



Product designation			Variable speed drives
Product type designation			VLA1
General characteristics			
Rated power supply voltage			200240VAC 50/60Hz
Rated output voltage		VAC	Three-phase 0240VAC 0- 599Hz
Rated output current		Α	7
Rated output power		kW	1.5
Rated output power		HP	2
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			16.7
Rated mains current with mains choke			13.9
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			50W
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

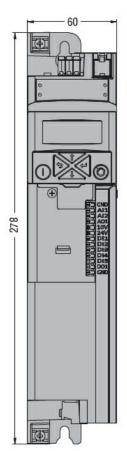
Speed reference signals front keyboard Door-mount installation kit 15 preset speeds via digital inputs Motor potentiometer 3-wire control Yes S-shape curves Yes Slip compensation Yes Flying restart Yes Access to DC bus No DC braking Yes DC injection at start Yes DC injection at start Yes, with sleep 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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of NPN logic	Digital input type		
Number of digital output Nr. 2			
	Number of digital output	Nr.	2

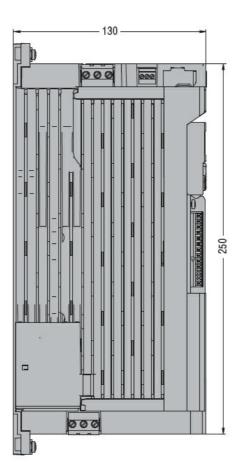


		1 relay output
		with changeover
Digital output arrangement		contact (C/O-
		SPDT) + 1 digital
		output
		Relay output: 3A
Output contacts ratings		250VAC Digital output: 100mA
		max 30VDC
Number of analog input	Nr.	2
		Analog input 1:
		configurable
		0/210VDC, 0
Analog input turns		5VDC, 0/4
Analog input type		20mA Analog input 2:
		configurable
		0/210VDC or
		05VDC
Number of analog output	Nr.	1
		configurable as
Analog autout time		010VDC, 0
Analog output type		5VDC, 2 10VDC, 0/4
		20mA
Ambient conditions		
Temperature		
Operating temperature		
mir	n °C	-10
max	(°C	+55
Current derating	1	2.5%/°C over
	,	
		40°C
Storage temperature	°C	
Storage temperature min	_	-25
Storage temperature min	C °C	-25 +60
Storage temperature min		-25
Storage temperature min	C °C	-25 +60 595% (with no condensing) 4000m (over
Storage temperature min	C °C	-25 +60 595% (with no condensing) 4000m (over 1000m derate
Storage temperature min max Relative humidity	°C %	-25 +60 595% (with no condensing) 4000m (over 1000m derate the rated current
Storage temperature min max Relative humidity Max altitude	°C %	-25 +60 595% (with no condensing) 4000m (over 1000m derate the rated current by 5%/1000m)
Storage temperature min max Relative humidity	°C %	-25 +60 595% (with no condensing) 4000m (over 1000m derate the rated current by 5%/1000m)
Storage temperature min max Relative humidity Max altitude Maximum Pollution degree	°C %	-25 +60 595% (with no condensing) 4000m (over 1000m derate the rated current by 5%/1000m) 2 III up to 2000m
Storage temperature min max Relative humidity Max altitude	°C %	-25 +60 595% (with no condensing) 4000m (over 1000m derate the rated current by 5%/1000m)
Storage temperature min max Relative humidity Max altitude Maximum Pollution degree Overvoltage category Housing	°C %	-25 +60 595% (with no condensing) 4000m (over 1000m derate the rated current by 5%/1000m) 2 III up to 2000m altitude (II above 2000m)
Storage temperature min max Relative humidity Max altitude Maximum Pollution degree Overvoltage category Housing Installation position	°C %	-25 +60 595% (with no condensing) 4000m (over 1000m derate the rated current by 5%/1000m) 2 III up to 2000m altitude (II above 2000m) Vertical
Storage temperature mir max Relative humidity Max altitude Maximum Pollution degree Overvoltage category Housing Installation position IP degree of protection	°C %	-25 +60 595% (with no condensing) 4000m (over 1000m derate the rated current by 5%/1000m) 2 III up to 2000m altitude (II above 2000m) Vertical IP20
Storage temperature min max Relative humidity Max altitude Maximum Pollution degree Overvoltage category Housing Installation position IP degree of protection Dimensions (W x H x D)	mm	-25 +60 595% (with no condensing) 4000m (over 1000m derate the rated current by 5%/1000m) 2 III up to 2000m altitude (II above 2000m) Vertical IP20 60 x 281 x 130
Storage temperature mir max Relative humidity Max altitude Maximum Pollution degree Overvoltage category Housing Installation position IP degree of protection	w °C %	-25 +60 595% (with no condensing) 4000m (over 1000m derate the rated current by 5%/1000m) 2 III up to 2000m altitude (II above 2000m) Vertical IP20





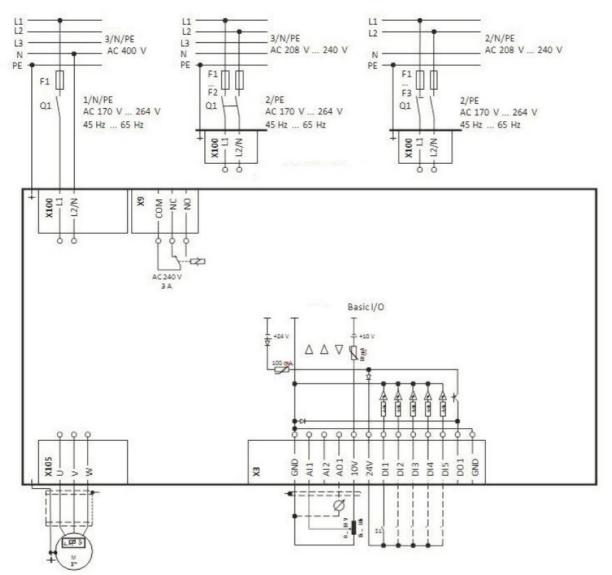




Wiring diagrams

ENERGY AND AUTOMATION

Variable speed drive, VLA1 type, single-phase, supply 200...240VAC (50/60Hz). Built-in EMC suppressor, Cat. C2, 1.5kW



Certifications and compliance

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