

HITACHI



LH HIGH-EFFICIENCY SERIES

22-250 kW

7.5-13.0 bar(g)

High-Efficiency Stationary Oil Flooded
Screw Air Compressor



Hitachi Global Air Power

Sullair and Hitachi

Since 1965, Sullair air compressors have been known for their Reliability, Durability and Performance. The legacy continues now as Hitachi Global Air Power - featuring the legendary Sullair product line, Together, two titans in the industry bring experience, engineering and expertise for every compressed air need.

RELIABILITY.
DURABILITY.
PERFORMANCE.

*These are the pillars that drive the quality of Sullair compressors.
It's a promise every Sullair machine makes.*



RELIABILITY

Customers who work with Sullair compressors have found intangibles make all the difference — things like trust, confidence and peace of mind. They go to work every day having full faith in their equipment, as well as the knowledge they have access to true compressor experts ready to support them every step of the way.

DURABILITY

Hitachi Global Air Power represents the collective strength of more than 150 years of compressor experience and the legendary durability of Sullair products. In shops and factories all around the world, our products have withstood the test of time, running consistently today as they did on day one.

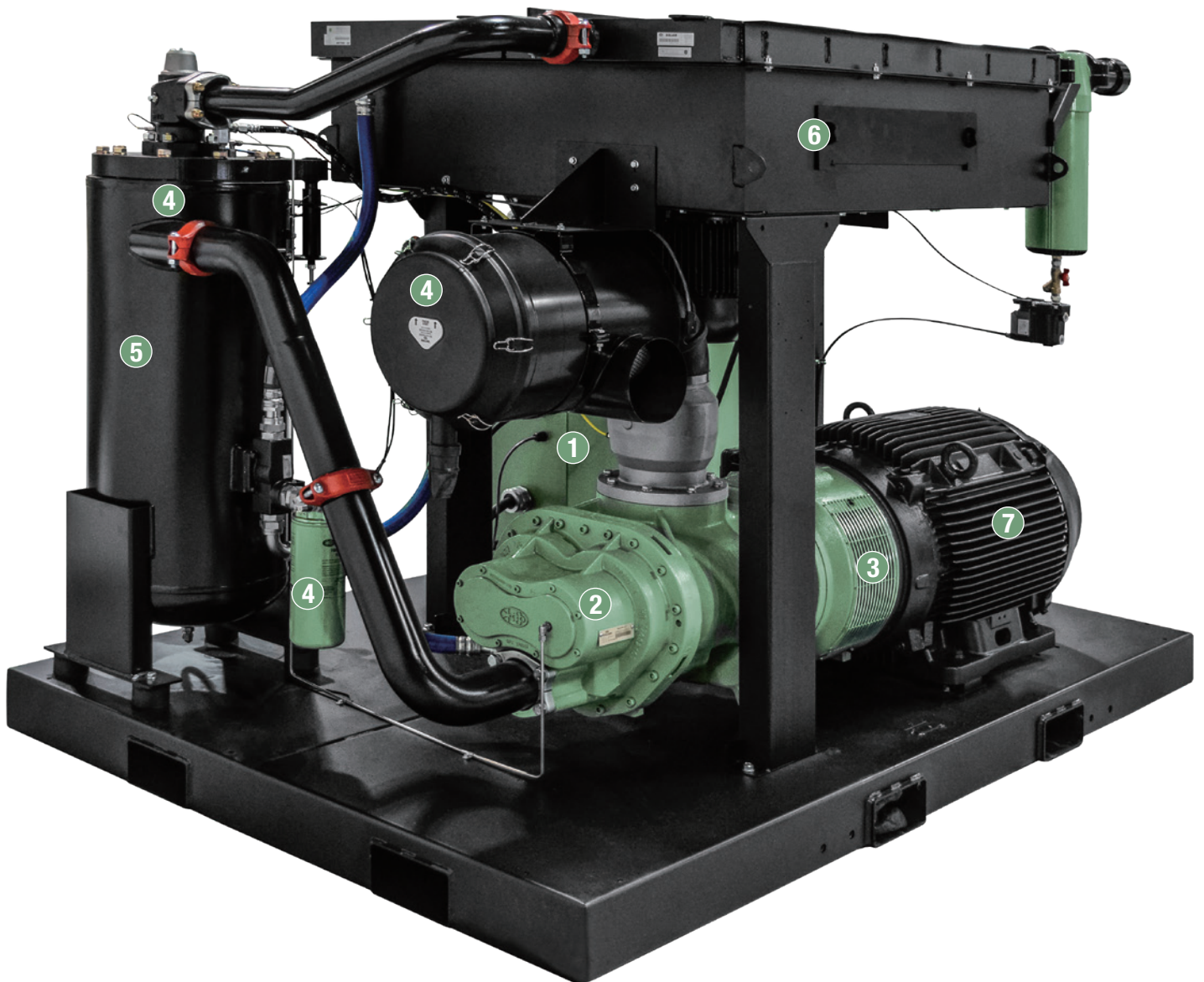
PERFORMANCE

Our vision for success is two-fold: produce clean, quality air for the job at hand, and provide cost-effective solutions for now and the long term. With high standards of efficiency for our compressors, we are committed to customer performance — especially in applications where air purity is critical.

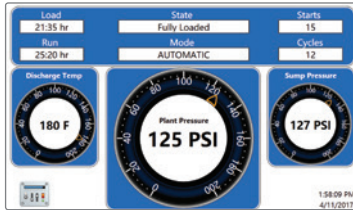
The Hitachi Global Air Power network of engineering and quality experts continues to build next-generation, environment-forward compressed air solutions to meet the demands of today's hard-working customers.



KEY PRODUCT FEATURES AND INDICATORS THAT BRING YOU BETTER PERFORMANCE



1. Electronic Control System



- 10" Touch Screen for LH90-250.
- The electronic control system from International brand with high reliability.
- Temperature and pressure display in real time and alarm function.

2. Air End

- Sullair's advanced Air End technology with the latest engineering design.
- Large rotor, low speed design, low noise, high reliability and durability.
- Proven reliable bearing design to extend bearing life (up to 100,000 hours) and reduce on maintenance cost.
- 5 years warranty will be provided for the screw Air End.

You can choose the exclusive Sullair Air End with 10 Years Diamond Warranty.



Maintaining the Sullair 10-Year Diamond Warranty requires using Genuine Sullair parts (Please contact with Sullair).

3. Transmission System

Transmission System has a robust design of the gear plus coupling. The use of the coupling increase the operational reliability of the transmission system, avoids the large radial force and axial force brought by the helical gear transmission, protects the motor bearing and compressor bearing. This will significantly prolongs the life span of the transmission system.

4. Filtration System

- Sullair OptimaAir® Air Filter provide 99.9% efficiency per ISO5011, cleaner air intake and extend component life.
- Large capacity fluid/air tank, optimize the efficiency of pre separation, so as to improve the actual service life of fluid separator.
- Dual nested Optimizer™ separator elements (45-75 kW /132-160 kW), reduce fluid carryover to a maximum of 3 ppm and extend service life up to 8,000 hours (under normal operating circumstance).

5. Fluid Piping System

- Optimized fluid piping system with reduce pressure drop.
- The LH Series are package with Sullube®, that can provide excellent performance. Even at high temperature there is no coking, 8,000 hours operation life, it helps customer to reduce maintenance cost.

6. Cooling System

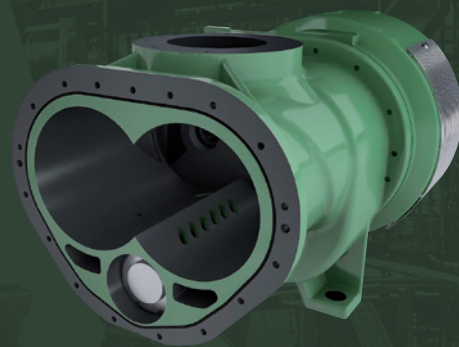
- LH Series installed with centrifugal fan provide high efficiency and lower noise (22-75 kW).
- With large area cover by fluid cooler. The centrifugal fan can provide large surplus cooling, even working on the worst condition (22-75 kW).
- Heavy duty cooler design to support for 46°C operation temperature.
- Optional with 55°C operation temperature (Please contact Sullair).

7. Motor

- Offer with IE3 high efficiency.
- Heavy duty designed low speed motors, which have longer bearing life than high speed motors.
- WEG is standard motor for 50 Hz (22-75 kW only).
- Class F insulation (Class B raise) B raise motor allow more than 50% winding lifetime vs F raise.
- Optional with IE4/IE5 efficiency motor (Please contact Sullair).

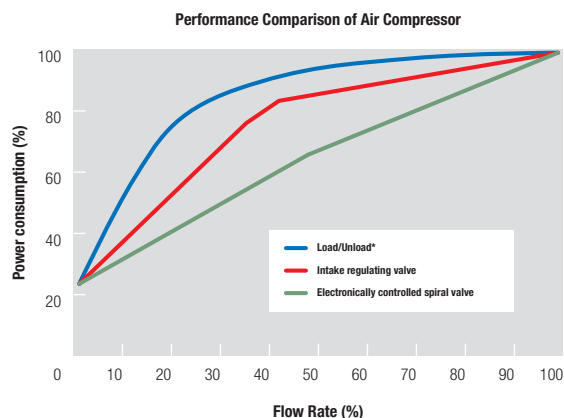
ELECTRONIC SPIRAL VALVE

(OPTIONAL ONLY FOR LH75-250)

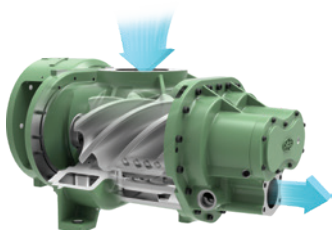


Sullair Spiral Valve Benefits

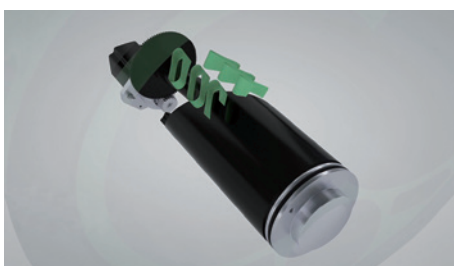
- Compressor with electronic spiral valve feature a variable displacement Air End. Compression volume is varied to suit air demand by progressively opening or closing internal bypass ports on the Air End. And compression chamber Closed bypass ports utilize the entire length of the rotor.
- Capacity is matched to system demand - prevent the wastage of air.
- Up to 55% turndown capability with electronic spiral valve.
- As compared to other compressors using suction throttling, or load/no load control, power saving up to 10% at part load conditions.
- 55 kW with mechanical spiral valve.



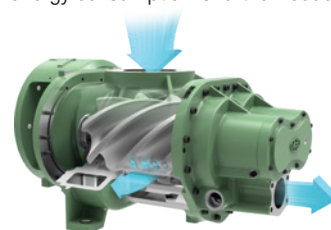
The spiral valve is closed and the air volume is compressed by 100%



The spiral valve is partially opened, the effective compression length of the rotor is reduced, and only a part of the intake air volume is compressed - the energy consumption is reduced



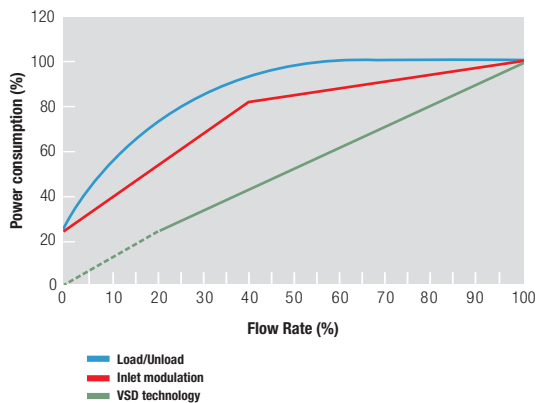
The spiral valve is fully opened, further reducing the effective compression length of the rotor, and the minimum amount of intake air is compressed - the energy consumption is further reduced



VSD TECHNOLOGY

[OPTIONAL]

Optimize your air demand with VSD technology to reduce the power consumption.



Reference: Compressed Air and Gas Hand book, 6th Edition, pages 221-223.

Sullair's High Efficiency VSD Motor*

- Sullair designed VSD motor provides reliability and durability with optimized efficiency.
- Special designed VSD motor ensure the insulation when VSD application.
- Special designed cooling system to guarantee the motor temperature when low running speed.

* Some VSD motors are permanent magnet motors



Control the motor and air end speed by VSD to optimize your air demand and reduce the power consumption



- Heavy duty VSD selection.
- Comparing with fixed speed models, VSD technology helps you to save about 35% power consumption.
- About 70% flow turndown to optimize your air demand.
- Soft starting by VSD which reduce the starting current for your power system.
- Less load and unload conditions by using VSD technology to get a stable discharge pressure.
- Wide flow range by VSD to meet your potential air demand.
- Built in design for less footprint.
- Easy service and friendly use.
- EMC certification for VSD.

SMART CONTROLLER



NEW GENERATION SMART CONTROLLER*

- Latest development by Sullair, reliable performance.
- Touch color screen.
- Displays temperature/pressure/operating time/loading-unloading time.
- Operating logic diagram display, more intuitive and easy to understand.
- Maintenance due reminder.
- Sequential control units: up to 14 units.
- Communication interface client reserved: Modbus RS485.
- Fault alarm/shutdown protection.
- Historical fault display.
- Power-off restart protection.
- USB interface for program upgrades.
- Sullair's proprietary IoT.
- Supports I/O expansion boards.
- Communication protocols supported: Profibus, Ethernet, etc.

*Available in some models/configurations

SULLAIR GENUINE PARTS AND LUBRICANTS

AIR TREATMENT AND OTHER VALUE ADDED SERVICE

SULLAIR WILL ASSIST IN OPTIMIZING YOUR OPERATION

With Sullair what you get is more than a Air Compressor. You are also getting the world's leading rotary screw technology and global service. We provide you with quality after sales products and top service.
If you have any needs, please contact the distributors supporting your region or Sullair after market support team.

GENUINE PARTS AND LUBRICANTS



Genuine parts and lubricants

AIR TREATMENT



Condensate separator



Air receiver



Refrigerated dryer

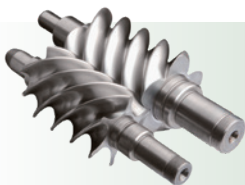


Desiccant dryer



Downstream filters

VALUE ADDED SERVICE



Airend rebuilt



VSD starter



Energy recovery
system(ERS)



ICC controller
(intelligent central controller)



IFC controller
(pressure optimal controller)

PRODUCT INFORMATION AND TECHNICAL PARAMETERS

For more information, please contact Sullair distributors in your area.

Technical parameters (50 Hz)

Compressor model	Motor power kW	Cooling mode	Rated voltage / frequency V/Hz	Maximum pressure bar(g)	Air discharge m ³ /min	Unit weight kg(±50)	Unit size L*W*H mm	Air Discharge size	Noise @1 meter
LH-22	22	Air-cooled	380-415 V/50 Hz	7.5	4.2	1,050	1,600×860×1,450	Rc1 1/2	69
				8.5	4.0				
				10.5	3.7				
				13.0	3.3				
LH-30	30	Air-cooled	380-415 V/50 Hz	7.5	5.9	1,100	1,600×860×1,450	Rc1 1/2	71
				8.5	5.5				
				10.5	4.9				
				13.0	4.2				
LH-37	37	Air-cooled	380-415 V/50 Hz	7.5	6.9	1,150	1,600×860×1,450	Rc1 1/2	73
				8.5	6.4				
				10.5	5.9				
				13.0	5.1				
LH-45	45	Air-cooled	380-415 V/50 Hz	7.5	8.5	1,420	2,150×1,200×1,730	Rc2	75
				8.5	8.0				
				10.5	7.0				
				13.0	5.7				
LH-55(S)	55	Air-cooled or water-cooled	380-415 V/50 Hz	7.5	11.2	1,680	2,150×1,200×1,730	Rc2	75
				8.5	10.0				
				10.5	8.5				
				13.0	7.6				
LH-55V	55	Air-cooled or water-cooled	380-415 V/50 Hz (VSD)	7.5	2.6-10.6	1,770	2,150×1,200×1,730	Rc2	73
				8.5	2.5-10.0				
				10.5	2.2-8.5				
				13.0	2.1-7.8				
LH-75	75	Air-cooled or water-cooled	380-415 V/50 Hz	7.5	15.0	2,100	2,500×1,500×2,027	Rc2	73
				8.5	14.3				
				10.5	12.4				
				13.0	10.8				
LH75V	75	Air-cooled or water-cooled	380 V/50 Hz (VSD)	7.5	3.6-15.0	2,490	2,500×1,500×2,027	Rc2	73
				8.5	3.5-14.3				
				10.5	2.8-12.4				
				13.0	2.7-10.8				
LH-90(S)	90	Air-cooled or water-cooled	380 V/50 Hz	7.5	18.9	2,650	2,509×1,760×1,773	NPT 3	76
				8.5	17.8				
				10.5	15.4				
LH-90V	90	Air-cooled or water-cooled	380 V/50 Hz (VSD)	7.5	4.7-18.9	2,730	2,509×1,760×1,773	NPT 3	76
				8.5	4.7-17.8				
				10.5	4.7-15.4				
LH-110(S)	110	Air-cooled or water-cooled	380 V/50 Hz	7.5	22.3	2,730	2,509×1,760×1,773	NPT 3	76
				8.5	21.2				
				10.5	18.8				
LH-110V	110	Air-cooled or water-cooled	380 V/50 Hz (VSD)	7.5	5.1-22.3	2,810	2,509×1,760×1,773	NPT 3	76
				8.5	5.1-21.2				
				10.5	4.7-18.8				
LH132(S)	132	Air-cooled or water-cooled	380 V/50 Hz	7.5	27.2	3,600	3,150×2,000×1,880	NPT3	78
				8.5	25.3				
				10.5	23.0				
LH132V	132	Air-cooled or water-cooled	380 V/50 Hz (VSD)	7.5	4.9-26.5	3,270	3,150×2,000×1,880	NPT3	78
				8.5	4.9-25.3				
				10.5	4.9-23.0				
LH160(S)	160	Air-cooled or water-cooled	380 V/50 Hz	7.5	32.5	3,750	3,150×2,000×1,880	NPT3	78
				8.5	30.5				
				10.5	27.3				
LH160V	160	Air-cooled or water-cooled	380 V/50 Hz (VSD)	7.5	7.2-32.5	3,870	3,150×2,000×1,880	NPT3	78
				8.5	7.2-30.5				
				10.5	7.2-27.3				

Compressor model	Motor power kW	Cooling mode	Rated voltage / frequency V/Hz	Maximum pressure bar(g)	Air discharge m ³ /min	Unit weight kg(±50)	Unit size L*W*H mm	Air Discharge size	Noise @1 meter
LH200(S)	200	Air-cooled or water-cooled	380V/50Hz	7.5	43.0	5,111	3,790×2,085×2,355	DN100	78
				8.5	40.8				
				10.5	35.0				
LH200V	200	Air-cooled or water-cooled	380V/50Hz (VSD)	7.5	10.8-43.0	4,550	3,790×2,085×2,355	DN100	78
				8.5	10.8-40.8				
				10.5	9.4-35.0				
LH220(S)	220	Air-cooled or water-cooled	380V/50Hz	7.5	47.0	5,232	3,790×2,085×2,355	DN100	78
				8.5	45.5				
				10.5	38.8				
LH220V	220	Air-cooled or water-cooled	380V/50Hz (VSD)	7.5	12.1-47.0	5,399	3,790×2,085×2,355	DN100	78
				8.5	12.1-45.5				
				10.5	12.1-38.8				
LH250(S)	250	Air-cooled or water-cooled	380V/50Hz	7.5	53.0	5,387	3,790×2,085×2,355	DN100	78
				8.5	50.0				
				10.5	43.7				
LH250V	250	Air-cooled or water-cooled	380V/50Hz (VSD)	7.5	13.5-53.0	5,553	3,790×2,085×2,355	DN100	78
				8.5	13.5-50.0				
				10.5	11.7-43.7				

Note: (S) - spiral valve

V - VSD

■ Unit performance parameters and acceptance criteria shall be subject to Appendix C, ISO 1217.

■ Reference conditions: absolute intake pressure: 1 bar(A); air intake temperature: 20 °C; relative humidity: 0%.

■ The air discharge measured at the following working pressures is: 7 bar for the 7.5bar model; 8 bar for the 8.5bar model; 10 bar for the 10.5bar model; and 12.5 bar for the 13.0bar model.

■ Noise value deviation: ±3.

■ For other 50Hz voltage requirements, please contact Sullair.

Technical parameters (60 Hz)

Compressor model	Motor power kW	Cooling mode	Maximum pressure bar(g)	Air discharge m ³ /min	Unit weight kg(±50)	Unit size L*W*H mm	Air Discharge size	Noise @1 meter
LH-22	22	Air-cooled	7.6	4.0	1,050	1,602×860×1,450	Rc1 1/2	69
			8.6	3.7				
			10.6	3.5				
			—	—				
LH-30	30	Air-cooled	7.6	5.8	1,100	1,600×860×1,450	Rc1 1/2	71
			8.6	5.4				
			10.6	4.8				
			12.6	4.0				
LH-37	37	Air-cooled	7.6	6.6	1,150	1,600×860×1,450	Rc1 1/2	73
			8.6	6.3				
			10.6	5.6				
			12.6	5.0				
LH-45	45	Air-cooled	7.6	8.5	1,420	2,150×1,200×1,730	Rc2	75
			8.6	7.9				
			10.6	6.6				
			12.6	—				
LH-55(S)	55	Air-cooled or water-cooled	7.6	12.0	LH5507/LH5508: 2,100 LH5510/LH5512: 1,420	2,150×1,200×1,730	Rc2	75
			8.6	11.0				
			10.6	8.2				
			12.6	7.7				
LH-55V	55	Air-cooled or water-cooled	7.6	2.6-10.6	1,770	2,150×1,200×1,730	Rc2	73
			8.6	2.5-9.9				
			10.6	2.2-8.6				
			12.0	2.1-7.8				
LH-75(S)	75	Air-cooled or water-cooled	7.6	15.0	2,400	2,500×1,500×2,027	Rc2	73
			8.6	14.3				
			10.6	12.0				
			12.6	10.8				

Compressor model	Motor power kW	Cooling mode	Maximum pressure bar(g)	Air discharge m ³ /min	Unit weight kg(±50)	Unit size L*W*H mm	Air Discharge size	Noise @1 meter
LH-75V	75	Air-cooled or water-cooled	7.6	3.5-15.0	2,490	2,500×1,500×2,027	Rc2	73
			8.6	3.5-14.3				
			10.6	2.5-12.0				
			12.0	2.5-10.8				
LH-90(S)	90	Air-cooled or water-cooled	7.6	17.9	2,650	2,509×1,760×1,773	NPT 3	76
			8.6	16.8				
			10.3	14.8				
LH-90V	90	Air-cooled or water-cooled	7.6	4.1-17.7	2,730	2,509×1,760×1,773	NPT 3	76
			8.6	4.1-16.8				
			10.3	4.7-14.5				
LH-110(S)	110	Air-cooled or water-cooled	7.6	21.6	2,730	2,509×1,760×1,773	NPT 3	76
			8.6	19.9				
			10.3	17.6				
LH-110V	110	Air-cooled or water-cooled	7.6	4.8-21.1	2,810	2,509×1,760×1,773	NPT 3	76
			8.6	4.7-19.9				
			10.3	4.8-17.6				
LH132(S)	132	Air-cooled or water-cooled	7.6	24.7	3,650	3,150×2,000×1,880	NPT 3	78
			8.6	24.7				
			10.3	23				
LH132V	132	Air-cooled or water-cooled	7.6	4.89-24.7	3,320	3,150×2,000×1,880	NPT 3	78
			8.6	4.89-24.7				
			10.3	4.89-23.0				
LH160(S)	160	Air-cooled or water-cooled	7.6	30.3	3,800	3,150×2,000×1,880	NPT 3	78
			8.6	27.9				
			10.3	24.8				
LH160V	160	Air-cooled or water-cooled	7.6	7.22-30.3	3,920	3,150×2,000×1,880	NPT 3	78
			8.6	7.22-27.9				
			10.3	5.67-24.8				
LH200(S)	200	Air-cooled or water-cooled	7.5	43.0	5,111	3,790×2,085×2,355	DN100	78
			8.5	40.8				
			10.5	35.0				
LH200V	200	Air-cooled or water-cooled	7.5	10.8-43.0	4,550	3,790×2,085×2,355	DN100	78
			8.5	10.8-40.8				
			10.5	9.4-35.0				
LH220(S)	220	Air-cooled or water-cooled	7.5	47.0	5,232	3,790×2,085×2,355	DN100	78
			8.5	45.5				
			10.5	38.8				
LH220V	220	Air-cooled or water-cooled	7.5	12.1-47.0	5,399	3,790×2,085×2,355	DN100	78
			8.5	12.1-45.5				
			10.5	12.1-38.8				
LH250(S)	250	Air-cooled or water-cooled	7.5	53.0	5,387	3,790×2,085×2,355	DN100	78
			8.5	50.0				
			10.5	43.7				
LH250V	250	Air-cooled or water-cooled	7.5	13.5-53.0	5,553	3,790×2,085×2,355	DN100	78
			8.5	13.5-50.0				
			10.5	11.7-43.7				

Note: (S) - spiral valve
V - VSD

- Unit performance parameters and acceptance criteria shall be subject to Appendix C, ISO 1217.
- Reference conditions: absolute intake pressure: 1 bar(A); air intake temperature: 20 °C; relative humidity: 0%.
- The air discharge measured at the following working pressures is: 7 bar for the 7.5bar and 7.6bar model; 8 bar for the 8.5bar and 8.6bar model; 10 bar for the 10.3bar, 10.5bar and 10.6bar model; 12 bar for the 12.0bar model; and 12.5 bar for the 12.6bar model.
- Noise value deviation: ±3.
- 220V/60Hz only available for 22-75kW (except 55/75 VSD).
- For other 60Hz voltage requirements, please contact Sullair.

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SULLAIR.COM   



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