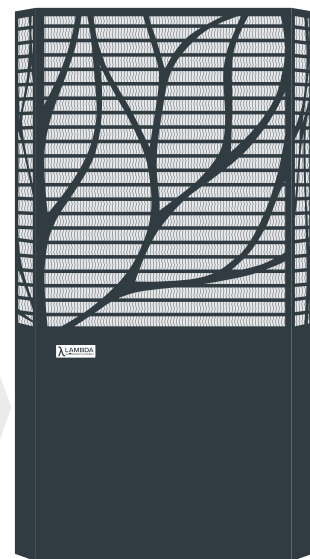


EN

LAMBDA
WÄRMEPUMPEN













TECHNICAL DATA SHEET



SUSTAINABLY EFFICIENT.

1 Technical data

1.1 Technical data sheet

Type	Unit	EU10L	EU13L	EU15L	EU20L	EU35L
OUTDOOR UNIT						
Height x Width x Depth	mm	1710 x 950 x 610	1710 x 950 x 610	1710 x 950 x 610	1772 x 1160 x 800	2320 x 1700 x 1190
Weight	kg	150	155	165	210	450
CONTROL CENTRE						
Height x Width x Depth	mm	310 x 170 x 130				
Weight	kg	3				
REFRIGERATION CYCLE						
Refrigerant		R290				
GWP		3				
Filling capacity	kg	1,4	1,4	1,5	2,2	4,9
Machine oil		PZ46M	POE Hatcol 4467	PAG	PAG	PAG
PERFORMANCE AND EFFICIENCY - HEATING						
Energy efficiency class at low temperature (medium climate)		 240% SCOP 6,08	 224% SCOP 5,68	 226% SCOP 5,73	 224% SCOP 5,68	 239% SCOP 6,06
Energy efficiency class at mid-range temperature (medium climate)		 179% SCOP 4,54	 177% SCOP 4,49	 176% SCOP 4,47	 176% SCOP 4,48	 179% SCOP 4,55
Variable heat output A7W35	kW	2,1 - 13,7	3,3 - 16,8	5,1 - 20,4	6,7 - 28,3	8,5 - 40,0
Variable heat output A2W35	kW	1,7 - 10,9	2,9 - 13,5	4,5 - 15,7	5,6 - 25,1	7,0 - 37,7
Variable heat output A-7W35	kW	1,3 - 9,2	3,3 - 12,9	3,9 - 15,3	4,6 - 20,8	6,1 - 34,1
Variable heat output A-7W55	kW	1,1 - 8,5	3,3 - 12,4	3,7 - 15,1	4,6 - 20,1	6,2 - 33,4
PERFORMANCE AND EFFICIENCY - COOLING						
Variable cooling capacity A35W18	kW	2,5 - 13,5	3,8 - 16,3	6,3 - 17,8	9,1 - 22,3	10,6 - 37,3
Variable cooling capacity A35W7	kW	1,8 - 11,1	2,8 - 13,7	5,6 - 15,4	6,6 - 19,8	8,9 - 29,1
SOUND						
Sound power level EN12102	dB(A)	45	44	46	50	53
Max. sound power level daytime	dB(A)	56	57	57	59	65
Max. sound power level night-time (70% power)	dB(A)	51	52	53	54	59
Max. sound power level night-time (50% power)	dB(A)	47	47	48	50	54
Tonality / tone quality	dB(A)	0				
LIMITS OF USE						
Water temperature - heating	°C	+12 bis +70				
Water temperature - cooling	°C	+7 bis +35				
Outside air temperature - heating	°C	-22 bis +40				
Outside air - cooling	°C	+5 bis +45				

Type	Unit	EU10L	EU13L	EU15L	EU20L	EU35L
HYDRAULICS						
Minimum volume flow of water	m ³ /h	1,3	1,6	1,6	2,1	3,5
Nominal flow rate	m ³ /h	1,7	2,1	2,5	3,4	5,5
Residual delivery height at minimum flow rate	m	6,0	5,2	5,2	5,3	7,0
Operating pressure	bar	0,5 bis 2,5				
Connections		5/4" AG	5/4" AG	5/4" AG	6/4" AG	6/4" AG
Minimum nominal diameter of connecting pipe	DN	25	32	32	32	50
HEAT SOURCE						
Air volume flow	m ³ /h	1500 bis 8500	1500 bis 8500	1500 bis 8500	3000 bis 14000	4000 bis 20000
Condensate during defrosting	Liter	7	7	9	12	19
400V POWER CONNECTION						
Outdoor unit		IP54				
Power connection		400VAC / 50Hz (L1,L2,L3,PE)				
Fuse		16A(B)	16A(B)	16A(B)	20A(B)	32A(B)
RCD		Typ B 30mA	Typ B 30mA	Typ B 30mA	Typ B 30mA	Typ B 100mA
Recommended minimum cross-section	mm ²	2,5	2,5	2,5	4	6
Max. current consumption / starting current	A	12	12	12	17,5	31
Max. power consumption	kW	4,9	5,3	5,7	10,0	18,8
Cos phi		0,9	0,9	0,9	0,83	0,97
Heating element (in charging station)		IP20				
Power connection		400VAC, 50Hz (L1,L2,L3,N,PE)				
Fuse		16A(B)				
Recommended minimum cross-section	mm ²	2,5				
Maximum current consumption	A	13				
Maximum power consumption	kW	8,8				
230V POWER CONNECTION						
Fuse		13A(B)				
Outdoor unit		IP54				
Fuse		13A(B)				
Control connection		230VAC / 50Hz (L,N,PE)				
Minimum cross-section	mm ²	1,5				
Max. power consumption	A	1,5				
Control centre		IP20				
Fuse		13A(B)				
Control connection		230VAC / 50Hz (L,N,PE)				
Recommended minimum cross-section	mm ²	1,5				
Max. power consumption	A	6,3				

Tab. 1: Data Sheet

1.2 Efficiency ratings according to 813/2013 (Ecodesign Directive / Energy Label)

Model				EU10L	EU13L	EU15L	EU20L	EU35L						
FUNCTION	Cooling mode			✓	✓	✓	✓	✓						
	Heating mode	moderate		✓	✓	✓	✓	✓						
		warmer		✓	✓	✓	✓	✓						
		cooler		✓	✓	✓	✓	✓						
POWER REGULATION	Fixed			×	×	×	×	×						
	Graded			×	×	×	×	×						
	Variable			✓	✓	✓	✓	✓						
FULL LOAD	Cooling mode		P _{design} [kW]	10	15	18	23	32						
	Heating mode	moderate		P _{design} [kW]	10	12	15	20	32					
		warmer		P _{design} [kW]	10	16	18	23	35					
		cooler		P _{design} [kW]	8	12	15	20	32					
SEASONAL COEFFICIENT OF PERFORMANCE	Cooling mode		SEER	6,06	5,86	5,67	5,65	6,05						
	Low temperature application up to 35 °C (NT) Medium temperature application up to 55 °C (MT)			35 °C	55 °C	35 °C	55 °C	35 °C	55 °C	35 °C	55 °C			
	Heating mode	moderate		SCOP / A	6,08	4,54	5,68	4,49	5,73	4,47	5,68	4,48	6,06	4,55
		warmer		SCOP / W	7,25	5,34	6,50	5,06	6,54	5,09	6,37	5,19	7,11	5,36
cooler		SCOP / C	5,31	4,29	5,10	4,09	5,00	4,07	4,95	4,09	5,25	4,26		
ANNUAL ENERGY EFFICIENCY	Cooling mode		η _s	239	234	227	226	239						
	Low temperature application up to 35 °C (NT) Medium temperature application up to 55 °C (MT)			35 °C	55 °C	35 °C	55 °C	35 °C	55 °C	35 °C	55 °C			
	Heating mode	moderate		η _s / A [%]	240	179	224	177	226	176	224	176	239	179
		warmer		η _s / A [%]	287	211	257	199	259	201	252	205	281	211
cooler		η _s / A [%]	209	168	201	161	197	160	195	161	207	167		
ANNUAL ENERGY CONSUMPTION HEATING MODE	Low temperature application up to 35 °C (NT) Medium temperature application up to 55 °C (MT)			35 °C	55 °C	35 °C	55 °C	35 °C	55 °C	35 °C	55 °C			
	Heating mode	moderate		Q _{HE} [kWh]	3397	4551	4367	5518	5404	6928	7279	9228	10909	14534
		warmer		Q _{HE} [kWh]	1840	2499	3286	4225	3674	4721	4823	5925	6572	8729
		cooler		Q _{HE} [kWh]	3713	4592	5801	7228	7397	9101	9970	12070	15029	18528
POWER at 27 °C indoor and outdoor temperature T _j	Cooling mode	T _j = 35 °C		P _{dc} [kW]	10,00	15,00	18,00	23,00	32,00					
		T _j = 30 °C		P _{dc} [kW]	7,37	11,05	13,26	16,95	23,58					
		T _j = 25 °C		P _{dc} [kW]	4,79	7,11	8,53	10,89	15,16					
		T _j = 20 °C		P _{dc} [kW]	2,65	3,16	3,79	4,84	12,50					
POWER FACTOR Indoor and outdoor temperature T _j	Cooling mode	T _j = 35 °C		EER _d	4,19	3,65	3,94	3,86	4,13					
		T _j = 30 °C		EER _d	5,22	4,96	4,68	4,85	4,91					
		T _j = 25 °C		EER _d	6,29	6,35	5,96	5,88	6,47					
		T _j = 20 °C		EER _d	7,35	6,85	7,00	6,82	7,52					

Model				EU10L		EU13L		EU15L		EU20L		EU35L				
POWER at 20 °C indoor and outdoor temperature T_j	Low temperature application up to 35 °C (NT) Medium temperature application up to 55 °C (MT)			35 °C	55 °C	35 °C	55 °C	35 °C	55 °C	35 °C	55 °C	35 °C	55 °C			
	Heating mode	moderate	$T_j = -7\text{ °C}$	P_{dh} [kW]	8,0	8,0	10,6	10,6	13,3	13,3	17,7	17,7	28,3	28,3		
			$T_j = 2\text{ °C}$	P_{dh} [kW]	5,2	5,2	6,5	6,5	8,1	8,1	10,8	10,8	17,3	17,3		
			$T_j = 7\text{ °C}$	P_{dh} [kW]	3,5	3,5	4,2	4,2	5,2	5,2	6,9	6,9	11,1	11,1		
			$T_j = 12\text{ °C}$	P_{dh} [kW]	2,3	2,3	1,8	1,8	2,3	2,3	3,1	3,1	4,9	4,9		
			$T_j = T_{biv}$	P_{dh} [kW]	10,0	10,0	12,0	12,0	15,0	15,0	20,0	20,0	32,0	32,0		
			$T_j = T_{TOL}$	P_{dh} [kW]	10,0	10,0	12,0	12,0	15,0	15,0	20,0	20,0	32,0	32,0		
		warmer	$T_j = 2\text{ °C}$	P_{dh} [kW]	10,0	10,0	16,0	16,0	18,0	18,0	23,0	23,0	35,0	35,0		
			$T_j = 7\text{ °C}$	P_{dh} [kW]	6,4	6,4	10,3	10,3	11,6	11,6	14,8	14,8	22,5	22,5		
			$T_j = 12\text{ °C}$	P_{dh} [kW]	2,9	2,9	4,6	4,6	5,1	5,1	6,6	6,6	10,0	10,0		
			$T_j = T_{biv}$	P_{dh} [kW]	10,0	10,0	16,0	16,0	18,0	18,0	23,0	23,0	35,0	35,0		
			$T_j = T_{TOL}$	P_{dh} [kW]	10,0	10,0	16,0	16,0	18,0	18,0	23,0	23,0	35,0	35,0		
			cooler	$T_j = -15\text{ °C}$	P_{dh} [kW]	6,5	6,5	9,8	9,8	12,2	12,2	16,3	16,3	26,1	26,1	
		$T_j = -7\text{ °C}$		P_{dh} [kW]	4,8	4,8	7,3	7,3	9,1	9,1	12,1	12,1	19,4	19,4		
		$T_j = 2\text{ °C}$		P_{dh} [kW]	3,0	3,0	4,4	4,4	5,5	5,5	7,4	7,4	11,8	11,8		
		$T_j = 7\text{ °C}$		P_{dh} [kW]	2,3	2,3	2,8	2,8	3,6	3,6	4,7	4,7	7,6	7,6		
		$T_j = 12\text{ °C}$		P_{dh} [kW]	2,6	2,6	1,3	1,3	1,6	1,6	2,1	2,1	3,4	3,4		
		$T_j = T_{biv}$		P_{dh} [kW]	6,7	6,7	10,1	10,1	12,6	12,6	16,8	16,8	27,0	27,0		
		$T_j = T_{TOL}$		P_{dh} [kW]	8,0	8,0	12,0	12,0	15,0	15,0	20,0	20,0	32,0	32,0		
		Low temperature application up to 35 °C (NT) Medium temperature application up to 55 °C (MT)			35 °C	55 °C	35 °C	55 °C	35 °C	55 °C	35 °C	55 °C	35 °C	55 °C		
		POWER FACTOR at 20 °C indoor and outdoor temperature T_j	Heating mode	moderate	$T_j = -7\text{ °C}$	COP_{dh}	3,81	2,78	3,64	2,74	3,59	2,76	3,85	2,72	3,73	2,75
					$T_j = 2\text{ °C}$	COP_{dh}	5,93	4,44	5,69	4,45	5,70	4,37	5,65	4,46	5,84	4,42
					$T_j = 7\text{ °C}$	COP_{dh}	7,88	5,95	7,03	5,79	7,24	5,70	6,59	5,48	7,75	5,83
					$T_j = 12\text{ °C}$	COP_{dh}	9,63	7,71	7,82	6,78	8,35	7,50	8,67	7,54	11,40	8,35
					$T_j = T_{biv}$	COP_{dh}	3,31	2,41	3,15	2,37	3,16	2,39	3,44	2,59	3,17	2,36
	$T_j = T_{TOL}$				COP_{dh}	3,31	2,41	3,15	2,37	3,16	2,39	3,44	2,59	3,17	2,36	
	warmer			$T_j = 2\text{ °C}$	COP_{dh}	4,43	3,03	4,09	2,91	3,96	3,00	4,09	3,25	4,23	3,15	
				$T_j = 7\text{ °C}$	COP_{dh}	6,77	4,63	6,04	4,46	6,04	4,39	6,13	4,62	6,30	4,69	
$T_j = 12\text{ °C}$				COP_{dh}	8,87	7,44	7,93	6,82	8,12	7,07	7,32	6,75	9,47	7,26		
$T_j = T_{biv}$				COP_{dh}	4,43	3,03	4,09	2,91	3,96	3,00	4,09	3,25	4,23	3,15		
$T_j = T_{TOL}$				COP_{dh}	4,43	3,03	4,09	2,91	3,96	3,00	4,09	3,25	4,23	3,15		
cooler				$T_j = -15\text{ °C}$	COP_{dh}	3,26	2,48	3,30	2,53	3,21	2,46	3,29	2,62	3,20	2,49	
	$T_j = -7\text{ °C}$			COP_{dh}	4,85	3,63	4,33	3,34	4,44	3,38	4,39	3,49	4,44	3,53		
	$T_j = 2\text{ °C}$			COP_{dh}	5,97	5,29	6,20	5,02	5,69	4,87	5,85	4,83	6,40	5,18		
	$T_j = 7\text{ °C}$			COP_{dh}	7,59	6,59	7,15	6,26	7,89	6,40	6,89	5,99	8,30	6,78		
	$T_j = 12\text{ °C}$			COP_{dh}	9,26	9,05	7,82	7,41	8,16	8,48	7,37	8,00	10,26	9,32		
	$T_j = T_{biv}$			COP_{dh}	3,02	2,34	3,15	2,29	3,04	2,35	3,14	2,53	3,09	2,38		
	$T_j = T_{TOL}$			COP_{dh}	2,66	1,72	2,72	2,07	2,56	1,98	2,71	2,14	2,65	1,97		

Model				EU10L	EU13L	EU15L	EU20L	EU35L
BIVALENCE TEMPERATURE	Heating mode	moderate	T_{biv} [°C]	-	-	-	-	-
		warmer	T_{biv} [°C]	-	-	-	-	-
		cooler	T_{biv} [°C]	-16	-16	-16	-16	-16
LIMIT VALUE OPERATING	Heating mode	moderate	T_{tol} [°C]	-10	-10	-10	-10	-10
		warmer	T_{tol} [°C]	2	2	2	2	2
		cooler	T_{tol} [°C]	-22	-22	-22	-22	-22
MODE OTHER THAN "ACTIVE MODE"	OFF	P_{off} [W]	7,0					
	Standby mode	P_{sb} [W]	7,0					
	Temperature controller OFF	P_{to} [W]	7,1					
	Crank case heating	P_{ck} [W]	0					

1.3 Efficiency parameters according to EN14511

		EU10L		EU13L		EU15L		EU20L		EU35L	
EN14511		Power [kW]	COP	Power [kW]	COP	Power [kW]	COP	Power [kW]	COP	Power [kW]	COP
Heating mode	A7W35	3,6	6,02	5,2	5,94	6,0	5,89	10,1	5,74	12,1	6,01
	A2W35	5,6	5,21	8,3	5,05	10,1	5,11	12,0	5,04	18,0	5,21
	A-7W35	9,7	3,39	13,0	3,77	14,9	3,83	20,0	3,70	32,0	3,53
	A-15W35	7,8	2,82	10,8	3,19	15,0	3,19	17,9	3,10	28,5	2,87
	A7W45	6,5	4,76	5,2	4,57	6,3	4,47	10,6	4,56	20,5	4,67
	A7W55	4,7	3,68	5,4	3,71	6,1	3,47	12,1	3,69	15,1	3,86
	A-7W55	9,4	2,42	12,4	2,59	14,8	2,71	21,0	2,62	32,0	2,59
Cooling mode	A35W18	10,0	4,60	12,8	4,46	15,1	4,46	20,0	4,54	32,0	4,68
	A35W7	7,0	3,76	9,1	3,43	10,2	3,69	13,3	3,61	21,0	3,88

2 Performance and efficiency diagrams

2.1 EU10L

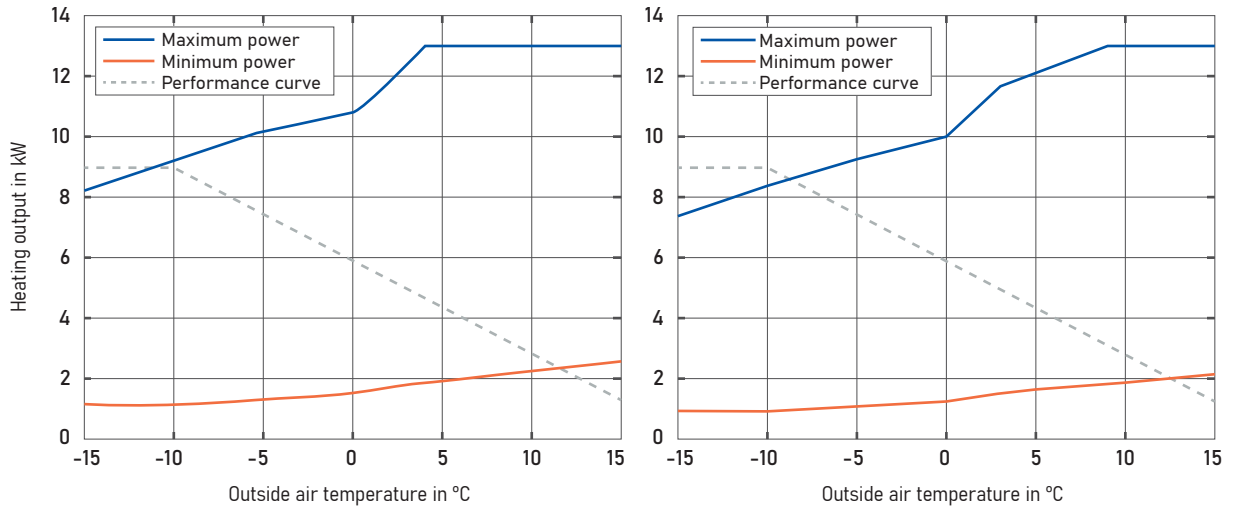


Fig. 1: Performance range of the EU10L depending on outside air temperature at 5K spread and 85 % humidity (left: 35 °C flow temperature / right: 55 °C flow temperature) with recommended performance curve according to EN 14825.

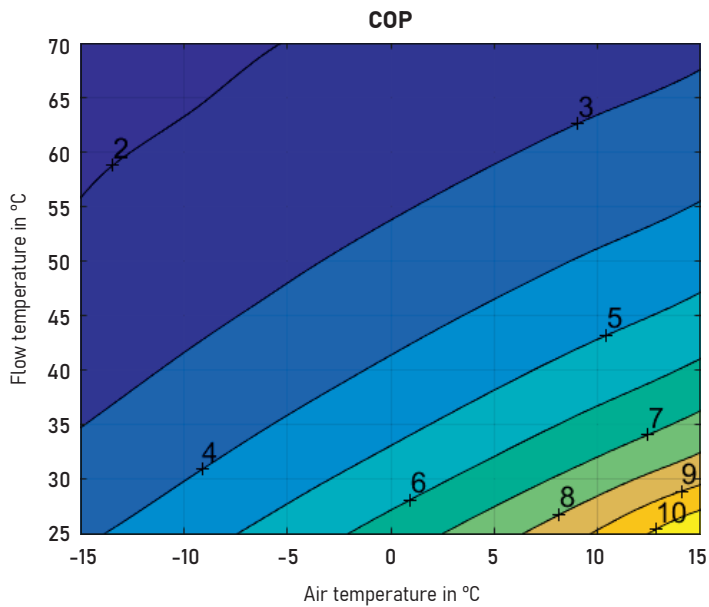


FIG. 2: EU10L with 6kW heat output

2.2 EU13L

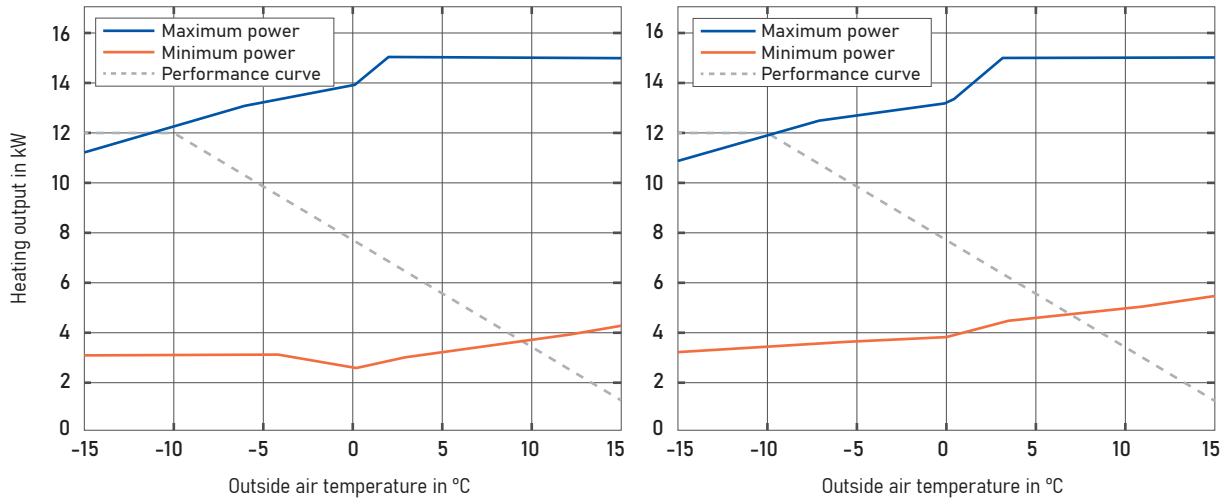


Fig. 3: Performance range of the EU13L depending on outside air temperature at 5K spread and 85 % humidity (left: 35 °C flow temperature / right: 55 °C flow temperature) with recommended performance curve according to EN 14825.

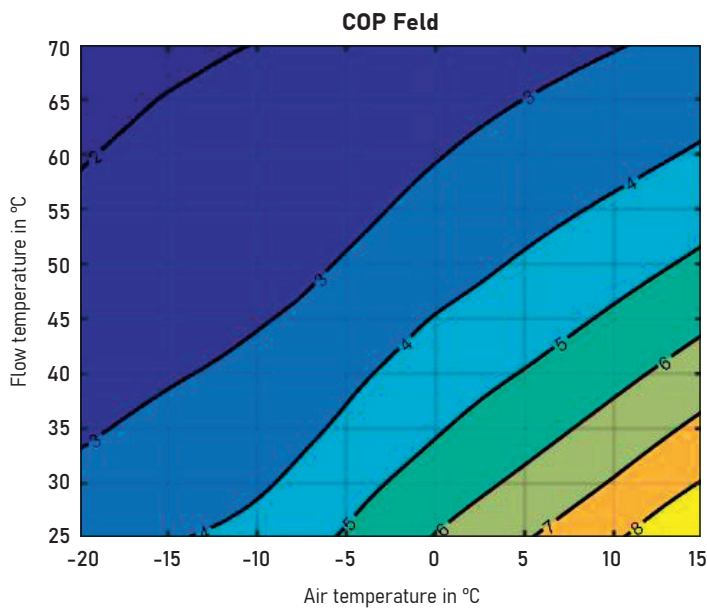


FIG. 4: EU13L with 9kW heat output

2.3 EU15L

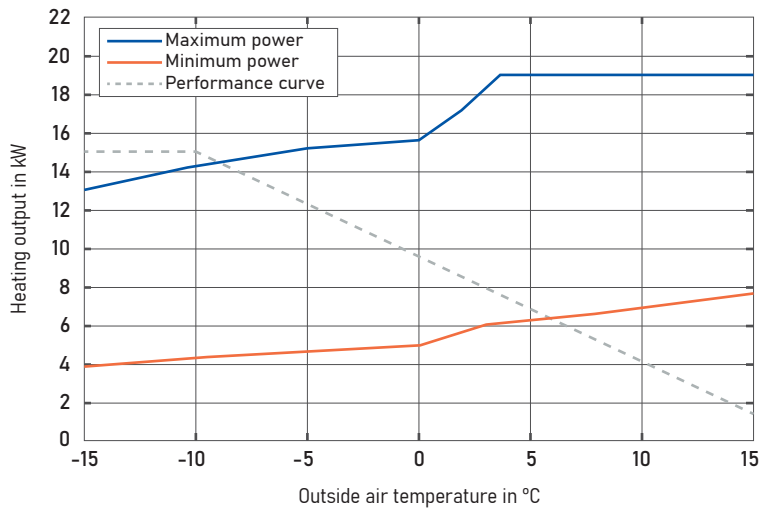
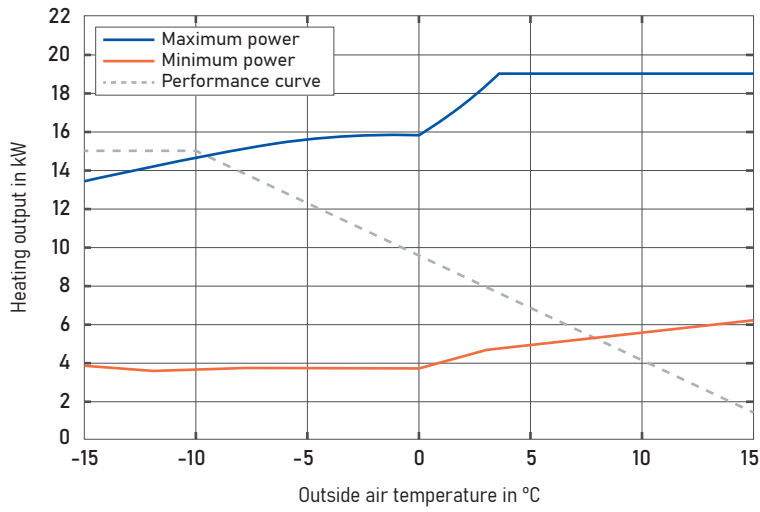


Fig. 5: Performance range of the EU15L depending on outside air temperature at 5K spread and 85 % humidity (left: 35 °C flow temperature / right: 55 °C flow temperature) with recommended performance curve according to EN 14825.

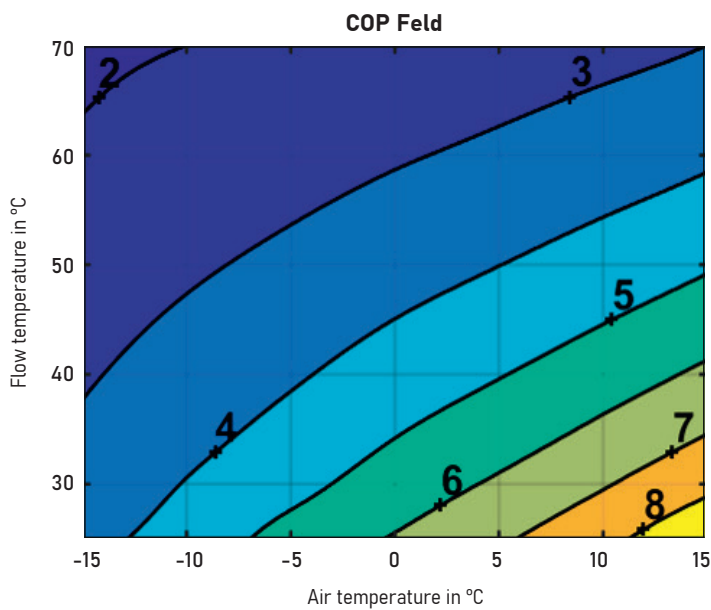


FIG. 6: EU15L with 11kW heat output

2.4 EU20L

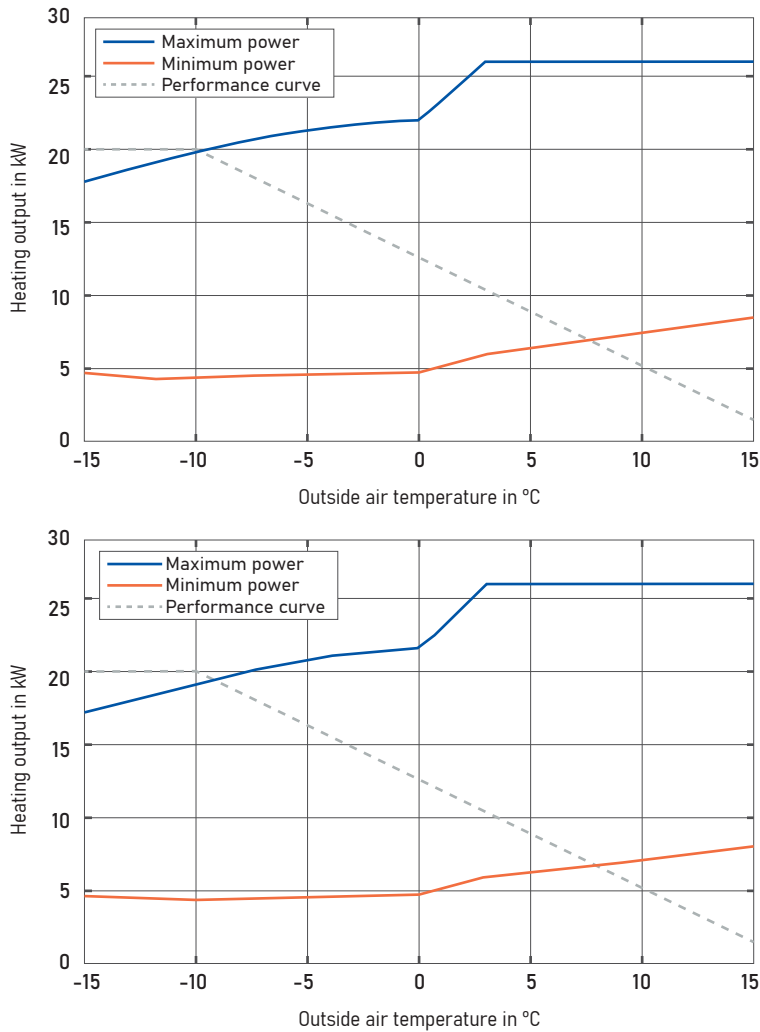


Fig. 7: Performance range of the EU20L depending on outside air temperature at 5K spread and 85 % humidity (left: 35 °C flow temperature / right: 55 °C flow temperature) with recommended performance curve according to EN 14825.

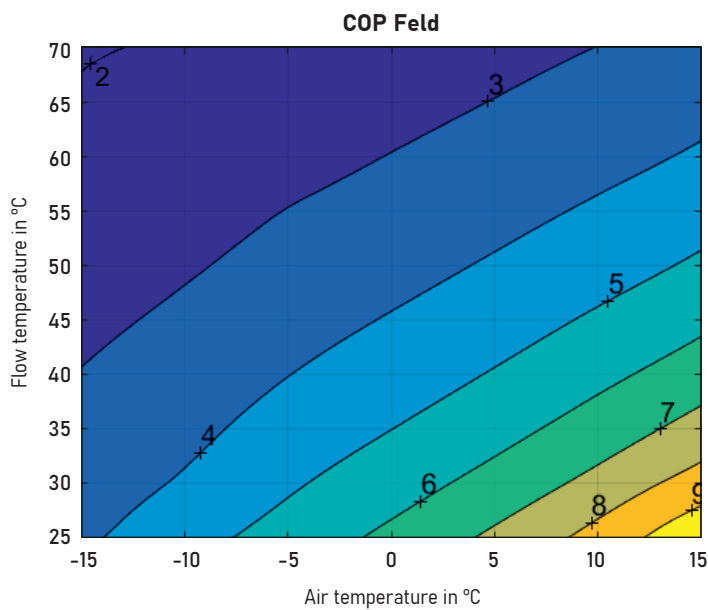


FIG. 8: EU20L with 14kW heat output

2.5 EU35L

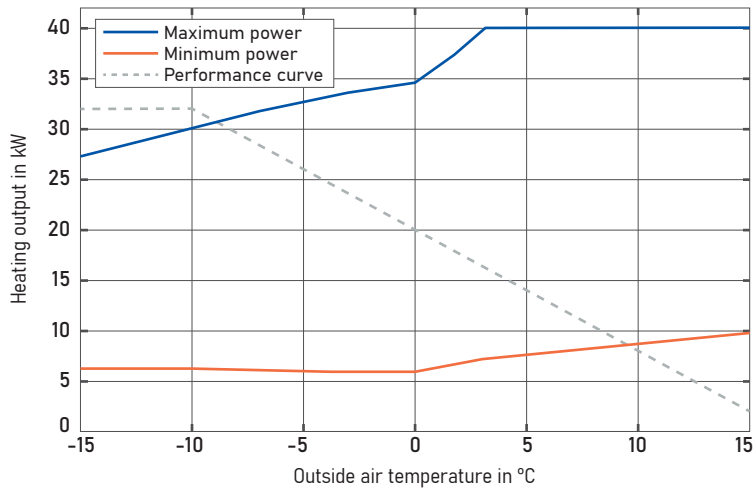
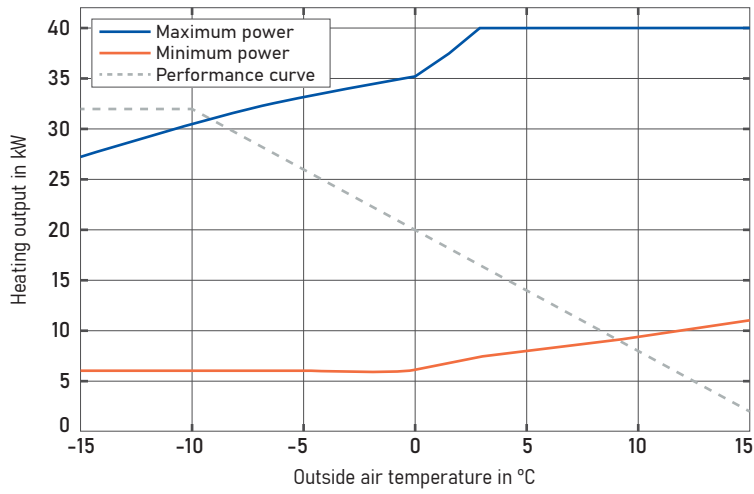


Fig. 9: Performance range of the EU35L depending on outside air temperature at 5K spread and 85 % humidity (left: 35 °C flow temperature / right: 55 °C flow temperature) with recommended performance curve according to EN 14825.

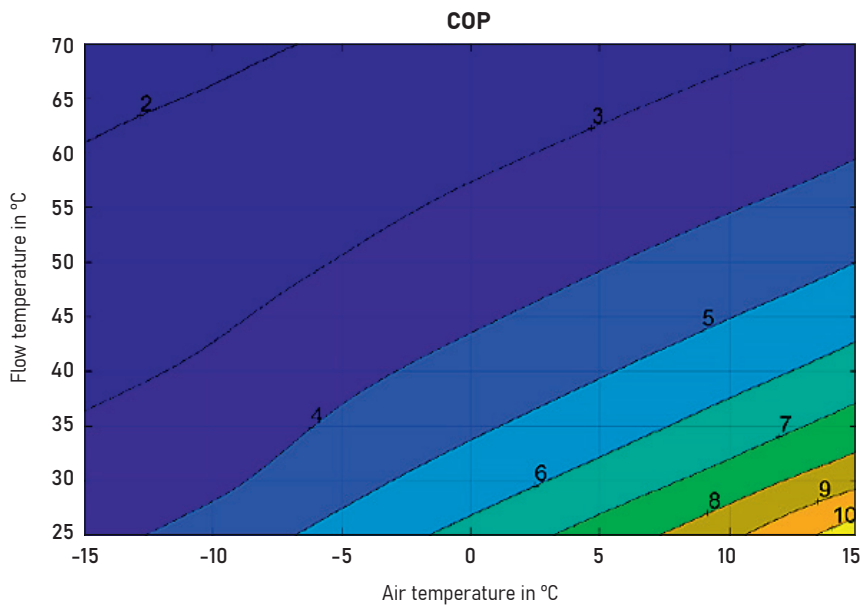


FIG. 10: EU35L with 20kW heat output

3 Pressure loss and residual delivery height

3.1 EU10L / EU13L / EU15L

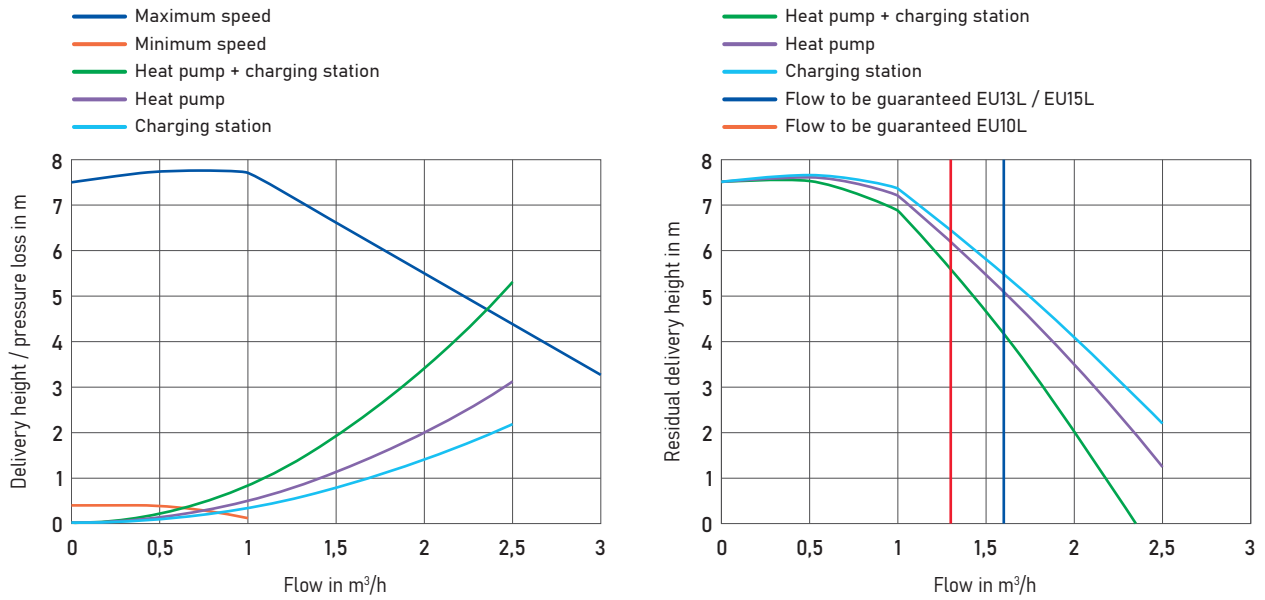


FIG. 11: Pump characteristic curve, system characteristic curve and residual delivery height EU10L, EU13L, EU15L

3.2 EU20L

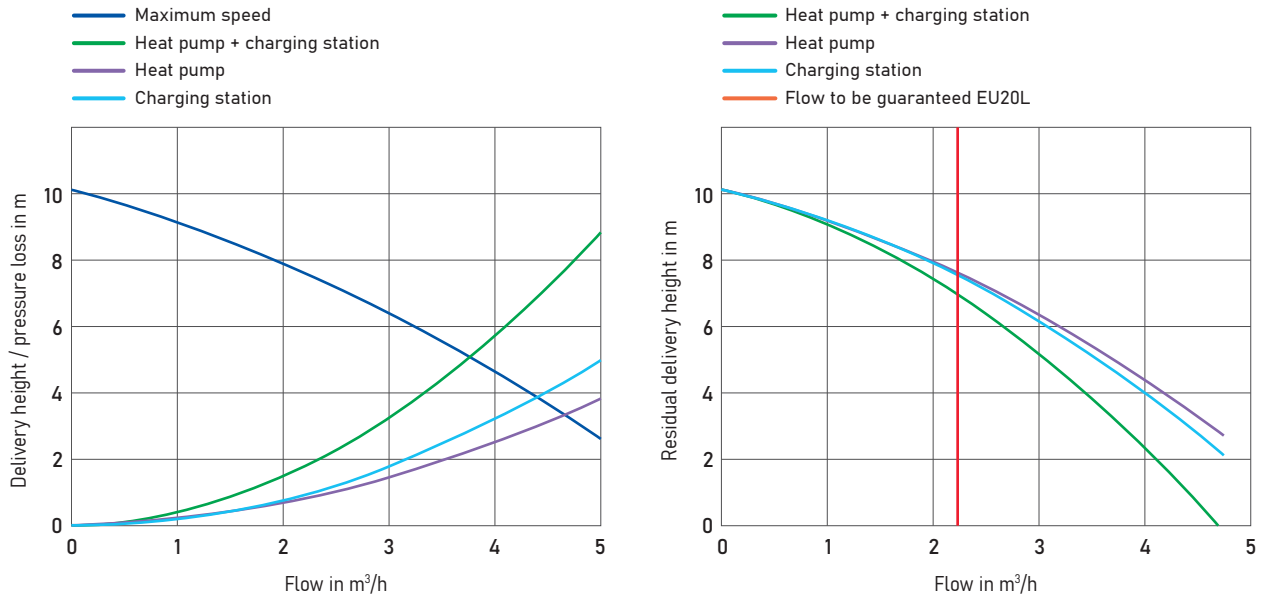


FIG. 12: Pump characteristic curve, system characteristic curve and residual delivery height EU20L

3.3 EU35L

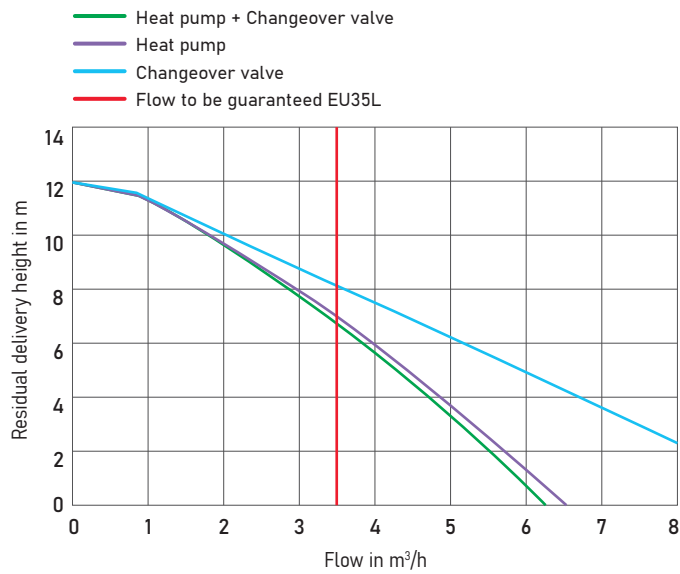
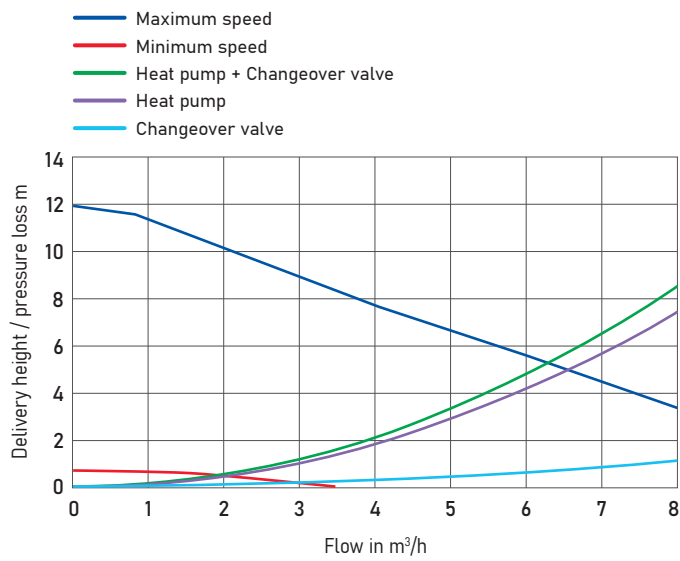


FIG. 13: Pump characteristic curve, system characteristic curve and residual delivery height EU35L

4 Appendix

4.1 Declaration of Conformity

Declaration of Conformity

Number: 202604.1
Issuer: LAMBDA Wärmepumpen GmbH
Address: Perlmooserstraße 2, A-6322 Kirchbichl

Product: Air / Water Heat Pump
Types: EU08L, EU10L, EU13L, EU15L, EU20L, EU35L



0408

LAMBDA Wärmepumpen GmbH declares under its sole responsibility that the above-mentioned product fulfils the requirements of the following directives and regulations:

2014/35/EU – Low Voltage Directive
2014/30/EU – EMC Directive
2011/65/EU – RoHS Directive
813/2013 – Ecodesign Regulation
2014/68/EU – Pressure Equipment Directive
2006/42/EG – Machinery Directive (until 19 January 2027)
2023/1230/EU – Machinery Regulation (from 20 January 2027)

Conformity Assessment Procedure according to Pressure Equipment Directive:

Category: 2
Module: A2
Notified Body: TÜV AUSTRIA SERVICES GMBH, Deutschstr. 10, A-1230 Wien
Identification Number: 0408

The following standards were applied:

EN 60335-1 / -2-40
EN ISO 12100
EN 378-1 / -2
EN 13585
EN 1779
EN 55014-1 / -2
EN 61000-3-12
EN IEC 63000
EN 12102-1
EN14825

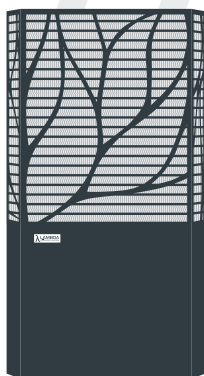
Kirchbichl, 02.04.2026



Florian Entleitner
Managing Director



Florian Fuchs
Managing Director



TECHNICAL DATA SHEET

LAMBDA Wärmepumpen GmbH

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