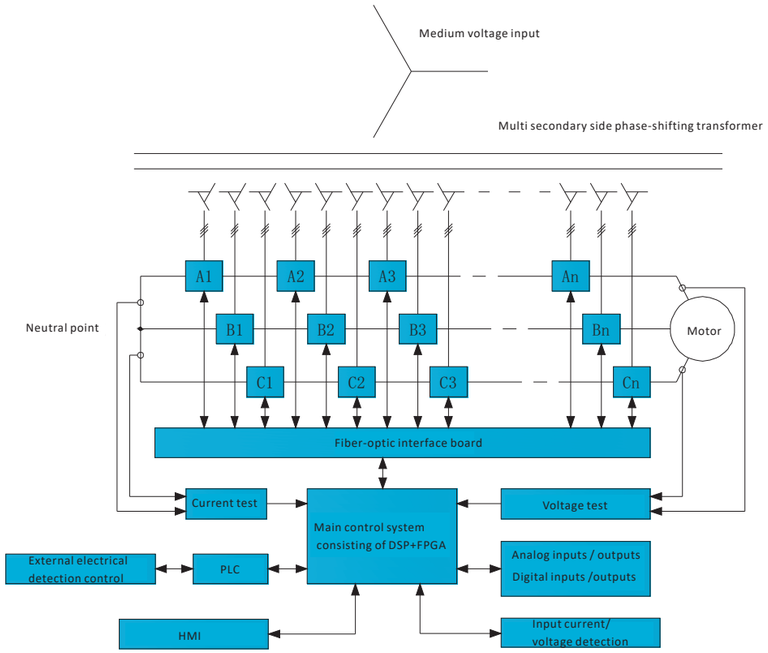
SLANVERT

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

Product Features

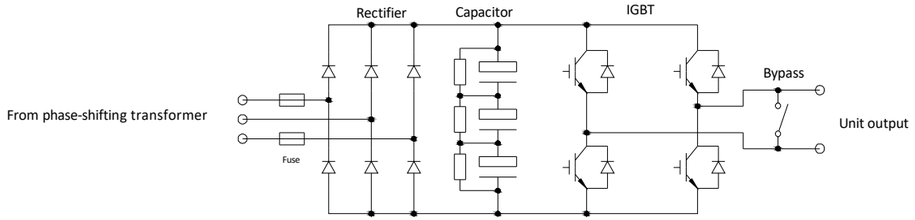
- Integrated design
- Modular design of units
- Multifunctional HMI design
- Anti-interference design technology
- "3-Full "test
- Speed tracking startup
- Anti-voltage sag technology
- Dual power redundancy technology
- Automatic current limiting technology
- AVR function
- Controllable excitation regulating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

System Principle



Principle Block Diagram of SBH Series Medium voltage Frequency Converter System

Power cell



Specification

Model	Rated capacity (kVA)	Rated output current (A)	Applicable motor (kW)	Model	Rated capacity (kVA)	Rated output current (A)	Applicable motor (kW)
SBH-030-160	200	39	160	SBH-030-800	1000	192	800
SBH-030-200	250	49	200	SBH-030-900	1125	216	900
SBH-030-220	275	54	220	SBH-030-1000	1250	240	1000
SBH-030-250	315	61	250	SBH-030-1120	1400	276	1120
SBH-030-280	350	68	280	SBH-030-1250	1563	308	1250
SBH-030-315	400	77	315	SBH-030-1400	1750	345	1400
SBH-030-355	450	86	355	SBH-030-1600	2000	395	1600
SBH-030-400	500	96	400	SBH-030-1800	2250	443	1800
SBH-030-450	560	108	450	SBH-030-2000	2500	493	2000
SBH-030-500	630	120	500	SBH-030-2240	2800	552	2240
SBH-030-560	700	135	560	SBH-030-2500	3150	616	2500
SBH-030-630	800	154	630	SBH-030-2800	3500	690	2800
SBH-030-710	900	171	710	SBH-030-3150	4000	778	3150

Rated voltage: 6kV

SBH-060-160	200	20	160	SBH-060-1120	1400	138	1120
SBH-060-200	250	25	200	SBH-060-1250	1600	154	1250
SBH-060-220	275	28	220	SBH-060-1400	1750	173	1400
SBH-060-250	315	31	250	SBH-060-1600	2000	198	1600
SBH-060-280	350	35	280	SBH-060-1800	2250	222	1800
SBH-060-315	400	39	315	SBH-060-2000	2500	247	2000
SBH-060-355	450	44	355	SBH-060-2240	2800	277	2240
SBH-060-400	500	50	400	SBH-060-2500	3150	309	2500
SBH-060-450	560	56	450	SBH-060-2800	3500	346	2800
SBH-060-500	630	62	500	SBH-060-3150	4000	384	3150
SBH-060-560	700	69	560	SBH-060-3550	4500	439	3550
SBH-060-630	800	78	630	SBH-060-4000	5000	495	4000
SBH-060-710	900	88	710	SBH-060-4500	5600	557	4500
SBH-060-800	1000	99	800	SBH-060-5000	6300	619	5000
SBH-060-900	1125	111	900	SBH-060-5600	7000	693	5600
SBH-060-1000	1250	123	1000	SBH-060-6300	7900	780	6300

Rated voltage: 10kV

SBH-100-200	250	15	200	SBH-100-1600	2000	115	1600
SBH-100-250	315	19	250	SBH-100-1800	2250	130	1800
SBH-100-280	350	21	280	SBH-100-2000	2500	144	2000
SBH-100-315	400	24	315	SBH-100-2240	2800	162	2240
SBH-100-355	450	27	355	SBH-100-2500	3150	182	2500
SBH-100-400	500	30	400	SBH-100-2800	3500	205	2800
SBH-100-450	560	34	450	SBH-100-3150	4000	230	3150
SBH-100-500	630	38	500	SBH-100-3550	4500	260	3550
SBH-100-560	700	42	560	SBH-100-4000	5000	290	4000
SBH-100-630	800	47	630	SBH-100-4500	5600	324	4500
SBH-100-710	900	53	710	SBH-100-5000	6300	360	5000
SBH-100-800	1000	60	800	SBH-100-5600	7000	403	5600
SBH-100-900	1125	68	900	SBH-100-6300	7900	454	6300
SBH-100-1000	1250	75	1000	SBH-100-7100	8900	510	7100
SBH-100-1120	1400	84	1120	SBH-100-8000	10000	580	8000
SBH-100-1250	1600	94	1250	SBH-100-9000	11250	653	9000
SBH-100-1400	1750	105	1400	SBH-100-10000	12500	725	10000

* For more information please contact SLANVERT.

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 phease, 3~11kV	For higher voltage and higher power, please contact us
	Output current rating		
	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)	3~4.16kV, THD<=4% 6~13.8kV, THD<=2%	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	IP30	Please inquiry for others by phone call
	Application site	Indoor, no explosive or corrosive gases, no conductive dust, and no oil mist	

Typical Solution