

OPTION	ORDER TYPECODE	NOTE 57 Galaxy Blvd., Units 1 & 2, Toronto, ON M9W 5P1			
DeviceNet Option Card	X5DNET01	TEL: (416) 231-6767 www.drivecentre.ca			
Ethernet IP Option Card	X5EIP01				
ModBus TCP/IP Option Card	X5MBTCP01	VACON X5 Only. Models with "09" suffix will not accept option cards			
ProfiBus Option Card	X5PR0F01				
115 Vac and Encoder Feedback Option Card	X50PT01				
Remote Keypad for Panel Mount Drives	XRKPM	Includes 12' Ribbon Cable VACON X4 and X5 - Frames 0-2			
Remote Keypad for Wall Mount Drives	XRKWM	VACON X4 and X5 - Frames 0-2			
Remote Keypad Mounting Kit	XRKMK	VACON X4 and X5 - Frames 3-5			
DB Connection Kit	XDBKITS4	VACON X4 and X5 - Frame 4 Only			
DB Connection Kit - Frame 5	XDBKITS5	VACON X4 and X5 - Frame 4 Only			

## **VACON X4 AND VACON X5 SPECIFICATIONS**

Environmental	Operating temperature	-10°C to +40°C [14°F to 104°F]					
	Storage temperature	-20°C to 65°C (-4°F to 149°F)					
	Humidity	0% to 95% non-condensing	0% to 95% non-condensing				
Altitude		1,000 m (3,300 ft) without derating					
	Maximum vibration	Per EN50178: Frame Size 0 and 1 5G					
	Acoustic noise	80 dba sound power at 1 m (3 ft)					
	Cooling	1 - 5 HP models: Natural convection 7.5 - 200 HP: Forced air (temperature controlled external fan)					
	Protection Level	1 – 100 HP models: UL Type 4X / IP66 Indoor or Outdoor Use (1 – 30 HP models: 1,000 psi water spray at 6 inches) 125 – 200 HP models: UL Type 3R / IP55					
	Agency approvals	UL, cUL, CE					
Electrical	Input voltage	115 Vac 1 phase, +/- 15% 1 HP 200-230 Vac, 3 phase, +/- 15% 1-25 HP 380-460 Vac, 3 phase, +/- 15% 1-200 HP 575 Vac, 3 phase, +/- 15% 1-200 HP					
	Line frequency 50 / 60 Hz +/-2 Hz						
	Source kVA (maximum) 10 times the unit rated kVA (65kA maximum)						
	DC bus voltage for: Overvoltage trip Dynamic brake activation	115 Vac models 406 Vdc 388 Vdc	230 Vac models 406 Vdc 388 Vdc	460 Vac models 814 Vdc 776 Vdc	575 Vac models 1017 Vdc 970 Vdc		
	Normal undervoltage (UV) trip	199 Vdc					
	Control system	V/Hz or Sensorless Vector Control (SVC)  Carrier frequency = 1 to 16 kHz programmable					
	Output voltage	0 to 100% of line voltage, 3 phase					
Overload capacity		120% of rated RMS current for 60 seconds (Normal Duty rating) 150% of rated RMS current for 60 seconds (Heavy Duty rating)					
	Frequency output	Range: 0.1 – 400Hz; Stability: 0.1Hz, 0.1% analog over 24 hours +/- 10°C					
Control Features	DC holding/injection braking	At start, stop, by frequency with adjustable current level and time or continuous DC injection by digital input					
	Current limit	Four-quadrant adjustable from 5 to 150%					
	Speed ramps	Primary and alternate adjustable from 0.1 to 3200.0 seconds					
	Voltage boost	Adjustable fixed boost or adjustable auto boost					
	Voltage characteristic	V/Hz - Linear, pump, fan or 2-piece linear; Sensorless Vector					
	Timed overload	Adjustable inverse time trip (shear pin, 30 sec, 60 sec, 5 minutes) for standard or inverter-duty motors					
	Protective features	Overcurrent, Overvoltage fault, ground fault, short circuit, Dynamic Brake overload, drive temperature, power wiring fault. Drive-timed overload, input voltage quality, overvoltage ridethrough					
	Program Sequence Controller	X4: 9-step, PLC-type functionality to control speed, direction and ramp times based on time, analog input, digital input or pulse count.  X5: 25-step, PLC-type functionality that can control speed, direction and ramps based on time, analog input, digital input, or pulse input. Conditional branching, addressable outputs and real time operations possible.					
	PI and PID Feedback	X4: PI Process control available with the use of a customer supplied transducer, either 0-10Vdc, 4-20mA or optical encoder input to the drive. X5: Process control available with the use of a customer supplied transducer, either 0-10Vdc, 4-20mA or optical encoder input to the drive. Includes an optional sleep mode, activated when the loop is satisfied.					