VARIABLE FREQUENCY DIRECT SCREW AIR COMPRESSOR

Introduction

Every model has a corresponding frequency conversion compressor, which controls the air delivery by changing the rotational speed of motor, making the air output and electricity consumption smoothly vary the air supply decreases and so does the electricity consumption for energy conservation. For capacity ranging from 2 to 60m3/min and discharge pressure from 0.5-1.3Mpa. There are corresponding models available to customers with different requirements.

In addition to that frequency conversion air compressors have the same good quality as other ERC model, the quality frequency converter will further better the result of energy conservation. With the help of the PID regulator disposed in frequency converter, it can start up smoothly, causes little impact on the power grid and generates great low-frequency start moment of current vector control and small running current. When the air use decreases, the compressors enter the sleeping status, saving considerable energy. Moreover, digital to analog conversion is highly accurate and the integration design features few fault points.

Life of compressor air end:

Rotors are asymmetric in profile and backed up by ball bearings and roller bearings and operate at a low speed. Helical gears can produce axial force to kill some acting force, which reduces the load of the bearing of compressor air end. Thereby low in abrasion and maintenance and repair expenses and the compressor air end being long in service life.

More reliable operation:

With frequency conversion soft start reduce in-rush starting current, reduce wear on electrical switch gears and motor windings. Also maintain less power during starting and stopping of motors and increase protection to motors. Also reduce peak demand and improve power factor.

In the case of rated power license setting desired pressure at discretion, and maintaining constant pressure at discretion, and maintaining constant pressure:

User to choose any delivery pressure between 4-13bar without any gears or belt change. When the use of air increases the unit increases air output through automatic acceleration of rotational speed to avoid a falling pressure and ensure volume at constant pressure. When the use of air decreases, the unit reduces air output by automatically lowering the rotational speed to avoid pressure increase and ensure continued air supply constant pressure.

Efficiency and energy conservation:

Thanks to the variable-speed control technology, the capacity of compressors can be perfectly combined with the air use of users, which downright avoid the unloading power loss. In intermittent air use, the minimized load of soft start eliminates the starting frequency of the peak current and further smooth start can reduce the power supply, equipment costs as well as the impact on the network power.

Model		Air delivery /Working pressure				Motor		Cooling air	Cooling water	connect pipe diam	Weight	Dimension(mm)		
		m^3/min/bar				KW		m3/min			Kg	L	W	H
ERC-30SA		1.52-3.8/7	1.4-3.6/8	1.28-3.2/10	1.08-2.5/12.5	22		110		1 1/4"	665	1380	850	1150
ERC-30SW		1.52-3.8/7	1.4-3.6/8	1.28-3.2/10	1.08-2.5/12.5	22			14.5	1 1/4"	665	1380	850	1150
ERC-40SA		2.08-5.3/7	2.0-5.0/8	1.72-4.3/10	1.48-3.6/12.5	30		145		1 1/4"	925	1380	850	1150
ERC-40SW		2.08-5.3/7	2.0-5.0/8	1.72-4.3/10	1.48-3.6/12.5	30			20	1 1/4"	925	1380	850	1150
ERC-50SA		2.56-6.6/7	2.4-6.2/8	2.2-5.7/10	1.84-4.6/12.5	37		145		1 1/2"	1110	1595	1000	1365
ERC-50SW		2.56-6.6/7	2.4-6.2/8	2.2-5.7/10	1.84-4.6/12.5	37			25	1 1/2"	1110	1595	1000	1365
ERC-60SA		3.2-8.0/7	3.08-7.7/8	2.6-6.9/10	2.16-6.0/12.5	45		185		1 1/2"	1210	1595	1000	1365
ERC-60SW		3.2-8.0/7	3.08-7.7/8	2.6-6.9/10	2.16-6.0/12.5	45			30	1 1/2"	1210	1595	1000	1365
ERC-75SA		4.2-10.5/7	3.92-9.8/8	3.4-8.7/10	2.84-7.3/12.5	55		220		2"	1810	2100	1250	1700
ERC-75SW		4.2-10.5/7	3.92-9.8/8	3.4-8.7/10	2.84-7.3/12.5	55			39.9	2"	1810	2100	1250	1700
ERC-100SA		5.4-13.6/7	5.16-13.0/8	4.4-11.3/10	3.76-10.1/12.5	75		250		2"	1900	2100	1250	1700
ERC-100SW		5.4-13.6/7	5.16-13.0/8	4.4-11.3/10	3.76-10.1/12.5	75			51	2"	1900	2100	1250	1700
ERC-120SA	A-air cooling	6.4-16.2/7	6.16-15.4/8	5.6-13.2/10	4.6-11.2/12.5	90		270		2"	2190	2100	1250	1700
ERC-120SW		6.4-16.2/7	6.16-15.4/8	5.6-13.2/10	4.6-11.2/12.5	90			61	2"	2190	2100	1250	1700
ERC-150SA		8.32-20.8/7	7.8-19.5/8	6.3-16.5/10	5.2-13.7/12.5	110		420		DN65	3030	2545	1450	1900
ERC-150SW		8.32-20.8/7	7.8-19.5/8	6.3-16.5/10	5.2-13.7/12.5	110			79	DN65	3030	2500	1550	1900
ERC-175SA		9.6-24.0/7	9.2-23.0/8	7.4-20.0/10	5.8-15.5/12.5	132		460		DN65	3320	2545	1450	1900
ERC-175SW		9.6-24.0/7	9.2-23.0/8	7.4-20.0/10	5.8-15.5/12.5	132			91	DN65	3320	2500	1550	1900
ERC-200SA		11.08-27.8/7	10.2-26.0/8	9.0-23.5/10	7.32-19.5/12.5	160		510		DN65	3720	2650	1550	1920
ERC-200SW	W- water cooling	11.08-27.8/7	10.2-26.0/8	9.0-23.5/10	7.32-19.5/12.5	160			105	DN65	3720	2650	1550	1950
ERC-250SA		13-32.5/7	12.4-31.0/8	9.8-26.0/10	8.0-21.6/12.5	185		510		DN80	3930	2650	1550	1920
ERC-250SW		13-32.5/7	12.4-31.0/8	9.8-26.0/10	8.0-21.6/12.5	185			123.5	DN80	3930	2650	1550	1950
ERC-270SA		13.6-34.5/7	12.8-33.0/8	11.2-28.0/10	9.4-23.5/12.5	200		620		DN80	4550	2850	1700	2000
ERC-270SW		13.6-34.5/7	12.8-33.0/8	11.2-28.0/10	9.4-23.5/12.5	200			131	DN80	4550	2850	1700	2000
ERC-300SA		14.8-38.0/7	14.0-36.5/8	12.032.0/10	10.4-27.0/12.5	220		710		DN100	5080	3400	1950	2020
ERC-300SW		14.8-38.0/7	14.0-36.5/8	12.032.0/10	10.4-27.0/12.5	220			144	DN100	5080	3400	1950	2020
ERC-330SA		17.2-43.0/7	16.2-40.5/8	13.6-36.5/10	12.0-32.0/12.5	250		800		DN100	5700	3400	1950	2020
ERC-330SW		17.2-43.0/7	16.2-40.5/8	13.6-36.5/10	12.0-32.0/12.5	250			163	DN100	5700	3400	1950	2020
ERC-375SA		21.0-51.5/7	20.0-50.0/8	18.0-45.0/10	14.8-37.0/12.5	280		890		DN125	6500	4000	2000	2100
ERC-375SW		21.0-51.5/7	20.0-50.0/8	18.0-45.0/10	14.8-37.0/12.5	280			202	DN125	6500	4000	2000	2100
ERC-420SA		21.6-56.0/7	18.8-55.0/8	15.6-49.0/10	13.4-41.0/12.5	315		960		DN125	7850	4600	2300	2400
ERC-420SW		21.6-56.0/7	18.8-55.0/8	15.6-49.0/10	13.4-41.0/12.5	315			212	DN125	7850	4600	2300	2400
Variable frequency starting							V/3PH	Ambient temperature + 15℃						
Voltage V/ HZ /PH : 380/50/3 220/60/3 440/50/3 etc or Two kinds of voltage reverse According to customer inquiry														