

# **G & GV Series Oil Free Series Air Compressor Fixed Speed & Variable Speed Drive** 37kW - 280kW / 50HP - 375HP





#### **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.



## | G/GV SERIES

### **G** Series

WORKING POWER:37-280KW (50-375HP)
FREE AIR DELIVERY:2.5-47m³/min (88.3-1660 cfm)
WORKING PRESSURE:7/8/10BAR (101.5/116/145 psig)





### **100% Oil Free Screw Compressor**

Two Stage 100% Oil Free Screw Compressors.

1st Stage air-end is of E35 steel and 2nd stage is Stainless steel with an ultra coating at the rotor surface thus giving higher tolerance and better life of the air-end.

GHH Airend From Germany	100% Oil Free	High Efficiency Cooling System
Pre-Cooler to Help reduce Temp	Class 0 Certificate from TUV	

# | TYPICAL APPLICATIONS

### **Pharmaceutical**



**Electronic Industry** 



Oil and Gas Industry



**Food and Beverage** 



**Medical** 



**Automobile** 



# G/GV SERIES EVEN MORE EFFICIENT



#### **01-Total enclosed Motor**

(PM motor is an option)

- Standard TEFC motor
- PM motor is an option for VSD type
- IP54 (IP55 as an option) protection grade



#### **02-Oil Free Airend**

- · Stainless Rotor for 2nd stage
- Double Protection (SS hermetic seal & labyrinth oil seal)
- SKF Bearings
- · Class 0 100% Oil free reliable air
- · Energy efficient operation
- Long maintenance intervals

#### **03-Inlet Filter**

- Nano Scale Heavy Duty
- Filtration accuracy up to 99.9%
- Captures dust particles below 0.3 microns
- Pressure drop indicator
- 2,000 hours service intervals

#### **04-Inlet Valve**

- · Optimizes the inlet flow of the air end
- No blowdown losses
- · Maintenance-free pipe design
- · High vacuum degree:700mmhg
- Large suction area, special design for low-pressure application
- Prevents unloading and shutdown of oil injection
- · Fluoro rubber for improved valve seal

#### **07-Electrical control cabinet**

 Siemens core electrical components are used to further enhance reliability

# 05-Innovative flux vector inverter (optional)

- · CE/UL certification
- · Wide voltage design
- Meet EMC C3 and C2 requirements
- Built-in DC reactor
- · Independent cooling air duct design
- Robust enclosure to trouble-free operation event in the harshest condition

#### 08-Centrifugal fan (up to 220HP)

- · High reliability
- Low Noise Level
- · High capacity for optimized cooling
- · low power consumption

#### <u>06-Advance PLC Panel</u>

- 7" full colour touch screen controller
- Real time operation/ maintenance/ alarm information
- · Full graphic flow diagram
- · Operation record/ chart display
- · Multiple languages
- Weekly and daily scheduling, service history and planning
- On board RS485 interface, modbus RTU

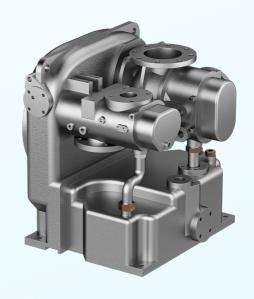
# 09-All-stainless steel internal pipe system

- All Steel internal pipe work and compression joints are used to prevent leakage and premature ageing often seen with flexible pipes
- · Reduced friction losses

### **|FEATURES & BENEFITES**

#### 01-OIL FREE SCREW AIREND

Original German GHH Rand Airend;
Stainless Steel Rotor;
Dual Sealed;
SKF Bearings;
Long Maintenance Intervals;
Energy Efficient Operation;
Clean 100% Oil free air to Class 0.



#### 02-PATENTED VENTURI PIPE TO REDUCE NOISE LEVELS

Dry compression often leads to high noise levels particularly at high speed operation. Thanks to the patent- ed Venturi design, noise levels are significantly reduced.









#### **03-AIR INLET SYSTEM**

The independent inlet silencer box ensures that the air filter inlet temperature matches the ambient temperature.

#### **04-SILENT AIR FILTER SYSTEM**

Pressure loss of air filter inlet structure <1000Pa. Reliable operation and easy maintenance.





### **ISTATE-OF-THE-ART TOUCH CONTROLLER**





**SUPPORTS UP TO 16 MACHINES** 

Improved user friendly design

Parameters can be modified without stopping compressor

7" touch screen plc

Modbus RTU protected

RS485 interface

Multiple warning and protection function

**Energy saving logic** 

Overload/ Over current/ phase loss/unbalance protection

Pre-alarm system to avoid sudden failure

Multiple compressor sequencing capability

Remote monitoring capability

Programmable start stop schedules

Power consumption data is storage inside PLC

## Seven major characteristics



On Board RS485 communication



Intelligent PID flow regulation mode



Accurate torque control



Fast response speed for system pressure



Fast acceleration and deceleration characteristics



Closed loop dynamic control and high precision control



Constant pressure control avoids over generating site air pressure



### **|CLOUD SERVICE OPTION**

### New air solution program with advanced IOT technology

#### Anytime, Anywhere

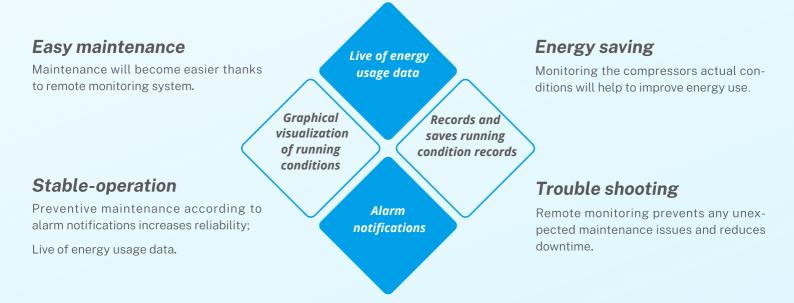
Customers can monitor the live running conditions of AIM compressors anytime, anywhere and can be accessed through a Cloud service in real time. Moreover, alarm notifications will help prevent any unplanned down time.



#### **Reliable Security**

VPN (Virtual private network) ensures the same reliable security level as the private network. User friendly Cloud service.

#### Practical use of cloud service



## **|TECHNICAL SPECIFICATIONS**

### Oil Free Screw - Fixed Speed - Air Cooled

Model	kW	НР	FAD (m3/min)	CFM	Pressure (Bar)	Dimensions (mm)	Outlet size	Weight (kg)
AIM 75G - 7		75	9.2	326	7	2380x1580x1880	DN50	2750
AIM 75G - 8	55		9	319	8			
AIM 75G - 10			7.7	273	10			
AIM 100G - 7		100	12.2	432	7	2380x1580x1880	DN50	2800
AIM 100G - 8	75		12	425	8			
AIM 100G - 10			10.7	379	10			
AIM 125G - 7	90	125	16	566	7	2880x1960x2110	DN65	3400
AIM 125G - 8			13.6	481	8			
AIM 125G - 10			13	460	10			
AIM 150G - 7			19.5	690	7	2880x1960x2110	DN65	3500
AIM 150G - 8	110	150	18.2	644	8			
AIM 150G - 10			16.5	584	10			
AIM 180G - 7			23	813	7	2880x1960x2110	DN65	3800
AIM 180G - 8	132	180	22.5	796	8			
AIM 180G - 10			19.5	690	10			
AIM 220G - 7	160	220	25.8	912	7	2880x1960x2110	DN65	
AIM 220G - 8			25.5	902	8			4000
AIM 220G - 10			22	778	10			

### Oil Free Screw - VFD - Air Cooled

Model	kW	НР	FAD (m3/min)	CFM	Pressure (Bar)	Dimensions (mm)	Outlet size	Weight (kg)
AIM 50GV - 7		50	3.4-5.7	121-202	7	2468x1250x1980	DN50	2400
AIM 50GV - 8	37		3.3-5.5	117-195	8			
AIM 50GV - 10			2.5-4.6	89-163	10			
AIM 60GV - 7		60	4.1-6.8	145-241	7	2468x1250x1980	DN50	2500
AIM 60GV - 8	45		3.9-6.6	138-234	8			
AIM 60GV - 10			3.2-5.4	114-191	10			
AIM 75GV - 7			5.8-9.2	205-326	7	2380x1580x1880	DN50	2850
AIM 75GV - 8	55	75	5.3-9.0	188-319	8			
AIM 75GV - 10			4.6-7.7	163-273	10			
AIM 100GV - 7		100	7.5-12.2	266-432	7	2380x1580x1880	DN50	2900
AIM 100GV - 8	75		7.4-12.0	262-425	8			
AIM 100GV - 10			6.4-10.7	227-379	10			
AIM 125GV - 7		125	9.6-16	340-566	7	2880x1960x2110	DN65	3700
AIM 125GV - 8	90		8.2-13.6	290-481	8			
AIM 125GV - 10			7.8-13	276-460	10			
AIM 150GV - 7			11.7-19.5	414-690	7	2880x1960x2110	DN65	3800
AIM 150GV - 8	110	150	10.9-18.2	386-644	8			
AIM 150GV - 10			9.1-16.5	322-584	10			
AIM 180GV - 7			13.8-23	488-813	7	2880x1960x2110	DN65	4100
AIM 180GV - 8	132	180	13.2-22.5	467-796	8			
AIM 180GV - 10			11.7-19.5	414-690	10			
AIM 220GV - 7		220	15.5-25.8	548-912	7	2880x1960x2110	DN65	4300
AIM 220GV - 8	160		14.7-25.5	520-902	8			
AIM 220GV - 10			13.2-22	467-778	10			

## Oil Free Screw - Fixed Speed - Water Cooled

Model	kW	HP	FAD (m3/min)	СҒМ	Pressure (Bar)	Dimensions (mm)	Outlet size	Weight (kg)
AIM 75WG - 7		75	9.2	326	7	2381x1581x1750	DN50	2280
AIM 75WG - 8	55		9	319	8			
AIM 75WG - 10			7.7	273	10			
AIM 100WG - 7			12.2	432	7			
AIM 100WG - 8	75	100	12	425	8	2381x1581x1750	DN50	2380
AIM 100WG - 10			10.7	379	10			
AIM 125WG - 7			16	566	7		DN65	
AIM 125WG - 8	90	125	13.6	481	8	2880x1880x1880		3300
AIM 125WG - 10			13	460	10			
AIM 150WG - 7			19.5	690	7	2880x1880x1880	DN65	3400
AIM 150WG - 8	110	150	18.2	644	8			
AIM 150WG - 10			16.5	584	10			
AIM 180WG - 7		180	23	813	7	2880x1880x1880	DN65	3800
AIM 180WG - 8	132		22.5	796	8			
AIM 180WG - 10			19.5	690	10			
AIM 220WG - 7			25.8	912	7	2880x1880x1880	DN65	4000
AIM 220WG - 8	160	220	25.5	902	8			
AIM 220WG - 10			22	778	10			
AIM 300WG - 7			37.8	1336	7	3350x2280x2080	DN100	5000
AIM 300WG - 8	220	300	37.5	1326	8			
AIM 300WG - 10			34	1202	10			
AIM 340WG - 7			45	1591	7	3350x2280x2080	DN100	
AIM 340WG - 8	250	340	42	1485	8			5200
AIM 340WG - 10			38	1343	10			
AIM 375WG - 7			47	1662	7			
AIM 375WG - 8	280	375	46.5	1644	8	3350x2280x2080	DN100	5500
AIM 375WG - 10			41	1449	10			

#### Oil Free Screw - VFD - Water Cooled

Model	kW	HP	FAD (m3/min)	СҒМ	Pressure (Bar)	Dimensions (mm)	Outlet size	Weight (kg)
AIM 75WGV - 7			5.8-9.2	205-326	7			
AIM 75WGV - 8	55	75	5.3-9.0	188-319	8	2381x1581x1750	DN50	2380
AIM 75WGV - 10			4.6-7.7	163-273	10			
AIM 100WGV - 7			7.5-12.2	266-432	7			
AIM 100WGV - 8	75	100	7.4-12.0	262-425	8	2381x1581x1750	DN50	2480
AIM 100WGV - 10			6.4-10.7	227-379	10			
AIM 125WGV - 7			9.6-16	340-566	7		DN65	3500
AIM 125WGV - 8	90	125	8.2-13.6	290-481	8	2880x1880x1880		
AIM 125WGV - 10			7.8-13.0	276-460	10			
AIM 150WGV - 7		150	11.7-19.5	414-690	7	2880x1880x1880	DN65	3600
AIM 150WGV - 8	110		10.9-18.2	386-644	8			
AIM 150WGV - 10			9.1-16.5	322-584	10			
AIM 180WGV - 7		180	13.8-23	488-813	7	2880x1880x1880	DN65	4100
AIM 180WGV - 8	132		13.2-22.5	467-796	8			
AIM 180WGV - 10			11.7-19.5	414-690	10			
AIM 220WGV - 7			15.5-25.8	548-912	7	2880x1880x1880	DN65	4300
AIM 220WGV - 8	160	220	14.7-25.5	520-902	8			
AIM 220WGV - 10			13.2-22	467-778	10			
AIM 300WGV - 7		300	23-37.8	813-1336	7	3350x2280x2080	DN100	5200
AIM 300WGV - 8	220		22-37.5	778-1326	8			
AIM 300WGV - 10			19-34	672-1202	10			
AIM 340WGV - 7			27-45	955-1591	7	3350x2280x2080	DN100	5500
AIM 340WGV - 8	250	340	25.8-42	912-1485	8			
AIM 340WGV - 10			22.8-38	806-1343	10			

- Standard Voltage is 400V/50Hz
- Free Air Delivery (m /min / cfm) 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 3 dB(A).
- · Vertical Air Tanks are available in various capacities
- Standalone Refrigerated Air Dryers, Heatless Air Dryers, Oil Removal Filters, and Auto Drain Valves are also available
- · Specifications may change without prior notice



**Always Ahead with Anest Iwata!** 

Innovation driven World's 1st products









Oil Free Reciprocating Compressor

Oil Free Scroll Compressor

Oil Free Booster Compressor

Oil Free Scroll Vacuum Pump









Reciprocating

Screw

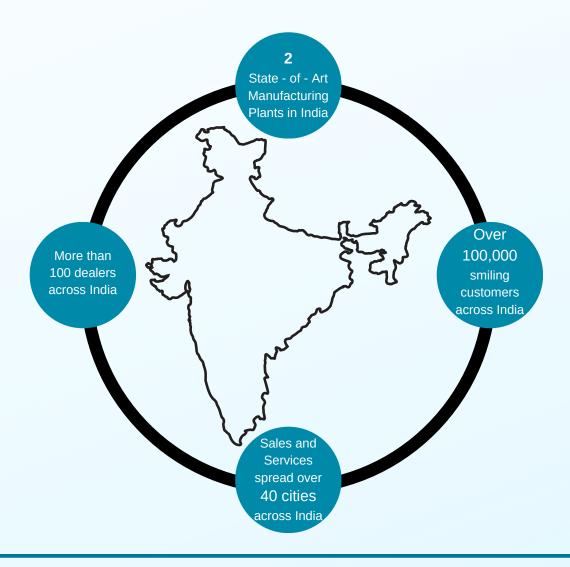
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Claw

Compressed Air Solutions in all Technologies



# Tctive with Newest Technology





Anest Iwata Motherson Pvt. Ltd. B-123 & 124, Sector-63, Noida - 201301, Distt. Gautam Budh Nagar, UP, India. Email: anestiwata@aim.motherson.com Web: www.aimcompressors.com

For any details reach us at:

Head Office: +91-120-4600-500/510/512/517

North : +91-9910394044 +91-9871362399 East : +91-9990023423 +91-9560806653 : +91-9899553648 +91-9850993326 West +91-9940654560 +91-9866000499 South

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