,9
LNO KIT 85%	**Cooling capacity (1)**	kW	**74,1**	**74,0**	**102,0**	**99,1**	**121,0**	**122,0**	**134,0**	**134,0**
	Unit power input	kW	28,4	28,2	36,7	36,4	45,8	45,9	53,8	53,8
	Total air flow	m³/h	19380	19380	28900	28900	36000	36000	36000	36000
	EER (1)	kW/kW	2,61	2,62	2,78	2,72	2,64	2,66	2,49	2,49
	Sound power level [Lw] (2)	dB(A)	77,9	77,9	80,6	80,6	84,6	84,6	84,6	84,6
	Average sound pressure level [L_{Pm}] (3)	dB(A)	60,5	60,5	62,5	62,5	66,4	66,4	66,4	66,4
LNO KIT 70%	**Cooling capacity (1)**	kW	**70,9**	**70,8**	**98,0**	**95,6**	**116,0**	**118,0**	**129,0**	**129,0**
	Unit power input	kW	29,8	29,6	38,3	37,9	47,5	47,6	56,3	56,6
	Total air flow		15960	15960	23800	23800	29652	29652	29652	29652
	EER (1)	kW/kW	2,38	2,39	2,56	2,52	2,44	2,48	2,29	2,28
	Sound power level [Lw] (2)	dB(A)	75,8	75,8	79,3	79,3	83,6	83,6	83,6	83,6
	Average sound pressure level [L_{Pm}] (3)	dB(A)	58,4	58,4	61,2	61,2	65,5	65,5	65,5	65,5
ELN KIT	**Cooling capacity (1)**	kW	**-**	**-**	**98,0**	**95,6**	**116,0**	**118,0**	**129,0**	**129,0**
	Unit power input	kW	-	-	38,3	37,9	47,5	47,6	56,3	56,6
	Total air flow		-	-	23800	23800	29652	29652	29652	29652
	EER (1)	kW/kW	-	-	2,56	2,52	2,44	2,48	2,29	2,28
	Sound power level [Lw] (2)	dB(A)	-	-	77,3	77,3	81,6	81,6	81,6	81,6
	Average sound pressure level [L_{Pm}] (3)	dB(A)	-	-	59,2	59,2	63,5	63,5	63,5	63,5

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

TECHNICAL DATA PYXIS U

	PYXIS U		164 P2 S	164 P2 D	186 P2 S	186 P2 D	204 P2 S	204 P2 D
	SIZE		U4	U4	U4	U4	U4	U4
STANDARD	**Cooling capacity (1)**	kW	**163,0**	**163,0**	**181,0**	**182,0**	**199,0**	**200,0**
	Unit power input	kW	55,8	55,8	65,1	65,0	74,5	74,3
	Evaporator water flow rate	m³/h	28,0	28,0	31,2	31,2	34,3	34,3
	Evaporator pressure drop	kPa	51	55	52	51	50	48
	Compressors		Scroll	Scroll	Scroll	Scroll	Scroll	Scroll
	Quantity	n.	2	2	2	2	2	2
	Capacity steps	n.	2	2	2	2	2	2
	Axial fans	n.	3	3	3	3	3	3
	Total air flow	m³/h	63540	63540	63540	63540	63540	63540
	Max external static pressure	Pa	0	0	0	0	0	0
	Air circuits	n.	1	1	1	1	1	1
	Refrigerant		R410A	R410A	R410A	R410A	R410A	R410A
	Total refrigerant charge (optional excluded)	kg	12,0	13,7	20,9	23,5	21,4	24,3
	Gas circuits	n.	1	2	1	2	1	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+N
	Max unit operating current (FLA)	A	142,5	142,5	159,7	159,7	176,9	176,9
	Unit starting current (LRA)	A	332,2	332,2	485,1	485,1	502,3	502,3
	EER - Eurovent standard (1)	kW/kW	2,92	2,92	2,78	2,80	2,67	2,69
	ESEER		3,96	3,61	3,88	3,50	3,82	3,39
	Sound power level [Lw] (2)	dB(A)	93,2	93,2	95,2	95,2	96,2	96,2
	Average sound pressure level [LPm] (3)	dB(A)	74,4	74,4	76,5	76,5	77,4	77,4
	Net weight	kg	990	1020	1030	1040	1060	1070
	Hydraulic connections							
	Evaporator IN/OUT - ISO 7/1 – R	Ø	-	-	-	-	-	-
	Evaporator IN/OUT - OD (4)	Ø mm	73,1	73,1	73,1	73,1	73,1	73,1
OPTIONAL	**Partial heat recovery - Heating capacity (5)**	kW	**59,8**	**-**	**66,5**	**-**	**73,1**	**-**
	Total heat recovery - Heating capacity (6)	kW	**211,0**	**211,0**	**239,0**	**240,0**	**268,0**	**269,0**
	EC axial fans-Max external static pressure	Pa	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
	Medium discharge head - Power input	kW	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
	Water tank - volume	l	200	200	200	200	200	200
LNO KIT 100%	**Cooling capacity (1)**	kW	**163,0**	**163,0**	**181,0**	**182,0**	**199,0**	**200,0**
	Unit power input	kW	55,8	55,8	65,1	65,0	74,5	74,3
	Total air flow	m³/h	63540	63540	63540	63540	63540	63540
	EER - Eurovent standard (1)	kW/kW	2,92	2,92	2,78	2,80	2,67	2,69
	Sound power level [Lw] (2)	dB(A)	87,2	87,2	89,0	89,0	89,7	89,7
	Average sound pressure level [LPm] (3)	dB(A)	68,4	68,4	70,2	70,2	71,0	71,0
LNO KIT 85%	**Cooling capacity (1)**	kW	**160,0**	**160,0**	**177,0**	**178,0**	**194,0**	**194,0**
	Unit power input	kW	56,7	56,7	66,3	66,4	76,4	76,4
	Total air flow	m³/h	54000	54000	54000	54000	54000	54000
	EER - Eurovent standard (1)	kW/kW	2,82	2,82	2,67	2,68	2,54	2,54
	Sound power level [Lw] (2)	dB(A)	85,5	85,5	87,7	87,7	88,8	88,8
	Average sound pressure level [LPm] (3)	dB(A)	66,7	66,7	69,0	69,0	70,0	70,0
LNO KIT 70%	**Cooling capacity (1)**	kW	**155,0**	**156,0**	**171,0**	**172,0**	**186,0**	**187,0**
	Unit power input	kW	58,5	58,4	68,7	68,8	79,5	79,6
	Total air flow		44478	44478	44478	44478	44478	44478
	EER - Eurovent standard (1)	kW/kW	2,65	2,67	2,49	2,50	2,34	2,35
	Sound power level [Lw] (2)	dB(A)	84,4	84,4	87,0	87,0	88,3	88,3
	Average sound pressure level [LPm] (3)	dB(A)	65,6	65,6	68,3	68,3	69,5	69,5
ELN KIT	**Cooling capacity (1)**	kW	**155,0**	**156,0**	**171,0**	**172,0**	**186,0**	**187,0**
	Unit power input	kW	58,5	58,4	68,7	68,8	79,5	79,6
	Total air flow		44478	44478	44478	44478	44478	44478
	EER - Eurovent standard (1)	kW/kW	2,65	2,67	2,49	2,50	2,34	2,35
	Sound power level [Lw] (2)	dB(A)	82,4	82,4	85,0	85,0	86,3	86,3
	Average sound pressure level [LPm] (3)	dB(A)	63,6	63,6	66,3	66,3	67,5	67,5

1. Referred to chilled water temperature 12/7°C and 35°C ambient air temperature, according to Eurovent standard.
2. Sound power level [Lw] according to ISO EN 9614 – 2.
3. Average sound pressure level [LPm] 1m far according to ISO EN 3744.
4. Hydraulic connection with grooved end. The flexible joint is an optional accessory.
5. Referred to chiller water temperature 12/7°C; 35°C ambient air temperature; hot water temperature 40/45°C.
6. Referred to chiller water temperature 12/7°C; 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
U4	4000	1200	1970