

VARISPEED

PROVEN RELIABILITY - EXPERT SERVICE

VDRIVE
-PLUS

VDRIVE
-PLUS

VDRIVE
-PLUS

V DRIVE - Plus 0.4kW - 400 kW

FREQUENCY INVERTER

HIGHLIGHTS



- Best performance / cost ratio, without compromise in reliability and quality High-tech motor control concept, based on advanced DSP-technology - ready for V/Hz, SENSORLESS VECTOR, CLV and PMM motor control - intelligent AUTOTUNING functions for easy setup
- Compact in size, modular in concept, rugged construction, build for the worldwide market
- Flexible inverter control, dual high resolution analogue inputs, free mappable digital I/O channels
- Ready for all commonly used fieldbus systems
- Universal function-set for all kind of industrial and residential applications, including integrated PID/ pump controller routines
- Smart PC-tools, for inverter control, parametrization and troubleshooting. Parameter-duplication stick
- EMC filter (C3 class) integrated
- Approved for worldwide standards by independent bodies



PARAMETER COPY STICK

FRAMESIZE

MODEL	INPUT VOLTAGE	MATCHED MOTOR (KW)	RATED CURRENT OUTPUT (A)	FRAME	DIMENSIONS (mm) W x H x D
VDEP-20002	220V - 240V	0.2	1.5	E1	80 x 138 x 135
VDEP-20004	220V - 240V	0.4	2.5	E1	80 x 138 x 135
VDEP-20007	220V - 240V	0.75	4.5	E1	80 x 138 x 135
VDEP-20015	220V - 240V	1.5	7.0	E1	80 x 138 x 135
VDEP-20022	220V - 240V	2.2	10.0	E2	106 x 180 x 150
VDEP-40007	380V - 460V	0.75	2.0	E1	80 x 138 x 135
VDEP-40015	380V - 460V	1.5	4.0	E1	80 x 138 x 135
VDEP-40022	380V - 460V	2.2	.5	E2	106 x 180 x 150
VDEP-40030	380V - 460V	3	7.0	E2	106 x 180 x 150
VDEP-40040	380V - 460V	4	9.0	E2	106 x 180 x 150
VDEP-40055	380V - 460V	5.5	12.0	E4	142 x 235 x 152
VDEP-40075	380V - 460V	7.5	17.0	E4	142 x 235 x 152
VDEP-40110	380V - 460V	11	23.0	E5	161 x 265 x 170
VDEP-40150	380V - 460V	15	32.0	E5	161 x 265 x 170
VDEP-40185	380V - 460V	18.5	38.0	E6	210 x 340 x 196
VDEP-40220	380V - 460V	22	44.0	E6	210 x 340 x 196
VDEP-40300	380V - 460V	30	60	E6	210 x 340 x 196
VDEP-40370	380V - 460V	37	75	E7	265 x 435 x 235
VDEP-40450	380V - 460V	45	90	E7	265 x 435 x 235
VDEP-40550	380V - 460V	55	110	C51	360 x 630 x 265
VDEP-40750	380V - 460V	75	150	C51	360 x 630 x 265
VDEP-40900	380V - 460V	90	180	C61	410 x 765 x 300
VDEP-41100	380V - 460V	110	220	C61	410 x 765 x 300
VDEP-41320	380V - 460V	132	265	C61	410 x 765 x 300
VDEP-41600	380V - 460V	160	320	C7	516 x 765 x 326

TECHNICAL DATA

Input	Rated voltage	3-Phase 380V-460V (+/-)15% 1-Phase 220V - 240V (±15%)
	Rated frequency	44 - 67 Hz
	EMC filter	Integrated for 2nd environment - industrial area (optional for residential area)
Output	Output voltage	0 - input
	Output frequency	0 - 650 Hz (1500HZ OPTION)
	Frequency resolution	0,01 Hz
	Overload capability	150% - 60 sec. / 10 min
Control	Motor control algorithm	V/Hz-SpaceVector, SLV-SENSORLESS VECTOR, Torque/Speed control mode CLV-Closed loop vector, Permanent Magnet, Synchronous Motor, PMSM SENSORLESS control
	Carrier frequency	0.8 - 16 kHz (fixed / random)
	V/F curve	Linear, exponential, and user-programmable curve
	Starting torque	150% rated torque at 0,5 Hz (in SLV Mode)
	Torque compensation	Automatic / Manual
	Motor data input	Manual, from nameplate / AUTOTUNING
	Control range	1:100 in SLV mode, 1:1000 in CLV mode, 1:20 in PMSM mode
	Speed precision	+/- 0,5% (SLV), +/- 0.02% (CLV)
	Torque precision	+/- 5% (SLV)
	DC Braking	User programmable functions
Brake chopper	Chopper transistor integrated (up to 90 kW)	
Display	7 segment, 4 characters	Config-Parameters and -value, programmable to display various working parameters
I/O Channels, control functions	Inverter control	Via terminals / Keypad / Serial link (or combination of all)
	Digital inputs	6 (8) Dig. inputs (NPN-PNP selectable) pulsetrain-input
	Speed reference input	Potentiometer (on keypad unit, external), analogue signal (terminals), keypad, internal programmable value, pulsetrain, serial link
	Analogue channels	2 analogue channels - 12 BIT: 0 - 10V, 0 - 5V -10V - 0 - 10V, 0 - (4)20 mA, all free scalable in gain and offset, and mathematically concatenable
	Analogue outputs	2 analogue outputs, programmable in gain and function (0...10V, 0(4)..20 mA)
	Digital outputs	2 digital outputs (free mapping to different functions)
	Relays output	1 switchover contact 3A 250VAC/30VDC (programmable assignment)
	Data link	Serial link RS 485 (MODBUS)
Special functions		24V / 50 mA auxiliary power supply on terminals, 10V potentiometer power supply, 5V/100 mA power supply on modbus connector Simple PTC / KLIXON motor protection
Protections with fault history	Electrical	Over voltage, under voltage Over current, overload, motor-overload, output short-circuit
	Thermal	Heatsink over temperature, I ² xt motor protection
Options	Display	Remotable display / keypad
	Brake chopper	Braking resistors for different load characteristics
	PC-software Parameter Stick	Configuration-, control- an diagnosis-tools, parameter duplicating stick, IP66 remote keypad with 4 line character display
Environmental and operating conditions	Protection class	IP20 / IP21(optional)
	Working temperature	-10 - +50 °C
	Humidity	0 to 95% RH, non-condensing, non-corrosive
	Altitude	1000 m.a.s.l, 1% for every 100m meters above 1000m
Vibration	Max. 0,5 g	
Power range	0,4 - 400 kW	
Standards	Electromagnetic Compatibility	EN61800-3(2004)

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