



Technical Specifications of V6-H series closed loop vector control and torque control frequency inverter (variable speed drive, VSD, VFD)

Control features	Control mode	Vector control 1	Vector control 2 (Without encoder, sensorless vector control)	Vector control 2 (With encoder, closed loop vector control)
	Startup torque	0.50Hz 180%	0.25Hz 180%	0.00Hz 180%
	Speed adjustment range	1:100	1:200	1:1000
	Speed stabilization precision	+0.5%	+ 0.2%	+ 0.02%
	Torque control	N	Y	Y
	Torque precision	-	+5%	+5%
	Torque response time	-	<20ms	<10ms
Product functions	Key functions	Undervoltage adjustment, switching of AC operation grounding, protective grounding and DC operation grounding, rotation speed tracing, torque limitation, multi-speed operation (up to 23 speeds), auto tuning, S curve acceleration/deceleration, slip compensation, PID closed loop control , drooping control, current limiting control, torque control mode and speed control mode switching, manual/auto torque boost, current limiting, multi-functional input/output terminal		
	Frequency setting mode	Operation panel setting, terminal UP/DN setting, host computer communication setting, analog setting AI1/AI2/AI3, terminal pulse DI setting		
	Frequency range	0.00 ~ 300.00Hz Note: Upon the control mode of vector control 1 0.0 ~ 3000.0Hz, which can be customized according to the customer demand		
	Startup frequency	0.00~60.00Hz		
	Acceleration/deceleration time	0.1~36000s		
	Powered braking capability	Braking unit action voltage: 650 ~ 750V; operating time: 100.0s; The braking unit can be embedded for V6-H-4T75G and below equipment		
	DC braking capability	DC braking initial frequency: 0.00 ~ 300.00Hz; DC braking current: Constant torque: 0.0 ~ 120.0%, Variable torque: 0.0 ~ 90.0% DC braking time: 0.0 ~ 30.0s; there is no initial waiting time for the DC braking to realize quick braking		
Magnetic flux braking function	Ongoing action and no action upon deceleration as option, no action upon deceleration at default			
Unique functions	Multifunctional M key	The unique multifunctional key is used to set the frequently used operations: JOG, emergency shutdown, running command reference mode switch, menu switching		
	Multiple menu modes	Basic menu mode, fast menu mode. Menu mode of non-leave-factory value function codes, Menu mode of last changed 10 function codes		
	Parameter copy	The standard operation panel can realize the parameter upload, download and display the copy progress. The user can select to forbid the overwriting of the uploaded parameters.		
	Displayed/hidden function code	The customer can select to display or hide the function codes by themselves.		
	Dual RS485 communication ports	Dual RS485 communication ports support ModBus protocol (RTU). The standard operation panel can realize remote control box function with a maximum distance of 500m.		
	Operation panel	Button type or shuttle type operation panel optional, protection class: IP20 as standard, IP65 as option		
	Common DC bus	The full series can realize common DC bus supply for several inverters.		
	Independent duct	The full series adopts independent duct design and supports the installation of heatsink outside the cabinet		
	Universal expansion interface	Universal expansion board equipped with CPU for supporting customers secondary development: physical interface SPI bus, software protocol ModBus		
Expansion card	User's secondary development card, injection molding machine interface card, PG feedback card, air compressor control card, communication adapter card, power monitoring card, phase sequence detection card, external power rectifying card			
Power-up auto-detection	Realizing the power-up auto-detection of internal and peripheral circuits, including motor grounding, abnormal +10V power supply output, abnormal analog input, and disconnection			



Protection function	Power supply under-voltage, over-current protection, overvoltage protection, interference protection, abnormal comparison reference input, auto-tuning failure, module protection, heatsink over-temperature protection, inverter overload protection, motor overload protection, peripheral protection, abnormal current detection, output to ground short circuit, abnormal power failure during operation, abnormal input power, output phase failure, abnormal EEPROM, abnormal relay contact, temperature sampling disconnection, encoder disconnection, abnormal +10V power supply output, abnormal analog input, motor over-temperature (PTC), abnormal communication, abnormal version compatibility, abnormal copying, abnormal expansion card connection, terminal mutual exclusion detection failure, hardware overload protection	
Efficiency	At rated power, 7.5kW and below power class $\geq 93\%$, 45kW and below power class $\geq 95\%$, 55kW and above power class $\geq 98\%$	
Environment	Operating site	The product shall be mounted vertically in the electric control cabinet with good ventilation. Horizontal or other installation modes are not allowed. The cooling media is the air. The product shall be installed in the environment free from direct sunlight, dust, corrosive gas, combustible gas, oil mist, steam and drip.
	Ambient temperature	-10 ~ +40°C, derated at 40 ~ 50°C, the rated output current shall be decreased by 1% for every temperature rise of 1°C
	Humidity	5 ~ 95%, no condensing
	Altitude	0 ~ 2000m, derated above 1000m, the rated output current shall be decreased by 1% for every rise of 100m
	Vibration	3.5mm, 2~9Hz; 10 m/s ² , 9~200Hz; 15 m/s ² , 200~500Hz
	Storage temperature	-40~+70°C

EcoDriveCN drives

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V&T Technologies Co., Ltd. (EcoDriveCN drives) is a leading manufacturer & supplier of motor control, energy efficiency & motion control, produces & supplies AC variable speed drive (AC drives, variable frequency drives, VSD, VFD, VVVF, frequency inverter), servo drive, motor soft starter, reactors (chokes), EMI filter, sine wave filter (sinus filter), du/dt filter, brake resistors, brake units, other power electronics. <http://www.EcoDriveCN.com/about.htm>

The drives are widely applied in plastic injection molding machine, machine tools, air compressor, water supply, civil engineering, conveyor belt, sewage disposal, extruder, fan and pump, HVAC, food and beverage industry, mining industry... <http://www.EcoDriveCN.com/application.htm>

From 200VAC to 1140VAC, from 0.4KW to 3MW (0.5hp - 4000hp), we are competing with ABB & Siemens in the market of power electronics.

Advantages:

Failure rate < 0.15%, similar as Siemens, Emerson Control Techniques, ABB, Eaton, Schneider, Allen Bradley, Lenze, Yaskawa, Fuji;

Authorized CE by ECMG. Under the audit of NVLAP. NVLAP Lab code: 200068-0. ISO/IEC 07025:1999, ISO 9002:1994;

Manufacturer & supplier of vector control frequency inverter (AC drive, VSD, VFD), servo, motor soft starter...



EcoDriveCN <http://www.EcoDriveCN.com>

18-month warranty period;

Delivery lead time: 3-5 days;

Supply to REGAL, Ingersoll Rand, Foxconn, Tata Group...

Contact information of our company & distributors: <http://www.EcoDriveCN.com/contact.htm>

V&T Technologies Co., Ltd.
<http://www.ecodrivecn.com>

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