L-BL2 N

Data sheet 2BL2 061

Compact circuit vacuum pump

IE3

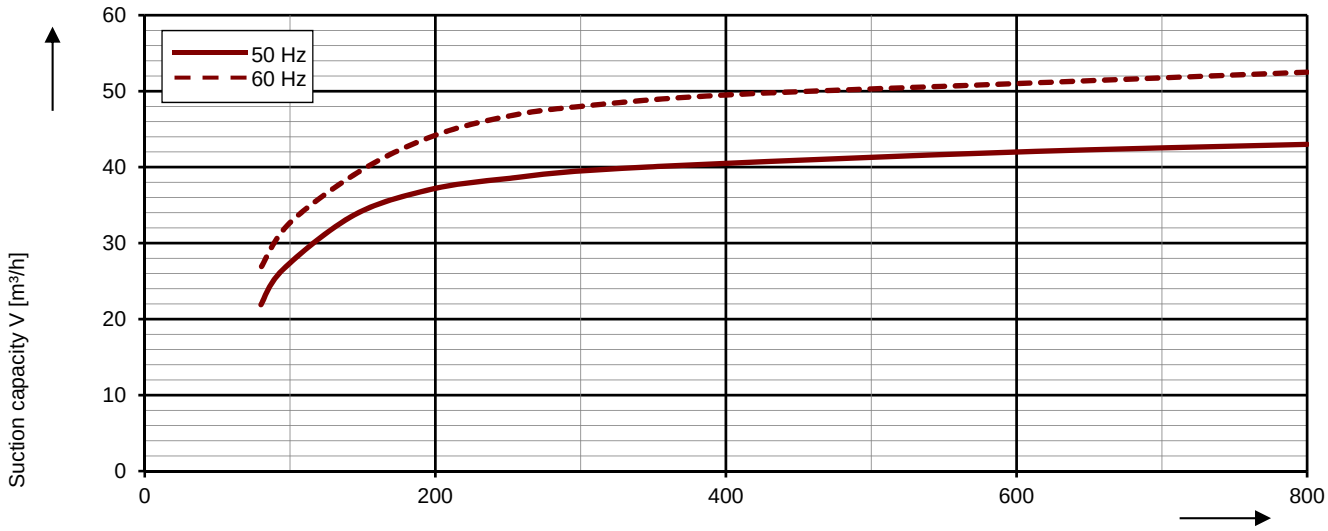
General information

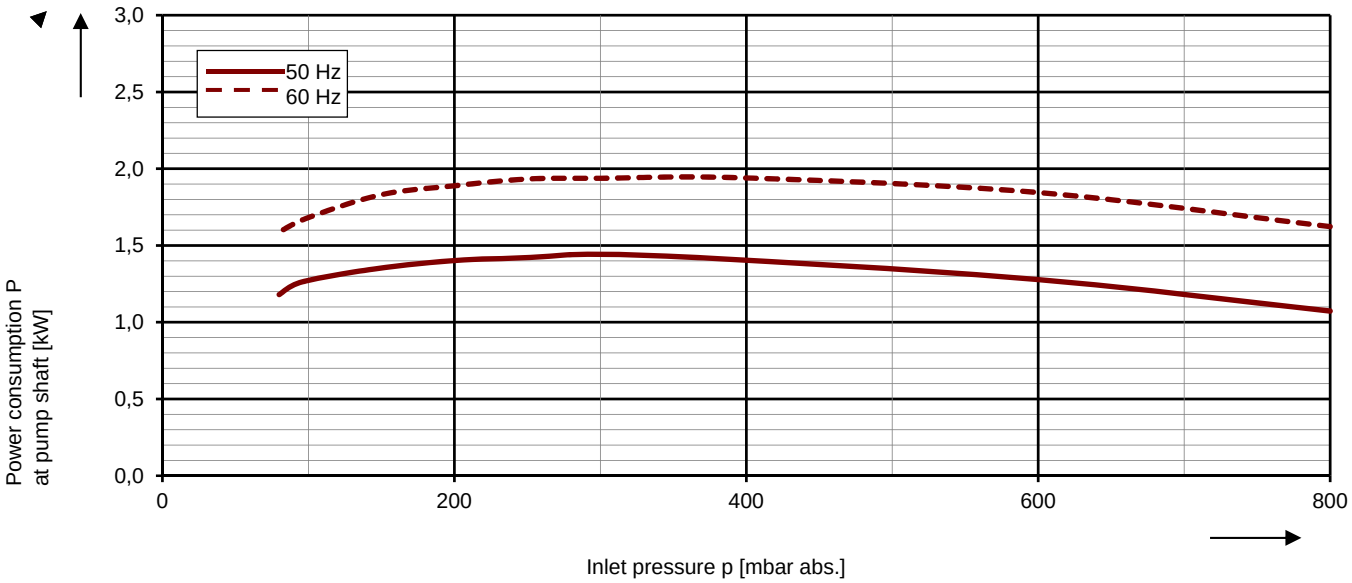
Elmo Rietschle vacuum pumps of the model range L-BL2 are Also known as the Elmo Rietschle "Pump in a Box", these portable units are oil free and air cooled. They include an L-BV liquid ring pump, industrial electric motor, discharge separator, seal water cooler and discharge air cooler. To install – 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 20 °C. At a suction pressure of 1013 mbar 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 061

Fre-quency	Rated Voltage	Rated Current	Rated Power	Service factor	Efficiency	Sound pressure level 2)	Weight Approx.	Order No.
Hz	V	A	kW	SF	-	dB(A)	kg	
3~ 50/60 Hz, IP55, Insulation material class F, UL (certificate number E489378)								
50	190-210 Δ	8,7 Δ	1,4	1,57	IE3	69	64	**2BL2061-1 □ K50-1B**
60	190-210 YY / 380-420 Y	10,0 YY / 5,0 Y	1,8	1,42	IE3	73		
	200 YY	8,4 YY	1,8	1,41	NP	73		
3~ 50/60 Hz, IP55, Insulation material class F, UL (certificate number E489378)								
50	220-240 Δ / 380-420 Y	7,5 Δ / 4,35 Y	1,4	1,57	IE3	69	64	**2BL2061-1 □ K50-6B**
60	220-240 YY / 440-480 Y	8,6 YY / 4,3 Y	1,8	1,42	IE3	73		
	230 YY / 460 Y	7,3 YY / 3,65 Y	1,8	1,42	NP	73		
3~ 50/60 Hz, IP55, Insulation material class F, UL (certificate number E489378)								
50	500 Y	3,35 Y	1,4	1,57	IE3	69	64	**2BL2061-1 □ Q50-3B**
60	575 Y	2,90 Y	1,8	1,41	NP	73		
3~ 50/60 Hz, IP55, Insulation material class F, UL (certificate number E489378)								
50	380-420 Δ / 660-725 Y	4,35 Δ / 2,50 Y	1,4	1,57	IE3	69	64	**2BL2061-1 □ Q50-7B**
60	440-480 Δ	4,30 Δ	1,8	1,42	IE3	73		
	460 Δ	3,65 Δ	1,8	1,41	NP	73		

Materials	
Cast iron (internal surface with ceramic coating)	**A**

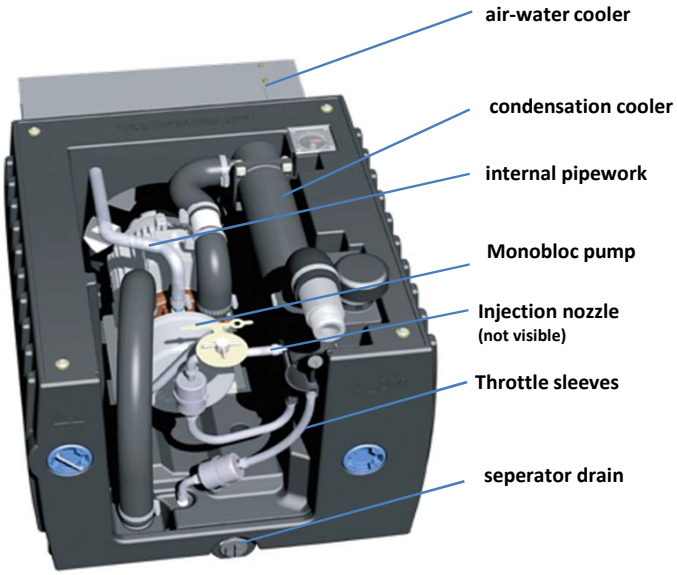
2) Measuring surface sound pressure level acc. to EN ISO 3744, measured with an equivalent unit at a distance of 1 m. The pump is throttled to an average suction pressure, with piping connected, but no relief valves fitted, tolerance ±3 dB (A).

Other voltages

Voltage range 50 Hz	Voltage range 60Hz	Efficiency	c UL us 60 Hz	2BL2…-.. □	..- □
3~					
200 VΔ	200 V YY / 230 VΔ / 400 VY	NEMA Premium	•	K	1
190-210 VΔ	190-210 VYY / 220-240 VΔ / 380-420VY	IE3			
200 V YY / 230 VΔ / 400 VY	230 V YY / 460 VY	NEMA Premium	•	K	6
190-210 VYY / 220-240 VΔ / 380-420VY	220-240 VYY / 440-480VY	IE3			
475-525 V Y	550-600 V Y	NEMA Premium	•	Q	3
475-525 VΔ	550-600 VΔ	NEMA Premium	•	Q	5
400 VΔ / 690 V Y	460 VΔ	NEMA Premium	•	Q	7

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. Voltage tolerances for three phase motors are +/-10%. The frequency tolerance is +/- 2 % maximum.

Materials



Denomination	A
Monobloc pump Lantern / Casing / Port Plate / Impeller	GG / SS / SS / Bronze
Internal piping (suction- and discharge side)	EPDM / Brass / Plastic
Water cooler / air-water cooler	Pipes in copper
Condensation cooler	Pipes in brass
Throttle sleeves / injection nozzle	Brass
Drain of seperator	Polyamide (PA)
Housing (2BL)	Polyethylen (PE)