


VARISPEED

PRODUCT BROCHURE

ELECTRONIC MOTOR CONTROL SOLUTIONS

ALPHA 
DRIVE
MOTOR MOUNT
0,4 kW - 11 kW



WATER



OIL & GAS



INDUSTRY



MINING



MARINE



HVAC



AGRICULTURE

a member of the **Hudaco** group

Approved for worldwide standards



High-tech motor control concept, based on advanced DSP- technology V/Hz, **SENSORLESS VECTOR** with **SPEED/TORQUE** control, sensorless PMM synchronous motor control.



- **Intelligent autotuning functions for easy set-up**
- **Rugged and reliable**
- **Suitable for all industrial and civil applications**

FEATURES & BENEFITS

- Rugged construction, all metal enclosure, thermally decoupled from motor, IP67/NEMA 4, shockproof(4G) – for motor- and wall mounting
- Flexible configurable 4 line character LCD display
- Ready for all common field bus systems
- Numerous standard inverter functions, to make it suitable for all kind of industrial and civil applications, and for retrofit as well- integrated
- PID controller
- C3 class EMC filter build in, optional kit for internal C1 class filter available
- Smart PC-tools, for inverter control, parametrization and troubleshooting. parameter-COPY- stick
- Approved for worldwide standards by independent bodies



**IP66 LCD
REMOTE KEYPAD**



**PARAMETER
COPY STICK**



**OPTIONAL BUILT-IN
C1 CLASS EMC FILTER**



**MOTOR
MOUNTING
ADAPTERS FOR
ALL KINDS
OF MOTORS**



**OPTIONAL WALL
MOUNT KIT**

SMARTER AUTOMATION

Rugged construction

TECHNICAL DATA

POWER INPUT	Rated input voltage	3-Phase 380V-460V (+/-15%) 1-Phase 220V ~ 240V (±15%) 3-Phase 220V ~ 240V (±15%)
	Input frequency	44...67 Hz
	EMC	Integrated C3 filter (industrial area), integrated C1 class filter optional
MOTOR OUTPUT	Output voltage	0.....V-input
	Output frequency	0.....650 Hz
	Frequency resolution	0,01 Hz
	Overload capability	150% - 60 sec. / 10 min
CONTROL-MODE	Motor control algorithm	V/Hz-SpaceVector, SLV-SENSORLESS VECTOR with torque/speed control mode, CLV-Closed loop vector, Permanent Magnet Synchronous Motor PMSM SENSORLESS control
	Chopper frequency	0.8...16 kHz (fixed / random pattern)
	V/Hz 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-Brake	User programmable functions
Brake chopper	Chopper transistor integrated	
DISPLAY	4 Line LCD Character	Programmable to display parameters and parameter values, inverter status and operating parameters
I/O HARDWARE	Analogue inputs	2 analogue inputs - 12 BIT: 0...10V, 0...5V, 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 relays with switchover contacts 5A 230V capability 1 OC digital output (24V 100 mA)
	Data link	Serial link RS 485 (MODBUS ASCII/RTU)
SPECIAL FUNCTIONS	Special functions	24V / 200 mA auxiliary power supply on terminals, 10V potentiometer power supply, 5V/100 mA power supply on modbus connector PTC / KLIXON motor protection
ELECTRONIC PROTECTIONS WITH FAULT HISTORY	Electrical	Over-voltage, under-voltage Over-current, overload, motor-overload, output short-circuit Input phaseloss, motor phase unbalance
	Thermal	Heatsink overtemperature, I ² t motorprotection Motor PTC
OPTIONS	Display	IP66 Removable display / keypad units
	Brake chopper	Braking resistors for different load characteristics
	PC-software Parameter copy stick	Configuration-, control- an diagnosis-tool, parameter copy/duplicating stick
	ENVIRONMENTAL AND OPERATING CONDITIONS	Protection class
Operating temperature	-10.....+40 °C - -40°C with automatic antifreeze control function (option)	
Humidity	0 to 98%, non-corrosive	
Altitude	1000 m, above 1% derating / 100m	
STANDARDS	EMC	EN61800-3(2004)
	Safety	EN61800-5-1 2003

PROVEN RELIABILITY | EXPERT SERVICE

ALPHA 
DRIVE
MOTOR MOUNT

THE VARISPEED QUALITY ASSURANCE

We refuse to cut corners when it comes to quality; and support our customers throughout the entire lifecycle with superb products and tailored services.

At the core of Varispeed's competitiveness is an all-encompassing commitment to high standards and sophisticated quality controls. With many years of expertise in the field, and in-house coverage of all areas, we are able to offer comprehensive service that truly deserves the name "Total Customer Support". Automating with us is simply the smarter way to automate.



VERSATILE



REPUTABLE



RELIABLE



EFFECTIVE



VALUE-DRIVEN



COMPETENT



CERTIFIED

Certified service & repair centres with industry-leading warranties.



AVAILABLE

24/7/365 expert service & technical support.



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