



Indoor packaged water-water unit

LEP 50 - 470 kW



Scroll
compressor



Refrigerant
R-410A



Heating/
Cooling



Total heat
recovery
multi-pur-
pose unit



Multi-purpose
2 pipes
system



Multi-purpose
4 pipes
system

Maximum efficiency with total recovery and dissipation in water.

LEP units are actually multi-purpose, they totally recover the condensation heat and they are characterized by the simultaneous production of cold and hot water. Available for two-pipe systems with the request of DHW production or in four-pipe systems, they are conceived for average-high power applications (multi residential or commercial unit) and they guarantee a high thermodynamic efficiency and a wide configurability both in terms of accessories and in terms of refrigeration cycle.

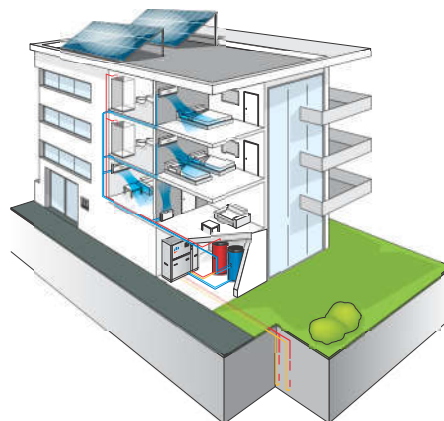
LEP series is characterized by a reduced size, high thermodynamic cycle COP, no external noise, reduced cooling load and it is composed of 24 models with refrigeration capacity ranging from 50 to 470 kW both for the standard version and the silenced one.

Multi-purpose LEP machines have six water connections linked to three different hydraulic circuits of which a dissipation one (hot or cold) opposed to the consumption. The users differ as for two-pipe system in which there is a hot/cold circuit and just one hot circuit for the production of DHW while in four-pipe systems there is one hot circuit and a cold one.

There is the option to obtain an external sound-proof hydraulic module with circulation pumps for dissipation circuits, users and domestic hot water.

PLUS

- » Maximum energy efficiency
- » Total condensation heat recovery
- » Electronic expansion valve
- » Up to 4 compressors
- » Remote connectivity with the most common protocols
- » Compact dimensions
- » Low-noise level thanks to the paneled structure



LEP is suitable to the air-conditioning of 2-pipe systems with production of DHW or in 4-pipe systems. In both, the total recovery of the heat ensures remarkable energy savings.

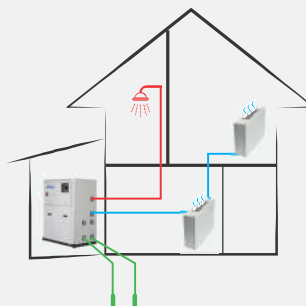
MAIN COMPONENTS

LEP-M: chiller mode

In the "Chiller" mode the unit cools water to air condition the interior on the user side, dissipating the condensation heat by means of water that is cooled in the dissipation exchanger.

LEP-M: chiller + DHW

In the "Chiller + DHW" mode the unit can produce chilled water with the simultaneous production of high-temperature hot water for sanitary use, thanks to total heat recovery.



LEP-M: DHW mode

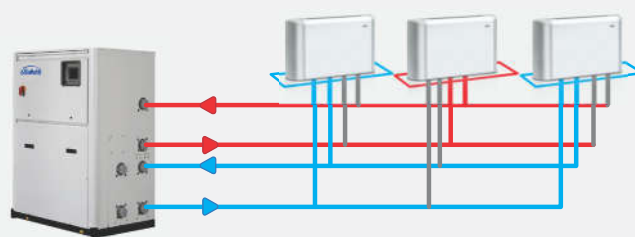
In the "high-temperature sanitary hot water (DHW)" mode the unit heats water in the condenser, dedicated to DHW as needed, dissipating the evaporative cooling capacity by means of water that is heated in the exchanger on the dissipation side.

LEP-M: heating pump mode

In the "heat pump" mode the unit heats the water in the condenser to warm the interior on the user side, dissipating the evaporative cooling capacity by means of water that is heated in the dissipation exchanger.

LEP-P: 4-pipes systems

The four-pipe system has a distribution system that offers both hot water (with respective return lines) and chilled water (with respective return lines). The LEP-P unit has a circuit used for the production of hot water and another one used for the production of cold water.



CONFIGURATOR

The models are completely configurable by selecting the version and the options. To the right is shown an example of configuration.

Version	Field	1	2	3	4	5	6	7	8	9
LEP214ML		2	B	P	0	2	G	0	0	B

To verify the compatibility of the options, use the selection software or the price list.

AVAILABLE VERSIONS

2 pipes systems version

LEP..MS Standard execution
LEP..ML Low noise execution

4 pipes systems version

LEP..PS Standard execution
LEP..PL Low noise execution

CONFIGURATION OPTIONS

- 1 Power supply**
 - 0 400 V - 3 N - 50 Hz
 - 2 400 V - 3 N - 50 Hz + magnetic breakers
- 2 Onboard controller and expansion valve**
 - B Advanced + electronic expansion valve
- 3 Source water flow modulation**
 - 0 Absent
 - P 0-10V signal for condensation control
- 4 User water flow modulation**
 - 0 Absent
 - D 0-10V signal for water flow adjustment with $\Delta T = \text{const}$ (advanced controller required)
 - T 0-10V signal for water flow adjustment with $T = \text{const}$ (advanced controller required)
- 5 Remote communication**
 - 0 Absent
 - 1 RS485 serial board (Carel / Modbus protocol)
 - 2 LON FTT10 serial board (advanced controller required)
 - 3 GSM modem board (advanced controller required)
 - 4 BACNET IP / PCOWEB serial board + supervision software Gweb (advanced controller required)
 - 5 BACNET IP / PCOWEB serial board + clock board + supervision software Gweb (advanced controller required)
- 6 Anti vibration shock mounts**
 - 0 Absent
 - G Rubber anti vibration shock mounts
 - M Spring anti vibration shock mounts

- 7 Packing**
 - 0 Standard
 - 1 Wooden cage
 - 2 Wooden crate
- 8 Remote control**
 - 0 Absent
 - 3 Remote user panel for advanced controller
- 9 Insulated hydraulic module**
 - 0 Absent
 - A Water pumps LP user + LP inverter source + LP recovery
 - B Water pumps LP user + LP source + LP recovery
 - C Water pumps LP user + HP source + LP recovery
 - D Water pumps LP user + HP inverter source + LP recovery
 - E Water pumps HP user + LP source + LP recovery
 - F Water pumps HP user + LP inverter source + LP recovery
 - G Water pumps LP user + LP source + LP recovery
 - H Water pumps HP user + HP inverter source + LP recovery
 - I Water pumps LP user + LP inverter source + HP recovery
 - J Water pumps LP user + LP source + HP recovery
 - K Water pumps LP user + HP source + HP recovery
 - L Water pumps LP user + HP inverter source + HP recovery
 - M Water pumps HP user + HP source + HP recovery
 - N Water pumps HP user + LP inverter source + HP recovery
 - P Water pumps HP user + HP source + HP recovery
 - Q Water pumps HP user + HP inverter source + HP recovery

ACCESSORIES

A	Power factor capacitors	F	Refrigerant pressure gauges
B	Soft starter	G	Three couples of Victaulic joints
C	Service kit (advanced controller required)	H	Filter isolation valves kit (solenoid valve and isolation valve)
D	ON/OFF status of the compressors	I	4-way valve for water flow inversion on user side in the hydraulic module
E	Set point compensation outdoor temperature probe	L	Couple of probes for buffer tank temperature regulation



Total heat recovery multi-purpose units LEP

RATED TECHNICAL DATA FOR 2-PIPES + DHW SYSTEMS

LEP M			042	052	062	072	082	092
Power supply			V-ph-Hz	400 - 3N - 50				
Cooling mode operation								
Cooling capacity	(1)(E)	kW	46,4	53,4	63,6	69,4	80,6	93,1
Total power input	(1)(E)	kW	10,5	12,5	14,2	15,8	17,8	21,4
EER	(1)(E)		4,41	4,27	4,47	4,39	4,52	4,35
SEER	(2)		5,61	5,52	5,87	5,81	6,17	6,12
Water flow user side	(1)	l/h	7981	9187	10939	11939	13861	16015
Water pressure drop user side	(1)(E)	kPa	19	25	21	25	19	25
Water flow source side	(1)	l/h	9731	11254	13303	14553	16833	19555
Water pressure drop source side	(1)(E)	kPa	27	36	30	35	27	36
Cooling mode operation and DHW in total recovery								
Cooling capacity	(3)(E)	kW	41,5	46,7	57,0	61,8	71,9	83,4
Heating capacity	(4)(E)	kW	54,4	63,7	74,5	81,3	93,8	109
Total power input	(5)(E)	kW	12,6	15,0	17,0	18,9	21,3	25,2
COP HRE	(5)(E)		7,60	7,34	7,74	7,56	7,80	7,66
Water flow user side	(3)	l/h	7981	9187	10939	11939	13861	16015
Water pressure drop user side	(3)	kPa	19	25	21	25	19	25
Water flow DHW side	(4)	l/h	9194	11061	12610	13717	15840	18435
Water pressure drop DHW side	(4)	kPa	25	34	27	32	24	32
Heating or DHW operation								
DHW heating capacity	(6)(E)	kW	53,0	63,8	72,7	79,1	91,3	106
Total power input	(6)(E)	kW	12,4	15,4	16,6	18,5	20,8	24,6
COP	(6)(E)		4,29	4,14	4,37	4,27	4,40	4,32
SCOP	(2)		4,16	4,30	4,38	4,31	4,36	4,21
Heating energy efficiency class	(7)		A+++					
Water flow DHW side	(6)	l/h	9194	11061	12610	13717	15840	18435
Water pressure drop DHW side	(6)	kPa	25	34	27	32	24	32
Water flow source side	(6)	l/h	11906	14225	16427	17784	20650	23965
Water pressure drop source side	(6)	kPa	39	54	44	51	39	51
General data								
Maximum current absorption		A	32,0	36,0	43,0	50,0	62,0	68,0
Start up current		A	117	140	161	143	171	208
Startup current with soft starter		A	60	68	81	91	111	126
Compressors / circuits			2 / 1					
Sound power level	(8)	dB(A)	78	74	75	78	79	80
Sound power level, low-noise version	(8)	dB(A)	72	68	69	72	73	74
Transport / operating weight		kg	410	420	450	460	490	510

(1) Water temperature - user side 12°C / 7°C, water temperature - dissipation side 30°C / 35°C (EN14511:2022)

(2) η efficiency values for heating and cooling are respectively calculated by the following formulas: $[\eta = SCOP / 2,5 - F(1) - F(2)]$ e $[\eta = SEER / 2,5 - F(1) - F(2)]$. For further information, please refer to the technical document "ErP 2009/125/EC DIRECTIVE" in the catalogue introducing pages, or to the EN14825:2022 regulation.

(3) Cooling water temperature 7°C, water flow rate same as in cooling mode

(4) Recovery water temperature 45°C, water flow rate same as in cooling mode

(5) Cooling water temperature 7°C, recovery water temperature 45°C

(6) DHW water temperature 40°C / 45°C, water temperature - source side 10°C / 7°C (EN14511:2022)

(7) Seasonal energy efficiency class for MEDIUM TEMPERATURE room heating under AVERAGE climatic conditions [EUROPEAN REGULATION No 811/2013]

(8) Sound power level measured according to ISO 9614

(E) EUROVENT certified data

RATED TECHNICAL DATA FOR 2-PIPES + DHW SYSTEMS

LEP M			112	132	142	144	162	164
Power supply		V-ph-Hz	400 - 3N - 50					
Cooling mode operation								
Cooling capacity	(1)(E)	kW	106	118	133	147	148	157
Total power input	(1)(E)	kW	24,3	27,1	30,6	34,5	34,4	36,7
EER	(1)(E)		4,36	4,33	4,36	4,26	4,30	4,27
SEER	(2)		6,40	6,38	6,31	6,07	6,17	6,19
Water flow user side	(1)	l/h	18206	20227	22925	25327	25442	26966
Water pressure drop user side	(1)(E)	kPa	31	38	35	41	38	33
Water flow source side	(1)	l/h	22186	24656	27932	30967	31063	32998
Water pressure drop source side	(1)(E)	kPa	45	54	49	60	54	48
Cooling mode operation and DHW in total recovery								
Cooling capacity	(3)(E)	kW	94,3	105	120	131	133	140
Heating capacity	(4)(E)	kW	124	138	157	173	174	184
Total power input	(5)(E)	kW	28,8	32,0	36,0	40,8	40,4	43,3
COP HRE	(5)(E)		7,57	7,61	7,68	7,46	7,60	7,50
Water flow user side	(3)	l/h	18206	20227	22925	25327	25442	26966
Water pressure drop user side	(3)	kPa	31	38	35	41	38	33
Water flow DHW side	(4)	l/h	20905	23287	26432	29364	29401	31244
Water pressure drop DHW side	(4)	kPa	40	49	45	54	49	43
Heating or DHW operation								
DHW heating capacity	(6)(E)	kW	121	134	152	169	170	180
Total power input	(6)(E)	kW	28,1	31,3	35,2	40,3	39,6	42,4
COP	(6)(E)		4,29	4,29	4,33	4,20	4,28	4,25
SCOP	(2)		4,29	4,24	4,29	4,34	4,28	4,28
Heating energy efficiency class	(7)		A+++					
Water flow DHW side	(6)	l/h	20905	23287	26432	29364	29401	31244
Water pressure drop DHW side	(6)	kPa	40	49	45	54	49	43
Water flow source side	(6)	l/h	27177	30319	34455	38020	38229	40474
Water pressure drop source side	(6)	kPa	64	78	72	86	79	69
General data								
Maximum current absorption		A	72,0	76,0	87,0	101	97,0	124
Start up current		A	212	279	289	222	336	233
Startup current with soft starter		A	133	141	161	131	180	147
Compressors / circuits			2 / 1	2 / 1	2 / 1	4 / 2	2 / 1	4 / 2
Sound power level	(8)	dB(A)	84	86	86	78	86	82
Sound power level, low-noise version	(8)	dB(A)	78	80	80	72	80	76
Transport / operating weight		kg	690	700	770	1010	830	1050

- (1) Water temperature - user side 12°C / 7°C, water temperature - dissipation side 30°C / 35°C (EN14511:2022)
- (2) η efficiency values for heating and cooling are respectively calculated by the following formulas: $[\eta = SCOP / 2,5 - F(1) - F(2)]$ e $[\eta = SEER / 2,5 - F(1) - F(2)]$. For further information, please refer to the technical document "ErP 2009/125/EC DIRECTIVE" in the catalogue introducing pages, or to the EN14825:2022 regulation.
- (3) Cooling water temperature 7°C, water flow rate same as in cooling mode
- (4) Recovery water temperature 45°C, water flow rate same as in cooling mode
- (5) Cooling water temperature 7°C, recovery water temperature 45°C
- (6) DHW water temperature 40°C / 45°C, water temperature - source side 10°C / 7°C (EN14511:2022)
- (7) Seasonal energy efficiency class for MEDIUM TEMPERATURE room heating under AVERAGE climatic conditions [EUROPEAN REGULATION No 811/2013]
- (8) Sound power level measured according to ISO 9614
- (E) EUROVENT certified data



Total heat recovery multi-purpose units LEP

RATED TECHNICAL DATA FOR 2-PIPES + DHW SYSTEMS

LEP M			182	184	204	214	244
Power supply		V-ph-Hz	400 - 3N - 50				
Cooling mode operation							
Cooling capacity	(1)(E)	kW	196	186	211	235	255
Total power input	(1)(E)	kW	44,8	42,9	48,3	54,1	56,2
EER	(1)(E)		4,38	4,34	4,37	4,35	4,53
SEER	(2)		6,37	6,47	6,43	6,54	6,87
Water flow user side	(1)	l/h	33780	32039	36308	40457	43793
Water pressure drop user side	(1)(E)	kPa	34	31	39	47	27
Water flow source side	(1)	l/h	41172	39112	44245	49307	53152
Water pressure drop source side	(1)(E)	kPa	49	45	56	68	35
Cooling mode operation and DHW in total recovery							
Cooling capacity	(3)(E)	kW	176	167	189	211	229
Heating capacity	(4)(E)	kW	230	219	247	276	297
Total power input	(5)(E)	kW	52,6	50,2	56,8	63,6	66,5
COP HRE	(5)(E)		7,71	7,68	7,68	7,66	7,91
Water flow user side	(3)	l/h	33780	32039	36308	40457	43793
Water pressure drop user side	(3)	kPa	34	31	39	47	27
Water flow DHW side	(4)	l/h	38731	36908	41796	46601	50165
Water pressure drop DHW side	(4)	kPa	44	40	50	61	35
Heating or DHW operation							
DHW heating capacity	(6)(E)	kW	223	213	241	269	289
Total power input	(6)(E)	kW	51,3	49,0	55,7	62,6	64,8
COP	(6)(E)		4,35	4,34	4,32	4,29	4,46
SCOP	(2)		4,34	4,37	4,31	4,34	4,43
Heating energy efficiency class	(7)		A+++				
Water flow DHW side	(6)	l/h	38731	36908	41796	46601	50165
Water pressure drop DHW side	(6)	kPa	44	40	50	61	35
Water flow source side	(6)	l/h	50490	48044	54439	60721	65630
Water pressure drop source side	(6)	kPa	71	65	81	99	51
General data							
Maximum current absorption		A	131	136	144	153	163
Start up current		A	375	276	284	355	366
Startup current with soft starter		A	240	175	185	195	208
Compressors / circuits			2 / 1	4 / 2	4 / 2	4 / 2	4 / 2
Sound power level	(8)	dB(A)	88	83	87	89	89
Sound power level, low-noise version	(8)	dB(A)	82	77	81	83	83
Transport / operating weight		kg	890	1130	1280	1350	1840

(1) Water temperature - user side 12°C / 7°C, water temperature - dissipation side 30°C / 35°C (EN14511:2022)

(2) η efficiency values for heating and cooling are respectively calculated by the following formulas: $[\eta = SCOP / 2,5 - F(1) - F(2)]$ e $[\eta = SEER / 2,5 - F(1) - F(2)]$. For further information, please refer to the technical document "ErP 2009/125/EC DIRECTIVE" in the catalogue introducing pages, or to the EN14825:2022 regulation.

(3) Cooling water temperature 7°C, water flow rate same as in cooling mode

(4) Recovery water temperature 45°C, water flow rate same as in cooling mode

(5) Cooling water temperature 7°C, recovery water temperature 45°C

(6) DHW water temperature 40°C / 45°C, water temperature - source side 10°C / 7°C (EN14511:2022)

(7) Seasonal energy efficiency class for MEDIUM TEMPERATURE room heating under AVERAGE climatic conditions [EUROPEAN REGULATION No 811/2013]

(8) Sound power level measured according to ISO 9614

(E) EUROVENT certified data

RATED TECHNICAL DATA FOR 2-PIPES + DHW SYSTEMS

LEP M			284	314	344	374	424
Power supply		V-ph-Hz	400 - 3N - 50				
Cooling mode operation							
Cooling capacity	(1)(E)	kW	268	293	342	391	444
Total power input	(1)(E)	kW	60,2	68,3	78,7	89,6	102
EER	(1)(E)		4,45	4,29	4,35	4,36	4,34
SEER	(2)		6,67	6,31	6,40	6,47	6,77
Water flow user side	(1)	l/h	46045	50342	58850	67166	76360
Water pressure drop user side	(1)(E)	kPa	30	35	33	33	36
Water flow source side	(1)	l/h	56037	61627	71915	82041	93312
Water pressure drop source side	(1)(E)	kPa	40	48	45	47	52
Cooling mode operation and DHW in total recovery							
Cooling capacity	(3)(E)	kW	241	264	307	350	399
Heating capacity	(4)(E)	kW	314	346	402	457	521
Total power input	(5)(E)	kW	71,0	80,2	92,4	105	119
COP HRE	(5)(E)		7,82	7,60	7,68	7,69	7,71
Water flow user side	(3)	l/h	46045	50342	58850	67166	76360
Water pressure drop user side	(3)	kPa	30	35	33	33	36
Water flow DHW side	(4)	l/h	52937	58369	67838	77045	87830
Water pressure drop DHW side	(4)	kPa	38	46	42	43	47
Heating or DHW operation							
DHW heating capacity	(6)(E)	kW	305	336	391	444	506
Total power input	(6)(E)	kW	69,3	78,2	90,0	102	116
COP	(6)(E)		4,40	4,30	4,34	4,34	4,35
SCOP	(2)		4,37	4,29	4,34	4,34	4,20
Heating energy efficiency class	(7)		A+++				
Water flow DHW side	(6)	l/h	52937	58369	67838	77045	87830
Water pressure drop DHW side	(6)	kPa	38	46	42	43	47
Water flow source side	(6)	l/h	69045	75765	88200	100174	114375
Water pressure drop source side	(6)	kPa	58	70	65	67	75
General data							
Maximum current absorption		A	174	194	228	262	296
Start up current		A	376	433	467	506	541
Startup current with soft starter		A	221	247	287	328	370
Compressors / circuits			4 / 2	4 / 2	4 / 2	4 / 2	4 / 2
Sound power level	(8)	dB(A)	89	89	90	91	94
Sound power level, low-noise version	(8)	dB(A)	83	83	84	85	88
Transport / operating weight		kg	1940	2040	2110	2180	2380

- (1) Water temperature - user side 12°C / 7°C, water temperature - dissipation side 30°C / 35°C (EN14511:2022)
 (2) η efficiency values for heating and cooling are respectively calculated by the following formulas: $[\eta = SCOP / 2,5 - F(1) - F(2)]$ e $[\eta = SEER / 2,5 - F(1) - F(2)]$. For further information, please refer to the technical document "ErP 2009/125/EC DIRECTIVE" in the catalogue introducing pages, or to the EN14825:2022 regulation.
 (3) Cooling water temperature 7°C, water flow rate same as in cooling mode
 (4) Recovery water temperature 45°C, water flow rate same as in cooling mode
 (5) Cooling water temperature 7°C, recovery water temperature 45°C
 (6) DHW water temperature 40°C / 45°C, water temperature - source side 10°C / 7°C (EN14511:2022)
 (7) Seasonal energy efficiency class for MEDIUM TEMPERATURE room heating under AVERAGE climatic conditions [EUROPEAN REGULATION No 811/2013]
 (8) Sound power level measured according to ISO 9614
 (E) EUROVENT certified data



Total heat recovery multi-purpose units LEP

RATED TECHNICAL DATA FOR 4-PIPES SYSTEMS

LEP P			042	052	062	072	082	092
Power supply		V-ph-Hz	400 - 3N - 50					
Cooling mode operation								
Cooling capacity	(1)(E)	kW	45,1	52,1	61,7	67,2	78,1	90,0
Total power input	(1)(E)	kW	10,8	12,8	14,7	16,3	18,4	22,2
EER	(1)(E)		4,16	4,08	4,19	4,12	4,25	4,06
SEER	(2)		5,61	5,52	5,87	5,81	6,17	6,12
Water flow user side	(1)	l/h	7762	8971	10625	11569	13439	15495
Water pressure drop user side	(1)(E)	kPa	29	38	41	37	29	39
Water flow source side	(1)	l/h	9542	11046	13031	14225	16462	19100
Water pressure drop source side	(1)(E)	kPa	41	54	44	53	41	55
Cooling and heating mode in total heat recovery								
Cooling capacity	(3)(E)	kW	40,2	46,5	55,1	59,8	69,7	80,5
Heating capacity	(4)(E)	kW	53,4	62,1	73,2	79,7	92,0	107
Total power input	(5)(E)	kW	12,9	15,1	17,5	19,4	21,7	25,8
COP HRE	(5)(E)		7,25	7,19	7,33	7,19	7,44	7,27
Water flow cooling side	(3)	l/h	7762	8971	10625	11569	13439	15495
Water pressure cooling heating side	(3)	kPa	29	38	41	37	29	39
Water flow heating side	(4)	l/h	9238	10721	12635	13772	15896	18483
Water pressure drop heating side	(4)	kPa	39	51	41	50	39	52
Heating mode operation								
Heating capacity	(6)(E)	kW	53,3	61,9	72,9	79,5	91,7	107
Total power input	(6)(E)	kW	13,0	15,2	17,6	19,5	21,8	25,8
COP	(6)(E)		4,11	4,08	4,15	4,08	4,21	4,13
SCOP	(2)		4,16	4,30	4,38	4,31	4,36	4,21
Heating energy efficiency class	(7)		A+++					
Water flow user side	(6)	l/h	9238	10721	12635	13772	15896	18483
Water pressure drop user side	(6)	kPa	39	51	41	50	39	52
Water flow source side	(6)	l/h	11881	13816	16341	17714	20565	23832
Water pressure drop source side	(6)	kPa	63	83	88	79	62	84
General data								
Maximum current absorption		A	32,0	36,0	43,0	50,0	62,0	68,0
Start up current		A	117	140	161	143	171	208
Startup current with soft starter		A	60	68	81	91	111	126
Compressors / circuits			2 / 1					
Sound power level	(8)	dB(A)	78	74	75	78	79	80
Sound power level, low-noise version	(8)	dB(A)	72	68	69	72	73	74
Transport / operating weight		kg	410	420	450	460	490	510

(1) Water temperature - user side 12°C / 7°C, water temperature - dissipation side 30°C / 35°C (EN14511:2022)

(2) η efficiency values for heating and cooling are respectively calculated by the following formulas: $[\eta = SCOP / 2,5 - F(1) - F(2)]$ e $[\eta = SEER / 2,5 - F(1) - F(2)]$. For further information, please refer to the technical document "ErP 2009/125/EC DIRECTIVE" in the catalogue introducing pages, or to the EN14825:2022 regulation.

(3) Cooling water temperature 7°C, water flow rate same as in cooling mode

(4) Recovery water temperature 45°C, water flow rate same as in cooling mode

(5) Cooling water temperature 7°C, recovery water temperature 45°C

(6) Water temperature - user side 40°C / 45°C, water temperature - source side 10°C / 7°C (EN14511:2022)

(7) Seasonal energy efficiency class for MEDIUM TEMPERATURE room heating under AVERAGE climatic conditions [EUROPEAN REGULATION No 811/2013]

(8) Sound power level measured according to ISO 9614

(E) EUROVENT certified data

RATED TECHNICAL DATA FOR 4-PIPES SYSTEMS

LEP P			112	132	142	144	162	164
Power supply		V-ph-Hz	400 - 3N - 50					
Cooling mode operation								
Cooling capacity	(1)(E)	kW	105	118	133	147	148	154
Total power input	(1)(E)	kW	24,3	27,1	30,5	34,6	34,4	37,2
EER	(1)(E)		4,32	4,34	4,37	4,25	4,30	4,14
SEER	(2)		6,40	6,38	6,31	6,07	6,17	6,19
Water flow user side	(1)	l/h	18052	20226	22925	25326	25442	26513
Water pressure drop user side	(1)(E)	kPa	32	37	34	41	38	40
Water flow source side	(1)	l/h	22042	24649	27925	30973	31068	32601
Water pressure drop source side	(1)(E)	kPa	43	52	47	57	51	57
Cooling and heating mode in total heat recovery								
Cooling capacity	(3)(E)	kW	94,3	105	120	131	133	138
Heating capacity	(4)(E)	kW	125	138	157	173	174	183
Total power input	(5)(E)	kW	29,0	32,0	36,0	40,8	40,4	43,7
COP HRE	(5)(E)		7,56	7,61	7,68	7,46	7,60	7,33
Water flow cooling side	(3)	l/h	18052	20226	22925	25326	25442	26513
Water pressure cooling heating side	(3)	kPa	32	37	34	41	38	40
Water flow heating side	(4)	l/h	21633	23861	27058	29886	30096	31588
Water pressure drop heating side	(4)	kPa	41	49	45	53	49	53
Heating mode operation								
Heating capacity	(6)(E)	kW	125	138	156	172	174	182
Total power input	(6)(E)	kW	29,1	32,1	36,0	41,0	40,4	43,9
COP	(6)(E)		4,29	4,29	4,33	4,20	4,29	4,15
SCOP	(2)		4,29	4,24	4,29	4,34	4,28	4,28
Heating energy efficiency class	(7)		A+++					
Water flow user side	(6)	l/h	21633	23861	27058	29886	30096	31588
Water pressure drop user side	(6)	kPa	41	49	45	53	49	53
Water flow source side	(6)	l/h	28118	31073	35278	38699	39167	40747
Water pressure drop source side	(6)	kPa	70	81	75	88	82	87
General data								
Maximum current absorption		A	72,0	76,0	87,0	101	97,0	124
Start up current		A	212	279	289	222	336	233
Startup current with soft starter		A	133	141	161	131	180	147
Compressors / circuits			2 / 1	2 / 1	2 / 1	4 / 2	2 / 1	4 / 2
Sound power level	(8)	dB(A)	84	86	86	78	86	82
Sound power level, low-noise version	(8)	dB(A)	78	80	80	72	80	76
Transport / operating weight		kg	690	700	770	1010	830	1050

- (1) Water temperature - user side 12°C / 7°C, water temperature - dissipation side 30°C / 35°C (EN14511:2022)
- (2) η efficiency values for heating and cooling are respectively calculated by the following formulas: $[\eta = SCOP / 2,5 - F(1) - F(2)]$ e $[\eta = SEER / 2,5 - F(1) - F(2)]$. For further information, please refer to the technical document "ErP 2009/125/EC DIRECTIVE" in the catalogue introducing pages, or to the EN14825:2022 regulation.
- (3) Cooling water temperature 7°C, water flow rate same as in cooling mode
- (4) Recovery water temperature 45°C, water flow rate same as in cooling mode
- (5) Cooling water temperature 7°C, recovery water temperature 45°C
- (6) Water temperature - user side 40°C / 45°C, water temperature - source side 10°C / 7°C (EN14511:2022)
- (7) Seasonal energy efficiency class for MEDIUM TEMPERATURE room heating under AVERAGE climatic conditions [EUROPEAN REGULATION No 811/2013]
- (8) Sound power level measured according to ISO 9614
- (E) EUROVENT certified data



Total heat recovery multi-purpose units LEP

RATED TECHNICAL DATA FOR 4-PIPES SYSTEMS

LEP P			182	184	204	214	244
Power supply		V-ph-Hz	400 - 3N - 50				
Cooling mode operation							
Cooling capacity	(1)(E)	kW	193	184	208	235	255
Total power input	(1)(E)	kW	45,4	43,3	49,1	54,0	56,2
EER	(1)(E)		4,26	4,25	4,24	4,36	4,53
SEER	(2)		6,37	6,47	6,43	6,54	6,87
Water flow user side	(1)	l/h	33250	31616	35778	40456	43793
Water pressure drop user side	(1)(E)	kPa	39	37	45	46	27
Water flow source side	(1)	l/h	40701	38732	43800	49301	53152
Water pressure drop source side	(1)(E)	kPa	55	51	64	64	35
Cooling and heating mode in total heat recovery							
Cooling capacity	(3)(E)	kW	173	165	186	211	229
Heating capacity	(4)(E)	kW	228	217	245	276	297
Total power input	(5)(E)	kW	53,1	50,7	57,5	63,6	66,5
COP HRE	(5)(E)		7,55	7,52	7,51	7,66	7,91
Water flow cooling side	(3)	l/h	33250	31616	35778	40456	43793
Water pressure cooling heating side	(3)	kPa	39	37	45	46	27
Water flow heating side	(4)	l/h	39278	37444	42416	47748	51400
Water pressure drop heating side	(4)	kPa	51	48	60	61	33
Heating mode operation							
Heating capacity	(6)(E)	kW	226	216	244	275	296
Total power input	(6)(E)	kW	53,1	50,8	57,8	64,0	66,5
COP	(6)(E)		4,26	4,25	4,23	4,30	4,45
SCOP	(2)		4,34	4,37	4,31	4,34	4,43
Heating energy efficiency class	(7)		A+++				
Water flow user side	(6)	l/h	39278	37444	42416	47748	51400
Water pressure drop user side	(6)	kPa	51	48	60	61	33
Water flow source side	(6)	l/h	50988	48551	55050	62254	67248
Water pressure drop source side	(6)	kPa	85	79	98	99	59
General data							
Maximum current absorption		A	131	136	144	153	163
Start up current		A	375	276	284	355	366
Startup current with soft starter		A	240	175	185	195	208
Compressors / circuits			2 / 1	4 / 2	4 / 2	4 / 2	4 / 2
Sound power level	(8)	dB(A)	88	83	87	89	89
Sound power level, low-noise version	(8)	dB(A)	82	77	81	83	83
Transport / operating weight		kg	890	1130	1280	1350	1840

(1) Water temperature - user side 12°C / 7°C, water temperature - dissipation side 30°C / 35°C (EN14511:2022)

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(5) Cooling water temperature 7°C, recovery water temperature 45°C

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(7) Seasonal energy efficiency class for MEDIUM TEMPERATURE room heating under AVERAGE climatic conditions [EUROPEAN REGULATION No 811/2013]

(8) Sound power level measured according to ISO 9614

(E) EUROVENT certified data

RATED TECHNICAL DATA FOR 4-PIPES SYSTEMS

LEP P			284	314	344	374	424
Power supply		V-ph-Hz	400 - 3N - 50				
Cooling mode operation							
Cooling capacity	(1)(E)	kW	268	293	337	381	436
Total power input	(1)(E)	kW	60,2	68,3	79,5	90,9	103
EER	(1)(E)		4,45	4,29	4,24	4,19	4,21
SEER	(2)		6,67	6,31	6,40	4,47	6,77
Water flow user side	(1)	l/h	46045	50342	57960	65436	74851
Water pressure drop user side	(1)(E)	kPa	30	35	37	40	41
Water flow source side	(1)	l/h	56037	61627	71109	80440	91927
Water pressure drop source side	(1)(E)	kPa	40	48	51	55	57
Cooling and heating mode in total heat recovery							
Cooling capacity	(3)(E)	kW	241	264	303	342	392
Heating capacity	(4)(E)	kW	314	346	398	450	515
Total power input	(5)(E)	kW	71,0	80,2	93,0	106	120
COP HRE	(5)(E)		7,82	7,60	7,54	7,47	7,55
Water flow cooling side	(3)	l/h	46045	50342	57960	65436	74851
Water pressure cooling heating side	(3)	kPa	30	35	37	40	41
Water flow heating side	(4)	l/h	54223	59828	68859	77890	89023
Water pressure drop heating side	(4)	kPa	38	46	49	52	54
Heating mode operation							
Heating capacity	(6)(E)	kW	312	345	397	449	513
Total power input	(6)(E)	kW	71,0	80,1	93,3	106	121
COP	(6)(E)		4,40	4,30	4,25	4,22	4,25
SCOP	(2)		4,37	4,29	4,34	4,34	4,20
Heating energy efficiency class	(7)		A+++				
Water flow user side	(6)	l/h	54223	59828	68859	77890	89023
Water pressure drop user side	(6)	kPa	38	46	49	52	54
Water flow source side	(6)	l/h	70760	77706	89182	100719	115372
Water pressure drop source side	(6)	kPa	64	76	81	86	89
General data							
Maximum current absorption		A	174	194	228	262	296
Start up current		A	376	433	467	506	541
Startup current with soft starter		A	221	247	287	328	370
Compressors / circuits			4 / 2	4 / 2	4 / 2	4 / 2	4 / 2
Sound power level	(8)	dB(A)	89	89	90	91	94
Sound power level, low-noise version	(8)	dB(A)	83	83	84	85	88
Transport / operating weight		kg	1940	2040	2110	2180	2380

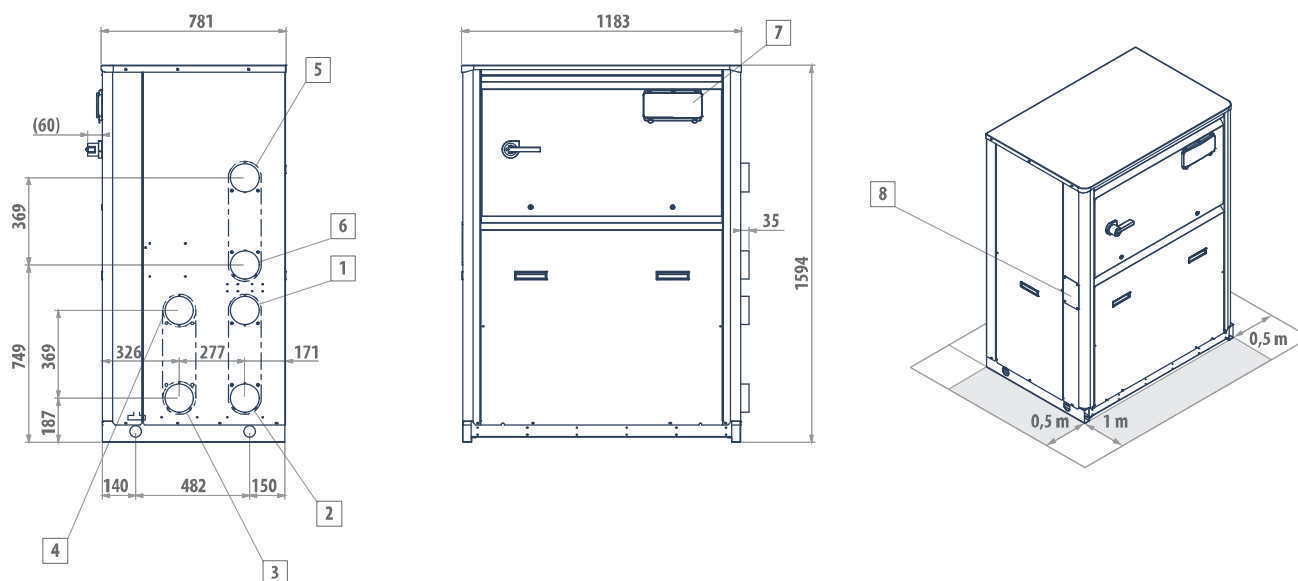
- (1) Water temperature - user side 12°C / 7°C, water temperature - dissipation side 30°C / 35°C (EN14511:2022)
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 (8) Sound power level measured according to ISO 9614
 (E) EUROVENT certified data



Total heat recovery multi-purpose units LEP

DIMENSIONAL DRAWINGS

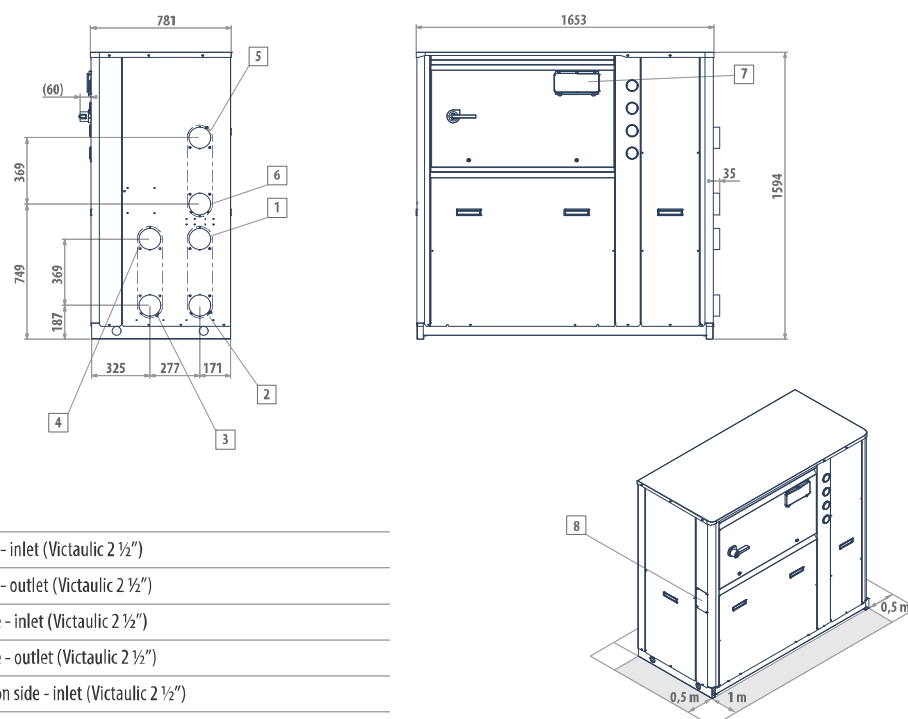
LEP 041 - 092



MODEL	VERSION
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LEP 112	M-P	S-L
LEP 132	M-P	S-L
LEP 142	M-P	S-L
LEP 162	M-P	S-L
LEP 182	M-P	S-L

LEP 112 - 182

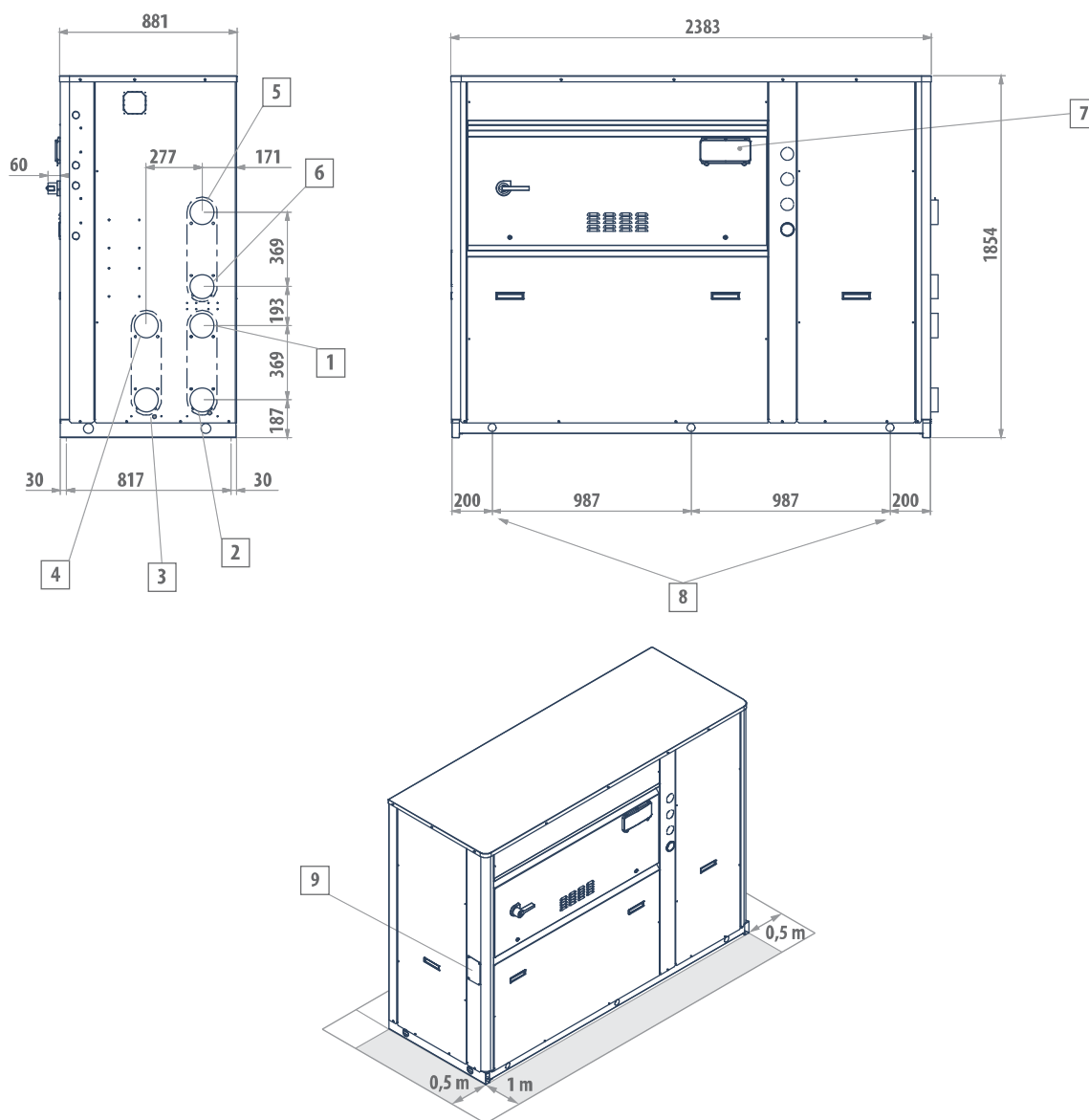


LEGEND

- | | |
|---|--|
| 1 | User side - inlet (Victaulic 2 1/2") |
| 2 | User side - outlet (Victaulic 2 1/2") |
| 3 | DHW side - inlet (Victaulic 2 1/2") |
| 4 | DHW side - outlet (Victaulic 2 1/2") |
| 5 | Dissipation side - inlet (Victaulic 2 1/2") |
| 6 | Dissipation side - outlet (Victaulic 2 1/2") |
| 7 | User interface |
| 8 | Power supply input |

DIMENSIONAL DRAWINGS

LEP 144 - 184



LEGEND

- | | |
|---|--|
| 1 | User side - inlet (Victaulic 2 ½") |
| 2 | User side - outlet (Victaulic 2 ½") |
| 3 | DHW side - inlet (Victaulic 2 ½") |
| 4 | DHW side - outlet (Victaulic 2 ½") |
| 5 | Dissipation side - inlet (Victaulic 2 ½") |
| 6 | Dissipation side - outlet (Victaulic 2 ½") |
| 7 | User interface |
| 8 | Lifting points |
| 9 | Power supply input |

MODEL VERSION

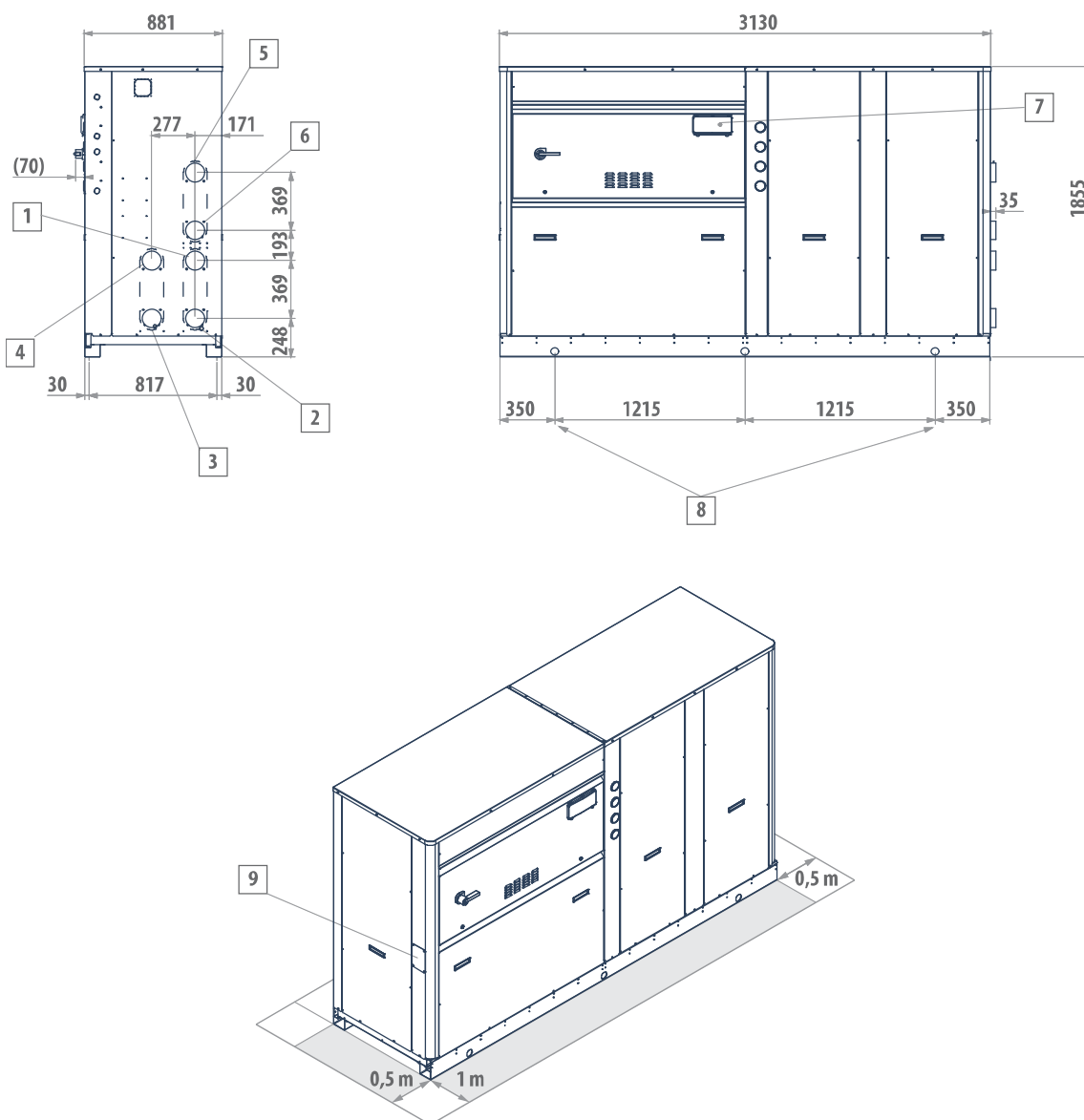
LEP 144	M-P	S-L
LEP 164	M-P	S-L
LEP 184	M-P	S-L



Total heat recovery multi-purpose units LEP

DIMENSIONAL DRAWINGS

LEP 204 - 214



LEGEND

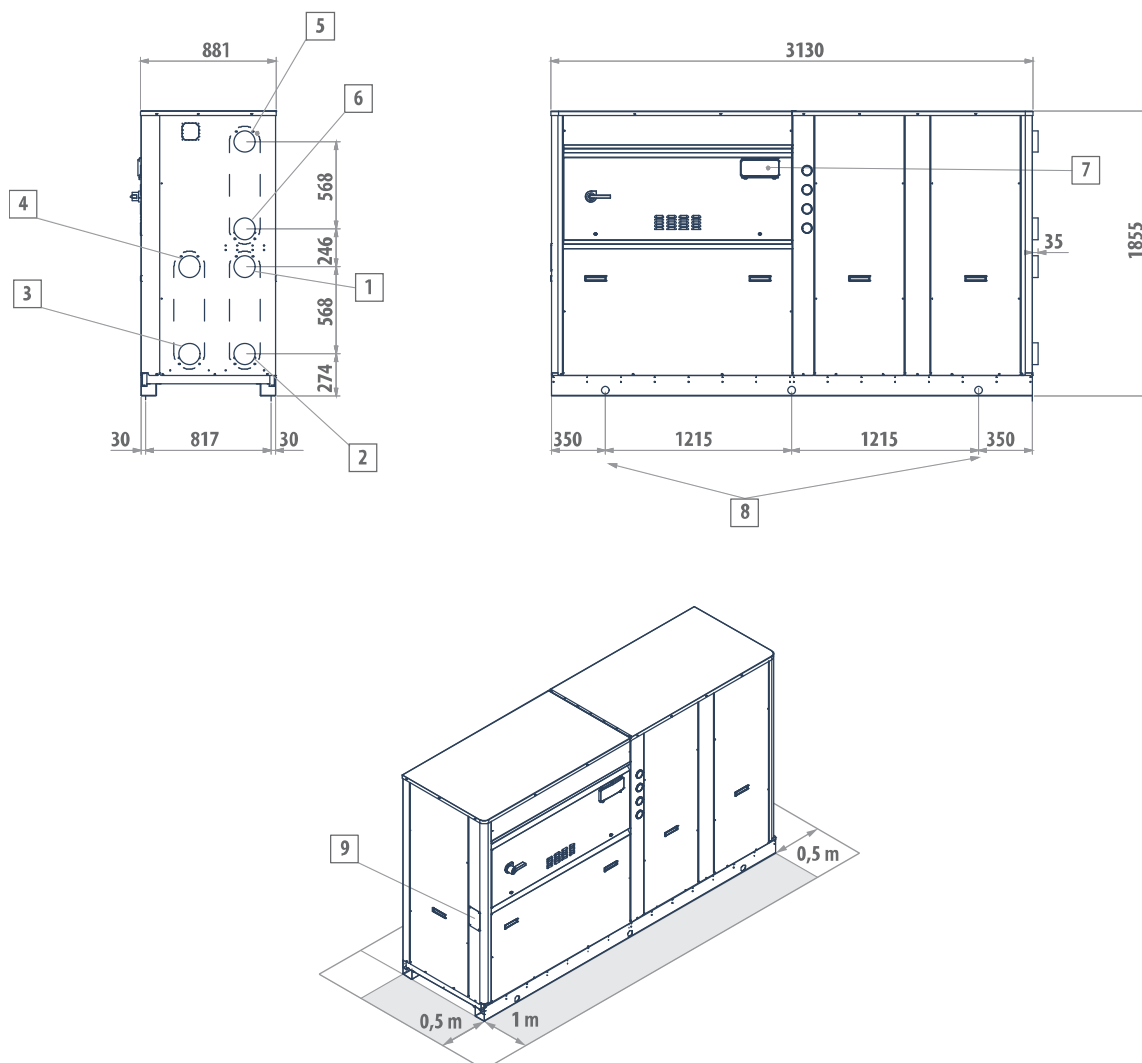
1	User side - inlet (Victaulic 2 ½")
2	User side - outlet (Victaulic 2 ½")
3	DHW side - inlet (Victaulic 2 ½")
4	DHW side - outlet (Victaulic 2 ½")
5	Dissipation side - inlet (Victaulic 2 ½")
6	Dissipation side - outlet (Victaulic 2 ½")
7	User interface
8	Lifting points
9	Power supply input

MODEL VERSION

LEP 204	M-P	S-L
LEP 214	M-P	S-L

DIMENSIONAL DRAWINGS

LEP 244 - 424



LEGEND

- | | |
|---|--|
| 1 | User side - inlet (Victaulic 3") |
| 2 | User side - outlet (Victaulic 3") |
| 3 | DHW side - inlet (Victaulic 3") |
| 4 | DHW side - outlet (Victaulic 3") |
| 5 | Dissipation side - inlet (Victaulic 3") |
| 6 | Dissipation side - outlet (Victaulic 3") |
| 7 | User interface |
| 8 | Lifting points |
| 9 | Power supply input |

MODEL VERSION

LEP 244	M-P	S-L
LEP 284	M-P	S-L
LEP 314	M-P	S-L
LEP 344	M-P	S-L
LEP 374	M-P	S-L
LEP 424	M-P	S-L