

PRODUCT BROCHURE

ELECTRONIC MOTOR CONTROL SOLUTIONS









OIL & GAS



INDUSTRY



MINING



MARINE



HVAC



AGRICULTURE

Compact in size, modular in concep



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 (1)



- · 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 False studges Gardy - 19% - 19hase 200_260v - 19% Implace 200_260v - 19% Im			
POWER SUPPLY Insuface (Integrated for 2. environment) Output Voltage Output Voltage Output Frequency Defends cipability Deveload cipability Deve		Rated voltage	3-phase 380460V +/- 15% - 1-phase 200240V +/- 15%
OUTPUT PROVIDED TO SET TO SET THE SET OF THE SET	POWER SUPPLY	-	· · · · · · · · · · · · · · · · · · ·
OUTPUT CONTROL-MODE CONTROL-MODE CONTROL-MODE PMM frequency VHz characteristic Starting torque DR-Arake Brake chopper DISPLAY 7 Segment LED display-4- digit Programming and visualization of different operating parameters Invertee control - Start/Stop Digitale outputs Speed reference analogue channels Reference analogue channels Reference analogue channels Display analogue channels CONTROL FUNCTIONS Digitale outputs Region and programmable curve Starting torque Display (100 CHANNELS, CONTROL FUNCTIONS) Reference analogue channels Reference analogue channels Digitale outputs Reference analogue channels Speed reference analogue channels Reference analogue channels Digitale outputs Reference analogue channels Referen		EMC filter	Integrated for 2. environment
OUTPUT CONTROL-MODE CONTROL-MODE CONTROL-MODE PMM frequency VHz characteristic Starting torque DR-Arake Brake chopper DISPLAY 7 Segment LED display-4- digit Programming and visualization of different operating parameters Invertee control - Start/Stop Digitale outputs Speed reference analogue channels Reference analogue channels Reference analogue channels Display analogue channels CONTROL FUNCTIONS Digitale outputs Region and programmable curve Starting torque Display (100 CHANNELS, CONTROL FUNCTIONS) Reference analogue channels Reference analogue channels Digitale outputs Reference analogue channels Speed reference analogue channels Reference analogue channels Digitale outputs Reference analogue channels Referen			
Resolution of outous, frequency Covertood capability 190% - As loss. / 10 Min 190% - As loss. /		-	
CONTROL-MODE PMM frequency V/Hz - Mode QR_ 6 Nz V/Hz - Mode QR_ 7 Nz V/Hz - Mode QR_ 6 Nz V/	OUTPUT	1 /	
CONTROL-MODE PMM frequency V/Hz - Mode PMM frequency V/Hz - Mode PMM frequency V/Hz - Mode V/Hz - Mode PMM frequency V/Hz - Mode V/Hz - M			
PMM frequency V/Rt characteristic Starting torque DC-Brake Pride chopper DISPLAY 7 Segment LED display -6- digit Inverter control - Start/Stop Digital control inputs Special function - control options Special function - control options Integrated chopper translated. In June 20, 100 Feb. Post Language cutputs Reference analogue outputs Special function - control options Special function - control options Integrated Chopper (Taractication and intensity programmable - DC injection integrated chopper translated of different operating parameters To configure, terminals / operation panel / serial link 4 digital inputs (HisHyLOW configurable) Potentiamente, analogue input (terminals In. INV, (DIA-20 mA), operating panel keys, serial link 1 Analogue outputs Interface Special function - control options Special function - control options Interface Special function - control options Special function - control options Special function - control options Interface Special function - control options Interface Special function - control options Interface Special function - control options Interface Special function - control options Special function - cont		Overload capability	150% - 60 Sec. / 10 MIN
CONTROL-MODE Control State (State State S		PWM control-modes	V/Hz - Mode
Analogue output Segrent LED display -4- digit DISPLAY 7 Segment LED display -4- digit For programming and visualization of different operating parameters Inverter control - Start/Stop Digital control inputs A digital inputs (HIBH/LOW configurable) Potentionmeter, analogue (terminals - 1.01/, (0)4. 20 mA), operating panel keys, serial link Reference analogue channels Reference analogue		PWM frequency	0,86 kHz
DISPLAY DISPLAY 7 Segment LED display -4- digit For programming and visualization of different operating parameters For programming and visualization of different operating parameters	CONTROL-MODE	V/Hz characteristic	Linear, quadratic, and user-programmable curve
DISPLAY 7 Segment LED display 4- digit For programming and visualization of different operating parameters Inverter control - Start/Stop Digital control inputs Speed reference signal Reference analogue channels CONTROL FUNCTIONS Digitale outputs Analogue outputs I analogue output serial link Analogue output serial link Analogue output serial link Peterence analogue channels I Analogue output serial link Peterence analogue control channel programmable in gain, different functions to assign (0100/) Digitale outputs I digital output (0c, different functions to assign) I switchover contact 3 A 200 (Organammable for different functions) I switchover contact 3 A 200 (Organammable for different functions) Pecial link (MOBBUS – SCU/RTU) Jog mode, 12V / 50 mA auxiliary power supply on terminals Pictoritol Fixed frequency control, programmable cycling frequency sequence AUTOREST/RESTART function Thermal protection functions Heatsink overtemperature Operating panel Brake resistors Filter / Chokes Pot-Link Software (via MOBBUS) Safety STO (02 only) Protection Operating temperature USB Stick with parameter dublication function Peter demands Vibration New Colonia – Vid Gerating / 100m above Vibration New Colonia – Vid Gerating / 100m above Vibration New Colonia – Vide Gerating / 100m above Vibration New Colonia – Vide Gerating / 100m above Vibration New Colonia – Vide Gerating / 100m above Vibration New Colonia – Vide Gerating / 100m above Vibration New Colonia – Vide Gerating / 100m above	CONTROL-MODE	Starting torque	100% rated torque at 1 Hz
To configure: terminals / operation parameters		DC-Brake	1 1 2
Inverter control - Start / Stop Digital control inputs Speed reference signal Reference analogue channels Reference analogue channels I/O CHANNELS, CONTROL FUNCTIONS Ipitale outputs Digitale outputs Analogue outputs Digitale o		Brake chopper	Integrated chopper transistor
Inverter control - Start / Stop Digital control inputs Speed reference signal Reference analogue channels Reference analogue channels I/O CHANNELS, CONTROL FUNCTIONS Ipitale outputs Digitale outputs Analogue outputs Digitale o	DISDLAV	7 Seament LED display -4- digit	For programming and visualization of different operating parameters
Digital control inputs Speed reference signal Reference analogue channels Protectioneter, analogue input (terminals 010V, (0)420 mA), operating panel, keys, serial tink Reference analogue channels Analogue	DISPLAT	, cogo.n. 225 d.optay . a.g.t	, or programming and riodalization of amorbit operating parameters
Speed reference signal Potentiometer, analogue input (terminals 010V, (0)420 mA), operating panel keys, serial link (Potentioneter, analogue input (terminals 010V, (0)420 mA)		Inverter control - Start/Stop	To configure: terminals / operation panel / serial link
PROTECTION FUNCTIONS Control Function Proceedings Proceedings Proceedings Proceded Proceedings Proceedings Proceedings Proceded Proc		Digital control inputs	4 digital inputs (HIGH/LOW configurable)
Part		Speed reference signal	Potentiometer, analogue input (terminals 010V, (0)420 mA), operating
Analogue outputs 1 analogue output channel programmable in gain, different functions to assign (010V)		Speed Felerence signal	
Analogue actiputs CONTROL FUNCTIONS Digitale outputs Interface Serial link (MODBUS - ASCI/RTU) Jog mode, 12V / 50 mA auxiliary power supply on terminals Piccontrol Fixed frequency control, programmable cycling frequency sequence AUTORESET/RESTART function OPTIONALS PROTECTION FUNCTIONS, INCL. FAULT MEMORY Derating panel Brake resistors Filter / chokes Parameter copy stick Po-Link Software (via MODBUS) Safety Safety Protection ENVIRONMENTAL CONDITIONS STANDARDS EMC EMC EMC EMC EMC EMC EMC EM		Reference analogue channels	
CONTROL FUNCTIONS Digitale outputs Relays output 1 switchower contact 3 A 230 V (programmable for different functions) 1 switchower contact 3 A 230 V (programmable for different functions) 1 switchower contact 3 A 230 V (programmable for different functions) 1 switchower contact 3 A 230 V (programmable for different functions) 1 switchower contact 3 A 230 V (programmable for different functions) 1 switchower contact 3 A 230 V (programmable for different functions) 1 switchower contact 3 A 230 V (programmable for different functions) 1 switchower control, programmable for different functions 1 switchower control, programmable eycling frequency sequence AUTORESET/RESTART function 2 overcurrent, Overload, Motor-Overload, Output-short Analogue reference interruption 4 switchower control, programmable eycling frequency sequence AUTORESET/RESTART function 2 overcurrent, Overload, Motor-Overload, Output-short Analogue reference interruption 4 switchower control, programmable eycling frequency sequence AUTORESET/RESTART function 2 overcurrent, Overload, Motor-Overload, Output-short Analogue reference interruption 4 switchower expand 4 switchower evertage 2 overcurrent, Overload, Motor-Overload, Output-short Analogue reference interruption 4 switchower evertage 4 switchower 4 sw	I/O CHANNELS.	Analogue outputs	
Relays output		Digitale outputs	
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PROTECTION FUNCTIONS, INCL. FAULT MEMORY Electrical protection functions Overvoltage, Undervoltage Overcurrent, Overload, Motor-Overload, Output-short Analogue reference interruption Heatsink overtemperature Operating panel Brake resistors Filter / chokes Parameter copy stick PC-Link Software (via MODBUS) Safety Frotection Operating temperature Protection Operating temperature Operating panel Brake resistors Filter / chokes PFC chokes - dv/dt limiting output filter - sinusfilter USB Stick with parameter dublication function Special tool for programming, control and diagnostic (parameter set memory) Safety STO (20 only) Protection Operating temperature Humidity Humidity Elavation Vibration Nax. 90 % not condensing, no corrosion Elavation Vibration Max. 0.5 g EMC EN61800-3(2004)		Special function Control options	
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PC-Link Software (via MODBUS) Safety STO (Q2 only) Protection Operating temperature Humidity Elavation Vibration POWER RANGE V/Hz STANDARDS Special tool for programming, control and diagnostic (parameter set memory) STO (Q2 only) Protection IP21 -10+40 °C Humidity Max. 90 % not condensing, no corrosion 1000 m - 1% derating / 100m above Max. 0,5 g EMC EN61800-3(2004)	OPTIONALS		
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STANDARDS EMC EN61800-3(2004)		Vibration	Max. 0,5 g
STANDARDS EMC EN61800-3(2004)			2001 20 20 111 (20) 20 55 111
STANDARDS	POWER RANGE	V/Hz	23UV: U,Z2,2 kW 400V: U.Z5,5 kW
STANDARDS	OTANDA DE C	EMC	EN61800-3(2004)
	STANDARDS		



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

Certfied service & repair centres with industry-leading warranties.



AVAILABLE

24/7/365 expert service & technical support.











OIL & GAS



INDUSTRY



MINING



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AGRICULTURE

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