



Industrial Product Range

Single screw
compressor
technology

ACROSS THE
COMPLETE RANGE

SINGLE SCREW COMPRESSORS, COMPRESSOR PACKS AND CHILLERS



J&E Hall
International

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MARKETS SERVED			
COLD ROOMS	PROCESS PLANTS	ICE RINKS	DISTRICT COOLING
BLAST FREEZERS	PETROCHEMICAL	BREWERIES	HEAT PUMPS

J & E Hall International...

For more than 200 years, J & E Hall International has pioneered the development and application of refrigeration technologies. Today the company is recognised as a leading manufacturer and after sales provider for refrigeration and air-conditioning products worldwide.

Single Screw Technology

Key to the success of the HallScrew single screw compressor is its outstanding reliability. Only three basic moving parts are involved, a main rotor which meshes with two diametrically opposed star wheels and results in balanced compression. Compressors are extremely robust and boasts long bearing life over 100,000 hours.

The HallScrew also features a high efficiency capacity control mechanism to regulate the capacity with corresponding reduction in power input. For ease of maintenance, the side casing can be removed to give access to all parts without removing the machine from its installation.



Benefits

-  Ease of installation and maintenance
-  Superior efficiency
-  Engineered for quiet operation
-  Environmentally conscious refrigerants
-  Reliability
-  Wide ranging cooling capacities

Star Wheel

J & E Hall use low friction composite material "HallPlas" in the compression process to ensure high efficiency and reliability. "HallPlas" material was developed using aerospace technology and can withstand the toughest operating conditions with all types of refrigerant.

Applications

J & E Hall manufactures screw compressors using state of the art production equipment for industrial refrigeration, air-conditioning and heat pump systems. HallScrew open and semi-hermetic compressors are used in the most varied applications from deep freezing through to standard refrigeration in retail, brewing, process plant, petrochemical and more.

Semi-Hermetic Compressor Range

HSM/HSL/HSB range

For incorporation into factory built chillers and compressor packs designed for high, medium and low temperature applications



HSM/L 3100

- **4 sizes:** 3118, 3120, 3121 and 3122
- **Displacement at 50Hz:** 175/213/250/292 m³/h

HSM/L 3200

- **4 sizes:** 3216, 3218, 3220 and 3221
- **Displacement at 50Hz:** 286/343/415/471 m³/h
- Developed for parallel multi compressor systems

HSM/L 4200

- **7 sizes:** 4221, 4222, 4223, 4224, 4225, 4226 and 4227
- **Displacement at 50Hz:** 504/611/716/828/898 /980/1108 m³/h

HSH/M/V5200/6200

- **5200 2 sizes:** 5228 and 5230
- **Displacement at 50Hz:** 1273 and 1500 m³/h
- Variable speed option HSV5228: 229-1528 and HSV5230: 270-1800 m³/h
- **6200 2 sizes:** 6231 & 6233
- **Displacement at 50Hz:** 1728 and 2100 m³/h
- Variable speed option HSV6231: 311-2074 and HSV6233: 378-2520 m³/h

Extended Semi-Hermetic Range

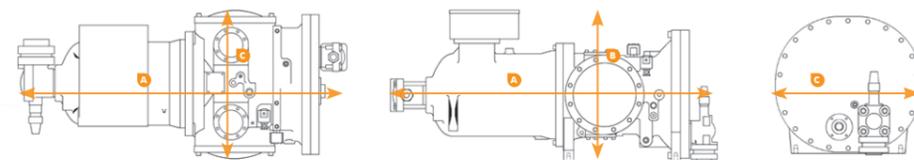
Reflecting the latest innovation in single screw technology the extended range of semi-hermetic HSH/M/V 4225/6/7, 5200, 6200 series are designed for incorporation into factory built air-conditioning chillers and heat pumps.

- ▶ Reduces the number of compressors required for larger capacity applications
- ▶ Saves overall installation cost compared to open drive compressors for HFC and HFO applications
- ▶ Useful for low pressure refrigerants R1234ze and R515B which require higher swept volume compressors

General information for the range

- ▶ Semi-hermetic single screw design
- ▶ Optimised for R404A, R507 and R134a
- ▶ High efficiency built in 3 phase, 2 pole motor 50/60Hz
- ▶ Motor designed for star/delta or direct on line
- ▶ Suction strainer
- ▶ Discharge stop valve
- ▶ Internal relief valve
- ▶ Suction flange with tail and joint
- ▶ Liquid injection adapter
- ▶ Oil drain connection
- ▶ Oil line fittings
- ▶ Oil injection for maximum reliability
- ▶ Built in stepless capacity control
- ▶ Electronic protection (INT 69TM)
- ▶ Economiser facility

Specifications



	Length mm (A)	Height mm (B)	Width mm (C)	Weight Kg
HSH/M/L 3100	1126	643	357	545 - 585*
HSH/M/L 3200	1298	584	566	720
HSH/M/L 4221/2/3/4	1432 - 1451*	547	629	730
HSH/M 4225/6/7	1579 - 1624*	758	774	1160
HSH/M/V 5200	1853	883	934	1600
HSH/M/V 6200	2240	1053	900	2176

* Dependent on motor type/suction cover option. See application manual for details

Semi-Hermetic Compressor Range

HSS range

Design for high temperature application for incorporation into factory built chillers and compressor packs



HSS 3100

- **4 sizes:** 3118, 3120, 3121 and 3122
- **Displacement at 50Hz:** 175/213/250/292 m³/h

HSS 3200

- **4 sizes:** 3216, 3218, 3220 and 3221
- **Displacement at 50Hz:** 286/343/415/471 m³/h
- Fitted stainless steel mesh type integral oil separator

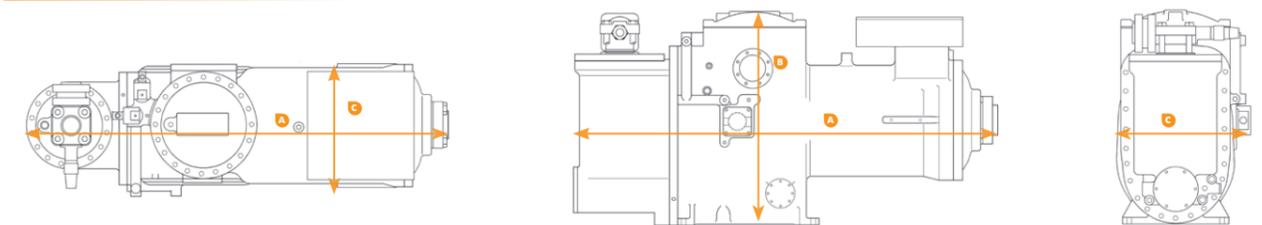
HSS 4200

- **4 sizes:** 4221, 4222, 4223 and 4224
- **Displacement at 50Hz:** 504/611/716/828 m³/h
- Required external oil separator and oil support system for maximum efficiency

General information for the range

- ▶ Semi-hermetic single screw design
- ▶ Optimised for R134a and R407C
- ▶ High efficiency built in 3 phase, 2 pole motor 50/60Hz
- ▶ Suction strainer
- ▶ Built in stepless capacity control
- ▶ Discharge stop valve
- ▶ Internal relief valve
- ▶ Integral oil separator (HSS 3100/3200)
- ▶ Flanged oil separator (HSS 4200)
- ▶ Discharge check valve
- ▶ Suction flange with tail and joint
- ▶ Liquid injection adapter
- ▶ Sight glass (x2)
- ▶ Oil charge
- ▶ Electronic protection (INT 69TM)
- ▶ Economiser facility

Specifications



	Length mm (A)	Height mm (B)	Width mm (C)	Weight Kg
HSS 3100	1274	643	389	569 - 603*
HSS 3200	1661 - 1820*	647	567	719 - 840*
HSS 4200	1555 - 1574*	849	919	1100



HallScrew Compressor Selection Software

Developed to quickly and easily identify the perfect HallScrew compressor products for any given industrial application.

Follow the QR code to sign up or login



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