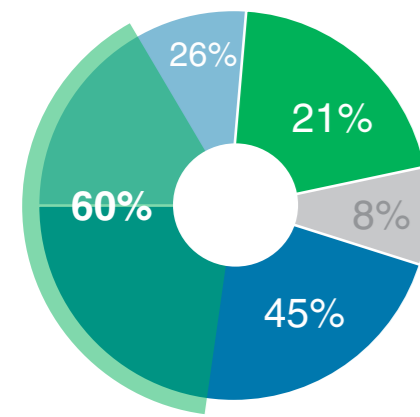


## Comprehensive scope of supply:

- Fully Hermetically Sealed Refrigerant Compressor with VSD Inverter
- Patented Energy efficient HEAT EXCHANGER
- **Purelogic™ Controller**
- Zero Loss Drains
- Single Electric Connection for easy and smooth installation



## Reduced total cost of ownership and faster payback – as low as 1.5 years thanks to reduced power consumption:



- Energy consumption by the dryer
- Energy consumption by the compressor due to pressure drop
- Investment
- Installation and maintenance
- **Savings - 60%** - A unique combination of high-efficiency components, smart unit design and an advanced control system enables you to achieve average energy savings of 60%.

## General specifications:

AC refrigeration dryers: cycling type including VSD	Operating Pressure: 4-14.5 barg/ 58-210 psig	Max. Ambient temperature: 46°C / 115°F
Flow rate: 360-1080 Nm³/hr (212-636 cfm)	Pressure dew point: 3°C / 37°F	Refrigerant: R410a
Cooling type: Air-cooled		

# AC 200-630 VSD – Revolutionary Cycling refrigeration VSD dryers

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## AC 200-630 VSD – Revolutionary cycling refrigeration VSD dryers

The AC VSD from Pneumatech raises the bar in refrigerant dryer performance. Using variable speed drive technology, it significantly reduces energy consumption while consistently supplying top-quality air. And, thanks to a carbon footprint that is smaller than that of its competitors, it even benefits the environment.

AC 200-630 VSD is Pneumatech's premium refrigeration dryer range at smaller flows: from 360 to 1080 Nm<sup>3</sup>/hr (210 CFM to 635 CFM)

### A leap forward in dryer technology

The new AC VSD refrigerant dryer from Pneumatech is engineered to make a difference, delivering energy savings of up to 60%. At the same time, the AC VSD supports production quality and reliability and offers a small carbon footprint.

The use of variable speed drive (VSD) technology ensures that the AC VSD only uses the energy it needs at any point. The result is a much lower electric bill that greatly reduces the total cost of dryer ownership.

### Top air quality

At the same time, Pneumatech's new dryer produces a stable supply of Class 4 purity air, which helps protect production reliability and quality. The AC VSD maintains its low dew point even in ambient temperatures of up to 46°C.

In spite of its sophisticated technology, the dryer is easy to operate thanks to its intuitive Purelogic™ controller. Users can even analyze and optimize their dryer's performance from anywhere by taking advantage of the advanced connectivity and remote monitoring option.

### A step toward a greener future

But the AC VSD's benefits extend beyond its outstanding performance. Due to its low energy consumption, it features a smaller carbon footprint than its competitors. Combined with an excellent TEWI-score, it helps companies meet their climate goals.

Lastly, the new AC VSD from Pneumatech is more compact than conventional dryers and can fit even in tight spaces.



## Features and benefits:



Variable frequency drive providing unmatched energy savings as compared to other dryers with lowest pressure drop possible

- Up to 60% in energy savings
- Thanks to the patented heat exchangers on air to air side, AC VSD dryers range has been designed to have very low internal pressure drops between 100 - 180 mbar (1,5 - 2,6 PSI) depending on the size resulting in less energy consumption at the compressor.
- Faster payback as low as 1.5 years as compared to non-cycling or thermal mass dryers



Increased uptime, powered by ICONS and new Purelogic™ for advanced control and monitoring:

#### Purelogic™ controller

- Touch based advance controller with interfacing through Modbus, Profibus or Ethernet/IP and no extra interfaces required.

#### Intelligent connectivity system (ICONS)

- With an intelligent connectivity system (ICONS), data and insights from Purelogic™ controller delivered to your computer, tablet or smartphone.
- The result: no surprise breakdowns, no unforeseen costs:
  - » On-time maintenance to control costs and ensure a longer machine life.
  - » Potential problems are recognized before they can pose a threat to the continuity of your production.



A dryer for a greener tomorrow

- Up to 65% less CO<sub>2</sub> emissions in TEWI (Total equivalent warming impact) compared to fixed speed dryers, up to 55% less than thermal mass dryers currently on the market.

#### Zero glide refrigerant

- R410a: No-temperature-glide effect resulting in stable guaranteed PDP and with lower GWP



Excellent production quality and reliability

- Stable and guaranteed performance at all operating conditions - PDP of 3° C – ISO 8573-1:2010 air purity class 4 guaranteed
- Smart combination of carefully designed components the AC VSD performs to the highest possible level, confirming the reduced power consumptions at all conditions – the performance is guaranteed even at ambient conditions as high as 46° C (115° F)
- Dryer is designed to operate with 100% of the compressed air nominal flow at all operational temperatures up to the maximum.
- The dryer does not have to be oversized for operation at maximum temperature with 100% of the nominal flow.
- Reduced energy consumption of the dryer compared to oversized solution

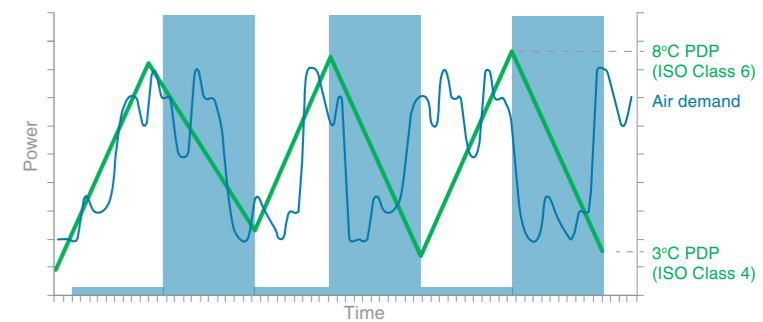


## The superior alternative to thermal mass

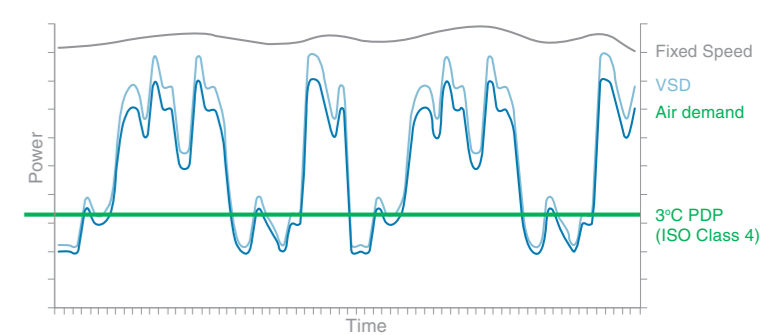
For many years, the most efficient dryers were the so-called thermal mass dryers, which run at full load to cool a thermal mass, then stop and rely on that mass for cooling before repeating the process. However, this process is inefficient as the dryer still needs to run at full load to cool the thermal mass. In addition, thermal mass dryers offer limited or no energy savings in high ambient temperatures.

Compared to thermal mass technology, VSD dryers offer real innovation and vastly superior energy savings. It is also important to point out that the dew point of VSD dryers stays consistently low. The result: A constant supply of high-quality air. The dew point of thermal mass compressors, however, rises and falls, which compromises air quality by up to 2 purity classes.

Thermal Mass



VSD (versus Fixed Speed)



## Technical specification

Specifications ↓	Units	AC200 VSD	AC300 VSD	AC400 VSD	AC450 VSD	AC550 VSD	AC630 VSD
Maximum conditions at full flow Ambient (Inlet) Temp	°C	46 (60)	46 (60)	46 (60)	46 (60)	46 (60)	46 (60)
Inlet flow for pressure dew point (PDP) of 3°C / 37.4°F	l/s	100	140	180	220	260	300
	cfm	212	297	381	466	551	636
	m <sup>3</sup> /hr	360	500	650	790	940	1080
Pressure drop at full flow	bar	0.16	0.11	0.18	0.14	0.1	0.18
	psi	2.3	1.6	2.6	2	1.5	2.6
Power consumption	kW	0.66	1.04	1.54	1.77	1.9	2.64
	hp	0.90	1.41	2.09	2.41	2.58	3.59
Max. working pressure	bar	14.5	14.5	14.5	14.5	14.5	14.5
	psi	210	210	210	210	210	210
Compressed air connections (NPT for UL version)		G 1 1/2" F	G 2" F	G 2" F	G 2 1/2" F	G 2 1/2" F	G 2 1/2" F
Dimensions	mm	805	805	805	805	805	805
	inch	31.69	31.69	31.69	31.69	31.69	31.69
	mm	962	962	962	962	962	962
	inch	37.87	37.87	37.87	37.87	37.87	37.87
	mm	1040	1040	1040	1040	1040	1040
	inch	41	41	41	41	41	41
Weight	kg	130	134	134	143	150	165
	lbs	287	295	295	315	331	364