



Product card No. OS-18-20230212-180257-162-3 Fan TC-EN 50/50/30/90

Client	XPLO Sp. z o.o.	Prepared by	m.sekienda@netecs.pl
Commission	Wentylator V=5000 m ³ /h pt=3000 Pa	Creation date	2023-02-12
Project number	-	Comment	-

INPUT DATA

Supply frequency	50 [Hz]	Pressure type	Total
Pressure	3000 [Pa]	Air volume	5000 [m ³ /h]
Altitude ASL	0.000 [m]	Temperature	20 [°C]
Amount of material	1000 [kg/h]	Duct diameter	0.25 [m]
EX	No		

OPERATING PARAMETERS

Air density	1.2 [kg/m ³]	Air volume	5020 [m ³ /h]
Static pressure	2884 [Pa]	Total pressure	3024 [Pa]
Dynamic pressure	140 [Pa]	Total efficiency	0.614 [-]
Static efficiency	0.586 [-]	Noise level	84.6 [dB(A)]
Shaft power	6.9 [kW]	Shaft power with material	8 [kW]
Amount of material	1000 [kg/h]	Installed power	11 [kW]
Material density	0.1992 [kg/m ³]	Duct diameter	0.25 [m]
Operating frequency	50 [Hz]	Average air speed in ducting	28.41 [m/s]
Housing dimensions	885x819 [mm]	Weight	190 [kg]
Average rated fan speed	2960 [1/min]		

ATEX VERSION

	Inside	Outside
Zone	-	-
Equipment group	-	-
Equipment category	-	-
Type of explosion protection	-	-
Temperature class	-	-
ATEX marking	-	-

WORK RESTRICTIONS

	Minimum	Maximum
Temperature of the conveyed medium	-10 [°C]	60 [°C]
Ambient temperature	-20 [°C]	40 [°C]
Rotor revolutions	-	3000 [1/min]



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MOTOR

Producer	Lammers	Motor poles	2
Rated speed	2955 [1/min]	Rated power	11 [kW]
Motor designation	1TZ9003-1DA2_160M	Frequency	50 [Hz]
Rated voltage	400/690 [V]	Protection class	IP55
Thermal protection class	F	Efficiency class	IE3
Winding protection	1 thermistor kit	Reinforced bearings	Yes
Special version	No		

CORROSION PROTECTION

Class / Category	C2	Underlay	ZG15
Paint finish	ZE27	Temperature resistance	120 °C
Total layer thickness	80 µm	RAL colour of the housing	5015
RAL colour of the rest of the fan	5015	RAL colour of the motor	5015

FAN

Fan kind	CLASSIC Transport fans	Fan type	TC-EN
Fan type number	50/50/30/90	Fan position	GL 360 (LG 0)
Execution	Standard	Medium	Shavings and sawdust
Impeller	Open	Drive	Direct
Balancing class	G6,3	Number of fans	1
Additional information	Welded steel housing, impeller statically and dynamically balanced		



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ACCESSORIES

Additional accessories

Equipment included in
price

VALUATION

Fan TC-EN 50/50/30/90

Total price: 3 360.50 EUR

DELIVERY AND ADDITIONAL INFORMATIONS

Delivery time

6 to 8 weeks from order date

Offer expiration time

6 weeks

Characteristic curve

TC-EN 50/50/30/90

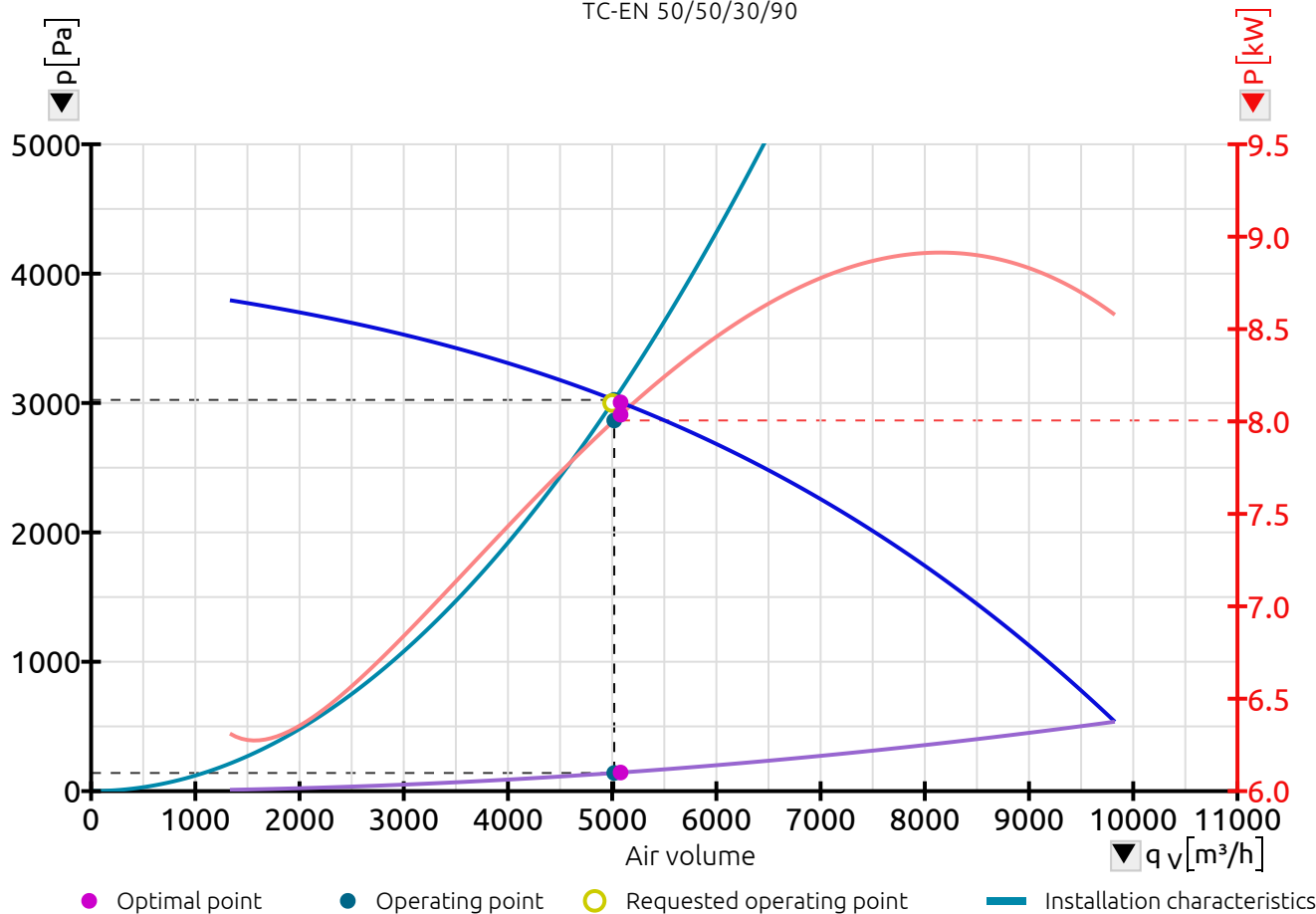


CHART COMPONENTS

Total pressure [p_T]	Total efficiency [η_T]	Shaft power without material [P_a]	Current at voltage V_1 (400 V)
Static pressure [p_{sF}]	Static efficiency [η_{sF}]	Shaft power with material [P_a]	Noise level [L_{A6}]
Dynamic pressure [p_{dF}]		Electrical power [P_e]	Current at voltage V_2 (690 V)

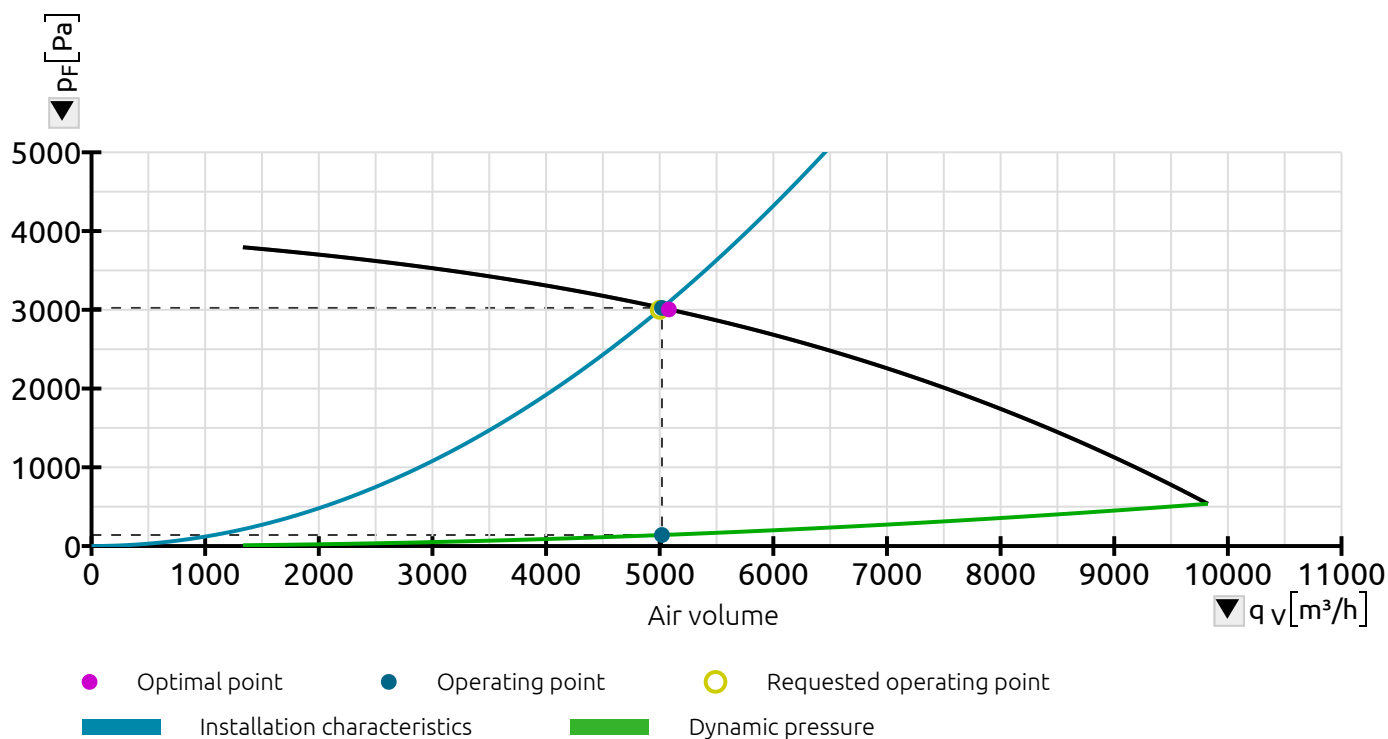
MAIN AXIS

Pressure [p]	Efficiency [η]	Power [P]	Noise level [L]	Current [I]
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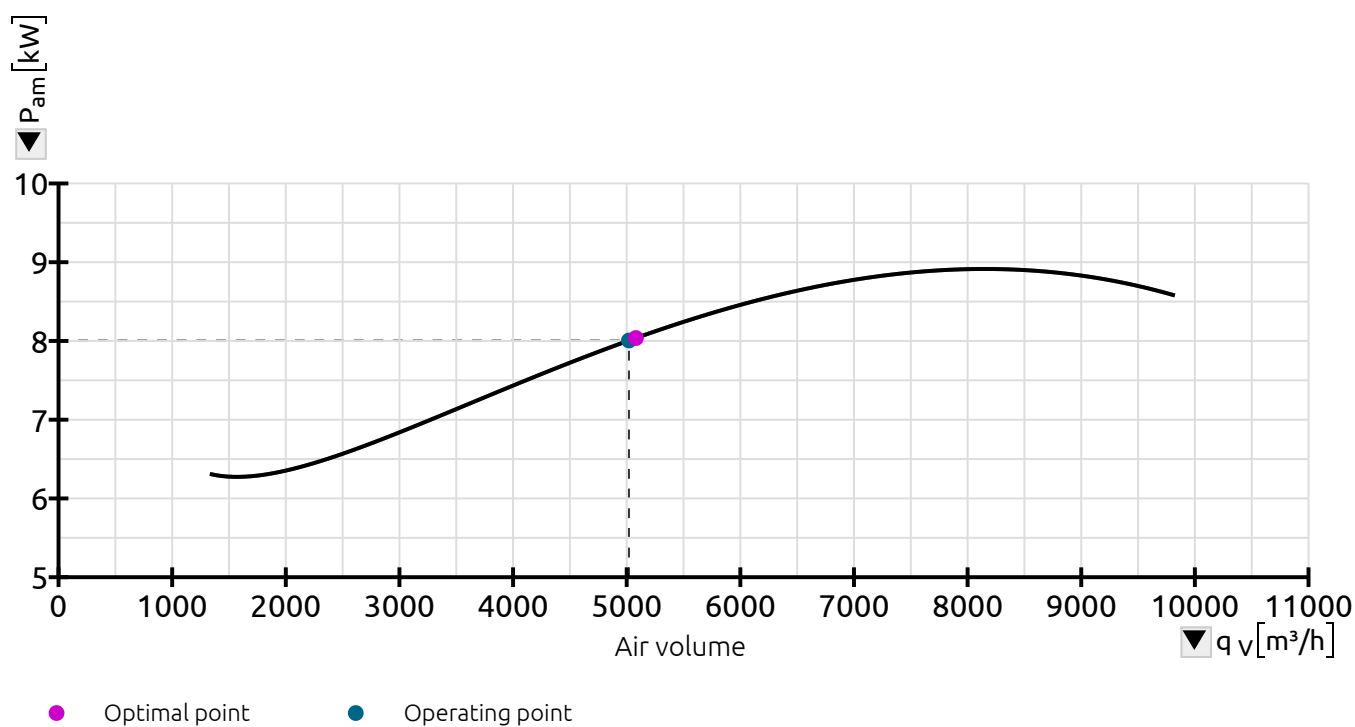
OPERATING POINT

Air density	1.2 [kg/m³]	Air volume	5020 [m³/h]
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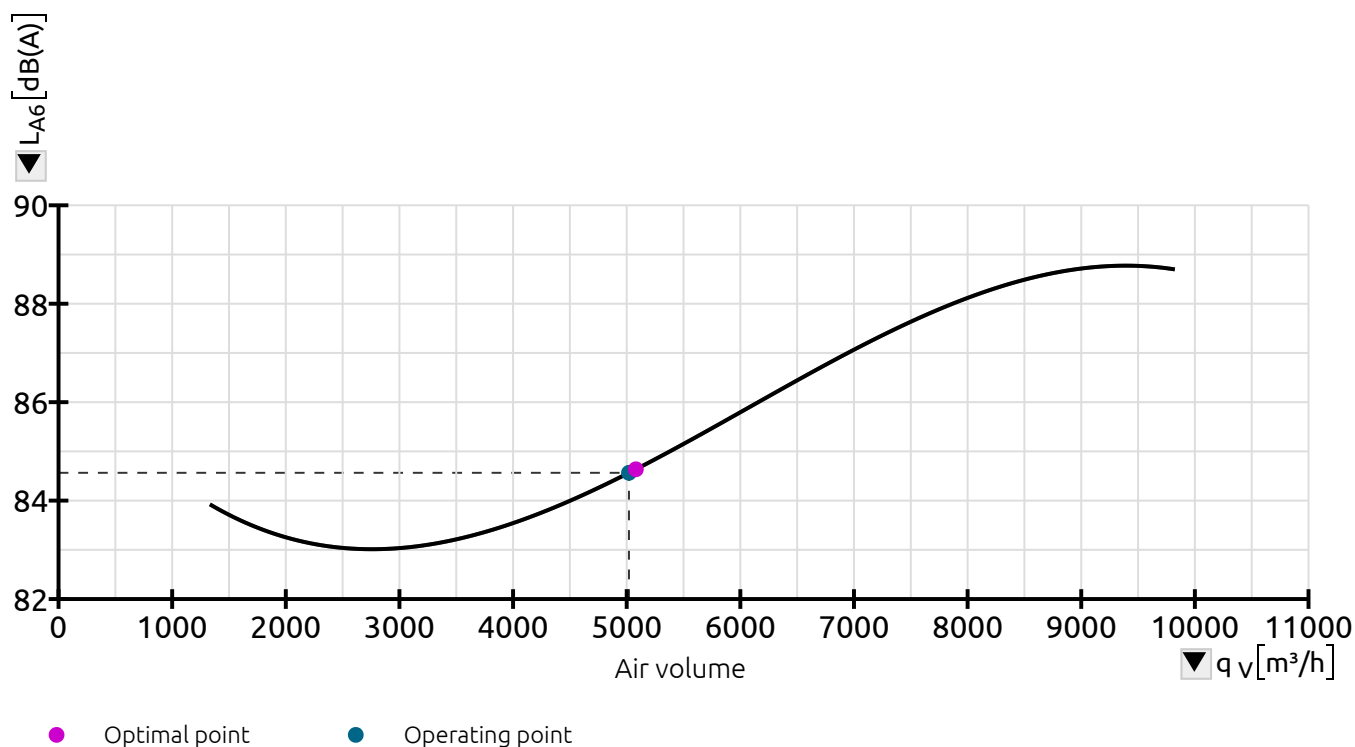
Total pressure [p_F]



Shaft power with material [P_a]



Noise level [L_{A6}]





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