



## Product card No. OS-18-20230212-180833-564-2 Fan TC-EN 50/55/35/80

Client	XPLO Sp. z o.o.	Prepared by	m.sekienda@netecs.pl
Commission	Wentylator V=7000 m <sup>3</sup> /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	7000 [m <sup>3</sup> /h]
Altitude ASL	0.000 [m]	Temperature	20 [°C]
Amount of material	1400 [kg/h]	Duct diameter	0.3 [m]
EX	No		

### OPERATING PARAMETERS

Air density	1.2 [kg/m <sup>3</sup> ]	Air volume	7026 [m <sup>3</sup> /h]
Static pressure	2794 [Pa]	Total pressure	3023 [Pa]
Dynamic pressure	229 [Pa]	Total efficiency	0.577 [-]
Static efficiency	0.533 [-]	Noise level	90 [dB(A)]
Shaft power	10.2 [kW]	Shaft power with material	11.9 [kW]
Amount of material	1400 [kg/h]	Installed power	15 [kW]
Material density	0.1993 [kg/m <sup>3</sup> ]	Duct diameter	0.3 [m]
Operating frequency	50 [Hz]	Average air speed in ducting	27.61 [m/s]
Housing dimensions	969x894 [mm]	Weight	214 [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	2960 [1/min]	Rated power	15 [kW]
Motor designation	1TZ9003-1DA3_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	50/55/35/80	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 50/55/35/80

Total price: 3 626.60 EUR

## DELIVERY AND ADDITIONAL INFORMATIONS

Delivery time

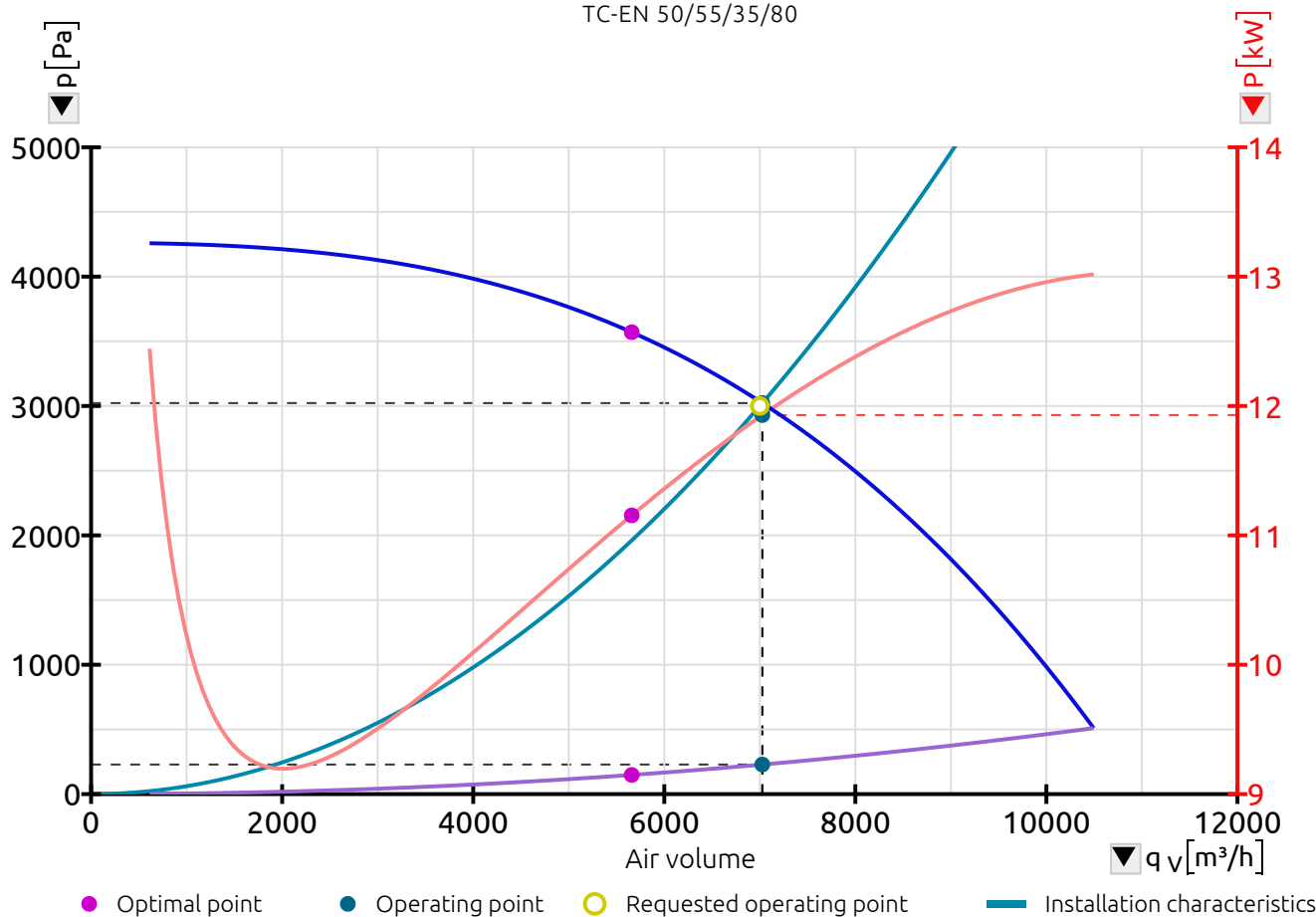
6 to 8 weeks from order date

Offer expiration time

6 weeks

### Characteristic curve

TC-EN 50/55/35/80



#### CHART COMPONENTS

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

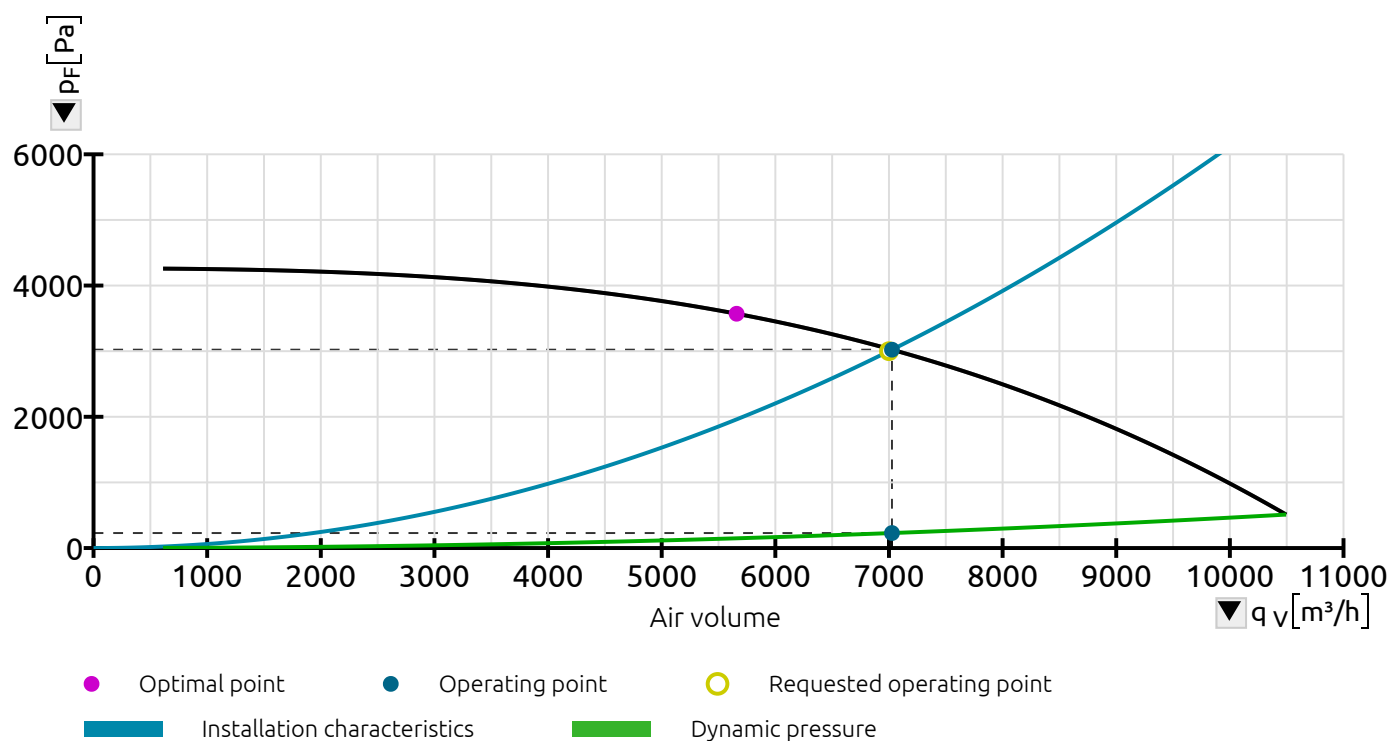
#### MAIN AXIS

Pressure $[p]$	Efficiency $[\eta]$	Power $[P]$	Noise level $[L]$	Current $[I]$
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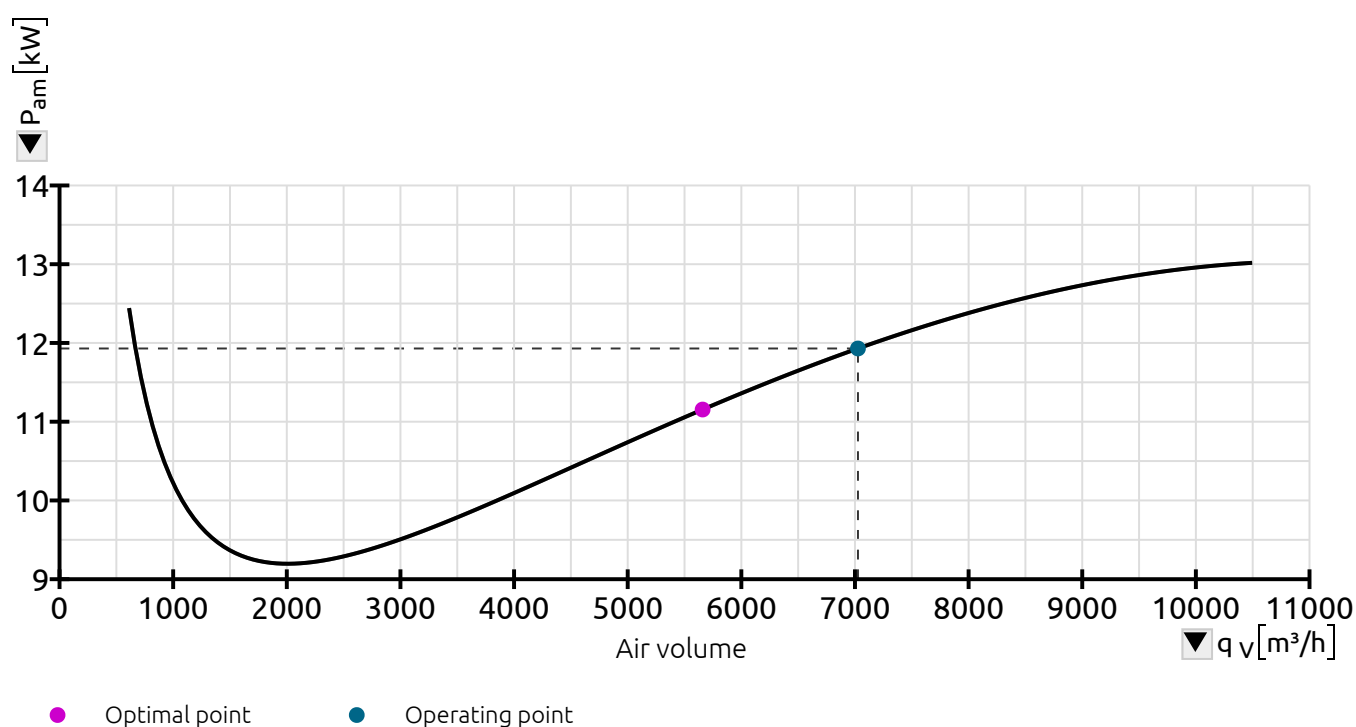
#### OPERATING POINT

Air density	1.2 [kg/m³]	Air volume	7026 [m³/h]
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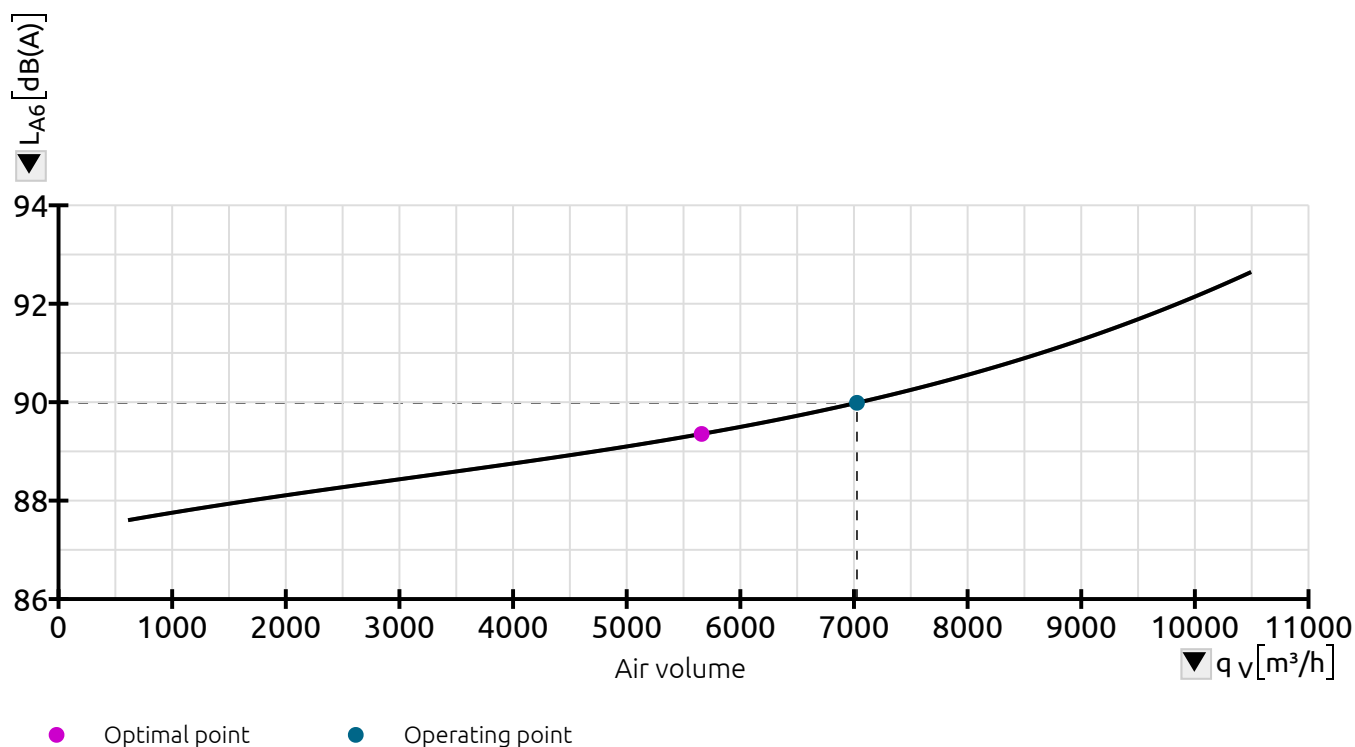
Total pressure [ $p_F$ ]



Shaft power with material [ $P_a$ ]



Noise level [ $L_{A6}$ ]





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