



# **HIGH EFFICIENCY BLOWER**

PRODUCT GUIDE



# INTRODUCTION

## 

DEC Star<sup>™</sup> integrates Regal's axial flux motor technology into a forward curved impeller, creating a revolutionary blower systems that maximises performance and efficiency.

### UNIQUE DESIGN IMPROVES COMFORT AND EFFICIENCY

DEC Star's<sup>™</sup> axial flux motor design removes the motor from the blower inlet, eliminating restriction and improving system efficiencies. This novel electromechanical design and integration delivers unparalleled airflow efficiency. DEC Star's<sup>™</sup> new design configuration is truly revolutionary and will facilitate some exciting advancements.

### SPECIFICATIONS

- Direct drive blower
- Forward curve
- Double inlet
- Motor range 370- 600 900w
- High temp plastic or steel wheels
  Air volumes up to 200 l/acc
- Air volumes up to 900 l/sec (525 static Pressure) HEB design

### **APPLICATIONS:**

- Cooling: IC411
- Gas furnace
- Air conditioning / fan coil unit
- Clean rooms
- Biological cabinets
- General ventilation

### OPTIONS

- Std & HEB housing (HEB = high static)
- 370 600 900w motor variable speed
- Customised housing (Eg Brackets & pre-punched mounting holes for ease of assembly)
- Data & Power looms available

### **AVAILABLE SIZES:**

- 241 x 181 (9 x 7)
- 241 x 203 (9 x 8)
- 270 x 203 (10 x 8)
- 270 x 270 (10 x 10)

The axial flux motor is positioned inside a heavy duty blower wheel, providing uniform airflow. This improves heat transfer, reduces hot spots and reduces pressure drop across the appliance. Its shaft-less rotor system allows the impeller to be hub-less.

### BENEFITS OF THE DEC STAR™ INCLUDE :

- Cooling: IC411
- Improved system efficiency
- Compact design reduces shipping and warehousing costs
- Reduced total unit weight of up to 3.6kg or 33%

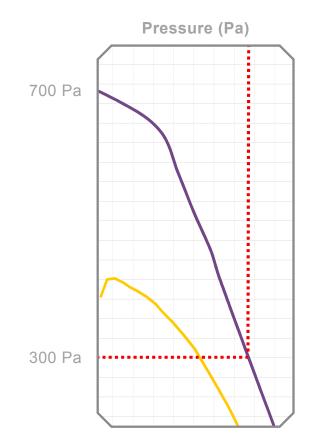


# **DEC STAR™ VS PSC POWERED BLOWERS**

When compared to an equivalent blower fitted with a P.S.C. induction motor, DEC Star™ delivers energy savings of up to 25% whilst reducing speed by up to 20% for the equivalent operating point.

DEC Star's unique design enables the system to operate at significantly higher static pressure.

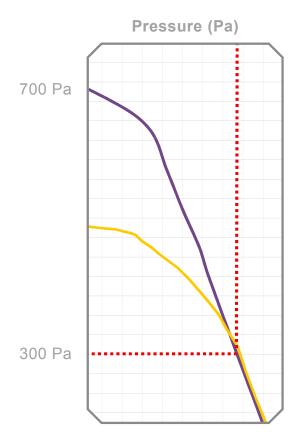




# **DEC STAR™ VS EC POWERED BLOWERS**

DEC Star<sup>™</sup> provides performance and efficiency benefits in excess of EC powered fans, including energy savings, reduced operating speed for the same duty and the ability to operate in systems with higher static pressures.





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REGAL

#### APPLICATION CONSIDERATIONS

The proper selection and application air system products and components, including the related area of product safety, is the responsibility of the customer. Operating and performance requirements and potential associated issues will vary appreciably depending upon the use and application of such products and components. The scope of the technical and application included in this publication is necessarily limited. Unusual operating environments and conditions, lubrication requirements, loading supports, and other factors can materially affect the application and operating results of the products and components and subtrained is selfiliates with respect to the use of products and components is given in good faith and without charge, and Regal assumes no obligation or liability for the advice given, or results obtained, all such advice and review being given and accepted at customer's risk. For a copy of our Standard Terms and Conditions of Sale, Disclaimers of Warranty and Limitation of Liability, please contact Customer Service at 1300 888 853 or visit www.regalaustralia.com.au. These terms and conditions of sale, disclaimers and limitations of liability apply to any person who may buy, acquire or use a Regal Beloit Australia Pty Ltd product referred to herein, including any person who successful distributor of these branded products.

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