

TECHNISCHE DATASHEET

LWPC 618 Monoblock 400V

AT-TEC
WARMTEPOMPEN



General Data

Power Range	A2/W35: 4 - 17	[kW]
Energy class VL 35°C	A++ (from 09/2019: A+++)	[-]
Energy class VL 55°C	A++	[-]
Max. Flow temperature	62,0	[°C]

Electrical Data

International Protection Marking	IPX3	[-]
Supply control	1/N/PE, 230V, 50Hz	[V, Hz]
Rated Input control	28	[W]
Cos(φ) control	0,90	[-]
Fuse control	1x B13	[-]
Supply compressor	3/N/PE, 400V, 50Hz	[V, Hz]
Operating current compressor	5,30	[A]
Starting current compressor	9 / -	[A / A]
Cos(φ) compressor	0,98	[-]
Fuse compressor	3x C16	[-]

Sound power level Data acc. EN12102

Nom. Sound power level heat pump	47,0	[dB(A)]
Max. Sound power level heat pump	62,1	[dB(A)]

Refrigerant circuit Data

Compressor - Type	Scroll	[-]
Refrigerant - Type	R452b	[-]
Refrigerant - Amount	6,0	[kg]
Refrigerant - Fluid Group	A2L	[-]
Refrigerant - GWP	676	[-]
Compressor Oil - Type	3MA-POE	[-]
Compressor Oil - Amount	1,18	[l]

Heating Side

Condenser - Type	Plate heat exchanger	[-]
Condenser - Material	Stainless steel, copper brazed	[-]
Condenser - Flowrate (5K)	2,5	[m³/h]
Condenser pressure loss	8,0	[kPa]
Circulation pump - Type	Yonos Para 25/7,5 - PWM1	[-]
Circulation pump - residual head	4,00	[mWs]
Circulation pump - max. power	75,00	[W]

Source Side

Evaporator - Type	Lamella heat exchanger	[-]
Evaporator - Material	Copper / Aluminium lamella	[-]
Evaporator - Flowrate (3K)	9000,0	[m³/h]
Evaporator - Pressure loss	24,0	[kPa]
Source - Type	Axial fan	[-]
Source - residual head	-	[mWs]
Source - max. Power	680	[W]

Sound Power Data acc. EN12102
Max. Compressor Speed 60% (corresponds to 8,0[kW] heating capacity at A-7/W55)

Mode*	Sound power level		Directing factor Q	Sound pressure dep. on distance[m] to heat pump								
	Maximum at A-7/W55	Minimum at A7/W55		1	2	4	5	6	8	10	12	15
	[dB(A)]	[dB(A)]		[dB]								
Standard	56,2	44,6	2	48,2	42,2	36,2	34,2	33	30,2	28,2	27	25
			4	51,2	45,2	39,2	37,2	36	33,2	31,2	30	28
			8	54,2	48,2	42,2	40,2	39	36,2	34,2	33	31
Silent	49,8	44,6	2	41,8	35,8	29,8	27,8	26	23,8	21,8	20	18
			4	44,8	38,8	32,8	30,8	29	26,8	24,8	23	21
			8	47,8	41,8	35,8	33,8	32	29,8	27,8	26	24

Max. Compressor Speed 75% (corresponds to 10,0[kW] heating capacity at A-7/W55)

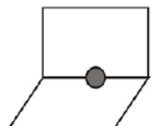
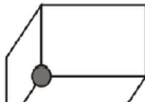
Mode*	Sound power level		Directing factor Q	Sound pressure dep. on distance[m] to heat pump								
	Maximum at A-7/W55	Minimum at A7/W55		1	2	4	5	6	8	10	12	15
	[dB(A)]	[dB(A)]		[dB]								
Standard	60,1	44,6	2	52,1	46,1	40,1	38,1	37	34,1	32,1	31	29
			4	55,1	49,1	43,1	41,1	40	37,1	35,1	34	32
			8	58,1	52,1	46,1	44,1	43	40,1	38,1	37	35
Silent	53,6	44,6	2	45,6	39,6	33,6	31,6	30	27,6	25,6	24	22
			4	48,6	42,6	36,6	34,6	33	30,6	28,6	27	25
			8	51,6	45,6	39,6	37,6	36	33,6	31,6	30	28

Max. Compressor Speed 100% (corresponds to 13,2[kW] heating capacity at A-7/W55)

Mode*	Sound power level		Directing factor Q	Sound pressure dep. on distance[m] to heat pump								
	Maximum at A-7/W55	Minimum at A7/W55		1	2	4	5	6	8	10	12	15
	[dB(A)]	[dB(A)]		[dB]								
Standard	62,9	44,6	2	54,9	48,9	42,9	40,9	39	36,9	34,9	33	31
			4	57,9	51,9	45,9	43,9	42	39,9	37,9	36	34
			8	60,9	54,9	48,9	46,9	45	42,9	40,9	39	37
Silent	55,9	44,6	2	47,9	41,9	35,9	33,9	32	29,9	27,9	26	24
			4	50,9	44,9	38,9	36,9	35	32,9	30,9	29	27
			8	53,9	47,9	41,9	39,9	38	35,9	33,9	32	30

* If the standard mode is activated, the fan is operating at normal speed.

In silent mode, this speed is reduced by about 25% to reduce the noise emissions.

	Directing factor Q=2 describes a hemispherical radiating sound source. The sound waves are only reflected by the floor surface.
	Richtfaktor Q=4 describes a quarter spherical radiating sound source. The sound waves are reflected by the floor and a wall surface.
	Richtfaktor Q=8 describes an eight-spherical radiating sound source. The sound waves are reflected by the floor and two wall surfaces.

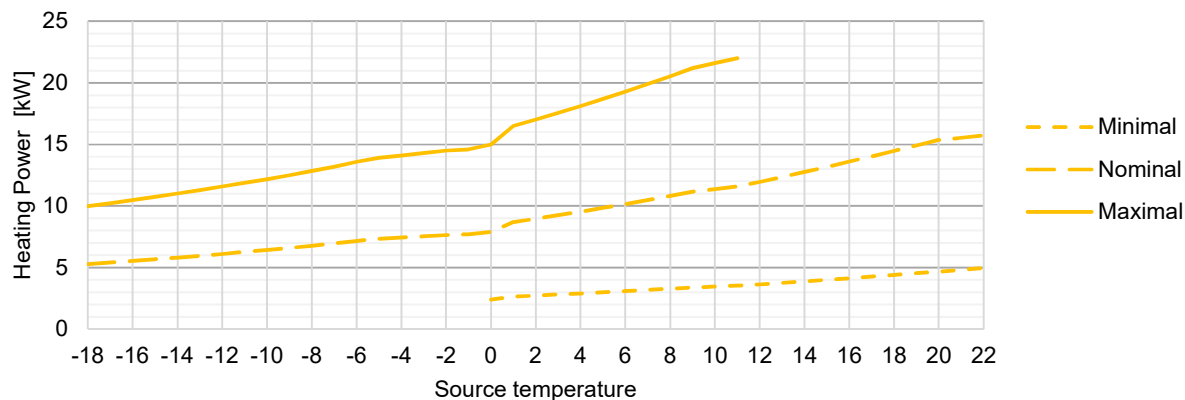


Performance Data*

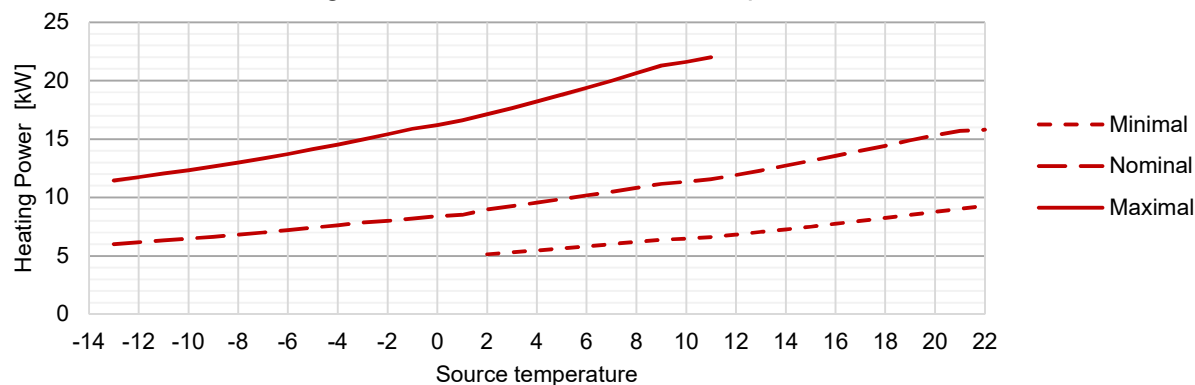
Operating point	Comp. speed	Heating capacity	Cooling capacity	Rated Input	COP
A10/W35	33%	7,6	6,2	1,4	5,52
A7/W35	33%	7,2	5,7	1,4	4,99
A2/W35	52%	9,0	6,9	2,1	4,31
A2/W35	100%	17,2	12,6	4,6	3,75
A-7/W35	88%	12,0	8,2	3,8	3,13
A-7/W52	100%	13,4	7,7	5,7	2,36
A20/W55	Minimal	9,0	6,6	2,4	3,81

Climate: warmer	35°C	SCOP	5,71
		η_s	225
	55°C	SCOP	4,22
		η_s	166
Climate: average	35°C	SCOP	4,92
		η_s	194
	55°C	SCOP	3,78
		η_s	148
Climate: colder	35°C	SCOP	4,40
		η_s	173
	55°C	SCOP	3,45
		η_s	135

Heating Power WPLK618 at Flow temperature 35°C*

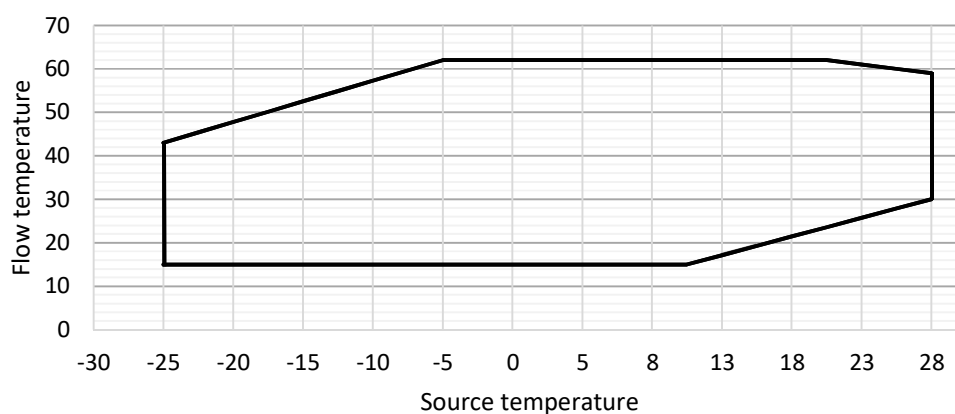


Heating Power WPLK618 at Flow temperature 55°C*



* Compressive performance deviations of up to 10% are possible. All informations without guarantee; typographical and printing errors reserved

Operating limit



Connection measurements

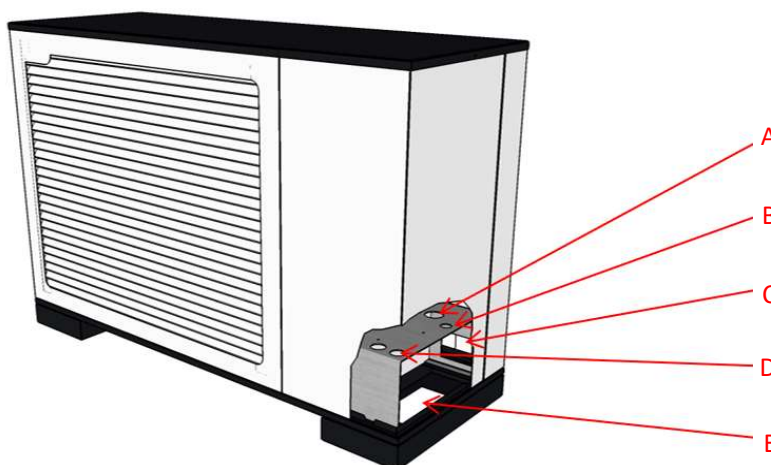
Heat Pump Dimensions (H x W x D)

[mm] 1.205 x 1.750 x 625

Heat Pump Weight

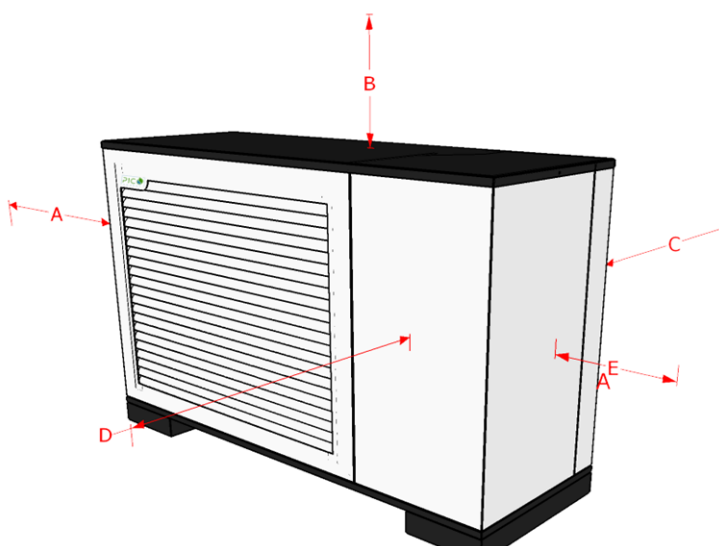
[kg] 267

- A: Heating Inlet, G1" FT
- B: Heating Outlet, G1" MT
- C: Main inlet "backside"
- D: Electrical Inlet
- E: Main inlet "bottom"



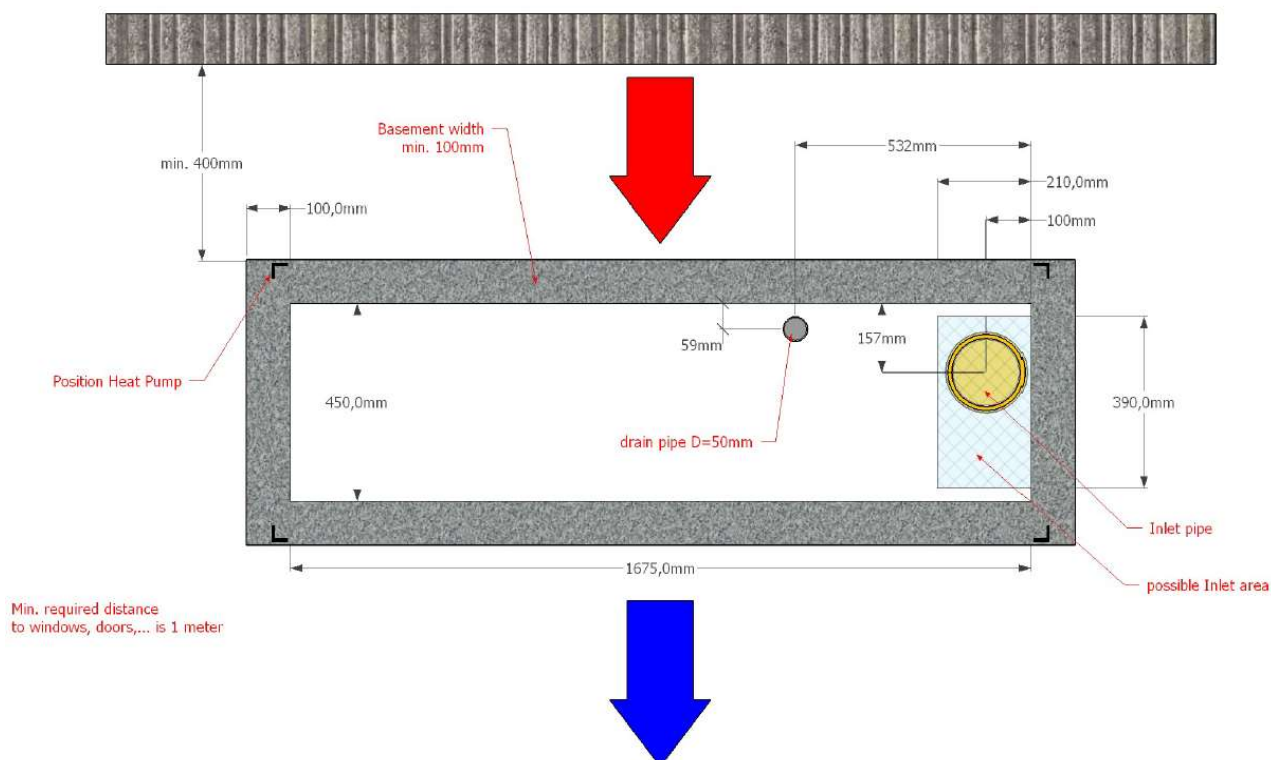
Free spaces

- A: 400mm
- B: 400mm
- C: 400mm
- D: 3000mm
- E: 800mm

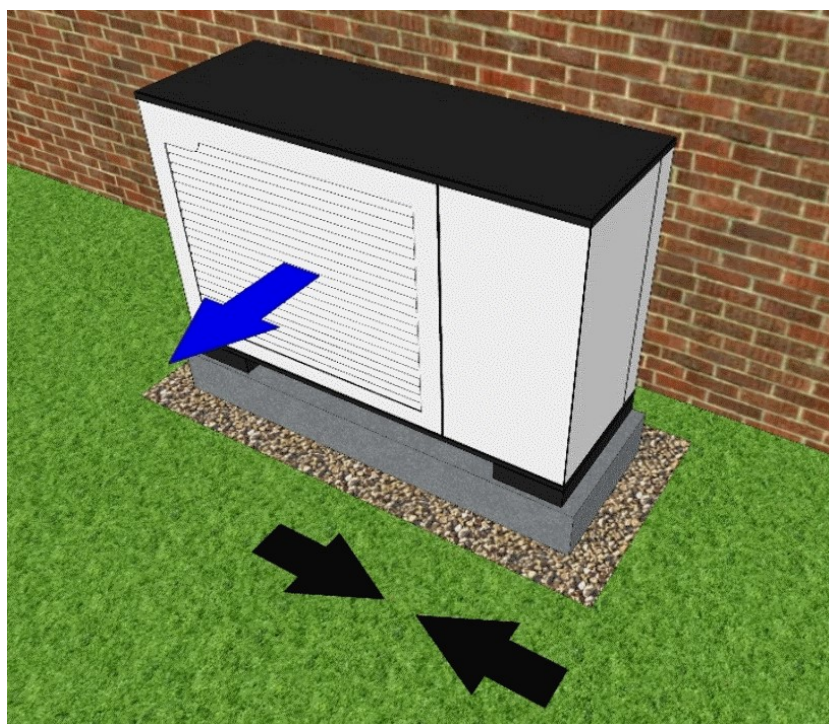




Basement dimension



Observe the main wind direction to avoid unwanted flow through the evaporator!



General installation and assembly criteria must be observed in accordance with the valid operating instructions.