8000B Series

Power range: single phase input and three-phase output (220V): 0.75-2.2kW; three-phase input and three-phase output (380V):0.75-400kW

8000B series inverter

Best selection for mechanical performance speed controlling.
Applicable to the occasions with heavy load and fast response requirements.

IP20

Flexible & practical

- Rich and practical terminal function and virtual terminals
- Integrated PID regulator and industry application functions
- RS-485 communication, standard Modbus protocol



Stable & reliable

- Up to 27 fault detection and protection, safer
- High standard hardware configuration, long lifetime
- ±15% wide voltage input design, strong applicability
- Automatic protective paint spray, quality assurance
- More than 500,000 application verification, high reliability

High performance

- Sensor-less vector control and V/F control, strong applicability
- 0.5Hz low frequency high torque output reaches 150%, adapts to heavy load startup
- 150% overload for 1 minute, high reliability
- Accurate motor parameter identification, convenient debugging

Datasheet

Control characteristic	Control mode	speed sensorless vector control(SVC)	V/F control
	Starting torque	0.5Hz 150%	0.5Hz 100%
	Speed adjustable range	1:100	1:20
	speed-holding precision	±0.5%	±1.0%
	Overload capability	G type: 150% rated current for 60s; 180% rated current for 1s	P type: 120% rated current for 60s; 150% rated current for 1s
	V/F curve	Linear, square, multipoint type	
	DC braking capacity	Braking current: 0-150% rated current(G type), 0-100% rated current(P type); braking time: 0.0-50.0s	
	Inching running	Inching frequency range: 0.00-maximum frequency; inching acceleration and deceleration time range: 0.1-3600S	
	acceleration and deceleration time	Two kinds: linear or S curve mode: acceleration and deceleration time range: 0.1-3600S	
	Torque compensation	Manual: 0.1-30.0%; automatic: 0.0	
Input/output	Start frequency	0.50-10Hz	
	Input voltage	220V/380V±15%	
	Input frequency	50/60Hz, fluctuation range: ±5%	
	Output voltage	0-rated input voltage	
	Output frequency	SVC: 0~300Hz, V/F: 0~600Hz	
peripheral interface	Programmable digital input	6 ways of digital terminal input	
	Programmable analog input	AVI: 0-10V; ACI: 0-10V or 0/4-20mA	
	Relay output	1 way of output, programmable	
	Open-collector output	1 way of output, programmable	
	Analog output	0.75-2.2kW: FM: 0-10V; AM: 4-20mA; 4-400kW: FM: 0-10V; AM: 4-20mA	
	Serial communication port	RS-485 half-duplex, standard modbus protocol	
Basic function	Command running channel	Set by operation panel, external terminals and RS-485 communication port, switchable by many ways	
	Main frequency source	Multiple setting ways: set by potentiometer of operation board, digital button UP/DOWN, analog terminals, RS-485 communication, PID etc.	
	Auxiliary frequency source	Capable of frequency synthesis and frequency trimming	
	Simple PLC	PLC running mode can be defined	
	multi-speed control	16 sections of different speed can be chosen by external digital input terminals	
	Integrated PID	For the convenience to realize closed-loop control	
	AVR	When grid voltage changes, it keeps output voltage constant automatically. By default, it doesn't work at deceleration	
	Stall control	Automatically limit current and voltage at running period to prevent tripping caused by frequent overcurrent/ overvoltage	
Industrial application	Pendulous frequency	Multiple triangular wave frequency control function, mainly used in traversing and winding situations	
	Frequency hopping	Two configurable frequency hopping points and hopping frequency range to avoid motor resonance frequency point	
	Droop control	Mainly used in the case that multiple motors drive the same load where balanced load is needed	
	Metering control	Automatically calculate and save meters of products according to set base when driving the motor	
Personalization function	LED display	multiple variables can be displayed including running frequency, set frequency, bus voltage, output voltage, output current etc	
	Automatic energy saving	Decrease output voltage at light load automatically to save energy	
	Password setting	4-bit password can be set with non-zero numbers. Exit password setting interface and the password will be valid after 1 minute	
	Parameter lock	Define whether the parameter is locked in running or stopped state in case of misoperation	
	Protection	Over current protection, over voltage protection, input/output phase loss protection, undervoltage protection, overheating protection, over load protection etc	
Application environment	Altitude	Lower than 1000m, service in derated capacity above 1000m. Derate 1% capacity every 100m increase in height	
	Environmental temperature	-10℃+ ~ 40℃, service in derated capacity for 40℃~50℃. Derate 4% capacity every 1℃ increase in temperature	
	Humidity	≤95%RH, no water condensation	
	Vibration	< 5.9m / S2（0.6G）	
	Storage temperature	-40℃～+70℃	

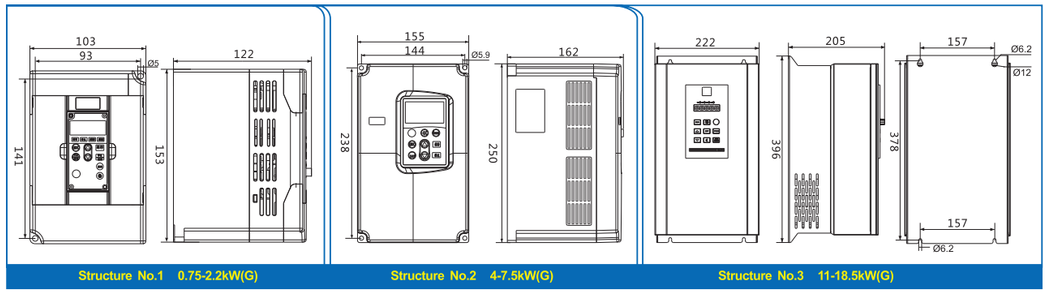
Model number description

8000B - 4 T 015 G B / 18R5 P B

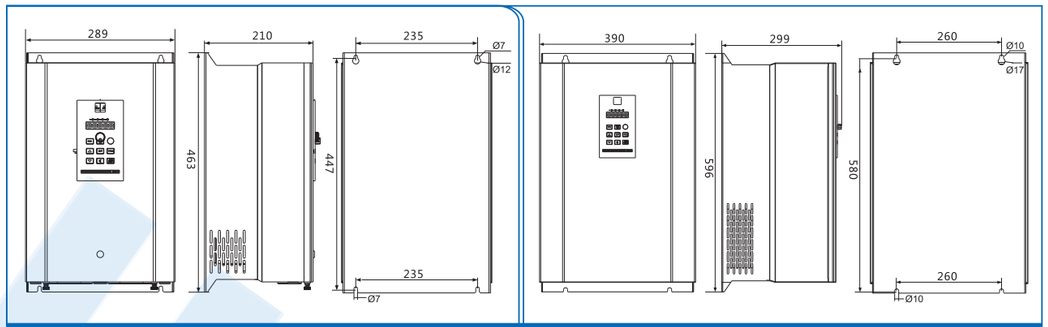
- 8000B: Product series
- 2: 220V, 4: 380V
- S: single phase; T: three-phase
- 015: 15kW
- G: general type
- B: with brake function
- 18R5: 18.5kW, R: refers to decimal point
- P: P type
- B: with brake function

Voltage grade	Power kW	Power HP	Rated intput current(A)	Rated output current(A)	Structure No.	Series No.	B: enhanced type		2: 220V 4: 380V	S:single phase T: three-phase	Adaptive motor power	G: general type P: fan and pump type (Some models support G/P integration)	B:integrated with brake function
Single phase 220VAC ±15%	0.75	1.0	8.2	4.5	1	8000	B	-	2	S	R75	G	B
	1.5	2.0	14.2	7	1	8000	B	-	2	S	1R5	G	B
	2.2	3.0	23	10	1	8000	B	-	2	S	2R2	G	B
Three phase 380VAC ±15%	0.75	1.0	3.4	2.5	1	8000	B	-	4	T	R75	G	B
	1.5	2.0	5	3.7	1	8000	B	-	4	T	1R5	G	B
	2.2	3.0	5.8	5	1	8000	B	-	4	T	2R2	G	B
	4/5.5	5.5/7.5	10/15	9/13	2	8000	B	-	4	T	4/5R5	G/P	B
	5.5/7.5	7.5/10	15/20	13/17	2	8000	B	-	4	T	5R5/7R5	G/P	B
	7.5	10.2	20	17	2	8000	B	-	4	T	7R5	G/P	B
	11/15	15/20.4	26/35	25/32	3	8000	B	-	4	T	11/15	G/P	B
	15/18.5	20.4/25.2	35/38	32/37	3	8000	B	-	4	T	15/18R5	G/P	B
	18.5	25.2	38	37	3	8000	B	-	4	T	18R5	G	B
	22/30	30/40.8	46/62	45/60	4	8000	B	-	4	T	22/30	G/P	
	30/37	40.8/50.3	62/76	60/75	4	8000	B	-	4	T	30/37	G/P	
	37	50.3	76	75	4	8000	B	-	4	T	37	G	
	45/55	61.2/74.8	91/113	90/110	5	8000	B	-	4	T	45/55	G/P	
	55/75	74.8/102	113/157	110/150	5	8000	B	-	4	T	55/75	G/P	
	75/93	102/126.5	157/180	150/176	6	8000	B	-	4	T	75/93	G/P	
	93/110	126.5/149.7	180/214	176/210	6	8000	B	-	4	T	93/110	G/P	
	110	149.7	214	210	6	8000	B	-	4	T	110	G	
	132/160	179.6/217.7	253/307	250/300	7	8000	B	-	4	T	132/160	G/P	
	160/185	217.7/251.7	307/346	300/340	7	8000	B	-	4	T	160/185	G/P	
	185	251.7	346	340	7	8000	B	-	4	T	185	G	
	200/220	272.1/229.3	385/420	380/415	8	8000	B	-	4	T	200/220	G/P	
	220/250	299.3/340.1	420/473	415/470	8	8000	B	-	4	T	220/250	G/P	
	250/280	340.1/381	473/525	470/520	8	8000	B	-	4	T	250/280	G/P	
	280/315	381/428.6	525/603	520/600	9	8000	B	-	4	T	280/315	G/P	
	315	428.6	603	600	9	8000	B	-	4	T	315	G	
	350	476.2	655	640	9	8000	B	-	4	T	350	G	
	400	544.2	710	690	9	8000	B	-	4	T	400	G	

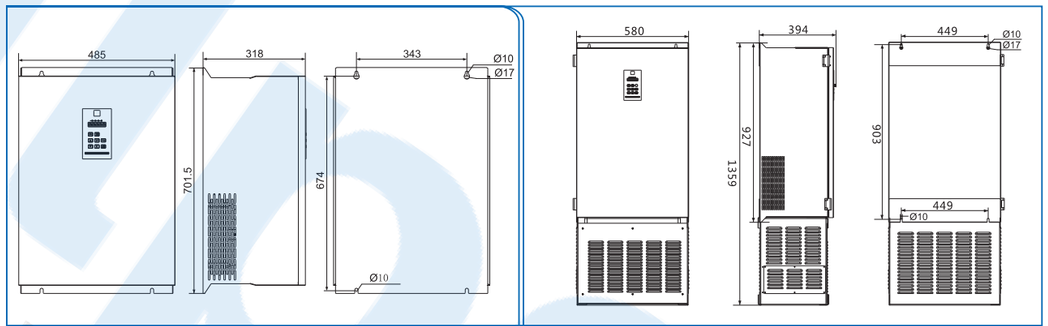
Dimensions(mm)



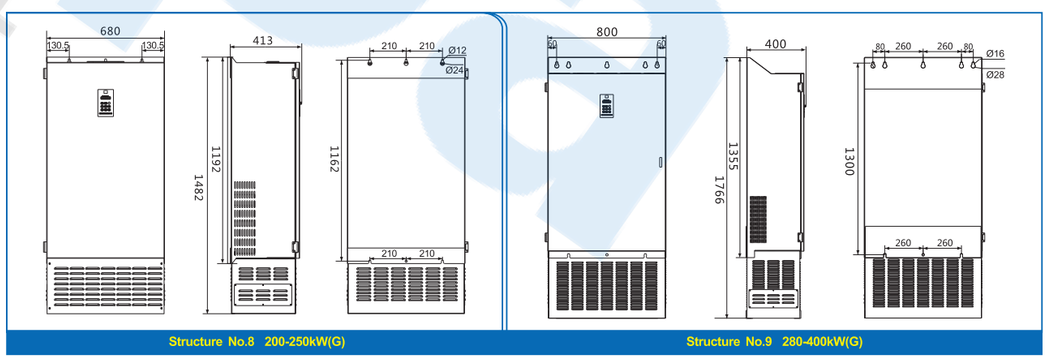
Structure No.1 0.75-2.2kW(G) | Structure No.2 4-7.5kW(G) | Structure No.3 11-18.5kW(G)



Structure No.4 22-37kW(G) | Structure No.5 45-55kW(G)



Structure No.6 75-110kW(G) | Structure No.7 132-185kW(G)



Structure No.8 200-250kW(G) | Structure No.9 280-400kW(G)