

L-BL2 N

Data sheet 2BL2 041

Compact circuit vacuum pump

IE3


General information

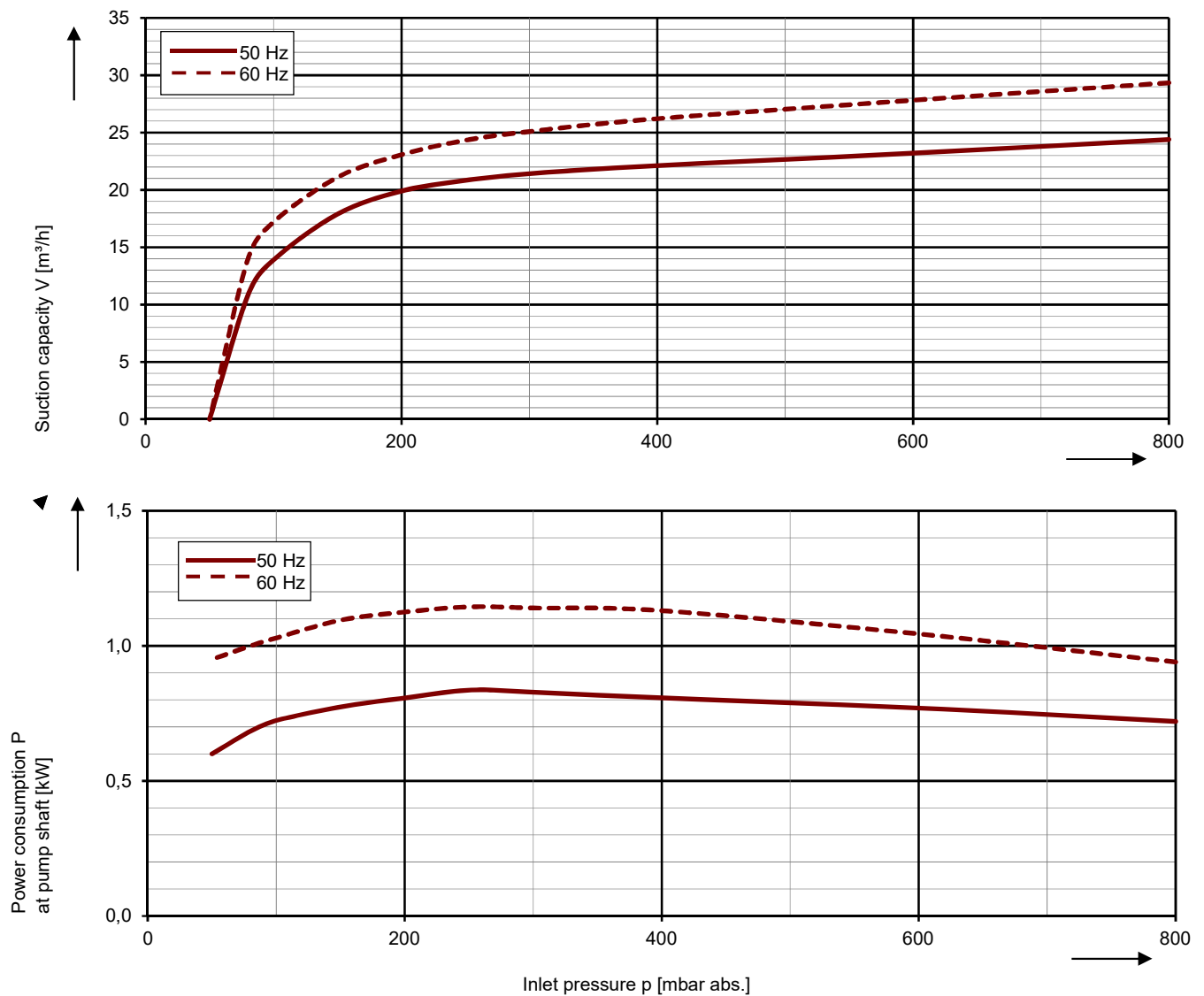
Elmo Rietschle vacuum pumps of the model range L-BL2 are Also known as the Elmo Rietschle "Pump in a Box", these portable units are oil free and air cooled. They include an L-BV liquid ring pump, industrial electric motor, discharge separator, seal water

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 041

Fre- quency	Rated			Service factor	Efficiency	Sound pressure level 2)	Weight Approx.	Order No.
	Voltage	Current	Power					
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	4,7 Δ	0,85	1,29	IE3	65	40	2BL2041-2 □ K50-1B
60	190-210 YY / 380-480 Y	5,40 YY / 2,70 Y	1,15	1,10	IE3	69		
	200 YY	4,60 YY	1,15	1,04	NP	69		
3~ 50/60 Hz, IP55, Insulation material class F, UL (certificate number E489378)								
50	220-240 Δ / 380-420 Y	4,5 Δ / 2,6 Y	0,85	1,29	IE3	65	40	2BL2041-2 □ K50-6B
60	220-240 YY / 440-480 Y	4,9 YY / 2,45 Y	1,15	1,10	IE3	69		
	230 YY / 460 Y	3,95 YY / 1,98 Y	1,15	1,10	NP	69		
3~ 50/60 Hz, IP55, Insulation material class F, UL (certificate number E489378)								
50	500 Y	1,82 Y	0,85	1,29	IE3	65	40	2BL2041-2 □ Q50-3B
60	575 Y	1,58 Y	1,15	1,04	NP	69		
3~ 50/60 Hz, IP55, Insulation material class F, UL (certificate number E489378)								
50	380-420 Δ / 660-725 Y	2,35 Δ / 1,36 Y	0,85	1,29	IE3	65	40	2BL2041-2 □ Q50-7B
60	440-480 Δ	2,35 Δ	1,15	1,10	IE3	69		
	460 Δ	1,98 Δ	1,15	1,04	NP	69		

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

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

**Gardner
Denver**

Your Ultimate Source for Vacuum and Pressure

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Management Service

CERTIFICATE

Certificate Registration No.: **12 100 62050 TMS** / Order No.: **707131567**

The Certification Body
of TÜV SÜD Management Service GmbH

certifies that the organization

**Gardner
Denver**

Gardner Denver Schopfheim GmbH

Johann-Sutter-Str. 6+8

79650 Schopfheim

Germany

for the scope

**Design, process design, manufacture, sales
and after sales service of vacuum pumps, compressors,
pressure vacuum pumps, systems and accessories**

has established and applies a Quality Management System.

An audit was performed and has furnished proof
that the requirements according to

DIN EN ISO 9001:2015

are fulfilled.

The certificate is valid from **2024-06-01** until **2027-05-31**.

Fred Wenke
Head of Certification Body
Munich, 2024-04-09



CERTIFICAT

CERTIFICADO

СЕРТИФИКАТ

認證證書

CERTIFICATE

ZERTIFIKAT

Production Quality Assurance Notification

2 Equipment and Protective Systems intended for use in potentially explosive atmospheres
Directive 2014/34/EU
Annex IV - Module D: Conformity to type based on quality assurance of the production process
Annex VII - Module E: Conformity to type based on product quality assurance

3 Notification number: **BVS 24 ATEX ZQS/E451**

4 Product category: **Equipment and components
equipment-group II, categories 2D, 2G:
Side Channel Blowers, Side Channel Vacuum Pumps**

5 Manufacturer: **Gardner Denver Deutschland GmbH**

6 Address: **Industriestraße 26, 97616 Bad Neustadt, Germany**

Site(s) of manufacture: **Gardner Denver Deutschland GmbH,
Industriestraße 26, 97616 Bad Neustadt, Germany**

7 The certification body of DEKRA Testing and Certification GmbH, Notified Body No 0158 in accordance with Article 17 of the Council Directive 2014/34/EU of 26 February 2014 notifies that the manufacturer has a production quality system, which complies with Annex IV of the Directive. This quality system in compliance with Annex IV of the Directive also meets the requirements of Annex VII.

In the updated annex all products covered by this notification and their type examination certificate numbers are listed.

8 This notification is based on audit report ZQS/E451/24 issued 2025-03-21.
Results of periodical re-assessments of the quality system are a part of this notification.

9 This notification is valid from 2024-05-11 until 2027-05-11 and can be withdrawn if the manufacturer does not satisfy the production quality assurance surveillance according to Annex IV and VII.

10 According to Article 16 (3) of the Directive 2014/34/EU the CE marking shall be followed by the identification number 0158 of DEKRA Testing and Certification GmbH as notified body involved in the production control phase.

DEKRA Testing and Certification GmbH
Bochum, 2025-03-21



Managing Director

This is a translation from the German original.
In the case of arbitration only the German wording shall be valid and binding.