

AXF: 01&02 @ 100% Speed



Technical Data - Fan Model RS-LCS071L2-A3/21

Location: Block A Shaft 01

Designation: SEF 01&02

Performance - Required

Air Flow : 5.20 m³/s
Static Pressure : 250 Pa
Selection Pressure: 395 Pa
Installation Type: TYPE C
Air Density: 1.204 kg/m³
- Atmos. Temp: 20 °C
- Altitude: 0 m
- Humidity: 0.0 %

Actual

Air Flow: 5.28 m³/s
Static Pressure: 393 Pa
Total Pressure: 500 Pa

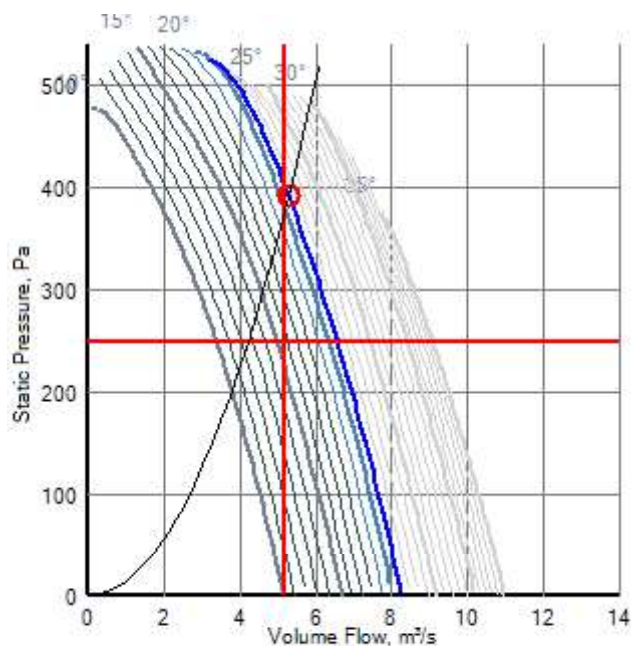
Fan Data

Catalogue Code: RS-LCS071L2-A3/21
(RSLCS071-717-IE3-112-4-2-181-28-RA3)

Description:

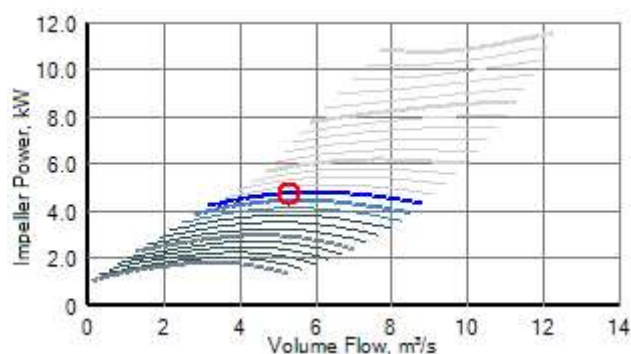
R&S Long-Cased Smoke Set

Diameter:	710 mm	Hub:	181 mm
Impeller Type:	Axial	Pitch:	21°
Blade Material:	Aluminium	Blades:	3
Speed:	2880 r/min @50 Hz		
Power, Abs:	4.76 kW	Form:	B
Input Power:	5.40 kW	Peak:	4.80 kW
Efficiency Total:	55.4%		
SFP:	1.04	Static:	43.6%
Fan Weight:	149.7 kg		



Motor Data (at STP)

Motor Type:	F300 (CE)	
Electrical Supply:	400V 3ph 50Hz	
Motor Frame:	112M	
Motor Power:	4.80kW (AOM)	(4.00kW IEC)
FLC/Start (DOL):	8.98A (AOM) / 58.49A	(7.48A FL IEC)
Motor Speed:	2 pole	
Motor Efficiency:	88.0%	



Sound Data

Spectrum (Hz):	63	125	250	500	1K	2K	4K	8K	dBW	dB(A) @ 3m
Inlet (dB):	107	101	100	100	100	101	99	95	111	86
Outlet (dB):	105	100	98	100	99	100	99	97	109	86
Breakout (dB):	101	91	82	79	76	74	66	65	102	63

Sound levels are quoted as in-duct values. dB(A) values are average spherical free-field for comparative use only.

Fan Breakout Sound Power Levels exclude the breakout from any attached ductwork or flexible connections and are calculated from the Inlet and Outlet Sound Power Levels, considering the Sound Reduction Index of the Fan Casing.

AXF: 01&02 Fan Dimensions

Technical Data - Fan Model RS-LCS071L2-A3/21

Location: Block A Shaft 01

Designation: SEF 01&02

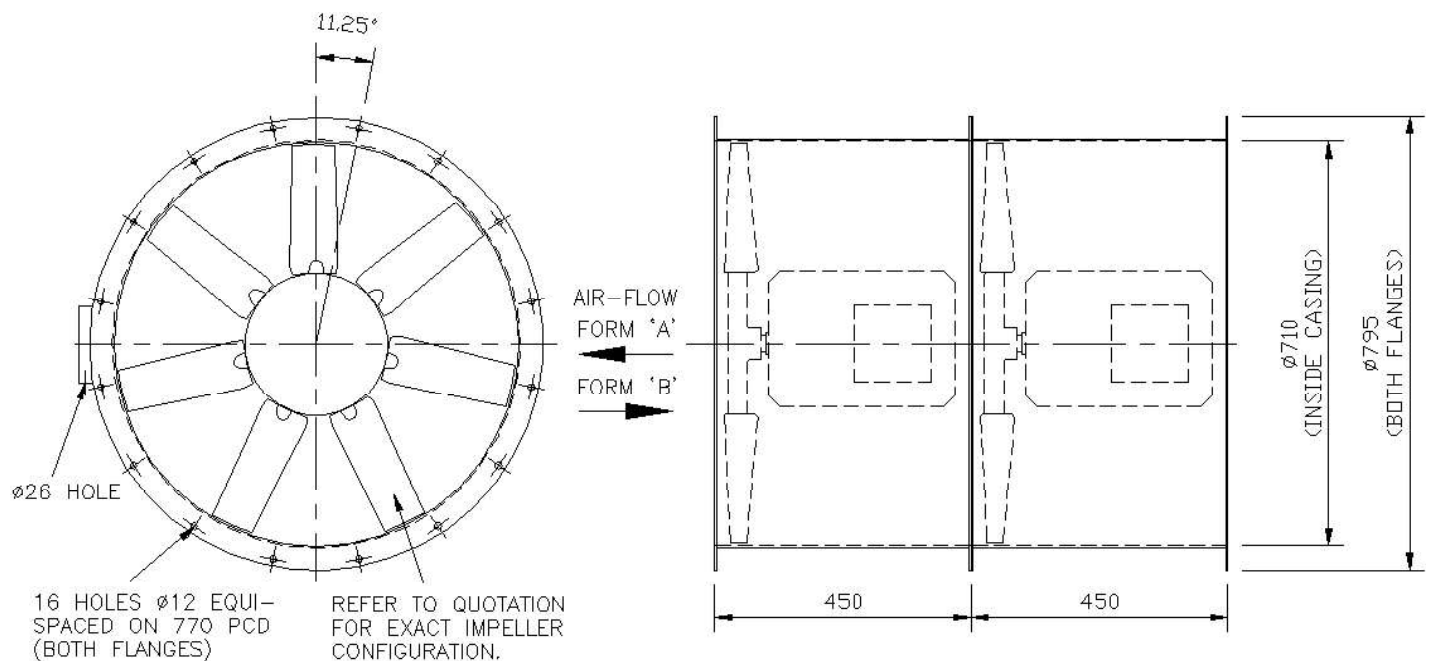
Energy Related Product Data

Overall Efficiency: 39.9%
Measurement Category: C
Efficiency Category: Static
FMEG: 41
Specific Ratio: 1

At Maximum Efficiency Point

Input Power: 5.21 kW
Air Flow: 4.48 m³/s
Pressure: 464 Pa
Speed: 2880 r/min

Drawing for Fan Model RS-LCS071L2-A3/21



AXF: 03&04 @ 100% Speed



Technical Data - Fan Model 1DENP+RS-LCS071N2-A6/19+1DENP

Location: Block A Shaft 02

Designation: SEF 03&04

Performance - Required

Air Flow : 5.50 m³/s
Static Pressure : 525 Pa
Selection Pressure: 762 Pa
Installation Type: TYPE C
Air Density: 1.204 kg/m³
- Atmos. Temp: 20 °C
- Altitude: 0 m
- Humidity: 0.0 %

Actual

Air Flow: 5.49 m³/s
Static Pressure: 758 Pa
Total Pressure: 874 Pa

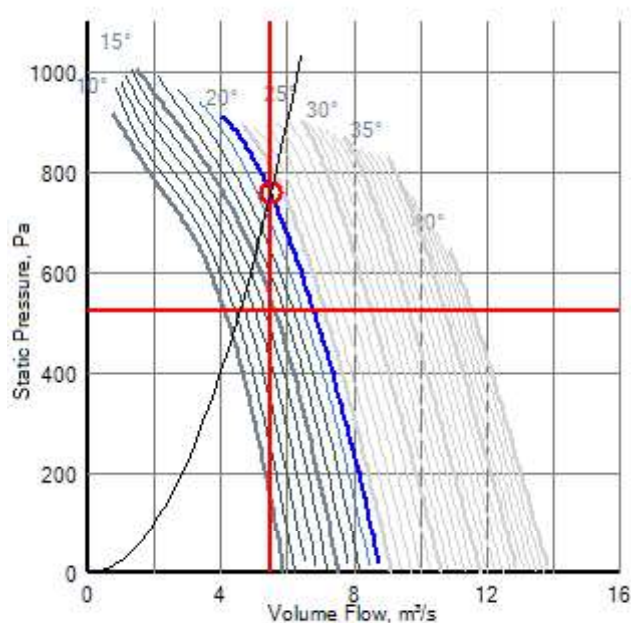
Fan Data

Catalogue Code: 1DENP+RS-LCS071N2-A6/19+1DENP
(RSLCS071-717-IE3-132-7.5-2-251-38-RA6)

Description:

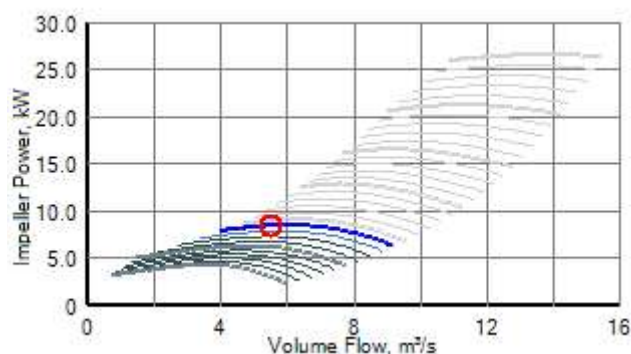
R&S Long-Cased Smoke Set

Diameter:	710 mm	Hub:	251 mm
Impeller Type:	Axial	Pitch:	19°
Blade Material:	Aluminium	Blades:	6
Speed:	2910 r/min @50 Hz		
Power, Abs:	8.45 kW	Form:	B
Input Power:	9.38 kW	Peak:	8.50 kW
Efficiency Total:	56.7%		
SFP:	1.71	Static:	49.2%
Fan Weight:	230.4 kg		



Motor Data (at STP)

Motor Type:	F300 (CE)
Electrical Supply:	400V 3ph 50Hz
Motor Frame:	132S
Motor Power:	9.00kW (AOM) (7.50kW IEC)
FLC/Start (DOL):	16.68A (AOM) / 119.96A (13.90A FL IEC)
Motor Speed:	2 pole
Motor Efficiency:	90.0%



Sound Data

Spectrum (Hz):	63	125	250	500	1K	2K	4K	8K	dBW	dB(A) @ 3m
Inlet (dB) with 1DENP:	93	95	93	91	90	95	91	87	102	78
Outlet (dB) with 1DENP:	94	96	92	90	89	94	91	86	101	78
Breakout (dB):	93	91	86	86	82	77	66	63	96	67

Sound levels are quoted as in-duct values. dB(A) values are average spherical free-field for comparative use only.

Fan Breakout Sound Power Levels exclude the breakout from any attached ductwork or flexible connections and are calculated from the Inlet and Outlet Sound Power Levels, considering the Sound Reduction Index of the Fan Casing.

AXF: 03&04 @ 20% Speed

Technical Data - Fan Model 1DENP+RS-LCS071N2-A6/19+1DENP

Location: Block A Shaft 02

Designation: SEF 03&04

Warning: Duty point is greater than fan performance.

Performance - Required

Air Flow : 5.50 m³/s
Static Pressure : 525 Pa
Selection Pressure: 762 Pa
Installation Type: TYPE C
Air Density: 1.204 kg/m³
- Atmos. Temp: 20 °C
- Altitude: 0 m
- Humidity: 0.0 %

Actual

Air Flow: 1.10 m³/s
Static Pressure: 30 Pa
Total Pressure: 35 Pa

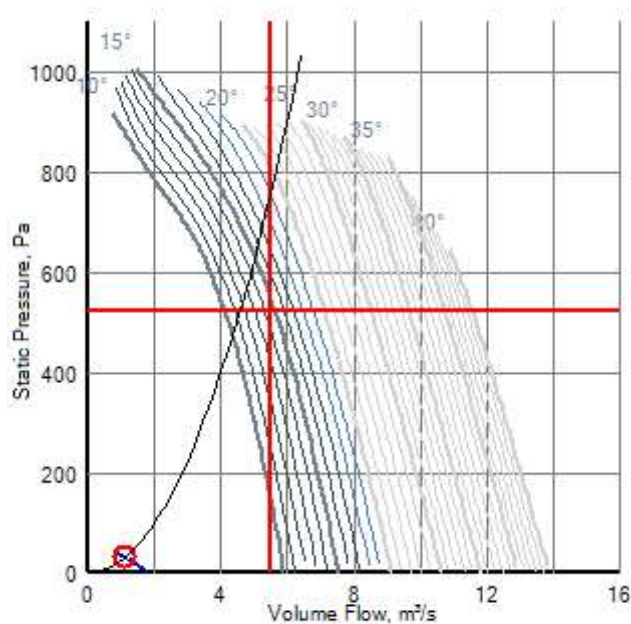
Fan Data

Catalogue Code: 1DENP+RS-LCS071N2-A6/19+1DENP
(RSLCS071-717-IE3-132-7.5-2-251-38-RA6)

Description:

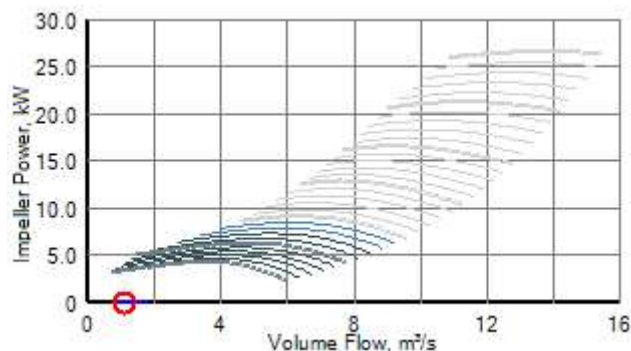
R&S Long-Cased Smoke Set

Diameter: 710 mm Hub: 251 mm
Impeller Type: Axial Pitch: 19°
Blade Material: Aluminium Blades: 6
Speed: 582 r/min @10 Hz
Power, Abs: 0.07 kW Form: B
Input Power: 2.85 kW Peak: 0.07 kW
Efficiency Total: 56.7%
SFP: 2.59 Static: 49.2%
Fan Weight: 230.4 kg



Motor Data (at STP)

Motor Type: F300 (CE)
Electrical Supply: 400V 3ph 50Hz
Motor Frame: 132S
Motor Power: 9.00kW (AOM) (7.50kW IEC)
FLC/Start (DOL): 16.68A (AOM) / 119.96A (13.90A FL IEC)
Motor Speed: 2 pole
Motor Efficiency: 2.4%



Sound Data

Spectrum (Hz):	63	125	250	500	1K	2K	4K	8K	dBW	dB(A) @ 3m
Inlet (dB) with 1DENP:	64	68	62	51	48	52	49	41	70	38
Outlet (dB) with 1DENP:	64	68	60	50	47	52	48	43	70	38
Breakout (dB):	63	63	54	46	40	34	24	18	66	30

Sound levels are quoted as in-duct values. dB(A) values are average spherical free-field for comparative use only.
Sound levels for fans running at non-standard speeds are estimated.

AXF: 03&04 Fan Dimensions

Technical Data - Fan Model 1DENP+RS-LCS071N2-A6/19+1DENP

Location: Block A Shaft 02

Designation: SEF 03&04

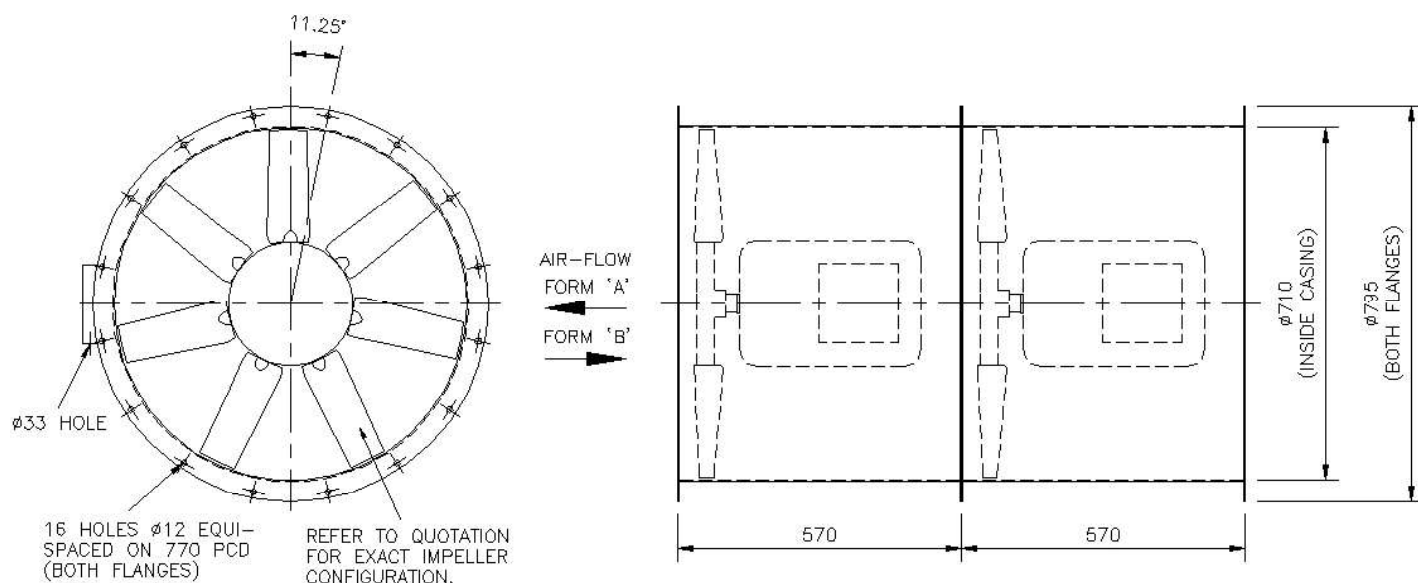
Energy Related Product Data

Overall Efficiency: 1.2%
Measurement Category: C
Efficiency Category: Static
FMEG: 4
Specific Ratio: 1

At Maximum Efficiency Point

Input Power: 2.85 kW
Air Flow: 1.08 m³/s
Pressure: 31 Pa
Speed: 582 r/min

Drawing for Fan Model RS-LCS071N2-A6/19



AXF: 05&06 @ 100% Speed

Technical Data - Fan Model 1DENP+RS-LCS071N2-A6/18+1DENP

Location: Block B

Designation: SEF 05&06

Performance - Required

Air Flow : 5.25 m³/s
Static Pressure : 500 Pa
Selection Pressure: 724 Pa
Installation Type: TYPE C
Air Density: 1.204 kg/m³
- Atmos. Temp: 20 °C
- Altitude: 0 m
- Humidity: 0.0 %

Actual

Air Flow: 5.27 m³/s
Static Pressure: 711 Pa
Total Pressure: 817 Pa

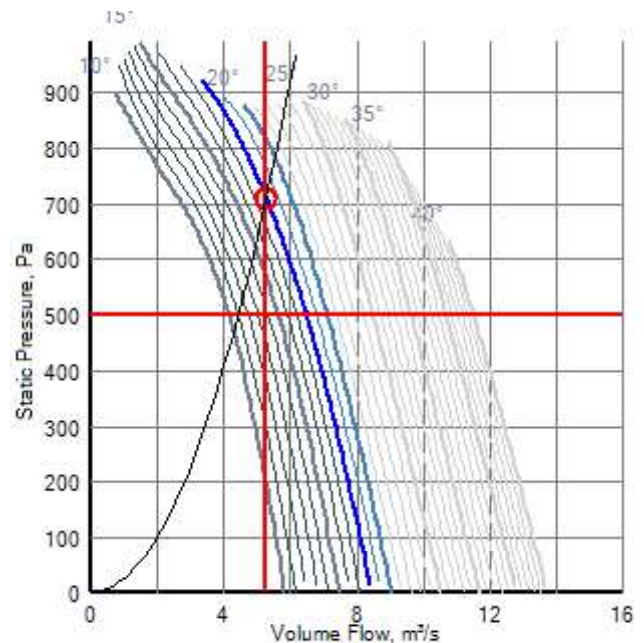
Fan Data

Catalogue Code: 1DENP+RS-LCS071N2-A6/18+1DENP
(RSLCS071-717-IE3-132-7.5-2-251-38-RA6)

Description:

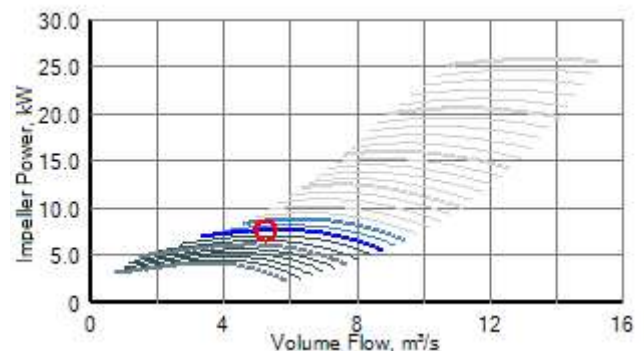
R&S Long-Cased Smoke Set

Diameter:	710 mm	Hub:	251 mm
Impeller Type:	Axial	Pitch:	18°
Blade Material:	Aluminium	Blades:	6
Speed:	2880 r/min @50 Hz		
Power, Abs:	7.64 kW	Form:	B
Input Power:	8.48 kW	Peak:	7.67 kW
Efficiency Total:	56.3%		
SFP:	1.62	Static:	49.0%
Fan Weight:	230.4 kg		



Motor Data (at STP)

Motor Type: F300 (CE)
Electrical Supply: 400V 3ph 50Hz
Motor Frame: 132S
Motor Power: 9.00kW (AOM) (7.50kW IEC)
FLC/Start (DOL): 16.68A (AOM) / 119.96A (13.90A FL IEC)
Motor Speed: 2 pole
Motor Efficiency: 90.1%



Sound Data

Spectrum (Hz):	63	125	250	500	1K	2K	4K	8K	dBW	dB(A) @ 3m
Inlet (dB) with 1DENP:	93	95	93	91	90	95	91	87	102	78
Outlet (dB) with 1DENP:	94	96	92	90	89	94	91	86	101	78
Breakout (dB):	93	91	86	86	82	77	66	63	96	67

Sound levels are quoted as in-duct values. dB(A) values are average spherical free-field for comparative use only.

Fan Breakout Sound Power Levels exclude the breakout from any attached ductwork or flexible connections and are calculated from the Inlet and Outlet Sound Power Levels, considering the Sound Reduction Index of the Fan Casing.

AXF: 05&06 @ 20% Speed

Technical Data - Fan Model 1DENP+RS-LCS071N2-A6/18+1DENP

Location: Block B

Designation: SEF 05&06

Warning: Duty point is greater than fan performance.

Performance - Required

Air Flow : 5.25 m³/s
Static Pressure : 500 Pa
Selection Pressure: 724 Pa
Installation Type: TYPE C
Air Density: 1.204 kg/m³
- Atmos. Temp: 20 °C
- Altitude: 0 m
- Humidity: 0.0 %

Actual

Air Flow: 1.04 m³/s
Static Pressure: 29 Pa
Total Pressure: 33 Pa

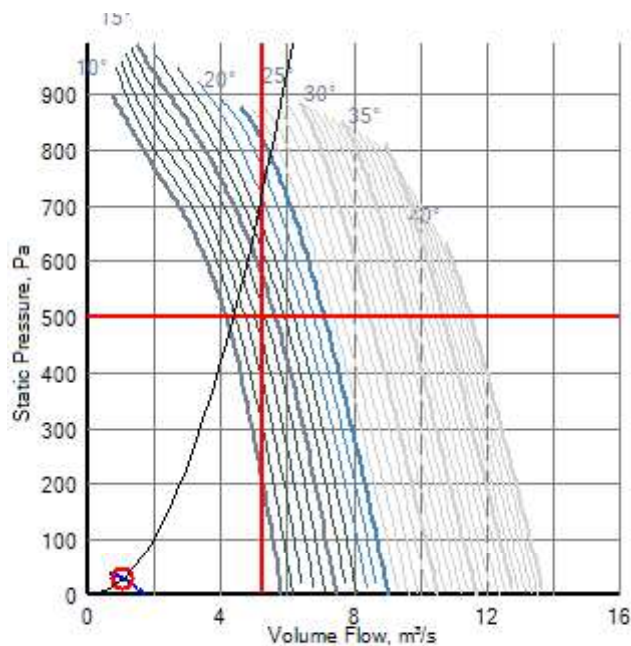
Fan Data

Catalogue Code: 1DENP+RS-LCS071N2-A6/18+1DENP
(RSLCS071-717-IE3-132-7.5-2-251-38-RA6)

Description:

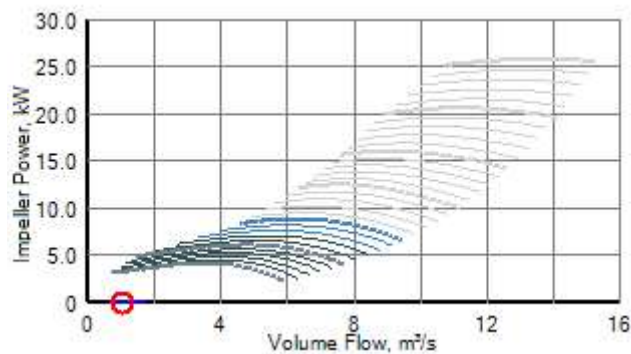
R&S Long-Cased Smoke Set

Diameter:	710 mm	Hub:	251 mm
Impeller Type:	Axial	Pitch:	18°
Blade Material:	Aluminium	Blades:	6
Speed:	576 r/min @10 Hz		
Power, Abs:	0.06 kW	Form:	B
Input Power:	2.86 kW	Peak:	0.06 kW
Efficiency Total:	56.2%		
SFP:	2.73	Static:	49.1%
Fan Weight:	230.4 kg		



Motor Data (at STP)

Motor Type:	F300 (CE)	
Electrical Supply:	400V 3ph 50Hz	
Motor Frame:	132S	
Motor Power:	9.00kW (AOM)	(7.50kW IEC)
FLC/Start (DOL):	16.68A (AOM) / 119.96A	(13.90A FL IEC)
Motor Speed:	2 pole	
Motor Efficiency:	2.1%	



Sound Data

Spectrum (Hz):	63	125	250	500	1K	2K	4K	8K	dBW	dB(A) @ 3m
Inlet (dB) with 1DENP:	64	68	62	51	48	52	49	41	70	38
Outlet (dB) with 1DENP:	64	68	60	50	47	52	48	43	70	38
Breakout (dB):	63	63	54	46	40	34	24	18	66	30

Sound levels are quoted as in-duct values. dB(A) values are average spherical free-field for comparative use only.
Sound levels for fans running at non-standard speeds are estimated.

AXF: 05&06 Fan Dimensions

Technical Data - Fan Model 1DENP+RS-LCS071N2-A6/18+1DENP

Location: Block B

Designation: SEF 05&06

Energy Related Product Data

Overall Efficiency: 1.1%
Measurement Category: C
Efficiency Category: Static
FMEG: 4
Specific Ratio: 1

At Maximum Efficiency Point

Input Power: 2.86 kW
Air Flow: 1.03 m³/s
Pressure: 29 Pa
Speed: 576 r/min

Drawing for Fan Model RS-LCS071N2-A6/18

