

# High Efficiency APM Screw Air Compressor



**High Efficiency Permanent Magnet Drive**

*The Air of Trust*

# Anest Iwata Motherson

Anest Iwata Motherson (AIM) is a joint venture between Anest Iwata Corporation, Japan, and Motherson Group, India. Anest Iwata Corporation is one of the global leaders in Air Compressors and Vacuum Pumps with more than 9 decades of inspiring history of technological excellence.

Anest Iwata Motherson is committed to delighting its customers by ensuring the supply of the best quality products, supported with effective after-sales services at optimum value. The company has two state-of-the-art manufacturing facilities and a wide network of sales and service centers spread across India.

## Anest Iwata Inspiring History



2022  
"ARID"  
Air Dryer Launched

2019  
Rotary Vane  
Vacuum Pump Launched

2018  
Screw Air Compressor  
Sales Started in India

2017  
Electric Bus  
Compressor Launched

2015  
MEGASY Series  
Medical Air & Vacuum Unit  
Launched

Second Facility in Greater Noida



2012  
Oil-Free Claw  
Air Compressor Launched

2013  
Reciprocating Vacuum  
Pump Launched in India

2005  
Braking Compressor for  
Indian Railways Launched

2010  
Second Facility Inaugurated  
in Greater Noida (India)

2000  
Anest Iwata Motherson  
Established



2004  
World's First Oil-Free  
Booster Compressor  
Launched



1991  
World's First Oil-Free Scroll  
Air Compressor Launched

1993  
World's First Oil-Free Scroll  
Vacuum Pump Launched

1928  
First Reciprocating  
Compressor  
Manufactured

1984  
World's First Oil-Free  
Reciprocating Compressor with  
"Seize Free Technology"  
Launched



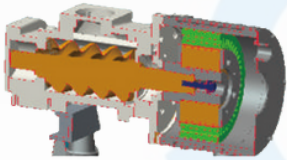
1977  
Screw Air compressor  
Launched

1926  
Established  
In Japan



# High efficiency inverter APM air compressor

## Unique designed two layer oil cooled PM motor



The double-layer oil-cooled shell design uses the air compressor cooling system to cool the motor through the liquid channel, ensuring low-temperature operation of the motor in the whole frequency range and preventing high-temperature lead to demagnetization. The PM motor adopts high-temperature permanent magnet material resistant to 180 degrees Celsius, which effectively ensures that the permanent magnet unit does not demagnetize. The IP65 motor is ideal for dusty or poor environments. The PM motor does not use traditional bearings making the motor maintenance-free

## Energy saving

In the case of a small amount of air used or no air used, the system goes to sleep to achieve maximum energy savings. During sleep, when you use compressed air again, the inverter will respond quickly and starts immediately.



## New Airend profile

The super profile increases the compression area so that the performance of the Airend is better than the standard one. Thanks to its excellent safety and reliability, plus high energy efficiency make it the best choice for replacing traditional Airend on the market.

## Original "Taper" connection

The Airend and the motor are connected by the Taper connection method. It is convenient and quick to install and disassemble. It does not need to be adjusted, and it is not easy to damage the motor and internal parts, which greatly reduces the maintenance cost.



## Latest touchscreen PLC

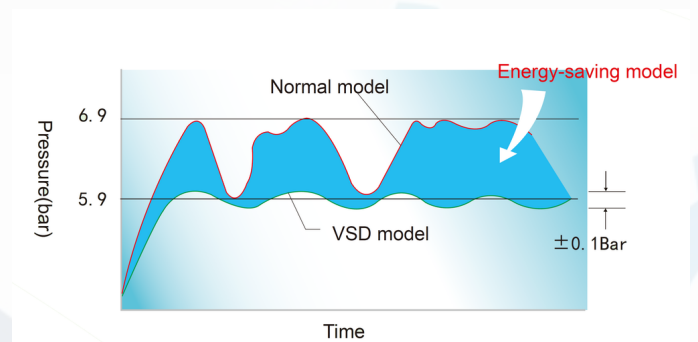
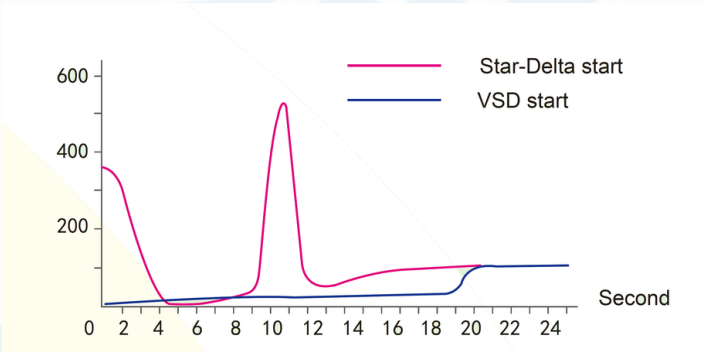
The latest touch screen PLC realizes the real intelligent control for your compressor, Time table running makes your compressor start/stop automatically as you want, more functions have been included to help the easy management of your compressor, we also could support remote control and monitoring with your permission.



# The advantages of Anest Iwata APM compressor

## 1. Keep constant air supply

The compressor keeps  $\pm 0.1\text{bar}$  constant pressure of air supply under the required pressure. With big air demand, the pressure keeps constant and the rotating speed increase ensures air demand. With small air demand, the pressure keeps constant and the rotating speed decreases to satisfy sufficient air demand.



## 2. Variable speed soft start, less impact to the power grid.

Variable speed soft-start eliminates the peak current when starting, a smooth start can reduce the power supply, and equipment costs, as well as impact the power grid.

## 3. Reduce mechanical damage, increase service life

VSD compressor reduces the frequent loading and unloading of the solenoid valve, increases its service life, and avoids the damage due to long-term high-speed running. Furthermore, when the solenoid valve starts for the first time, then it has no more action, which not only extends the service life but also extends its maintenance period to save operating expenses.

## 4. Low noise

VSD air compressor starts and runs steadily without frequent loading and unloading sound fixed speed screw compressor. Adopting double VSD control (main motor and fan motor double VSD) will have better efficiency and the air discharged air temperature can be controlled within  $\pm 2^{\circ}\text{C}$  to avoid condensation.

## 5. Stand-by function

When the air demand is small or no demand, the system will enter into a standby mode to have maximum energy-saving.

## 6. Electricity-saving— Unbelievable high efficiency of electricity-saving return

With variable speed control technology, the outlet air capacity of the compressor can be combined perfectly with the customer's requirements, which thoroughly avoids loss of unloading power. In the status of intermittent air demand, a soft start with zero loading can avoid the peak value of current and torque, so the compressor can start and stop many times.

# Technical Specification

Model	kW	HP	FAD (m3/min)	CFM	Pressure (Bar)	Noise Level (dB)	Dimensions (mm)	Outlet size	Weight (kg)
AIM 10 APM - 7	7.5	10	1.15	41	7	64	750 x 650 x 890	RC 1/2	230
AIM 10 APM - 8			1.10	39	8				
AIM 10 APM - 10			0.95	34	10				
AIM 15 APM - 7	11	15	1.75	62	7	64	900 x 800 x 1053	RC 3/4	270
AIM 15 APM - 8			1.70	60	8				
AIM 15 APM - 10			1.50	53	10				
AIM 15 APM - 13			1.20	43	13	66			
AIM 15 APM - 15			1.00	36	15				
AIM 20 APM - 7	15	20	2.40	85	7	68	900 x 800 x 1053	RC 3/4	280
AIM 20 APM - 8			2.30	82	8				
AIM 20 APM - 10			2.00	71	10				
AIM 20 APM - 13			1.60	57	13	70			
AIM 20 APM - 15			1.30	46	15				
AIM 20 APM - 16			1.20	43	16				
AIM 30 APM - 7	22	30	3.70	131	7	70	1200 x 800 x 1100	RC 1	350
AIM 30 APM - 8			3.60	128	8				
AIM 30 APM - 10			3.00	107	10				
AIM 30 APM - 12.5			2.70	96	12.5	77			
AIM 30 APM - 15			1.90	68	15				
AIM 30 APM - 16			1.80	64	16				
AIM 50 APM - 7	37	50	6.20	220	7	74	1300 x 900 x 1270	RC 1 1/2	520
AIM 50 APM - 8			6.10	216	8				
AIM 50 APM - 10			5.60	198	10				
AIM 60 APM - 7	45	60	7.40	262	7	73	1300 x 950 x 1370	R 1 1/2	620
AIM 60 APM - 8			7.30	258	8				
AIM 60 APM - 10			6.80	241	10				
AIM 75 APM - 7	55	75	10.4	368	7	77	1800 x 1200 x 1550	RC 2	1000
AIM 75 APM - 8			10.1	357	8				
AIM 75 APM - 10			8.50	301	10				
AIM 100 APM - 7	75	100	13.3	471	7	77	1800 x 1200 x 1550	RC 2	1100
AIM 100 APM - 8			12.9	456	8				
AIM 100 APM - 10			11.8	418	10				

**Note :**

- Free Air Delivery (FAD) is measured as per ISO 1217: 2009 - Annex C
- Mean noise level measured at a distance of 1 m according to ISO 2151: 2004 using ISO 9614/2 (sound intensity method); tolerance  $\pm 3$  dB(A)
- All performance parameters are as per JIS (Japanese Industrial Standards)
- All pictures shown are for illustration purposes only. The actual product may vary due to continuous product enhancement.
- Standalone Refrigerated Air Dryers, Heatless Air Dryers, Oil Removal Filters, Auto Drain Valves, and Air Receiver are also available
- Specifications may change without prior notice