Sep 13, 2023

Product data sheet

HAVXC2S0022G

Characteristics

Variable speed drive, EXPERT-Compact, 2.2 kW, 220 V, 1 phase, compact

Main

Range of product	EXPERT-Compact
Product or component type	Variable speed drive
Product specific application	Advance general purpose
Format of the drive	Compact
Product destination	Asynchronous motors
IP degree of protection	IP20
Type of cooling	Fan
Network number of phases	1 phase
[Us] rated supply voltage	220 V - 15...10 %
Supply frequency	50...60 Hz
Maximum voltage unbalance factor	3 %
Motor power kW	2.2 kW for heavy duty
Motor power hp	2.95 hp for heavy duty
Continuous output current	9.8 A
Maximum transient current	14.7 A during 1 min 17.64 A during 3 s 19.6 A during 0 s
Asynchronous motor control profile	SVC and V/f energy saving ratio
Speed drive output frequency	0…550 Hz
Communication port protocol	Modbus

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
Control type	Manual using keypad Using control terminal Using serial port Three way control using output collector terminals
Communication service	Read motor parameters automatically
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	Hanging Enclosure Flange
Width	85 mm
Height	210 mm
Depth	172.8 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)
Device composition	Built-in breaking unit
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	
Environmental characteristic	Dust resistant Corrosive gas free Oil and vapour resistant
Marking	CE