

Customer Day ZIEHL-ABEGG s.r.o.



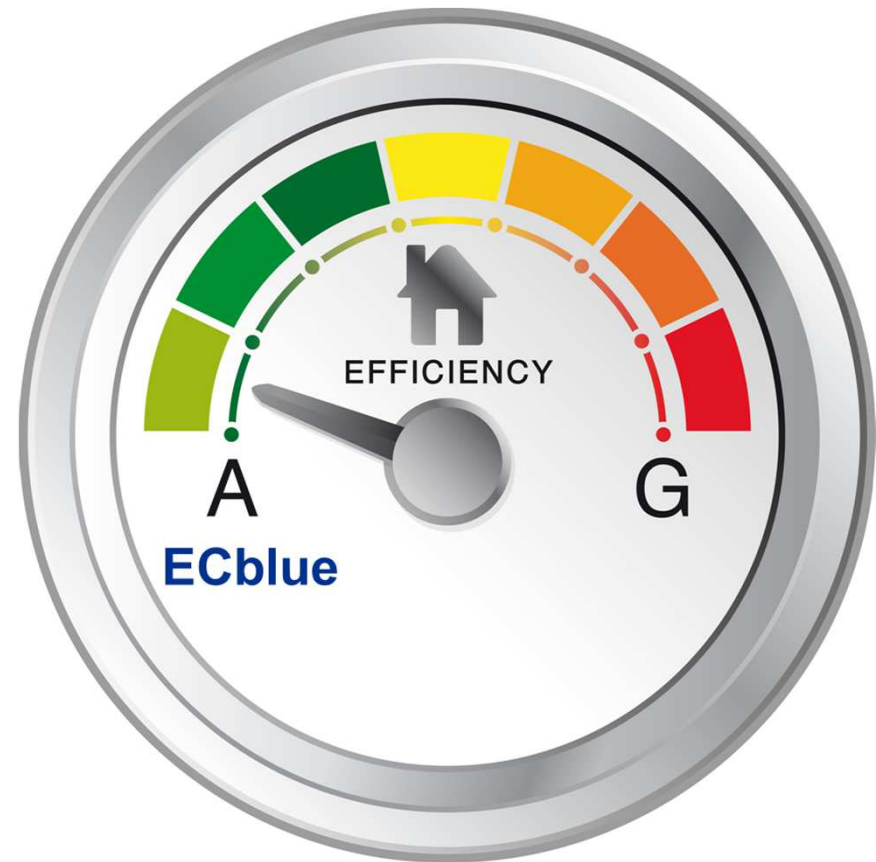
Agenda

- ECblue Product Overview
- NEW ECblue solutions to optimize your system
- ECblue Agriculture
- Control Options for ECblue

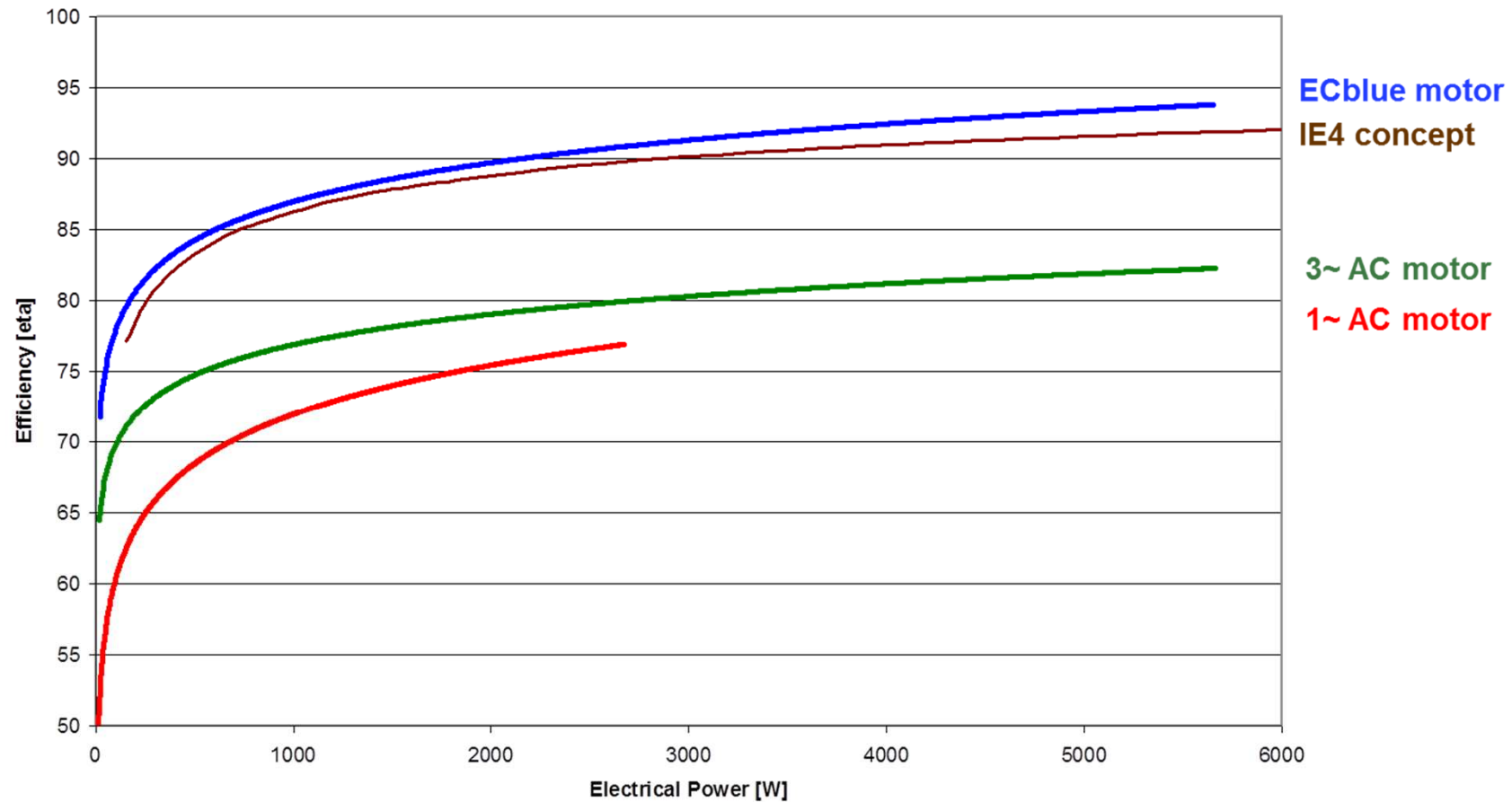
Why ECblue?



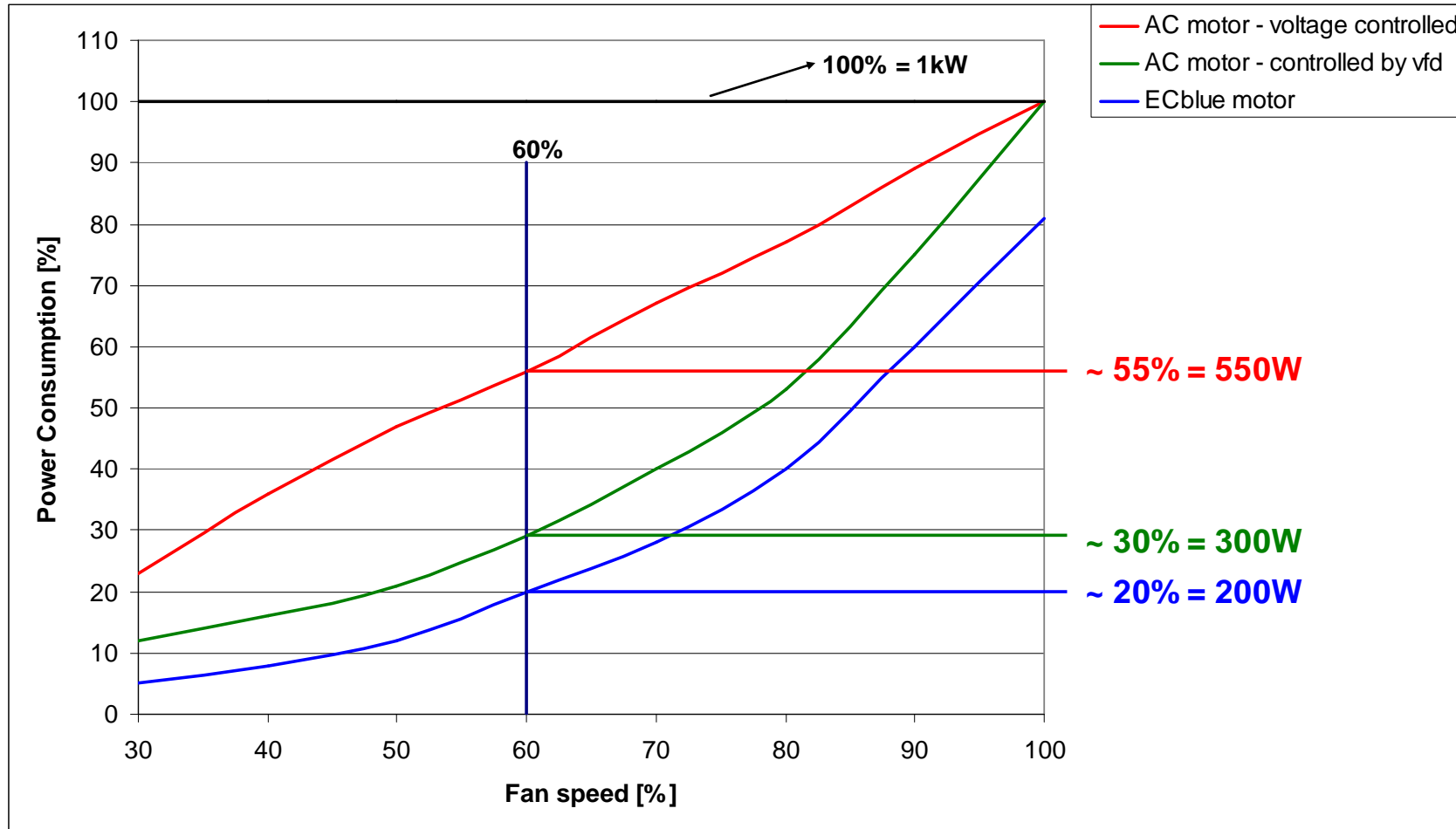
Energy Efficiency Regulations



ECblue



ECblue



ECblue

Best System Efficiency = Best Motor + Best Impeller?

$$\mathbf{\eta_{System} = \eta_{Electronic} \times \eta_{Motor} \times \eta_{Impeller}}$$

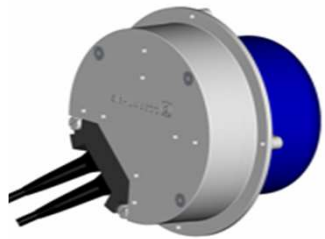
Right, but....

...Peak Points of efficiency have to match to each other.



ZPlus
**–System competence made
by ZIEHL-ABEGG**

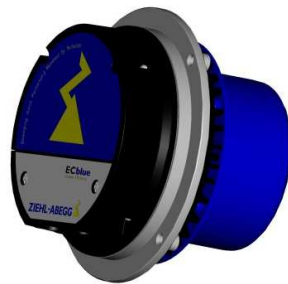
ECblue Motorange



EC074

P1 <235W

1~ 200...277V 50/60Hz



EC090

P1 <500W

1~ 200...277V 50/60Hz



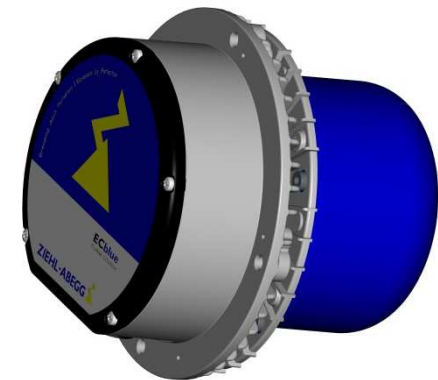
EC116

P1 <1,3kW

1~ 200...277V 50/60Hz

P1 <4,0kW

3~ 380...480V 50/60Hz



EC152

P1 <6,0kW

3~ 380...480V 50/60Hz

EC090 –New Generation-



EC090 IP20 „Cleanroom“

Technical Data:

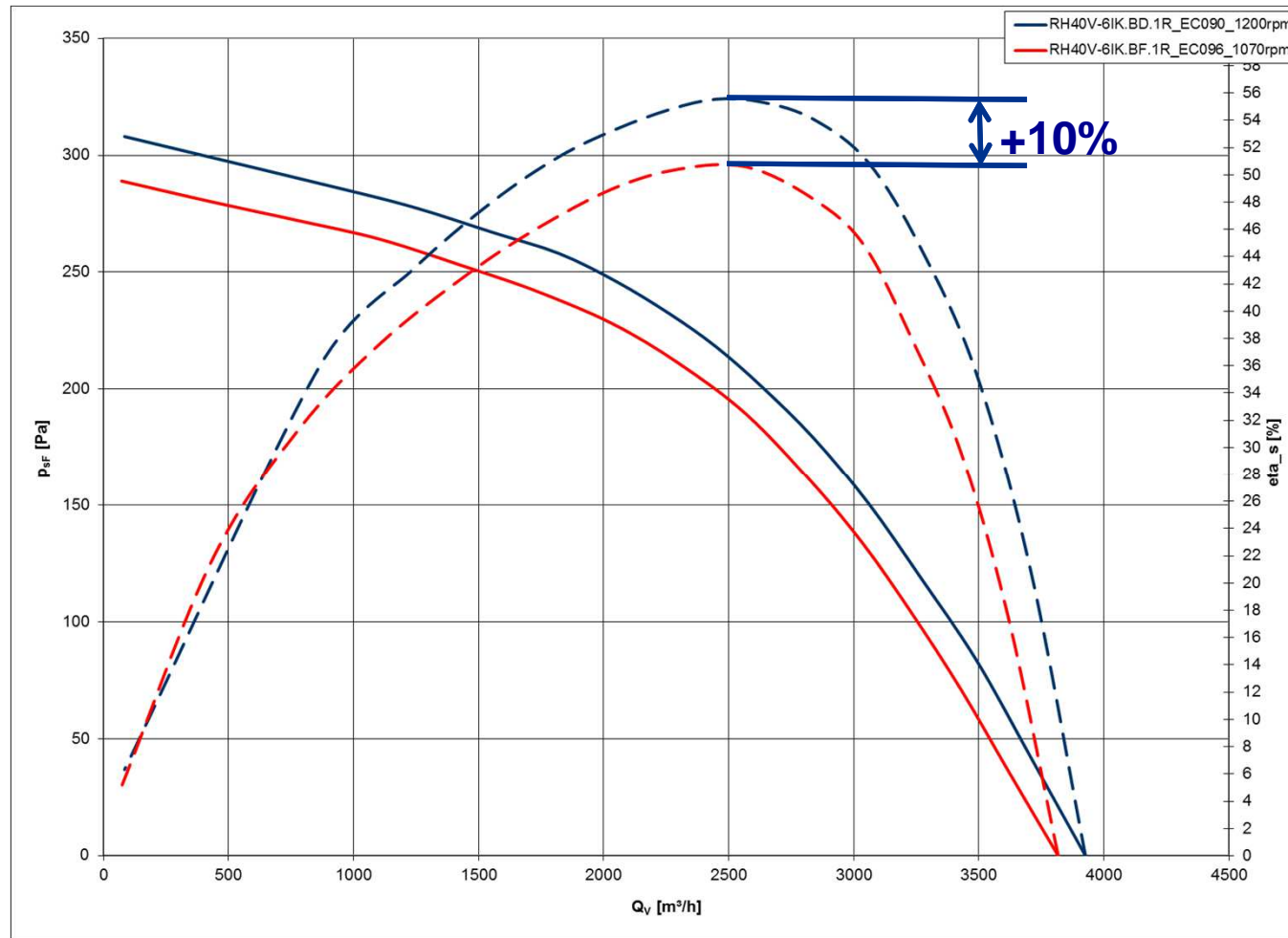
- 1~ 200...277V 50/60Hz
- P1 max. ≤ 500W
- Control mode: Modbus with auto addressing
- Certifications: UL1004-7

EC090 IP54

Technical Data:

- 1~ 200...277V 50/60Hz
- 1~ 100...130V 50/60Hz
- P1 max. ≤ 500W
- Control mode: Modbus, 0-10V and PWM
- Certifications: UL1004-7, VDE60335

EC090 –New Generation-



ECblue Product Range Axial



FE2owlet 300mm – 1250mm

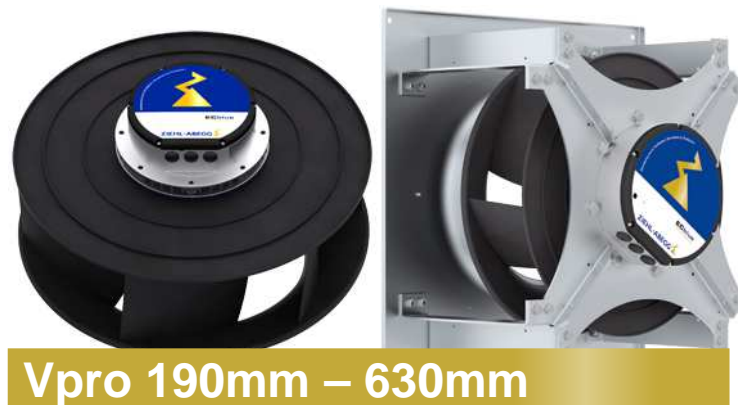
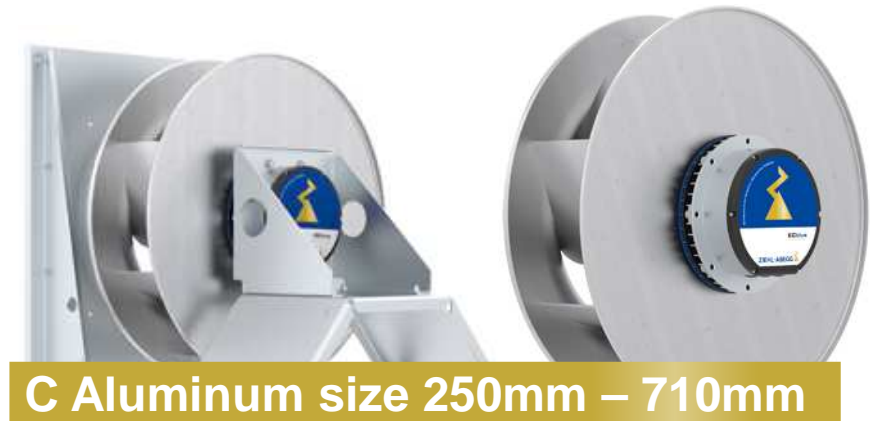


ZAplus 450mm – 910mm



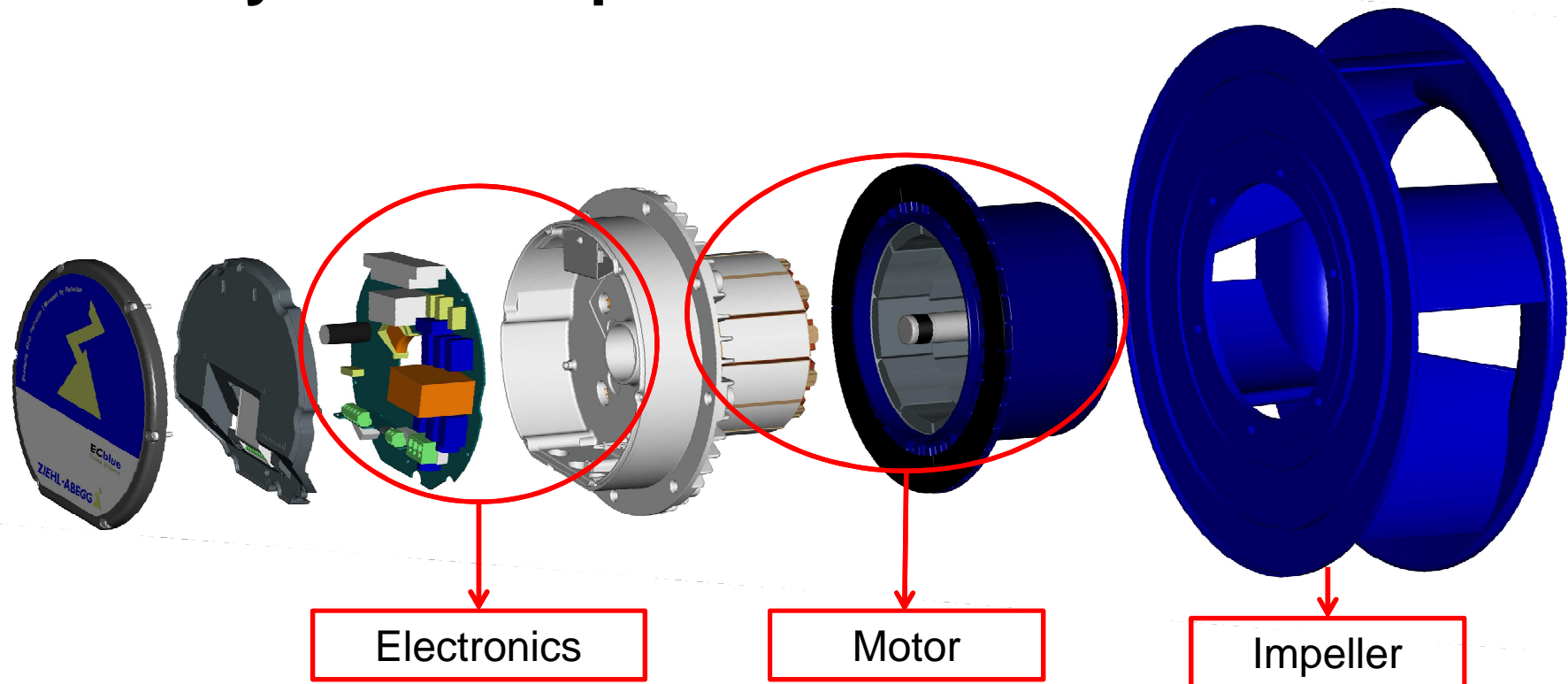
FFowlet 500mm – 910mm

ECblue Product Range Centrifugal



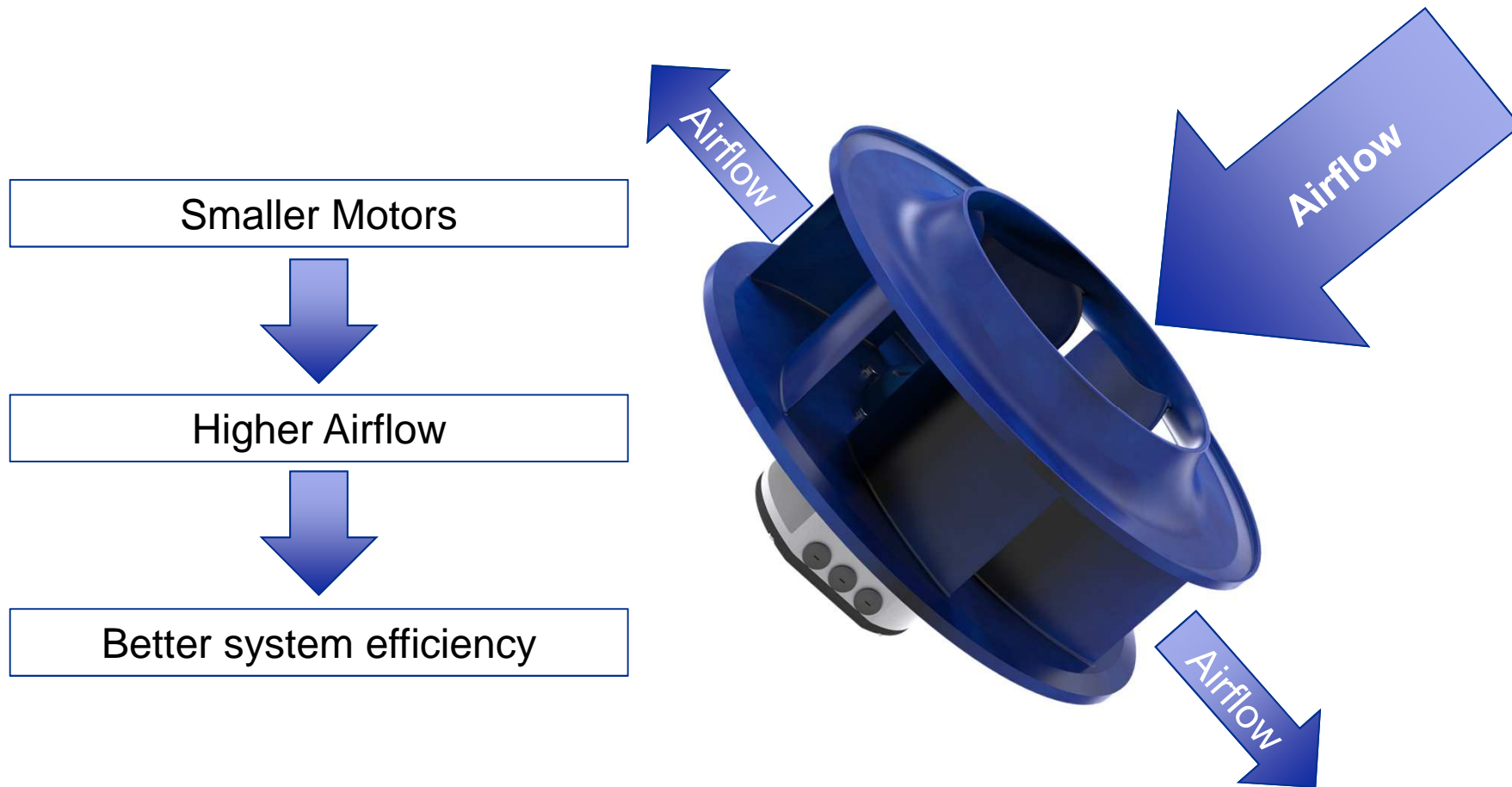
NEW ECblue solutions to optimize your system

ECblue System components



Limiting system component depends on application!

NEW ECblue solutions to optimize your system

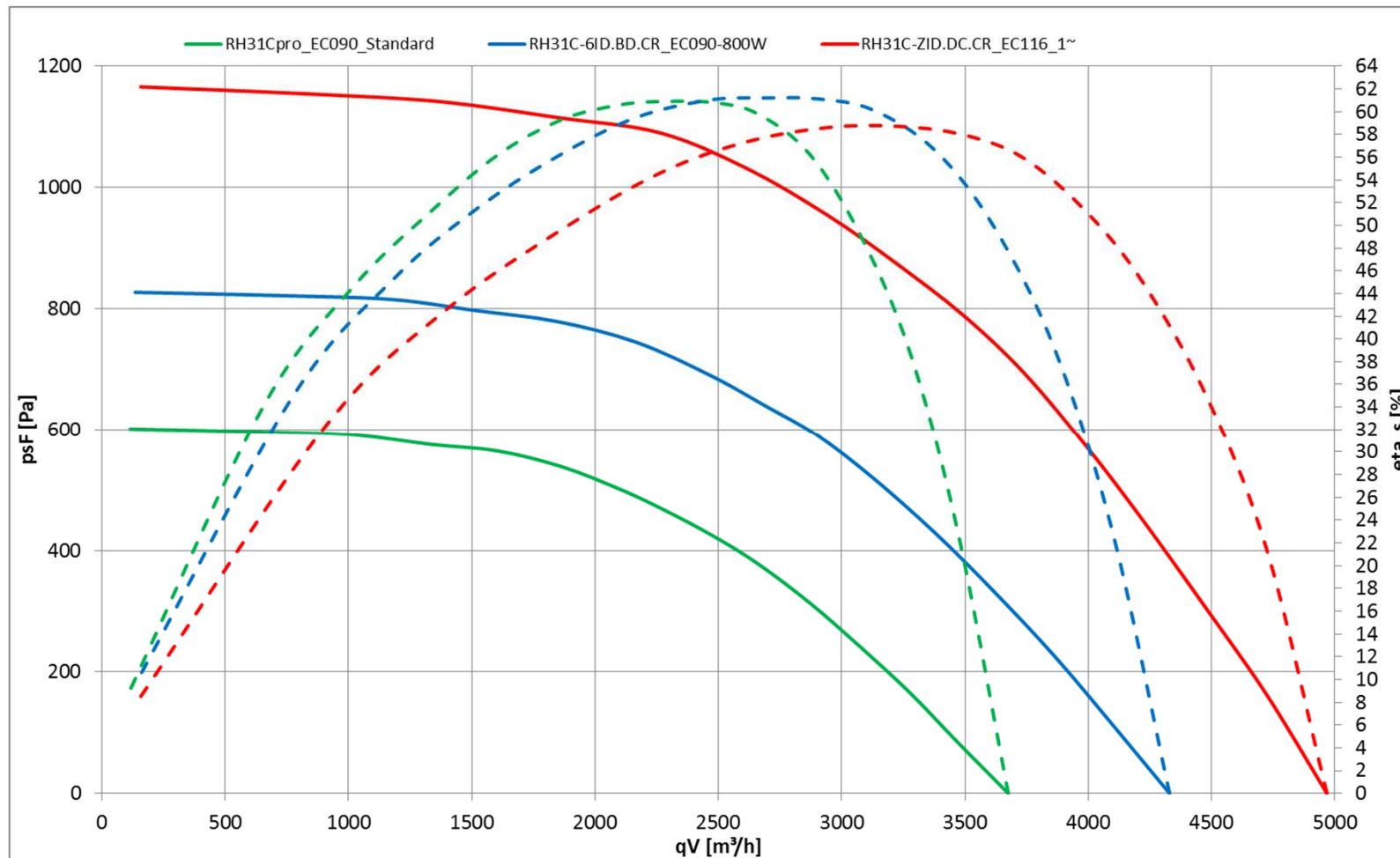


NEW ECblue solutions to optimize your system

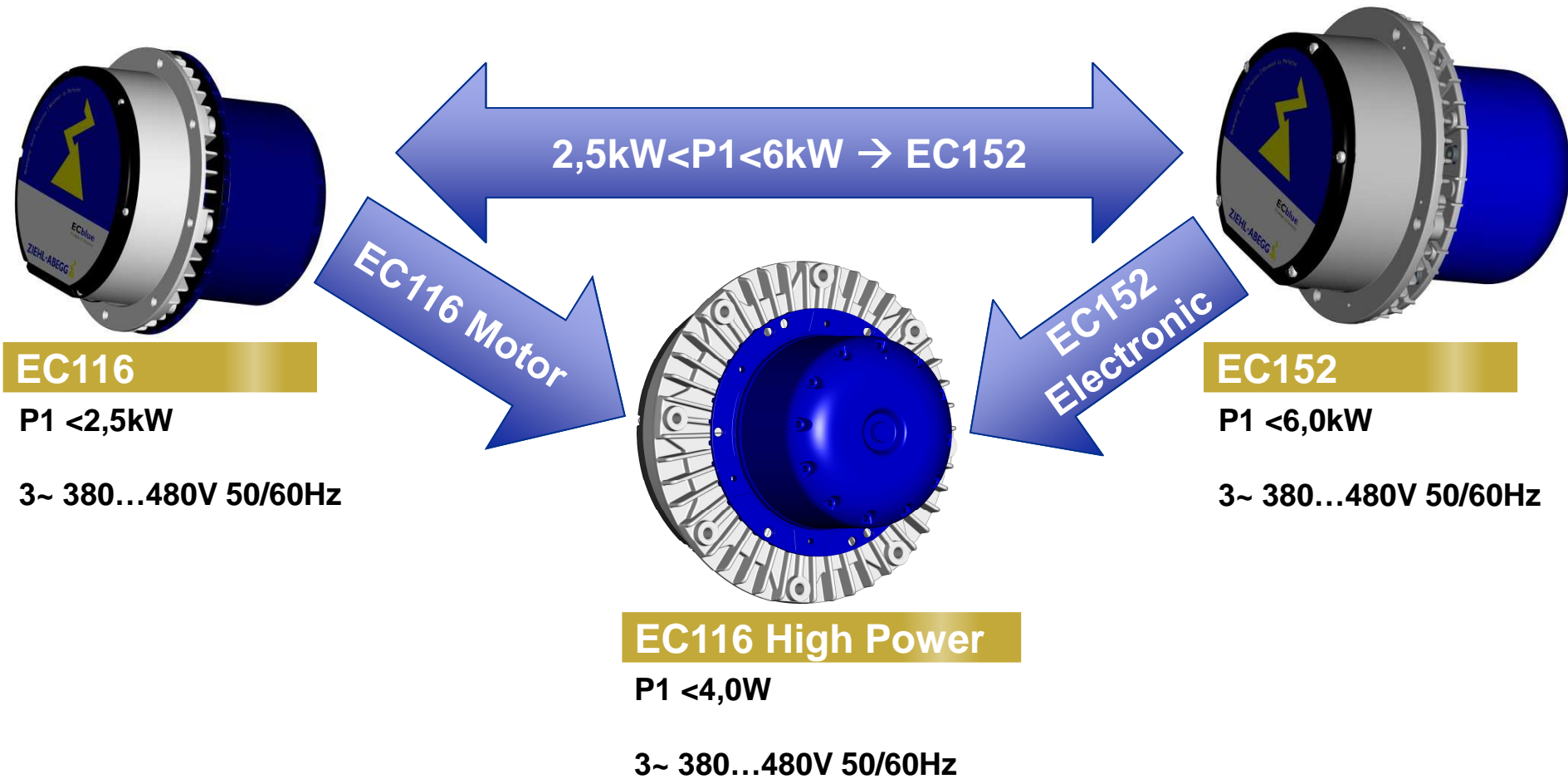


Product Launch Q1/2015!

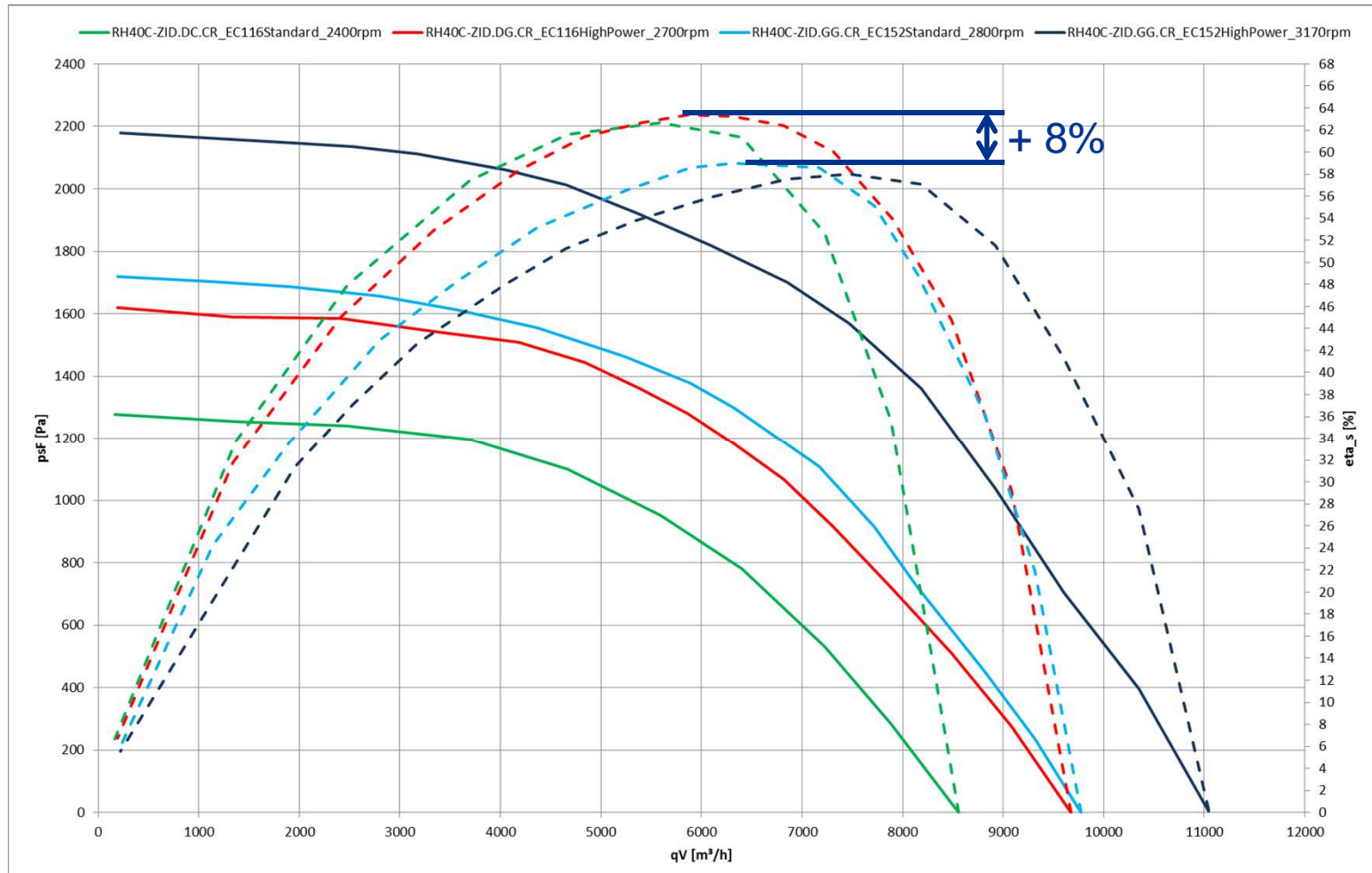
NEW ECblue solutions to optimize your system



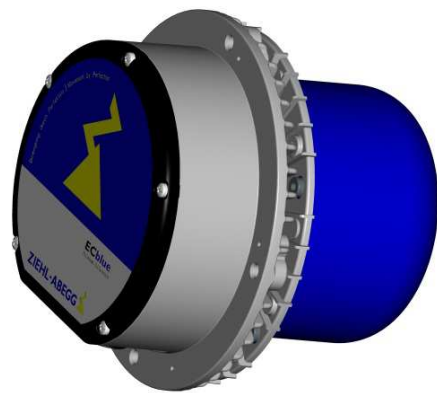
NEW ECblue solutions to optimize your system



NEW ECblue solutions to optimize your system



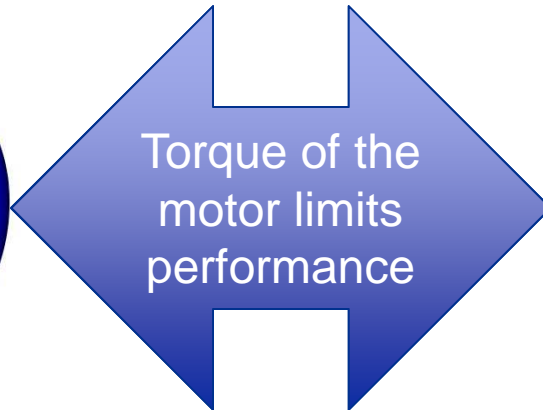
NEW ECblue solutions to optimize your system



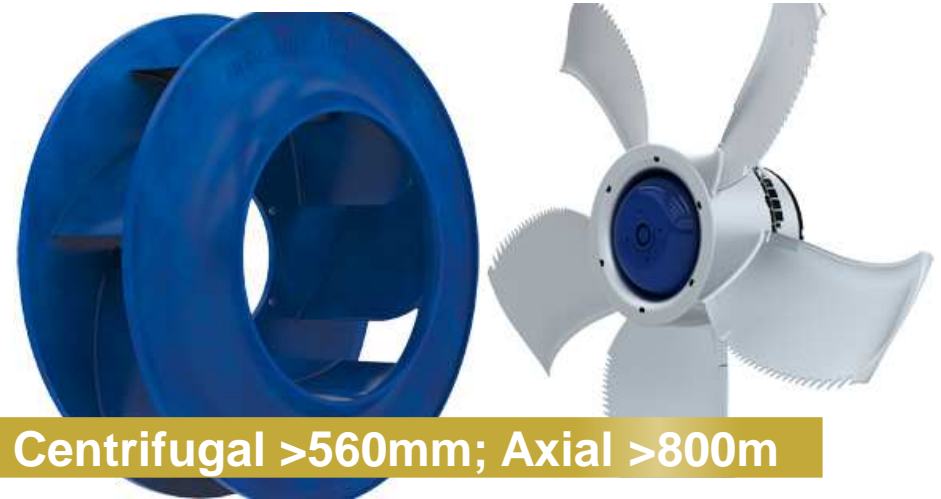
EC152

P1 <6,0kW

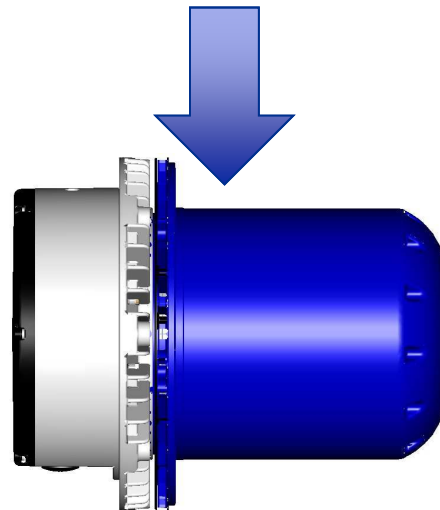
3~ 380...480V 50/60Hz



Torque of the
motor limits
performance



Centrifugal >560mm; Axial >800m

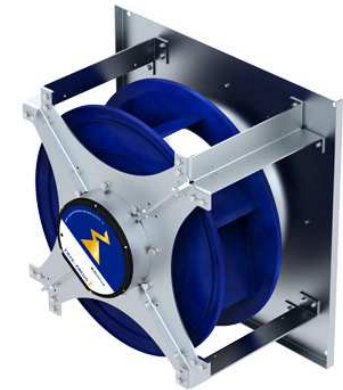
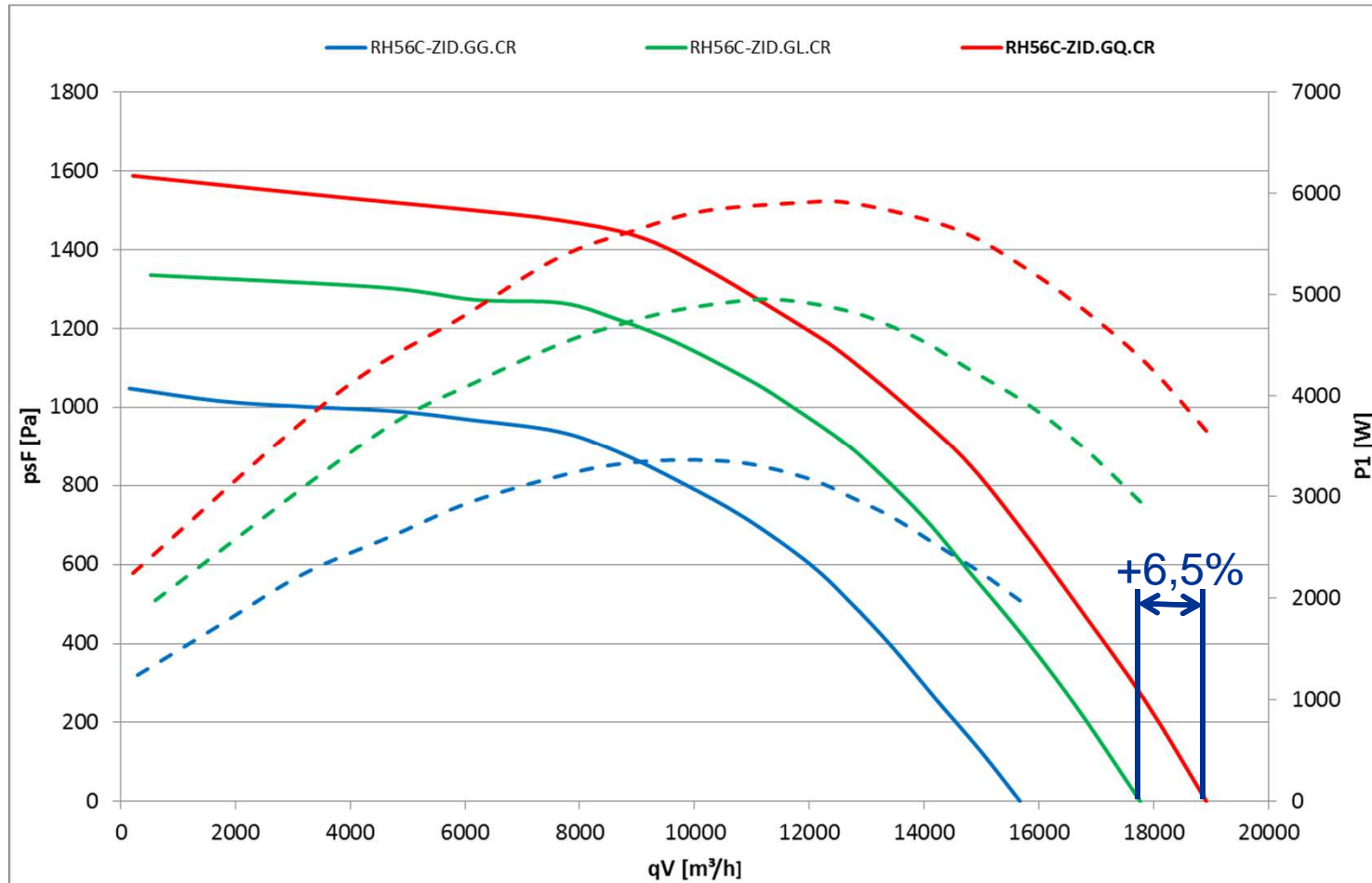


EC152-XL

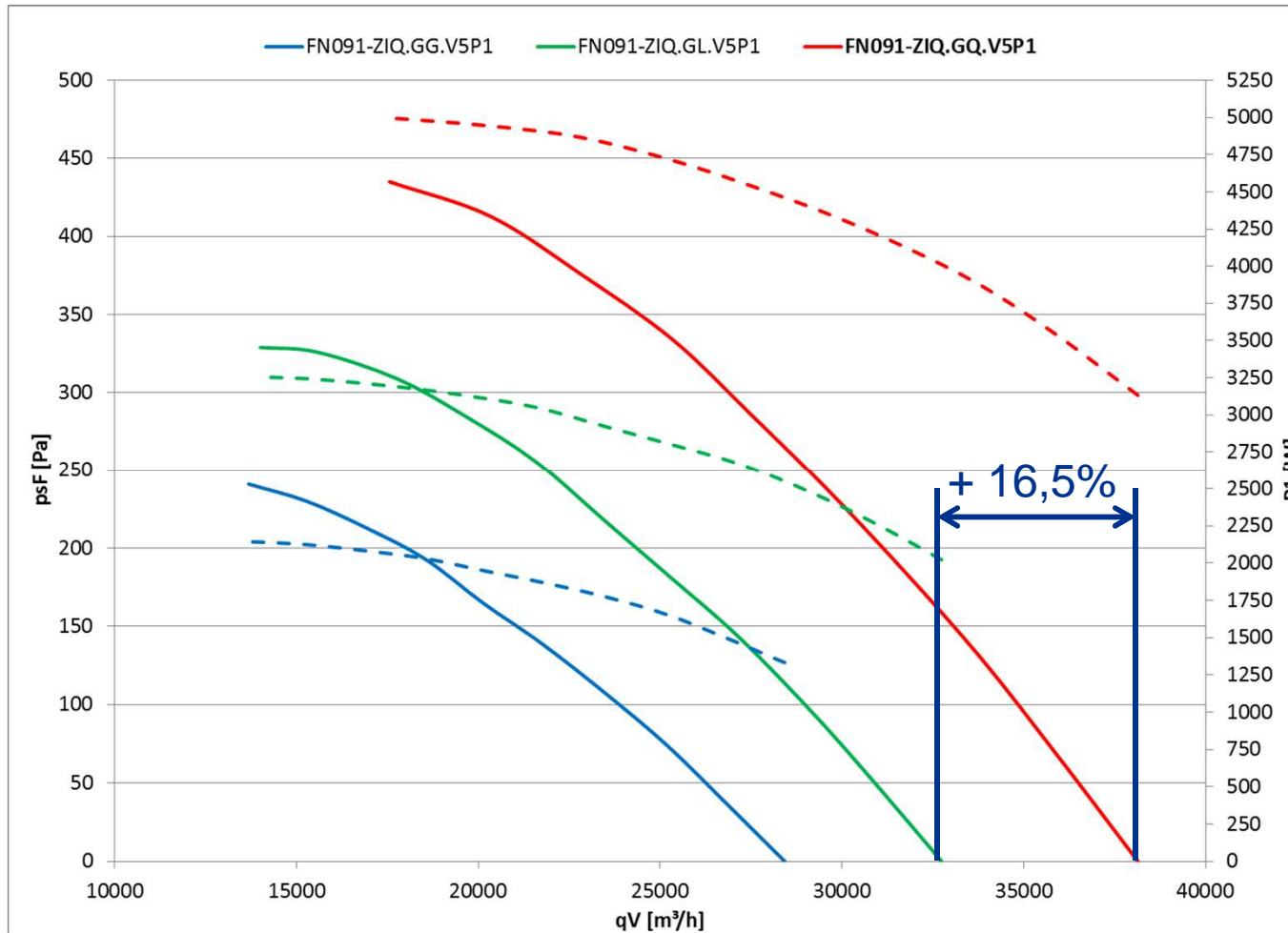
→ longer stack length

→ 25% more torque

NEW ECblue solutions to optimize your system



NEW ECblue solutions to optimize your system



**Product launch
High Power Axial
fans Q1/2015**

ECblue Agriculture



ECblue Agriculture

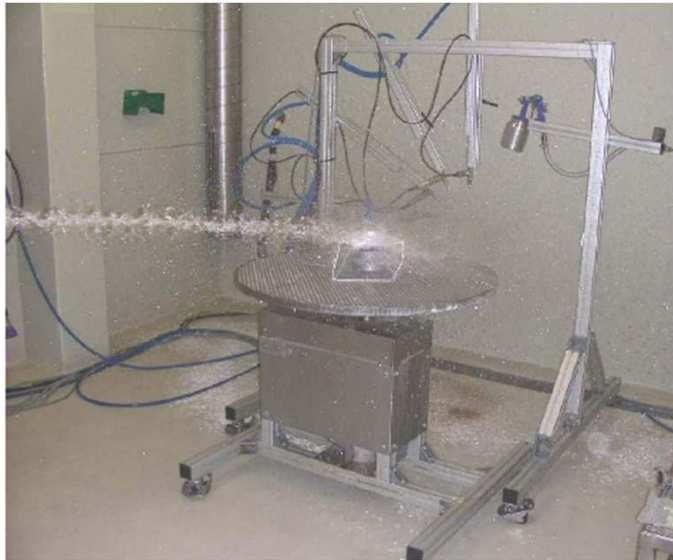


Bild 3: Muster während der IPX6 Strahlwasserbelastung

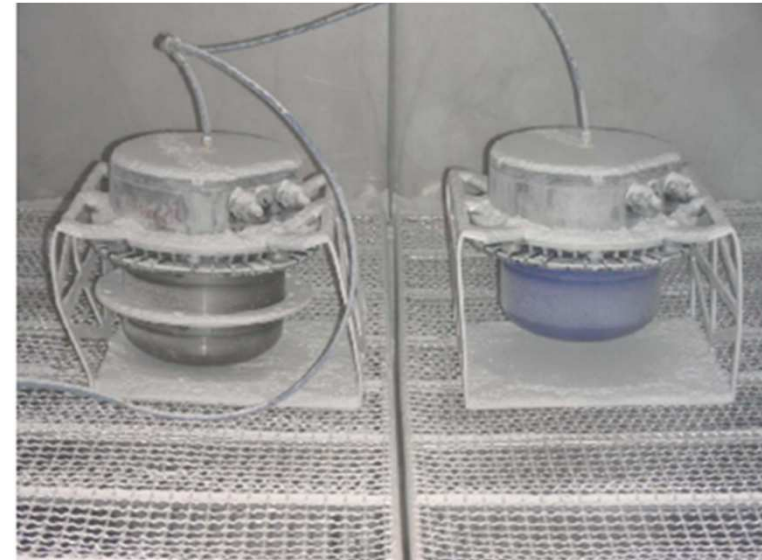


Bild 2: Muster nach 8 h Staubbelastung

Approval process:

- IP rating tests
- Tests with salty, dusty and noxious gas
- 3 years real life test before market launch!!

ECblue Agriculture



Encapsulation of electronics
to protect against...

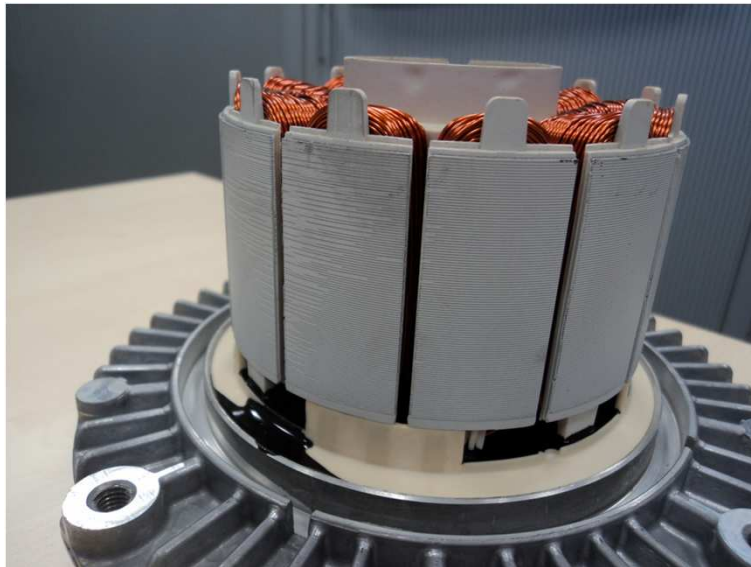
... humidity
... dust
... vibration

... and much better heat
management !

IP65 rating for electronic housing!

ECblue Agriculture

IP54 Motor



IP55 Motor



**Extra Actions for Agriculture Application...
...windings completely encapsulated**

→ IP55 motor as standard in agriculture

ECblue Agriculture



Agriculture one of the toughest applications for ZIEHL-ABEGG products!
ZIEHL-ABEGG have more than 15 years experience with EC technology in agriculture.

ECblue qualified and approved for agriculture!!!

ECblue Control Options

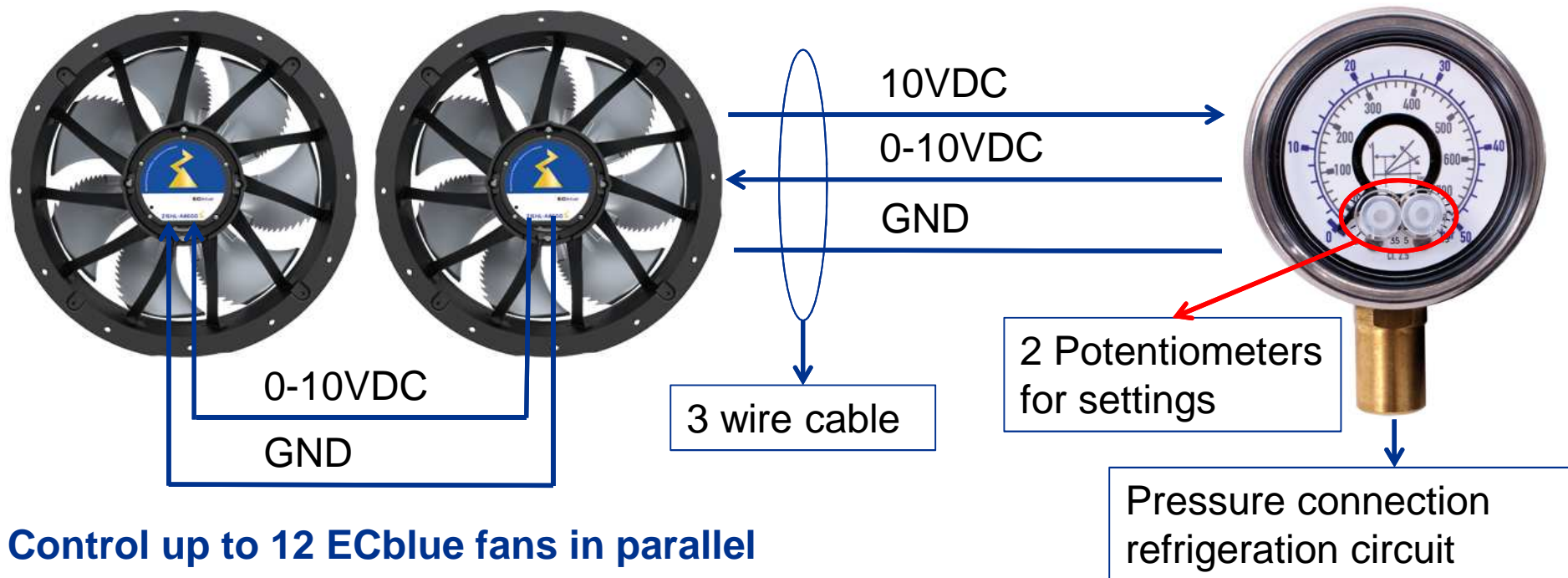


**ZIEHL-ABEGG offers for every application
the perfect control option!**

ECblue Control Options

The easiest way to control pressure of refrigeration circuit via 10VDC.

→ The ZIEHL-ABEGG CBG Sensor Control Module

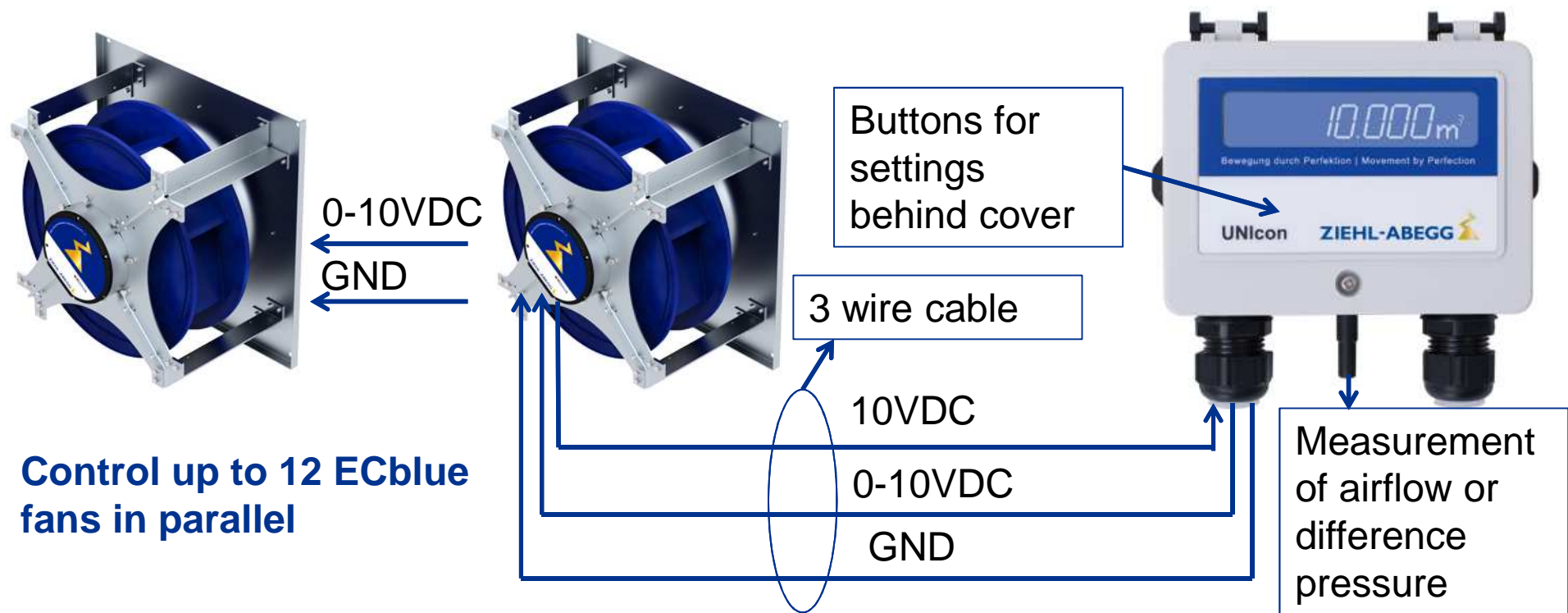


Control up to 12 ECblue fans in parallel

ECblue Control Options

The easiest way to control difference pressure or airflow via 10VDC.

→ The ZIEHL-ABEGG CPG Sensor Control Module



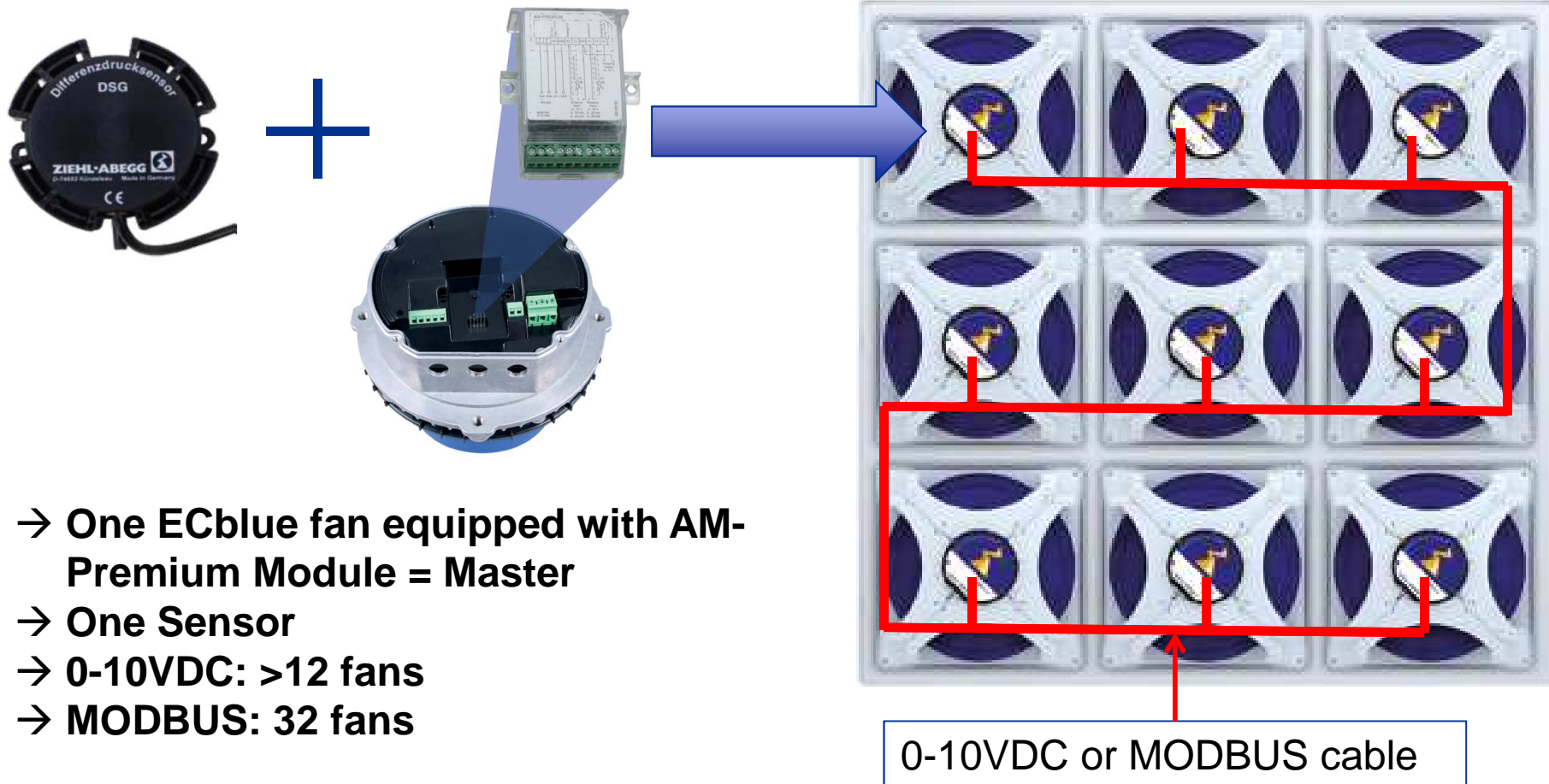
ECblue Control Options



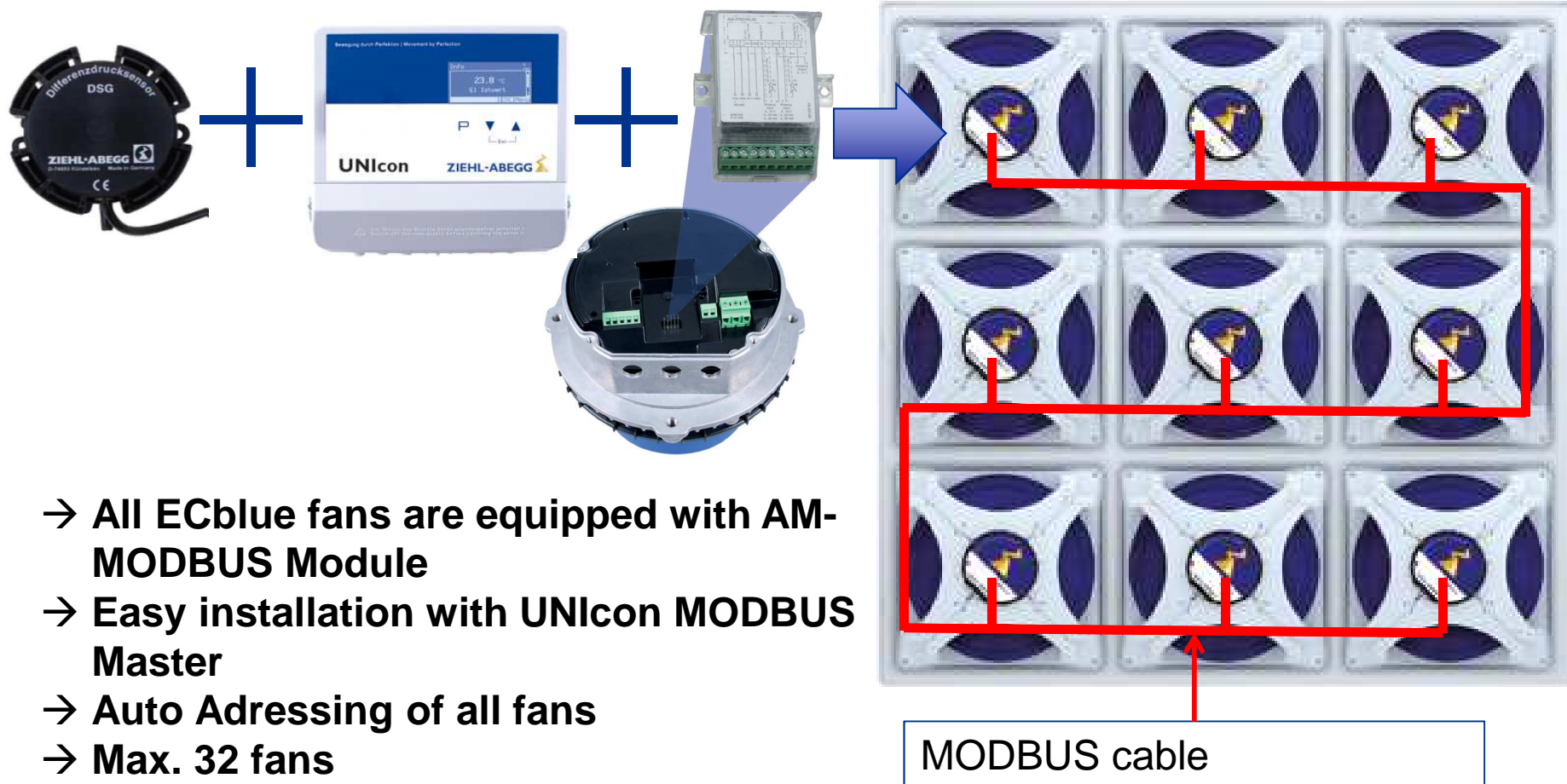
CBG and CPG are a very easy solution to control the speed of ECblue fans via 0-10VDC!

If you need more, ZIEHL-ABEGG have the perfect solution!

ECblue Control Options



ECblue Control Options



ECblue Control Options

What does Auto Addressing mean?



- **MODBUS Auto Addressing function –ZIEHL-ABEGG patent**
- **Start Auto Addressing with UNIcon MODBUS Master –All ECblue fans will be addressed.**
- **Easy to extent a MODBUS system**
- **Easy to replace a motor in the MODBUS system**
- **Supports you, if you check the MODBUS cabling**

ECblue Control Options



ZIEHL-ABEGG offers you the perfect control solution for your application!!!



The Royal League



Thank you and see you again at ZIEHL-ABEGG

Movement by Perfection

