

# V6

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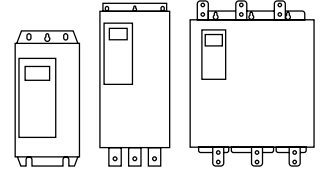
**Intuitive user interface.**

**Protection of the motor.**

**Used with a wide range of motors and applications.**

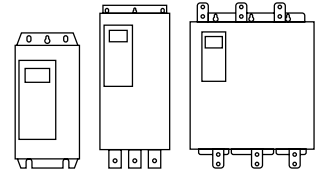
**Includes integrated bypass, which improves its efficiency.**





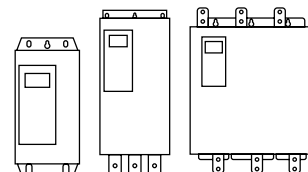
INPUT	Current range <sup>[1]</sup>	16 A – 1250 A (7.5 kW – 1200 kW)
	Voltage range	200 – 525 Vac (±10%) 380 – 690 Vac (-5/+10%) 1200 V (-20%/+10%) <sup>[1]</sup>
	Control voltage	110 – 240 Vac (+10%/-15%), 600 mA
	Input frequency	50 Hz/60 Hz (±5%)
OUTPUT	Output voltage	0 to 100% Supply voltage
	Output frequency	Equal to input
	Efficiency (At full load)	≥ 99%
ENVIRONMENTAL CONDITIONS	Operation ambient temperature	Minimum: -10 °C Maximum: +60 °C <sup>[2]</sup>
	Storage temperature	Minimum: -25 °C Maximum: +60 °C
	Altitude <sup>[1]</sup>	> 1000 m, 1% P <sub>N</sub> (kW) each 100 m; 3000 m maximum
	Ambient humidity	< 95%, non-condensing
	Degree of protection	IP20 (Frame 1) IP00 (Frames 2 y 3) <sup>[3]</sup>
	Vibration	According IEC 60068-2-6
	Conformal Coated Electronics	Class 3C3
PROTECTIONS	Motor protections	Phase sequence
		Locked rotor
		Phase imbalance
		Overload and underload
		Low power and over power
		Motor temperature (thermal model)
		Motor overtemperature (PTC)
		Excessive starting time
	Softstarter protections	Maximum number of starts per hour
		SCR short circuit
		Ground fault current
		Heatsink temperature
		Input phase loss
		Low input voltage
		High input voltage
		Equipment thermal model
SETTINGS	Functions	Ground fault
		Loss of signal from analog inputs settings functions
		Parameter lock
		Second motor setting
		Scheduled start/stop (days of the week and time)
		DC brake
		Pump cleaning cycle
		Adaptive stop control
Operation at reduced speed (Jog)		
Operation with a damaged phase (PowerThrough)		
HARDWARE	Digital inputs	2 fixed (Start/Stop and Reset) 2 programmable
	Digital outputs	2 fixed relays (Main contactor and bypass) 1 configurable switch (NO/NC) 1 configurable relay (NO)
	Analog outputs	1 analog output (0-20 mA or 4-20 mA)
	PTC input	Trip > 3.6 kΩ, reset < 1.6 kΩ
	Expansion slots	1

NOTES  
 [1] Consult availability with Power Electronics.  
 [2] Above 40°C with power reduction.  
 [3] Optional IP20 for sizes 2 and 3.



OPTIONALS <sup>[4]</sup>	Optional hardware	Remote Keypad
		IP20 Conversion Kit (Sizes 2 and 3)
		Disassembly tool (V6TOOL)
	Serial communication	"Pumping Smart Card" board: 3 digital inputs, 3 analog inputs 4-20 mA, 1 RTD input, 1 USB-B port
		DeviceNET
		Modbus RTU <sup>[5]</sup>
	Ethernet communication	Profibus-DP
		Modbus-TCP <sup>[5]</sup>
		Ethernet/IP <sup>[5]</sup>
	CONTROL PANEL	Type
Length <sup>[6]</sup>		3 meters
Connectivity		PC software through Modbus RTU, Modbus TCP, or USB.
LCD display		LCD display with 4 lines of information
		LED indicators (Ready, Run, Trip, Local)
		Keypad with 4 keys (Menu, Back, Up, Down)
Remote keypad (optional)		LCD display with four lines of information
		LED indicators (Ready, Run, Trip, Local)
		Keypad with 11 keys (Start, Stop, Reset, Local/Remote, Menu, Back, Up, Down, Logs, Graph, and Tools)
Display information		Software version
	Current in the three phases	
	Voltage in the three phases and average voltage	
	Mains frequency	
	Motor power factor	
	Motor power	
	Motor temperature (%)	
	Operating hours	
	Number of starts	
	I/O value	
	Heatsink temperature	
	Bypass model (%)	
	SCR temperature	
	Load capacity (%)	
	Ground fault current (only with Ground Fault cards)	
Information from the last start: duration, starting current, motor temperature (thermal model).		
Date and time (RTC)		
Recording of up to 384 events (starts, stops, configuration changes...)		
REGULATIONS	Certifications	CE, RCM, RoHS, UKCA, WEEE
	Electromagnetic compatibility	Directive EMC (2014/35/EU)
		IEC 60947-4-2
Design and construction	IEC 60068-2-6 - Vibration	

NOTES  
 [4] All optional cards have a connector for the remote keypad.  
 [5] Includes "Ground Fault" for ground fault detection.  
 [6] It only affects the remote keypad.



DIMENSIONS



Model	Frame	Width W (mm)	Depth D (mm)	Height H (mm)	Weight (kg)
V60024xB	1	152	233	336	4.8
V60042xB					
V60052xB					
V60064xB					
V60105xB	1	152	233	336	5.5
V60115xB					
V60135xB					
V60200xB					
V60229xB	2A	216	245	495	12.7
V60250xB					
V60352xB	2B	216	245	523	15.5
V60410xB					
V60550xB	2B	216	245	523	19
V60835xB	3	447	310	618	51
V61070xB					
V61230xB					
V61250xB					

NOTES