



## CSD Series Cabinet Fan

Inline Centrifugal Cabinet Fan



✖ Compact ⚙ Easy to Maintenance 🔊 Low Noise

# Why KRUGER?

KRUGER has been a leading innovator and manufacturer of residential, commercial and industrial fan application solutions across Asia since 1985. Today with a direct presence in over 18 regions throughout Asia; world class R&D and manufacturing facilities; KRUGER are able to offer their customers unparalleled service and support at a local level. Our customers place their trust in KRUGER.



## What is a KRUGER CSD Inline Centrifugal Cabinet Fan?

The CSD series is a single inlet centrifugal inline fan designed for supply, exhaust and pressurization in general clean air application with CL-F insulation motor. It is compact, generates high pressure and low noise.

## Why use a KRUGER CSD Cabinet Fan?



### Compact size

**Smaller footprint/space** >>>> **More usable area for occupants**

CSD series compact size cabinet require smaller for installation and it could be installed above ceiling.

### Low noise

**Installation near occupant** >>>> **Flexible installation location**

KRUGER CSD Series offer one of the lowest noise /CMH in the industry.



### Easy to maintenance

**Direct without the belt, bearing and sheaves** >>>> **Lower maintenance cost**

CSD fan impeller is directly mouted to motor shaft, eliminate the loss due to drive transmission, require less fan parts and no maintenance needed.



# Summary of Key Standard CSD Series Specifications

**A** Airflow and static pressure up to 7,000 CMH and 750 Pa.

**B** Airstream Operating Temperatures  
Clean air standard ventilation application  
-20°C to +40°C.

**C** Certifications



Kruger\* certifies that the CSD series shown herein is licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with the AMCA publication 211 and comply with the requirements of the AMCA Certified Ratings Program.

- \*Kruger Ventilation Industries Asia Co. Ltd.
- \*Shanghai Kruger Ventilation Co. Ltd.
- \*Tianjin Kruger Ventilation Co. Ltd.
- \*Wuhan Kruger Ventilation Co., Ltd.
- \*Kruger Ventilation Industries (India) Pvt. Ltd.
- \*P.T. Kruger Ventilation Indonesia
- \*Kruvent Industries (M) Sdn. Bhd.
- \*Kruger Ventilation Industries (Thailand) Co. Ltd.
- \*Kruger Ventilation Industries (Vietnam) Co., Ltd.

**D** Cabinet

With high gloss surface finished manufactured from ZERO spangle galvanized steel.

**E** Single Width Forward Curved Wheel

Wheel manufactured in high gloss surface finished manufactured from ZERO spangle galvanized steel. All wheels are statically and dynamically balanced to G2.5 in accordance with ISO 21940.

**F** Modularized Cabinet Design

INSTALL & SERVICE-FRIENDLY, removable access panel on both sides for easy access to fan and motor.

**G** Duct Collars/L-Inlet and Outlet Fan



## Options and Accessories

- H** : Flexible Duct
- J** : Isolators

## Typical Applications



Office



Toilet

# Technical Data

## IP21 Motor Models

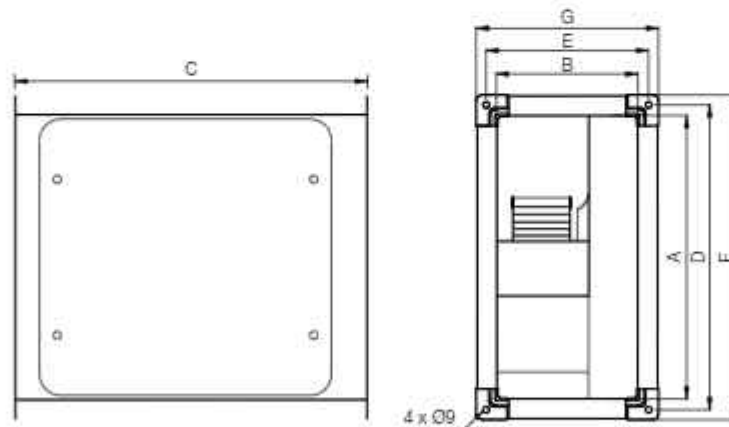
Model	Max Q (m³/h)	Max Ps (Pa)	Motor Installed Power (W)	Maximum Motor Input Power (W)	Motor Protection	Phase	Pole	Hz	Maximum Current (A)	Voltage (V)	Capacitor (µF/V)	Insulation Class	Lp (A) at 3m free discharge (dB (A))*	Speed (RPM)	Motor Model Number
CSD 200 4P-1 1SY	845	245	165	222	IP21	1	4	50	0.9	230	7.5/450	F	49	1440	F3MC7317
CSD 225 4P-1 1SY	1080	450	245	348	IP21	1	4	50	1.6	230	7.5/450	F	49	1370	F3MC7315
CSD 250 4P-1 3SY	1870	535	350	708/520/363	IP21	1	4	50	3.0/2.3/1.7	230	12.5/450	F	49	1300/1150/1050	F3MC7316
CSD 280 4P-1 3SY	2590	585	550	1154/976/842	IP21	1	4	50	5.2/4.3/3.8	230	12.5/450	F	53	1300/1250/1150	F3MC7308
CSD 315 4P-1 3SY	2940	755	750	1736/1512/1265	IP21	1	4	50	6.5/5.5/4.9	230	12.5/450	F	54	1300/1250/1150	F3MC7324
CSD 315 6P-1 3SY	3160	395	709	855/742/494	IP21	1	6	50	4.6/3.6/2.6	230	12.5/450	F	54	950/850/750	F3MC7309

## IP44 & IP55 Motor Models

Model	Max Q (m³/h)	Max Ps (Pa)	Motor Installed Power (W)	Maximum Motor Input Power (W)	Motor Protection	Phase	Pole	Hz	Maximum Current (A)	Voltage (V)	Capacitor (µF/V)	Insulation Class	Lp (A) at 3m free discharge (dB (A))*	Speed (RPM)	Motor Model Number
CSD 200 4P-1 1SC	800	221	165	210	IP44	1	4	50	0.9	230	7.5/450	F	49	1440	F3MC7317
CSD 225 4P-1 1SC	1005	376	245	306	IP44	1	4	50	1.4	230	7.5/450	F	49	1380	F3MC7315
CSD 250 4P-1 3SC	1765	533	350	673/493/356	IP44	1	4	50	2.8/2.2/1.6	230	12.5/450	F	49	1350/1270/1150	F3MC7316
CSD 280 4P-1 3SC	2160	672	550	854/707/649	IP44	1	4	50	3.8/3.1/2.9	230	12.5/450	F	53	1350/1270/1150	F3MC7308
CSD 315 6P-1 3SC	2630	397	709	713/537/381	IP44	1	6	50	3.0/2.8/1.9	230	12.5/450	F	55	940/830/750	F3MC7309
CSD 355 6P-3 1SC	4380	453	1100	2205	IP55	3	6	50	3.1	400	-	F	55	950	MK270C
CSD 400 6P-3 1SC	7045	533	1500	3162	IP55	3	6	50	5.2	400	-	F	55	910	MK280C

- 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.
- Lp(A) at 3m free discharge dB(A) levels are not licensed by AMOA International.

## Dimension



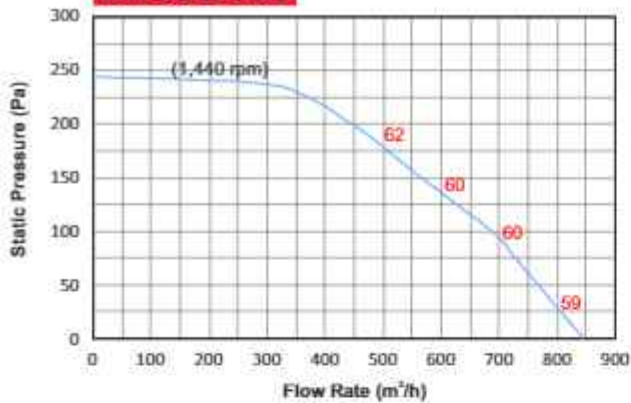
Model	A	B	C	D	E	F	G	W(kg)
CSD 200	400	200	500	431	232	459	260	15
CSD 225	500	250	542	531	282	559	310	19
CSD 250	500	300	562	531	332	559	360	22
CSD 280	600	300	682	631	322	659	360	30
CSD 315	600	350	717	631	382	659	410	42
CSD 355	800	400	800	831	432	859	460	45
CSD 400	800	500	882	831	532	859	560	55

All dimension in mm.

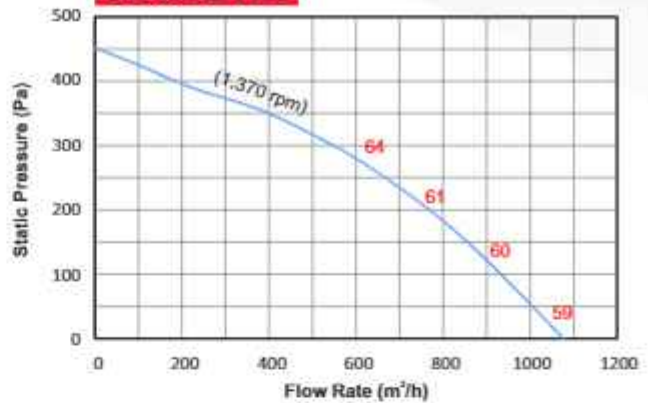


# Performance Data

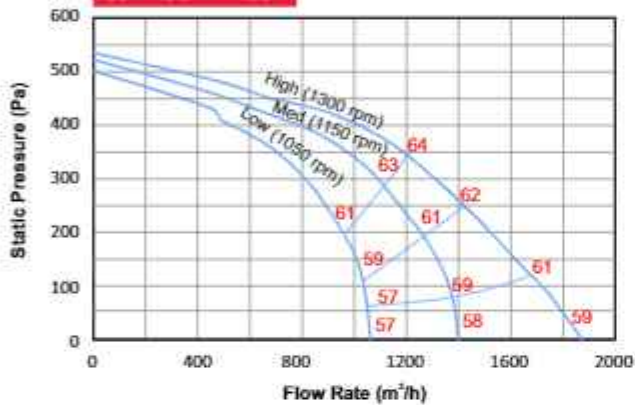
**CSD 200 4P-1 1SY**



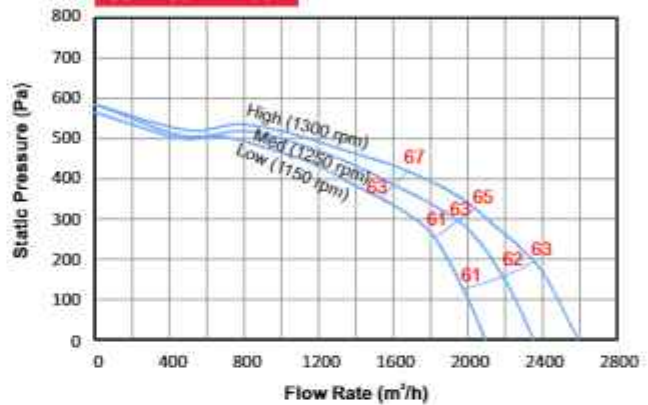
**CSD 225 4P-1 1SY**



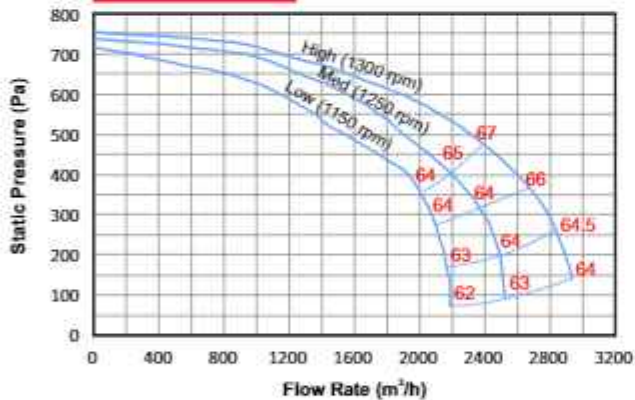
**CSD 250 4P-1 3SY**



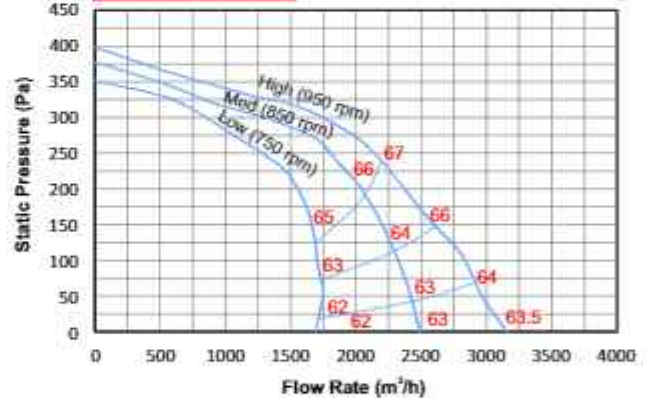
**CSD 280 4P-1 3SY**



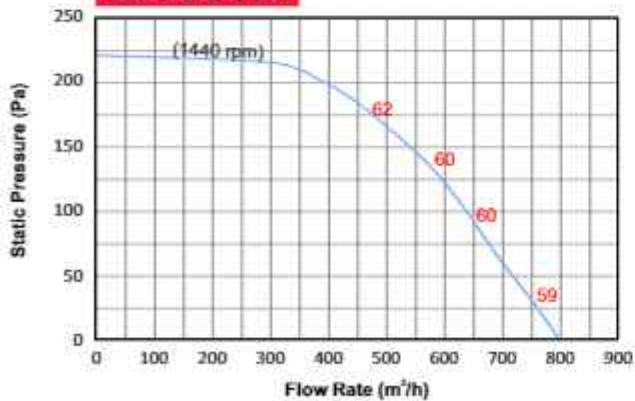
**CSD 315 4P-1 3SY**



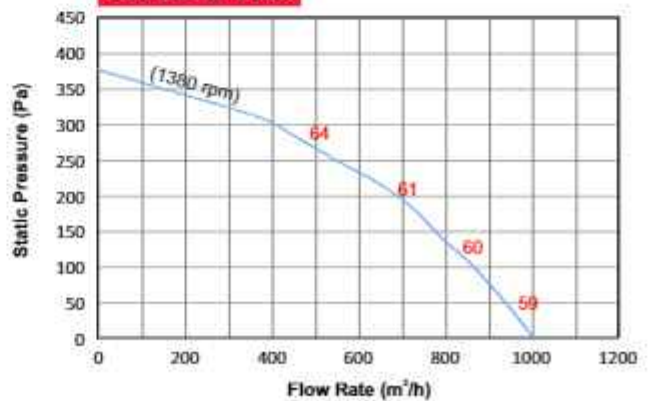
**CSD 315 6P-1 3SY**



**CSD 200 4P-1 1SC**



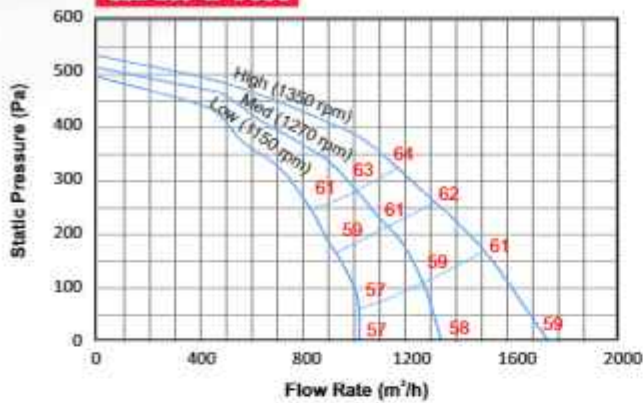
**CSD 225 4P-1 1SC**



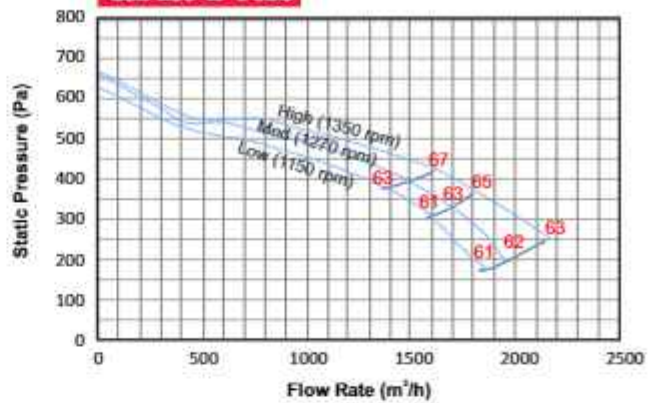
- The AMCA Certified Ratings seal applies to air performance only.
- Sound pressure level Lp(A) at 1m free field.
- Performance certified is for installation type D – Ducted inlet, Ducted outlet.
- Performance ratings do not include the effects of appurtenances (accessories).
- Speed (RPM) shown is nominal. Performance is based on actual speed of test.

# Performance Data

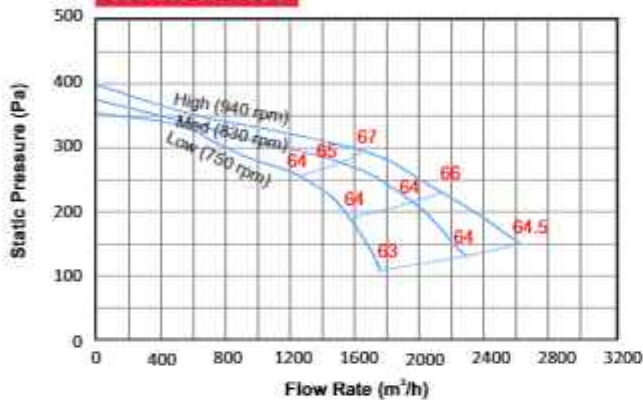
**CSD 250 4P-1 3SC**



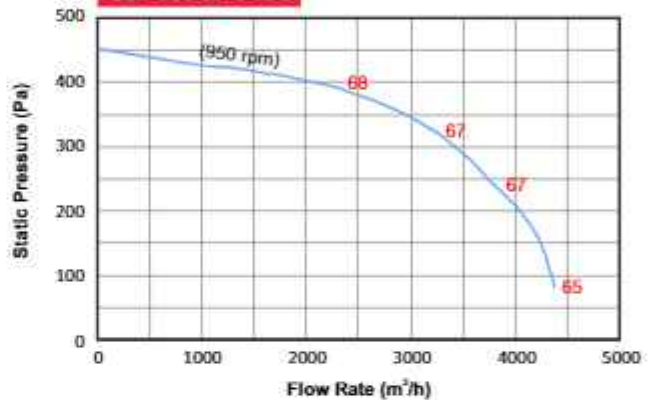
**CSD 280 4P-1 3SC**



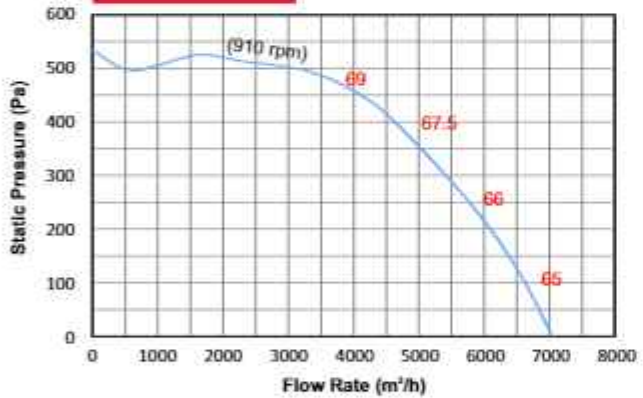
**CSD 315 6P-1 3SC**



**CSD 355 6P-3 1SC**



**CSD 400 6P-3 1SC**



- The AMCA Certified Ratings seal applies to air performance only.
- Sound pressure level Lp(A) at 1m free field.
- 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.