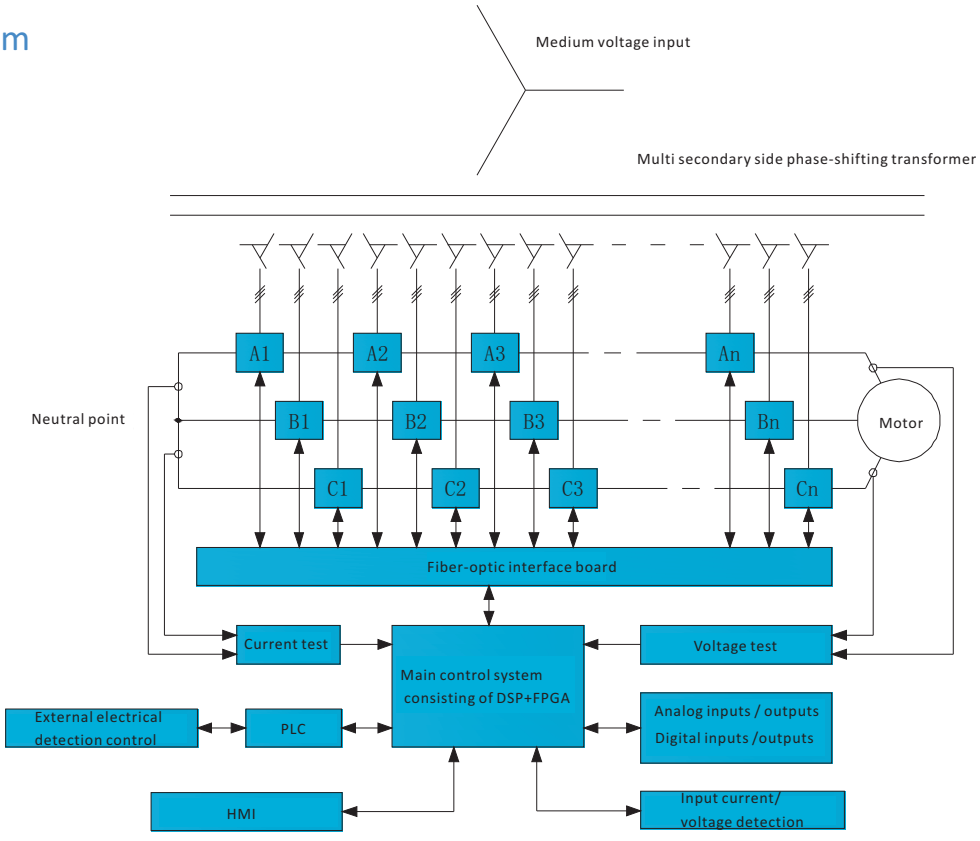
SBH 3kV-11kV Series Medium-voltage frequency inverter

Product Features

- Integrated design
- Modular design of units
- Multifunctional HMI design
- Anti-interference design technology
- “3-Full ”test
- Vector control technology
- Speed tracking startup
- Anti-voltage sag technology
- Dual power redundancy technology
- Automatic current limiting technology
- AVR function
- Controllable excitation regulating technology
- Built-in soft PLC function
- Undisturbed switching technology (optional)
- Unique master-slave control technology (optional)

Control System

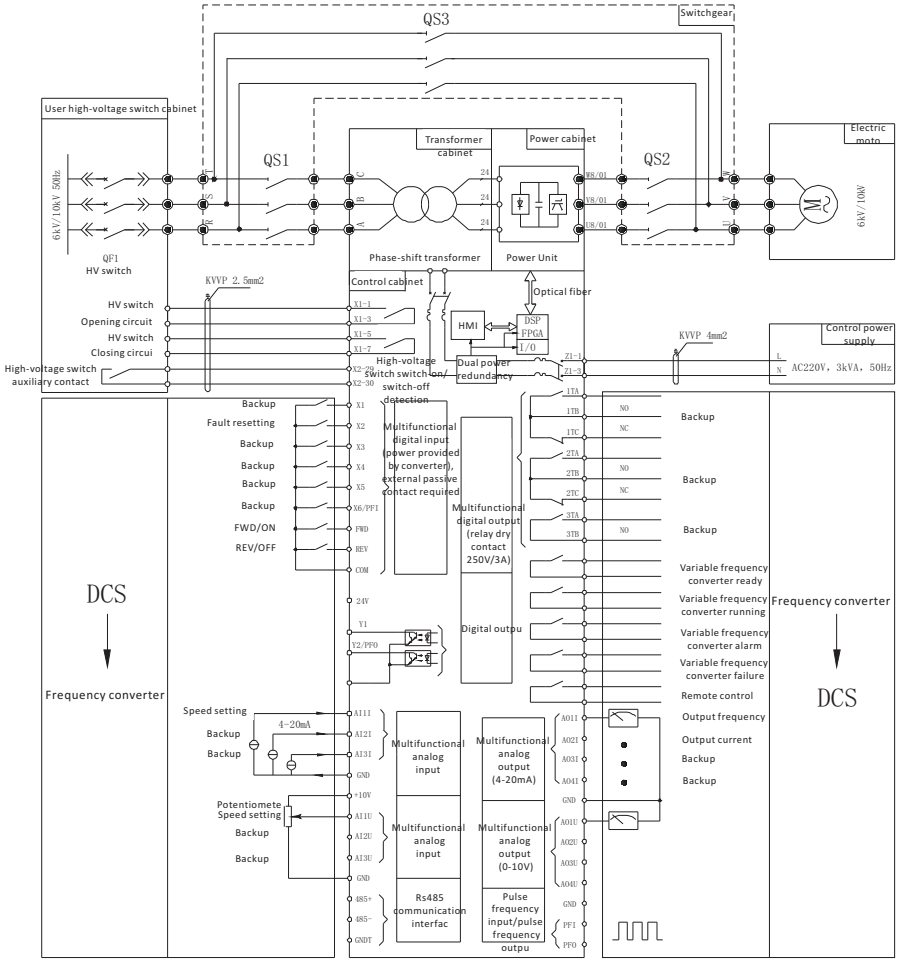


Principle Block Diagram of SBH Series Medium voltage Frequency Converter Control System

Typical Solution

- Standard solution without power frequency bypass
- Solution without power frequency bypass, with isolation cabinet
- Solution without power frequency bypass, with isolation cabinet
- Manual 1-drive-1 with Power Frequency Bypass solution
- Automatic 1-drive-1 with Power Frequency Bypass solution
- Manual 1-drive-1 with Power Frequency soft starter Bypass solution
- Manual 1-drive-2 with Power Frequency Bypass solution (3 Power Supply)
- Automatic 1-drive-2 with Power Frequency Bypass solution (3 Power Supply)
- Manual 1-drive-2 with Power Frequency Bypass solution (2 Power Supply)
- Automatic 1-drive-2 with Power Frequency Bypass solution (2 Power Supply)

Standard Wiring Diagram



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Model description

SBH – 060 – 1000–□

Classification: SBH universal high-voltage frequency converter

Voltage level of frequency converter (kV)
For example, 060 represents 6.0kV

Rated power of inverter
For example, 1000 represents 1000kW

T: Synchronous motor
S: Heavy du ty model selection
No suffix: Asynchronous motor
PM: Permanent-magnet synchronous motor

Technical Parameters

Content		Parameters	Remarks
Input	Rated input voltage	Three-phase, 3~11kV ± 10%	
	Rated input frequency	50/60Hz ± 3%	
	Ripple voltage	Grid voltage drop within 35%, MVD operates by derating	
	Power factor	≥ 0.96 (load>20%)	
Output	Rated output voltage	3 phase, 3~11kV	For higher voltage and higher power, please contact us
	Output current rating	25 ~ 1400A	
	Output power range	160 ~ 20000kW	
	Overload capacity	120% 120s, 150% 5s, 200% immediately protection	Protection curve can be set
Basic performance	Inverters efficiency	98.5%	
	Frequency resolution	0.01Hz	
	Total Harmonic Distortion (THD)	≤4%	Meet the Chinese national standards GB14549-93 and IEEE519-1992 for power quality standards
Control interface	Display	Multilingual HMI, capable of simultaneously displaying basic electrical parameters such as input (output) voltage, current, power, power factor, as well as real-time operation status of frequency converters, alarm fault recording, and event recording functions	
	Setting	Multifunctional parameter settings	
	Operation	Local touch control, DCS and on-site operation box remote control, upper computer communication control	
Control	Motor control mode	Without PGV/F control, with PGV/F control, without PG vector control, with PG vector control	
	Acceleration/ deceleration times	0.1~3600.0S adjustable	
	Analog input/output quantity	3 channels AI, 4 channel AO Voltage type and current type can be set Input frequency, output current, and output frequency can be set There are 7 types that can be set, including 0 (4) ~20mA, and 0 (2) ~10V, etc	
	Digital input/output quantity	8-circuit digital input, 5-circuit digital output (scalable) 38 digital input functions such as internal virtual REV/FWD and forward/reverse jog can be set 52 digital output functions such as alarm/fault output and forward/reverse operation status can be set	
	Communication function	RS485, MODBUS-RTU (standard configuration) PROFIBUS-DP (optional), TCP/IP (optional)	
	Control power capacity	Single phase 220VAC/3kVA, 50/60HZ (DC power supply optional according to project requirements)	
	Main control functions	Instantaneous power failure restart, torque increase, avoidance frequency, and unit bypass "Galloping" start, system self-diagnosis, and system power frequency bypass	
	Protection	Overcurrent, overload, short circuit, three-phase current imbalance, instantaneous power loss, input (output) phase loss, overvoltage, undervoltage, converter overheating, external fault shutdown (NO and NC), and Power cell automatic bypass, etc.	
Environment and others	Ambient temperature/humidity	-10~40 °C, 20%~90% (no condensation)	For special environment, please call for consultation
	Storage temperature	-40~70℃	
	Altitude	<2000m, derated above 2000m	
	Cooling mode	Forced air cooling	
	Degree of protection	IP31	Please inquiry for others by phone call
	Application site	Indoor, no explosive or corrosive gases, no conductive dust, and no oil mist	

Typical Solutions