

air/water heat pump WPLK1030, 400V



General Data

Power range (rounded)	A2/W35: 8 - 31	[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	5,2	[A]
Max. operating current compressor	34,0	[A]
Starting current compressor with / without softstarter	35 / -	[A / A]
Cos(φ) compressor	0,98	[-]
Fuse compressor	3x C32	[-]
Res. current circuit breaker compressor supply	30mA, Typ B / B+	[-]

Sound power level data acc. EN12102

Nom. sound power level heat pump	53	[dB(A)]
Max. sound powe level heat pump	68	[dB(A)]
Level surcharge low-freq. noise characteristics	-	[dB]

Refrigerant circuit data

Compressor- type	scroll	[-]
Refrigerant- type	R410a	[-]
Refrigerant- amount	9,0	[kg]
Refrigerant- fluidgroup	2	[-]
Refrigerant- GWP	1924	[-]
Compressor oil- type	FVC68D	[-]
Compressor oil- amount	2,30	[l]

Heating side

Condenser- type	plate heat exchanger	[-]
Condenser- material	stainless steel, soldered copper	[-]
Condenser- flow rate (5K)	4,1	[m³/h]
Condenser- pressure loss	33,3	[kPa]
Circulation pump- type	UPMXL GEO 25-125/180/PWM	[-]
Circulation pump- residual head	3,2	[mWs]
Circulation pump- max. power	180,0	[W]

Source side

Evaporator- type	finned heat exchanger	[-]
Evaporator- material	copper / aluminium fins	[-]
Evaporator- flow rate	11000,0	[m³/h]
Evaporator- pressure loss	0,07	[kPa]
Source- type	axial fan	[-]
Source- residual head	-	[mWs]
Source- max. power	480,0	[W]

Sound power level data acc. EN12102

Heat pump compressor speed released 75% (corresponds to 19,2[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	64 64	2	56	56	50	50	42	42	38	38	36	36	34	34	32	32
		4	59	59	53	53	45	45	41	41	39	39	37	37	35	35
		8	62	62	56	56	48	48	44	44	42	42	40	40	38	38
Silent	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

Heat pump compressor speed released 100% (corresponds to 22,8[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	68 66	2	60	58	54	52	46	44	42	40	40	38	39	37	37	35
		4	63	61	57	55	49	47	45	43	43	41	42	40	40	38
		8	66	64	60	58	52	50	48	46	46	44	45	43	43	41
Silent	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

* 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.

	directivity Q=2 describes a hemispherically radiating sound source. The sound waves are only reflected from the floor surface.
	directivity Q=4 describes a quarter-spherical radiating sound source. The sound waves are reflected from the floor and a wall surface.
	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.

Power data**

operating point	compressor speed	rps compressor	heating power [kW]	COP
A7/W35*	55%	44	20,4	5,11
A7/W55*	60%	48	20,9	3,07
A2/W35*	48%	38	15,9	4,54
A2/W42*	45%	36	14,9	3,92
A-7/W34*	100%	80	23,9	3,14
A-7/W52*	100%	80	23,8	2,25
A-10/W35*	100%	80	22,1	2,89
A-10/W55*	100%	80	22,0	1,96
A7/W35	min. / max.	20 / 80	9,3 / 34,2	
A7/W55	min. / max.	20 / 80	8,6 / 33,8	
A2/W35	min. / max.	20 / 80	8,1 / 26,5	
A2/W35 POWER***	min. / max.	20 / 100	8,1 / 31,0	
A2/W55	min. / max.	20 / 80	7,8 / 26,1	
A2/W55 POWER***	min. / max.	20 / 100	7,8 / 31,0	
A-7/W35	min. / max.	20 / 80	7,5 / 22,8	
A-7/W55	min. / max.	20 / 80	7,5 / 22,4	
A20/W55	min. / max.	20 / 80	13,2 / 42,1	
operating point	compressor speed	rps compressor	cooling power [kW]	EER
A35/W18	55%	44	25,2	3,72
A35/W7	55%	44	20,4	3,42

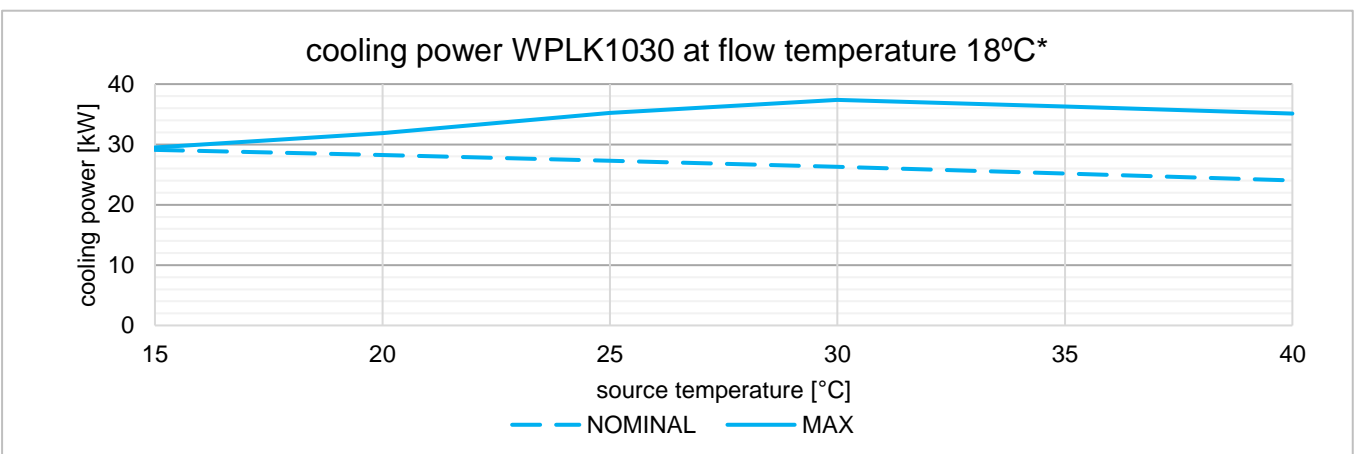
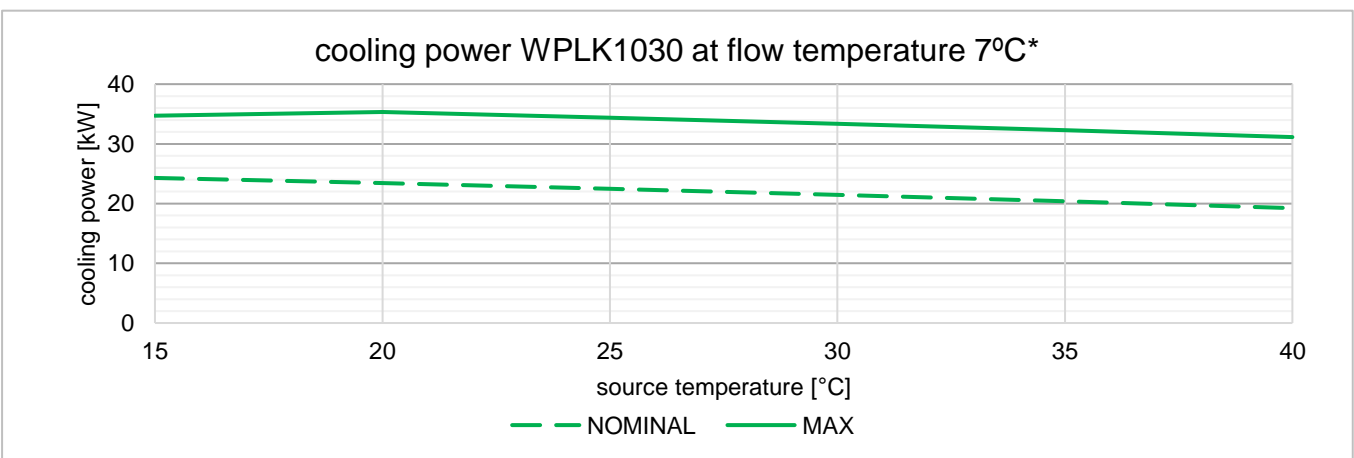
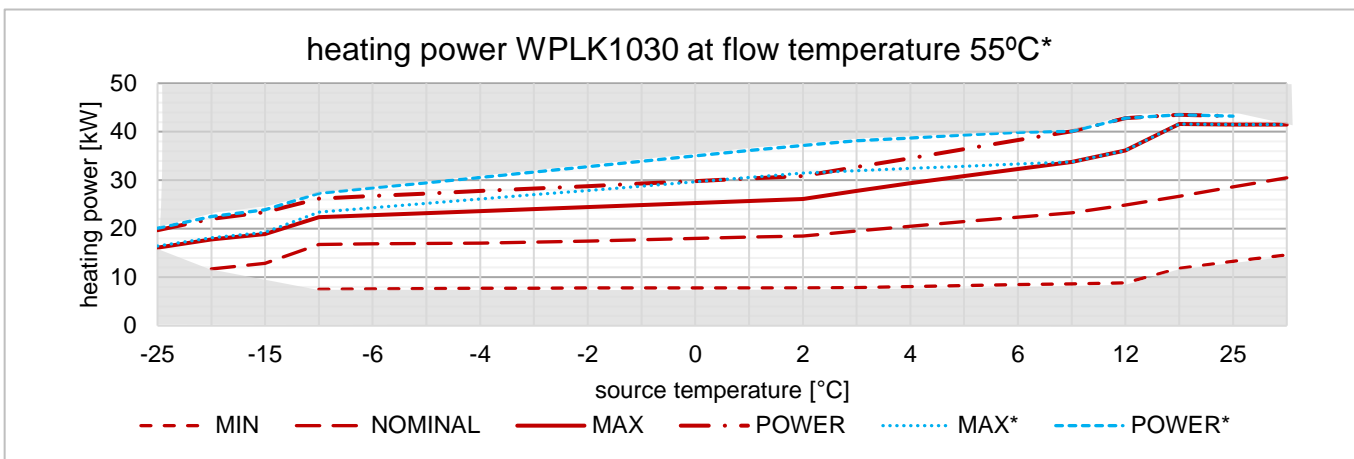
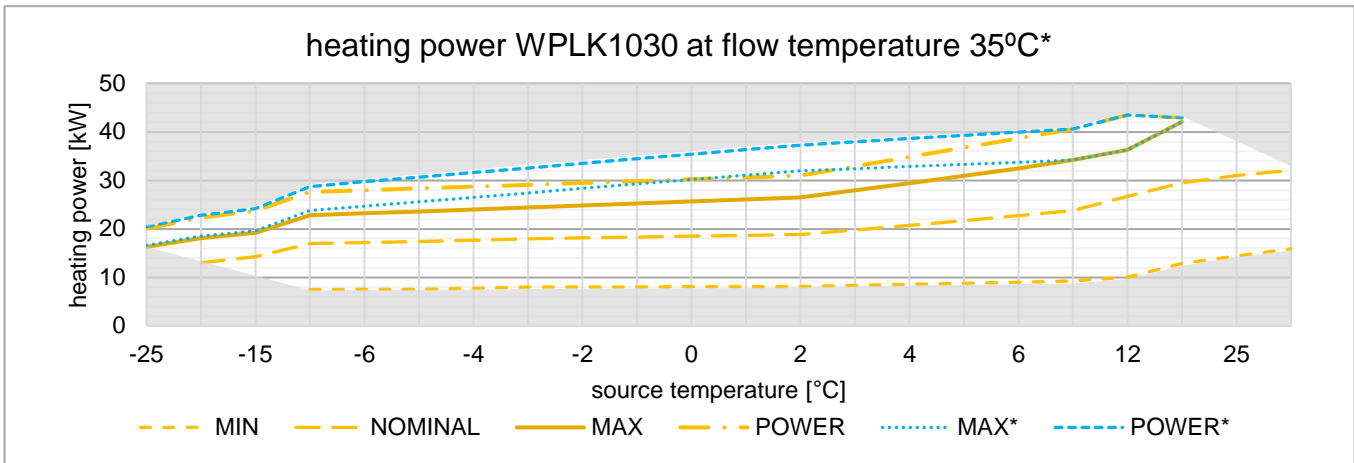
			warmer	middle	colder
climate	35°C	SCOP	5,94	5,20	4,50
		η_s	230	204	176
	55°C	SCOP	4,31	3,92	3,21
		η_s	172	152	125

** 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

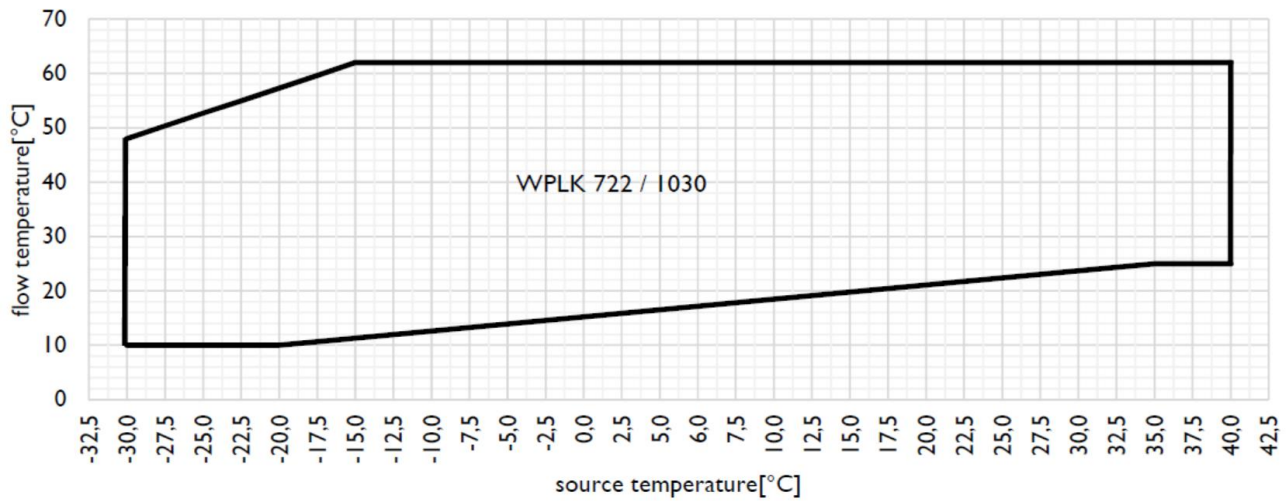
***POWER-MODE only after activation in the software, no test according to EN14511, no information for COP and sound power

Power diagrams



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. POWER-MODE only after activation in the software, no test according to EN14511, no information for COP and sound power. Areas with a gray background mark an impermissible operating area
* data without defrosting

Area of application



Connection dimension

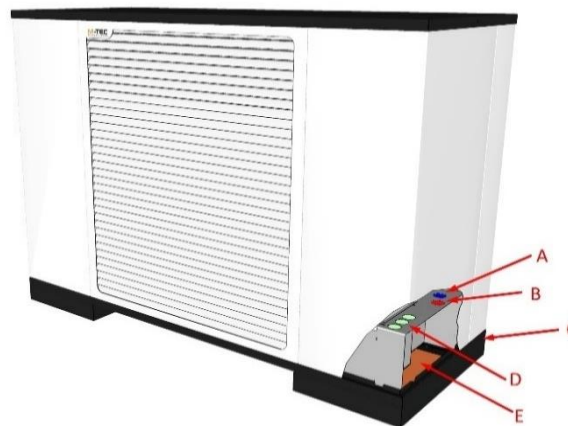
Dimensions of heat pump (H x W x D)

[mm] 1.433 x 1.965 x 755

Weight of heat pump

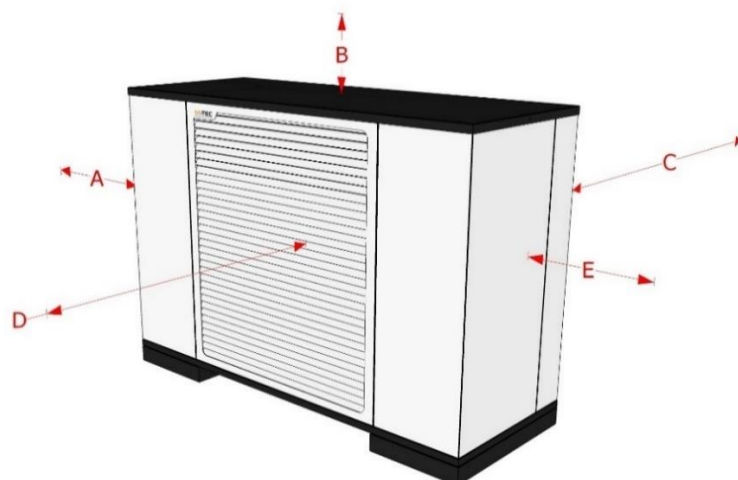
[kg] 405

- A: heating inlet (return), G5/4" ET
- B: heating outlet (flow), G5/4" ET
- C: main connection "backside"
- D: electrical entries
- E: main connection "from below"

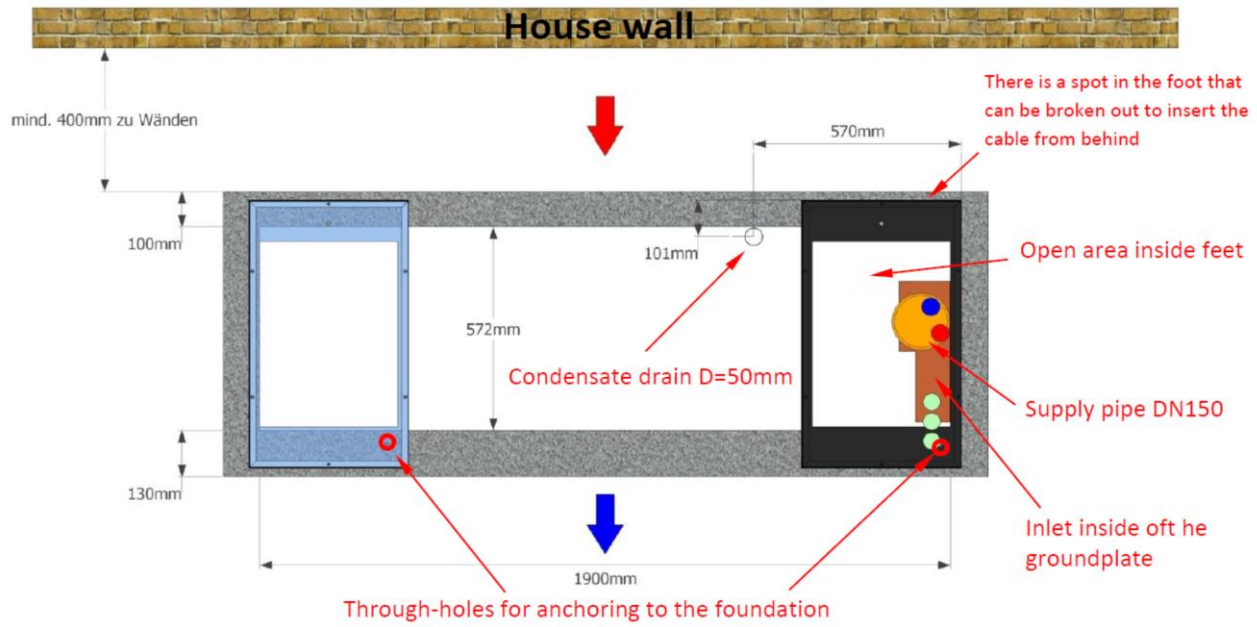


Free spaces

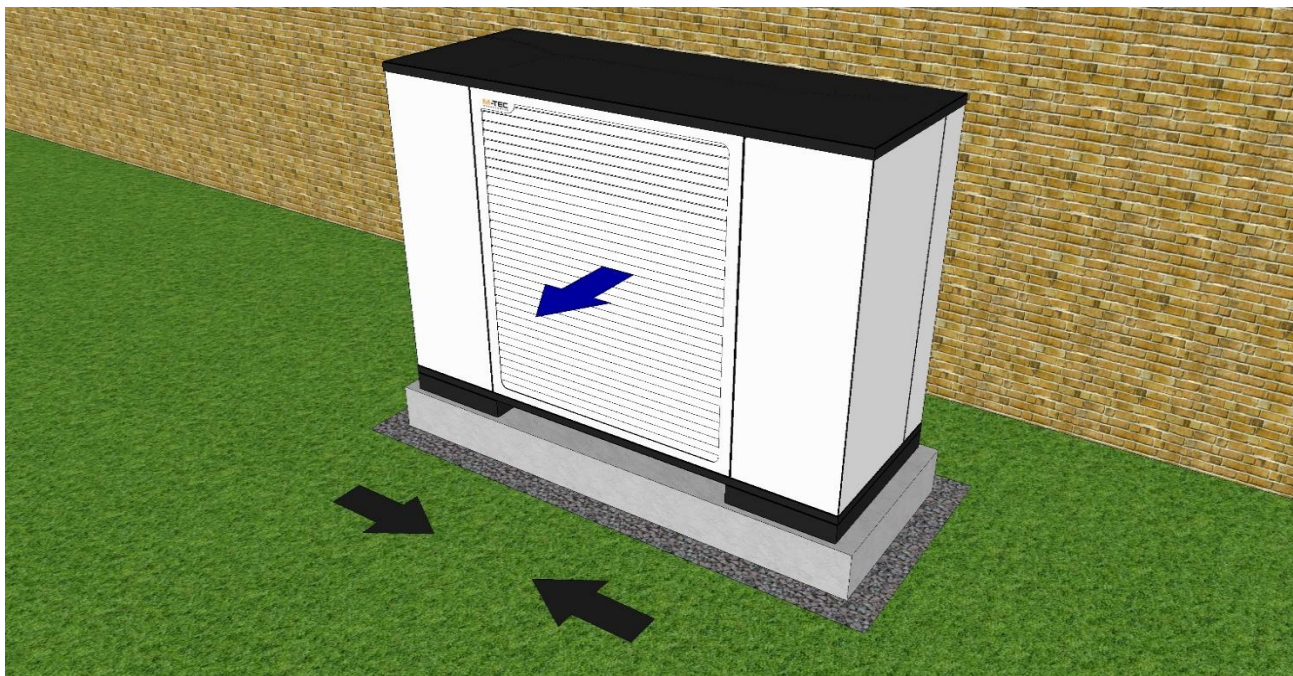
- A: 400mm
- B: 400mm
- C: 400mm
- D: 3000mm
- E: 800mm



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.