

L-BL2

Data sheet 2BL2 281

Compact circuit vacuum pump



General information

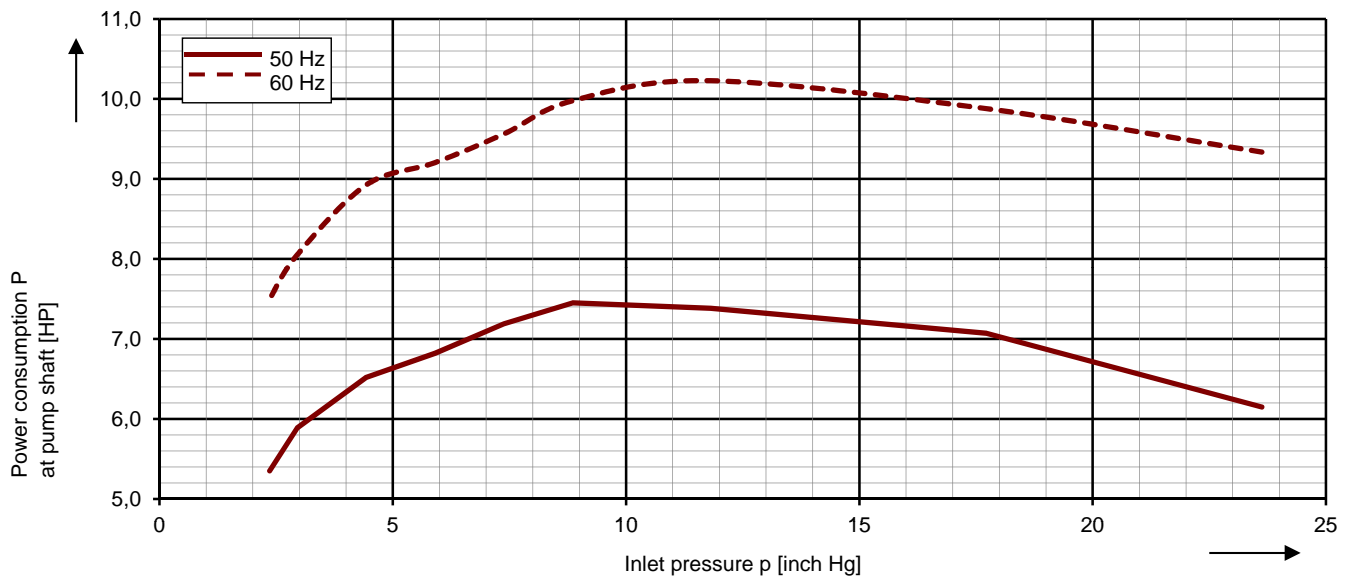
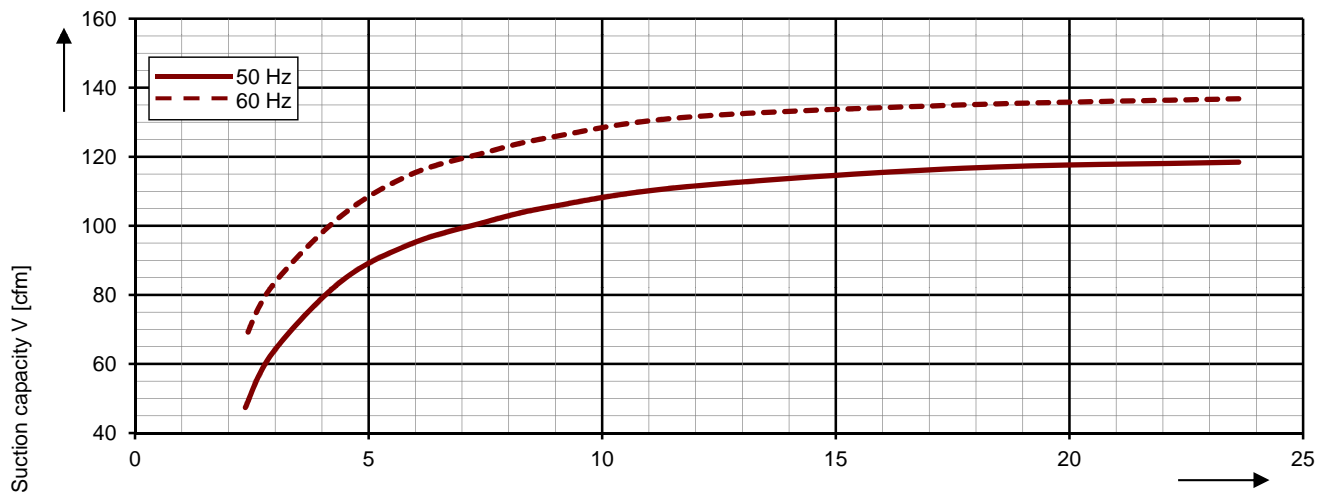
Elmo Rietschle vacuum pumps of the model range L-BL2 are Also known as the Elmo Rietschle "Pump in a Box", these portable units are oil free and air cooled. They include an L-BV liquid ring pump, industrial electric motor, discharge separator, seal water cooler and discharge air cooler. To install – simply connect the suction line and motor and fill the water tank – it's ready to go!

Maintenance and wear are minimal thanks to contact free compression and a built-in discharge air cooler. Additional features include: quiet operation, continuous duty design and suitability for humid environments.



Performance curves

Vacuum operation



The characteristic curves are based on the evacuation of dry air and an intake temperature of 36 °F. At a suction pressure of 25.23 inch. H₂O abs. (water as operating liquid) the characteristic curves will be achieved. The tolerance is ± 10 %.

The motors are supplied as standard for the input voltage ranges of 50 and 60 Hz and for the protection category IP55.

Selection and ordering data

Typ 2BL2 281

| Fre- quency | Rated | | | Service- factor | Sound pressure level ²⁾ | Weight Approx. | Order No. |
|--|-----------------------|-----------------|-------|--------------------|--|-------------------|--------------------|
| | Voltage | Current | Power | | | | |
| Hz | V | A | HP | SF | dB(A) | lbs | |
| 3- 50/60 Hz, IP55, Insulation material class F, UL 507 and CSA 22.2 No 113 (certificate number E225239) | | | | | | | |
| 50 | 345-415 Δ / 600-720 Y | 16,0 Δ / 9,2 Y | 7,4 | 1,27 | 73 | 463 | 2BL2281-0 □ H03-7S |
| 60 | 380-480 Δ / 660-720 Y | 16,0 Δ / 9,2 Y | 11,0 | 1,00 | 78 | | |
| 50 | 200-240 Δ / 345-415 Y | 27,5 Δ / 16,0 Y | 7,4 | 1,27 | 73 | 463 | 2BL2281-0 □ H03-8S |
| 60 | 220-275 Δ / 380-480 Y | 27,5 Δ / 16,0 Y | 11,0 | 1,00 | 78 | | |
| 3- 50/60 Hz, IP55, Insulation material class F, UL 507 and CSA 22.2 No 113 (certificate number E225239) | | | | | | | |
| 50 | 500 Δ | 12,5 Δ | 7,4 | 1,27 | 73 | 463 | 2BL2281-0 □ H03-5S |
| 60 | 575 Δ | 12,8 Δ | 11,0 | 1,00 | 78 | | |

| Materials | |
|-----------------------------------|---|
| Standard version Cast iron | K |
| Non-cast-iron version | R |
| Partially stainless steel version | B |
| Stainless steel version | H |

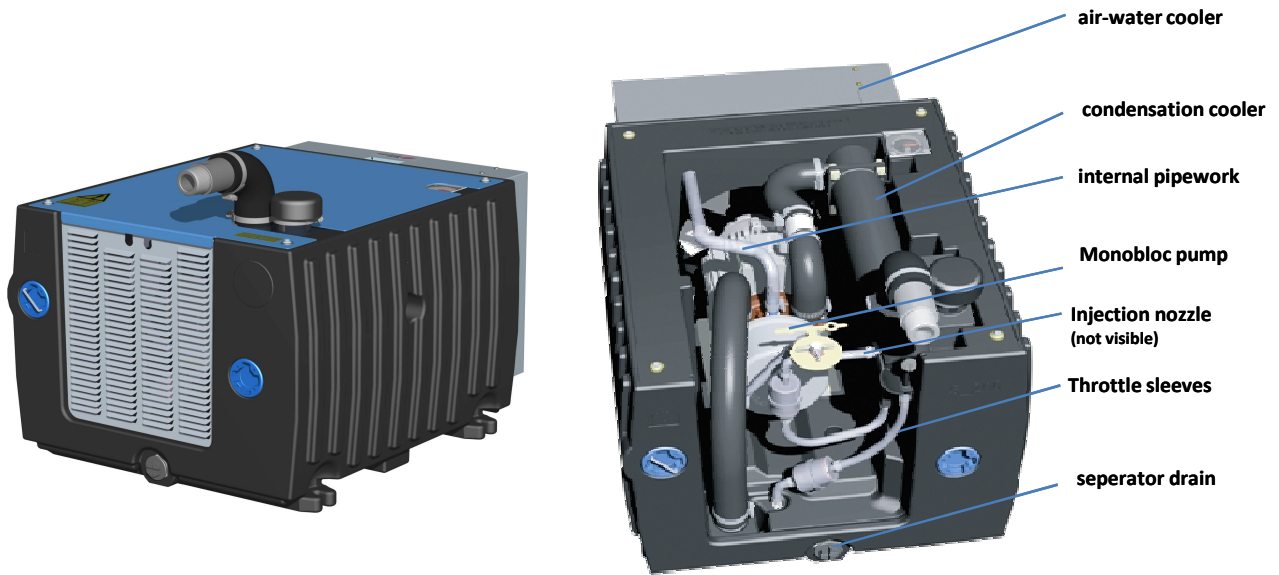
2) Measuring surface sound pressure level acc. to EN ISO 3744, measured with an equivalent unit at a distance of 1 m. The pump is throttled to an average suction pressure, with piping connected, but no relief valves fitted, tolerance ±3 dB (A).

Other voltages ³⁾

| Voltage range | | Fixed voltage | | US | | | |
|-------------------------------|-------------------------------|--------------------|-------------------|-------|-----------------------|---|---|
| 50 Hz | 60 Hz | 50 Hz | 60 Hz | 60 Hz | 2BL2 281-.. □ ... □ S | | |
| | | | | Δ | V | | |
| 3 Phase | | | | | | | |
| 185 - 220 V Δ / 320 - 380 V Y | 200 - 254 V Δ / 345 - 440 V Y | | | | | H | 0 |
| 200 - 240 V Δ / 345 - 415 V Y | 220 - 275 V Δ / 380 - 480 V Y | | | | | H | 8 |
| 345 - 415 V Δ / 600 - 720 V Y | 380 - 480 V Δ / 660 - 720 V Y | | | | | H | 7 |
| 500 V Δ | 575 V Δ | | | | | H | 5 |
| 3 Phase | | | | | | | |
| | | IE2 3 Phase | | | | | |
| 180 - 240 V Δ / 310 - 415 V Y | 200 - 275 V Δ / 345 - 480 V Y | 200 V Δ / 345 V Y | 230 V Δ / 400 V Y | | | P | 1 |
| 450 - 550 V Δ | 520 - 600 V Δ | 500 V Δ | 575 V Δ | | | P | 5 |
| 200 - 260 V Δ / 350 - 450 V Y | 230 - 290 V Δ / 400 - 500 V Y | 230 V Δ / 400 V Y | 265 V Δ / 460 V Y | | | P | 6 |
| 350 - 450 V Δ / 610 - 725 V Y | 400 - 500 V Δ / 690 - 725 V Y | 400 V Δ / 690 V Y | 460 V Δ | | | P | 7 |

3) High efficiency motors (IE2) available on request. Please refer to corresponding data sheets.

All L-BL2 fulfil the 2006/42/EC (machinery) and 2006/95/EC (low voltage) directives and the EN 60034-1 norm "Rotating electrical machines". The motors comply with EN 60 034-1 / -2 / -30 (IEC 60034) and thermal class F. For three phase motors tolerances are +/-10% for fixed voltage motors and +/-5% for voltage range motors. Single phase machines are designed with a +/-5% tolerance. The frequency tolerance is +/- 2 % maximum.



| Denomination | K | B | R | H |
|--|---------------------------------------|------------------------------|-----------------------------|---------------------|
| Monobloc pump Cover / Casing / Port Plate / Impeller | GG / GG+ARC / GG / Bronze | GG / GG+ARC / SS / Bronze | SS / SS / SS / Bronze | SS / SS / SS / SS |
| Internal piping (suction- and discharge side) | Cast iron / EPDM / Brass / Plastic | SS / EPDM / Brass / Plastic | SS / EPDM / Brass / Plastic | SS / EPDM / Plastic |
| Water cooler / air-water cooler | Pipes in copper | Pipes in copper | Pipes copper | Pipes in SS |
| Condensation cooler | Pipes in brass | Pipes in brass | Pipes in brass | Pipes in SS |
| Throttle sleeves / injection nozzle | Brass | Brass | Brass | SS |
| Drain of seperator | Polyamide (PA) | Polyamide (PA) | Polyamide (PA) | Polyamide (PA) |
| Housing (2BL) | Polyethylen (PE) | Polyethylen (PE) | Polyethylen (PE) | Polyethylen (PE) |

Changes in particular of the quoted performance curve, data and weights may occur without prior notice. The data given do not constitute an obligation from our side to deliver as shown.

Elmo Rietschle is a brand of Gardner Denver

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