CECCATO
ARIA COMPRESSA

IVR from 40 to 240 HP

Variable-speed compressors

TECHNOLOGY YOU CAN TRUST

IVR for Environment

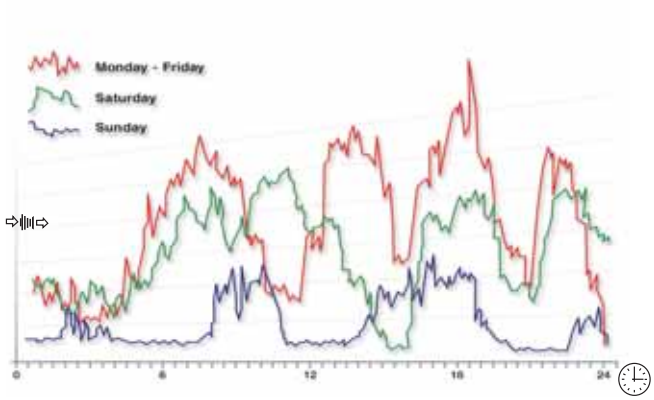
Our extensive experience of compressed air has taught us that, regardless a compressor size:

- the amount of compressed air needed varies according to consumption peaks,
- greater the variation in compressed air consumption, more energy is consumed per liter of air produced,
- most installations require two or three compressors of different sizes.

Variations in the amount of compressed air needed causes constant loading and emptying of the compressors or choked intake.

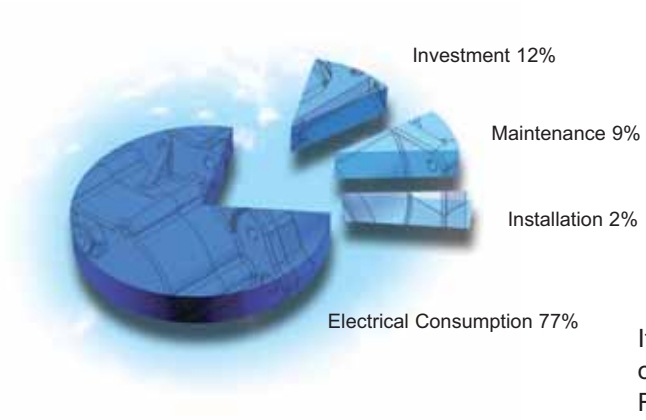
- If a compressor operates empty, energy is wasted while no work is performed.
- If a compressor operates with choked intake, it consumes more energy than would be required to produce the same amount of compressed air.

The amount of compressed air needed during a given day or week varies depending on production.



These variations may be more or less intense. The more intense they are, the more energy is consumed when the compressor operates empty.

Only producing the air needed for the production cycle is an intelligent way to cut consumption and power costs.



It is well-known that in 3-5 years of operation, over three quarters of the overall cost of a compressor is ascribable to electricity consumption. REDUCING electricity consumption means:

• Lower power costs = SAVINGS

• Lower power consumption = ENVIRONMENTAL FRIENDLINESS

Energy saving is the best possible investment for improved future performance.

IVR High Technology

Variable-speed compressors with Inverters from Ceccato Aria Compressa S.p.A. operate optimally under any load conditions and ensure maximum capacity with minimum consumption.

All components are reliable, efficient and time-proven, and are the standard components used in fix speed machines.

The inverter is made by the world's leading brand, and is integrated into our design.

Compressor with asymmetric screws.
High efficiency, high yield and low noise level.

Main **electric motor** enclosed, air-cooled with external ventilation and Class F insulation.

Triple-action **air/oil separator** guarantees compressed air delivery with lower residual-oil content.

Compact, highly efficient air/air and air/oil **coolers** maintain optimum oil temperature and keep delivery air cool.

Control panel with state-of-the-art control system, microprocessor diagnostics and alphanumerical display for safe, efficient machine management.
All data displayed in alpha numeric characters (several languages available).

Built-in **frequency converter** for compressor speed variation and ramped motor startup, including standard RFI filters.

Sound-proofing fairing in wide, painted steel panels, removable for easy access to all internal components.

Sturdy steel **base** set-up for easy handling.

IVR range 40 - 240 HP

40 - 50 - 60 - 75 HP

75 - 100 - 125 - 150 HP

200 - 240 HP

Easy maintenance

Particular care has been taken to simplify all maintenance operations:

- wide, easily removable side doors or panels ensure easy access to all internalcomponents
- all components can be removed without special equipment
- scheduled signaling of all maintenance required.
- "Service" planning

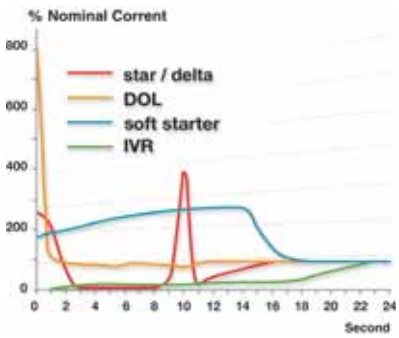
Easy to use

The compressor is controlled by a safe, state-of-the-art monitoring system proven through years of use in traditional machines.

- automatically manages the multiple running phases, such as startup, adjustment, compressor control and shutoff
- stops the compressor in the event of breakdowns
- All messages are digital, displayed simply and clearly, and directly readable without special codes.

Soft startup

Traditional startup results in high current peaks.



Startup with the inverter

- does NOT cause current peaks
- does NOT result in overheating to an extent that limits the number of startups
- does NOT cause mechanical stress to coupling elements
- EXTENDS the lifetime of components, bearings, and transmission joints.

Built-in INVERTER

A highly efficient frequency converter with low harmonic distortion ensures excellent output for all compressor operations.

A standard product compatible with our compressors.

Conforms to current standards of electromagnetic compatibility (EMC compatible) at the end of the sentence.

Built into the machine in a well-ventilated housing.

Savings...

with the variable-speed compressor from Ceccato Aria Compressa S.p.A.

Principle

Variations in the amount of compressed air required causes corresponding variations in line pressure.

Pressure variation is detected by the compressor delivery pressure sensor, which processes the signal and transmits it to the control system.

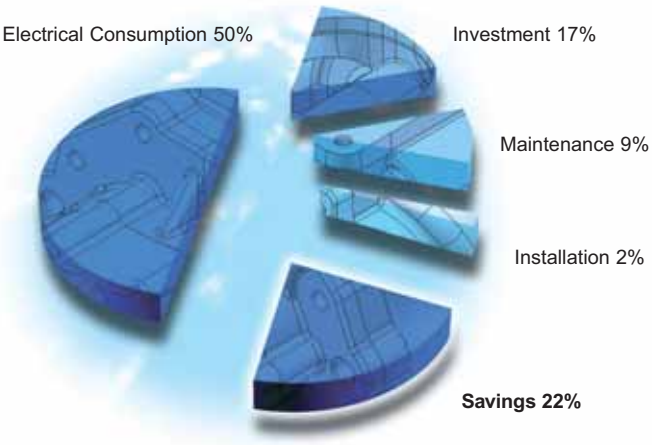
The machine varies motor speed and keeps line pressure constant, adjusting automatically the parameters according to consumption. This means it only supplies the amount of compressed air required by the system.

The motor speed is regulated by varying the electric motor feed frequency.

Every re-start of the electric motor using the INVERTER is ramped, with limited current. This means an unlimited number of startups can be performed, unlike traditional compressors with direct or ASD startup.

Result

The IVR screw compressor, coupled to a system that electronically adjusts the motor's rotation speed, ONLY CONSUMES the energy needed to produce the compressed air required by the system. This saves over 20% in approximately 20,000 hours of operation compared to a fix speed machine at equal power.



Advantages

- **Lower running cost**
  - Only uses energy for needed air production.
  - No energy wasted on partial loading.

- **Constant pressure**
  - Lower energy consumption.
  - Higher process stability.

- **Lower maximum pressure**
  - Minimum energy consumption for lowest maximum pressure.
  - Reduced compressed air leaks.

- **Constant power factor (Cos φ)**
  - High value, even with reduced loads.
  - No need for rephasing.
  - No tax penalties from power suppliers.

- **ramped motor-startup**
  - No current peaks.
  - Lower energy consumption.
  - Less stress on coupling elements.
  - Improved mechanical reliability.
  - Unlimited startups.
  - No tax penalties from power supplier.

- **Standard components**
  - Reliable, standard motors and inverter.
  - Worlwide customer service available everywhere.

- **Easy maintenance**
  - Easy component access.
  - Monitoring of all operation parameters through controller.

- **Longer maintenance intervals**

- **Certified electromagnetic compatibility**

- **Silent running**

- **Ceccato Aria Compressa S.p.A. guarantee**

- **Profitable in the long run**

In response to these needs, Ceccato Aria Compressa S.p.A. offers its own range of compressors with INVERTERS and its own technical specialists to analyze your requirements.

TECHNICAL DATA

Type	bar	HP	kW	l/min (cfm) ②								dB(A)	L mm	W mm	H mm	gas	kg ③
	min.	max.			min. ②	6 bar	7 bar	8 bar	9 bar	10 bar	11 bar	12 bar						
DRD 40 IVR ①	4	9,5	40	30	1.433 51	5.517 195	5.517 195	5.167 182	4.867 171	-	-	-	65	1.920	950	1.760	1 ½"	850
DRD 40 IVR HP ①	7	12,5	40	30	1.317 46	-	4.000 142	3.983 141	3.967 140	3.950 138	3.933 138	3.850 136						
DRD 50 IVR ①	4	9,5	50	37	1.467 52	6.750 238	6.633 235	6.267 221	5.917 209	-	-	-	66	1.920	950	1.760	1 ½"	905
DRD 50 IVR HP ①	7	12,5	50	37	1.350 48	-	4.733 167	4.717 166	4.700 166	4.667 165	4.650 164	4.617 163						935
DRD 60 IVR ①	4	9,5	60	45	1.567 55	8.217 290	7.933 280	7.517 265	7.100 251	-	-	-	67	1.920	950	1.760	1 ½"	1.010
DRD 60 IVR HP ①	7	12,5	60	45	1.367 48	-	5.833 206	5.817 205	5.800 205	5.783 204	5.750 203	5.717 202						
DRD 75 IVR ①	4	9,5	75	55	1.567 55	10.083 356	9.700 343	9.250 327	8.850 313	-	-	-	70	1.920	950	1.760	1 ½"	1.215
DRD 75 IVR HP ①	7	12,5	75	55	1.450 51	-	8.067 285	8.050 284	8.017 283	8.000 282	7.817 276	7.450 263						1.185
DRE 75 IVR	4	9,5	75	55	2.767 98	11.350 401	10.717 378	10.067 356	9.450 334	-	-	-	65	2.230	1.060	1.600	2"	1.480
DRE 100 IVR	4	9,5	100	75	2.550 90	14.783 522	14.667 518	13.833 489	13.083 462	-	-	-	66	2.230	1.060	1.600	2"	1.550
DRE 100 IVR HP	7	12,5	100	75	2.617 92	-	11.833 418	11.800 417	11.767 415	11.733 414	11.700 413	11.150 394						
DRE 125 IVR	4	9,5	125	90	3.583 127	17.167 606	16.317 576	15.500 547	14.750 521	-	-	-	71	2.230	1.060	1.600	2"	1.675
DRE 125 IVR HP	7	12,5	125	90	2.300 81	-	13.133 464	13.100 463	13.067 461	13.033 460	13.000 459	12.567 444						1.675
DRE 150 IVR	4	9,5	150	110	4.300 152	19.417 686	19.067 673	18.033 637	17.333 612	-	-	-	75	1.935	1.060	1.600	2"	1.860
DRE 150 IVR HP	7	12,5	150	110	2.550 90	-	15.033 531	15.000 530	14.967 529	14.933 527	14.900 526	14.867 525						
DRF 200 IVR	5,5	9,5	180	150	5.083 180	26.633 941	26.533 937	25.300 893	24.350 860	-	-	-	73	2.627	1.490	1.938	3"	3.000
DRF 200 IVR HP	7	12,5	180	150	3.567 126	-	22.200 784	22.100 780	22.000 777	21.683 766	20.217 714	19.000 671						
DRF 240 IVR	6	9,5	220	160	4.900 173	30.467 1076	30.333 1071	28.650 1012	27.583 974	-	-	-	74	2.963	1.610	1.992	3"	3.550
DRF 240 IVR HP	7	12,5	220	160	4.717 167	-	25.800 911	25.700 908	25.583 903	25.467 899	24.300 858	22.867 807						

Unit performance measured according to ISO 1217, Ed.3, Annex C-1996.
Noise level measured according to ISO 2151/Pneurop/Cagi PN8NTC2 test code; tolerance 3 dB(A).

① Integrated dryer option
② Reference conditions: intake : 760 mmHg,20°C
output : 7 bar basement version - 9,5 bar version HP
③ Sizes and weights without packaging

Our products are under constant development. We therefore reserve the right to make any product changes deemed

CECCATO ARIA COMPRESSA

Design Manufacture, Sales and Service of air compressors, Air dryers and air filters

ORIGINAL PART

SOLD BY

www.ceccato.com

TECHNE Media Agency
6999100121