



## Product card No. OS-18-20230212-173540-994-2 Fan USC-SFN 60/50/35/90

Client	XPLO Sp. z o.o.	Prepared by	m.sekienda@netecs.pl
Commission	Wentylator V=7000 m <sup>3</sup> /h pt=2500 Pa	Creation date	2023-02-12
Project number	-	Comment	-

### INPUT DATA

Supply frequency	50 [Hz]	Pressure type	Total
Pressure	2500 [Pa]	Air volume	7000 [m <sup>3</sup> /h]
Altitude ASL	0.000 [m]	Temperature	20 [°C]
Duct diameter	0.3 [m]	EX	No

### OPERATING PARAMETERS

Air density	1.2 [kg/m <sup>3</sup> ]	Air volume	7150 [m <sup>3</sup> /h]
Static pressure	2324 [Pa]	Total pressure	2608 [Pa]
Dynamic pressure	284 [Pa]	Total efficiency	0.922 [-]
Static efficiency	0.822 [-]	Noise level	87.5 [dB(A)]
Shaft power	5.6 [kW]	Installed power	7.5 [kW]
Duct diameter	0.3 [m]	Operating frequency	50 [Hz]
Average air speed in ducting	28.10 [m/s]	Housing dimensions	885x819 [mm]
Weight	187 [kg]	Minimum amount of air at the minimum frequency	62 [m <sup>3</sup> /h]
Average rated fan speed	2970 [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	20 [°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	2950 [1/min]	Rated power	7.5 [kW]
Motor designation	1TZ9003-1CA1_132S	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 Clean gas fans	Fan type	USC-SFN
Fan type number	60/50/35/90	Fan position	GL 360 (LG 0)
Execution	Standard	Medium	Clean gas
Impeller	Closed	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 USC-SFN 60/50/35/90

Total price: 3 050.50 EUR

## DELIVERY AND ADDITIONAL INFORMATION

Delivery time

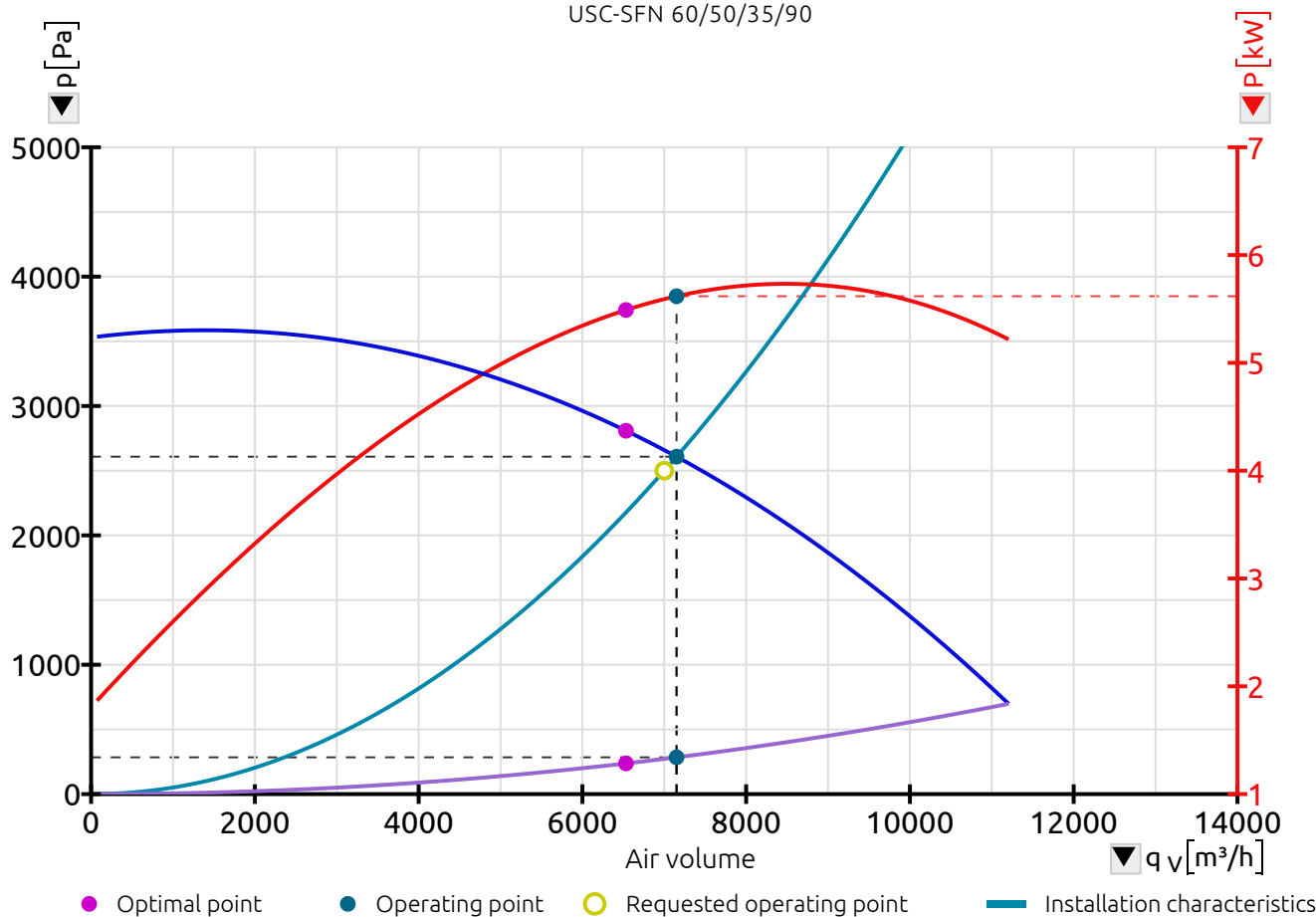
6 to 8 weeks from order date

Offer expiration time

6 weeks

### Characteristic curve

USC-SFN 60/50/35/90



#### 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 [ $L_{A6}$ ]
Dynamic pressure [ $p_{dF}$ ]		Electrical power [ $P_e$ ]	Current at voltage $V_2$ (690 V)

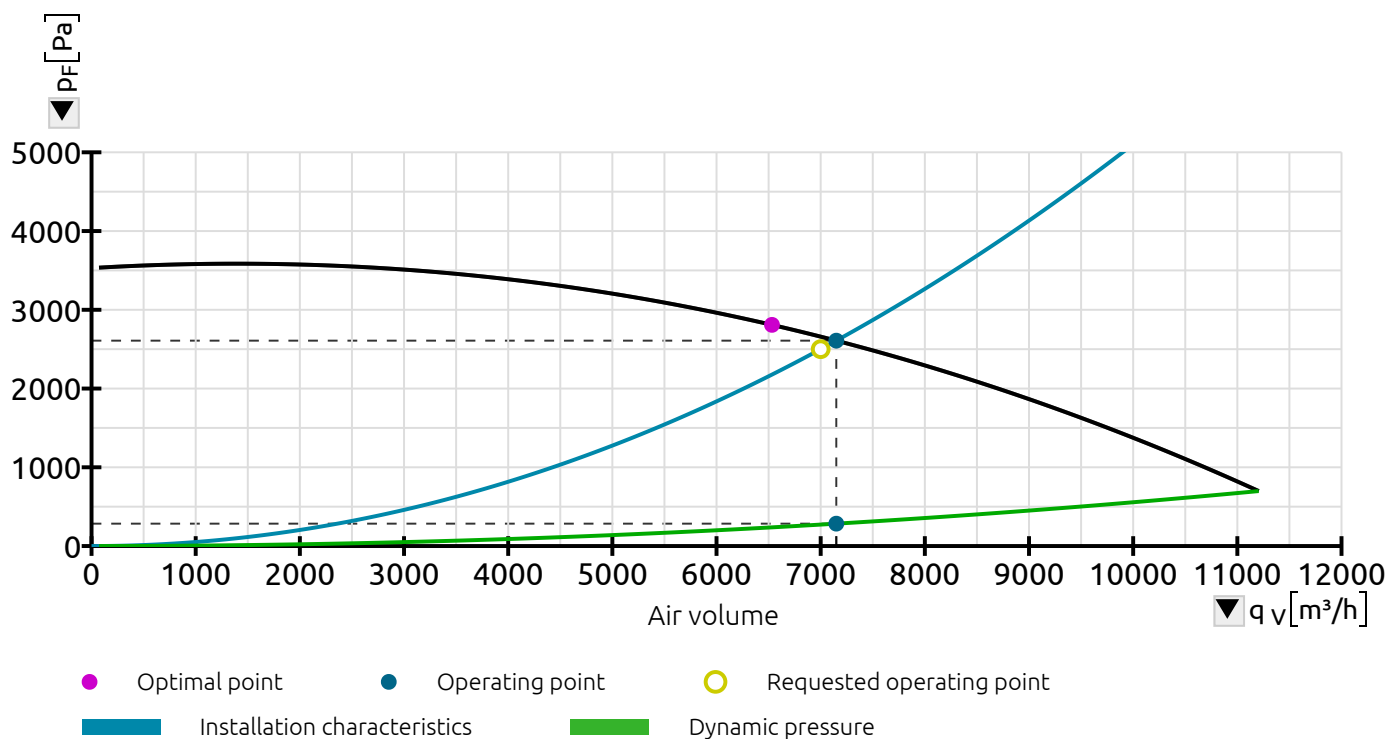
#### MAIN AXIS

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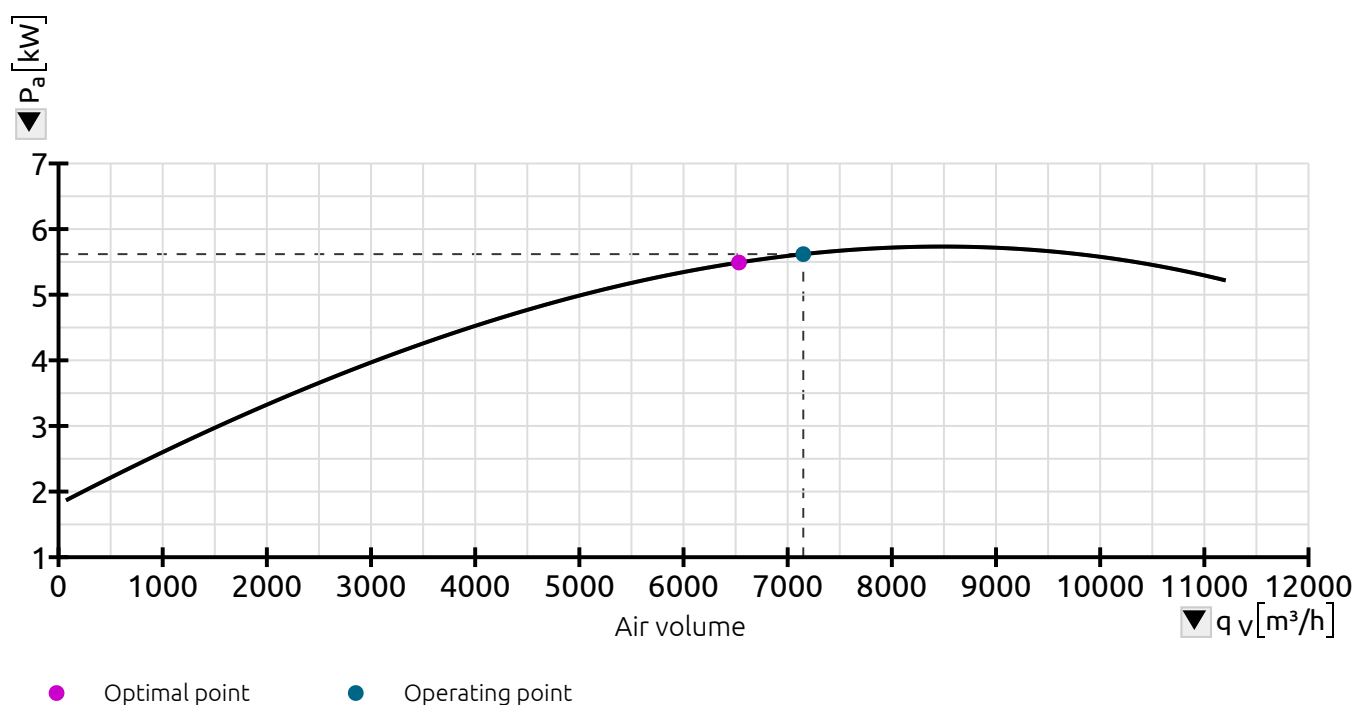
#### OPERATING POINT

Air density	1.2 [kg/m³]	Air volume	7150 [m³/h]
Static pressure	2324 [Pa]	Total pressure	2608 [Pa]
Dynamic pressure	284 [Pa]	Total efficiency	0.922 [-]
Static efficiency	0.822 [-]	Noise level	87.5 [dB(A)]
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Duct diameter	0.3 [m]	Operating frequency	50 [Hz]
Average air speed in ducting	28.10 [m/s]	Housing dimensions	885x819 [mm]
Weight	187 [kg]	Minimum amount of air at the minimum frequency	62 [m³/h]
Average rated fan speed	2970 [1/min]		

Total pressure [ $p_F$ ]



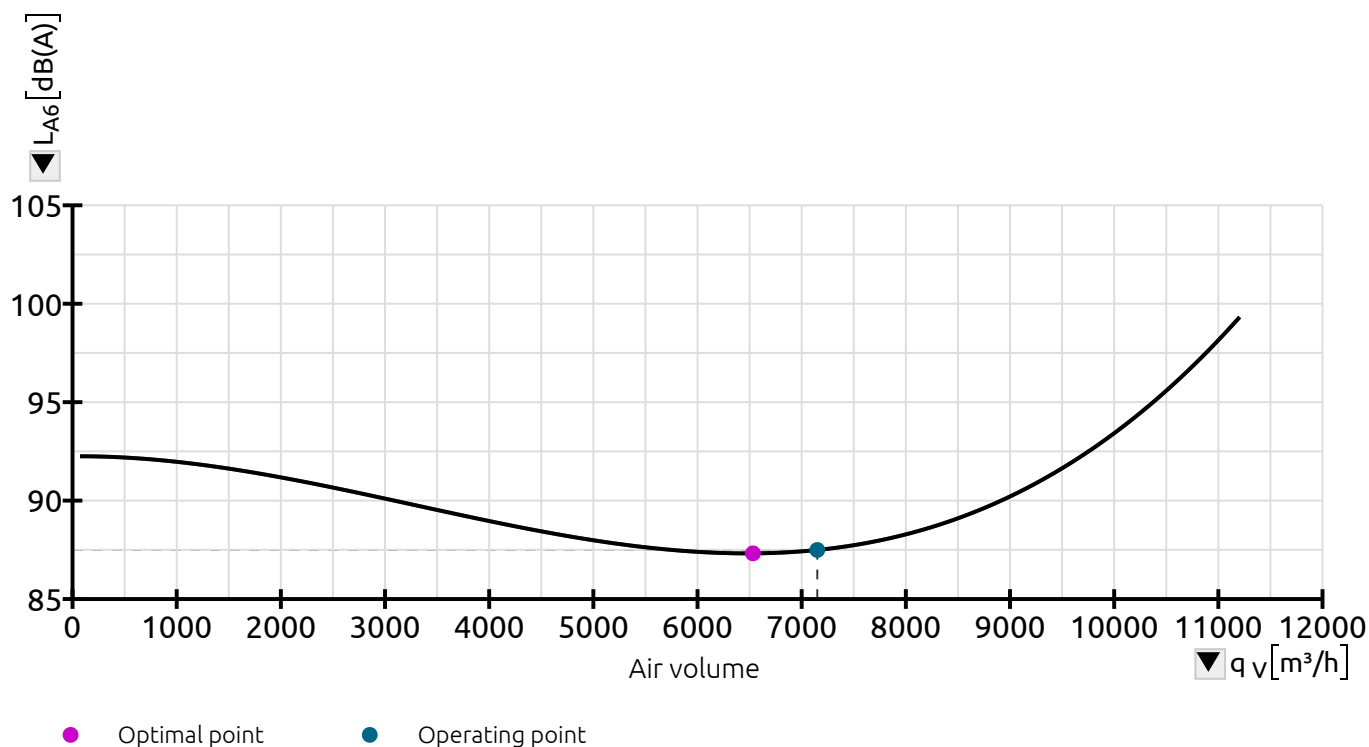
Shaft power without material [ $P_a$ ]





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Noise level [ $L_{A6}$ ]





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