

SWISS ROTORS



SR-MI-P



EC Motorized Impellers

225-315 mm

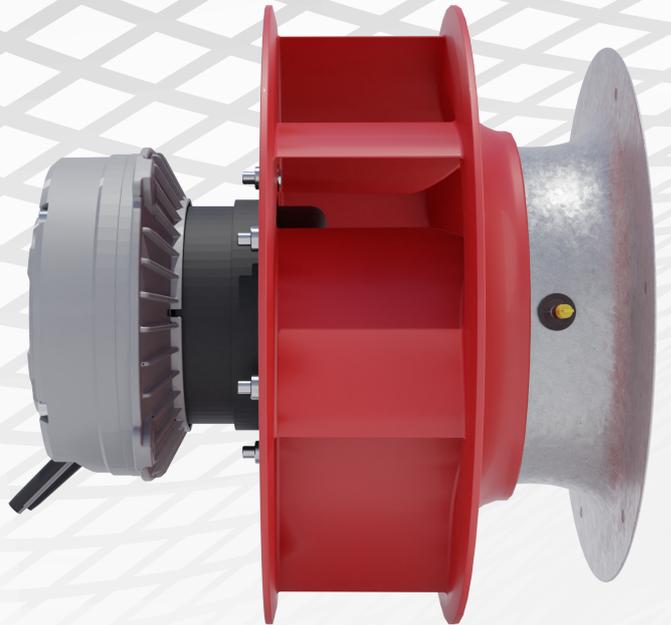
Backward Curved
Single Inlet, Single Width
Polymer Impellers

Metric Units Technical Catalog

Catalog ver: 20240524 (May, 2024)

SR-MI-P

EC Motorized Impellers



Application

Various mechanical ventilation systems, air handling units, rooftop units, and others

Ventilation systems requiring low Specific Fan Power (SFP) together with smooth and precise airflow adjustment

Perfect solution to be combined into Fan-Array systems

Fitted for vertical and horizontal arrangement

General Specification

EC Fan in Motorized Impeller Execution (**MI**)

Support to **CAV/VAV** systems (factory mounted static pressure probes on fan inlet vane + precisely determined K-factor)

Air performance according to ISO 5801, Installation Category: A, LwA according to ISO 13347.

Compliance with standards

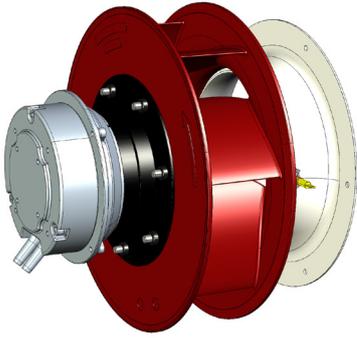
ISO 5801:2017 – „Fans – Performance testing using standardized airways“

Commission Regulation(EU) 327/2011 – Requirements for fans driven by motors with an electric input power between 125 W and 500 kW



SR-MI-P-225-0.3	4
SR-MI-P-225-0.7	6
SR-MI-P-250-0.3	8
SR-MI-P-250-0.7	10
SR-MI-P-315-0.3	12
SR-MI-P-315-0.7	14
SR-MI-P-315-1.5	16
SR-MI-P-315-2.5	18

Appearance



General specification

Fan Set Model	SR-MI-P-225-0.3
Rated Voltage	1×230 VAC / 50-60 Hz
Rated Current	3.0 A
Nominal Input Power	0.5 kW
Revolutions: Min / Nominal	360 ÷ 3600 RPM
CAV K-factor	47.0
Storage temperature range	-30°C to 50°C
Operating temperatures range	-25°C to 50°C
Support plate material	N/A
Support brackets material	N/A
Mass	3.242 kg
Installation position	Horizontal / Vertical shaft

Motor

Type	Electronically Comutated, Brushless DC
Housing	Die-cast aluminum
Protection Degree	IP 54
Overload protection	Inbuilt thermal limit
Speed Control	0~10VDC / Modbus RTU
Bearings	Ball type, Maintenance Free, Permanently Lubricated
Bearings service life L ₁₀	63 400 (40 °C) / 31 700 (max. work. temperature)

Application

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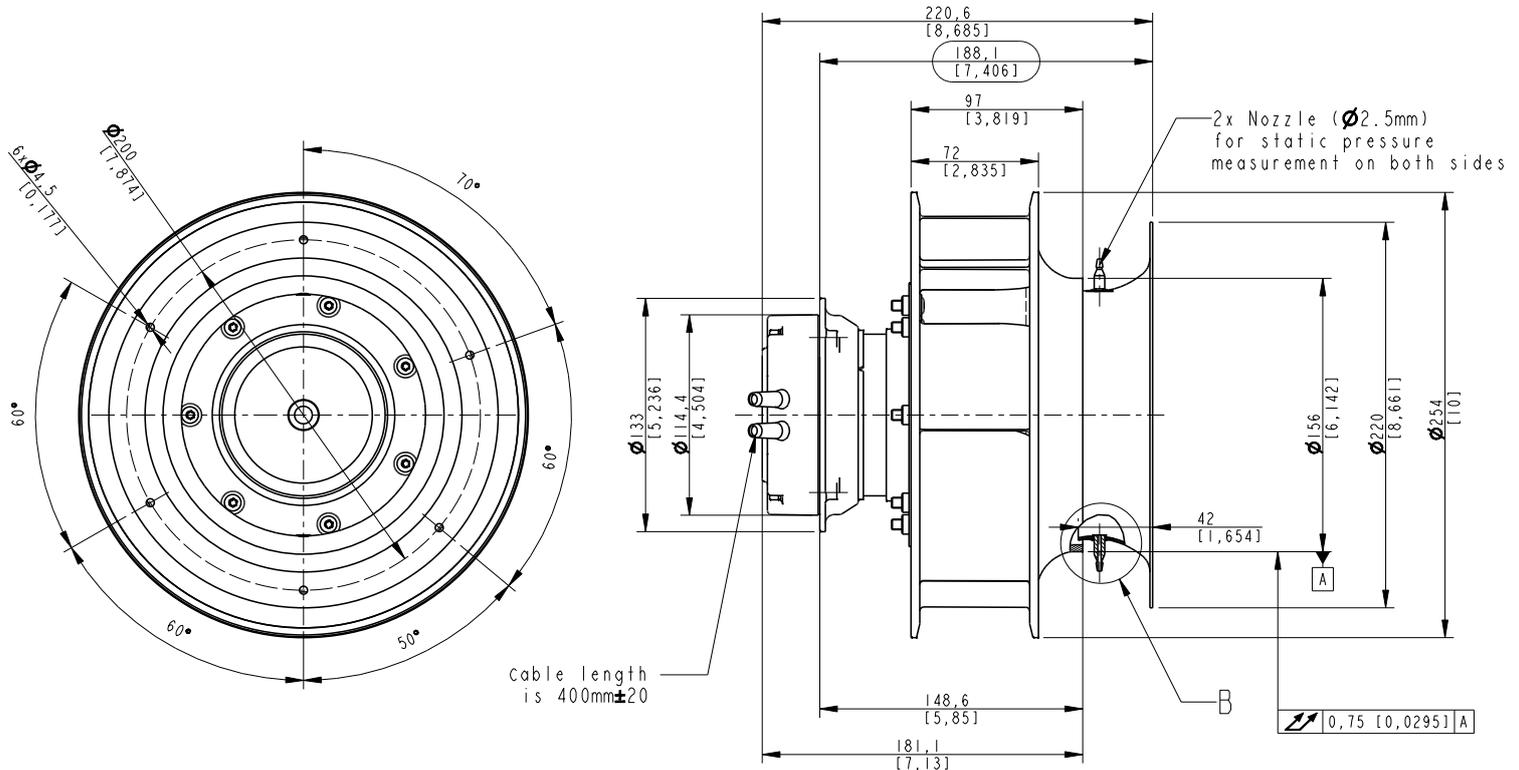
Support to CAV/VAV systems (factory mounted static pressure probes on fan inlet vane + precisely determined K-factor)

Air performance according to ISO 5801, Installation Category: A, LwA according to ISO 13347.

Impeller

Fan Impeller Size	225 mm
Blade design / No of blades	Aerofoil / 7
Spinning direction	Clockwise, wiewed from air inlet
Impeller material	Polymer
Inlet funnel material	Hot-dip galvanized steel
Balance grade	G 6,3 (ISO 1940-1) and BV-3 (ANSI S2.19-1989)

Installation Dimensions



Information according to (EU) 327/2011 (ERP 2018)

Commission Regulation (EU) 327/2011		Requirements for fans driven by motors with an electric input power between 125 W and 500 kW.
1	Overall efficiency η_{es}	65.4%
2	Measurement category	A
3	Efficiency Category	Static
4	Efficiency grade N: Actual / Req. 2015	73.3%
5	Variable speed drive	Yes
9	Power consumption P_{ed}	0.43 kW
	Air flow q_v	1 288 m ³ /h
	Pressure increase pfs	704.0
10	Speed (rpm) n	3 600
11	Specific ratio	1.01

Compliance with Standards

ISO 5801:2017	„Fans – Performance testing using standardized airways”
ANSI/AMCA Standard 210-16	Laboratory Methods of Testing Fans for Certified Aerodynamic Performance Rating
ANSI/AMCA Standard 300-14	Reverberant Room Method for Sound Testing of Fans
AMCA Standard 205-10	Energy Efficiency Classification for Fans
ANSI/AMCA Standard 208-18	Calculation of the Fan Energy Index

AMCA Certification

Swiss Rotors Sp. z o.o. certifies that the

SR-MI-P-225-0.3 Motorized Impeller

shown herein is licensed to bear the AMCA seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 211 and AMCA Publication 311 and comply with the requirements of the AMCA Certified Ratings Program.

Power rating does not include transmission losses.

Performance ratings do not include the effects of appurtenances.

Performance certified is for installation type A (Free inlet, free outlet).



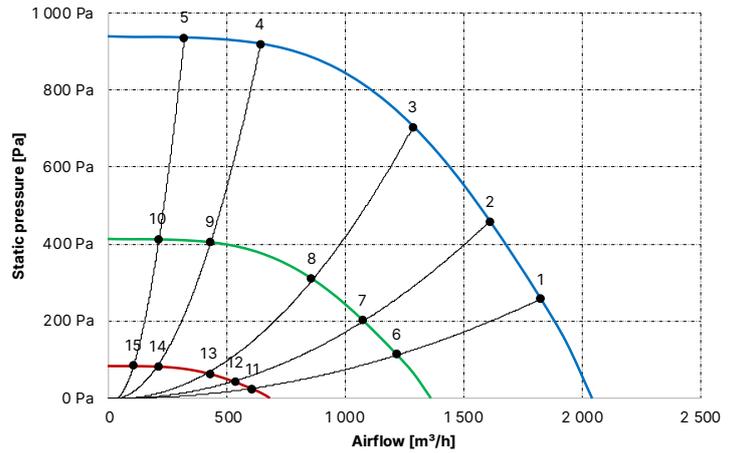
AMCA Fan Efficiency Grade

Fan Efficiency Grade (FEG), AMCA 205-10	90
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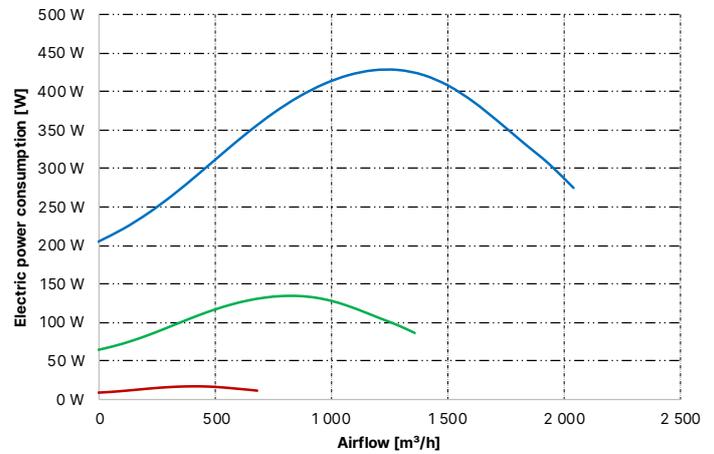
Measured Points

Point #	n RPM	V [m ³ /h]	dP [Pa]	I [A]	EPC [kW]	L _{pAin} dB(A)	L _{wAin} dB(A)	L _{wAout} dB(A)	FEI
1	3 600	1 825	256	1.9	0.33	66.9	74.9	81.0	1.20
2	3 600	1 611	459	2.2	0.39	64.8	72.8	78.4	1.47
3	3 600	1 288	704	2.4	0.43	64.0	72.0	78.0	1.61
4	3 600	644	919	2.0	0.35	70.1	78.1	83.3	1.56
5	3 600	322	935	1.5	0.27	71.8	79.8	85.2	1.45
6	2 400	1 217	113	0.6	0.10	58.1	66.1	72.2	1.67
7	2 400	1 074	202	0.7	0.12	56.0	64.0	69.6	1.86
8	2 400	859	310	0.7	0.13	55.2	63.2	69.2	1.96
9	2 400	429	405	0.6	0.11	61.3	69.3	74.5	1.98
10	2 400	215	412	0.5	0.08	63.0	71.0	76.4	1.96
11	1 200	608	23	0.1	0.01	43.0	51.0	57.1	4.86
12	1 200	537	41	0.1	0.02	41.0	49.0	54.6	4.47
13	1 200	429	63	0.1	0.02	40.1	48.1	54.1	4.14
14	1 200	215	82	0.1	0.01	46.3	54.3	59.4	4.28
15	1 200	107	84	0.0	0.01	47.9	55.9	61.3	4.70

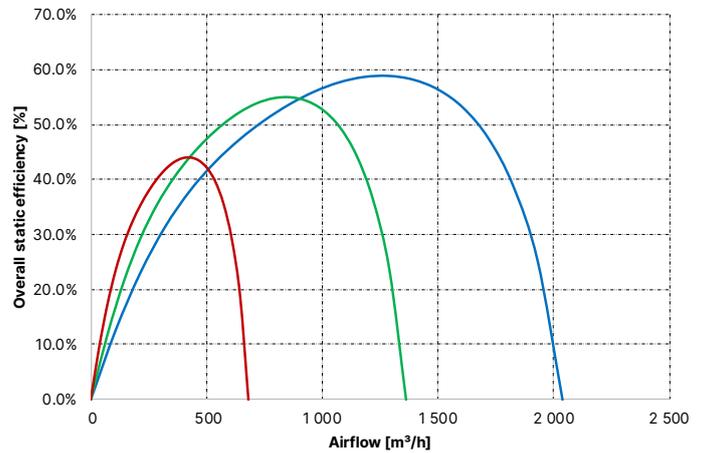
dP = f(V)



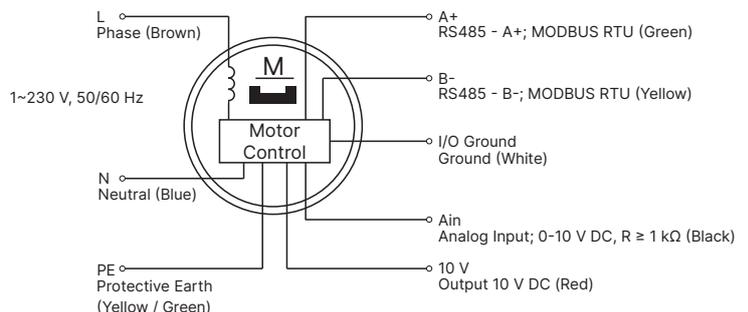
EPC = f(V)



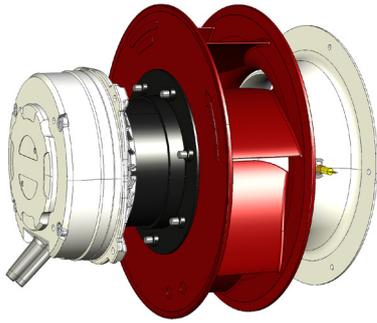
$\eta_{es} = f(V)$



Power supply and control connections



Appearance



General specification

Fan Set Model	SR-MI-P-225-0.7
Rated Voltage	1×230 VAC / 50-60 Hz
Rated Current	5.7 A
Nominal Input Power	0.9 kW
Revolutions: Min / Nominal	450 ÷ 4500 RPM
CAV K-factor	47.6
Storage temperature range	-30°C to 50°C
Operating temperatures range	-25°C to 50°C
Support plate material	N/A
Support brackets material	N/A
Mass	5.042 kg
Installation position	Horizontal / Vertical shaft

Motor

Type	Electronically Comutated, Brushless DC
Housing	Die-cast aluminum
Protection Degree	IP 54
Overload protection	Inbuilt thermal limit
Speed Control	0~10VDC / Modbus RTU
Bearings	Ball type, Maintenance Free, Permanently Lubricated
Bearings service life L ₁₀	63 400 (40 °C) / 31 700 (max. work. temperature)

Application

Various mechanical ventilation systems, air handling units, rooftop units, and others

Ventilation systems requiring low Specific Fan Power (SFP) together with smooth and precise airflow adjustment

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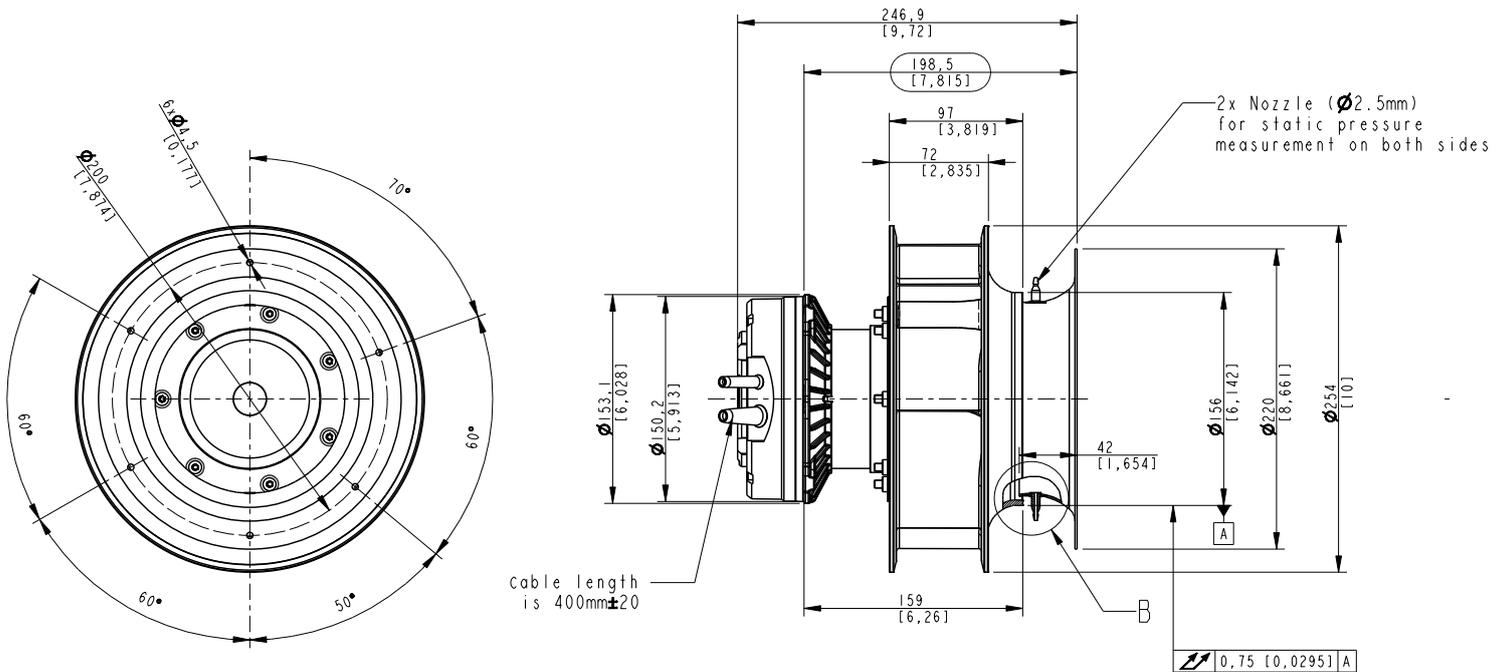
Support to CAV/VAV systems (factory mounted static pressure probes on fan inlet vane + precisely determined K-factor)

Air performance according to ISO 5801, Installation Category: A, LWA according to ISO 13347.

Impeller

Fan Impeller Size	225 mm
Blade design / No of blades	Aerofoil / 7
Spinning direction	Clockwise, wiewed from air inlet
Impeller material	Polymer
Inlet funnel material	Hot-dip galvanized steel
Balance grade	G 6,3 (ISO 1940-1) and BV-3 (ANSI S2.19-1989)

Installation Dimensions



Information according to (EU) 327/2011 (ERP 2018)

Commission Regulation (EU) 327/2011		Requirements for fans driven by motors with an electric input power between 125 W and 500 kW.
1	Overall efficiency η_{es}	62.0%
2	Measurement category	A
3	Efficiency Category	Static
4	Efficiency grade N: Actual / Req. 2015	68.1%
5	Variable speed drive	Yes
9	Power consumption P_{ed}	0.85 kW
	Air flow q_v	1 642 m ³ /h
	Pressure increase pfs	1 065.0
10	Speed (rpm) n	4 500
11	Specific ratio	1.01

Compliance with Standards

ISO 5801:2017	„Fans – Performance testing using standardized airways”
ANSI/AMCA Standard 210-16	Laboratory Methods of Testing Fans for Certified Aerodynamic Performance Rating
ANSI/AMCA Standard 300-14	Reverberant Room Method for Sound Testing of Fans
AMCA Standard 205-10	Energy Efficiency Classification for Fans
ANSI/AMCA Standard 208-18	Calculation of the Fan Energy Index

AMCA Certification

Swiss Rotors Sp. z o.o. certifies that the

SR-MI-P-225-0.7 Motorized Impeller

shown herein is licensed to bear the AMCA seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 211 and AMCA Publication 311 and comply with the requirements of the AMCA Certified Ratings Program.

Power rating does not include transmission losses.

Performance ratings do not include the effects of appurtenances.

Performance certified is for installation type A (Free inlet, free outlet).



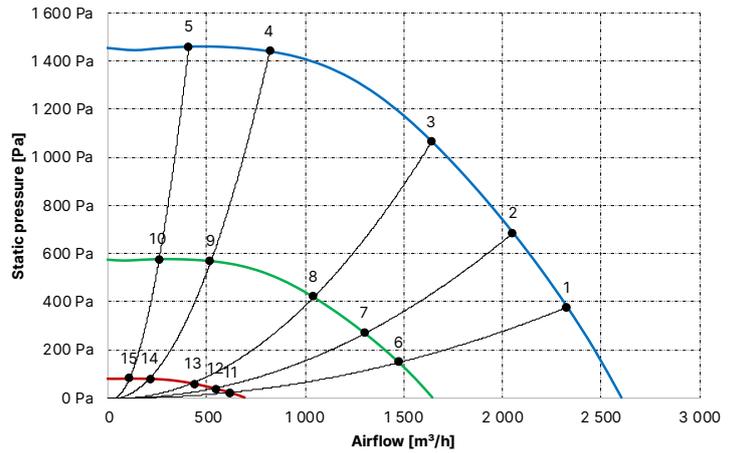
AMCA Fan Efficiency Grade

Fan Efficiency Grade (FEG), AMCA 205-10	90
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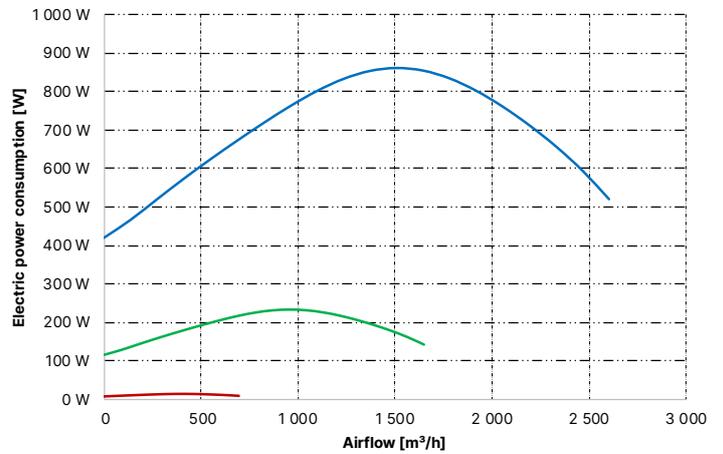
Measured Points

Point #	n [RPM]	V [m ³ /h]	dP [Pa]	I [A]	EPC [kW]	L _p A _{in} [dB(A)]	L _w A _{in} [dB(A)]	L _w A _{out} [dB(A)]	FEI
1	4 500	2 327	376	3.7	0.66	71.8	79.8	85.9	1.00
2	4 500	2 053	685	4.3	0.76	70.0	78.0	83.7	1.28
3	4 500	1 642	1 065	4.8	0.85	68.8	76.8	82.8	1.42
4	4 500	821	1 441	4.0	0.72	74.9	82.9	88.0	1.34
5	4 500	411	1 461	3.2	0.57	76.6	84.6	90.0	1.14
6	2 850	1 473	149	1.0	0.18	61.9	69.9	76.0	1.32
7	2 850	1 300	271	1.1	0.21	60.1	68.1	73.8	1.54
8	2 850	1 040	421	1.3	0.23	58.9	66.9	72.8	1.64
9	2 850	520	569	1.0	0.20	65.0	73.0	78.1	1.61
10	2 850	260	577	0.8	0.16	66.7	74.7	80.1	1.48
11	1 200	620	21	0.0	0.01	43.1	51.1	57.2	5.61
12	1 200	547	38	0.0	0.01	41.3	49.3	55.0	5.14
13	1 200	438	59	0.0	0.01	40.1	48.1	54.0	4.68
14	1 200	219	79	0.0	0.01	46.2	54.2	59.3	4.71
15	1 200	109	81	0.0	0.01	47.9	55.9	61.3	4.94

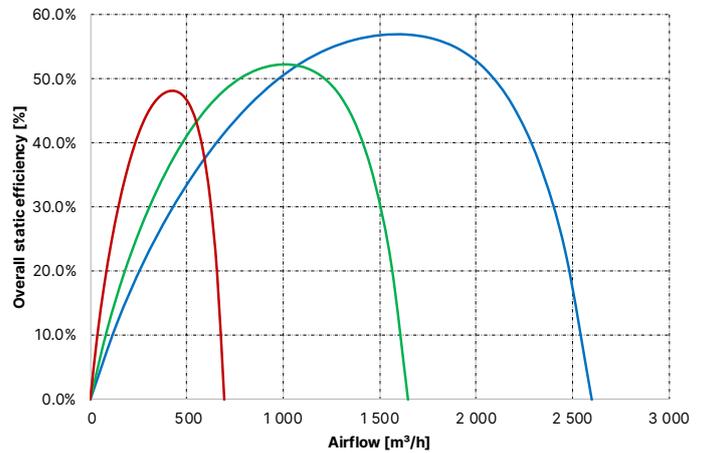
dP = f(V)



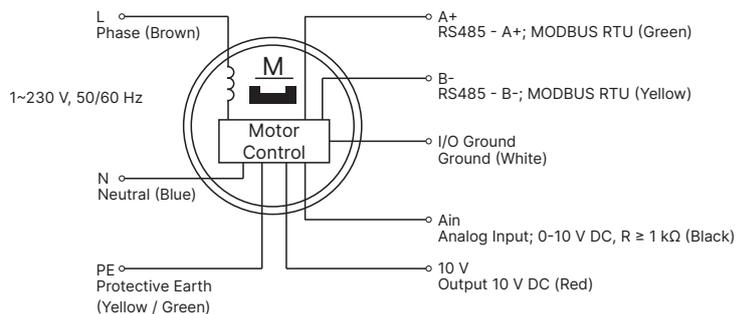
EPC = f(V)



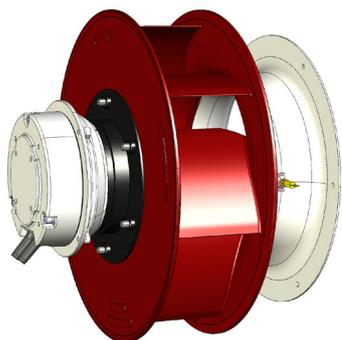
$\eta_{es} = f(V)$



Power supply and control connections



Appearance



General specification

Fan Set Model	SR-MI-P-250-0.3
Rated Voltage	1×230 VAC / 50-60 Hz
Rated Current	3.5 A
Nominal Input Power	0.6 kW
Revolutions: Min / Nominal	300 ÷ 3000 RPM
CAV K-factor	63.3
Storage temperature range	-30°C to 50°C
Operating temperatures range	-25°C to 50°C
Support plate material	N/A
Support brackets material	N/A
Mass	3.311 kg
Installation position	Horizontal / Vertical shaft

Motor

Type	Electronically Comutated, Brushless DC
Housing	Die-cast aluminum
Protection Degree	IP 54
Overload protection	Inbuilt thermal limit
Speed Control	0~10VDC / Modbus RTU
Bearings	Ball type, Maintenance Free, Permanently Lubricated
Bearings service life L ₁₀	63 400 (40 °C) / 31 700 (max. work. temperature)

Application

Various mechanical ventilation systems, air handling units, rooftop units, and others

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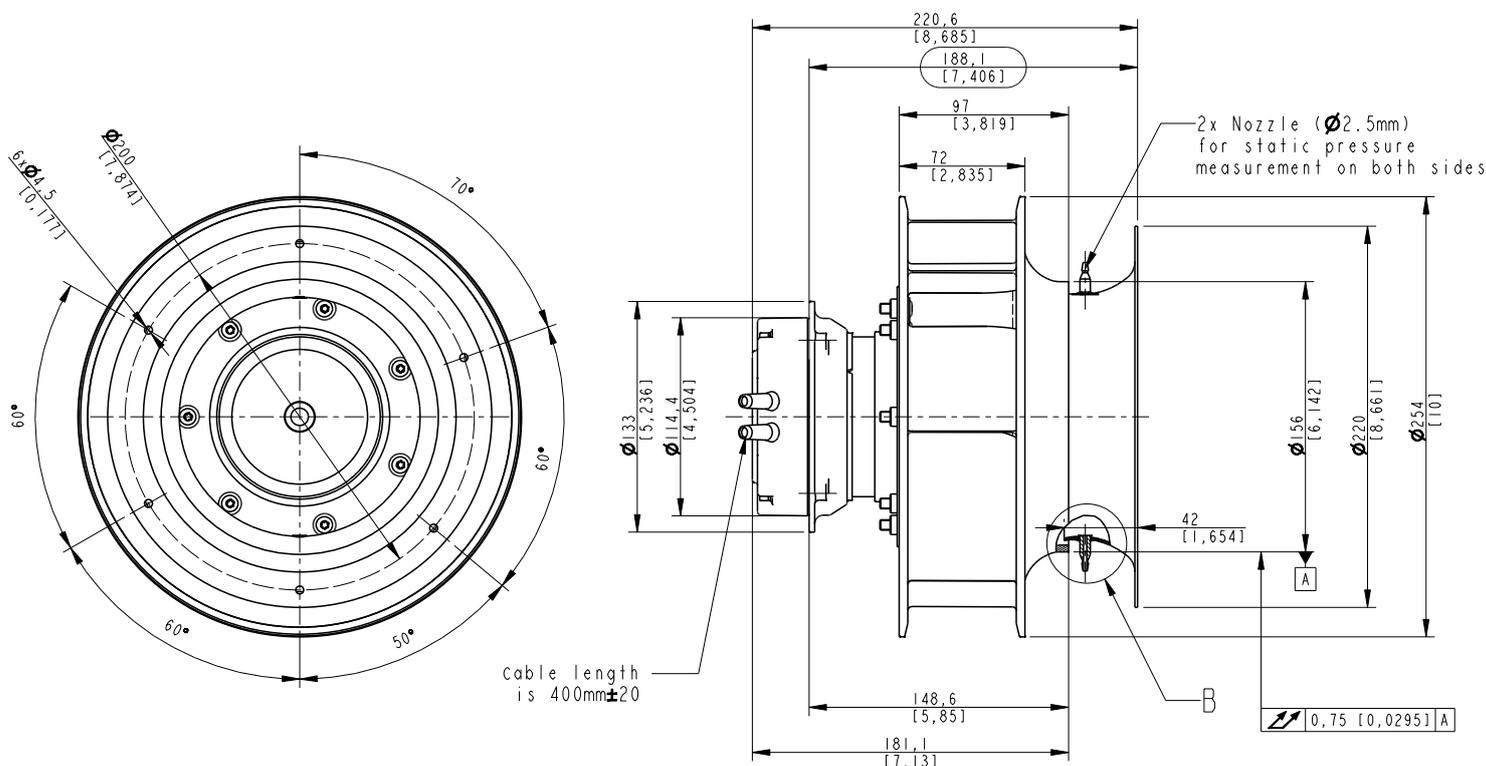
Support to CAV/VAV systems (factory mounted static pressure probes on fan inlet vane + precisely determined K-factor)

Air performance according to ISO 5801, Installation Category: A, LwA according to ISO 13347.

Impeller

Fan Impeller Size	250 mm
Blade design / No of blades	Aerofoil / 7
Spinning direction	Clockwise, wiewed from air inlet
Impeller material	Polymer
Inlet funnel material	Hot-dip galvanized steel
Balance grade	G 6,3 (ISO 1940-1) and BV-3 (ANSI S2.19-1989)

Installation Dimensions



Information according to (EU) 327/2011 (ERP 2018)

Commission Regulation (EU) 327/2011		Requirements for fans driven by motors with an electric input power between 125 W and 500 kW.
1	Overall efficiency η_{es}	66.2%
2	Measurement category	A
3	Efficiency Category	Static
4	Efficiency grade N: Actual / Req. 2015	73.3%
5	Variable speed drive	Yes
9	Power consumption P_{ed}	0.49 kW
	Air flow q_v	1 676 m ³ /h
	Pressure increase pfs	632.7
10	Speed (rpm) n	3 000
11	Specific ratio	1.01

Compliance with Standards

ISO 5801:2017	„Fans – Performance testing using standardized airways”
ANSI/AMCA Standard 210-16	Laboratory Methods of Testing Fans for Certified Aerodynamic Performance Rating
ANSI/AMCA Standard 300-14	Reverberant Room Method for Sound Testing of Fans
AMCA Standard 205-10	Energy Efficiency Classification for Fans
ANSI/AMCA Standard 208-18	Calculation of the Fan Energy Index

AMCA Certification

Swiss Rotors Sp. z o.o. certifies that the

SR-MI-P-250-0.3 Motorized Impeller

shown herein is licensed to bear the AMCA seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 211 and AMCA Publication 311 and comply with the requirements of the AMCA Certified Ratings Program.

Power rating does not include transmission losses.

Performance ratings do not include the effects of appurtenances.

Performance certified is for installation type A (Free inlet, free outlet).



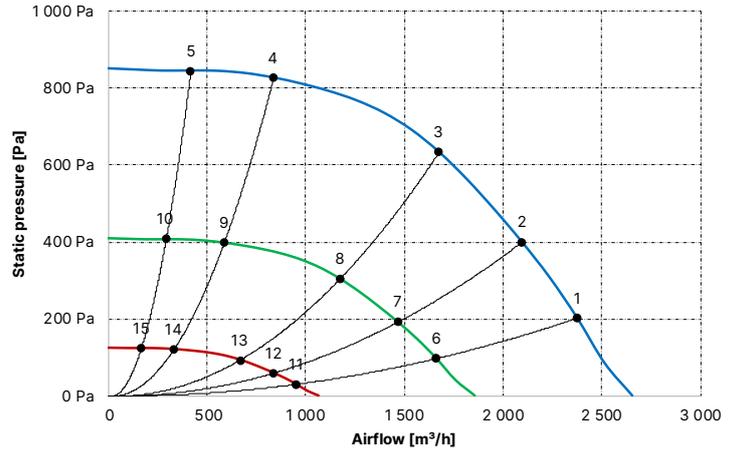
AMCA Fan Efficiency Grade

Fan Efficiency Grade (FEG), AMCA 205-10	90
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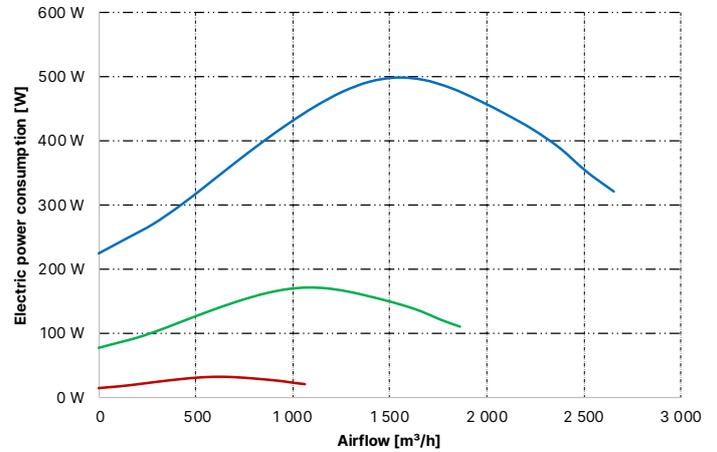
Measured Points

Point #	n [RPM]	V [m ³ /h]	dP [Pa]	I [A]	EPC [kW]	L _p A _{in} [dB(A)]	L _w A _{in} [dB(A)]	L _w A _{out} [dB(A)]	FEI
1	3 000	2 375	202	2.2	0.39	67.2	75.2	81.2	1.09
2	3 000	2 095	399	2.5	0.44	66.1	74.1	80.3	1.42
3	3 000	1 676	633	2.8	0.49	63.5	71.5	77.2	1.56
4	3 000	838	826	2.2	0.40	68.8	76.8	81.8	1.47
5	3 000	419	845	1.7	0.30	71.0	79.0	84.4	1.34
6	2 100	1 662	97	0.7	0.13	59.4	67.4	73.5	1.55
7	2 100	1 467	193	0.9	0.15	58.4	66.4	72.5	1.82
8	2 100	1 173	305	1.0	0.17	55.8	63.8	69.5	1.91
9	2 100	587	398	0.8	0.14	61.0	69.0	74.1	1.85
10	2 100	293	407	0.6	0.10	63.2	71.2	76.6	1.78
11	1 200	950	30	0.1	0.02	47.3	55.3	61.3	3.60
12	1 200	838	58	0.2	0.03	46.2	54.2	60.4	3.56
13	1 200	671	93	0.2	0.03	43.6	51.6	57.3	3.35
14	1 200	335	121	0.1	0.03	48.9	56.9	61.9	3.33
15	1 200	168	124	0.1	0.02	51.1	59.1	64.5	3.51

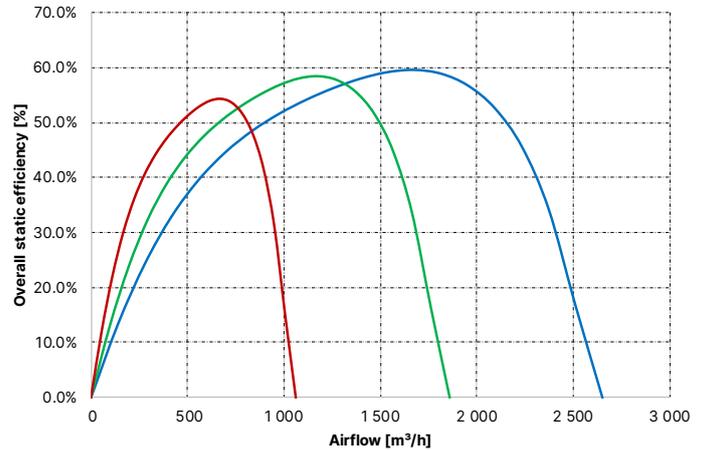
dP = f(V)



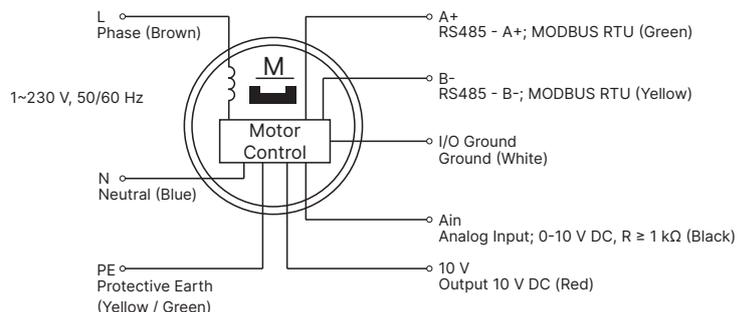
EPC = f(V)



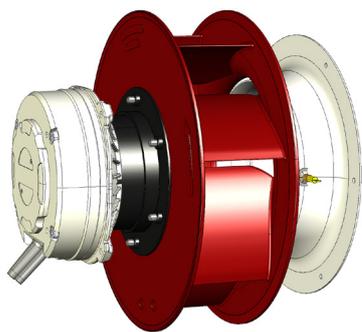
$\eta_{es} = f(V)$



Power supply and control connections



Appearance



General specification

Fan Set Model	SR-MI-P-250-0.7
Rated Voltage	1×230 VAC / 50-60 Hz
Rated Current	4.4 A
Nominal Input Power	1.0 kW
Revolutions: Min / Nominal	380 ÷ 3800 RPM
CAV K-factor	65.1
Storage temperature range	-30°C to 50°C
Operating temperatures range	-25°C to 50°C
Support plate material	N/A
Support brackets material	N/A
Mass	5.311 kg
Installation position	Horizontal / Vertical shaft

Motor

Type	Electronically Comutated, Brushless DC
Housing	Die-cast aluminum
Protection Degree	IP 54
Overload protection	Inbuilt thermal limit
Speed Control	0~10VDC / Modbus RTU
Bearings	Ball type, Maintenance Free, Permanently Lubricated
Bearings service life L ₁₀	63 400 (40 °C) / 31 700 (max. work. temperature)

Application

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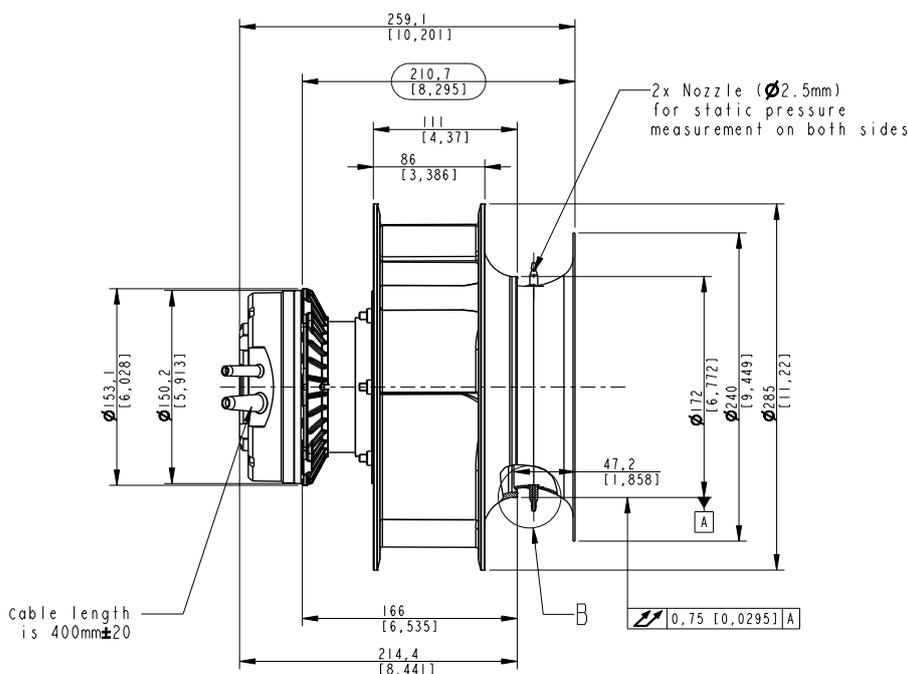
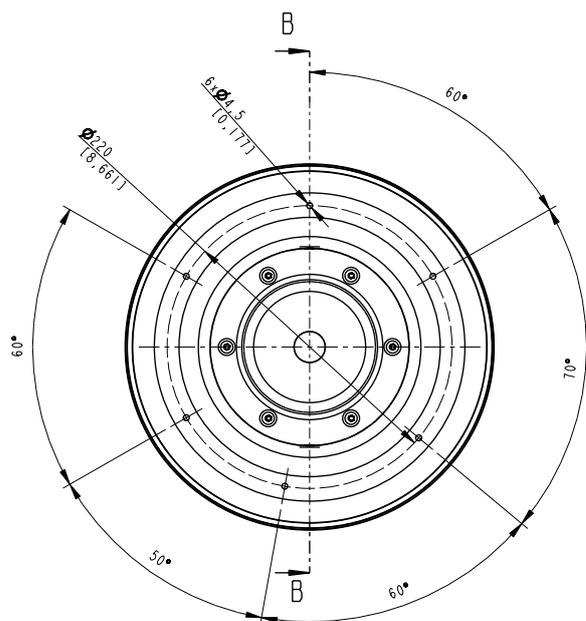
Support to CAV/VAV systems (factory mounted static pressure probes on fan inlet vane + precisely determined K-factor)

Air performance according to ISO 5801, Installation Category: A, LWA according to ISO 13347.

Impeller

Fan Impeller Size	250 mm
Blade design / No of blades	Aerofoil / 7
Spinning direction	Clockwise, wiewed from air inlet
Impeller material	Polymer
Inlet funnel material	Hot-dip galvanized steel
Balance grade	G 6,3 (ISO 1940-1) and BV-3 (ANSI S2.19-1989)

Installation Dimensions



Information according to (EU) 327/2011 (ERP 2018)

Commission Regulation (EU) 327/2011		Requirements for fans driven by motors with an electric input power between 125 W and 500 kW.
1	Overall efficiency η_{es}	67.4%
2	Measurement category	A
3	Efficiency Category	Static
4	Efficiency grade N: Actual / Req. 2015	72.4%
5	Variable speed drive	Yes
9	Power consumption P_{ed}	0.98 kW
	Air flow q_v	2 060 m ³ /h
	Pressure increase pfs	1 058.0
10	Speed (rpm) n	3 800
11	Specific ratio	1.01

Compliance with Standards

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ANSI/AMCA Standard 210-16	Laboratory Methods of Testing Fans for Certified Aerodynamic Performance Rating
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ANSI/AMCA Standard 208-18	Calculation of the Fan Energy Index

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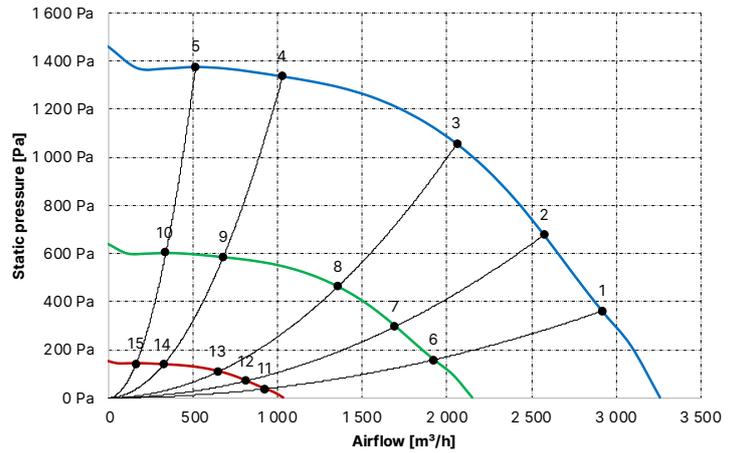
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Fan Efficiency Grade (FEG), AMCA 205-10	90
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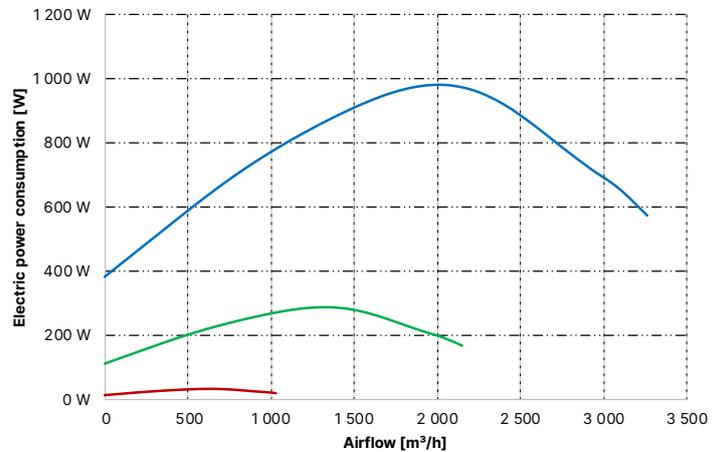
Measured Points

Point #	n [RPM]	V [m ³ /h]	dP [Pa]	I [A]	EPC [kW]	L _{pAin} [dB(A)]	L _{wAin} [dB(A)]	L _{wAout} [dB(A)]	FEI
1	3 800	2 918	362	3.2	0.72	71.8	79.8	86.0	1.07
2	3 800	2 575	679	3.8	0.86	71.1	79.1	85.2	1.37
3	3 800	2 060	1 058	4.4	0.98	68.5	76.5	82.2	1.48
4	3 800	1 030	1 338	3.5	0.78	74.0	82.0	87.1	1.34
5	3 800	515	1 378	2.6	0.59	76.1	84.1	89.5	1.17
6	2 501	1 921	159	0.9	0.21	62.7	70.7	76.9	1.43
7	2 501	1 695	298	1.1	0.25	62.0	70.0	76.1	1.67
8	2 501	1 356	464	1.2	0.29	59.4	67.4	73.2	1.74
9	2 501	678	587	1.0	0.23	65.0	73.0	78.1	1.64
10	2 501	339	604	0.7	0.18	67.0	75.0	80.4	1.53
11	1 200	922	37	0.0	0.02	46.7	54.7	60.9	3.76
12	1 200	813	70	0.1	0.03	46.1	54.1	60.2	3.59
13	1 200	651	109	0.1	0.03	43.4	51.4	57.2	3.35
14	1 200	325	138	0.0	0.03	49.0	57.0	62.1	3.35
15	1 200	163	142	0.0	0.02	51.1	59.1	64.5	3.51

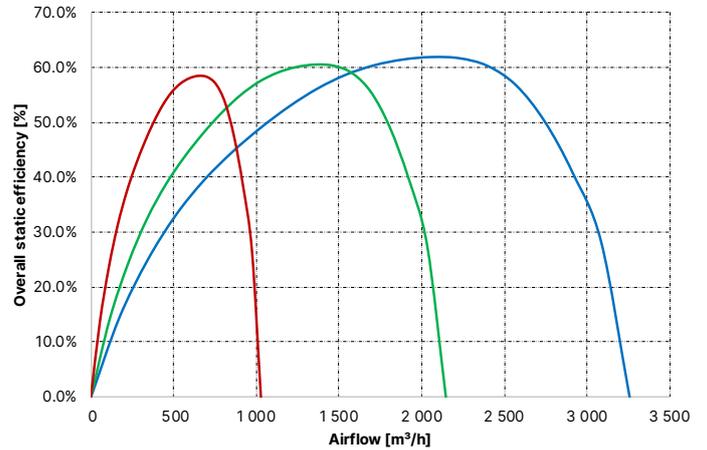
dP = f(V)



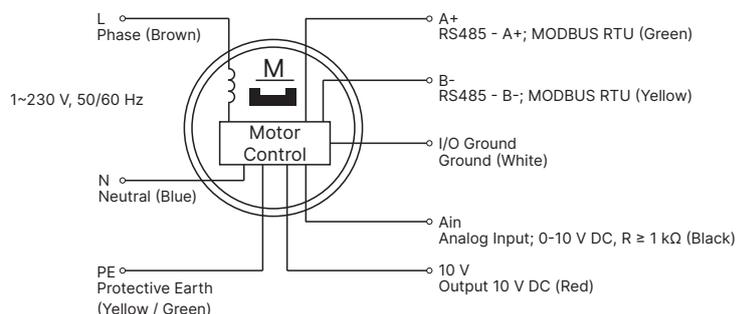
EPC = f(V)



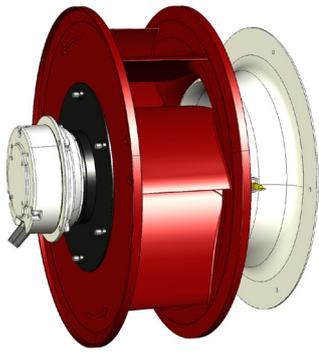
$\eta_{es} = f(V)$



Power supply and control connections



Appearance



Application

Various mechanical ventilation systems, air handling units, rooftop units, and others

Ventilation systems requiring low Specific Fan Power (SFP) together with smooth and precise airflow adjustment

Perfect solution to be combined into Fan-Array systems

Fitted for vertical and horizontal arrangement

Support to **CAV/VAV** systems (factory mounted static pressure probes on fan inlet vane + precisely determined K-factor)

Air performance according to ISO 5801, Installation Category: A, LwA according to ISO 13347.

General specification

Fan Set Model	SR-MI-P-315-0.3
Rated Voltage	1×230 VAC / 50-60 Hz
Rated Current	3.4 A
Nominal Input Power	0.5 kW
Revolutions: Min / Nominal	300 ÷ 2060 RPM
CAV K-factor	93.0
Storage temperature range	-30°C to 50°C
Operating temperatures range	-25°C to 50°C
Support plate material	N/A
Support brackets material	N/A
Mass	4.595 kg
Installation position	Horizontal / Vertical shaft

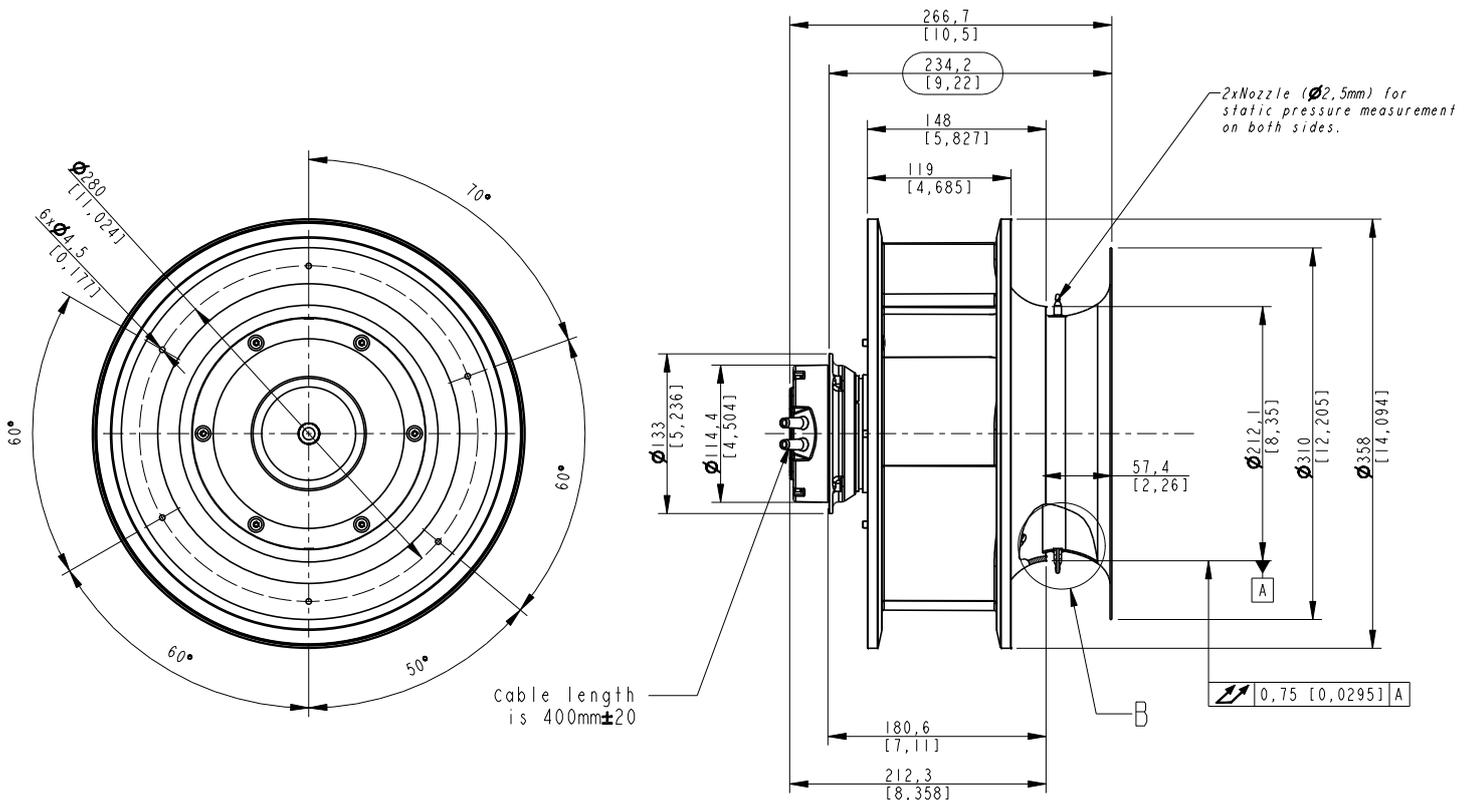
Motor

Type	Electronically Comutated, Brushless DC
Housing	Die-cast aluminum
Protection Degree	IP 54
Overload protection	Inbuilt thermal limit
Speed Control	0~10VDC / Modbus RTU
Bearings	Ball type, Maintenance Free, Permanently Lubricated
Bearings service life L ₁₀	63 400 (40 °C) / 31 700 (max. work. temperature)

Impeller

Fan Impeller Size	315 mm
Blade design / No of blades	Aerofoil / 7
Spinning direction	Clockwise, wiewed from air inlet
Impeller material	Polymer
Inlet funnel material	Hot-dip galvanized steel
Balance grade	G 6,3 (ISO 1940-1) and BV-3 (ANSI S2.19-1989)

Installation Dimensions



Information according to (EU) 327/2011 (ERP 2018)

Commission Regulation (EU) 327/2011		Requirements for fans driven by motors with an electric input power between 125 W and 500 kW.
1	Overall efficiency η_{es}	65.4%
2	Measurement category	A
3	Efficiency Category	Static
4	Efficiency grade N: Actual / Req. 2015	72.7%
5	Variable speed drive	Yes
9	Power consumption P_{ed}	0.49 kW
	Air flow q_v	2 256 m ³ /h
	Pressure increase pfs	460.8
10	Speed (rpm) n	2 060
11	Specific ratio	1.01

Compliance with Standards

ISO 5801:2017	„Fans – Performance testing using standardized airways”
ANSI/AMCA Standard 210-16	Laboratory Methods of Testing Fans for Certified Aerodynamic Performance Rating
ANSI/AMCA Standard 300-14	Reverberant Room Method for Sound Testing of Fans
AMCA Standard 205-10	Energy Efficiency Classification for Fans
ANSI/AMCA Standard 208-18	Calculation of the Fan Energy Index

AMCA Certification

Swiss Rotors Sp. z o.o. certifies that the

SR-MI-P-315-0.3 Motorized Impeller

shown herein is licensed to bear the AMCA seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 211 and AMCA Publication 311 and comply with the requirements of the AMCA Certified Ratings Program.

Power rating does not include transmission losses.

Performance ratings do not include the effects of appurtenances.

Performance certified is for installation type A (Free inlet, free outlet).



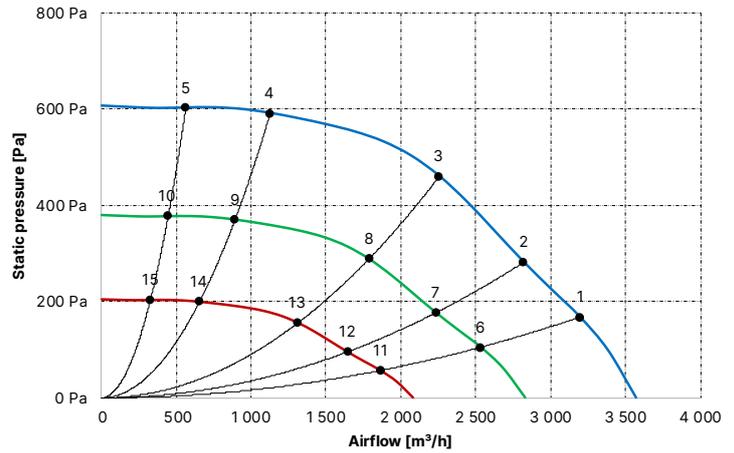
AMCA Fan Efficiency Grade

Fan Efficiency Grade (FEG), AMCA 205-10	85
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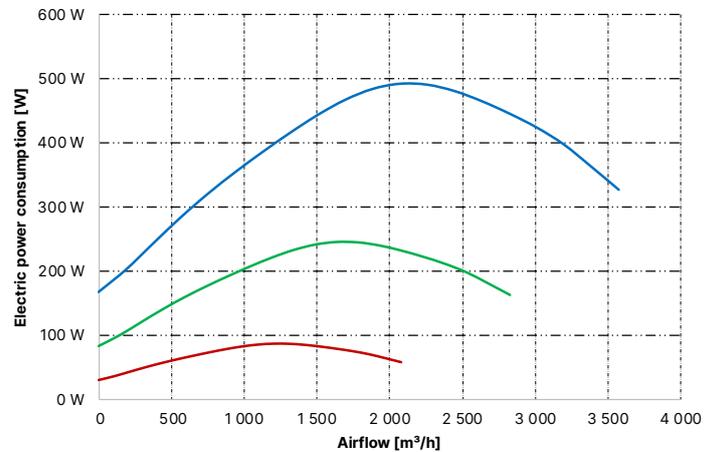
Measured Points

Point #	n [RPM]	V [m ³ /h]	dP [Pa]	I [A]	EPC [kW]	L _p A _{in} [dB(A)]	L _w A _{in} [dB(A)]	L _w A _{out} [dB(A)]	FEI
1	2 060	3 197	168	2.3	0.40	65.2	73.2	79.7	1.22
2	2 060	2 820	282	2.5	0.45	63.6	71.6	79.0	1.39
3	2 060	2 256	461	2.8	0.49	62.3	70.3	76.0	1.53
4	2 060	1 128	591	2.2	0.39	67.7	75.7	80.8	1.39
5	2 060	564	603	1.6	0.28	69.8	77.8	83.2	1.23
6	1 631	2 531	105	1.1	0.20	60.5	68.5	74.7	1.54
7	1 631	2 233	177	1.3	0.22	59.8	67.8	73.9	1.66
8	1 631	1 786	289	1.4	0.24	57.2	65.2	70.9	1.76
9	1 631	893	371	1.1	0.19	62.7	70.7	75.7	1.62
10	1 631	447	378	0.8	0.14	64.8	72.8	78.2	1.48
11	1 200	1 862	57	0.4	0.07	53.8	61.8	68.0	2.56
12	1 200	1 643	96	0.4	0.08	51.9	59.9	67.3	2.56
13	1 200	1 314	156	0.5	0.09	50.5	58.5	64.3	2.56
14	1 200	657	201	0.4	0.07	56.0	64.0	69.1	2.38
15	1 200	329	205	0.3	0.05	58.1	66.1	71.5	2.30

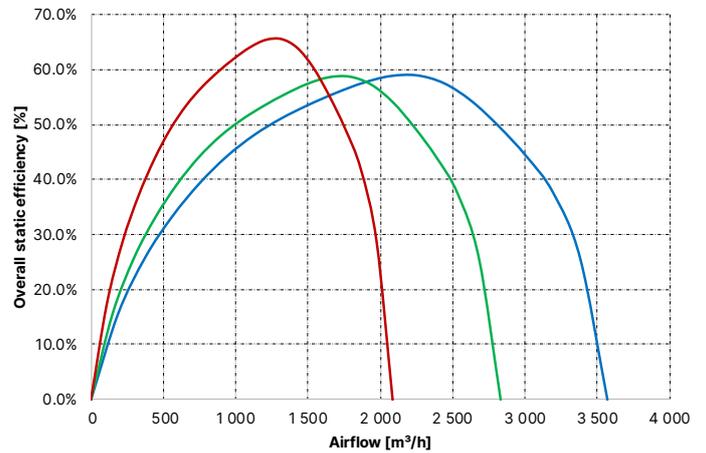
dP = f(V)



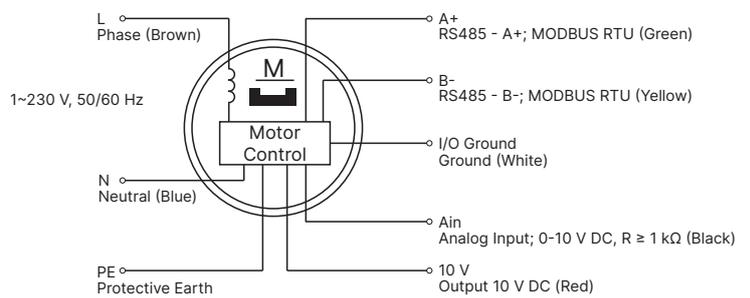
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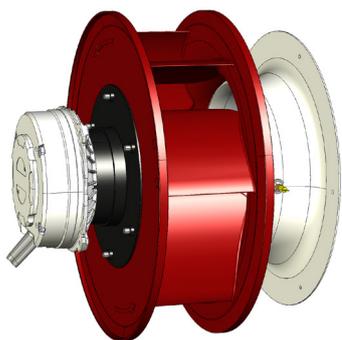
$\eta_{es} = f(V)$



Power supply and control connections



Appearance



General specification

Fan Set Model	SR-MI-P-315-0.7
Rated Voltage	1×230 VAC / 50-60 Hz
Rated Current	4.8 A
Nominal Input Power	0.8 kW
Revolutions: Min / Nominal	300 ÷ 2400 RPM
CAV K-factor	89.2
Storage temperature range	-30°C to 50°C
Operating temperatures range	-25°C to 50°C
Support plate material	N/A
Support brackets material	N/A
Mass	6.195 kg
Installation position	Horizontal / Vertical shaft

Motor

Type	Electronically Comutated, Brushless DC
Housing	Die-cast aluminum
Protection Degree	IP 54
Overload protection	Inbuilt thermal limit
Speed Control	0~10VDC / Modbus RTU
Bearings	Ball type, Maintenance Free, Permanently Lubricated
Bearings service life L ₁₀	63 400 (40 °C) / 31 700 (max. work. temperature)

Application

Various mechanical ventilation systems, air handling units, rooftop units, and others

Ventilation systems requiring low Specific Fan Power (SFP) together with smooth and precise airflow adjustment

Perfect solution to be combined into Fan-Array systems

Fitted for vertical and horizontal arrangement

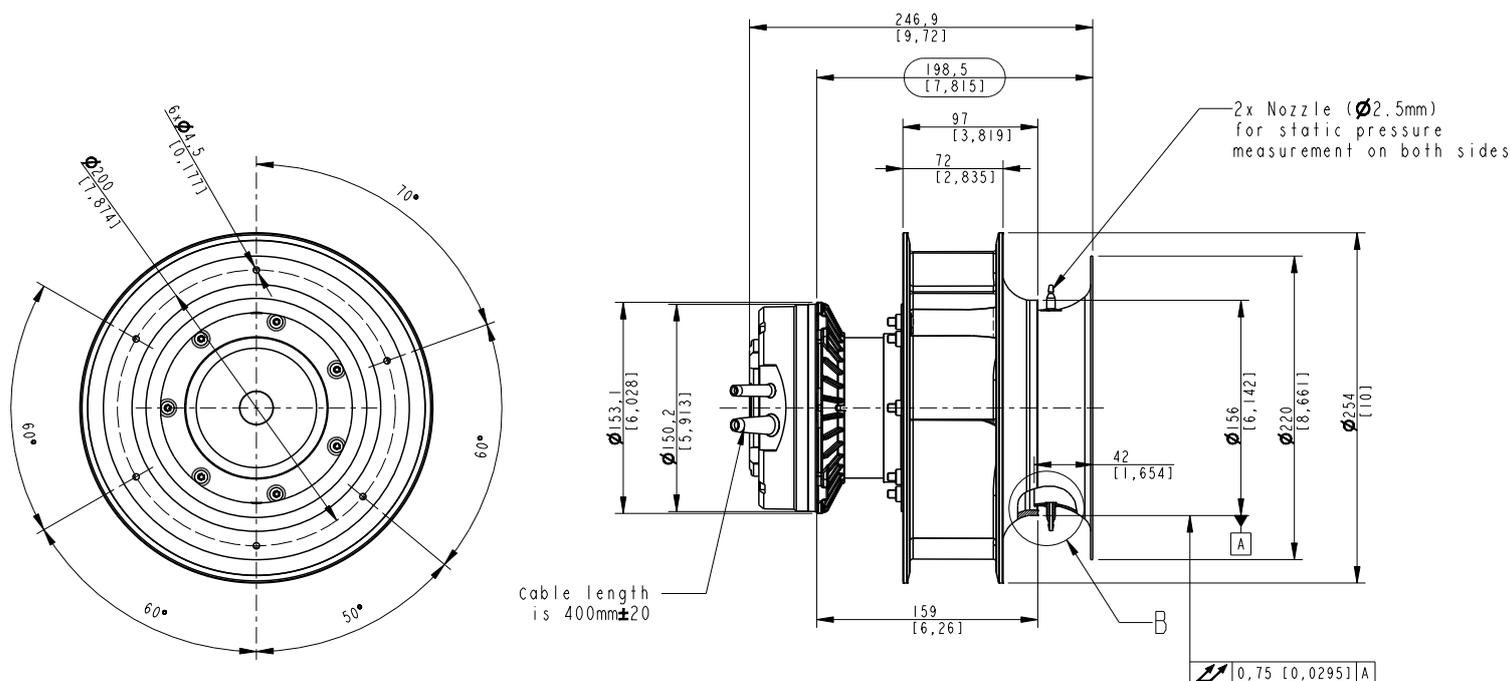
Support to CAV/VAV systems (factory mounted static pressure probes on fan inlet vane + precisely determined K-factor)

Air performance according to ISO 5801, Installation Category: A, LWA according to ISO 13347.

Impeller

Fan Impeller Size	315 mm
Blade design / No of blades	Aerofoil / 7
Spinning direction	Clockwise, wiewed from air inlet
Impeller material	Polymer
Inlet funnel material	Hot-dip galvanized steel
Balance grade	G 6,3 (ISO 1940-1) and BV-3 (ANSI S2.19-1989)

Installation Dimensions



Information according to (EU) 327/2011 (ERP 2018)

Commission Regulation (EU) 327/2011		Requirements for fans driven by motors with an electric input power between 125 W and 500 kW.
1	Overall efficiency η_{es}	66.2%
2	Measurement category	A
3	Efficiency Category	Static
4	Efficiency grade N: Actual / Req. 2015	72.0%
5	Variable speed drive	Yes
9	Power consumption P_{ed}	0.75 kW
	Air flow q_v	2 411 m ³ /h
	Pressure increase pfs	674.1
10	Speed (rpm) n	2 400
11	Specific ratio	1.01

Compliance with Standards

ISO 5801:2017	„Fans – Performance testing using standardized airways”
ANSI/AMCA Standard 210-16	Laboratory Methods of Testing Fans for Certified Aerodynamic Performance Rating
ANSI/AMCA Standard 300-14	Reverberant Room Method for Sound Testing of Fans
AMCA Standard 205-10	Energy Efficiency Classification for Fans
ANSI/AMCA Standard 208-18	Calculation of the Fan Energy Index

AMCA Certification

Swiss Rotors Sp. z o.o. certifies that the

SR-MI-P-315-0.7 Motorized Impeller

shown herein is licensed to bear the AMCA seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 211 and AMCA Publication 311 and comply with the requirements of the AMCA Certified Ratings Program.

Power rating does not include transmission losses.

Performance ratings do not include the effects of appurtenances.

Performance certified is for installation type A (Free inlet, free outlet).



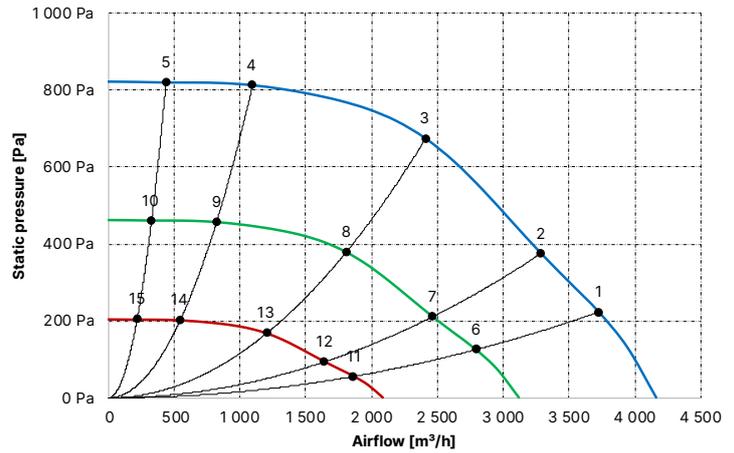
AMCA Fan Efficiency Grade

Fan Efficiency Grade (FEG), AMCA 205-10	85
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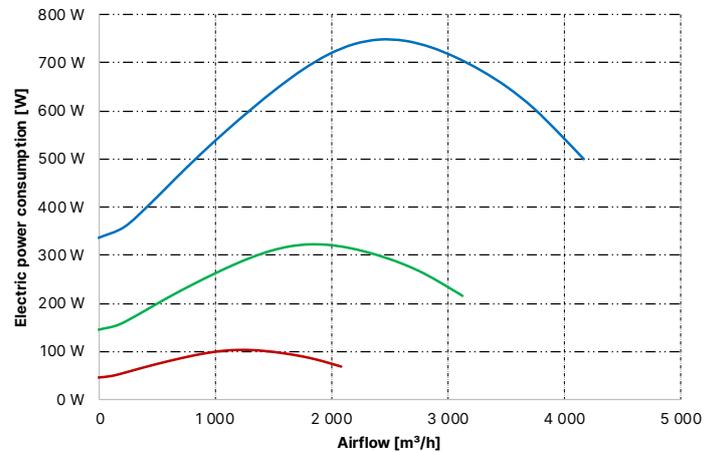
Measured Points

Point #	n RPM	V [m ³ /h]	dP [Pa]	I [A]	EPC [kW]	L _{pAin} dB(A)	L _{wAin} dB(A)	L _{wAout} dB(A)	FEI
1	2 400	3 725	223	3.6	0.61	68.9	76.9	83.1	1.10
2	2 400	3 287	375	4.0	0.68	68.2	76.2	82.3	1.29
3	2 400	2 411	674	4.4	0.75	65.4	73.4	79.3	1.47
4	2 400	1 096	812	3.3	0.56	71.9	79.9	85.1	1.24
5	2 400	438	819	2.3	0.41	73.1	81.1	86.6	0.98
6	1 800	2 794	126	1.4	0.26	62.6	70.6	76.8	1.39
7	1 800	2 465	211	1.6	0.29	60.7	68.7	76.1	1.53
8	1 800	1 808	379	1.8	0.32	59.2	67.2	73.1	1.66
9	1 800	822	457	1.3	0.24	65.6	73.6	78.8	1.45
10	1 800	329	461	0.9	0.17	66.9	74.9	80.3	1.22
11	1 200	1 863	56	0.3	0.08	53.8	61.8	68.0	2.14
12	1 200	1 644	94	0.4	0.09	53.2	61.2	67.3	2.13
13	1 200	1 205	169	0.5	0.10	50.3	58.3	64.3	2.12
14	1 200	548	203	0.3	0.08	56.8	64.8	70.0	1.92
15	1 200	219	205	0.2	0.06	58.1	66.1	71.5	1.77

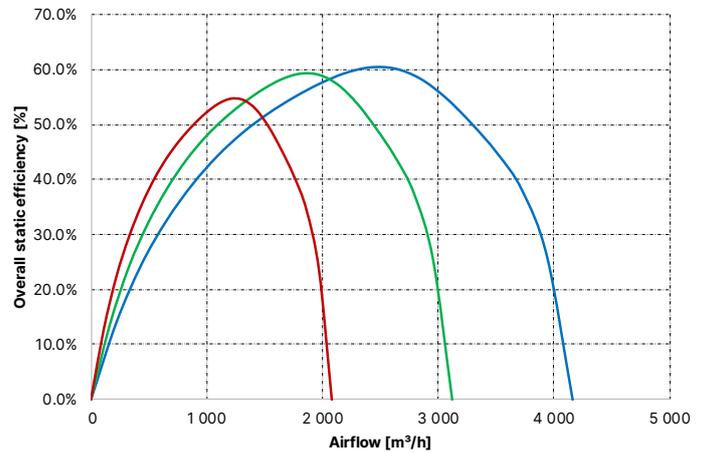
dP = f(V)



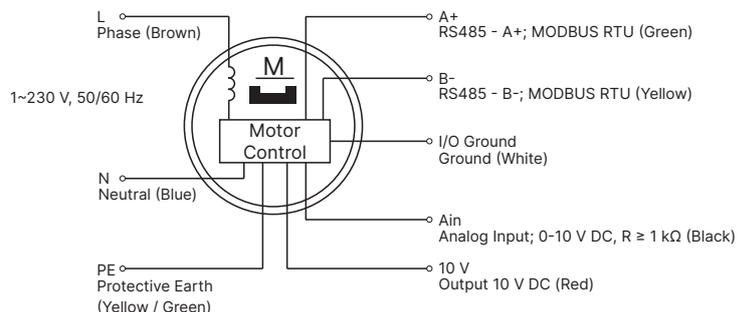
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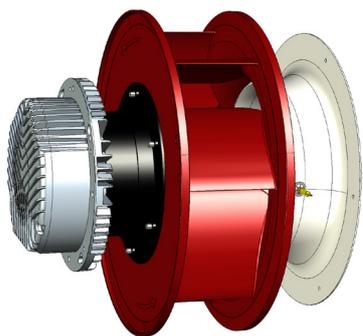
$\eta_{es} = f(V)$



Power supply and control connections



Appearance



General specification

Fan Set Model	SR-MI-P-315-1.5
Rated Voltage	3×380-480 VAC / 50-60 Hz
Rated Current	3.0 A
Nominal Input Power	1.9 kW
Revolutions: Min / Nominal	325 ÷ 3250 RPM
CAV K-factor	92.7
Storage temperature range	-30°C to 50°C
Operating temperatures range	-25°C to 50°C
Support plate material	N/A
Support brackets material	N/A
Mass	9.475 kg
Installation position	Horizontal / Vertical shaft

Motor

Type	Electronically Comutated, Brushless DC
Housing	Die-cast aluminum
Protection Degree	IP 54
Overload protection	Inbuilt thermal limit
Speed Control	0~10VDC / Modbus RTU
Bearings	Ball type, Maintenance Free, Permanently Lubricated
Bearings service life L ₁₀	75 200 (40 °C) / 37 600 (max. work. temperature)

Application

Various mechanical ventilation systems, air handling units, rooftop units, and others

Ventilation systems requiring low Specific Fan Power (SFP) together with smooth and precise airflow adjustment

Perfect solution to be combined into Fan-Array systems

Fitted for vertical and horizontal arrangement

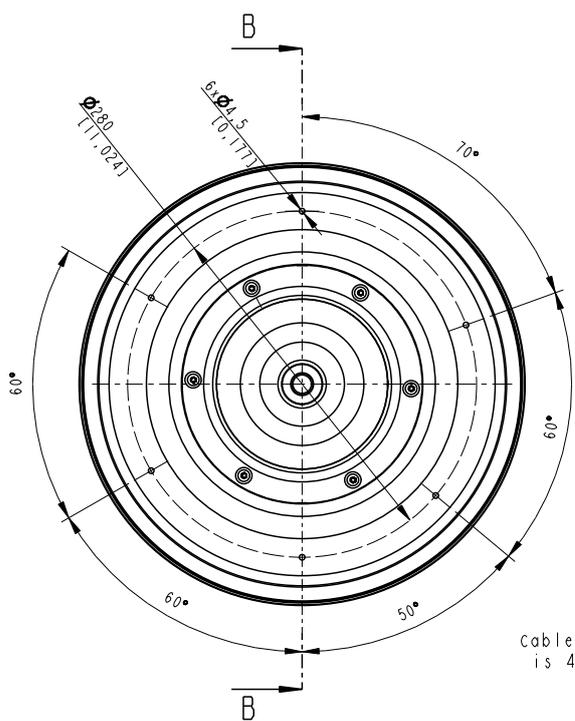
Support to CAV/VAV systems (factory mounted static pressure probes on fan inlet vane + precisely determined K-factor)

Air performance according to ISO 5801, Installation Category: A, LwA according to ISO 13347.

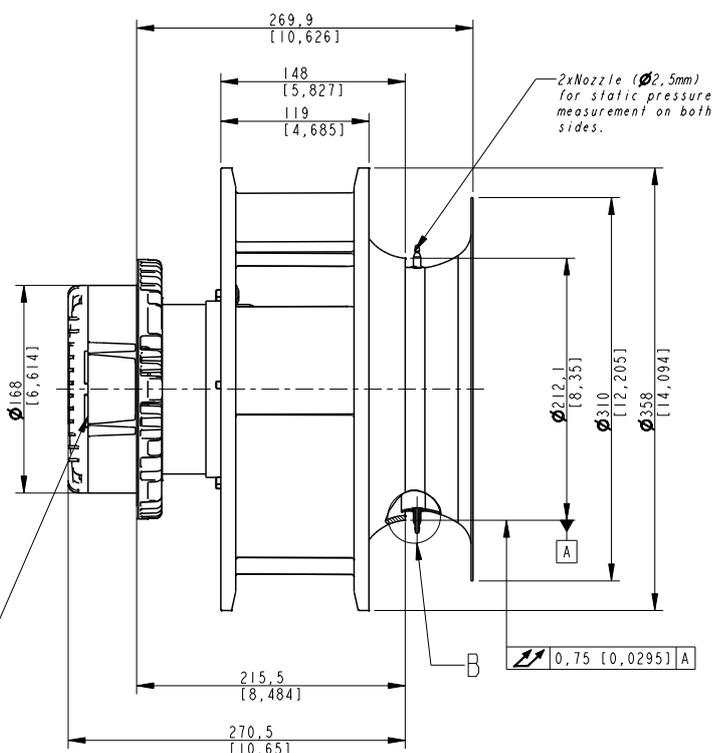
Impeller

Fan Impeller Size	315 mm
Blade design / No of blades	Aerofoil / 7
Spinning direction	Clockwise, wiewed from air inlet
Impeller material	Polymer
Inlet funnel material	Hot-dip galvanized steel
Balance grade	G 6,3 (ISO 1940-1) and BV-3 (ANSI S2.19-1989)

Installation Dimensions



Cable length is 400mm±20



Information according to (EU) 327/2011 (ERP 2018)

Commission Regulation (EU) 327/2011		Requirements for fans driven by motors with an electric input power between 125 W and 500 kW.
1	Overall efficiency η_{es}	69.7%
2	Measurement category	A
3	Efficiency Category	Static
4	Efficiency grade N: Actual / Req. 2015	73.0%
5	Variable speed drive	Yes
9	Power consumption P_{ed}	1.77 kW
	Air flow q_v	3 560 m ³ /h
	Pressure increase pfs	1 164.4
10	Speed (rpm) n	3 250
11	Specific ratio	1.01

Compliance with Standards

ISO 5801:2017	„Fans – Performance testing using standardized airways”
ANSI/AMCA Standard 210-16	Laboratory Methods of Testing Fans for Certified Aerodynamic Performance Rating
ANSI/AMCA Standard 300-14	Reverberant Room Method for Sound Testing of Fans
AMCA Standard 205-10	Energy Efficiency Classification for Fans
ANSI/AMCA Standard 208-18	Calculation of the Fan Energy Index

AMCA Certification

Swiss Rotors Sp. z o.o. certifies that the

SR-MI-P-315-1.5 Motorized Impeller

shown herein is licensed to bear the AMCA seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 211 and AMCA Publication 311 and comply with the requirements of the AMCA Certified Ratings Program.

Power rating does not include transmission losses.

Performance ratings do not include the effects of appurtenances.

Performance certified is for installation type A (Free inlet, free outlet).



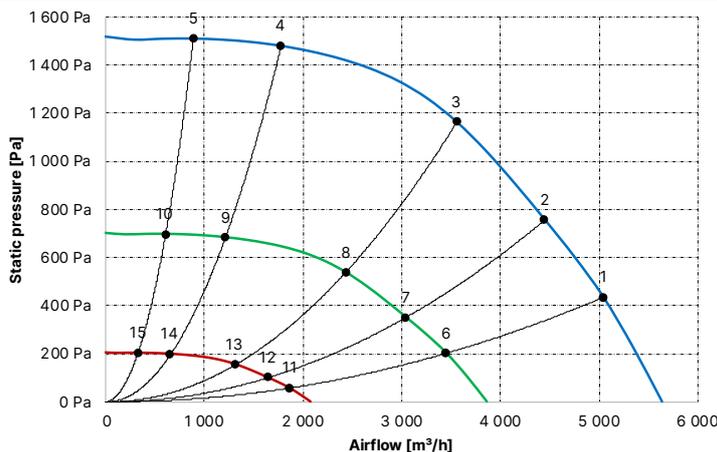
AMCA Fan Efficiency Grade

Fan Efficiency Grade (FEG), AMCA 205-10	90
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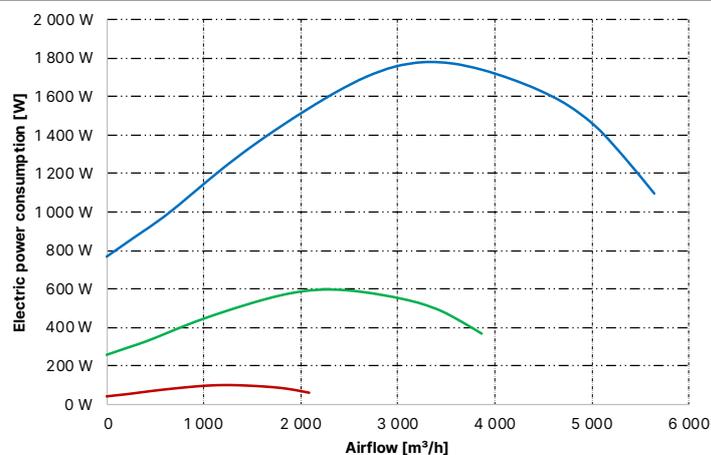
Measured Points

Point #	n [RPM]	V [m ³ /h]	dP [Pa]	I [A]	EPC [kW]	L _{pAin} [dB(A)]	L _{wAin} [dB(A)]	L _{wAout} [dB(A)]	FEI
1	3 250	5 044	435	2.1	1.44	75.1	83.1	89.6	1.02
2	3 250	4 450	758	2.3	1.64	73.6	81.6	88.9	1.30
3	3 250	3 560	1 164	2.6	1.77	72.2	80.2	85.9	1.45
4	3 250	1 780	1 481	2.1	1.44	77.6	85.6	90.7	1.22
5	3 250	890	1 511	1.6	1.10	79.7	87.7	93.1	0.96
6	2 224	3 451	201	0.7	0.48	67.2	75.2	81.4	1.21
7	2 224	3 045	350	0.8	0.55	66.6	74.6	80.7	1.43
8	2 224	2 436	537	0.8	0.59	63.9	71.9	77.7	1.54
9	2 224	1 218	684	0.7	0.48	69.4	77.4	82.5	1.34
10	2 224	609	698	0.5	0.37	71.5	79.5	84.9	1.12
11	1 200	1 862	59	0.1	0.08	53.8	61.8	68.0	2.18
12	1 200	1 643	102	0.1	0.09	53.2	61.2	67.3	2.21
13	1 200	1 315	157	0.1	0.10	50.5	58.5	64.3	2.18
14	1 200	657	200	0.1	0.08	56.0	64.0	69.1	1.95
15	1 200	329	204	0.0	0.06	58.1	66.1	71.5	1.81

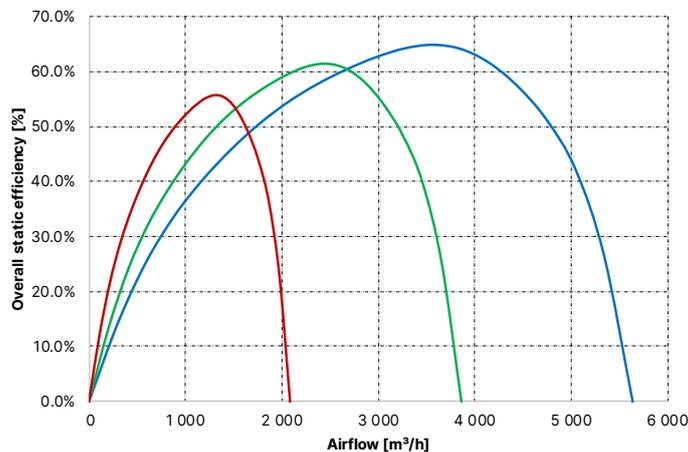
dP = f(V)



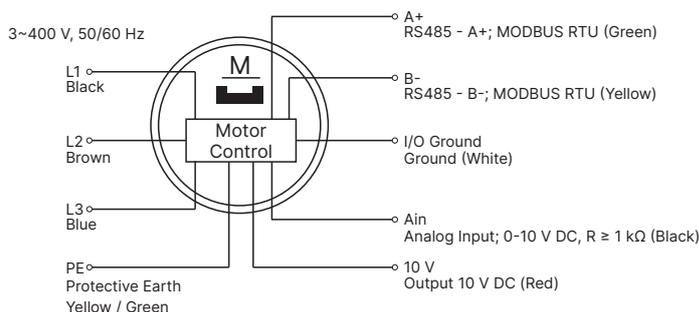
EPC = f(V)



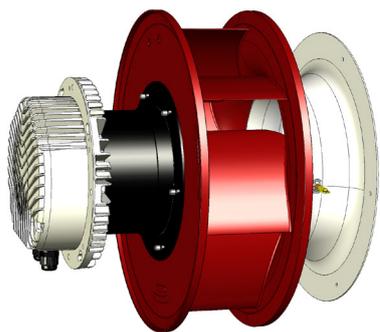
$\eta_{es} = f(V)$



Power supply and control connections



Appearance



General specification

Fan Set Model	SR-MI-P-315-2.5
Rated Voltage	3×380-480 VAC / 50-60 Hz
Rated Current	4.0 A
Nominal Input Power	2.6 kW
Revolutions: Min / Nominal	360 ÷ 3700 RPM
CAV K-factor	97.5
Storage temperature range	-30°C to 50°C
Operating temperatures range	-25°C to 40°C
Support plate material	N/A
Support brackets material	N/A
Mass	10.46 kg
Installation position	Horizontal / Vertical shaft

Application

Various mechanical ventilation systems, air handling units, rooftop units, and others

Ventilation systems requiring low Specific Fan Power (SFP) together with smooth and precise airflow adjustment

Perfect solution to be combined into Fan-Array systems

Fitted for vertical and horizontal arrangement

Support to CAV/VAV systems (factory mounted static pressure probes on fan inlet vane + precisely determined K-factor)

Air performance according to ISO 5801, Installation Category: A, LwA according to ISO 13347.

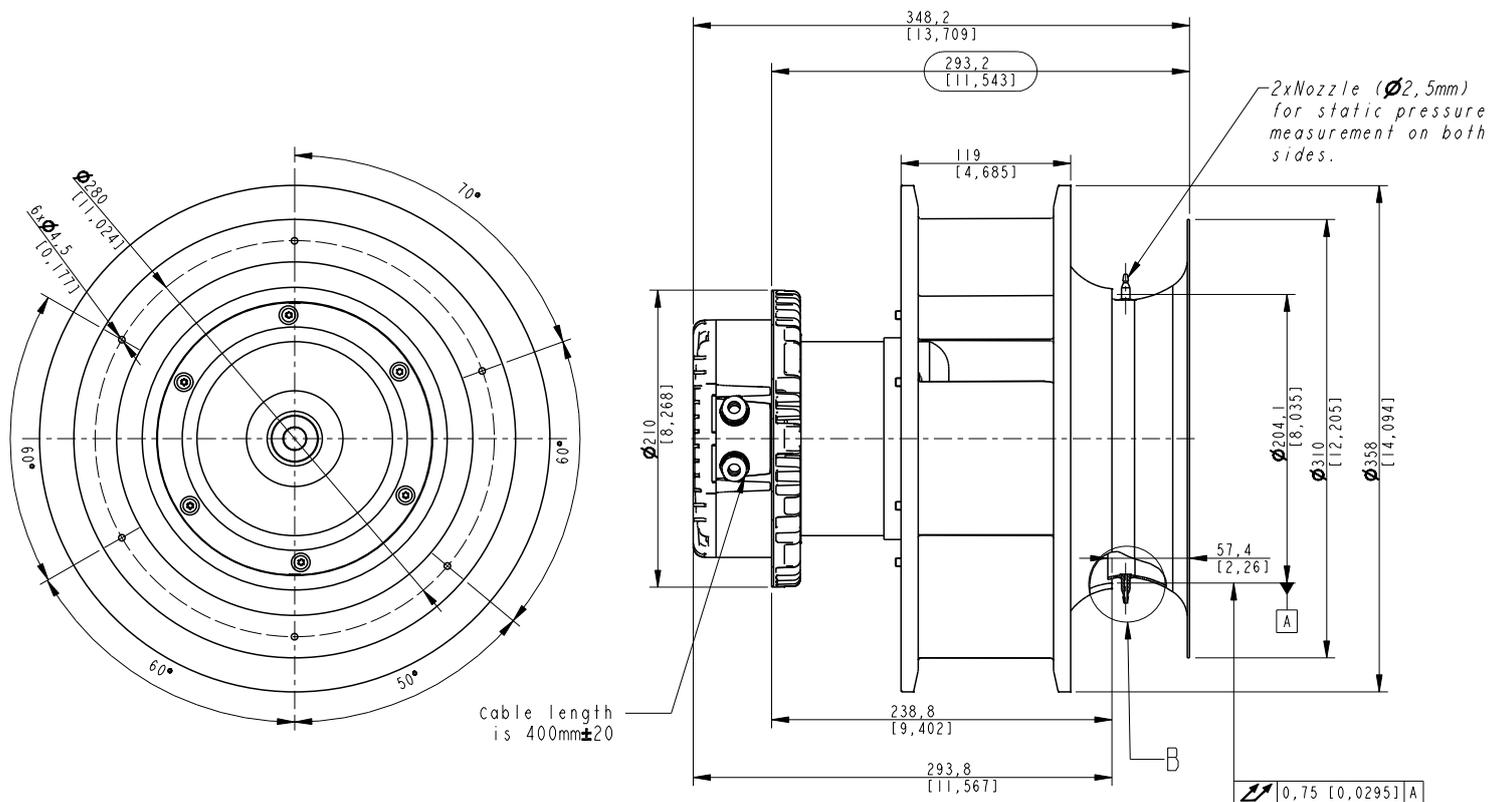
Motor

Type	Electronically Comutated, Brushless DC
Housing	Die-cast aluminum
Protection Degree	IP 54
Overload protection	Inbuilt thermal limit
Speed Control	0~10VDC / Modbus RTU
Bearings	Ball type, Maintenance Free, Permanently Lubricated
Bearings service life L ₁₀	75 200 (40 °C) / 37 600 (max. work. temperature)

Impeller

Fan Impeller Size	315 mm
Blade design / No of blades	Aerofoil / 7
Spinning direction	Clockwise, wiewed from air inlet
Impeller material	Polymer
Inlet funnel material	Hot-dip galvanized steel
Balance grade	G 6,3 (ISO 1940-1) and BV-3 (ANSI S2.19-1989)

Installation Dimensions



Information according to (EU) 327/2011 (ERP 2018)

Commission Regulation (EU) 327/2011		Requirements for fans driven by motors with an electric input power between 125 W and 500 kW.
1	Overall efficiency η_{es}	67.8%
2	Measurement category	A
3	Efficiency Category	Static
4	Efficiency grade N: Actual / Req. 2015	70.4%
5	Variable speed drive	Yes
9	Power consumption P_{ed}	2.44 kW
	Air flow q_v	3 964 m ³ /h
	Pressure increase pfs	1 419.3
10	Speed (rpm) n	3 600
11	Specific ratio	1.01

Compliance with Standards

ISO 5801:2017	„Fans – Performance testing using standardized airways”
ANSI/AMCA Standard 210-16	Laboratory Methods of Testing Fans for Certified Aerodynamic Performance Rating
ANSI/AMCA Standard 300-14	Reverberant Room Method for Sound Testing of Fans
AMCA Standard 205-10	Energy Efficiency Classification for Fans
ANSI/AMCA Standard 208-18	Calculation of the Fan Energy Index

AMCA Certification

Swiss Rotors Sp. z o.o. certifies that the

SR-MI-P-315-2.5 Motorized Impeller

shown herein is licensed to bear the AMCA seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 211 and AMCA Publication 311 and comply with the requirements of the AMCA Certified Ratings Program.

Power rating does not include transmission losses.

Performance ratings do not include the effects of appurtenances.

Performance certified is for installation type A (Free inlet, free outlet).



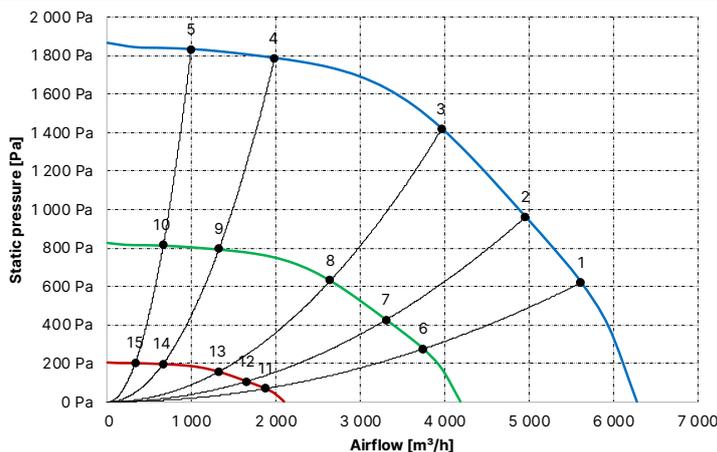
AMCA Fan Efficiency Grade

Fan Efficiency Grade (FEG), AMCA 205-10	85
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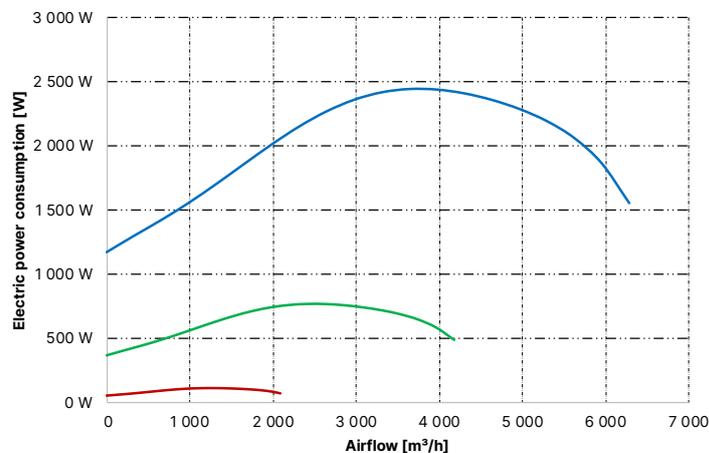
Measured Points

Point #	n [RPM]	V [m ³ /h]	dP [Pa]	I [A]	EPC [kW]	L _p A _{in} [dB(A)]	L _w A _{in} [dB(A)]	L _w A _{out} [dB(A)]	FEI
1	3 600	5 616	620	3.1	2.06	77.8	85.8	91.9	1.07
2	3 600	4 955	961	3.4	2.29	77.0	85.0	91.2	1.28
3	3 600	3 964	1 419	3.6	2.44	74.4	82.4	88.2	1.41
4	3 600	1 982	1 786	3.0	2.01	79.8	87.8	92.9	1.15
5	3 600	991	1 832	2.4	1.56	82.0	90.0	95.4	0.88
6	2 400	3 744	276	1.1	0.65	69.0	77.0	83.1	1.20
7	2 400	3 303	427	1.2	0.72	68.2	76.2	82.3	1.36
8	2 400	2 643	631	1.2	0.77	65.6	73.6	79.4	1.46
9	2 400	1 321	794	1.0	0.64	71.0	79.0	84.1	1.22
10	2 400	661	814	0.8	0.49	73.1	81.1	86.5	1.00
11	1 200	1 872	69	0.3	0.10	53.9	61.9	68.1	1.99
12	1 200	1 652	107	0.3	0.11	53.2	61.2	67.3	1.98
13	1 200	1 321	158	0.3	0.12	50.6	58.6	64.3	1.95
14	1 200	661	198	0.3	0.10	56.0	64.0	69.0	1.70
15	1 200	330	204	0.2	0.07	58.1	66.1	71.5	1.56

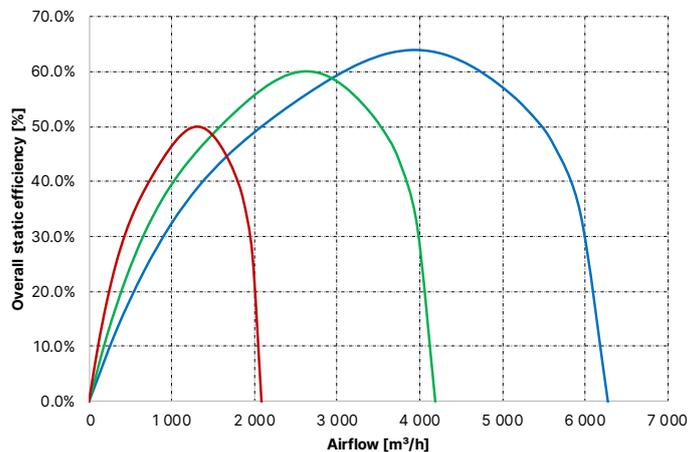
dP = f(V)



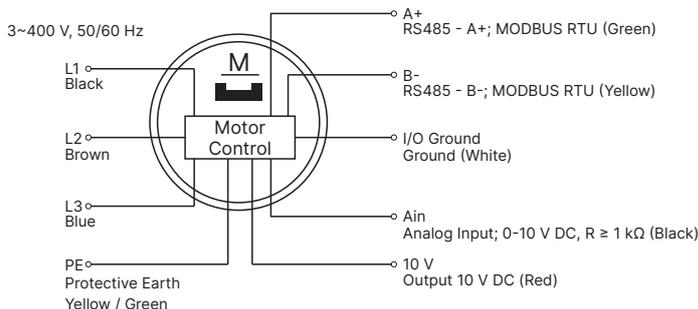
EPC = f(V)



$\eta_{es} = f(V)$



Power supply and control connections



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