



Product data sheet

HAVXS4T4500G5000P

Characteristics

Variable speed drive, EXPERT-Standard, 450 kW, 380 V, 3 phase, standard

	Main	
	Range of product	EXPERT-Standard
	Product or component type	Variable speed drive
	Product specific application	Advance general purpose
	Format of the drive	Standard
	Product destination	Asynchronous motors
	IP degree of protection	IP20
	Type of cooling	Fan
	Network number of phases	3 phases
	[Us] rated supply voltage	380...440 V - 15...10 %
	Motor power kW	450 kW for heavy duty 500 kW for light duty
	Motor power hp	600 hp for heavy duty 670 hp for light duty
	Maximum transient current	1275 A during 1 min (heavy duty) 1530 A during 3 s (heavy duty) 1700 A during 0 s (heavy duty) 1104 A during 1 min (light duty) 1380 A during 3 s (light duty) 1656 A during 0 s (light duty)
	Asynchronous motor control profile	SVC and V/f energy saving ratio
	Speed drive output frequency	0...550 Hz
	Communication port protocol	Modbus PROFINET

Complementary

Device application	Speed control
Function available	Automatic voltage regulation (AVR) Energy saving mode Fixed and variable swing frequency Length control Sagging (multiple inverters drive one load) Multi-speed operation Jogging Adjustable wobble frequency
Supply frequency	50...60 Hz
Maximum voltage unbalance factor	3 %
Continuous output current	850 A heavy duty 920 A light duty
Control type	Manual using keypad Using control terminal Using serial port Three way control using output collector terminals
Efficiency	93 %
Communication service	Read motor parameters automatically
Electrical connection	DC bus sharing

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Speed range	1...100 in open-loop mode
Speed accuracy	+/- 0.1 % of nominal speed
Regulation loop	Adjustable PID regulator
Acceleration and deceleration ramps	Linear adjustable separately from 0.1 s...60 h S-curve adjustable separately from 0.1 s...60 h
Braking to standstill	By DC injection, 30 s
Protection type	Overcurrent Overvoltage Undervoltage Overheating Overload
Protection technology	Current limiter
Frequency resolution	Digital input: 0.01 Hz Analog input: 0.55 Hz
Display type	7 segments LED for 27 parameters
Device mounting	Wall mounted Enclosure Floor mounted
Product compatibility	External braking unit Communication module I/O extension module
Width	635 mm
Height	1480 mm
Depth	467 mm
Analogue input number	3
Analogue input type	AI1 voltage: 0...10 V, impedance: 100000 Ohm, resolution 12 bits AI2 current: 0...20 mA, impedance: 165 Ohm, resolution 12 bits AI2 voltage: 0...10 V, impedance: 100000 Ohm, resolution 12 bits AI3 voltage: differential +/- 10 V, resolution 12 bits
Discrete input number	6
Discrete input type	Programmable (DI1...DI5) Programmable as pulse input (DI6)
Analogue output number	1
Analogue output type	AO1 voltage/current: 0...20 mA or 0...10 V AO2 voltage/current: 0...20 mA or 0...10 V
Discrete output number	4
Discrete output type	configurable relay logic 250 V (5 A) for NO relay output circuit configurable relay logic 250 V (3 A) for NC relay output circuit open collector 9...30 V (50 mA)
Type of installation	Indoor/outdoor
Application	Material handling machine Textile machine Material working machine Industrial washing machine Air compressor Construction elevator Metal and mining process Petrochemical
Environment	
Vibration resistance	5.9 m/s²
Relative humidity	0...90 % without condensation
Ambient air temperature for operation	-10...40 °C
Ambient air temperature for storage	-20...60 °C
Operating altitude	= 1000 m
Environmental characteristic	Dust resistant Corrosive gas free Oil and vapour resistant
Marking	CE