

air/water heat pump WPLK618, 400V



General Data

Power range (rounded)	A2/W35: 4 - 17	[kW]
Energy class flow 35°C	A+++	[-]
Energy class flow 55°C	A+++	[-]
Max. flow temperatur	62	[°C]

Electrical Data

Protection marking	IP X4	[-]
Control supply	1/N/PE, 230V, 50Hz	[V, Hz]
Rated input control	28	[W]
Cos(ϕ) control	0,90	[-]
Fuse control	1x B13	[-]
Compressor supply	3/N/PE, 400V, 50Hz	[V, Hz]
Operating current compressor	3,1	[A]
Max. operating current compressor	10,6	[A]
Starting current compressor with / without softstarter	9 / -	[A / A]
Cos(ϕ) compressor	0,98	[-]
Fuse compressor	3x C16	[-]
Res. current circuit breaker compressor supply	30mA, Typ B / B+	[-]

Sound power level data acc. EN12102

Nom. sound power level heat pump	50	[dB(A)]
Max. sound powe level heat pump	62	[dB(A)]
Level surcharge low-freq. noise characteristics	-	[dB]

Refrigerant circuit data

Compressor- type	scroll	[-]
Refrigerant- type	R452b	[-]
Refrigerant- amount	6,0	[kg]
Refrigerant- fluidgroup	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, soldered copper	[-]
Condenser- flow rate (5K)	2,5	[m³/h]
Condenser- pressure loss	8,0	[kPa]
Circulation pump- type	PARA G25-180/8-75/iPWM	[-]
Circulation pump- residual head	3,2	[mWs]
Circulation pump- max. power	75,0	[W]

Source side

Evaporator- type	finned heat exchanger	[-]
Evaporator- material	copper / aluminium fins	[-]
Evaporator- flow rate	9000,0	[m³/h]
Evaporator- pressure loss	0,02	[kPa]
Source- type	axial fan	[-]
Source- residual head	-	[mWs]
Source- max. power	680,0	[W]

Sound power level data acc. EN12102

Heat pump compressor speed released 75% (corresponds to 10,2[kW] heating power at A-7/W35)

mode*	sound power level	directivity Q	max. sound pressure depending in the distance[m] to the heat pump														
	max. at A-7/W55 A7/W55		1	2	5	8	10	12	15								
	[dB(A)]		[dB]														
Standard	61 61	2	53	53	47	47	39	39	35	35	33	33	31	31	29	29	
		4	56	56	50	50	42	42	38	38	36	36	34	34	32	32	
		8	59	59	53	53	45	45	41	41	39	39	37	37	35	35	
Silent	58 58	2	50	50	44	44	36	36	32	32	30	30	29	29	27	27	
		4	53	53	47	47	39	39	35	35	33	33	32	32	30	30	
		8	56	56	50	50	42	42	38	38	36	36	35	35	33	33	

Heat pump compressor speed released 100% (corresponds to 13,2[kW] heating power at A-7/W35)

mode*	sound power level	directivity Q	max. sound pressure depending in the distance[m] to the heat pump														
	max. at A-7/W55 A7/W55		1	2	5	8	10	12	15								
	[dB(A)]		[dB]														
Standard	62 62	2	54	54	48	48	40	40	36	36	34	34	33	33	31	31	
		4	57	57	51	51	43	43	39	39	37	37	36	36	34	34	
		8	60	60	54	54	46	46	42	42	40	40	39	39	37	37	
Silent	58 58	2	50	50	44	44	36	36	32	32	30	30	29	29	27	27	
		4	53	53	47	47	39	39	35	35	33	33	32	32	30	30	
		8	56	56	50	50	42	42	38	38	36	36	35	35	33	33	

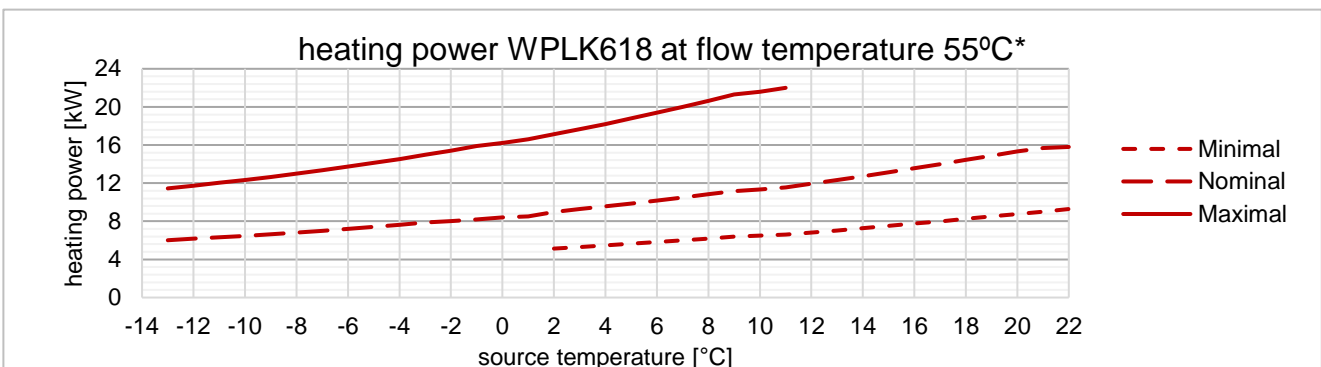
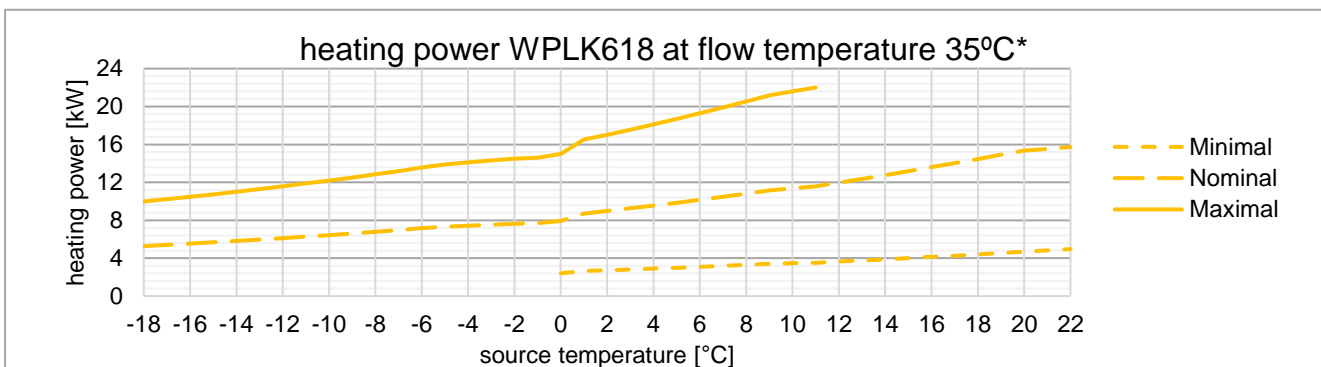
* if standard mode is activated the fan is operating with normal speed. In silent mode the fan speed is reduced by approx. 25% to reduce noise emissions.

	<p>directivity Q=2 describes a hemispherically radiating sound source. The sound waves are only reflected from the floor surface.</p>
	<p>directivity Q=4 describes a quarter-spherical radiating sound source. The sound waves are reflected from the floor and a wall surface.</p>
	<p>directivity Q=8 describes a sound source radiating in the shape of an eighth of a sphere. The sound waves are reflected from the floor and two wall surfaces.</p>

Power data**

operating point	compressor speed	rps compressor	heating power [kW]	COP
A7/W35*	33%	33	7,2	4,99
A7/W55*	40%	40	8,1	3,07
A2/W35*	52%	52	9,0	4,31
A2/W42*	47%	47	8,8	3,92
A-7/W34*	88%	88	12,9	3,21
A-7/W52*	100%	100	13,4	2,36
A-10/W35*	100%	100	12,5	3,13
A-10/W55*	100%	100	12,5	2,23
A7/W35	min. / max.	20 / 100	3,2 / 19,9	
A7/W55	min. / max.	20 / 100	6,0 / 20,0	
A2/W35	min. / max.	20 / 100	2,7 / 17,0	
A2/W55	min. / max.	20 / 100	5,1 / 17,1	
A-7/W35	min. / max.	20 / 100	4,1 / 13,2	
A-7/W55	min. / max.	20 / 100	5,2 / 13,4	
A20/W55	min. / max.	20 / 100	9,0 / 32,4	
operating point	compressor speed	rps compressor	cooling power [kW]	EER
A35/W18	55%	55	12,5	3,71
A35/W7	55%	55	8,6	2,59

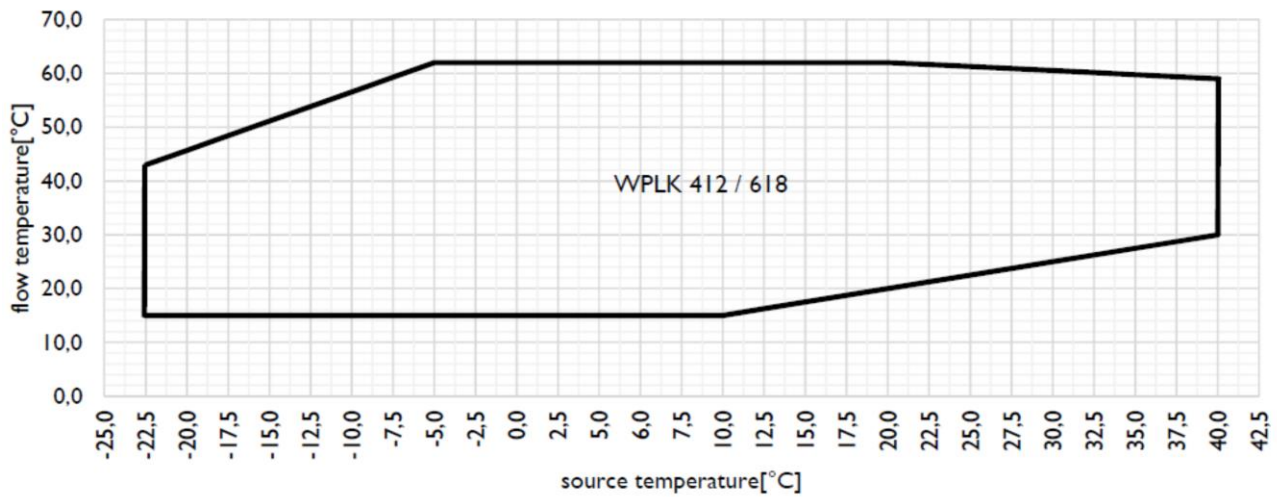
			warmer	middle	colder
climate	35°C	SCOP	5,28	4,57	3,97
		η_s	208	180	156
	55°C	SCOP	4,28	3,82	3,50
		η_s	168	150	137



** Compressor-related performance deviations of up to 10% are possible. All information without guarantee: typographical and printing errors reserved. All information including possibly necessary defrosting.

* acc. EN14511

Area of application

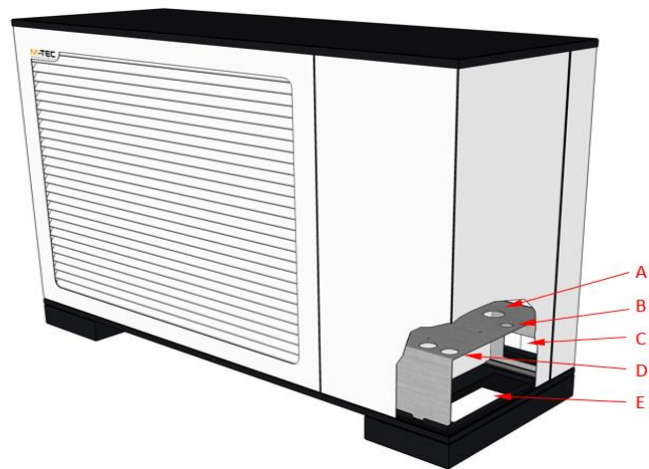


Connection dimension

Dimensions of heat pump (H x W x D)
Weight of heat pump

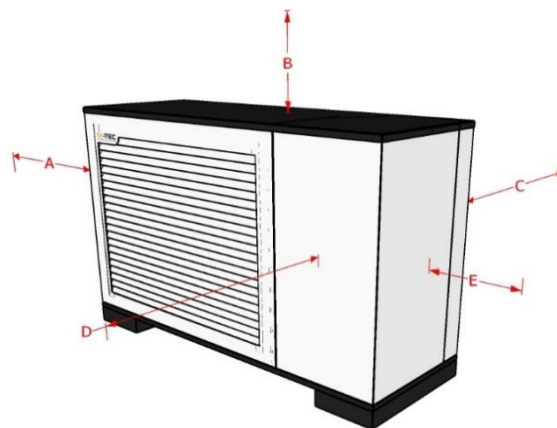
[mm] 1.205 x 1.750 x 625
[kg] 275

- A: heating inlet (return), G1" ET
- B: heating outlet (flow), G1" ET
- C: main connection "backside"
- D: electrical entries
- E: main connection "from below"

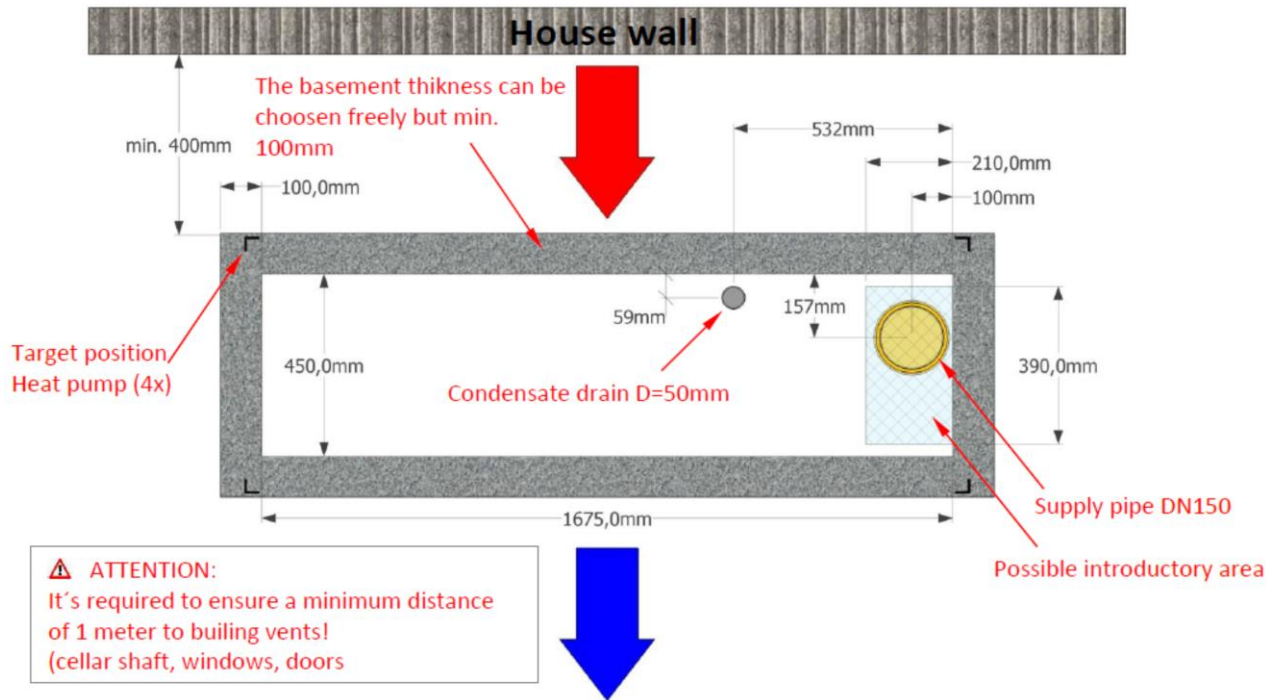


Free spaces

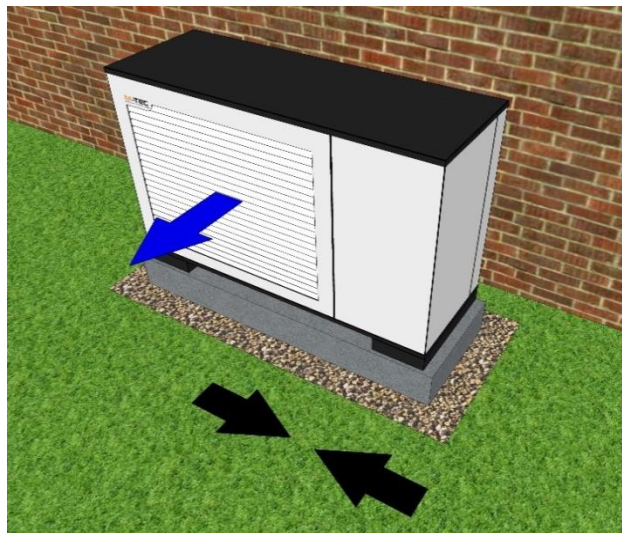
- A: 400mm
- B: 400mm
- C: 400mm
- D: 3000mm
- E: 800mm



Proposal foundation



Note the main wind direction to avoid unwanted flows through the heat pump!



General installation and assembly criteria according to the applicable operating instructions must be observed.