

Quotation/order number 403053

31-07-2017

Our contact : MNP
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Customer reference : Mogilv
Remark :

Pos.	Article number	Plant / Order	Page
403053-1	HTPC 0465-025		
	<i>Technical data - Customer units</i>		2
	<i>Characteristic - Customer units</i>		3
	<i>Sound data</i>		4

HTPC 0465-025

Technical data - Customer units

Plant / Order:
Type:

31-07-2017/MNP
403053-1

Data from input

Air Volume	[m³/h]	481
Static pressure	[Pa]	3313
Suctionside pressure	[Pa]	-1500
Density (Ambient)	[kg/m³]	1,204
Temperature	[°C]	20
Pressure (Ambient)	[kPa]	101,325
Altitude	[m]	0

Air technical data

Temperature	[°C]	20
Air Volume (Actual)	[m³/h]	481
Air Volume (Normal)	[Nm³/h]	442
Air Volume	[m³/h]	481
Air Volume	[kg/h]	571
Total pressure	[Pa]	3313
Static pressure	[Pa]	3313
Total pressure	[Pa]	3313
Static pressure	[Pa]	3313
Density (at inlet)	[kg/m³]	1,186
Power (impeller)	[kW]	0,8
Speed	[1/min]	2660
Frequency	[Hz]	45,7
Noise pressure level	[dB(A)]	70,4* (1m)

Sound power level	[dB(A)]	84*
Power (shaft)	[kW]	0,81
Efficiency, impeller	[%]	54,6
Circumferential velocity	[m/s]	64,8
Inlet speed	[m/s]	16,4
Outlet velocity	[m/s]	16,4
Run-up time approx.	[s]	123
Temperature increase	[°C]	5
Max. allowed temperature	[°C]	20

*Data incl. motor at nom. RPM and add. sources (± 5dB)

Motor Data

Make	WEG Cast Iron
Type	WEG W22 100L IE3 2P 3kW
Size	[-] 100L
Power	[kW] 3
Speed	[1/min] 2910
Voltage	[V] 3x400
Frequency	[Hz] 50(45,7)
Design	[-] B3
Terminal box	[-] Above
Efficiency class	[-] IE3
Ex	[-] -
Heat class/Enclosure	[-] F/IP55
Startup	[-] Freq. converter (VFD)
Motor protection	[-] PTC 1x3 - 150°C
Insulated bearing ND-side	[-] -
Roller bearing in D-side	[-] -
Shaft diameter	[mm] 28
Weight, Motor	[kg] 35

Fan data

Fan type	HTPC 0465-025
Article number	10001.01.110.120.00Y
Housing position	LG 0
Impeller diameter	[mm] 465
Impeller width	[%] 100
Connection suct. side	[mm] ø102
Connection pres. side	[mm] 100x80
Weight excl. motor	[kg] 126
Connection	Pipe connection on both sides
Medium	Air

Material and surface

Impeller	1.4404 - AISI 316L	Pickled Passivation
Housing	1.4404 - AISI 316L	Glass blasted Glass blasted
Console	1.4307 - AISI 304L	Glass blasted Glass blasted

Mounted Accessories

- Outlet transition Flange (Std.) - 1.4404 - 106x86-40x5
- Drain Female Socket 1" - 1.4404
- Inspection Type Standard Hatch - 1.4404 - 250-710
- AtexZone 2/NA
- Inlet Flange 102 - 1.4404
- Vibration dampers
- ShaftSeal GACO Box

Loose Accessories

- Counter flange for flex 106x86-40x5 - BB HTP 0465-025 - 1.4404

HTPC 0465-025

Characteristic - Customer units

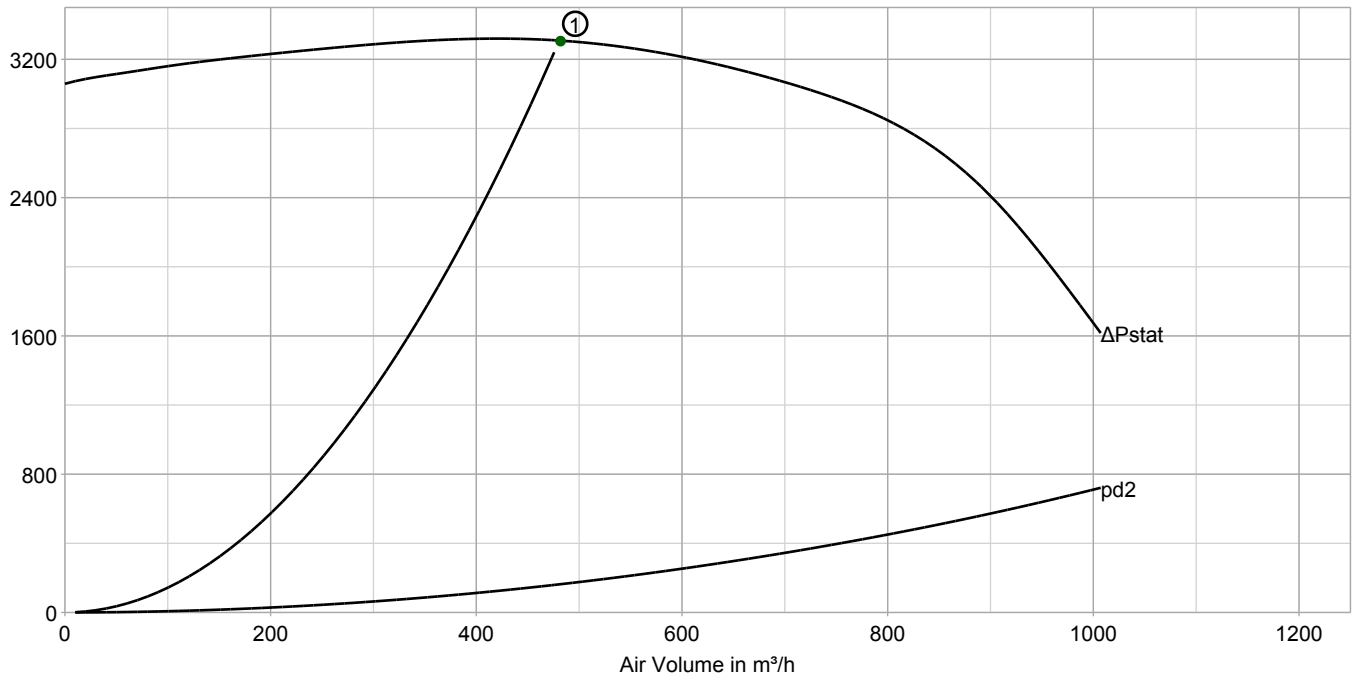
Plant / Order:

Type:

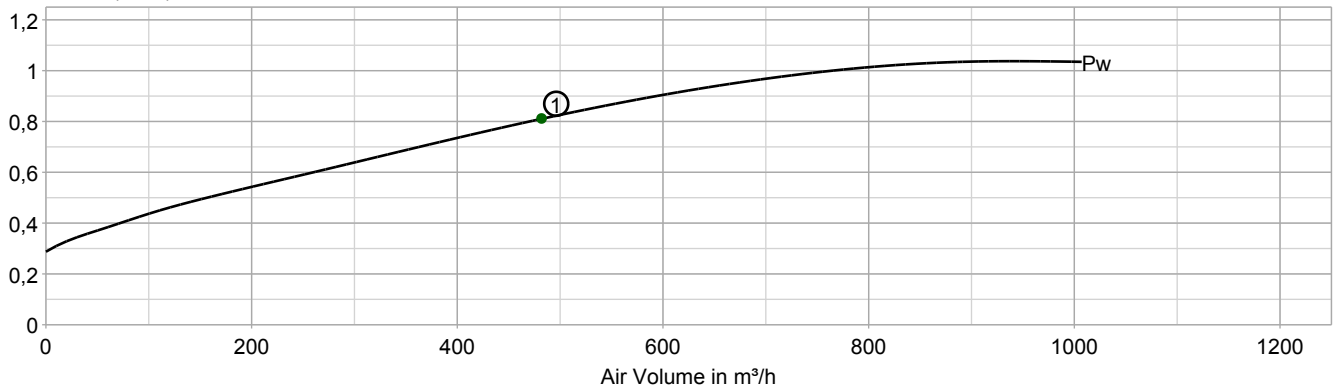
31-07-2017/MNP

403053-1

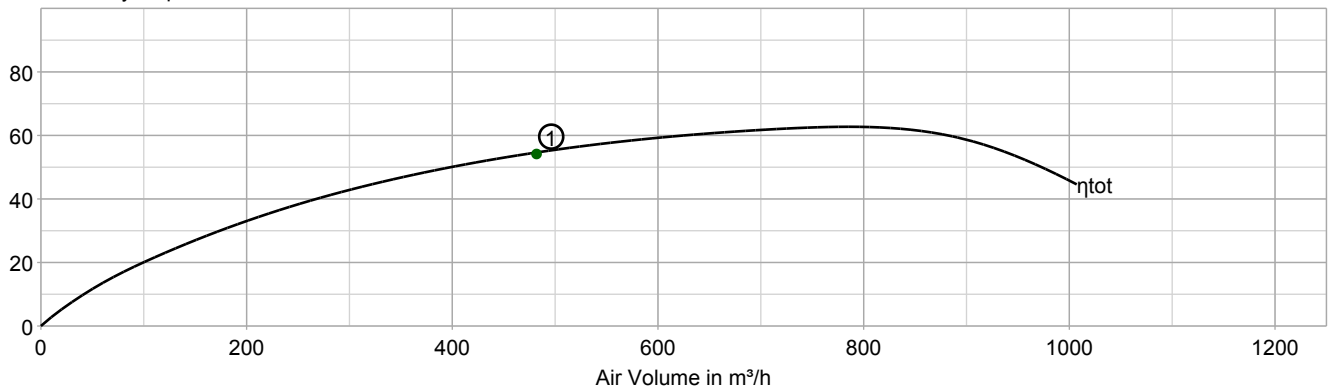
Pressure increase in Pa



Power (shaft) in kW



Efficiency, impeller in %



Operating point

1

Air Volume	[m³/h]	481
Total pressure	[Pa]	3313
Static pressure	[Pa]	3313
Power (shaft)	[kW]	0,81
Density (at inlet)	[kg/m³]	1,186
Speed	[1/min]	2660

HTPC 0465-025

Sound data

Plant / Order:

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Type:

403053-1

Operating point	1				
Housing	1.4404	3 mm	Air Volume	481	m³/h
Inlet diameter	102	mm	Total pressure	3313	Pa
Outlet opening	100x80	mm	Medium temperature	20	°C
Operating speed	2660	1/min	Medium density	1,186	kg/m³
Number of blades	12		Operating point V/Vopt	0,6	
Blade frequency	532	Hz	Measuring surface index	13,6	db

Basic capacity (Fan type 3731) db 99,9

Sound correction (operating point V/Vopt) db 1,4

Octave band	Hz	Total	63	125	250	500	1000	2000	4000	8000
Turning sound adjustment	db		0	0	0	5	0	0	0	0
Strouhal number	db		0,5	0,9	1,8	3,6	7,2	14,4	28,7	57,4
Relative spectrum	db		-5,9	-6,5	-8	-10,4	-13,6	-17,9	-23	-29
Total linear soundlevel	db	101,3	95,4	94,8	93,3	95,9	87,6	83,4	78,3	72,3
A-weighting	db		-26,2	-16,1	-8,6	-3,2	0	1,2	1	-1,1
Insulation platethickness housing	db		-3,4	-5,4	-7,4	-12,4	-12,4	-12,4	-12,4	-12,4
Total soundlevel	LwA 1 dB(A)	95,1	69,2	78,7	84,7	92,7	87,6	84,6	79,3	71,2
Soundlevel housing	LwA 2 dB(A)	83,9/84*	65,8	73,3	77,3	80,3	75,2	72,2	66,9	58,8
	LpA 2(1m) dB(A)	70,3/70,4*	52,2	59,8	63,8	66,8	61,7	58,7	53,4	45,3
Soundlevel duct suctionside	LwA 3 dB(A)	94,9	68,2	77,7	82,7	92,7	87,6	84,6	79,3	71,2
	LpA 3(1m) dB(A)	83**	38,7	54,1	64,8	79,6	77,5	75,7	70,8	62,8
Soundlevel duct pressureside	LwA 4 dB(A)	97,2	69,2	79,7	86,7	95,7	87,6	83,6	78,3	71,2
	LpA 4(1m) dB(A)	84,5**	39,7	56,1	68,8	82,6	77,5	74,7	69,8	62,8

Soundlevel motor LwA dB(A) 67

Noise reduction motor Lw db 0

Additional sound sources LwA dB(A) 0

* Data incl. motor at nom. RPM and add. sources (± 5dB)

**Theoretical noiselevel for estimating of the soundpressure level at the systemborder (± 5dB)

