VARIABLE SPEED DRIVE, VLB3... TYPE, THREE-PHASE SUPPLY 400-480VAC 50/60HZ. EMC SUPPRESSOR BUILT-IN, CAT. C2, 2.2KW



Product type designation	Product designation			Variable speed
Rated power supply voltage	•			drives
Rated output voltage				VLB3
Rated power supply voltage 50/60Hz Rated output voltage VAC Three-phase 0 480VAC 0-599Hz Rated output power kW 2.2 2 16kHz Rated output power HP 3 (heavy load) Built-in EMC suppressor cat. C2 EMC filter Suppressor cat. C2 C2 Communication port RS485, Modbus RTU RTU Time-phase Input type Three-phase Phase RTU Rated mains voltage VAC 400480 Operating mains voltage range VAC 340528 Rated mains frequency range Hz 50/60 Operating mains frequency range Hz 4565 Rated mains current with mains choke 7.8 Rated mains current with mains choke 5.3 Rated mains current with mains choke 5.3 Cutput voltage range VAC 0480 Output type 5.3 Output type 5.3 Output type 15.0% for 60% 200% for 38 Current overload %/8 150% for 60% 200% for 38 Apparent output power 3.6 (heavy load) Power loss Windex proper for the communication	General characteristics			400 400 440
Rated output current A 5.6 Rated output power kW 2.2 Rated output power HP 3 (heavy load) Built-in EMC suppressor cat. C2 Communication port RS485, Modbus RTU Technical features Input type Three-phase Rated mains voltage VAC 400480 Operating mains voltage range VAC 341528 Rated mains frequency Hz 50/60 Operating mains requency range Hz 5.3 Rated mains current without mains choke 7.8 8 Rated mains current with mains choke 5.3 1 Output type Three-phase 1 Output type Three-phase 1 Output voltage range VAC 0480 Output voltage range VAC 0480 Output frequency range Hz 0599 Current overload %/s 150% for 60s; 20% for 3s Apparent output power 3.6 (heavy load) Brake chopper Yes	Rated power supply voltage			50/60Hz
Rated output power kW 2.2 Rated output power HP 3 (heavy load) EMC filter Built-in EMC suppressor cat. C2 Communication port RS485, Modbus RTU 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 7.8 5.3 Output type Three-phase Output utype Three-phase Output voltage range VAC 0480 Output voltage range VAC 0480 Output type Three-phase Output voltage range VAC 0480 Output voltage range VAC 0480 Output oltage range VAC 0599 Current overload %/s 200% for 0s; 200% for 3s Apparent output power 3.6 (heavy load)	Rated output voltage		VAC	Three-phase 0 480VAC 0-599Hz
Rated output power HP 3 (heavy load) EMC filter Built-in EMC suppressor cat. C2 Communication port RS485, Modbus RTU Technical features Input type Three-phase Rated mains voltage VAC 400480 Operating mains voltage range VAC 340528 Rated mains frequency range Hz 50/60 Questing mains frequency range Hz 4565 Rated mains current without mains choke 5.3 Rated mains current with mains choke 5.3 Output type Three-phase Output frequency range VAC 0480 Output frequency range Hz 0599 Current overload %/s 150% for 60s; 200% for 3s Apparent output power 3.6 (heavy load) Power loss Yes Switching frequency Yes Max motor cable length Without EMC category m switching frequency 4kHz max) Max motor cable length Category C1 m 3 3 switching frequency max) Max motor cable length Category C1 m 20 (Category C2 m 20 (Category C3 m 35) 3 switching frequency max) <td>Rated output current</td> <td></td> <td>Α</td> <td>5.6</td>	Rated output current		Α	5.6
Built-in EMC suppressor cat. C2 c2 communication port RS485, Modbus RTU	Rated output power		kW	2.2
EMC filter suppressor cat. C2 Communication port RS485, Modbus RTU Technical features Three-phase Rated mains voltage VAC 400480 Operating mains voltage range VAC 340528 Rated mains frequency Hz 50/60 Operating mains frequency range Hz 50/60 Rated mains current without mains choke 7.8 3.6 Rated mains current with mains choke 7.8 3.6 Output type Three-phase 0480 Output frequency range Hz 0599 Current overload %/s 150% for 60s; 200% for 3s Apparent output power 3.6 (heavy load) Power loss 4KHz: 66W (heavy load) Brake chopper Yes Switching frequency 216kHz Max motor cable length Without EMC category m 50m / 100m (40°C max, switching frequency withing frequency 4kHz max) Category C1 m 3 Category C2 m 20 Category C2 m 20 <t< td=""><td>Rated output power</td><td></td><td>HP</td><td>3 (heavy load)</td></t<>	Rated output power		HP	3 (heavy load)
Technical features STrue-phase Three-phase Rated mains voltage VAC 400480	EMC filter			suppressor cat.
Three-phase	Communication port			RS485, Modbus- RTU
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 5.3 Rated mains current with mains choke 5.3 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 3.6 (heavy load) Power loss 4kHz: 66W (heavy load) Brake chopper 7kes Switching frequency 216kHz Max motor cable length 50m / 100m (40°C max, switching frequency 4kHz max) Category C1 m 3 Category C2 m 20 Category C3 m 20 Category C3 m 35 Unshielded Unshielded				
Operating mains voltage range VAC 340528 Rated mains frequency Hz 50/60 Operating mains frequency range Hz 4565 Rated mains current without mains choke 7.8 Rated mains current with mains choke 5.3 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 3.6 (heavy load) Power loss 4kHz: 66W (heavy load) Brake chopper 216kHz Switching frequency 7cs Switching frequency 50m / 100m (40°C max, switching frequency 4kHz max) Category C1 m ax 3 Category C2 m 20 Category C3 m 20 Category C3 m 35 Unshielded Unshielded	Input type			•
Rated mains frequency Hz 50/60 Operating mains frequency range Hz 4565 Rated mains current without mains choke 7.8 Rated mains current with mains choke 5.3 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 3.6 (heavy load) Power loss 4kHz: 66W (heavy load) Brake chopper Yes Switching frequency 216kHz Max motor cable length Without EMC category m Without EMC category m switching frequency 4kHz max) Category C1 m 3 Category C2 m 20 Category C3 m 35 Unshielded Unshielded Vacategory C3 m	Rated mains voltage		VAC	400480
Operating mains frequency range Hz 4565 Rated mains current without mains choke 7.8 Rated mains current with mains choke 5.3 Output type Three-phase Output voltage range VAC 0480 Output frequency range Hz 0599 Current overload %/s 150% for 60s; 200% for 3s 200% for 3s 200% for 3s 200% for 3s 200% for 3s 200%	Operating mains voltage range		VAC	340528
Rated mains current without mains choke 7.8	Rated mains frequency		Hz	50/60
Rated mains current with mains choke 5.3	Operating mains frequency range		Hz	4565
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 3.6 (heavy load) Power loss 4kHz: 66W (heavy load) Brake chopper Yes Switching frequency 216kHz Max motor cable length Shielded Without EMC category m Without EMC category m Category C1 m 3 Category C2 m 20 Category C3 m 35 Unshielded Unshielded VAC 0480	Rated mains current without mains choke			7.8
Output voltage range VAC 0480 Output frequency range Hz 0599 Current overload %/s 150% for 60s; 200% for 3s Apparent output power 3.6 (heavy load) Power loss 4kHz: 66W (heavy load) Brake chopper Yes Switching frequency 216kHz Max motor cable length 50m / 100m (40°C max, switching frequency 4kHz max) Category C1 max 3 Category C2 m 20 Category C3 m 35 Unshielded Unshielded	Rated mains current with mains choke			5.3
Output frequency range Hz 0599 Current overload %/s 150% for 60s; 200% for 3s Apparent output power 3.6 (heavy load) Power loss 4kHz: 66W (heavy load) Brake chopper Yes Switching frequency 216kHz Max motor cable length 50m / 100m (40°C max, switching frequency 4kHz max) Category C1 max) 3 Category C2 m 20 Category C2 m 20 Category C3 m 35 Unshielded Unshielded	Output type			Three-phase
Current overload %/s 150% for 60s; 200% for 3s Apparent output power 3.6 (heavy load) Power loss 4kHz: 66W (heavy load) Brake chopper Yes Switching frequency 216kHz Max motor cable length Shielded Without EMC category m 50m / 100m (40°C max, switching frequency 4kHz max) Category C1 max m 3 category C2 m 20 category C2 m 20 category C3 m 35 Unshielded Unshielded	Output voltage range		VAC	0480
Apparent output power Apparent output power Power loss Brake chopper Switching frequency Max motor cable length Shielded Without EMC category Without EMC category C1 m switching frequency 4kHz max) Category C2 m 20 Category C3 m 35 Unshielded	Output frequency range		Hz	0599
Power loss	Current overload		%/s	
Power loss	Apparent output power			3.6 (heavy load)
Switching frequency 216kHz	Power loss			
Max motor cable length Shielded Without EMC category m switching frequency 4kHz max) Category C1 m 3 Category C2 m 20 Category C3 m 35 Unshielded	Brake chopper			Yes
Shielded Without EMC category m switching frequency 4kHz max) Category C1 m 3 Category C2 m 20 Category C3 m 35 Unshielded	Switching frequency			216kHz
Without EMC category m switching frequency 4kHz max) Category C1 m 3 Category C2 m 20 Category C3 m 35 Unshielded	Max motor cable length			
Without EMC category m switching frequency 4kHz max) Category C1 m 3 Category C2 m 20 Category C3 m 35 Unshielded	Shielded			
frequency 4kHz max) Category C1 m 3 Category C2 m 20 Category C3 m 35 Unshielded		Without EMC actorony	m	(40°C max,
Category C2 m 20 Category C3 m 35 Unshielded		williout Eivic category	Ш	frequency 4kHz
Category C3 m 35 Unshielded			m	
Unshielded		<u> </u>	m	
		Category C3	m	35
G ,	Unshielded	Without EMC category	m	200





VARIABLE SPEED DRIVE, VLB3... TYPE, THREE-PHASE SUPPLY 400-480VAC 50/60HZ. EMC SUPPRESSOR BUILT-IN, CAT. C2, 2.2KW

V/f linear, quadratic torque, sensoritess vector control, ECO mode, servo control with encoder feedback, multipoint V/f curve, V/f closed loop control with encoder feedback, torque setpoint, sensoritess expoint, sensoritess expoint, sensoritess signals: 0 Speed reference signals Speed reference settle speed settle s	Functions	
quadratic torque, sensorless vector control, ECO mode, servo control with encoder feedback, multipoint V/I curve, V/I closed loop control with encoder feedback, multipoint V/I curve, V/I closed loop control with encoder feedback, torque setpoint, sensorless External potentiometer 010kR Voltage signals: 0 10kD vor 10 10kD vor	Tanonono	V/f linear.
Sensorless vector control, ECO mode, servo control with encoder feedback, multipoint V/f curve, V/f closed loop control with encoder feedback, torque setpoint, sensorless External potentiometer O10kD Voltage signals: 0 10VDC or -10 10VDC or -10 110VDC or -10 20mA Buttons on torque setpoint, sensorless External potentiometer O10kD Voltage signals: 0 10VDC or -10 110VDC or		
ECO mode, servo control with encoder feedback, servo control with encoder feedback, multipoint Vf curve, Vf closed loop control with encoder feedback, torque setpoint, sensorless External potentiometer o10kD Voltage signals: 0 10VDC or -10 10VDC		· · · · · · · · · · · · · · · · · · ·
ECO mode, servo control with encoder feedback, servo control with encoder feedback, multipoint Vf curve, Vf closed loop control with encoder feedback, torque setpoint, sensorless External potentiometer o10kD Voltage signals: 0 10VDC or -10 10VDC		vector control,
Servo control with encoder (eedback, multipoint V/f curve, V/f closed loop control with encoder (eedback, multipoint V/f curve, V/f closed loop control with encoder (eedback, torque setpoint, seensorless) External potentiometer 010kΩ Voltage signals: 0 10hCV voltage signals: 0 10hCV voltage signals: 0 +10VDC current signals: 0.4 20mA Buttons on front keyboard poor-mount installation kit 15 preset speeds via digital inputs Motor potentiom 3-wire control yes S-shape curves Yes S-shape curves Yes Slip compensation Yes Access to DC bus Yes CC injection at start Yes DC traking Yes DC traking Yes DC injection at start Yes Preset speeds Yes Motorpotentiometer Yes Parameters changeover function Yes Parameters changeover function Yes Parameters changeover function Yes Parameters changeover function Yes Parameters menu Yes Autotuning No Safe torque Off (STO) safety function		
Motor control modes feedback, multipoint V/f curve, Vf closed loop control with encoder feedback, torque setpoint, sensorless External potentiometer 010kD Voltage signals: 0 10VDC or -10 +10VDC or -10 +10VDC Current signals: 0/4 20mA Buttons on front keyboard Door-mount installation kit 15 preset speeds via digital inputs Motor potention kit 15 preset speeds via digital inputs Motor potention kit 15 preset speeds via digital inputs Motor potention vyes S-shape curves Stip compensation Yes Flying restart Yes Access to DC bus Yes DC injection at start Yes DC injection at start Yes PID control Sequencer (programmable frequency/time cycles) Yes Motorpotentiometer Sequencer (programmable frequency/time cycles) Yes Driser speeds Yes Motorpotentiometer Yes Motorpotentiometer Yes Preset speeds Yes Motorpotentiometer Yes Preset speeds Yes Parameters changeover function Yes Parameters changeover function Yes Parameters renu Yes Parameters renu Yes Parameters menu Yes Parameters function Optional		
multipoint V/f curve, V/f closed loop control with encoder feedback, torque setpoint, sensorless External potentiometer 010kΩ Voltage signals: 0 10VDC or -10 Speed reference signals Autotor Speed speeds Yes Speeds yes Yes DC braking Yes Yes DC price price in at start Yes PlD control Yes Sequencer (programmable frequency/time cycles) Yes Preset speeds Yes Morpote		encoder
Curve, Vif closed loop control with encoder feedback, torque setpoint, sensorless External potentiometer 010kΩ Voltage signals: 0 10VDC or -10 + 10VDC or	Motor control modes	feedback,
Curve, Vif closed loop control with encoder feedback, torque setpoint, sensorless External potentiometer 010kΩ Voltage signals: 0 10VDC or -10 + 10VDC or		multipoint V/f
loop control with encoder rededback, torque setpoint, sensorless External potentiometer 010kΩ Voltage signals: 0 10VDC or -10 +10VDC		
encoder feedback, torque setpoint, sensorless External potentiometer 01 0 kΩ Voltage signals: 0 10 VDC or -10 +10 VDC Current signals 0/4 20mA Buttons on front keyboard Door-mount installation kit 15 preset speeds via digital inputs Motor potentiom 3-wire control Yes S-shape curves Yes Slip compensation Yes Slip compensation Yes Compensation Yes Different parameter configuration sets Yes DC injection at start Yes DC injection at start Yes DC injection at start Yes DC grammable frequency/time cycles) Yes Preset speeds Yes Motor potentiom Yes Preset speeds Yes DC injection at start Yes DC injectio		
Setpoint, sensorless External potentiometer 010kQ Voltage signals: 0 10VDC or -10 +10VDC ourrent signals: 04 20mA Buttons on front keyboard Door-mount installation kit 15 preset speeds via digital inputs Motor potentiom 3-wire control Yes S-shape curves Yes S-shape curves Yes Slip compensation Yes Flying restart Yes Access to DC bus Yes DC braking Yes DC braking Yes DC injection at start Yes DC injection at start Yes DC injection at start Yes Motor potentiom Sequencer (programmable frequency/time cycles) Yes Motorpotentiometer Yes Motorpotentiometer Yes Different parameter configuration sets Parameters changeover function Yes Favorite parameters menu Yes Favorite parameters menu Yes Favorite parameters menu Yes Favorite parameters menu Aves No		
Setpoint, sensorless External potentiometer 010kQ Voltage signals: 0 10VDC or -10 +10VDC ourrent signals: 04 20mA Buttons on front keyboard Door-mount installation kit 15 preset speeds via digital inputs Motor potentiom 3-wire control Yes S-shape curves Yes S-shape curves Yes Slip compensation Yes Flying restart Yes Access to DC bus Yes DC braking Yes DC braking Yes DC injection at start Yes DC injection at start Yes DC injection at start Yes Motor potentiom Sequencer (programmable frequency/time cycles) Yes Motorpotentiometer Yes Motorpotentiometer Yes Different parameter configuration sets Parameters changeover function Yes Favorite parameters menu Yes Favorite parameters menu Yes Favorite parameters menu Yes Favorite parameters menu Aves No		feedback, torque
sensorless External potentiometer 010kΩ Voltage signals: 0 10VDC or -10 + 10VDC Current signals: 0.4		·
potentiometer 010kΩ 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 3-wire control 3-wire control 3-wire control 4-yes S-shape curves 5-shape curves Yes Slip compensation Yes Flying restart Yes Access to DC bus DC braking Yes DC braking Yes DC injection at start Yes PID control Sequencer (programmable frequency/time cycles) Yes Preset speeds Yes Motorpotentiometer Yes Motorpotentiometer Yes Preset speeds Yes Different parameter configuration sets Yes Pavameters changeover function Yes Favorite parameters menu Yes Autotuning No Safe torque Off (STO) safety function Optional		
Speed reference signals Speed stop to reference signals Speed speed speeds Speed reference signals Speed speeds Speed reference signals Speed speeds Speed speed speeds Speed reference signals Speed spee		External
signals: 0 10VDC or -10 +10VDC Current Speed reference signals Spend Retor keyboard Door-mount installation kit 15 preset speeds Yes S-shape curves Yes Slip compensation Yes Slip compensation Yes Preset speeds Yes DC braking Yes Preset speeds Yes Proportion at start Yes Preset speeds Yes Preset speeds Yes Motorpotentiometer Yes Preset speeds Yes Motorpotentiometer Yes Parameters changeover function Yes Parameters changeover function Yes Favorite parameters menu Yes Autotuning No Safe torque Off (STO) safety function Optional		potentiometer
Speed reference signals Speed Speeds Yes Speed Speeds Yes Preset speeds Speed Reference signals Speed Reference signals Speeds Yes Notes Preset speeds Yes Preset speeds Yes Motor potentiometer Yes Motor potentiometer Yes Motor potentiometer Yes Speed Reference signals Speeds Speeds Yes Preset speeds Yes Motor potentiometer Yes Speeds Autotuning No Safe torque Off (STO) safety function Optional		010kΩ Voltage
Speed reference signals Speed reference signals \$\begin{array}{cccccccccccccccccccccccccccccccccccc		signals: 0
Speed reference signals Signals: 0/4 20mA Buttons on front keyboard Door-mount installation kit 15 preset speeds via digital inputs Motor potentiom 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 DC injection at start Yes PID control Sequencer (programmable frequency/time cycles) Preset speeds Motorpotentiometer Yes Motorpotentiometer Yes Motorpotentiometer Yes Flying restart Yes Preset speeds Yes Motorpotentiometer Yes Farameters changeover function Yes Favorite parameters menu Yes Autotuning No Safe torque Off (STO) safety function Optional		10VDC or -10
20mA Buttons on front keyboard Door-mount installation kit 15 preset speeds via digital inputs Motor potentiom 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 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 Favorite parameters menu Yes Autotuning No Safe torque Off (STO) safety function Optional		+10VDC Current
ZUMA Buttons on front keyboard Door-mount installation kit 15 preset speeds via digital inputs Motor potentiom 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 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 Favorite parameters menu Yes Autotuning No Safe torque Off (STO) safety function Preset speeds No Safe torque Off (STO) safety function Optional	Chand reference signals	signals: 0/4
Door-mount installation kit 15 preset speeds via digital inputs Motor potentiom 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 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 No Safe torque Off (STO) safety function Optional	Speed reference signals	
Door-mount installation kit 15 preset speeds via digital inputs Motor potentiom 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 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 No Safe torque Off (STO) safety function Optional		front keyboard
preset speeds via digital inputs Motor potentiom 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 PID control Yes Preset speeds Yes Motorpotentiometer Yes Motorpotentiometer Yes Different parameter configuration sets Yes Parameters changeover function Yes Favorite parameters menu Yes Autotuning No Safe torque Off (STO) safety function Yes Preset Speeds No Autotuning No Optional		
via digital inputs Motor potentiom 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 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 No Safe torque Off (STO) safety function Optional		installation kit 15
via digital inputs Motor potentiom 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 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 No Safe torque Off (STO) safety function Optional		preset speeds
3-wire controlMotor potentiom3-wire controlYesS-shape curvesYesSlip compensationYesFlying restartYesAccess to DC busYesDC brakingYesDC injection at startYesPID controlYes, with sleep and rinse functionSequencer (programmable frequency/time cycles)YesPreset speedsYesMotorpotentiometerYesDifferent parameter configuration setsYesParameters changeover functionYesFavorite parameters menuYesAutotuningNoSafe torque Off (STO) safety functionOptional		
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 No Safe torque Off (STO) safety function Optional		
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 No Safe torque Off (STO) safety function Optional	3-wire control	Yes
Flying restart Access to DC bus PC braking PID control Sequencer (programmable frequency/time cycles) Preset speeds Motorpotentiometer Different parameter configuration sets Parameters changeover function Yes Autotuning No Yes Yes Yes Yes Yes Yes Yes Ye	S-shape curves	
Access to DC bus DC braking C injection at start PID control Sequencer (programmable frequency/time cycles) Preset speeds Motorpotentiometer Ves Pifferent parameter configuration sets Parameters changeover function Yes Favorite parameters menu Autotuning Yes Yes Yes Yes Yes Yes Yes Ye	Slip compensation	
DC braking 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 Autotuning No Safe torque Off (STO) safety function Optional	Flying restart	
DC injection at start PID control Sequencer (programmable frequency/time cycles) Preset speeds Motorpotentiometer Different parameter configuration sets Parameters changeover function Yes Favorite parameters menu Autotuning No Safe torque Off (STO) safety function Yes, with sleep and rinse function Yes Yes Yes Yes Yes Yes No No Optional		
PID control Yes, with sleep and rinse function Sequencer (programmable frequency/time cycles) Preset speeds Motorpotentiometer Different parameter configuration sets Parameters changeover function Yes Favorite parameters menu Autotuning Safe torque Off (STO) safety function Yes, with sleep and rinse function Yes Yes Yes No Optional		Yes
Sequencer (programmable frequency/time cycles) Preset speeds Motorpotentiometer Different parameter configuration sets Parameters changeover function Yes Favorite parameters menu Autotuning Safe torque Off (STO) safety function and rinse function Yes Yes Yes Yes Yes Yes No Optional	DC injection at start	
Sequencer (programmable frequency/time cycles) Preset speeds Motorpotentiometer Different parameter configuration sets Parameters changeover function Favorite parameters menu Autotuning Safe torque Off (STO) safety function Yes And rinse function Yes Yes Yes Yes Yes No Optional	PID control	
Preset speeds Yes Motorpotentiometer Yes Different parameter configuration sets Yes Parameters changeover function Yes Favorite parameters menu Yes Autotuning No Safe torque Off (STO) safety function Optional		
MotorpotentiometerYesDifferent parameter configuration setsYesParameters changeover functionYesFavorite parameters menuYesAutotuningNoSafe torque Off (STO) safety functionOptional	Sequencer (programmable frequency/time cycles)	Yes
Different parameter configuration sets Parameters changeover function Yes Favorite parameters menu Autotuning No Safe torque Off (STO) safety function Optional	Preset speeds	Yes
Parameters changeover function Yes Favorite parameters menu Yes Autotuning No Safe torque Off (STO) safety function Optional	·	Yes
Favorite parameters menu Yes Autotuning No Safe torque Off (STO) safety function Optional		Yes
Autotuning No Safe torque Off (STO) safety function Optional		
Safe torque Off (STO) safety function Optional	Favorite parameters menu	Yes
	Autotuning	No
PTC probe input Yes		Optional
	PTC probe input	Yes





VARIABLE SPEED DRIVE, VLB3... TYPE, THREE-PHASE SUPPLY 400-480VAC 50/60HZ. EMC SUPPRESSOR BUILT-IN, CAT. C2, 2.2KW

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

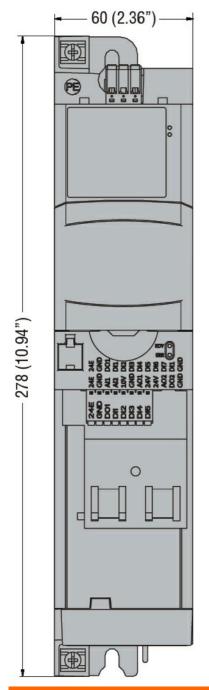


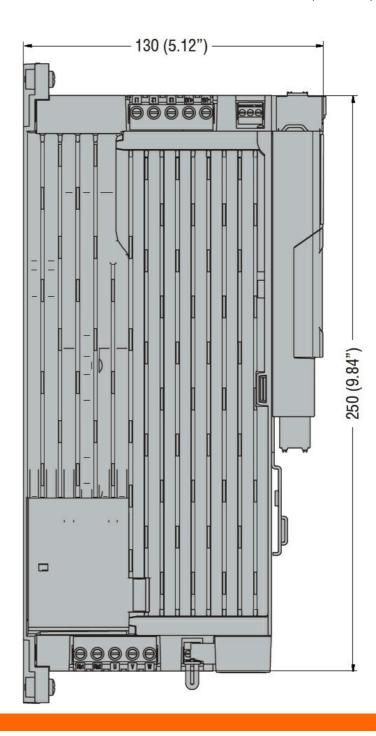


VARIABLE SPEED DRIVE, VLB3... TYPE, THREE-PHASE SUPPLY 400-480VAC 50/60HZ. EMC SUPPRESSOR BUILT-IN, CAT. C2, 2.2KW

	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 278 x 130
Weight		Kg	1.38
Dimensions			

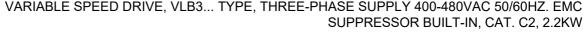
VARIABLE SPEED DRIVE, VLB3... TYPE, THREE-PHASE SUPPLY 400-480VAC 50/60HZ. EMC SUPPRESSOR BUILT-IN, CAT. C2, 2.2KW

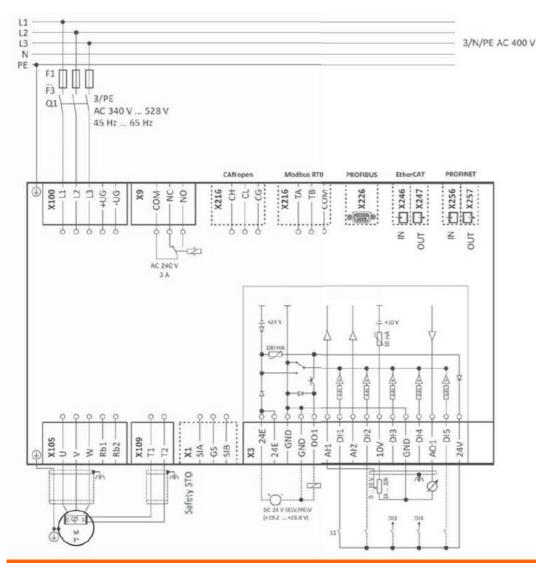




Wiring diagrams

VARIABLE SPEED DRIVE, VLB3... TYPE, THREE-PHASE SUPPLY 400-480VAC 50/60HZ. EMC





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