



Saving energy and space: SLF/SLDF with integrated frequency control

Effective FAD: 1.06 – 28.21 m³/min; 37 – 996 cfm

Pressure range: 8 – 13 bar; 115 – 190 psig

Rated power: 22 – 160 kW; 30 – 220 HP



With radial fan (optional).



High output with total control: SLF/SLDF series

Adjusting the motor speed to fulfill the varying free air delivery requirements is the most efficient operating method when the system has considerable fluctuations, limited air receiver capacity or when the compressor is operating as peak load compressor.

Advantages of frequency control:

- Smooth starting and stopping within seconds
- Continuous volume flow control from 25 to 100%
- Flexible adaptation of free air delivery
- Reduced costs for wearing parts and maintenance
- No start-up current peaks (energy saving!)
- Constant net pressure +/- 0.1 bar (energy saving!)
- Almost no idle operation (energy saving!)

SLF/SLDF

- Matches demand perfectly
- Controls pressure precisely
- Optional radial fan or super-silencing for significant sound pressure reduction
- Option with integral refrigerant dryer: the ultimate energy saving, space saving solution.



The frequency converter with its built in control is integrated neatly into the existing electrical cabinet.

The BOGE SLF/SLDF series combines a direct coupled drive system with frequency control to provide the ultimate compressor for pressure control under variable output requirements.

In this direct coupled series the frequency converter assures the smoothest possible transition from 25-100% to maintain pressure and output perfectly.

An energy efficient RATIO control is also a standard feature of the SLF/SLDF series. The respective operating conditions are clearly and precisely visible via an LCD display.

The SLF series operates the air end within its optimum range and by changing the speed of both motor and rotor the compressed air output adapts to the actual

demand. Expensive idling times and motor switches are avoided. At the same time a tighter pressure band can be set, also helping to save energy.

Synchronisation of pressure value and free air delivery: Economical due to flexibility

Special Feature:

By adjusting the airend speed utilising frequency regulation not only adjusts the output (FAD) but can also adjust the pressure (bar).

The SLF machines can therefore operate at 8, 10 or 13 bar pressure without compromising free air delivered.

To regulate a normal 13 bar compressor to 8 bar reduces the pressure but the output remains at the 13 bar design figure.

The direct driven SLF, utilises frequency regulation in order to maximise FAD output whether at 8, 10 or 13 bar!



| BOGE Type | Max. pressure | | Effective free air delivery* | | Motor power | | Dimensions silenced | Dimensions super-silenced with radial fan | Compressed air outlet | Weight silenced / with radial fan kg | Weight super-silenced kg |
|-----------|---------------|------|------------------------------|---------|-------------|-----|---------------------|---|-----------------------|--------------------------------------|--------------------------|
| | bar | psig | m ³ /min | cfm | kW | HP | W x D x H (mm) | W x D x H (mm) | | | |
| SLF 30 | 8 | 115 | 1.06- 3.87 | 37-137 | 22 | 30 | 1830 x 966 x 1444 | 1830 x 966 x 1944 | G 1 1/4 | 700/ 730 | 730 |
| | 10 | 150 | 1.06- 3.30 | 37-117 | 22 | 30 | 1830 x 966 x 1444 | 1830 x 966 x 1944 | G 1 1/4 | 700/ 730 | 730 |
| | 13 | 190 | 1.06- 2.68 | 37- 95 | 22 | 30 | 1830 x 960 x 1444 | 1830 x 966 x 1944 | G 1 1/4 | 700/ 730 | 730 |
| SLF 40 | 8 | 115 | 1.06- 5.05 | 37-178 | 30 | 40 | 1830 x 966 x 1444 | 1830 x 966 x 1944 | G 1 1/4 | 770/ 805 | 810 |
| | 10 | 150 | 1.06- 4.53 | 37-160 | 30 | 40 | 1830 x 966 x 1444 | 1830 x 966 x 1944 | G 1 1/4 | 770/ 805 | 810 |
| | 13 | 190 | 1.06- 3.82 | 37-135 | 30 | 40 | 1830 x 966 x 1444 | 1830 x 966 x 1944 | G 1 1/4 | 770/ 805 | 810 |
| SLF 51 | 8 | 115 | 1.51- 6.71 | 53-237 | 37 | 50 | 2040 x 1090 x 1450 | 2040 x 1090 x 1950/2060 | G 1 1/4 | 1020/1070 | 1070 |
| | 10 | 150 | 1.47- 6.04 | 52-213 | 37 | 50 | 2040 x 1090 x 1450 | 2040 x 1090 x 1950/2060 | G 1 1/4 | 1020/1070 | 1070 |
| | 13 | 190 | 1.37- 4.98 | 48-176 | 37 | 50 | 2040 x 1090 x 1450 | 2040 x 1090 x 1950/2060 | G 1 1/4 | 1020/1070 | 1070 |
| SLF 61 | 8 | 115 | 1.55- 7.87 | 55-278 | 45 | 60 | 2040 x 1090 x 1450 | 2040 x 1090 x 1950/2060 | G 1 1/2 | 1150/1200 | 1200 |
| | 10 | 150 | 1.51- 6.92 | 53-244 | 45 | 60 | 2040 x 1090 x 1450 | 2040 x 1090 x 1950/2060 | G 1 1/2 | 1150/1200 | 1200 |
| | 13 | 190 | 1.42- 5.90 | 50-208 | 45 | 60 | 2040 x 1090 x 1450 | 2040 x 1090 x 1950/2060 | G 1 1/2 | 1150/1200 | 1200 |
| SLF 75 | 8 | 115 | 1.55- 9.33 | 55-329 | 55 | 75 | 2040 x 1090 x 1450 | 2040 x 1090 x 1950/2060 | G 1 1/2 | 1270/1320 | 1320 |
| | 10 | 150 | 1.51- 8.40 | 53-297 | 55 | 75 | 2040 x 1090 x 1450 | 2040 x 1090 x 1950/2060 | G 1 1/2 | 1270/1320 | 1320 |
| | 13 | 190 | 1.46- 7.26 | 52-256 | 55 | 75 | 2040 x 1090 x 1450 | 2040 x 1090 x 1950/2060 | G 1 1/2 | 1270/1320 | 1320 |
| SLF 101 | 8 | 115 | 4.22-13.64 | 149-482 | 75 | 100 | 2415 x 1335 x 1750 | 2415 x 1335 x 2250 | G 2 1/2 | 2200/ - | 2260 |
| | 10 | 150 | 4.16-12.33 | 147-435 | 75 | 100 | 2415 x 1335 x 1750 | 2415 x 1335 x 2250 | G 2 1/2 | 2200/ - | 2260 |
| | 13 | 190 | 4.00-10.58 | 141-374 | 75 | 100 | 2415 x 1335 x 1750 | 2415 x 1335 x 2250 | G 2 1/2 | 2200/ - | 2260 |
| SLF 125 | 8 | 115 | 4.22-15.70 | 149-554 | 90 | 125 | 2415 x 1335 x 1750 | 2415 x 1335 x 2250 | G 2 1/2 | 2250/ - | 2310 |
| | 10 | 150 | 4.16-14.36 | 147-507 | 90 | 125 | 2415 x 1335 x 1750 | 2415 x 1335 x 2250 | G 2 1/2 | 2250/ - | 2310 |
| | 13 | 190 | 4.00-12.56 | 141-443 | 90 | 125 | 2415 x 1335 x 1750 | 2415 x 1335 x 2250 | G 2 1/2 | 2250/ - | 2310 |
| SLF 221 | 8 | 115 | 6.46-28.21 | 228-996 | 160 | 220 | 3145 x 1910 x 2145 | 3145 x 1910 x 2645 | DN 100 | 4500/ - | 4600 |
| | 10 | 150 | 6.18-25.06 | 218-885 | 160 | 220 | 3145 x 1910 x 2145 | 3145 x 1910 x 2645 | DN 100 | 4500/ - | 4600 |
| | 13 | 190 | 5.46-20.36 | 193-719 | 160 | 220 | 3145 x 1910 x 2145 | 3145 x 1910 x 2645 | DN 100 | 4500/ - | 4600 |

| BOGE Type | Max. pressure | | Effective free air delivery* | | Motor power | | Dimensions silenced | Dimensions super-silenced with radial fan | Compressed air outlet | Weight silenced / with radial fan kg | Weight super-silenced kg |
|-----------|---------------|------|------------------------------|--------|-------------|----|---------------------|---|-----------------------|--------------------------------------|--------------------------|
| | bar | psig | m ³ /min | cfm | kW | HP | W x D x H (mm) | W x D x H (mm) | | | |
| SLDF 30** | 8 | 115 | 1.06-3.87 | 37-137 | 22 | 30 | 1830 x 966 x 1664 | 1830 x 966 x 1944 | G 1 1/4 | 785/ - | 815 |
| | 10 | 150 | 1.06-3.30 | 37-117 | 22 | 30 | 1830 x 966 x 1664 | 1830 x 966 x 1944 | G 1 1/4 | 785/ - | 815 |
| | 13 | 190 | 1.06-2.68 | 37- 95 | 22 | 30 | 1830 x 960 x 1664 | 1830 x 966 x 1944 | G 1 1/4 | 785/ - | 815 |
| SLDF 40** | 8 | 115 | 1.06-5.05 | 37-178 | 30 | 40 | 1830 x 966 x 1664 | 1830 x 966 x 1944 | G 1 1/4 | 855/ - | 895 |
| | 10 | 150 | 1.06-4.53 | 37-160 | 30 | 40 | 1830 x 966 x 1664 | 1830 x 966 x 1944 | G 1 1/4 | 855/ - | 895 |
| | 13 | 190 | 1.06-3.82 | 37-135 | 30 | 40 | 1830 x 966 x 1664 | 1830 x 966 x 1944 | G 1 1/4 | 855/ - | 895 |

* Free air delivery for complete package in accordance with ISO 1217, Appendix C, at 20°C ambient temperature and maximum pressure.

**with integral dryer

Emitted sound pressure level as per PN8NTC2.3 from **68 dB(A)**.



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- ☑ Oil-lubricated piston and screw compressors
- ☑ Compressed air purification
- ☑ Compressed air distribution and storage
- ☑ Compressed air accessories
- ☑ Compressed air service
- ☑ System control and display.

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