

# Connecting cost efficiency and performance

Oil-injected screw compressors fixed and variable speed

DRD 60-100 IVR PM, DRE 100-120 IVR PM, DRD75-100 and DRE100-120







SIMPLICITY



# Experience the new DRD 60-100 IVR PM, DRE 100-120 IVR PM, DRD75-100 and DRE100-120 screw compressors

### Connecting cost efficiency and performance

The new range offers you excellent performance, plug-and-play installation and the reliability you can expect from the Ceccato brand. The advanced connectivity adds intelligence to your compressor, allowing you to decrease operating costs further while increasing productivity.





### Ready to discover our new compressors?



### Improved performance

Built with the newest tecnology, our compressor range features IE4 motors which are the best in order to reach high performance and energy cost savings.



### **Known Ceccato reliability**

Our range has always been valued for their excellent reliability. This is also something you can expect from the new range, plus that little bit more.



### Stay connected

The ES4000T controller gives you insight into the performance of your compressed air system – remotely and at any given moment – allowing you to make smarter use of your resources.



### Main features



#### New air end

- The in-house designed compression element, combined with an IE4 efficiency motor, comes with increased performance, lower compression temperature and high reliability.
- The Free Air Delivery is increased up to +4% and power consumption is reduced by up to -3% thanks to the improved product selection and our in-house designed compressor element.
- Fit for environments with ambient temperatures of up to 46°C due to superior component design.



#### **ES4000T**

- An intuitive and easy-to-operate control system gives you an insight into the performance of your compressed air system
  remotely and at any given moment.
- Controls the unit by maintaining the pressure between programmable limits.
- Protects the unit thanks to the programmed shutdown warnings.
- Maintains the unit thanks to our programmed service time interval meter, informing the customer when service is due.



### Easy installation and service

- Effortless maintenance thanks to the easily removable panels and quick access to all service parts.
- Low maintenance costs.



### Silencing baffle

- Guarantees reduced noise levels.
- Even more important when operating the compressor close to the point-of-use.



### In-house designed components

 The spring-controlled unloader valve includes a more precise mechanism that allows to release excess pressure in a more reliable way.



### Air quality

- A water separator drain comes as standard on units with an integrated dryer.
- Removes the condensate formed in the cooler as the compressed air is cooled.
- Improves the air quality.



#### **Integrated dryers**

- The whole Industrial range is now available with integrated dryers.
- Internal Water Separator integrated in air cooler for machines with integrated dryer.



#### High efficiency motor

- IE4 Super Premium efficiency class.
- Oil-cooled PM aircooled induction.
- IP66 protection against dust ingress.
- Introducing the 90kW PM machine will complete the PM range.



# Generous and smart cooling system

- Bigger air oil coolers have been selected, resulting in a high cooling capacity, maximum cooling efficiency and increased reliability.
- The large fan provides forced ventilation and conveyed flows, improving the air flow and reducing operating temperature for enhanced reliability.



### 10 reasons to choose DRD PM / DRE PM

The DRD PM / DRE PM range is the result of dedicated investments in R&D and in-house developed key components. By maximizing performance, energy efficiency and reliability of each individual component we have ensured that the final result is our most innovative compressor to date.



### 1. Interior Permanent Magnet (iPM) motor

- IE4 Super Premium Efficiency.
- Oil-cooled, optimal cooling at all speeds.
- IP66, highest possible protection against dust ingress.
- In-house designed.

# 2. New generation screw elements

- Superior performance and efficiency.
- Improved rotor profile, reduced pressure losses.
- In-house designed and produced in Belgium.

### 3. Integrated dryer

- Enhanced air quality
- Condensate removal at the source, minimizing pipework corrosion
- Reduced footprint, up to 1/3 of a standalone dryer
- Single service visit, reducing maintenance cost
- No installation cost





### 4. ES4000 touchscreen controller

- Easy-to-use full-color graphical display with touchscreen.
- Integrated connectivity helps optimizing and save energy.
- In-house designed.

### 5. Imperium - Variable Speed Technology

- Robust industrial design with IP5X protection.
- Tailor-made for screw compressor applications.
- In-house designed.



### 6. Proven inlet valve

- Optimizing the inlet flow to the screw element.
- Maintenance-free, low total cost of ownership.
- In-house designed.

### 7. Solid inlet baffle

- Filters mats pre-filter incoming air, ensuring superior air quality.
- Highly efficient and low noise axial fan as standard.

### 8. Casted oil separator vessel

- Integrated minimum pressure valve (MPV) eliminates risk of leakage.
- Designed for optimal oil separation and low oil carry over.







### 9. Quality filtration

- Protecting internal components and increasing lifetime.
- Heavy duty air/oil/oil separator filters with long lifetime for low total cost of ownership.

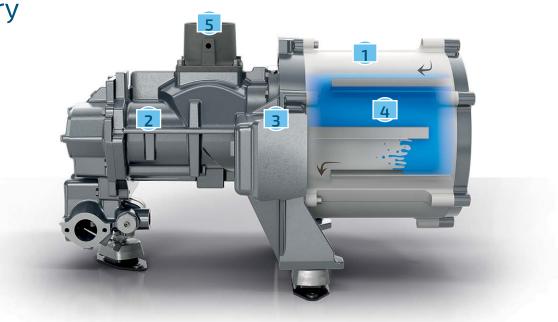
### 10. Separate coolers

- Separate oil and air cooler for high-quality cooling and long lifetime of the coolers.
- Gliding rails for easy and safe removal.
- Easy access for cleaning.
- Integrated water separation for coolers used on machines with integrated dryers.





Revolutionary drive train technology



Improved energy efficiency saves you money

- In-house designed iPM motor (1) with IE4 Super Premium Efficiency.
- New generation in-house designed screw elements (2), with improved efficiency.
- Integrated direct drive transmission (3) for minimal losses.
- Smart inlet valve (5) optimizes the inlet flow and improves efficiency.

Increased reliability extends lifetime

- iPM motor (1) rated IP66, premium protection against dust and water ingress.
- Globally renowned screw elements (2), proven in thousands of installations.
- Optimal cooling at all speeds and conditions thanks to oil-cooling principle (4) of the iPM motor (1).

Maintenance-free design minimizes downtime and improves your productivity

- No (re)grease(ing) of the motor (1) bearing needed.
- Coupling-free direct drive design (3), no maintenance needed.
- Smart inlet valve (5), no maintenance needed.





# A big leap in energy efficiency

### Why energy efficiency?

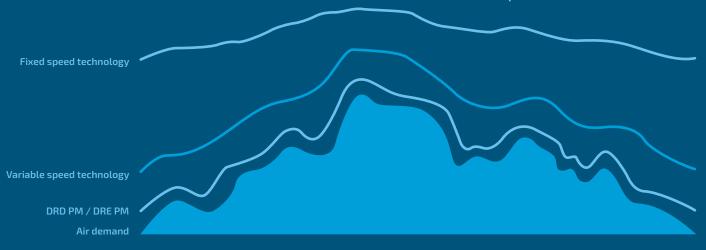
Energy costs represent about 70% of the total operating cost of your compressor over a 5-year period.

## Why variable speed compressors?

By matching the air supply to the air demand, unload losses are avoided, and energy costs reduced on average by 30%.

## Why invest in DRD PM / DRE PM?

Imperium variable speed technology combined with iPM motor technology and evolved the energy efficiency of variable speed compressors to a new level, resulting in energy savings of up to 45%.



3% Installation 77%

**Energy consumption** 

45%

Fixed speed technology

8% Service 12%

### How much energy could you save in your existing compressor installation?

Contact us for an energy audit. We will measure the air demand and energy consumption of your existing installation and generate a detailed report at the end. Based on your specific situation we can simulate and show how much your energy costs would reduce with DRD PM / DRE PM. If you would decide to invest in DRD PM / DRE PM, you can expect a typical payback of 1-2 years.



# Equipped with the ES4000 touch controller bringing you a next-level, rugged and intuitive display.

The new ES4000T is an incredible state-of-the-art compressor controller. But more than this, it means ease of use, peace of mind, and performance optimisation. In combination with our ICONS Intelligent Connectivity System, the ES4000T allows you to improve both the reliability and efficiency of your production process.

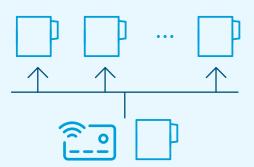
- Big, easy to use 4" touch control with a simplified lay-out
- The compressor is protected with sensors to immediately alert you when something is wrong
- Clear overview of all parameters and service intervals



- Plan maintenance interventions at the right time, guarantee system uptime and eliminate breakdown risks
- Designed for intuitive use in heavy duty environments

### **ICONS**





# Increased uptime, Powered by ICONS

With the Intelligent CONnectivity System (ICONS), data and insights are delivered straight from your machines to your computer, tablet or smartphone.

The new range of compressors can be fully connected.

### **ECOntrol6i**

The optional ECO6i controller allows you to optimize both workload and energy consumption.

Do you operate more than 2 compressors? The ES4000T can act as a master controller thanks to its built-in **ECOntrol6i** functionality. Reduce service costs by evenly distributing running hours over your compressors and save energy by using one pressure band for your entire compressor room.



## Built-in options



### Air Quality

### Integrated water separation drains

Ensures efficient condensate removal.

### Tropical thermostatic valve

For use in humid and hot conditions.

### Freeze protection

Guarantees a certain oil temperature in the oil vessel to avoid condensation.

### Integrated refrigerant dryer

Removes water condensate from the compressed air, minimizing the risk of product spoilage in your application.

### **Energy Saving**

### Integrated energy recovery

Recovers up to 75% of the heat energy formed during the compression process, which can be used to heat up water for boilers, showers, etc.

### ECO2i – ECO4i – ECO6i

Integrated multiple compressor control for up to 6 compressors reduces system pressure and energy consumption.



## A range of options

- Full Feature machines
- Watercooling
- Water Separation drain - Mechanical
- Integrated **Energy Recovery**
- Oil 8000h oil synthetic

(Pack only)

Test report

- Water Separation drain
  - Electronic
- Expansion Module
- Prefilter Kit
- Power duct fan - AC\*
- Oil preheater = freeze protection

- Dil 4000h oil food grade
- ▶ ECO2i
- ▶ ECO4i
- ▶ ECO6i
- Tropical **Thermostat**
- **EMC** filter
- Compressor running-L/ULsignal
  - Remote control



## Performance data

### Fixed speed DRD 75-100 and DRE 100-120

Model	Max working	Reference working pressure	Free air delivery @ reference conditions			Motor power		Noise level	Cooling air volume	Weight		Compressed
	pressure									STD	PLUS	air output diameter
	bar(g)	bar(g)	m³/h	l/s	cfm	kW	Нр	dB(A)	m³/s	kg	kg	
DRD75	7.5	7	626	174	369	55	75	71	2.62	1123	1431	2 1/2"
	8.5	8	598	166	352	55	75	71	2.62	1123	1431	2 ½"
	10	9.5	536	149	316	55	75	70	2.62	1123	1431	2 ½"
	13	12.5	475	132	280	55	75	70	2.62	1123	1431	2 ½"
DRD100	7.5	7	806	224	475	75	100	73	2.62	1189	1510	2 ½"
	8.5	8	778	216	458	75	100	72	2.62	1189	1510	2 ½"
	10	9.5	720	200	424	75	100	73	2.62	1189	1510	2 ½"
	13	12.5	623	173	367	75	100	73	2.62	1189	1510	2 ½"
DRE100	7.5	7	901	250	530	75	100	71	2.62	1284	1605	2 ½"
	8.5	8	829	230	488	75	100	71	2.62	1284	1605	2 ½"
	10	9.5	763	212	449	75	100	71	2.62	1284	1605	2 ½"
	13	12.5	662	184	390	75	100	72	2.62	1284	1605	2 ½"
DRE120	7.5	7	1021	284	601	90	120	72	3.52	1346	1672	2 ½"
	8.5	8	976	271	574	90	120	71	3.52	1346	1672	2 ½"
	10	9.5	911	253	536	90	120	73	3.52	1346	1672	2 ½"
	13	12.5	770	214	453	90	120	71	3.52	1346	1672	2 ½"

### Variable speed DRD 60-100 IVR PM and DRE 100-120 IVR PM

	Motor power		Working	Min. Free air delivery (7bar)			Max. Free air delivery								
CECCATO			pressure	7	7	7	7	7	7	9.5	9.5	9.5	12.5	12.5	12.5
	kW	Нр	bar	m³/h	l/s	cfm	m³/h	l/s	cfm	m³/h	l/s	cfm	m³/h	l/s	cfm
DRD60 PM	45	60	4-13bar	101	28	59	545	151	320	482	134	284	403	112	237
DRD75 PM	55	75	4-13bar	104	29	61	657	183	387	576	160	339	490	136	288
DRD100 PM	75	100	4-13bar	104	29	61	791	220	465	706	196	415	598	166	352
DRE100 PM	75	100	4-13bar	169	47	100	936	260	551	835	232	492	688	191	405
DRE120PM	90	120	4-13bar	169	47	100	1069	297	629	950	264	559	767	213	451

	Noise	Cooling	Wei	Compressed		
CECCATO	level	air volume	STD	PLUS	Compressed air output diameter	
	dB(A)	m³/s	kg	kg		
DRD60 PM	70	2.62	956	1264	2 ½"	
DRD75 PM	70	2.62	966	1274	2 ½"	
DRD100 PM	72	2.62	986	1307	2 ½"	
DRE100PM	71	2.62	1119	1440	2 ½"	
DRE120PM	72	3.52	1132	1458	2 ½"	

## Ceccato's heritage

Ceccato Aria Compressa is a product company that specializes in the design, production and sales of screw compressors and air treatment products like dryers and filters, within the Atlas Copco Group.

Atlas Copco is a world-leading business in more than 180 countries, a truly global company, that serves customers with its innovative compressors, vacuum solutions and air treatment systems, construction and mining equipment, power tools and assembly systems, with more than 44,000 committed employees in the Group who contribute to the success of the company.

Since 1936 the Ceccato name has represented a very simple and reliable product range, designed for an extensive variety of applications. The stationary electric driven compressors produced by Ceccato have been largely distributed worldwide without any restrictions of ambient conditions or locations. The range of compressors is integrated with a wide selection of dryers and accessories in general, to make the Ceccato range of products an interesting business opportunity for any distributor worldwide. The attitude of Ceccato is to design and produce compressors according to the real market needs, in order to become a real reliable partner for any company who wants to establish solid and long-term relationships.



# Contact your local representative:

www.ceccato.com



### **CARE**

Care is what service is all about: professional service by knowledgeable people, using high-quality original parts.

### **TRUST**

Trust is earned by delivering on our promises of reliable, uninterrupted performance and long equipment lifetime.

### **EFFICIENCY**

Equipment efficiency is ensured by regular maintenance. Efficiency of the service organization is how Original Parts and Service make the difference.

