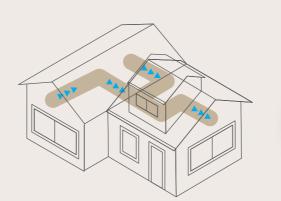




Built to move air, built to last













Built to move air, built to last.













# **Features**

#### I High Precision Engineering

Features a high-performance external rotor motor, integrated thermal protector, and premium ball bearings to ensure consistent and dependable operation.





### Long Operational Lifespan

Engineered for longevity, supporting continuous use for up to 40,000 hours.



#### Robust Protection

IP44-rated enclosure safeguards against dust and water ingress for reliable operation in demanding environments.

#### Low Noise & Vibration

Double-sided dynamically balanced fan blades provide smooth, quiet, and vibration-free performance.



Installation Simulation
(Mount above ceiling)

10MMA/12MMA/15MMA/ 16MMA/20MMA/25MMA



31MMA

#### Optimized Airflow Design

Centrifugal structure with Class F insulation above for enhanced performance and safety.



# 10MMA / 12MMA 15MMA / 16MMA **20MMA**

- Equipped with a high-performance external rotor motor
- Premium ball bearings
- Integrated thermal protector
- Long Operational Lifespan
- Low Noise & Vibration
- Optimized Airflow Design
- Motor Insulation Class F
- IP protection: IP44

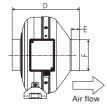
Panasonic Ecology Systems Guangdong Co., Ltd. certifies that the In-line Centrifugal Fan Series shown herein are licensed to bear the AMCA Seal. The ratings shown are based on tests and





procedures performed in accordance with AMCA Publication 211 and AMCA Publication 311 and comply with the requirements of the AMCA Certified Ratings Program.





Model	Α	В	С	D	E	ØF	G	Duct Dimension
10MMA	285	258	137	213	26	97	196	Ø100
12MMA	285	258	137	203	26	123	196	Ø125
15MMA	375	348	181	266	25	147	267	Ø150
16MMA	375	348	181	260	25	157	267	Ø160
20MMA	375	348	181	245	25	197	267	Ø200

#### **Specification**

**Dimension** Unit: mm

	Voltage	Frequency	CFM/SONE AT STATIC Pressure (ps-inches of H <sub>2</sub> O)														Watts*	Watts**
Model	[V]	[Hz]	inches of H <sub>2</sub> O	0.000	0.121	0.201	0.402	0.603	0.804	1.005	1.206	1.507	1.808	2.009	2.411	RPM	FOR AMCA	FOR IEC
10MMA	MA 240	50	CFM	161	152	146	125	108	87	66	_	_	_		_	2,606	63	57
TOWNA	240		Sones	8.8	8.5	8.4	8.0	7.5	7.2	6.9						2,000	03	31
12MMA	240	50	CFM	197	178	169	144	121	100	74	49	-	_	_	_	2.580	62	58
I∠IVIIVIA	240	50	Sones	9.9	9.5	9.3	8.8	8.4	8.0	7.6	7.1		-	_	_	2,580	80 63	56
15MMA	240	50	CFM	413	390	375	332	288	246	203	163	106	_	_	_	2.495	104	97
AIVIIVICI	240	50	Sones	11.1	10.9	10.8	10.5	10.2	10.2	10.2	10.9	10.6	-	_	_	2,495	104	97
16MMA	240	F0	CFM	487	462	440	390	337	294	250	212	146			_	2.311	126	128
I DIVIIVIA	240	50	Sones	10.6	10.3	10.3	10.1	10.2	10.3	11.1	10.5	9.1	_	-	-	2,311	136	120
0004040	0.40	0 50	CFM	553	523	506	460	421	379	332	284	229 163		121	_	0.505		474
20MMA 240	240		Sones	11 2	10.9	10.8	10.2	99	9.6	97	10.2	12.2	12.5	12.9	-	2,535	181	174

Performance certified is for installation type D: Ducted inlet, Ducted outlet.

Performance ratings do not include the effects of appurtenances (accessories). Speed (RPM) shown is nominal.

Performance is based on actual speed of test. The sound ratings shown are loudness values in fan sones at 5 ft. (1.5m) in a hemispherical free field calculated per AMCA International Standard 301.

Values shown are for installation type D: ducted inlet hemispherical sone levels. Ratings do not include the effect of duct end correction.

\* the Watts rating is for AMCA test method and it is at the static pressure of 0 inch of H<sub>2</sub>O.

\*\* the Watts rating is only for IEC test method and the AMCA Certified Rating Seal does not apply to IEC test method watts.

## **25MMA**

- Equipped with a high-performance external rotor motor
- Premium ball bearings
- Integrated thermal protector
- Long Operational Lifespan
- Low Noise & Vibration
- Optimized Airflow Design
- Motor Insulation Class F
- IP protection: IP44

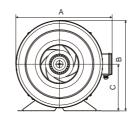
Panasonic Ecology Systems Guangdong Co., Ltd. certifies that the In-line Centrifugal Fan Series shown herein are licensed to bear the AMCA Seal. The ratings shown are based on tests and

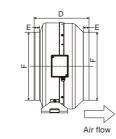


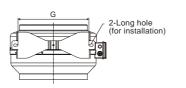
procedures performed in accordance with AMCA Publication 211 and AMCA Publication 311 and comply with the requirements of the AMCA Certified Ratings Program.



#### **Dimension** Unit: mm







Α	В	С	D	Е	ØF	G	Duct Dimension
375	348	181	219	25	247	267	Ø250

#### **Specification**

Voltag		Frequency	CFM/SONE AT STATIC Pressure (ps-inches of H <sub>2</sub> O) inches of H O 0.000 0.121 0.201 0.402 0.603 0.804 1.005 1.206 1.507 1.808 2.009 2.411													Watts*	Watts**	
Model	[V]	[Hz]	inches of H <sub>2</sub> O	0.000	0.121	0.201	0.402	0.603	0.804	1.005	1.206	1.507	1.808	2.009	2.411	RPM	FOR AMCA	FOR IEC
25MMA	240	50	CFM Sones	555 11.7	532 11.2	515 11.1	474 10.5	436 10.1	394 9.7	352 9.3	307 9.1	250 10.0	186 12.3	140 13.3	-	2,643	178	165

Performance certified is for installation type D: Ducted inlet, Ducted outlet.

Performance ratings do not include the effects of appurtenances (accessories). Speed (RPM) shown is nominal.

Performance is based on actual speed of test. The sound ratings shown are loudness values in fan sones at 5 ft. (1.5m) in a hemispherical free field calculated per AMCA International Standard 301.

Values shown are for installation type D: ducted inlet hemispherical sone levels. Ratings do not include the effect of duct end correction.

\* the Watts rating is for AMCA test method and it is at the static pressure of 0 inch of H<sub>2</sub>O.

\*\* the Watts rating is only for IEC test method and the AMCA Certified Rating Seal does not apply to IEC test method watts.



# **31MMA**

- Equipped with a high-performance external rotor motor
- Premium ball bearings
- Integrated thermal protector
- Long Operational Lifespan
- Low Noise & Vibration
- Optimized Airflow Design
- Motor Insulation Class H
- IP protection: IP44

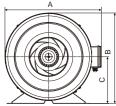
Panasonic Ecology Systems Guangdong Co., Ltd. certifies that the In-line Centrifugal Fan Series

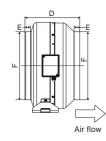


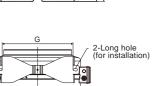
comply with the requirements of the AMCA Certified Ratings Program.











Α	В	С	D	E	ØF	G	Duct Dimension
445	416	215	255	26	313	327	Ø315

#### **Specification**

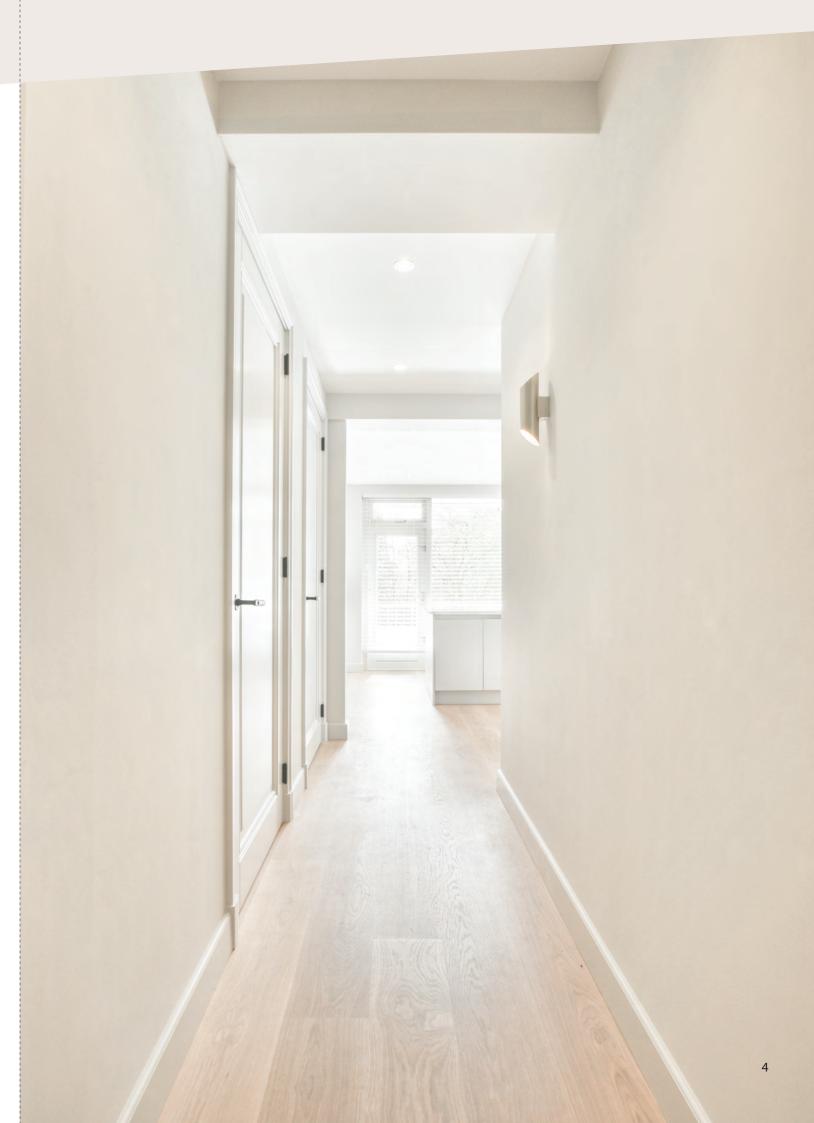
	Voltage Frequency [V] [Hz]			CFM/SONE AT STATIC Pressure (ps-inches of H <sub>2</sub> O)									Watts*	Watts**				
Model		inches of H <sub>2</sub> O	0.000	0.121	0.201	0.402	0.603	0.804	1.005	1.206	1.507	1.808	2.009	2.411	RPM	FOR AMCA	FOR IEC	
31MMA	240	50	CFM Sones	953 17.7				709 14.4	601 12.5	504 12.0	438 12.1	366 13.6	307 17.4	263 20.0	159 21.1	2,519	246	238

Performance certified is for installation type D: Ducted inlet, Ducted outlet.

Performance ratings do not include the effects of appurtenances (accessories). Speed (RPM) shown is nominal.

Performance is based on actual speed of test. The sound ratings shown are loudness values in fan sones at 5 ft. (1.5m) in a hemispherical free field calculated per AMCA International Standard 301.

Values shown are for installation type D: ducted inlet hemispherical sone levels. Ratings do not include the effect of duct end correction.



<sup>\*</sup> the Watts rating is for AMCA test method and it is at the static pressure of 0 inch of H<sub>2</sub>O.

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