



Product designation			Variable speed drives
Product type designation			VLB3
General characteristics			
Rated power supply voltage			400480VAC 50/60Hz
Rated output voltage		VAC	Three-phase 0 480VAC 0-599Hz
Rated output current		Α	1.3
Rated output power		kW	0.4
Rated output power		HP	0.5 (heavy load)
EMC filter			Built-in EMC suppressor cat. C1/C2
Technical features			
Input type			Three-phase
Rated mains voltage		VAC	400480
Operating mains voltage range		VAC	340528
Rated mains frequency		Hz	50/60
Operating mains frequency range		Hz	4565
Rated mains current without mains choke			1.8
Rated mains current with mains choke			1.4
Output type			Three-phase
Output voltage range		VAC	0480
Output frequency range		Hz	0599
Current overload		%/s	150% for 60s; 200% for 3s
Apparent output power			0.9 (heavy load)
Power loss			4kHz: 20W (heavy load)
Brake chopper			Yes
Switching frequency			216kHz
Max motor cable length			
Shielded			
V	Without EMC category	m	15
	Category C1	m	3
	Category C2	m	15
<del></del>	Category C3	m	15
	Without EMC category	m	30
Functions			





Motor control modes  Motor control modes  feedback, multipoint V/f curve, V/f closed loop control with encoder feedback, torque setpoint, sensorless
$\begin{tabular}{lll} External & potentiometer & $010k\Omega$ Voltage & signals: $0$ & $10VDC$ or $-10$ & $+10VDC$ Current & signals: $0/4$ & $20mA$ Buttons on & front keyboard & Door-mount & installation kit $15$ & preset speeds & via digital inputs & Motor potentiom & $100000000000000000000000000000000000$
3-wire control Yes
S-shape curves Yes
Slip compensation Yes
Flying restart Yes
Access to DC bus Yes
DC braking Yes
DC injection at start Yes
PID control  Yes, with sleep and rinse function
Sequencer (programmable frequency/time cycles)  Yes
Preset speeds Yes
Motorpotentiometer Yes
Different parameter configuration sets Yes
Parameters changeover function Yes
Favorite parameters menu Yes
Autotuning
Safe torque Off (STO) safety function Optional
PTC probe input Yes





Protections		Overcurrent Output short circuit and earth/ground leakage Overvoltage Undervoltage Phase loss Motor heat overload (i2t) Overspeed Speed reverse Multi-pump PID
Special funct.		control (1 main pump frequency regulated + 2 auxiliary pumps activated in direct mode in case of necessity)
Input and Output		
Number of digital input		5
Digital input type		Selectable PNP or NPN logic
Number of digital output	Nr.	2
Digital output arrangement		1 relay output with changeover contact (C/O- SPDT) + 1 digital output
Output contacts ratings		Relay output: 3A 250VAC Digital output: 100mA max 30VDC
Number of analog input	Nr.	2
Analog input type		Configurable 0/210VDC, -10+10VDC, 05VDC, 0/4 20mA
Number of analog output		1
Analog output type		configurable as 010VDC, 0 5VDC, 2 10VDC, 0/4 20mA
Ambient conditions		
Temperature Operating temperature		-10 +55

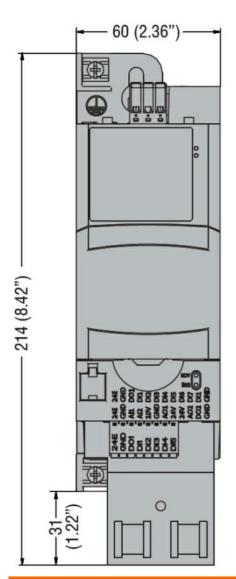


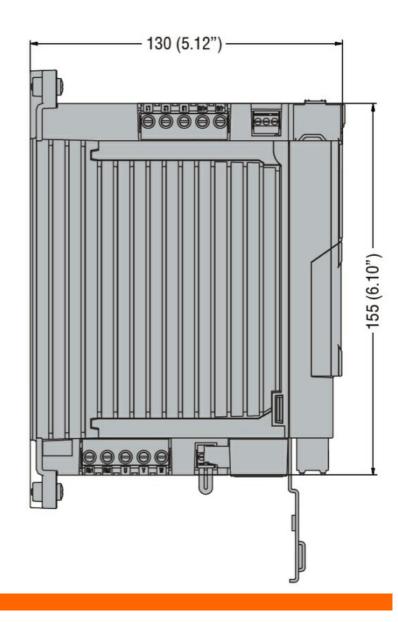


	Current derating		switching frequency 2 or 4kHz: 2.5%/°C over 45°C switching frequency 8 or 16kHz: 2.5%/°C over 40°C
Storage temperature			
	min	°C	-25
	max	°C	+60
Relative humidity		%	595% (with no condensing)
Max altitude		m	4000m (over 1000m derate the rated current by 5%/1000m)
Maximum Pollution degree			2
Overvoltage category			III up to 2000m altitude (II above 2000m)
Housing			
Installation position			Vertical
IP degree of protection			IP20
Dimensions (W x H x D)		mm	60 x 214 x 130
Weight		Kg	0.8
Dimensions			

**ENERGY AND AUTOMATION** 

POWER UNIT, VLB3... TYPE, THREE-PHASE SUPPLY 400-480VAC 50/60HZ. EMC SUPPRESSOR BUILT-IN, CAT. C1, 0.4KW





## Certifications and compliance

Compliance

CSA 22.2 n°274

EN 61800-5-1

UL61800-5-1

Certificates

CSA

cULus

EAC

RCM

ETIM classification

**ETIM 8.0** 

EC001857 -Frequency converter =< 1 kV