

SW200 General Type Inverter



① 
High Performance
Vector+VF+MPPT
Synchronous and
Asynchronous Motors

② 
**MPPT Function
for Solar Pumps**
DC voltage:
150-400V 250V-800V

③ 
Wide Voltage
AC200~240V
AC380~480V
(-20%~+10%)

④ 
**Good EMC
Performance**
Strong anti-interference
low noise

⑤ 
**Seperately
Cooling Duct**
Strong environmental
adaptability

⑥ 
**Encoder
Speed Regulation**
Accurate speed control,
smooth rotation

SW200 Series Introduction

I, Product Feature

SW200 series is general use vector VFD.

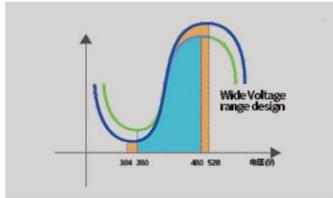
Power Range:

G1: 0.75-55KW (1 Phase 220V input, 3 Phase 220V output)

G2: 0.75-55KW (3 Phase 220V input, 3 Phase 220V output)

G3: 0.75-500KW (3 Phase 380V input, 3 Phase 380V output)

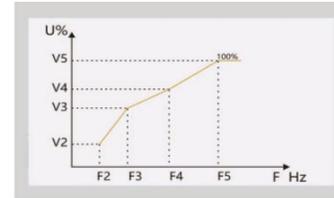
G4: 0.75-55KW (1 Phase 220V input, 3 Phase 380V output)



Wide voltage range (-20%~ +10%)



Support both Synchronous Motors and Asynchronous Motors



Vector control and V/f control model



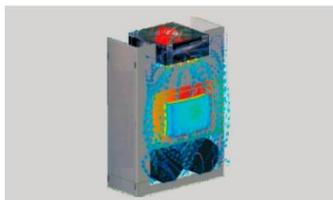
Excellent performance in over-voltage & over-current protection



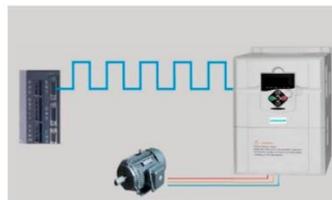
EMC standard complies with CE



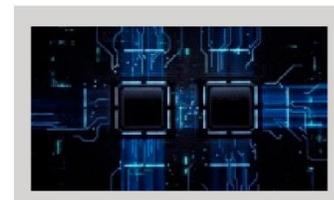
Easy to operate and copy parameters



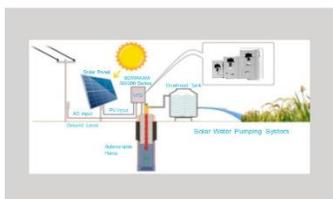
Independent air duct design



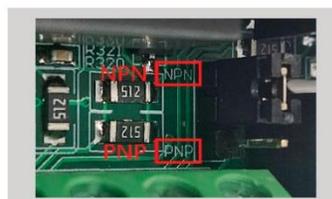
Support high speed pulse input/output



Dual-CPU design



MPPT Function for Solar Pumps



PNP & NPN



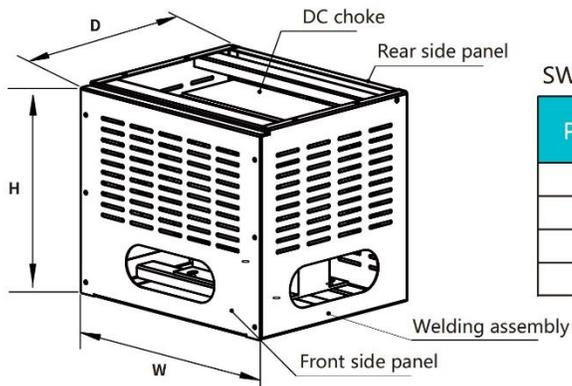
Higher Protection UV Coating

II, Product Specifications

Model No.	Applied motor		Rated input current (A)	Rated output current (A)	DIM
	KW	HP			
1 PH/3 PH input AC220V ~ 240V 50Hz/60Hz					
SW200-R75G1B	0.75	1.0	11	4	SW200-1
SW200-1R5G1B	1.5	2.0	20.6	7	
SW200-2R2G1B	2.2	3.0	28.3	9.6	
SW200-003G1B	3	4.0	36	13	
SW200-004G1B	4	5.5	50	17	SW200-2
SW200-5R5G1B	5.5	7.5	62	25	SW200-3
SW200-7R5G1B	7.5	10	73	32	
SW200-011G1B	11	15	84	45	SW200-4
SW200-015G1	15	20	93	60	
3 PH input AC380 ~ 480V 50Hz/60Hz					
SW200-R75G3B	0.75	1.0	3.7	2.1	SW200-1
SW200-1R5G3B	1.5	2.0	6.4	4.0	
SW200-2R2G3B	2.2	3.0	8.9	5.6	
SW200-003G3B	3	4.0	13.4	7.3	
SW200-004G3B	4	5.5	10.5	9	SW200-2
SW200-5R5G3B	5.5	7.5	14.5	13	
SW200-7R5G3B	7.5	10	20.5	17	
SW200-011G3B	11	15	26	25	SW200-3
SW200-015G3B	15	20	35	32	
SW200-018G3B	18.5	25	38.5	37	SW200-4
SW200-022G3B	22	30	46.5	45	
SW200-030G3B	30	40	62	60	
SW200-037G3	37	50	76	75	SW200-5
SW200-045G3	45	60	92	90	SW200-7
SW200-055G3	55	70	113	110	
SW200-075G3	75	100	157	152	
SW200-090G3	90	125	175	176	SW200-8
SW200-110G3	110	150	206	210	
SW200-132G3	132	175	251	253	SW200-9
SW200-160G3	160	210	304	304	
SW200-185G3	185	245	350	340	SW200-10
SW200-200G3	200	260	381	380	
SW200-220G3	220	300	420	426	
SW200-250G3	250	355	472	462	SW200-11
SW200-280G3	280	396	525	520	
SW200-315G3	315	445	590	585	
SW200-355G3	355	500	647	650	SW200-12
SW200-400G3	400	530	718	725	
SW200-450G3	450	595	810	820	
SW200-500G3	500	750	835	860	

SW200 series Frequency Inverter

Power range	DIM	Dimension			Installation			N.W(kg)
		H	W	D	H1	W1	d	
0.75KW	SW200-1	196	116	167.5	186	106	2*4.5	1.55
1.5KW								1.6
2.2KW								1.65
3KW								1.7
4KW	SW200-2	196	116	167.5	186	106	2*4.5	1.7
5.5KW								1.75
7.5KW	SW200-3	256	162	183	244	140	4*5.4	1.8
11KW								3.2
15KW	SW200-4	320	184	198	308	162	4*5.4	3.4
18.5KW								5.1
22KW								5.3
30KW	SW200-5	430	288	223	414	170	7	5.6
37KW								20
45KW	SW200-7	580	337	242	553	270	12	21
55KW								39
75KW	SW200-8	650	379	242	623	270	12	40
90KW								45
110KW	SW200-9	700	410	350	678	280	14	49
132KW								85
160KW	SW200-10	888	570	390	850	380	12	86
185KW								110
200KW								110
220KW	SW200-11	1050	665	392	1012	515	14	110
250KW								150
280KW	SW200-12	1100	824	417	1060	600	14	150
315KW								200
355KW	SW200-12	1100	824	417	1060	600	14	200
400KW								200
450KW								200
500KW	200							

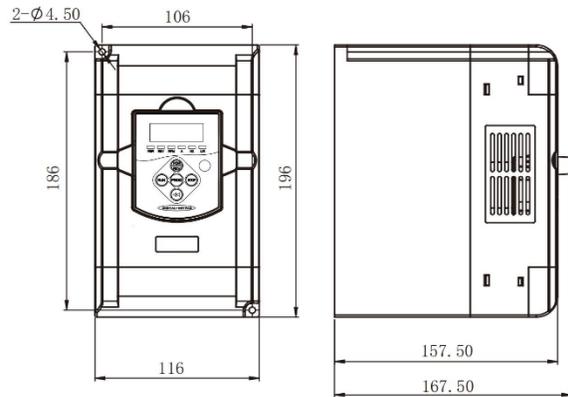


SW200-9~12 shape and installation size

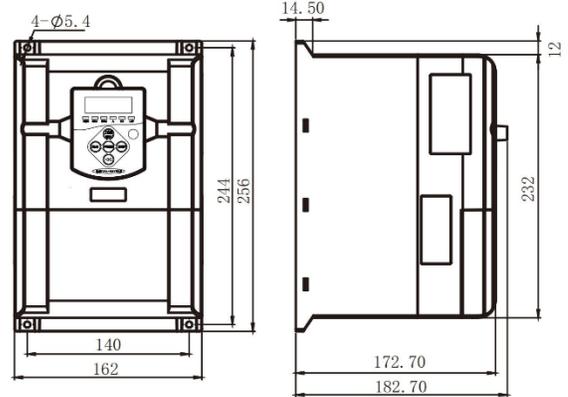
Power range	DIM	Dimension size(mm)		
		H	W	D
132~160KW	SW200-9	350	405	337
185~220KW	SW200-10	506	561	376
250~315KW	SW200-11	540	656	379
355~500KW	SW200-12	640	814	404

III, Installation Dimensions(mm)

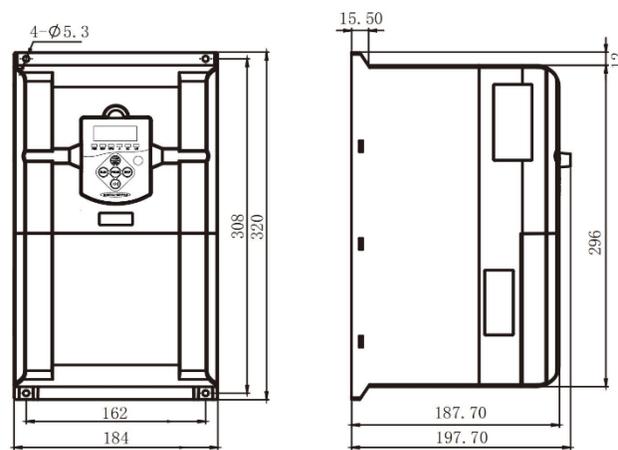
1. SW200-1/2 shape and installation size



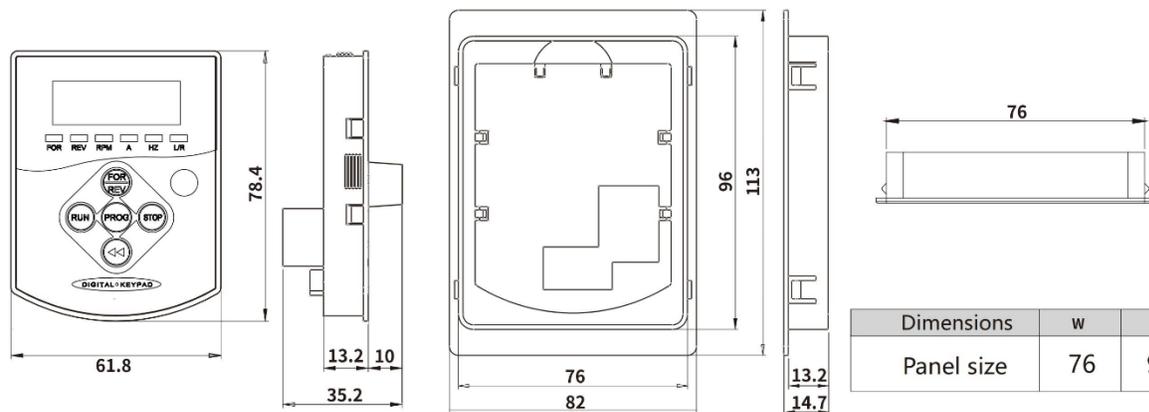
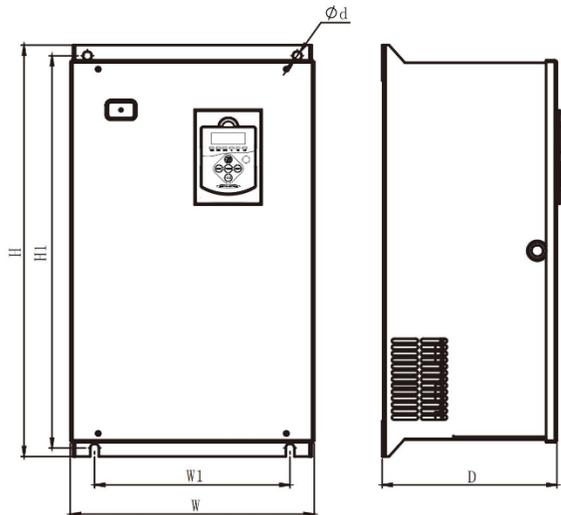
2. SW200-3 shape and installation size



3. SW200-4 shape and installation size



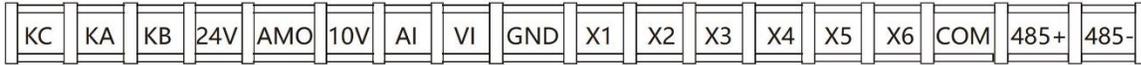
4. SW200-5 shape and installation size



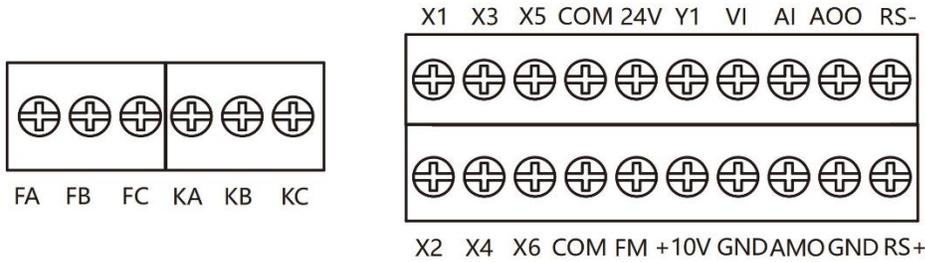
V, Control Circuit

Control circuit terminal

SW200 Series Control circuit terminal (0.75-30KW)

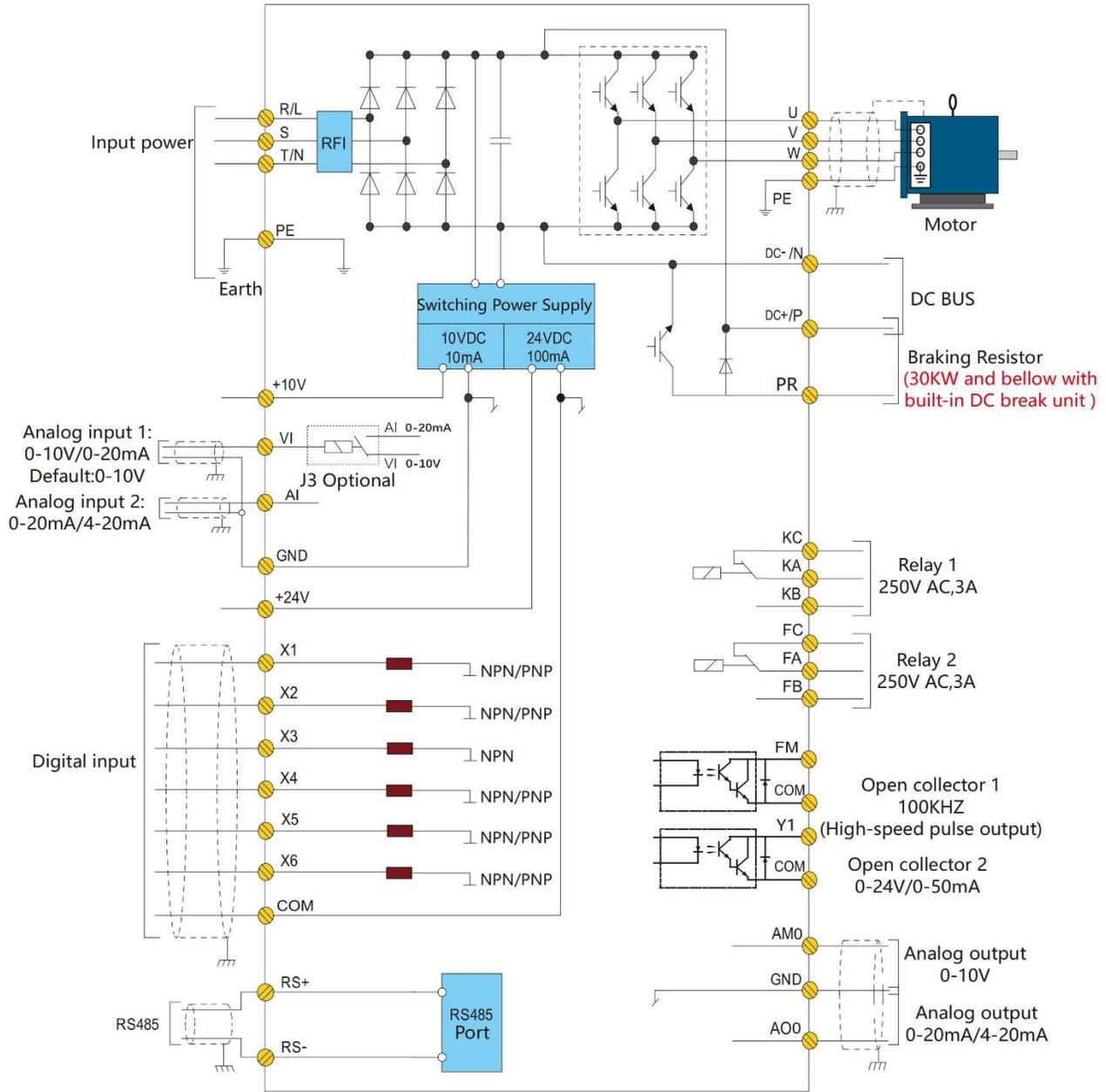


SW200 Series control circuit terminal (30KW above)



Terminal	Description	Specification
X1-X6	Digital input terminal	1. Logic: > DC19V logic 0. < DC14V logic 1. 2. Input voltage: 0-30V. 3. Input impedance: 3.6KΩ. 4. X3 can be used as pulse input, pulse input range: 0.00-5.00KHZ, 100KHZ optional.
COM	Digital volume signal ground	A common port connected to a digital signal input.
FM	High speed pulse output	The terminal output mode is selected as high-speed pulse output, with the highest frequency up to 100kHz.
Y1	Digital output 1	Photocoupling isolation, bipolar open collector output. Output voltage range: 0V ~ 24V. Output current range: 0mA ~ 50mA.
+24V	24V Power Supply	It provides 24V power supply to the outside, which is generally used as working power supply for digital input/output terminals. Max output current: 100mA.
+10V	10V Power Supply	Max load 10mA.
VI	Analog input terminal	0-10 V voltage input or 0-20 mA current input through the dip switch. VI Default Voltage input. 1. Voltage input: Input impedance approx 10KΩ. 2. Current input : Input impedance ≤500Ω.
AI	Analog input terminal	AI Default : current input. 1. Current input : Input impedance ≤500Ω.
GND	Analog signal ground	A common port connected analog signal input.
AMO AOO	Analog output terminal	Select 0 ~ 10V voltage output or 0 ~ 20mA current output by software parameters, AMO default: 0 ~ 10V voltage output. 1. Voltage output : load more than 500Ω. 2. Current output : load more than 500Ω.
RS+,RS-	RS485 Communication	Max baud rate 38400bit/s.
KA-KB-KC FA-FB-FC	Relay output	1. Resistive load: 250VAC 3A/30VDC 3A. 2. Inductive load: 250VAC 0.2A/24VDC 0.1A. (cosφ=0.4). 3. KA and KB are normally open, and KA and KC are normally close. FA and FB are normally open, and FA and FC are normally close.

IV, Wiring Diagram



SW200 series wiring diagram

Note : SW200 series 0.75-30KW only have 1 way analog output and 1 way relay output, without FM and Y1 functions.
For the wiring diagram of products power less than 30KW, the terminals on inverter shall prevail



SW200- Specification

Name		Specification
Input Power	Voltage	1PH/3PH 200~240V -20%~+10%; 3PH 380~480V -20%~+10%;
	Frequency	48-62HZ;
	Max Unbalance	3%;
Output Power	Output Voltage	3PH 0~240V/0~480V;
	Output Frequency	Vector control;V/F:0-600Hz;
Main Control Function	Control Mode	V/F,Vector control; MPPT
	Start Torque	0.5Hz 150%;
	Overload Capacity	150% Rated output current(60s) , 200% Rated output current(1s);
	Carrier Frequency	V/F: 2K~16kHz, Vector: 2K~10KHz;
	Speed Setting Resolution	Digital: 0.001Hz; Analog: 0.5% of Max Operation Frequency;
	Open Loop Speed Control Accuracy	30~4000rpm:Error±8rpm;
	Control Command Source	Operate Panel; Digital Terminal; Communication;
	Set Frequency Source	Panel; Analog; Pulse; Communication;
Acceleration and Deceleration time	4 Groups Acceleration and Deceleration time is 0.05-3600.00S;	
Basic Function	Torque open loop control, Motor self-learn, Motor Pre-excitation, Motor Rotation Compensation, Automatic Load Compensation, Automatic Voltage Stabilizing Function, Multi-Point V/F curve, Acceleration and Deceleration Curve, DC Braking, AC Braking, Rotation Speed Limited, Current Limited, Torque Limited, Frequency Tracking Start, Auto Reset Restart, JOG Control, External Control of Multistage Speed, Mechanical Braking, UP/DOWN Function, High speed pulse input and output function, Built in PID Controller;	
Protect Function	Phase Loss Protection of Power Supply, Short-voltage Protection, Over-voltage Protection, Overcurrent Protection, Over-load Protection, Phase Loss Protection of Output, Output short circuit Protection, Output Grounded Protection, Signal Disconnection, AMA Fail, CPU Fault, Button Inhibit, Copy Failure, LCP Communication Error, Parameter Read Only, Value Out of Range, Not ecutable in Running;	
IO Panel Control Terminal	Input Terminal	6 digital input terminals; One channel (X3) supports high-speed pulse input up to 100KHZ; 2 analog input terminals (0-10V voltage signal, 0-20mA current signal);
	Output Terminal	2 analog output terminals, support 0-10V voltage output or 0-20mA current output.(Only 1 channel output is supported below 30KW,Default: Voltage variable 0-10V) 2 relay output terminals (KA/KB is normally open, KA/KC is normally closed)(Only 1 channel relay output terminal is supported below 30KW)
	Power Supply Terminals	1 Group 10V Power Supply Terminal, Max Output Current: 10mA; 1Group 24VPower Supply Terminal, Max Output Current: 100mA;
	Communication Terminals	Max Baud Rate 38400bit/s
Panel	5-Digit 8-Segment LED display	Display the frequency/alarm/Status and other information
	Monitoring Function	Set Value, Output Frequency, Feedback Value, Output Current, DC Bus Voltage, Output Voltage, Output Power, Output Terminals State, Input Terminals State, Input Analog Value, Analog B Output Value, History 1-3 Fault Records and Accumulated Working Hours;
	Indicator Light	Indicator Light FOR, REV, RPM, Hz, A, L/R display various states of Inverter;
Environment	Protection Level	IP20;
	Operation Temperature	-10°C~40°C, Over 40°C need bigger capacity inverter;
	Operation Humidity	5%-85%(95% No drops of water);
	Vibration	< 5.9m/S ² (0.6g);
	Highest altitude	1000m, Over 1000m need bigger power inverter;
Length of Motor Wire line	Shielding wire: 50m; Unshielding wire: 10m;	
Others	DC reactor	NO;
	Braking Unit	Built-in (built-in below 30KW, external for other power segments).