

TECHNICAL SPECIFICATIONS

Input power supply 50/60 Hz (kW)	Hope 800	SB70	SB150	SB200
Single-phase 200V	-	0.55 ~ 2.2 kW	0.4 ~ 1.1 kW	-
Three-phase 200V	-	4 ~ 5.5 kW	0.4 ~ 1.5 kW	-
Three-phase 400V	0.4 kW ~ 375 kW	0.4 ~ 1650 kW	0.4 ~ 1.5 kW	1.5 ~ 400 kW
Three-phase 690V	-	11 ~ 1200 kW	-	-
Three-phase 1140V	-	55 ~ 1000 kW	-	-
Output power supply(U,V,W)				
Output frequency	V/f control : 0.00 - 650.00 Hz Vector control : 0.00 - 200.00 Hz			0.00 – 650.00 Hz
Overload current capacity	150% of rated current for 1 minute			110% of rated current for 1 minute
Resolution of frequency set	Operation with digital signals: 0.01Hz Operation with analog signals: 0.1% of max frequency			
Output Frequency accuracy	Analog setting: $\pm 0.2\%$ of max frequency ($25 \pm 10^\circ\text{C}$) Digital setting : 0.01 Hz (-10 ~ + 40 °C)			
Control				
Analog inputs	2	2	2	3
Analog outputs	2	2	1	2
Digital inputs (Multi-function)	8	8	5	8
Digital outputs (Multi-function)	2	2	1	2
Relay outputs (Multi-function)	2	2	1	5
Pulse Frequency Input(PFI) 50kHz	✓	✓	✗	✓
Pulse Frequency Output(PFI) 0~50kHz	✓	✓	✗	✓
DC braking	Braking time: 0.0 - 60.0 sec Braking current: 0.0 - 100.0% of rated current			
Dynamic braking unit	Built-in braking unit for model 15kW or below	Built-in braking unit		Built-in braking unit for model 22kW or below
Function				
Torque boost	Auto & manual torque boost			
Auto energy saving	✓	✓	✗	✓
AVR	Keep the output voltage constant automatically when the voltage of the power grid fluctuates			
Auto carrier regulation	Regulate carrier frequency automatically based on the load and ambient temperature			
Momentary Power failure	Ensure uninterrupted operation by controlling the DC link voltage			
Protections	Overcurrent, Overvoltage, Under voltage, Input/output phase loss, Analog input loss, Short-circuit, Stall prevention, Motor overload , Stall prevention, Overheat, etc.			
Features	Process PID, Multiple PLC mode (8 PLC run mode), Multiple Speed mode, Wobble (Winding of Textiles), kWh meter timer.	Keypad with potentiometer, Process PID, Multistep frequency, Wobble (Winding of textiles).	Pump switching mode, Firefighting water supply mode, Constant pressure water supply mode.	
Environmental conditions				
Protection level	IP30	IP20		
Operation temperature	-10°C ~ + 40°C			
Storage temperature	-20°C ~ + 60°C			
Relative humidity	20 ~ 90% without condensation			
Altitude	Less than 1000 m			
Vibration	Less than 5.9m/sec ² (0.6 G)			
Cooling method	Forced air cooling with built-in fan control			
Communication hardware	RS485 port			
Protocol	Modbus, USS commands and CAN bus			
Optional hardware	Profibus-DP module			
Optional software	SB monitor			
Optional Accessories				
Brake unit, Digital I/O expansion board, Relay extension board, LCD keypad panel (SB-PU40), Extension cable for keypad, EMI filter, AC input/output reactor and DC input reactor, communication component and etc.				
Certifications				
CE, ISO 14001, ISO 9001, UL				