

VARISPEED

PRODUCT BROCHURE

ELECTRONIC MOTOR CONTROL SOLUTIONS

ALPHA 
DRIVE-MICRO

LOW VOLTAGE
ECONOMY DRIVE:

0,4 kW - 5,5 kW



WATER



OIL & GAS



INDUSTRY



MINING



MARINE



HVAC



AGRICULTURE

a member of the **Hudaco** group

Compact in size, modular in concept



The Alpha Drive-Micro is an exceptional economy drive offering the best cost/performance ratio without compromising on quality and reliability.



- High-tech motor control concept, based on advanced DSP-technology
- Compact design, easy to integrate into your environment: DIN rail mounting, contractor-style I/O

FEATURES & BENEFITS

- Easy to setup: simple set of optimized parameters for all basic functions and applications
- PID and HVAC functions - safety integrated - MODBUS - open for networking
- Internal EMC filter as standard: Ready for CE market
- Economical mass production on high automated and dedicated SMT lines
- General purpose drive - made for the worldwide market (CE/UL/CCC)
- Approved and certified by European independent bodies



SMARTER AUTOMATION

Built for the worldwide market

TECHNICAL DATA

POWER SUPPLY	Rated voltage	3-phase 380...460V +/- 15% - 1-phase 200...240V +/- 15%
	Input frequency	44...67 Hz
	EMC filter	Integrated for 2. environment
OUTPUT	Output voltage	0.....V-input
	Output frequency	0.5.....650 Hz
	Resolution of output frequency	0,01 Hz
	Overload capability	150% - 60 sec. / 10 Min
CONTROL-MODE	PWM control-modes	V/Hz - Mode
	PWM frequency	0,8.....6 kHz
	V/Hz characteristic	Linear, quadratic, and user-programmable curve
	Starting torque	100% rated torque at 1 Hz
	DC-Brake	Freq. threshold, duration and intensity programmable - DC injection
	Brake chopper	Integrated chopper transistor
DISPLAY	7 Segment LED display -4- digit	For programming and visualization of different operating parameters
I/O CHANNELS, CONTROL FUNCTIONS	Inverter control - Start/Stop	To configure: terminals / operation panel / serial link
	Digital control inputs	4 digital inputs (HIGH/LOW configurable)
	Speed reference signal	Potentiometer, analogue input (terminals 0...10V, (0)4...20 mA), operating panel keys, serial link
	Reference analogue channels	1 Analogue channels 0...10V, (0)4...20 mA
	Analogue outputs	1 analogue output channel programmable in gain, different functions to assign (0...10V)
	Digital outputs	1 digital output (OC, different functions to assign)
	Relays output	1 switchover contact 3 A 230 V (programmable for different functions)
	Interface	Serial link (MODBUS - ASCII/RTU)
	Special function - control options	Jog mode, 12V / 50 mA auxiliary power supply on terminals
		PI-control Fixed frequency control, programmable cycling frequency sequence AUTORESET/RESTART function
PROTECTION FUNCTIONS, INCL. FAULT MEMORY	Electrical protection functions	Overvoltage, Undervoltage Overcurrent, Overload, Motor-Overload, Output-short Analogue reference interruption
	Thermal protection functions	Heatsink overtemperature
OPTIONALS	Operating panel	Remote keypad
	Brake resistors	Braking resistors for heavy duty operation
	Filter / chokes	PFC chokes - dv/dt limiting output filter - sinusfilter
	Parameter copy stick	USB Stick with parameter duplication function
	PC-Link Software (via MODBUS)	Special tool for programming, control and diagnostic (parameter set memory)
	Safety	STO (Q2 only)
ENVIRONMENTAL CONDITIONS	Protection	IP21
	Operating temperature	-10.....+40 °C
	Humidity	Max. 90 % not condensing, no corrosion
	Elevation	1000 m - 1% derating / 100m above
	Vibration	Max. 0,5 g
POWER RANGE	V/Hz	230V: 0,2...2,2 kW 400V: 0,2...5,5 kW
STANDARDS	EMC	EN61800-3(2004)
	Safety	EN61800-5-1 2003

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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