

Compax3 HXXX V4 Specifications

Specifications

Drive Input Power

Voltage
Phase
Frequency
24 VDC Logic Power (Required)

H050 V4

350-528 VAC
3Ø
50/60 Hz
24 VDC ±15%

H090 V4

350-528 VAC
3Ø
50/60 Hz
24 VDC ±15%

H125 V4

350-528 VAC
3Ø
50/60 Hz
24 VDC ±15%

H155 V4

350-528 VAC
3Ø
50/60 Hz
24 VDC ±15%

Drive Output Power

PWM
Continuous Current (RMS)
Peak Current (RMS)
Commutation

8 kHz
50 Amps @ 400 VAC
75 Amps for 5 sec
Sinusoidal

8 kHz
90 Amps @ 400 VAC
135 Amps for 5 sec
Sinusoidal

8 kHz
125 Amps @ 400 VAC
187.5 Amps for 5 sec
Sinusoidal

8 kHz
155 Amps @ 400 VAC
232.5 Amps for 5 sec
Sinusoidal

Performance

Torque Loop
Velocity Loop
Position Loop

62.5 micro seconds
125 micro seconds
125 micro seconds

Command Inputs (T10 only)

Velocity and Torque Mode
Position Mode

14 bit, ±10 VDC Analog
Step & Direction; 5V or 24 V level (300 kHz input frequency); differential signal

Onboard Digital Inputs

Type
Functions
1xx T10 (4 dedicated)
1xx T11 (8 dedicated)
1xx T30 (8 programmable*)
1xx T40 (8 programmable*)

Sinking type, 24 V nom. @ 10 mA, high = 9-32 V, low <8 V
Drive stage enable, control input enable, reset, motor brake open/close
Motion interrupt, Start, Drive Stage enable + 5 motion profile select inputs (or 4 inputs with a home input)
User definable via IEC61131-3 programming environment
User definable via IEC61131-3 programming environment

Analog Inputs (T11, T30, T40)

Two (dedicated); 14 bit

Onboard Digital Outputs

Type
Functions
1xx T10 (4 dedicated)
1xx T11 (4 dedicated)
1xx T30 (4 programmable*)
1xx T40 (4 programmable*)
Encoder
Relay

Sourcing type, rated for 24 V @ 100 mA, short-circuit protected
No fault, drive enabled, in position window, at zero point
No fault, position reached, power stage active, at zero point
User definable via IEC61131-3 programming environment
User definable via IEC61131-3 programming environment
Programmable up to 16,384 ppr (pre-quadrature)
Normally closed, dry contact (switching current: 10-300 mA, switching voltage [AC/DC]: 100 mV-60 V)

Analog Outputs (T11, T30, T40)

Two (dedicated); 8 bit; software configurable as monitor outputs

Communications

Type
Baud Rate
Multi-drop (RS485)
Profibus**
CANopen**
DeviceNet**
CANopen**

RS232 (3-wire) on RS485 (2- or 4-wire); 8-bit word length, 1 stop bit, no parity
Fixed at 115.8 Kbaud for RS232; adjustable for RS485
Up to 255 nodes
DPV0 supported; selectable Baud rate, 12 Mbd maximum transmission speed
DCiA, DS102 supported; selectable Baud rate, 1 Mbd maximum transmission speed
Polled, C05/cyclic I/O and bit strobe; 500 kBit/second max speed
Interploated mask (ACR); fieldbus

Environmental

Temperature
Humidity
IP Class

Still air: 33-113°F (0-45°C); moving air: 33-122°F (0-50°C)
0-75%, non-condensing
IP 20

Protection

Short Circuit
Brownout
Over Voltage
Over Temperature
I²t
Safety Isolation

Phase-to-phase, phase-to-ground
Below 70 VDC
Will shut down when power dissipation capacity is exceeded
Motor 330°F (170°C), Drive 221°F (105°C)
Error generated if peak current > 3 seconds
VDE0160

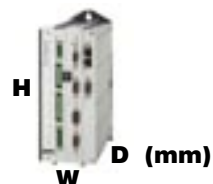
Standards

UL, cUL, CE (EMC), CE (LVD)

Internal Regeneration Capacities/Storable Energy

Compax3 H050 V4: 2600 µF / 602Ws
Compax3 H090 V4: 3150 µF / 729Ws
Compax3 H125 V4: 5000 µF / 1158Ws
Compax3 H155 V4: 5000 µF / 1158Ws

	H050	H090	H125	H155
H	453	668.6	720	720
W	252	257	257	257
D	245	312	355	355



* 12 additional I/O points available as an option
** Applicable only to models supporting this option