



Atlas Copco

Atlas Copco oil-injected rotary screw compressors

G 90-355 (VSD)
up to 14 bar(e) / 203 psig



G 90-355 (VSD): Reliability, efficiency and simplicity

1

Smaller footprints

- Smaller footprint than all competitors.
- Save more installation space, increase capacity in limited installation space.

2

State-of-the-art screw element

- Atlas Copco designed and patented asymmetric element profile with high quality bearings offering low wear and increased reliability.
- The unique profile design provides industry leading energy efficiency to lower your operating cost.

3

High-efficiency cooler

- Element outlet temperature is optimized, avoid machine shut down due to element high temperature, increase reliability.
- Stainless cooler bundle avoid corrosion for water cooled machine.
- Optimized design reduces maintenance cost and increases reliability.

4

Superior air-oil separation

- Reduction of pressure drops and energy costs.
- Low oil consumption ensures minimal maintenance costs and long compressor lifetime.
- Optimized design of vessel to reduce the oil carry over, increase reliability.

5

High-efficiency motor

- High-efficiency (IE3) motor (Class F insulation) adapted to harshest conditions.
- Long-term stable operation even in harsh environments.

6

Optimal control with the Elektronikon® MK5 & SmartLink

- Clear icons and intuitive navigation provide you with fast access to all of the important settings and data.
- Monitoring of the equipment running conditions and maintenance status..
- SmartLink provides remote monitoring of compressor running status.



Easy to install, use and service

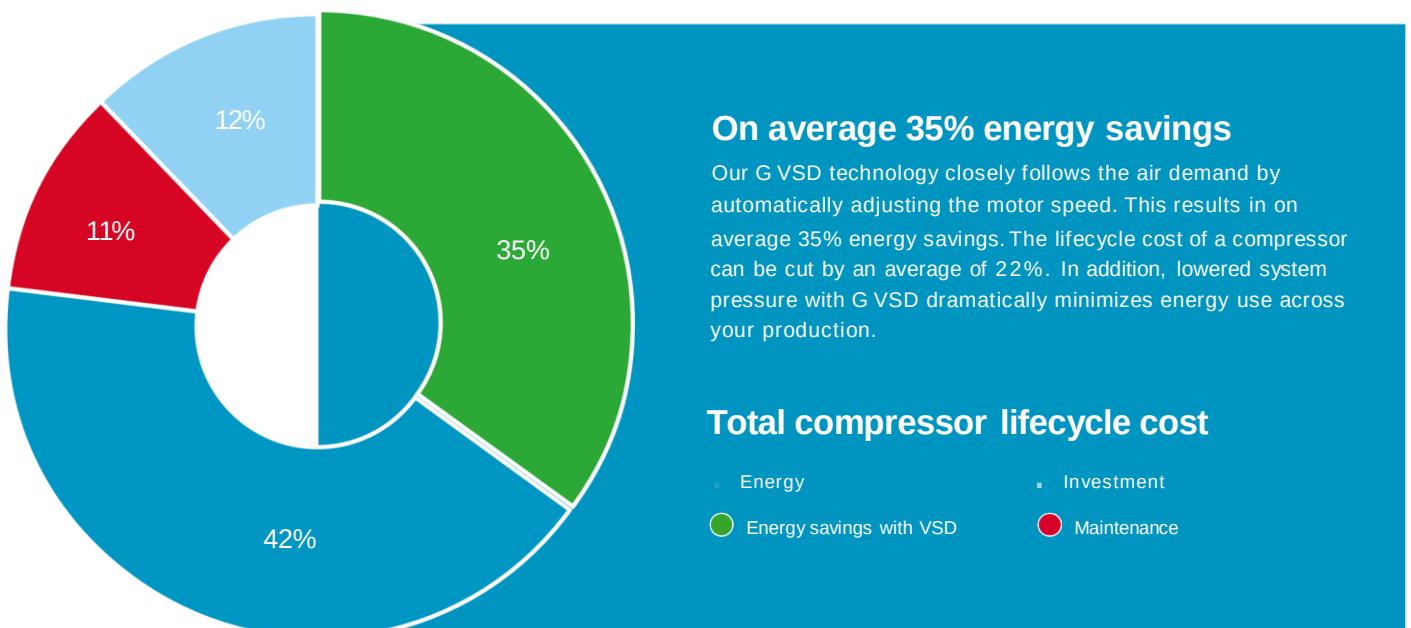
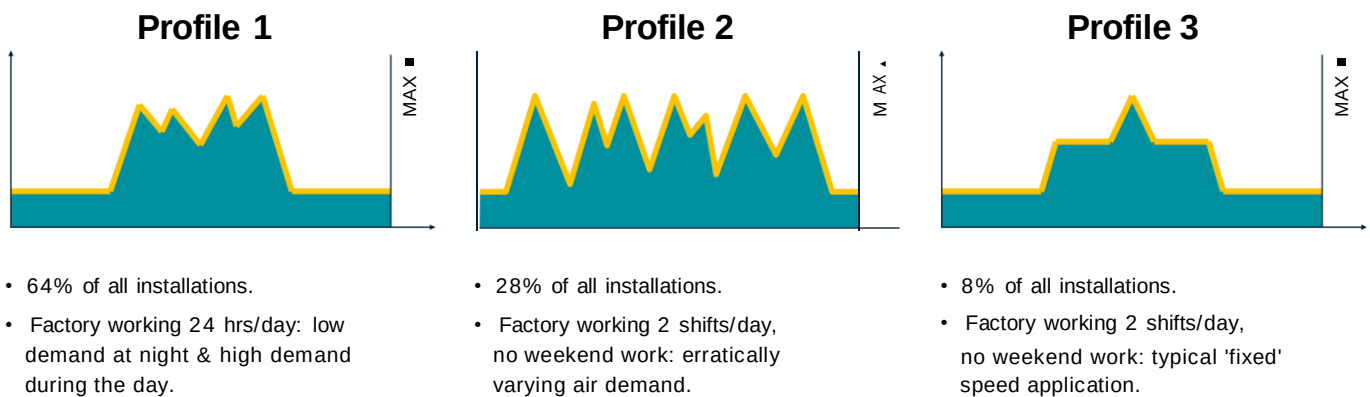
- No foundations needed: easy installation.
- Completely integrated, silenced package.
- Easy to transport and simple maintenance.

VSD: Driving down your energy costs

Over 70% of a compressor's lifecycle cost is taken up by the energy it consumes. Moreover, the generation of compressed air can account for more than 40% of a plant's total electricity bill. Atlas Copco was the first compressor manufacturer to introduce compressors with integrated Variable Speed Drive (VSD). With over 20 years of design and manufacturing experience our VSD technology has reached new heights of energy savings and reliability. VSD technology reduces energy consumption in systems that have varying air demand patterns. This reduction in energy consumption not only reduces your energy consumption but also your carbon footprint to help protect the environment for generations to come.

Why VSD technology?

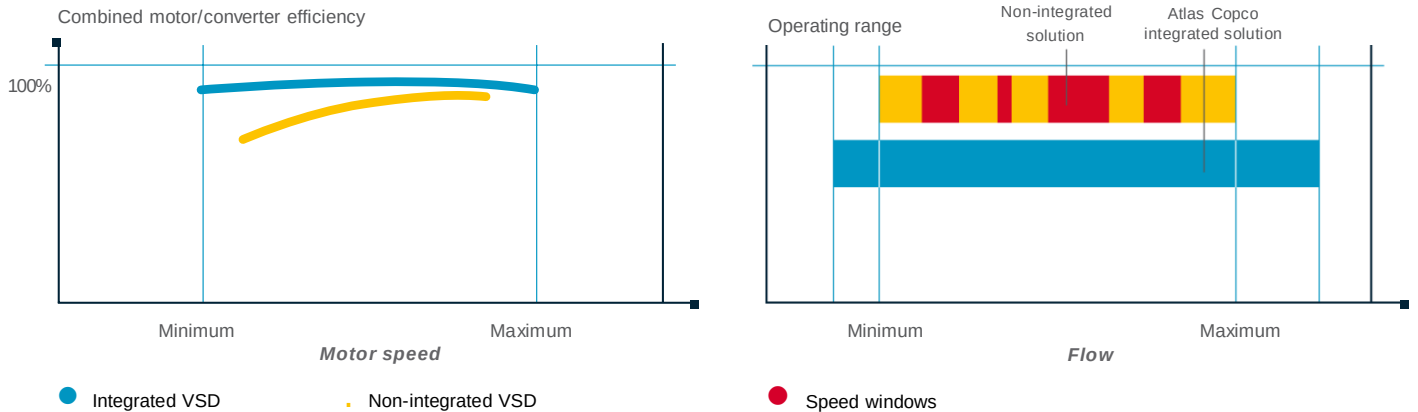
In almost every production environment, air demand fluctuates depending on different factors (time of the day, week or even month). Extensive measurements and studies of compressed air demand profiles show that many compressors have substantial variations in air demand. Only 8% of all installations have a more stable air demand. Tests prove that, even in this case, VSD compressors save energy.



Find out how much you can save

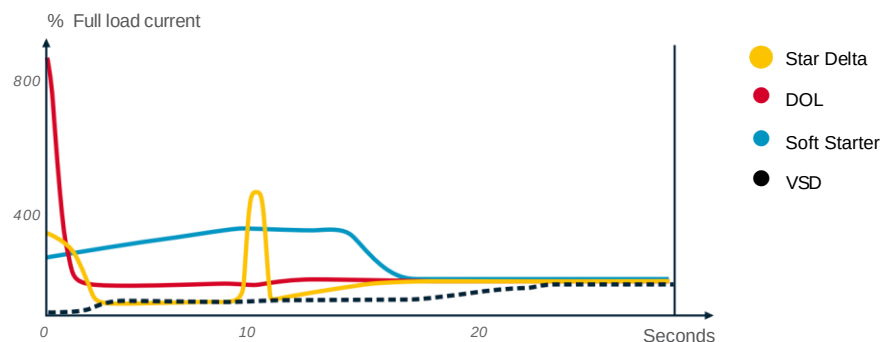
We can help you map the air demand profile of your current compressor installation and indicate potential energy savings with VSD compressors. For more information, please contact your local Atlas Copco representative.

What is unique about the integrated Atlas Copco G VSD?



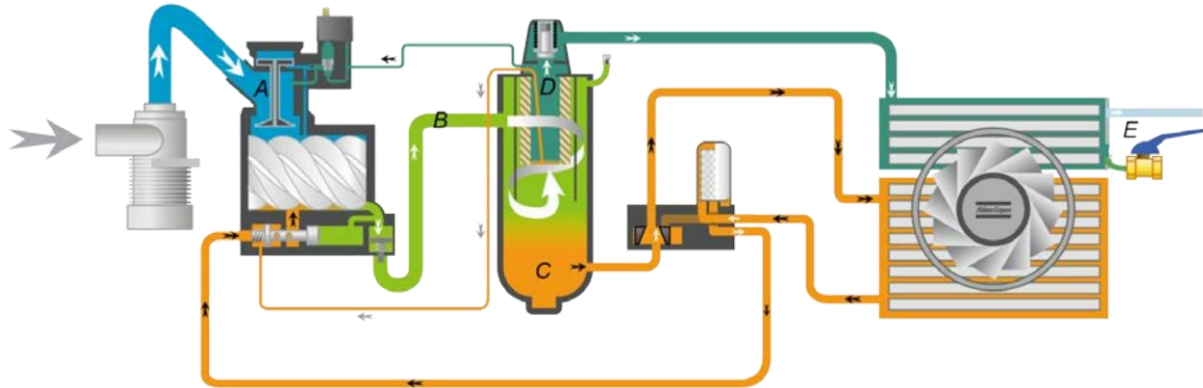
- 1 The Elektronikon® controls both the compressor and the integrated converter, ensuring maximum machine safety within parameters.
- 2 Flexible pressure selection from 4 to 10 bar with electronic gearing reduces electricity costs.
- 3 Specific converter and motor design (with protected bearings) for the highest efficiency across the speed range.
- 4 Electric motor specifically designed for low operating speeds with clear attention to motor cooling and compressor cooling requirements.
- 5 All Atlas Copco G VSD compressors are EMC tested and certified. Compressor operation does not influence external sources and vice versa.
- 6 Mechanical enhancements ensure that all components operate below critical vibration levels throughout the entire compressor speed range.
- 7 No 'speed windows' that can jeopardize energy savings or the stability of the net pressure. FAD range: 30-100%.
- 8 Net pressure band is maintained within 0.10 bar, 1.5 psi.

No current peaks



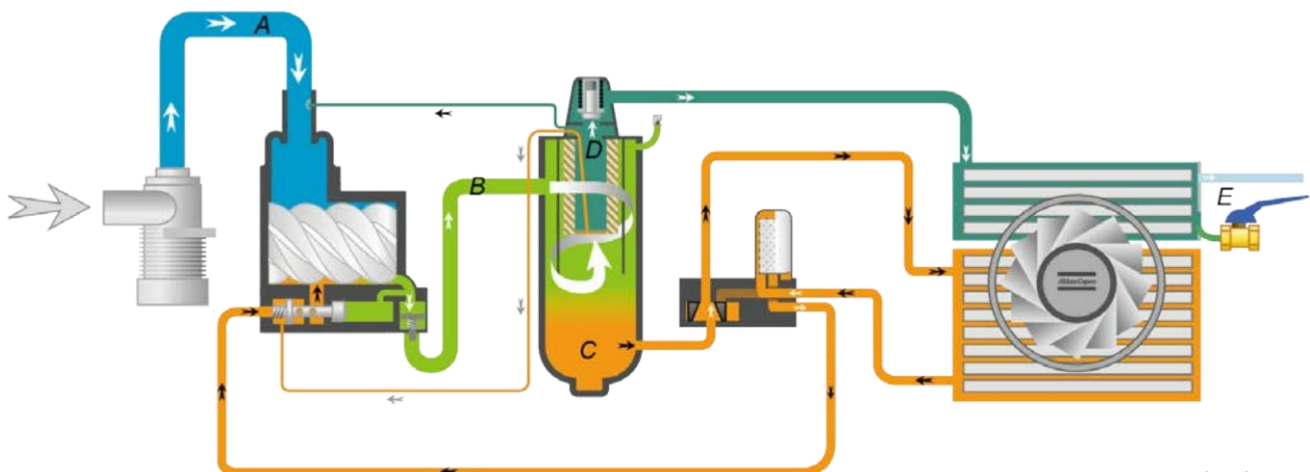
Flow chart

Fixed speed



- A ■ Intake air
- B ■ Air/oil mixture
- C ■ Oil
- D ■ Wet compressed air
- E ■ Condensate

Variable Speed Drive



- A ■ Intake air
- B ■ Air/oil mixture
- C ■ Oil
- D ■ Wet compressed air
- E ■ Condensate

Optimize your system

Scope of supply

- Air inlet filter and flexibles
- Air intake valve
- Full load/no load regulator
- Long lifetime filtration and separation elements
- G/DIN connection for 50Hz unit, NPT/ANSI for 60Hz unit
- Heavy-duty oil filters
- Air-oil separator
- Compressed air aftercooler and oil cooler
- ASME/ML/AS1210/MOM approvals
- SmartLink
- Low noise cooling fan for air-cooled units
- Corrosion resistant coolers for water-cooled units
- IE3/GB18613-2012 Level 2 Class F electric motor
- Starters (Star-Delta)
- Pre-mounted electrical cubicles
- Elektronikon® unit controller
- Phase sequence relay
- Separate start and stop signal for MV voltage
- Structural skid with no need for foundations
- Silenced canopy
- Flexible vibration dampers

Options

- Performance test certificate
- Witness performance test
- Seaworthy packing

Dimensions



TYPE	Dimensions (Air-cooled)					
	L		W		H	
	mm	inch	mm	inch	mm	inch
G 90-132 (VSD)	1900	75	1200	47	2000	79
G 160 Pro (VSD)	2800	110	1600	63	2000	79
G 200-250 Pro (VSD)	2800	110	1600	63	2300	91
G 250L-355 Pro (VSD)	3400	134	1750	69	2400	94

TYPE	Dimensions (Water-cooled)					
	L		W		H	
	mm	inch	mm	inch	mm	inch
G 90-132 (VSD)	1900	75	1200	47	2000	79
G 160 - 250 Pro (VSD)	2800	110	1600	63	2000	79
G 250L - 355 Pro (VSD)	3400	134	1750	69	2000	79

Technical data 50 Hz

TYPE	Maximum working pressure		Capacity FAD (1)			Installed motor power		Air Outlet Size	Weight (shipping mass)	
	Standard		Pack						Standard	
	bar(e)	psig	l/s	m³/min	cfm	kW	HP		kg	lbs
50 Hz										
G 90-7.5	7.5	109	294	17.6	623	90	125	G2-1/2"	1900	4189
G 90-8.5	8.5	123	270	16.2	571	90	125	G2-1/2"	1900	4189
G 90-10	10	145	254	15.3	539	90	125	G2-1/2"	1900	4189
G 90-14	14	203	217	13.0	460	90	125	G2-1/2"	1900	4189
G 110-7.5	7.5	109	335	20.1	710	110	150	G2-1/2"	2000	4409
G 110-8.5	8.5	123	314	18.8	664	110	150	G2-1/2"	2000	4409
G 110-10	10	145	290	17.4	614	110	150	G2-1/2"	2000	4409
G 110-14	14	203	247	14.8	523	110	150	G2-1/2"	2000	4409
G 132-7.5	7.5	109	404	24.2	855	132	175	G2-1/2"	2100	4630
G 132-8.5	8.5	123	383	23.0	811	132	175	G2-1/2"	2100	4630
G 132-10	10	145	344	20.7	729	132	175	G2-1/2"	2100	4630
G 132-14	14	203	302	18.1	640	132	175	G2-1/2"	2100	4630
G 160-7.5 Pro	7.5	109	516.7	31.0	1095	160	215	DN100	3973	8759
G 160-8.5 Pro	8.5	123	500	30.0	1059	160	215	DN100	3973	8759
G 160-10 Pro	10	145	450	27.0	953	160	215	DN100	3973	8759
G 160-14 Pro	14	203	380	22.8	805	160	215	DN100	3973	8759
G 180-7.5 Pro	7.5	109	603.4	36.2	1279	180	241	DN100	4213	9288
G 180-8.5 Pro	8.5	123	583.3	35.0	1236	180	241	DN100	4213	9288
G 180-10 Pro	10	145	511.7	30.7	1084	180	241	DN100	4213	9288
G 180-14 Pro	14	203	411.7	24.7	872	180	241	DN100	4213	9288
G 200-7.5 Pro	7.5	109	693.4	41.6	1469	200	268	DN100	4298	9475
G 200-8.5 Pro	8.5	123	670	40.2	1420	200	268	DN100	4298	9475
G 200-10 Pro	10	145	591.6	35.5	1254	200	268	DN100	4298	9475
G 200-14 Pro	14	203	495	29.7	1049	200	268	DN100	4298	9475
G 250-7.5 Pro	7.5	109	750	45.0	1589	250	335	DN100	4513	9949
G 250-8.5 Pro	8.5	123	750	45.0	1589	250	335	DN100	4513	9949
G 250-10 Pro	10	145	673.4	40.4	1427	250	335	DN100	4513	9949
G 250-14 Pro	14	203	568.3	34.1	1204	250	335	DN100	4513	9949
G 250L-7.5 Pro	7.5	109	890	53.4	1886	250	335	DN125	6760	14903
G 250L-8.5 Pro	8.5	123	844	50.6	1788	250	335	DN125	6760	14903
G 250L-10 Pro	10	145	785	47.1	1662	250	335	DN125	6760	14903
G 250L-14 Pro	14	203	650	39.0	1378	250	335	DN125	6760	14903
G 315-7.5 Pro	7.5	109	1049	62.9	2222	315	422	DN125	6790	14969
G 315-8.5 Pro	8.5	123	1002	60.1	2123	315	422	DN125	6790	14969
G 315-10 Pro	10	145	916	55.0	1941	315	422	DN125	6790	14969
G 315-14 Pro	14	203	750	45.0	1589	315	422	DN125	6790	14969
*G 355-7.5 Pro	7.5	109	1093	65.6	2316	355	476	DN125	7130	15719
G 355-8.5 Pro	8.5	123	1093	65.6	2316	355	476	DN125	7130	15719
G 355-10 Pro	10	145	1000	60.0	2120	355	476	DN125	7130	15719
G 355-14 Pro	14	203	834	50.0	1766	355	476	DN125	7130	15719

* G 355-7.5 Pro FAD is 1140 l/s for water cooled version

(1) Unit performance : Measured according to ISO1217
Reference conditions:
- Absolute inlet pressure 1 bar (14,5psi)
- Intake air temperature 20°C (68°F)
- Cooling medium temperature 20°C (68°F)

FAD is measured at the following working pressures:

- 7.5 bar variants at 7 bar
- 8.5 bar variants at 8 bar
- 10 bar variants at 10 bar
- 14 bar variants at 12.5 bar

Technical data 50 Hz VSD

TYPE		Maximum working pressure		Capacity FAD (1)			Installed motor power		Air Outlet Size	Weight (shipping mass)	
		Standard		Pack						kg	lbs
		bar(e)	psig	l/s	m³/min	cfm	kW	HP			
50 Hz											
G 110 VSD-10	Minimum	4	58	77-335	4.6-20.1	163-710	110	150	G2-1/2"	2100	4630
G 110 VSD-10		7	102	77-334	4.6-20.1	163-708	110	150	G2-1/2"	2100	4630
G 110 VSD-10		8	116	76-317	4.6-19	161-672	110	150	G2-1/2"	2100	4630
G 110 VSD-10	Maximum	10	138	76-287	4.5-17.2	160-607	110	150	G2-1/2"	2100	4630
G 110 VSD-14	Maximum	14	203	83-244	5-14.6	176-516	110	150	G2-1/2"	2100	4630
G 132 VSD-10	Minimum	4	58	110-398	6.6-23.9	233-843	132	175	G2-1/2"	2200	4850
G 132 VSD-10		7	102	109-397	6.6-23.8	231-842	132	175	G2-1/2"	2200	4850
G 132 VSD-10		8	116	108-378	6.5-22.7	230-800	132	175	G2-1/2"	2200	4850
G 132 VSD-10	Maximum	10	138	108-342	6.5-20.5	229-724	132	175	G2-1/2"	2200	4850
G 132 VSD-14	Maximum	14	203	112-288	6.7-17.3	238-611	132	175	G2-1/2"	2200	4850
G 160VSD-10 Pro		10	145	201.9-543.3	12.1-32.6	428-1151	160	215	DN100	3570	7871
G 160VSD-14 Pro		14	203	202.3-461.6	12.1-27.7	429-978	160	215	DN100	3570	7871
G 180VSD-10 Pro		10	145	198.3-613.4	11.9-36.8	420-1300	180	241	DN100	3607	7952
G 180VSD-14 Pro		14	203	199.6-516.6	12.0-31.0	423-1095	180	241	DN100	3607	7952
G 200VSD-10 Pro		10	145	198.4-706.7	11.9-42.4	420-1497	200	268	DN100	3617	7974
G 200VSD-14 Pro		14	203	254.1-600	15.2-36.0	538-1271	200	268	DN100	3617	7974
G 250VSD-10 Pro		10	145	198.5-750	11.9-45.0	421-1589	250	335	DN100	3792	8360
G 250VSD-14 Pro		14	203	200.4-651.7	12.0-39.1	425-1381	250	335	DN100	3792	8360
G 250LVSD-10 Pro		10	145	277-883	16.6-53.0	587-1872	250	335	DN125	6495	14319
G 250LVSD-14 Pro		14	203	267-750	16.0-45.0	566-1589	250	335	DN125	6495	14319
G 315VSD-10 Pro		10	145	352-1050	21.1-63.0	746-2225	315	422	DN125	6740	14859
G 315VSD-14 Pro		14	203	345-939	20.7-56.3	731-1989	315	422	DN125	6740	14859
*G 355VSD-10 Pro		10	145	351-1090	21.1-65.4	744-2310	355	476	DN125	6750	14881
G 355VSD-14 Pro		14	203	345-1020	20.7-61.2	731-2162	355	476	DN125	6750	14881

* G 355VSD-10 Pro max FAD is up to 1140 l/s for water cooled version

(1) Unit performance : Measured according to ISO1217

Reference conditions:

- Absolute inlet pressure 1 bar (14,5psi)
- Intake air temperature 20°C (68°F)
- Cooling medium temperature 20°C (68°F)

FAD is measured at the following working pressures:

- 10 bar variants between 7 to 10 bar
- 14 bar variants between 10 to 14 bar

Technical data 60 Hz

TYPE	Maximum working pressure		Capacity FAD (1)			Installed motor power		Air Outlet Size	Weight (shipping mass)		
	Standard		Pack						Standard		
	bar(e)	psig	l/s	m³/min	cfm	kW	HP		kg	lbs	
60 Hz											
G 90-7.5	7.5	109	298	17.9	632	90	125	NPT 2-1/2"	1900	4189	
G 90-8.5	8.5	123	269	16.1	569	90	125	NPT 2-1/2"	1900	4189	
G 90-10	10	145	254	15.2	537	90	125	NPT 2-1/2"	1900	4189	
G 90-14	14	203	223	13.4	472	90	125	NPT 2-1/2"	1900	4189	
G 110-7.5	7.5	109	332	19.9	704	110	150	NPT 2-1/2"	2000	4409	
G 110-8.5	8.5	123	313	18.8	664	110	150	NPT 2-1/2"	2000	4409	
G 110-10	10	145	288	17.3	610	110	150	NPT 2-1/2"	2000	4409	
G 110-14	14	203	248	14.9	525	110	150	NPT 2-1/2"	2000	4409	
G 132-7.5	7.5	109	403	24.2	853	132	175	NPT 2-1/2"	2100	4630	
G 132-8.5	8.5	123	383	23.0	811	132	175	NPT 2-1/2"	2100	4630	
G 132-10	10	145	346	20.8	733	132	175	NPT 2-1/2"	2100	4630	
G 132-14	14	203	313	18.8	663	132	175	NPT 2-1/2"	2100	4630	
G 160-7.5 Pro	7.5	109	521.6	31.3	1105	160	215	ANSI 4"	3973	8759	
G 160-8.5 Pro	8.5	123	503.3	30.2	1066	160	215	ANSI 4"	3973	8759	
G 160-10 Pro	10	145	460	27.6	975	160	215	ANSI 4"	3973	8759	
G 160-14 Pro	14	203	376.7	22.6	798	160	215	ANSI 4"	3973	8759	
G 180-7.5 Pro	7.5	109	595	35.7	1261	180	241	ANSI 4"	4213	9288	
G 180-8.5 Pro	8.5	123	583.3	35.0	1236	180	241	ANSI 4"	4213	9288	
G 180-10 Pro	10	145	516.6	31.0	1095	180	241	ANSI 4"	4213	9288	
G 180-14 Pro	14	203	416.7	25.0	883	180	241	ANSI 4"	4213	9288	
G 200-7.5 Pro	7.5	109	680.1	40.8	1441	200	268	ANSI 4"	4298	9475	
G 200-8.5 Pro	8.5	123	668.3	40.1	1416	200	268	ANSI 4"	4298	9475	
G 200-10 Pro	10	145	596.7	35.8	1264	200	268	ANSI 4"	4298	9475	
G 200-14 Pro	14	203	495.1	29.7	1049	200	268	ANSI 4"	4298	9475	
G 250-7.5 Pro	7.5	109	741.7	44.5	1572	250	335	ANSI 4"	4513	9949	
G 250-8.5 Pro	8.5	123	741.6	44.5	1571	250	335	ANSI 4"	4513	9949	
G 250-10 Pro	10	145	683.3	41.0	1448	250	335	ANSI 4"	4513	9949	
G 250-14 Pro	14	203	570	34.2	1208	250	335	ANSI 4"	4513	9949	
G 250L-7.5 Pro	7.5	109	890	53.4	1886	250	335	ANSI 5"	6760	14903	
G 250L-8.5 Pro	8.5	123	843	50.6	1785	250	335	ANSI 5"	6760	14903	
G 250L-10 Pro	10	145	780	46.8	1652	250	335	ANSI 5"	6760	14903	
G 250L-14 Pro	14	203	705	42.3	1494	250	335	ANSI 5"	6760	14903	
G 315-7.5 Pro	7.5	109	1046	62.8	2217	315	422	ANSI 5"	6790	14969	
G 315-8.5 Pro	8.5	123	1006	60.4	2131	315	422	ANSI 5"	6790	14969	
G 315-10 Pro	10	145	910	54.6	1928	315	422	ANSI 5"	6790	14969	
G 315-14 Pro	14	203	777	46.6	1646	315	422	ANSI 5"	6790	14969	
*G 355-7.5 Pro	7.5	109	1093	65.6	2316	355	476	ANSI 5"	7130	15719	
G 355-8.5 Pro	8.5	123	1084	65.1	2297	355	476	ANSI 5"	7130	15719	
G 355-10 Pro	10	145	1004	60.3	2128	355	476	ANSI 5"	7130	15719	
G 355-14 Pro	14	203	854	51.2	1809	355	476	ANSI 5"	7130	15719	

* G 355-7.5 Pro FAD is 1140 l/s for water cooled version

(1) Unit performance : Measured according to ISO1217

Reference conditions:

- Absolute inlet pressure 1 bar (14,5psi)
- Intake air temperature 20°C (68°F)
- Cooling medium temperature 20°C (68°F)

FAD is measured at the following working pressures:

- 7.5 bar variants at 7 bar
- 8.5 bar variants at 8 bar
- 10 bar variants at 10 bar
- 14 bar variants at 12.5 bar

Technical data 60 Hz VSD

TYPE		Maximum working pressure		Capacity FAD (1)			Installed motor power		Air Outlet Size	Weight (shipping mass)	
		Standard		Pack							
		bar(e)	psig	l/s	m³/min	cfm	kW	HP		kg	lbs
60 Hz											
G 110 VSD - 10	Minimum	4	58	81-335	4.9-20.1	172-710	110	150	NPT 2-1/2"	2100	4630
G 110 VSD - 10		7	102	77-335	4.6-20.1	163-710	110	150	NPT 2-1/2"	2100	4630
G 110 VSD - 10		8	116	76-313	4.6-18.8	161-664	110	150	NPT 2-1/2"	2100	4630
G 110 VSD - 10	Maximum	10	138	76-290	4.5-17.4	160-614	110	150	NPT 2-1/2"	2100	4630
G 110 VSD - 14	Maximum	14	203	83-244	5-14.6	176-518	110	150	NPT 2-1/2"	2100	4630
G 132 VSD - 10	Minimum	4	58	114-399	6.8-23.9	241-845	132	175	NPT 2-1/2"	2200	4850
G 132 VSD - 10		7	102	109-399	6.6-23.9	231-844	132	175	NPT 2-1/2"	2200	4850
G 132 VSD - 10		8	116	108-383	6.5-23	230-811	132	175	NPT 2-1/2"	2200	4850
G 132 VSD - 10	Maximum	10	138	108-347	6.5-20.8	229-736	132	175	NPT 2-1/2"	2200	4850
G 132 VSD - 14	Maximum	14	203	112-288	8.7-17.3	238-611	132	175	NPT 2-1/2"	2200	4850
G 160VSD-10 Pro		10	145	201.9-543.3	12.1-32.6	428-1151	160	215	ANSI 4"	3570	7871
G 160VSD-14 Pro		14	203	202.3-461.6	12.1-27.7	429-978	160	215	ANSI 4"	3570	7871
G 180VSD-10 Pro		10	145	198.3-613.4	11.9-36.8	420-1300	180	241	ANSI 4"	3607	7952
G 180VSD-14 Pro		14	203	199.6-516.6	12.0-31.0	423-1095	180	241	ANSI 4"	3607	7952
G 200VSD-10 Pro		10	145	198.4-706.7	11.9-42.4	420-1497	200	268	ANSI 4"	3617	7974
G 200VSD-14 Pro		14	203	254.1-600	15.2-36.0	538-1271	200	268	ANSI 4"	3617	7974
G 250VSD-10 Pro		10	145	198.5-750	11.9-45.0	421-1589	250	335	ANSI 4"	3792	8360
G 250VSD-14 Pro		14	203	200.4-651.7	12.0-39.1	425-1381	250	335	ANSI 4"	3792	8360
G 250LVSD-10 Pro		10	145	277-883	16.6-53.0	587-1872	250	335	ANSI 5"	6495	14319
G 250LVSD-14 Pro		14	203	267-750	16.0-45.0	566-1589	250	335	ANSI 5"	6495	14319
G 315VSD-10 Pro		10	145	352-1050	21.1-63.0	746-2225	315	422	ANSI 5"	6740	14859
G 315VSD-14 Pro		14	203	345-939	20.7-56.3	731-1989	315	422	ANSI 5"	6740	14859
*G 355VSD-10 Pro		10	145	351-1090	21.1-65.4	744-2310	355	476	ANSI 5"	6750	14881
G 355VSD-14 Pro		14	203	345-1020	20.7-61.2	731-2162	355	476	ANSI 5"	6750	14881

* G 355VSD-10 Pro max FAD is up to 1140 l/s for water cooled version

(1) Unit performance : Measured according to ISO1217

Reference conditions:

- Absolute inlet pressure 1 bar (14,5psi)
- Intake air temperature 20°C (68°F)
- Cooling medium temperature 20°C (68°F)

FAD is measured at the following working pressures:

- 10 bar variants between 7 to 10 bar
- 14 bar variants between 10 to 14 bar