



## Product data sheet

## HA VSO2S0040GSM

### Characteristics

Variable speed drive, SOLAR, 4 kW 220V, 1 phase, HD, 1 phase motor



### Main

Range of product	SOLAR
Product or component type	Variable speed drive
Product specific application	Solar pump
Network number of phases	1 phase
[Us] rated supply voltage	220 V AC - 15...15 % 150...440 V DC
Supply voltage type support	AC/DC
Supply frequency	50...60 Hz
Motor power kW	4 kW for heavy duty
Motor power hp	5 hp for heavy duty
Maximum transient current	25.5 A during 1 min (heavy duty) 30.6 A during 3 s (heavy duty) 34 A during 0 s (heavy duty)
Asynchronous motor control profile	Sensorless vector control (SVC) Voltage/frequency ratio (V/f)
Speed drive output frequency	0...400 Hz
Continuous output current	17 A

### Complementary

Product destination	Asynchronous motors
Function available	MPPT function Auto start-run-stop Energy/flow calculator Pump cleaning Multi-speed operation Energy saving mode
Type of cooling	Fan
Regulation loop	Adjustable PID regulator
Acceleration and deceleration ramps	Linear adjustable separately from 0.01 to 6500 s
Frequency resolution	Analog input: 0.05/50 Hz
Analogue input number	1
Analogue input type	AI1 voltage: 0...10 V AI1 current: 0...20 mA
Discrete input number	4
Discrete input type	Programmable (DI1...DI4)
Analogue output number	1
Analogue output type	AO1 voltage/current: 0...20 mA or 0...10 V
Discrete output number	2

Discrete output type	configurable relay logic 250 V (3 A) for NO relay output circuit configurable relay logic 250 V (3 A) for NC relay output circuit configurable relay logic 30 V DC (3 A) for NO relay output circuit configurable relay logic 30 V DC (3 A) for NC relay output circuit open collector 9...30 V (50 mA)
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Output frequency	50 kHz for pulse output at DO1
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Display type	5 digits 7 segments for 39 parameters
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Device application	Speed control
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Type of installation	Indoor/outdoor
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Control type	Manual using keypad Using control terminal Using serial port
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Device mounting	Wall mounted DIN rail
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Speed accuracy	+/- 0.5 % of nominal speed
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Protection type	Overcurrent Overvoltage Undervoltage Overheating Overload Short-circuit Phase loss Low light protection
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Width	145 mm
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Height	230 mm
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Depth	177.4 mm
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#### **Environment**

Relative humidity	0...95 % without condensation
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Ambient air temperature for storage	-20...65 °C
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Quality labels	CE
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Operating altitude	= 1000 m
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IP degree of protection	IP20
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Vibration resistance	5.9 m/s <sup>2</sup>
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#### **Packing Units**

Unit Type of Package 1	PCE
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Number of Units in Package 1	1
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#### **Contractual warranty**