

Low Pressure Rotary Screw Air Compressors

Installed motor power: 11-315kW, 15-425hp

Free air delivery: 0.74-93.65m³/min, Pressure 3-5bar



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LOW PRESSURE ROTARY SCREW AIR COMPRESSORS(FIXED SPEED)

Features and advantages



01

Smart Controller

- Increased reliability: durable keyboard, user-friendly, multilingual user interface.
- Improved ease of use: intuitive navigation system with main operation conditions including warning indications, maintenance scheduling etc.



02

Stainless Steel Oil Pipe And Air Pipe

- High temperature resistant ($400^{\circ}\text{C} = 752^{\circ}\text{F}$) and low temperature resistant ($-270^{\circ}\text{C} = -518^{\circ}\text{F}$), high pressure resistant.
- Ultra-long life(80 years), completely leak free and maintenance free.



03

Intelligent Control And Protection

- Schneider electrical elements with original package from France, safe and reliable.
- Reasonable, simple and clear wiring, easy for maintenance.
- Good protection function ensures the stable running of the compressor unit.



04

Premium Efficiency Drive Motor

- Premium efficiency totally enclosed fan cooled (TEFC) IP54/IP55 motor (Class F insulation) protects against dust and chemicals etc.
- Long-term stable operation even in harsh environments up to 55°C (131°F).



05

State-of-the-art Screw Element

- Original DENAIR air end.
- Advanced SAP profile design.
- The material of the rotors is American specialty steel.
- Superior Sweden SKF element bearings.



06

Efficient Radiator

High quality aluminum aluminum fins and copper coil materials with good thermal conductivity ensure the perfect cooling efficiency.

Technical parameters for single stage

Model	Maximum Working Pressure		Capacity FAD*				Installed Motor Power		Driving Model & Cooling Method	Noise level** [dB(A)]	Dimensions(mm)			Weight kg	Air outlet pipe diameter
			50Hz		60Hz						L	W	H		
	bar(g)	psig	m ³ /min	cfm	m ³ /min	cfm	kW	hp							
DAL-11	3	43.5	1.81	64	1.76	62	11	15	Direct Driven Air Cooling/ W-water Cooling	76	1500	960	1200	500	R1-1/2
DAL-15			3.97	140	3.85	136	15	20		76	1500	960	1200	500	R1-1/2
DAL-18			5.83	206	5.66	200	18	25		76	1800	1200	1700	800	R2
DAL-22			6.77	239	6.57	232	22	30		76	1800	1200	1700	900	R2
DAL-30			9.76	345	9.48	335	30	40		76	2340	1480	1600	1300	DN65
DAL-37			12.17	430	11.82	417	37	50		76	2340	1480	1600	1400	DN65
DAL-45			14.33	506	13.91	491	45	60		76	2705	1775	1915	1600	DN80
DAL-55			18.13	640	17.60	621	55	75		80	2705	1775	1915	1650	DN80
DAL-75			22.31	788	21.66	765	75	100		80	2705	1775	1915	2100	DN80
DAL-90			29.46	1040	28.60	1010	90	120		80	3110	1890	2150	2950	DN125
DAL-110(W)			32.45	1146	31.50	1112	110	150		80	3110	1890	2150	3100	DN125
DAL-132(W)			46.66	1648	45.30	1600	132	175		80	3790	2290	2540	5500	DN150
DAL-160(W)			50.37	1778	48.90	1727	160	215		83	3790	2290	2540	5850	DN150
DAL-185(W)			61.80	2182	60.00	2119	185	250		83	4100	2500	2770	6300	DN150
DAL-200(W)			63.91	2257	62.05	2191	200	270		85	4100	2500	2770	6400	DN150
DAL-220(W)			74.32	2624	72.16	2548	220	300		85	4100	2500	2770	6500	DN200
DAL-250(W)			83.51	2949	81.08	2863	250	350		85	4100	2500	2770	6600	DN200
DAL-280(W)	93.65	3307	89.19	3149	280	375	88	4100	2500	2770	6700	DN200			

*) FAD in accordance with ISO 1217:2009, Annex C: Absolute intake pressure 1 bar (a), cooling and air intake temperature 20 °C

**) Noise level as per ISO 2151 and the basic standard ISO 9614-2, operation at maximum operating pressure and maximum speed; tolerance: ±3 dB(A)

Specifications are subject to change without notice.

Technical parameters for double stage

Model	Maximum Working Pressure		Capacity FAD*				Installed Motor Power		Driving Model & Cooling Method	Noise level** [dB(A)]	Dimensions(mm)			Weight kg	Air outlet pipe diameter
			50Hz		60Hz						L	W	H		
	bar(g)	psig	m ³ /min	cfm	m ³ /min	cfm	kW	hp							
DAL-22+	5	72.5	7.07	250	6.86	242	22	30	Direct Driven Air Cooling/ W-water Cooling	76	1700	1150	1330	900	R2
DAL-30+			8.53	301	8.28	292	30	40		76	2340	1480	1600	1500	R2
DAL-37+			9.46	334	9.18	324	37	50		76	2340	1480	1600	1500	R2
DAL-45+			12.27	433	11.91	421	45	60		76	2340	1480	1600	1700	R2
DAL-55+			16.24	573	15.77	557	55	75		80	2435	1795	1715	2150	DN80
DAL-75+			20.12	710	19.53	690	75	100		80	2435	1795	1715	2200	DN80
DAL-90(W)+			26.22	926	25.46	899	90	120		80	3110	1890	2150	3200	DN100
DAL-110(W)+			28.91	1021	28.07	991	110	150		80	3110	1890	2150	3500	DN100
DAL-132(W)+			37.35	1319	36.26	1280	132	175		80	3310	2090	2400	4300	DN100
DAL-160(W)+			42.17	1489	40.94	1446	160	215		83	3730	2380	2550	5450	DN125
DAL-185(W)+			46.94	1657	45.57	1609	185	250		83	3730	2380	2550	5500	DN125
DAL-200(W)+			52.16	1842	50.64	1788	200	270		85	3730	2380	2550	5700	DN125
DAL-220(W)+			56.58	1998	54.93	1940	220	300		85	3730	2380	2550	5800	DN125
DAL-250(W)+			63.52	2243	61.67	2178	250	350		85	4100	2500	2770	6700	DN150
DAL-280(W)+			70.12	2476	66.78	2358	280	375		88	4100	2500	2770	6780	DN150
DAL-315(W)+			73.24	2586	70.42	2487	315	425		88	4100	2500	2770	6800	DN150

*) FAD in accordance with ISO 1217:2009, Annex C: Absolute intake pressure 1 bar (a), cooling and air intake temperature 20 °C

**) Noise level as per ISO 2151 and the basic standard ISO 9614-2, operation at maximum operating pressure and maximum speed; tolerance: ±3 dB(A)

Specifications are subject to change without notice.

LOW PRESSURE ROTARY SCREW AIR COMPRESSORS(PM VSD)

Features and advantages



01

Variable Speed Drive

- Different variable speed drive brands available, such as INVT, ABB, Bosch etc.
- VSD: variable volume, controlled costs: there is no unnecessary power generated, the DENAIR DVA models can reduce energy costs by 35% or more.
- Life cycle costs of the compressor can be reduced by an average of 22%.



02

State-of-the-art Screw Element

- Original DENAIR air end.
- Advanced SAP profile design.
- The material of the rotors is American specialty steel.
- Superior Sweden SKF element bearings.



03

Smart Controller

- Increased reliability: durable keyboard, user-friendly, multilingual user interface.
- Improved ease of use: intuitive navigation system with main operation conditions including warning indications, maintenance scheduling etc.



04

High Efficiency Permanent Magnetic Motor

- Cooling method: oil cooling/air cooling
- No bearing design, 100% transmission efficiency
- UH series magnets, can withstand temperature up to 180 °C
- Up to 5 years durability test, 40,000 hours of durable operation without failure
- IP65, F class insulation, B grade temperature rise
- Perfectly linear output torque, low speed still retains high torque output



05

Efficient Separation System

- Reduction of pressure drops and energy costs.
- Low oil consumption ensures minimal maintenance costs and long compressor lifetime.
- Quality air with low oil content:
 - three step air-oil separation(centrifuge, gravity, filter)
 - oil content: less than 3 ppm by weight
 - hinged cover for easy separator element change.



06

Stainless Steel Oil Pipe and Air Pipe

- High temperature resistant (400°C=752°F) and low temperature resistant (-270°C = -518°F), high pressure resistant.
- Ultra-long life(80 years), completely leak free and maintenance free.

Technical parameters for single stage

Model	Maximum Working Pressure		Capacity FAD*								Installed Motor Power		Driving Model & Cooling Method	Noise level**	Dimensions(mm)			Weight	Air outlet pipe diameter
			50Hz				60Hz								L	W	H		
	bar(g)	psig	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	kW	hp						[dB(A)]	
DAVL-11	3	43.5	0.74	1.85	26	65	0.70	1.76	25	62	11	15	Direct Driven Air Cooling/ W-water Cooling	76	1500	960	1200	500	R1-1/2
DAVL-15			1.62	4.04	57	143	1.54	3.85	54	136	15	20		76	1500	960	1200	500	R1-1/2
DAVL-18			2.38	5.94	84	210	2.26	5.66	80	200	18	25		76	1800	1200	1700	800	R2
DAVL-22			2.76	6.90	97	244	2.63	6.57	93	232	22	30		76	1800	1200	1700	900	R2
DAVL-30			3.98	9.95	141	351	3.79	9.48	134	335	30	40		76	2340	1480	1600	1300	DN65
DAVL-37			4.96	12.41	175	438	4.73	11.82	167	417	37	50		76	2340	1480	1600	1400	DN65
DAVL-45			5.84	14.61	206	516	5.56	13.91	196	491	45	60		76	2705	1775	1915	1600	DN80
DAVL-55			7.39	18.48	261	653	7.04	17.60	249	621	55	75		80	2705	1775	1915	1650	DN80
DAVL-75			9.10	22.74	321	803	8.66	21.66	306	765	75	100		80	2705	1775	1915	2100	DN80
DAVL-90			12.01	30.03	424	1060	11.44	28.60	404	1010	90	120		80	3110	1890	2150	2950	DN125
DAVL-110(W)			13.23	33.08	467	1168	12.60	31.50	445	1112	110	150		80	3110	1890	2150	3100	DN125
DAVL-132(W)			19.03	47.57	672	1680	18.12	45.30	640	1600	132	175		80	3790	2290	2540	5500	DN150
DAVL-160(W)			20.54	51.35	725	1813	19.56	48.90	691	1727	160	215		83	3790	2290	2540	5850	DN150
DAVL-185(W)			25.20	63.00	890	2225	24.00	60.00	847	2119	185	250		83	4100	2500	2770	6300	DN150
DAVL-200(W)			26.06	65.15	920	2300	24.82	62.05	876	2191	200	270		85	4100	2500	2770	6400	DN150
DAVL-220(W)			30.31	75.77	1070	2675	28.86	72.16	1019	2548	220	300		85	4100	2500	2770	6500	DN200
DAVL-250(W)			34.05	85.13	1202	3006	32.43	81.08	1145	2863	250	350		85	4100	2500	2770	6600	DN200
DAVL-280(W)	37.46	93.65	1323	3307	35.68	89.19	1260	3149	280	375	88	4100	2500	2770	6700	DN200			

*) FAD in accordance with ISO 1217:2009, Annex C: Absolute intake pressure 1 bar (a), cooling and air intake temperature 20 °C

**) Noise level as per ISO 2151 and the basic standard ISO 9614-2, operation at maximum operating pressure and maximum speed; tolerance: ±3 dB(A)

Specifications are subject to change without notice.

Technical parameters for double stage

Model	Maximum Working Pressure		Capacity FAD*								Installed Motor Power		Driving Model & Cooling Method	Noise level**	Dimensions(mm)			Weight	Air outlet pipe diameter
			50Hz				60Hz								L	W	H		
	bar(g)	psig	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	kW	hp						[dB(A)]	
DAVL-22+	5	72.5	2.88	7.20	102	254	2.74	6.86	97	242	22	30	Direct Driven Air Cooling/ W-water Cooling	76	1700	1150	1330	900	R2
DAVL-30+			3.48	8.69	123	307	3.31	8.28	117	292	30	40		76	2340	1480	1600	1500	R2
DAVL-37+			3.86	9.64	136	340	3.67	9.18	130	324	37	50		76	2340	1480	1600	1500	R2
DAVL-45+			5.00	12.51	177	442	4.76	11.91	168	421	45	60		76	2340	1480	1600	1700	R2
DAVL-55+			6.62	16.56	234	585	6.31	15.77	223	557	55	75		80	2435	1795	1715	2150	DN80
DAVL-75+			8.20	20.51	290	724	7.81	19.53	276	690	75	100		80	2435	1795	1715	2200	DN80
DAVL-90(W)+			10.69	26.73	377	944	10.18	25.46	360	899	90	120		80	3110	1890	2150	3200	DN100
DAVL-110(W)+			11.79	29.47	416	1041	11.23	28.07	396	991	110	150		80	3110	1890	2150	3500	DN100
DAVL-132(W)+			15.23	38.07	538	1344	14.50	36.26	512	1280	132	175		80	3310	2090	2400	4300	DN100
DAVL-160(W)+			17.19	42.99	607	1518	16.38	40.94	578	1446	160	215		83	3730	2380	2550	5450	DN125
DAVL-185(W)+			19.14	47.85	676	1690	18.23	45.57	644	1609	185	250		83	3730	2380	2550	5500	DN125
DAVL-200(W)+			21.27	53.17	751	1877	20.26	50.64	715	1788	200	270		85	3730	2380	2550	5700	DN125
DAVL-220(W)+			23.07	57.68	815	2037	21.97	54.93	776	1940	220	300		85	3730	2380	2550	5800	DN125
DAVL-250(W)+			25.90	64.75	915	2286	24.67	61.67	871	2178	250	350		85	4100	2500	2770	6700	DN150
DAVL-280(W)+			28.05	70.12	990	2476	26.71	66.78	943	2358	280	375		88	4100	2500	2770	6780	DN150
DAVL-315(W)+			29.58	73.94	1044	2611	28.17	70.42	995	2487	315	425		88	4100	2500	2770	6800	DN150

*) FAD in accordance with ISO 1217:2009, Annex C: Absolute intake pressure 1 bar (a), cooling and air intake temperature 20 °C

**) Noise level as per ISO 2151 and the basic standard ISO 9614-2, operation at maximum operating pressure and maximum speed; tolerance: ±3 dB(A)

Specifications are subject to change without notice.



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Never use compressed air without prior purification in accordance with local legislation and standards.



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