

## Product data sheet

## HA VXS4T0450G0550P

### Characteristics

Variable speed drive, EXPERT-Standard, 45 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	45 kW for heavy duty 55 kW for light duty
Motor power hp	60.35 hp for heavy duty 73.76 hp for light duty
Maximum transient current	135 A during 1 min (heavy duty) 162 A during 3 s (heavy duty) 180 A during 0 s (heavy duty) 132 A during 1 min (light duty) 165 A during 3 s (light duty) 198 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	90 A heavy duty 110 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

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,
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	2 x 7-segment LED for 27 parameters
Device mounting	Wall mounted Enclosure Flange
Product compatibility	External braking unit Communication module I/O extension module
Width	320 mm
Height	560 mm
Depth	308 mm
Analogue input number	3
Analogue input type	AI1 voltage: 0...10 V, impedance: 100000 Ohm, resolution 12 bits AI2 voltage: 0...10 V, impedance: 165 Ohm, resolution 12 bits AI2 current: 0...20 mA, impedance: 165 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 AO1 voltage/current: 4...20 mA or 2...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
<b>Environment</b>	
Vibration resistance	5.9 m/s <sup>2</sup>
Relative humidity	0...90 % without condensation
Ambient air temperature for operation	-10...40 °C
Ambient air temperature for storage	-20...60 °C
Operating altitude	

Environmental characteristic

Dust resistant  
Corrosive gas free  
Oil and vapour resistant

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Marking

CE

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