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TZ Automatic Voltage Stabilizer



Application

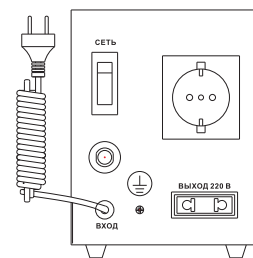
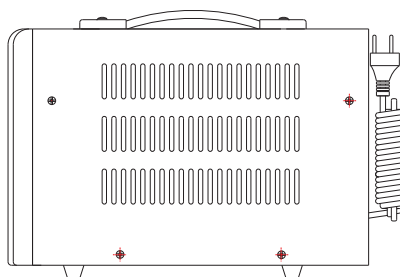
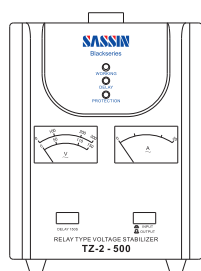
Model		TZ-2-500	TZ-2-1000	TZ-2-1500	TZ-2-2000	TZ-2-3000	TZ-2-5000	TZ-2-8000	TZ-2-10000
Power		500VA	1000VA	1500VA	2000VA	3000VA	5000VA	8000VA	10000VA
Input	Voltage Range	120V-260V							
	Frequency	50/60Hz							
Output	Voltage Range	220V							
	Precision	±8%							
Efficiency		95%							
Phase		Single Phase							
Indicator Status	WORKING	Green : indicating the power ON/OFF							
	DELAYING	Yellow : ON during delay; OFF when delay finish							
	UNUSUAL	Red : indicating protection of Over/Under-voltage ; OFF when protection finish							
Protection	Over-voltage Protection	YES							
	Under-voltage Protection	YES							
	Overload Protection	YES							
	High Temperature Protection	YES							
	Short Circuit Protection	YES							
Cooling	Fan	NO						YES	
Environmental	Operating temperature	-5℃～40℃							
	Humidity	<90%							
Physical	Machine Size(mm)	210x115x155	240x130x175	245x145x190	245x145x190	410x225x260	410x225x260	410x225x260	410x225x260
	N.W.(Kgs)	2.7	3.5	4.7	5.1	9.8	12.9	15.3	16.5

TZ Automatic Voltage Stabilizer

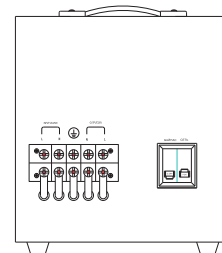
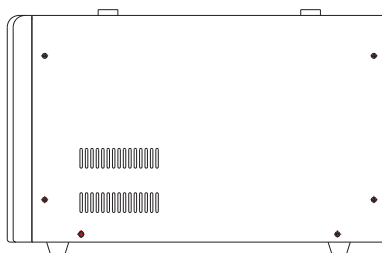
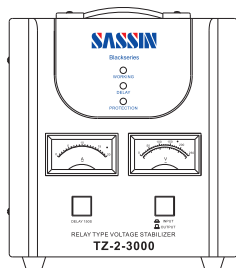
■ Main Technical Parameters

Connector Accessory Select	
$\leq 2000\text{VA}$:	$\geq 3000\text{VA}$:
 A  B  C  D  E  F	Terminal Blocks

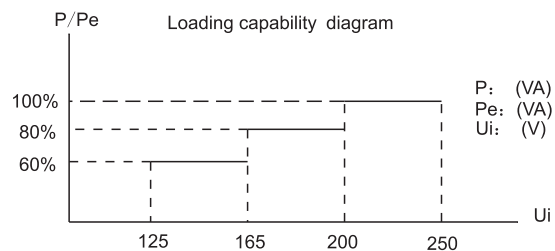
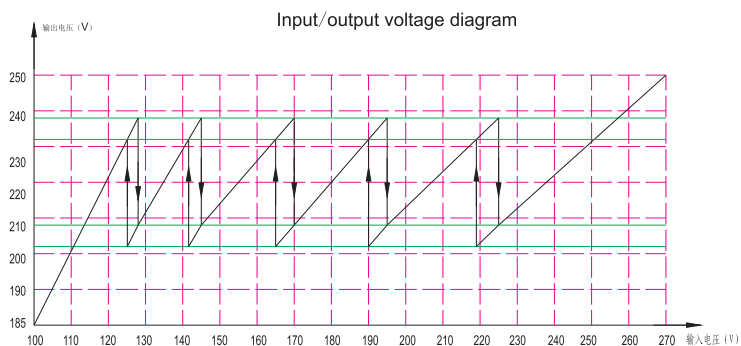
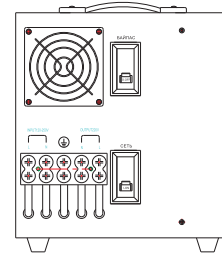
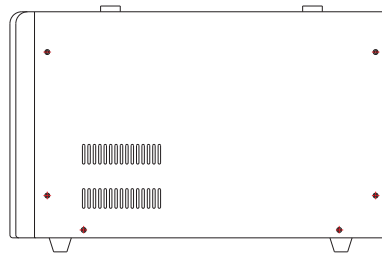
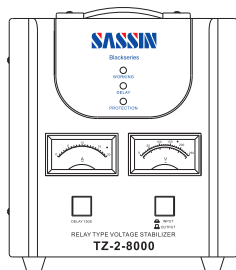
TZ-2-500~2000



TZ-2-3000~5000



TZ-2-8000~10000





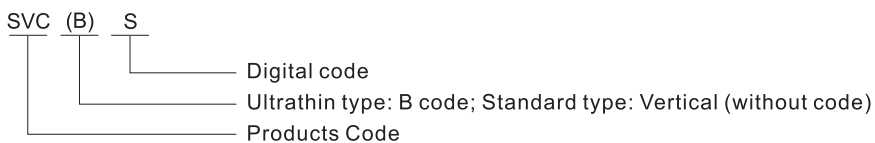
■ Application

After devoting great efforts into research and development, SASSIN has launched the SVC-S series of high precision and full automatic AC voltage stabilizer. It consists of many specific spare parts, including voltage regulating coil, servo-motor and automatic control circuit, etc. When power network is unstable or the load is changed, the automatic sampling control circuit will send signals to start the servo - motor to adjust the place of carbon brush moving on voltage regulating coil, so as to correct the output voltage into rated voltage range.

The power supply panel of this stabilizer is LED display in English. It has advantages of small size, with full functions and nice outlook, etc. The stabilizer is widely applied in regions where the wave or seasonal changes of the electric network and voltage have wide movements. This protective equipment is ideal for household appliances and precise instruments.

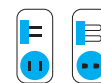
This product contains many functions, including wide range of input voltage, stable output voltage, high precision, long and short time delay setting, no additional output wave form distortion, short response time, with load analogue display, overload warning and alarming, earth leakage protection, etc.

■ Type and meanings



■ Main Technical Parameters

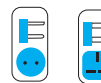
Specifications VA	0.5K、1K、1.5K、2K、3K、5K、8K、10K	Connector Accessory Select	
Input Voltage	AC 150V~250V AC 70V~130V	≤1500VA :	≥2000VA :
Output Voltage	AC 220V / 110V		
Output Precision	220V 1% 3% 5% 110V 2% 6% 10%		
Frequency	50Hz 60Hz		
Delay Time	Long 180s short 5s		
Over-voltage Protection	1)250V delay time 3S 2) 275V delay time 2S 3)295V delay time 1S 4) 305V delay time 0S		
Under-voltage Protection	170V delay time 3S		
Overload Protection	2.2 times rated		
Over Temperature Protection	90℃		
Load Power Factor	0.9		
Response Time	≤sec. against 10% input voltage deviation		
Waveform Distortion	No additional waveform distortion		
Withstand Voltage	1500V/1min		
Insulation Resistance	>5M Ω		
Insulation Grade	Level E		
Ambient Environment	Temperature -10℃~+40℃ Humidity: <90%		
Altitude	2000m		



A



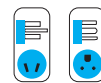
B



C



D



E



F

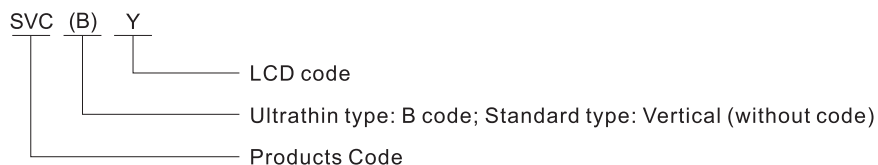
Terminal Blocks



■ Application

After carefully research and tests, SASSIN has launched the newly developed product "SVC (B) Y series of AC full automatic voltage stabilizer", which is controlled by SCM and contains the features of voltage stabilizing precision and time delay setting. The stabilizer has protective functions of time delay, inverse time delay over-voltage, under-voltage, overload, over-temperature and mechanical failure. The LCD with the blue screen back lighting and interface dynamic display is used to reveal the operational status of the stabilizer, such as its functional stability, voltage and current movements and loading condition, etc.. When the stabilizer is not functioning well, corresponding tips and warnings will appear on the interface and alert by different long/short alarm. This product includes other functions of wide range of input voltage, stable output voltage, high precision, long and short time delay setting, over-voltage protection subsection time delay, precise over-temperature protective value, no additional output waveform distortion and short response time, etc..

■ Type and meanings



■ Main Technical Parameters

Specifications	0.5K、1K、1.5K、2K、3K、(5K、8K、10K)	Connector Accessory Select	
Input Voltage Range	AC 150V~250V	≤1500VA :	≥2000VA :
Output Voltage	AC 220V	 A  B  C  D  E  F	Terminal Blocks
Voltage Precision	3%		
Leakage Action Current $I_{\Delta n0} < I_{\Delta n}$	15mA-30mA		
Leakage Action Time	<0.3s		
Frequency	50Hz/60Hz		
Delay Time	Long 180s short 5s		
Over-voltage Protective Value	246±4V		
Under-voltage Protective Value	184±4V		
Overload Warning and Alarming	Load current is bigger than rated current		
Over Temperature Protective Value	90℃		
Load Power Factor	0.8		
Response Time	≤3 sec. against 10% input voltage deviation		
Waveform Hand	No additional waveform hand		
Pressure Proof	1500V/1min		
Insulation Grade	E Level		
Ambient Environment	Temperature -10℃~+40℃ Humidity <90%		
Altitude	2000m		

SVC Automatic Voltage Stabilizer



SVC-500VA



SVC-1000VA



SVC-1500VA



SVC-2000VA



SVC-3000VA



SVC-5000VA



SVC-8000VA



SVC-10000VA

Application

SVC automatic voltage stabilizers use continuously variable auto-transformer, buck and boost transformer, AC synchronous motor, IC loop control system. It features low waveform distortion, high efficiency, high power factor. It can be widely used in places where voltage is unstable.

Specification

Input	160V~250V / 70V~130V	Connector Accessory Select	
Output	220V ± 3% / 110V ± 3%	≤1500VA :	≥2000VA :
Phase	Single phase	 A  B  C  D  E  F	Terminal Blocks
Frequency	50/60Hz		
Response time	within 1 sec. against 10% input voltage deviation		
Efficiency	≥ 90%		
Ambient temperature	-5~+40℃		
Relative humidity	< 95%		
Waveform distortion	Non-lack fidelity in waveform		

Model	SVC-500VA	SVC-1000VA	SVC-1500VA	SVC-2000VA	SVC-3000VA	SVC-5000VA	SVC-8000VA	SVC-10000VA
Output power	500VA	1000VA	1500VA	2000VA	3000VA	5000VA	8000VA	10000VA

SVC Single Phase Vertical Automatic Voltage Stabilizer



SVC-5000VA , 8000VA, 10000VA
Vertical (Pointer)

SVC-5000VA , 8000VA, 10000VA
Vertical (Digital display)



SVC-15000VA , 20000VA, 30000VA
Vertical (Pointer)

SVC-15000VA , 20000VA, 30000VA
Vertical (Digital display)

■ Vertical type

Model	SVC-5000VA	SVC-8000VA	SVC-10000VA	SVC-15000VA	SVC-20000VA	SVC-30000VA
Output power	5000VA	8000VA	10000VA	15000VA	20000VA	30000VA

SVC Three-Phase Automatic Voltage Stabilizer



SVC-3KVA



SVC-6KVA



SVC-9KVA



SVC-4.5KVA



SVC-15KVA



SVC-30KVA

Application

SVC Three-phase automatic voltage stabilizer has all the functions of single phase automatic voltage stabilizer. The stabilizer has three meters to indicate three phases separately, and a select switch connected with voltage meter to shift and observe the voltage of each phase.

Specification

- Computer
- Test equipment
- Lighting equipment
- Alarm and security system
- X-ray equipment
- Communication system
- Medical equipment
- Photographic processing equipment
- Numeric control machine tool
- Industrial robot
- Laboratory instrument
- Hi-Fi equipment

Input	Three-phase 280-430V
Output	Three-phase 380V $\pm$ 3%
Phase	Three-Phase
Frequency	50/60Hz
Response time	Within 1 sec. against 10% input voltage deviation
Efficiency	$\geq$ 90%
Ambient temperature	-5 ~+ 40℃
Relative humidity	< 95%
Waveform distortion	Non-lack fidelity in waveform
Insulation resistance	More than 5M Ω
Model	SVC-1.5KVA SVC-3KVA SVC-4.5KVA SVC-6KVA SVC-9KVA
	SVC-15KVA SVC-20KVA SVC-30KVA SVC-50KVA SVC-60KVA



DBW/SBW series single-phase and three-phase compensated voltage stabilizer

■ Application

DBW/SBW series single - phase and three-phase full automatic compensated voltage stabilizer (hereinafter referred to as voltage stabilizer) is designed for stabilizing AC voltage and made with Western Europe advanced technology and on the basis of our country national conditions . It can keep output voltage in steady state automatically when the power network voltage fluctuates or the load current varies. Compared with other voltage stabilizers, it has the advantage of large capacity, high efficiency, no wave distortion, stable voltage adjustment, suitability for kinds of loads, bearing instantaneous overload, working continually for long time, as well as free transferring between manual control and automatic control, etc. Besides, it is provided with protection against over-voltage, over current, phase failure and protection for phase sequence and has the following merits: small volume, light weight, convenient installation and reliable running and so on. It can be applied to large type electromechanical equipment, metal processing equipment , production line , construction device , elevator , medical equipment, equipment of light and textile industry, air-condition, TV set, household appliance and lighting used for industry, agriculture, traffic, military, railroad, scientific culture, etc, where need voltage stabilization.

■ Main Characteristic

Input voltage	Single-phase : $220V \pm 20\%$ or $220V \pm 30\%$ (please indicate when placing an order)
	Three-phase four-line: phase voltage $220 \pm 20\%$, line voltage $380V \pm 20\%$ or phase voltage $380 \pm 30\%$, line voltage $380V \pm 30\%$ (please indicate when placing an order)
Output voltage	Single phase: 220V Three phase: three-phase four-wire phase voltage 220V, wire voltage 380V
Accuracy of output voltage	2-5%(adjustable) Frequency: 50Hz/60Hz
Efficiency	$\geq 95\%$ (power class: more than 50KVA)
Environment temperature	$-5^{\circ}\text{C} \sim +40^{\circ}\text{C}$
Insulation resistance	$\geq 1\text{M}\Omega$
Electric Strength	Bear power frequency sine voltage 2,000V for 1 min without breakdown or flash over.
Overload Capacity	2 times rated current, keeping 1min
Waveform Distortion	No additive waveform distortion
Protection	Over-voltage, over-current, phase failure and machine fault, as well as phase sequence protection (single-phase and three-phase 150KVA below have no phase failure and are provided with phase sequence protection) .
Response Time	$\leq 1.5\text{S}$ (when outside voltage has 10% of change)
Model	DBW-10KVA DBW-15KVA DBW-20KVA DBW-25KVA DBW-30KVA DBW-40KVA DBW-50KVA DBW-60KVA DBW-70KVA DBW-80KVA DBW-100KVA DBW-120KVA DBW-150KVA DBW-180KVA DBW-200KVA
	SBW-10KVA SBW-15KVA SBW-20KVA SBW-30KVA SBW-50KVA SBW-60KVA SBW-80KVA SBW-100KVA SBW-120KVA SBW-150KVA SBW-180KVA SBW-200KVA SBW-2250KVA SBW-150KVA SBW-300KVA SBW-320KVA SBW-350KVA SBW-400KVA SBW-450KVA SBW-500KVA SBW-600KVA SBW-800KVA SBW-1000KVA SBW-1200KVA SBW-1600KVA SBW-1800KVA SBW-2000KVA SBW-2500KVA SBW-3000KVA SBW-3500KVA SBW-4000KVA SBW-5000KVA

TDGC2(J) / TSGC2(J) Voltage Regulator



■ Application

TDGC2(J) voltage regulator gives smooth output voltage from zero to the maximum value. All the models find popular applications in industries, scientific researches, particularly suited to serve as ancillary facilities for equipment such as various machine tools, transistor curve tracers, and analytical instruments in petroleum industry, etc where voltage regulation is required.

■ Specifications

Model	Capacity (kVA)	Phase	Frequency (Hz)	Input voltage (V)	Output voltage(V)	Max.output current (A)	Shape
TDGC2J-0.2/0.5(M)	0.2	1	50/60	110/220	0-250	0.36/0.8	Round
TDGC2J-0.25/0.5(M)	0.25					0.4/1	
TDGC2J-0.5/0.5(M)	0.5					0.88/2	
TDGC2J-0.5	0.5					0.88/2	
TDGC2J-1	1					1.6/4	
TDGC2J-2	2					3.2/8	Hexagon
TDGC2J-3	3					4.8/12	Round
TDGC2J-5	5					8/20	Octagon
TDGC2J-10	10					16/40	
TDGC2J-15	15					24/60	
TDGC2J-20	20					80	
TSGC2J-3	3	3	50/60	220/380	0-430	1.6/4	Hexagon
TSGC2J-6	6					3.2/8	
TSGC2J-10	10					5.4/13.4	
TSGC2J-15	15					20	Octagon
TSGC2J-20	20					28	
TSGC2J-30	30					40	

SKN-Z Pure Sine Wave Inverter



- Micro Processor Control
- Wide Input Frequency Range
- Pure Sine Wave
- Intelligent Automatic Voltage Regulating Technology
- Intelligent Automatic Voltage Charging Technology
- Over load, short circuit protection
- Over temperature protection
- Low battery protection
- Over voltage, Low voltage protection
- Special LED Display Design

Model	SKN-Z500	SKN-Z1000	SKN-Z2000	SKN-Z3000	SKN-Z4000	SKN-Z5000
Specification						
DC INPUT						
Input Voltage(Vdc)	12/24	24	24/48	48	48	48
Input Current(A)	50/25	50	100/50	75	100	125
Input DC Range(Vdc)	10~15/20~30	20~30/40~60		40~60		
AC BYPASS						
Input AC Range (Vac)	155~280V			165~265V		
Input Frequency Rang(Hz)	45~55Hz					
Input Current (A)	2.3	4.5	9.1	13.6	18.2	22.7
Charge Current	7~10A		13~17A		17~25A	
Transfer Time (ms)	≤4 ms					
AC OUTPUT						
Capacity (VA)	500	1000	2000	3000	4000	5000
Output Power(W)	350	700	1400	2100	2800	3500
Output Voltage(Vac)	220VAC~110VAC					
Output Frequency Rang(Hz)	50Hz~60Hz					
Output Current (A)	1.6	3.2	6.4	9.5	12.7	15.9
Voltage Precision(Vac)	220±3%					
Frequency Precision (Hz)	50±1/60±1%					
Wave Distortion(TCKJ)	≤3%					
Power Factor (PF)	0.7					
Overload Capacity	100%~120%, 25 mins, 120%~200%, 1 mins,>200%, 0.1 mins					
Inversion Efficiency	85%					
Bypass Transfer time (ms)	≤4 ms					
PROTECTION						
Protection	over temperature/ over load/ over voltage/ low battery / low voltage/ Input low/ high voltage/ short current protection					
AMBIENT						
Noise(dB)	≤40 (1 meter)					
Temperature	-20~45℃					
Humidity	0~95% (no condensation)					
Altitude(m)	≤1500					
DIMENSION						
Package L×W×H(mm)	520×240×327		600×335×475			
Weight(kg)	9.5	15	22	28	39	43.5

PCS Line-Interactive UPS



UPS

■ Main function

1. CPU control
2. Wide Input Voltage Range
3. High/Low Voltage Protection, Overload/Short Circuit Protection
4. Cool start computer even there is no main power
5. Automatic recharge even UPS is off
6. Automatic restart
7. Beeping Alarm on Battery, Battery Low and Overload
8. Beeping Selection
9. Intelligent Battery Management
10. Intelligent LCD Display
11. Smart RS232 & RJ11 & USB Option
12. Compatibility with generators

■ Technical parameter

Product	Requirements	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Power (VA)		PCS-500	PCS-650	PCS-800	PCS-1000	PCS-1200	PCS-1500
Input	Voltage	145V 290 VAC±5V					
	Frequency	50Hz±10%					
Output	Voltage (AC Mode)	190V-250VAC					
	Voltage (Inverter Mode)	220VAC±5%					
	Capacity	500VA/300W	650VA/360W	800VA/480W	1000VA/600W	1200VA/720W	1500VA/880W
	Frequency (Inverter Mode)	50Hz±0.5Hz					
	Transfer Time	2MS typical					
	Generator connection	Normal Working under the Generator					
	Waveform	modified-Sinewave					
	Protection	Spike & Surge Suppression	yes				
Over/Under Volt.		Switch to Bat. O/P when Mains over regulation range					
Over load/short circuit		Fuse & current limited for both Mains and Battery modes					
Battery	Type	Lead-Acid maintenance-free					
	Dc Bus	12V7.0Ah	12V9.0Ah	12V7.0Ah	12V9.0Ah		
	Number	1 PC			2 Purchase		
	Recharge time	8 hours ≥ 90%					
Physical	Back up time (one PC)	8-15mins	10-18mins	15-25mins	20-30mins	20-30mins	25-45mins
	Weight (KGS)	5	5.5	6.5	10.5	11	11.5
	Shipping Wt. (KG)	5.6	6	7	11	11.5	12
	Product Dimensions (mm)	335X95X160			355X120X195		
	Package Dimensions (mm)	375X170X200			420X190X250		
Soft ware	RS232 or USB option Windows & NT	Auto save & shut down					
Function	Cool start	UPS start the computer even there is no main power					
	Automatic Charge	Automatic charge when UPS is off					
	Automatic Restart	Automatic Restart if main power coming within one hour (UPS shutdown by Automatic)					
	Voltage display	220V/230V Optional following the real capacity					
	Frequency	50/60Hz Optional following the real					
	Beeping	During the battery mode, the beeping optional					
Efficiency	AC - AC	1					
	DC - AC	0.6					
Acoustic	Noise level	≤ 45dB					
Environmental	Temperature	-5 - 45 Degree C					
	Humidity	20% to 90%					
Power Outlets	No.	2 SOCKETS			3 SOCKETS		

SP Line-Interactive UPS



■ Main function

1. Micro Processor Control
2. Pure Sine Wave
3. Wide Input Voltage Range
4. Wide Input Frequency Range
5. Intelligent Automatic Voltage Regulating Technology
6. Intelligent Automatic Voltage Charging Technology
7. Intelligent Battery Management
8. Cool start computer even there is no main power
9. Automatic recharge even UPS is off
10. Over load, short circuit protection
11. Over temperature protection
12. Low battery protection
13. Over voltage, Low voltage protection
14. Compatibility with generators
15. Special LED or LCD (option) Display Design

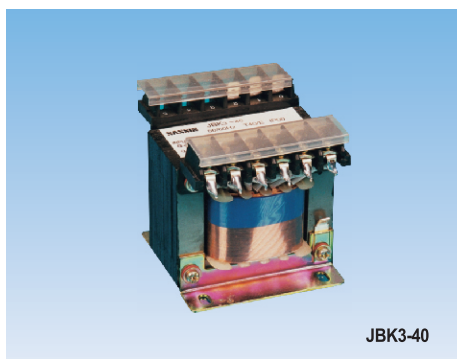
■ TECHNICAL PARAMETER

MODEL	SP-1KVA	SP-1KS	SP-2KVA	SP-2KS	SP-3KVA	SP-3KS
SPECIFICATION						
Input AC voltage range (Vac)	155~280V					
Input Frequency Range (Hz)	43-60Hz					
Number of phases	Three line in single phase					
Power factor	0.7					
Power capacity (VA)	1000/700W		2000/1400W		3000/2100W	
Output Voltage (AC mode)	220±10%					
Output Voltage (Inverter mode)	220±3%					
Output Frequency (Hz)	50±0.5% (battery mode)					
Wave form	Pure Sine wave THD<3%					
Transfer Time (ms)	≤ 4ms					
Overload capacity	load<125% 10Sec By pass, load >125% 5Sec By pass					
Battery	12V7AH	W/O	12V12AH	W/O	12V12AH	W/O
Battery voltage (Vdc)	24		48			
Back-up time	10 minutes	Random continue	18minutes	Random continue	12minutes	Random continue
Charging current (A)	5-8A		8-12A			
Full recharging time	<8 hours					
Communications interface	RS232 + Intelligent Slot					
Warning functions	Low battery abnormal utility power over UPS breakdown					
panel display	LED, LCD displaying operation conditions of UPS					
Noise (dB)	<45					
Protections	Low battery, overload, over voltage protection					
	short-circuit, low voltage, overheated protection					
Ambient temperature	-20℃- 40℃					
Relative humidity	0-95% no condensation					
Products Size (mm)	440x170x220		550x200x435			
Packing Size (mm)	550x270x340		750x335x600			
Packing Weight (KG)	22	17	43	22	49	28

JBK3 Machine Tool Control Transformer



JBK3-100



JBK3-40

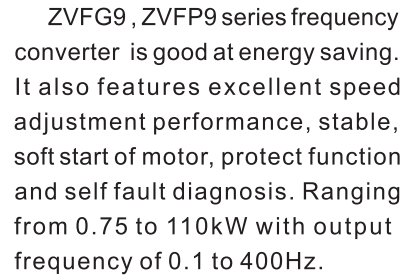
■ Application

JBK3 Series transformer for machine tool control is applicable to power supply control and power supply of working illumination and indication of machinery on AC 50-60Hz, rated output voltage under 220V, and rated input voltage under 500V.

■ Specification

Type	Rated capacity (VA)	Uel Rated input voltage (V)	Rated output voltage(V)		
			control	illumination	indication
JBK3-40	40	220±5% 380±5%	110 (127)	24 (36)	6 (12)
JBK3-63	63				
JBK3-100	100				
JBK3-160	160				
JBK3-250	250				
JBK3-400	400				
JBK3-630	630				
JBK3-1000	1000				
JBK3-1600	1600				
JBK3-2500	2500				
			Distribution of capacity for different winding may be according to the users' request.		

■ Product characteristic



Z VF GP 9 — 2 4 022 150 J
 With Optional device
 Maximum motor adapter power: 022=2.2kW
 Voltage of input: 2=200V 015=1.5kW
 4=400V
 The code of design
 G means type of ventilating(constant angular force)
 P means type of fan drive, water pump(square angular force)
 Converter adjustment
 Code of enterprise

Type of transducer		Input Voltage (V)	Max Adapter Moter(kw)	Rated output current(A)
ZVFG9	ZVFP9			
2005		Single phase200	0.5	2.5
2007		Single phase200	0.75	4
2011		Single phase200	1.1	6
2015		Single phase200	1.5	7
2022		Single phase200	2.2	10
2030		Single phase200	3.0	13
4007		Three phase400	0.75	2.5
4015		Three phase400	1.5	3.7
4022		Three phase400	2.2	5
4030		Three phase400	3.0	7
4040		Three phase400	4.0	9.5
4055		Three phase400	5.5	13
4075	4075	Three phase400	7.5	18
4110	4110	Three phase400	11	24
4150	4150	Three phase400	15	30
4185	4185	Three phase400	18.5	39
4220	4220	Three phase400	22	46
4300	4300	Three phase400	30	58
4370	4370	Three phase400	37	75
4450	4450	Three phase400	45	90
4550	4550	Three phase400	55	110
4750	4750	Three phase400	75	150
4930	4930	Three phase400	93	170
41100	41100	Three phase400	110	210

Frequency Converter

■ Standard technology specifications

Item		Reference
Input	Input voltage	Single phase 200V $\pm$ 15% three phase 400V $\pm$ 20%
	Input frequency	50/60Hz $\pm$ 5%
Output	Output voltage	Three-phase 0~input voltage
	Output frequency	0.1~400Hz
Capacity of overload		ZVF-G7: 150%rated current one minute ZVF-P7: 120%Rated current one minute
Control function	Adjustment	Space voltage complex or SVPWM control
	Output Accuracy	Max output frequency+0.1%
	Output frequency resolution factor	Data setting:0.1Hz analog setting: Max frequency $\times$ 0.1%
	angular force lifting	0~30%
	angular force compensation	0.0~5.0Hz
	Speed/release time	Straight and S curve line eight section speed/release the time set range 0.1~999.9s
	PWM carrier frequency	1~12KHz
	V/F curve line	Set the V/F curve arbitrarily
	Multistep run	DC brake frequency 0.0~25.0Hz torque 0~30% time 0.0~25.0S
Run function	Run control	Panel control terminal control exterior
	Frequency setting	Panel▲▼key analog voltage or potentiometer analog current terminal exterior lift/down
	Input signal	Positive Reverse command multi speed command run command accident input reset command count input and so on
	Output signal	Accident warning output(250V/2A contact) open electric pole output
Other function		Diagram run. PID restart after transient stop restart after accident frequency down up data locking crawl function absorbing function and so on
Protection function		Over current protection over voltage protection under voltage protection overload protection over heat protection output short circuit protection
Display	Run	Output frequency, output current, output voltage, DC bus bar voltage speed PID feedback PID, aim data counter data
	accident	Over Current over voltage, under voltage overload over heat, output short circuit, system abnormality fault of diagram code accident exterior deposit fault data fault and so on
Environment	Exterior connecting meter	Analogue frequency teller analogue ammeter(1mA) analogue voltmeter (DC10V)
	Work place	Indoor avoid the sunshine without dust without combustibile and corrosion gas
	Altitude	Below 1000 meters
	Temperature humidity	Temperature:-10 degree~+40 degree humidity:20%~90%RH(with water drip)
	Shake	Below 0.5G
	Storage temperature	-20 degree~+60 degree
Function	Protect grade	IP20
	Manner of cooling	Force fan cold



Soft Starter

■ Product characteristic:

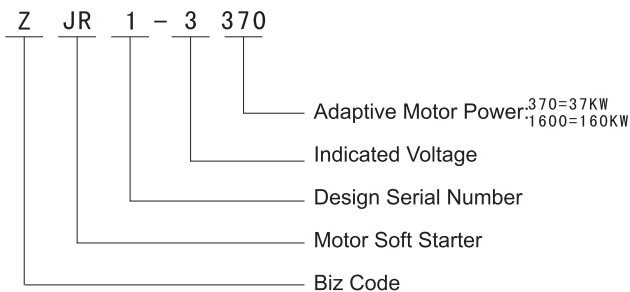
ZJR1- series soft starter device type can work with three-phase AC motor in the process of starting too big acceleration torque and power supply system, playing a protection from excessive current harvest dynamic impact role, which has the following characteristics:

1. 16 SCM control, intelligent all-digital display;
2. can be put into practice a soft starter control multiple motors;
3. four starting modes: Start voltage, current limiting starter, starting torque, torque+sudden danced dynamic;
4. free and soft shutdown, downtime 0 to 60 seconds can be arbitrary choice;
5. with the flow, over loading, lack phase, instantaneous stop, and other malfunction protection;
6. easy installation, simple operation, strong function and reasonable prices;

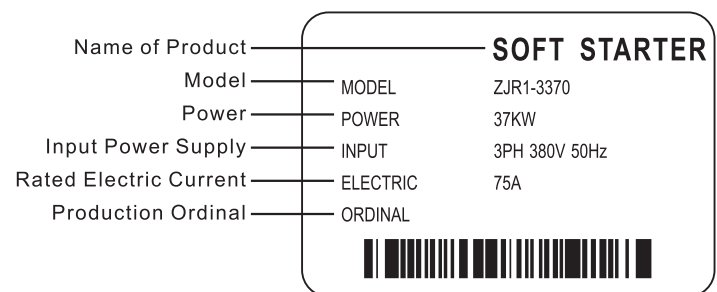
■ Scope of application:

ZJR1 series soft starter motor applies to centrifuges, blower, compressor, transport planes, mixer, rolling ball mill broken machines and mechanical equipment motor starter.

■ Demonstration of the Model:



■ Demonstration of the Specifications Label:



Soft Starter

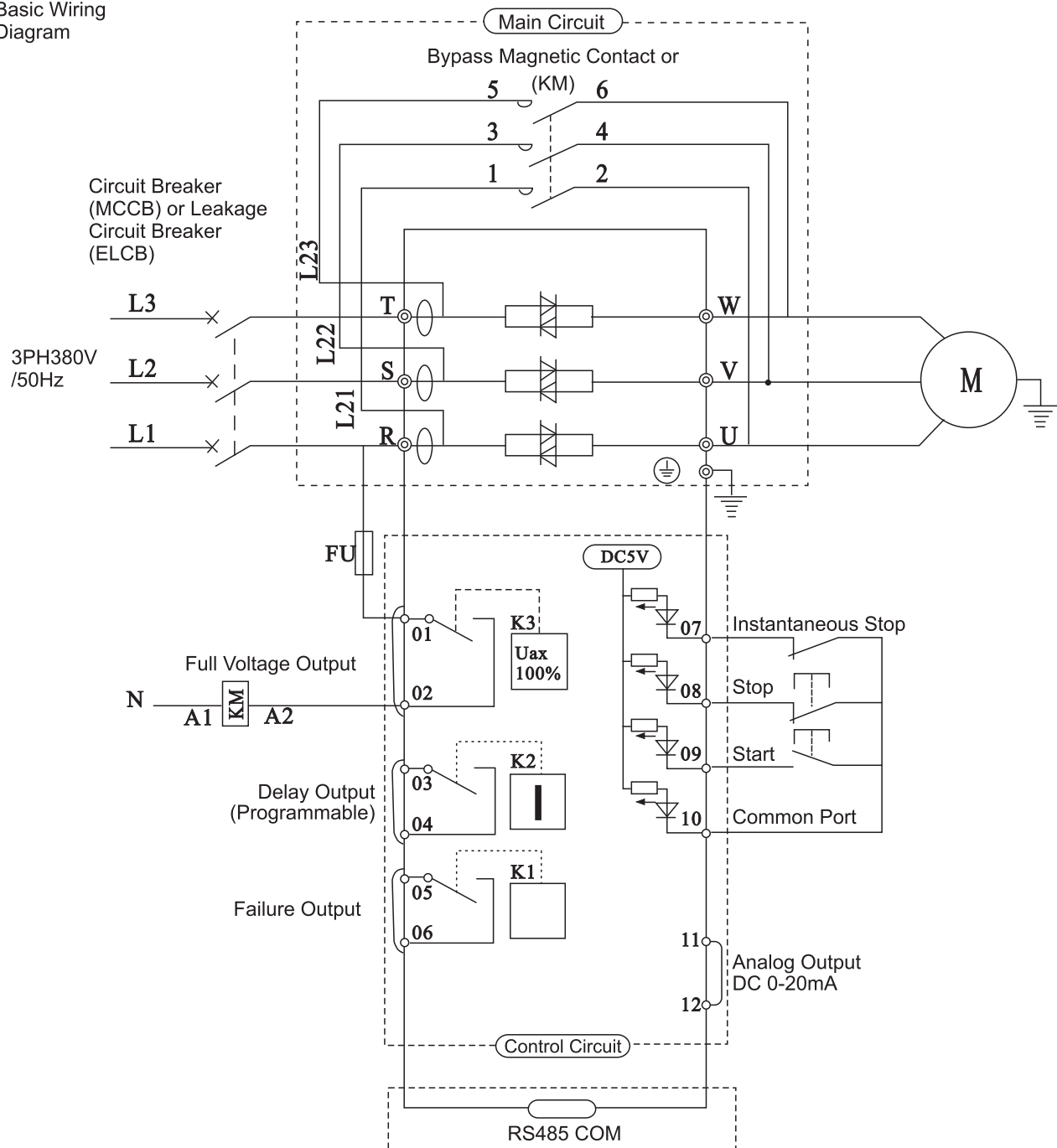
■ Technical Regulations

Item		Item Description
Input Power Supply	Input Voltage	Three-phase 380V-15%~415V+10%
	Frequency	50/60Hz
Adaptive Motor		Squirrel-cage three-phase asynchronous motor
Starting Times		It is recommended not to exceed 20 times per hour
Control Modes		1)Operation panel control; 2)Operation panel+external control; 3)External control; 4)External control +COM control; 5)Operation panel +external+COM control; 6)Operation panel+COM control; 7)COM control; 8)No start or stop operation.
Start Modes		1) Current-limiting start; 2)Voltage ramp start; 3)Kickstart+current-limiting start; 4)Kickstart+voltage ramp start; 5)Current ramp start; 6)Voltage current-limiting double closed-loopstart.
Stop Modes		1) Soft stop; 2)Free stop.
Protective Functions		1) Open loop protection for external instantaneous stop terminals; 2) Over-heat protection for soft starter; 3) Protection for too long starting time; 4) Input open phase protection; 5) Output open-phase protection; 6) Unbalanced three-phase protection; 7) Starting over current protection; 8) Running over load protection; 9) Undervoltage protection for power voltage; 10) Over voltage protection for power voltage; 11) Protection for fault parameter setting; 12) Load short circuit protection; 13) Autorestart or incorrect wiring protection; 14) Incorrect wiring protection of external control stop terminals.
Ambient	Place to be used	Indoor location with good ventilation free from corrosive gas and conductive dust.
	Altitude	Below 1,000M. Derating should be performed before use if the altitude is higher than 1,000M.
	Ambient Temperature	-10~+40℃
	Ambient Humidity	≤90%RH without dew condensation.
	Vibration	<0.5G
Structure	Protection Class	IP20<0.5G
	Cooling Pattern	Natural wind cooling.

Soft Starter

■ Wiring Diagram:

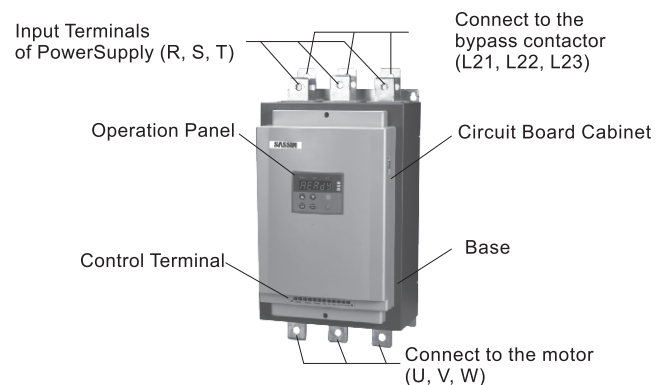
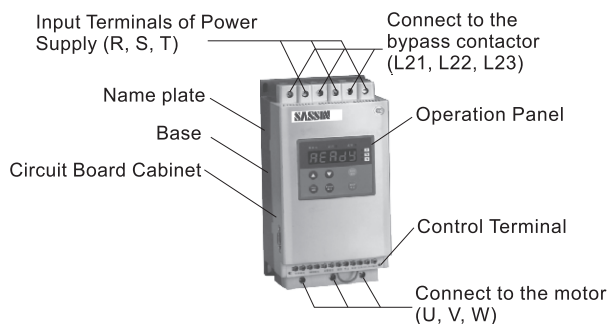
Basic Wiring
Diagram



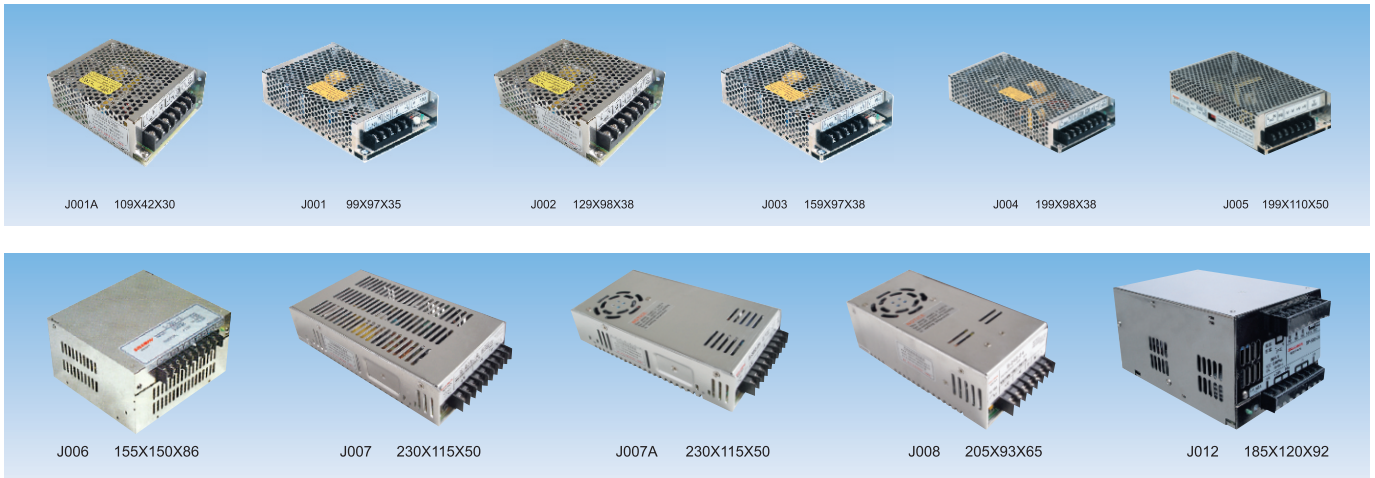
Soft Starter

■ Schedule of Models & Specifications:

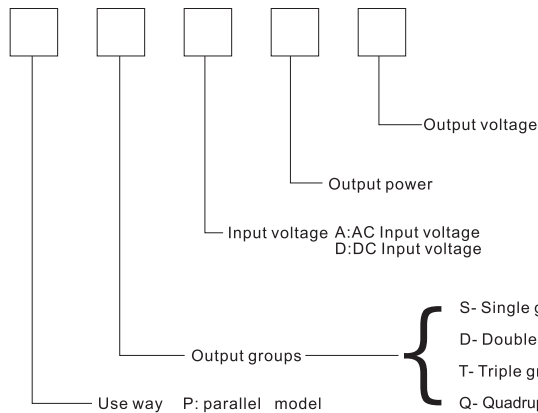
Model	Max Adaptive Motor Power(KW)	Input Voltage(V)	Rated Current(A)	Weight of Type Z (Kg)
ZJR1-3055	5.5	380	11	3.5
ZJR1-3075	7.5	380	15	3.5
ZJR1-3110	11	380	22	3.5
ZJR1-3150	15	380	30	3.5
ZJR1-3185	18.5	380	37	3.5
ZJR1-3220	22	380	43	3.5
ZJR1-3300	30	380	60	3.5
ZJR1-3370	37	380	75	3.5
ZJR1-3450	45	380	50	3.5
ZJR1-3550	55	380	110	3.5
ZJR1-3750	75	380	150	25
ZJR1-3900	90	380	180	25
ZJR1-31100	100	380	220	25
ZJR1-31320	132	380	264	25
ZJR1-31600	160	380	320	25
ZJR1-32000	200	380	400	25
ZJR1-32500	250	380	500	35
ZJR1-32800	280	380	560	35
ZJR1-33150	315	380	630	35
ZJR1-34000	400	380	800	45
ZJR1-35000	500	380	1000	50



Switching Power Supply



Type code



	U1	U2	U3	U4	U5	U6
D Series	5V,12V	5V,24V	5V,15V	12V,24V	±12V	±15V
T Series	±5V,12V	5V,±12V	5V,±15V	5V,12V,24V	3.3V,5V,12V	
Q Series		±5V,±12V	±5V,±15V	5V,±12V,24V	±6V,±15V	5V,±15V,24V
	U7	U8	U9	U10	U11	
Q Series	3.3V,±5V,12V	3.3V,5V,±12V	3.3V,5V,±15V	3.3V,5V,24,-12V	3.3V,5V,24,-15V	
	A1	A2	A3	A4	A12	
AC110	AC220	AC36	AC48	Ac110、220 general		
D1	D2	D3	D4	D12		
DC110V	DC220V	DC36	DC48	DC110V、220 general		

Eg: SA2-50-12 means that it's a power supply of input voltage is AC220V single-group output, power is 50W, and output voltage is DC12V.

AC-DC Single group output

Type	Power	Input	DC Output current(A)													Function	Safety standard	Outlet
	W	(bak1)	3V	5V	6V	9V	12V	15V	24V	27V	33V	36V	40V	44V	48V	(bak2)	(bak3)	(picture)
S□ -15-□	15	S		3			1.3		0.7							AHK		J001
S□ -15F-□	15	F		3			1.3		0.7							AHK		J001A
S□ -25-□	25	F		5			2.1		1.1							ABHK	UTE	J001
S□ -35-□	35	S		7			3		1.5							AHK		J002
S□ -40-□	40	F		8			3.5	2.8	1.8							ABHK	UTE	J002
S□ -50-□	50	S		10		5.6	4.2	3.4	2.1						1	AHK	UTE	J003
S□ -60-□	60	F		12			5		2.5							ABHK		J003
S□ -75-□	75	F		15			6.2		3							ABHK	UTE	J003
S□ -100-□	100	S		20		10	8.5		4.5					2.3	2	AHK	UTE	J004
S□ -100F-□	100	F		20			8.5	6.7	4.5						2.2	ABK	UTE	J004
S□ -145-□	145	S	30	25			12	9.7	6				3.6			ABHK		J004
S□ -150-□	150	S		30	25		12.5		6.5							ABHK	UTE	J005
S□ -200-□	200	S		40			16.5	13	8.3	7.4		5.6			4.2	ABCHK		J006
S□ -201-□	200	S		40			16.5	13	8.3	7.4					4.2	ABCHK		J007
S□ -240-□	240	A		40			18		10							ABCDHK		J008
S□ -320-□	320	S		50			25	20	12.5	11					6.5	ABCDHK	UC	J007A
S□ -350-□	350	S		50			29		14.6						7.3	ABCDHK	UTE	J007A
S□ -500-□	500	F					40		20						10	ABCDHK		J012

Switching Power Supply

AC-DC Double group output

Type	Power	Input	DC Output current(A)							Function	Safety standard	Outlet
	W	1(bak1)	5V	-12V	12V	-24V	24V	3.8V	48V	(bak2)	3(bak3)	(picture)
D-30U1	30	S	4		1					AK	UTE	J002
D-30U2	30	S	2.2				1			AK	UTE	J002
D-30U5	30	S		1.3	1.3					AK	UTE	J002
D-50U1	50	S	6		2					AK		J003
D-50U2	50	S	6				1			AK		J003
D-50U5	50	S		2	2					AK	UTE	J003
D-50U7	50	S				1	1			AK		J003
D-60-U1	60	F	4		3					ABK	UTE	J003
D-60-U2	60	F	3				1.8			ABK	UTE	J003
D-100-U0	100	J			1			20		ABK	UTE	J005
D-100U1	100	J	10		4					ABK	UTE	J005
D-100U1a	100	J	1		6					ABK	UTE	J005
D-100U2	100	J	6				3			ABK	UTE	J005
D-100U2a	100	J	2				4			ABK	UTE	J005
D-120U1	120	S	12		5					ABK	UTE	J005
D-120U2	120	S	6				4			ABK	UTE	J005
D-120U4	120	S			1.2		2.5			ABK	UTE	J005
D-120U4a	120	S			1		5			ABK	UTE	J005
D-210U1	210	J	6		15					ABK	UTE	J005
D-210U4	210	J			5		5			ABK	UTE	J005

AC-DC Triple group output

Type	Power	Input	DC Output current(A)									Function	Safety standard	Outlet
	W	(bak1)	-5V	5V	-10V	10V	-12V	12V	15V	-15V	24V	(bak2)	(bak3)	(picture)
T-30U1	30	S	0.5	3				1				AK	UTE	J002
T-30U2	30	S		3			0.5	1				AK		J002
T-40-U ₁	40	F	0.5	3				2				ABK	UTE	J002
T-40-U ₂	40	F		3			0.5	2				ABK	UTE	J002
T-40-U ₃	40	F		3					1.5	0.5		ABK	UTE	J002
T-50U1	50	S	1	7				1				AK	UTE	J003
T-50-U2	50	S		5			1	1				AK		J003
T-50-U3	50	S		4					1	1		AK		J003
T-50-U4	50	S		3				1			1	AK	UTE	J003
T-60-U1	60	F	0.5	5				2.5				ABK		J003
T-60-U2	60	F		5			0.5	2.5				ABK	UTE	J003
T-60-U3	60	F		5					2.5	0.5		ABK		J003
T-100-U ₃	100	S		10					2.5	1		A	UTE	J005
T-100-U ₆	100	S		6				2			2	A	UTE	J005
T-130-U7	130	J						3	3	3		ABK	UTE	J003

AC-DC Quadruple group output

Type	Power	Input	DC Output current(A)											Function	Safety standard	Outlet
	W	1(bak1)	5V	-5V	9V	-9V	-12V	12V	15V	-15V	24V	27V	48V	2(bak2)	(bak3)	(picture)
Q _□ -60-□	60	F	5.5	0.5			0.5	2						ABK	U.C.	J003
Q _□ -120-U ₂	120	S	11	1			4	4						ABK	UTE	J005
Q _□ -120-U ₃	120	S	10	1					3.5	1				ABK	UTE	J005
Q _□ -120-U ₄	120	S	8				1	2			2			ABK	UTE	J005
Q _□ -100-U ₂	100	S	13	1			1	2						A	UTE	J005
Q _□ -100-U ₄	100	S	8				0.5	1			2			A	UTE	J005
Q _□ -180-U ₄	180	S	10				1	2			5			AK	UTE	J006

Bak1: 85-132/170-264VAC choice ways: A: Auto-switch, F: Full range, S: Choose by switch, J: Choose by jump line, X: Fixation

Bak2: Function A: Over load & short circuit protection, B: Output over voltage protection, C: High temperature protection

D: Auto switch control for radiator fan (extend lifetime), E: Signal for power inspection, F: Output TTL signal control,

G: Both series and parallel connection, H: Series connection, I: Charge protection, J: Output Voltage inspection,

K: Output display by LED

Bak3: Safety standards T: Attain Germanic TUV EN60950(IEC950 UC1950), U: American UL1012, E: Accord with European EMC LVD(CE).

Note in particular: 1, Other specification types are under developing 2, Can produce by customer's request in particular