

Variable speed drive, VLA1 type, single-phase, supply 200...240VAC (50/60Hz). Built-in EMC suppressor, Cat. C2, 0.75kW



Product designation			Variable speed drives
Product type designation			VLA1
General characteristics			VLAT
Rated power supply voltage			200240VAC 50/60Hz
Rated output voltage		VAC	Three-phase 0240VAC 0- 599Hz
Rated output current		Α	4.2
Rated output power		kW	0.75
Rated output power		HP	1
EMC filter			Built-in EMC suppressor cat. C2
Communication port			None
Technical features			
Input type			Single-phase
Rated mains voltage		VAC	200240
Operating mains voltage range		VAC	170264
Rated mains frequency		Hz	50/60
Operating mains frequency range		Hz	4565
Rated mains current without mains choke			10
Rated mains current with mains choke			8.8
Output type			Three-phase
Output voltage range		VAC	0240
Output frequency range		Hz	0599
Current overload		%/s	150% for 60s, 200% for 3s
Power loss			33W
Brake chopper			No
Switching frequency			216kHz
Max motor cable length			
Shielded			
	Without EMC category	m	50
	Category C2	m	20
Functions			
Motor control modes			V/f linear, quadratic torque, sensorless vector control, ECO mode

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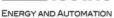
Speed reference signals  front keyboard Door-mount installation kit 15 preset speeds via digital inputs Motor potentiometer  3-wire control Yes S-shape curves Yes Slip compensation Yes Flying restart Yes Access to DC bus No DC braking Yes DC injection at start Yes DC injection at start Yes, with sleep and rinse function Sequencer (programmable frequency/time cycles) Yes Preset speeds Yes Motorpotentiometer Yes Different parameter configuration sets Yes Parameters changeover function Safe torque Off (STO) safety function No Safe torque Off (STO) safety function PTC probe input  front keyboard Door-mount install preset speeds via digital inputs will option install installation installati			
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(i2t) Overspeed Speed reverse  Multi-pump PID control (1 main pump frequency regulated + 2 auxiliary pumps activated in direct mode in case of necessity)  Input and Output  Number of digital input Nr. 5  Digital input type  (i2t) Overspeed Speed reverse  Multi-pump PID control (1 main pump frequency regulated + 2 auxiliary pumps activated in direct mode in case of necessity)  Selectable PNP or NPN logic			Phase loss Motor
Speed reverse  Multi-pump PID control (1 main pump frequency regulated + 2 auxiliary pumps activated in direct mode in case of necessity)  Input and Output  Number of digital input  Nr. 5  Digital input type  Speed reverse  Multi-pump PID control (1 main pump frequency regulated + 2 auxiliary pumps activated in direct mode in case of necessity)  Selectable PNP or NPN logic			
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Special funct.  Special funct.			Speed reverse
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Special funct.  regulated + 2 auxiliary pumps activated in direct mode in case of necessity)  Input and Output  Number of digital input  Nr. 5  Digital input type  Selectable PNP or NPN logic			
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Input and Output  Number of digital input  Digital input type  Auxiliary pumps activated in direct mode in case of necessity)  Input and Output  Nr. 5  Selectable PNP or NPN logic	Special funct.		
mode in case of necessity)  Input and Output  Number of digital input  Digital input type  mode in case of necessity)  Nr. 5  Selectable PNP or NPN logic			
Input and Output  Number of digital input  Digital input type  necessity)  Nr. 5  Selectable PNP or NPN logic			
Input and Output Number of digital input  Digital input type  Nr. 5  Selectable PNP or NPN logic			
Number of digital input  Digital input type  Nr. 5  Selectable PNP or NPN logic	Input and Output		, ,
or NPN logic	•	Nr.	5
of NPN logic	Digital input type		
Number of digital output Nr. 2			
	Number of digital output	Nr.	2

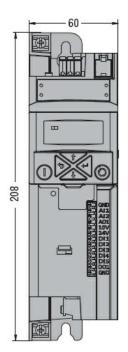
**ENERGY AND AUTOMATION** 

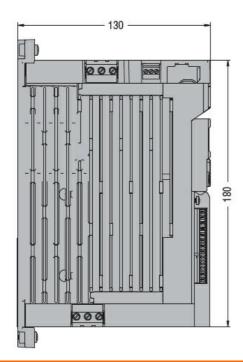
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				1 roley output
				1 relay output with changeover
Digital output arrangement				contact (C/O-
Digital output arranger	none			SPDT) + 1 digital
				output
				Relay output: 3A
				250VAC Digital
Output contacts rating	S			output: 100mA
				max 30VDC
Number of analog inpu	ıt		Nr.	2
				Analog input 1:
				configurable
				0/210VDC, 0
				5VDC, 0/4
Analog input type				20mA Analog
				input 2:
				configurable
				0/210VDC or
Nl			N.I.	05VDC
Number of analog outp	out		Nr.	1
				configurable as 010VDC, 0
Analog output type				5VDC, 2
Analog output type				10VDC, 0/4
				20mA
Ambient conditions				2011/1
Temperature				
· oporataro	Operating temperature			
	o h araning ramp promise	min	°C	-10
		max	°C	+55
			•	2.5%/°C over
		Current derating		40°C
	Storage temperature			
		min	°C	-25
		max	°C	+60
Relative humidity			%	595% (with no
			70	condensing)
				4000m (over
Max altitude			m	1000m derate
			•••	the rated current
				by 5%/1000m)
Maximum Pollution de	gree			2
O				III up to 2000m
Overvoltage category				altitude (II above
Housing				2000m)
Housing				Marthaul
Installation position				Vertical
IP degree of protectio				IP20
Dimensions (W x H x I	D)		mm	60 x 208 x 130
Weight			Kg	0.95
Dimensions				

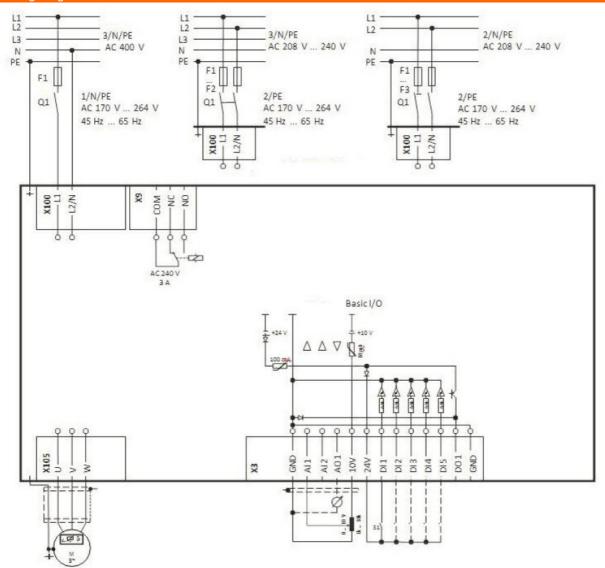
Variable speed drive, VLA1 type, single-phase, supply 200...240VAC (50/60Hz). Built-in EMC suppressor, Cat. C2, 0.75kW







## Wiring diagrams



## Certifications and compliance



## **VLA107A240**

Variable speed drive, VLA1 type, single-phase, supply 200...240VAC (50/60Hz). Built-in EMC suppressor, Cat. C2, 0.75kW

Compliance

CSA 22.2 No. 274

EN 61800-5-1

UL61800-5-1

Certificates

cULus

EAC

RCM

ETIM classification

ETIM 8.0

EC001857 - Frequency

converter =< 1 kV