

SC Series Lateral Stand Power Transformers

LI012V1/2008

1. Features

- ① The fully-encapsulated board can be assembled by lateral stand and has a perfect outline, making it easy to use.
- ② It is compact in structure, solid, vibration-proof, moisture-proof, flame-resistant, and has high dielectric strength;
- ③ It has low idle current, high power factor, a wide range of over primary voltage, and a built-in temperature protector, making it safer to use.
- ④ It has welding slips in the output terminals, making it compatible with standard plugs and easy and flexible to use in applications.

2. Ambient Conditions:

- ① Ambient temperature: $-25^{\circ}\text{C}\sim+70^{\circ}\text{C}$;
- ② Relative humidity: $\leq 90\%$ at 40°C ;
- ③ Atmospheric pressure: $860\sim 1060\text{mbar}$ ($650\sim 800\text{mmHg}$ approximately)

3. Insulation Rating: Class F (155°C)

4. Safety Features

- ① Dielectric resistance: $>1000\text{M}\Omega$ in normal condition;
- ② Insulation withstand voltages: 3750V (50HZ) / 1 min ;
- ③ Insulation impact strength: Continuously 20 times impact of $6\text{KV}/50\mu\text{S}$;
- ④ Fire retardancy: In conformity with UL94-Vo ;

5. Safety Certification:

6. Rated Power: 3VA, 12VA, 60VA



7. Rating:

① Standard series:

Primary: $220\text{V} \pm 15\% \sim 25\%$ 50Hz/60Hz

Secondary:

Single output: 6V, 7.5V, 9V, 12V, 15V, 18V, 21V, 24V, 27V

Double output: $2 \times 6\text{V}$, $2 \times 7.5\text{V}$, $2 \times 9\text{V}$, $2 \times 12\text{V}$, $2 \times 15\text{V}$, $2 \times 18\text{V}$, $2 \times 21\text{V}$, $2 \times 24\text{V}$, $2 \times 27\text{V}$

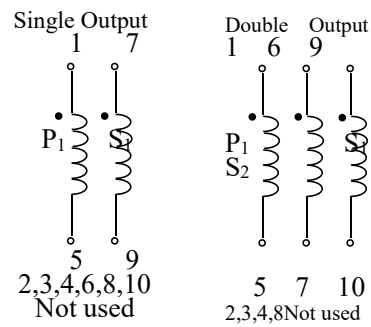
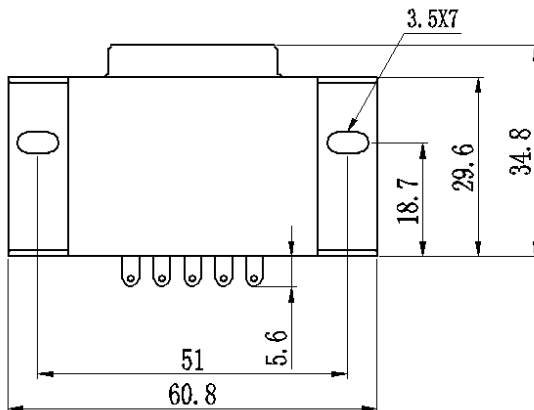
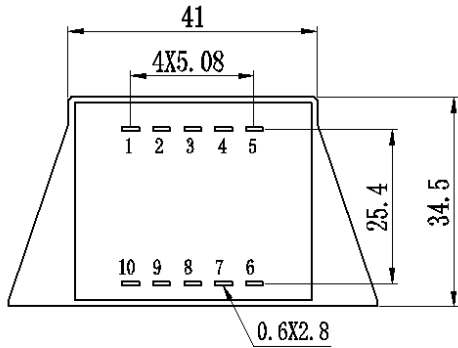
② Non-standard series: It can be customized based on customer's requirements.

8. Universal Technical Parameters of SC Series Standard Product

Power	Model	Idle Current	Idle Loss	Voltage Regulation Ratio	Temperature Rise	Weight (g)	Dimension (mm) ³ L×W×H
3VA	SC3	$\leq 15\text{ mA}$	$\leq 0.35\text{W}$	$\leq 15\%$	$\leq 15^{\circ}\text{C}$	165	$60.8 \times 34.5 \times 34.8$
12VA	SC12	$\leq 25\text{ mA}$	$\leq 1.0\text{W}$	$\leq 20\%$	$\leq 20^{\circ}\text{C}$	340	$75 \times 38.5 \times 43$
60VA	SC60	$\leq 65\text{ mA}$	$\leq 1.5\text{W}$	$\leq 9\%$	$\leq 40^{\circ}\text{C}$	1050	$94 \times 63 \times 60.5$

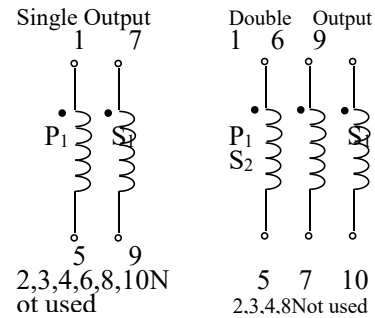
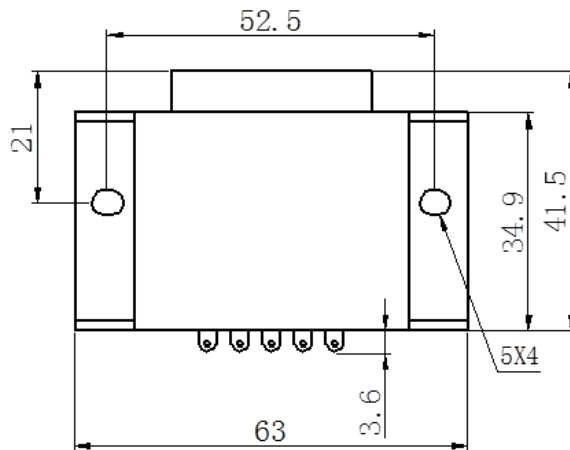
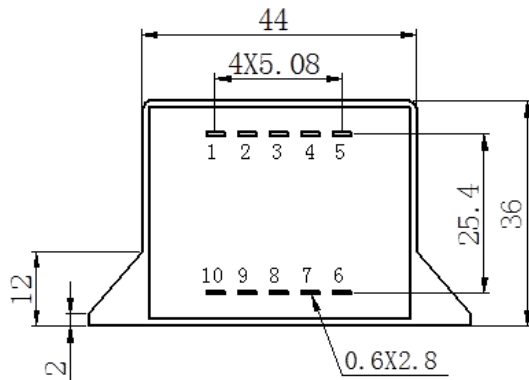
9. Outline, Installation Dimension and Detailed Technical Parameters

1. SC3(3VA) (Tolerance±0.5mm)



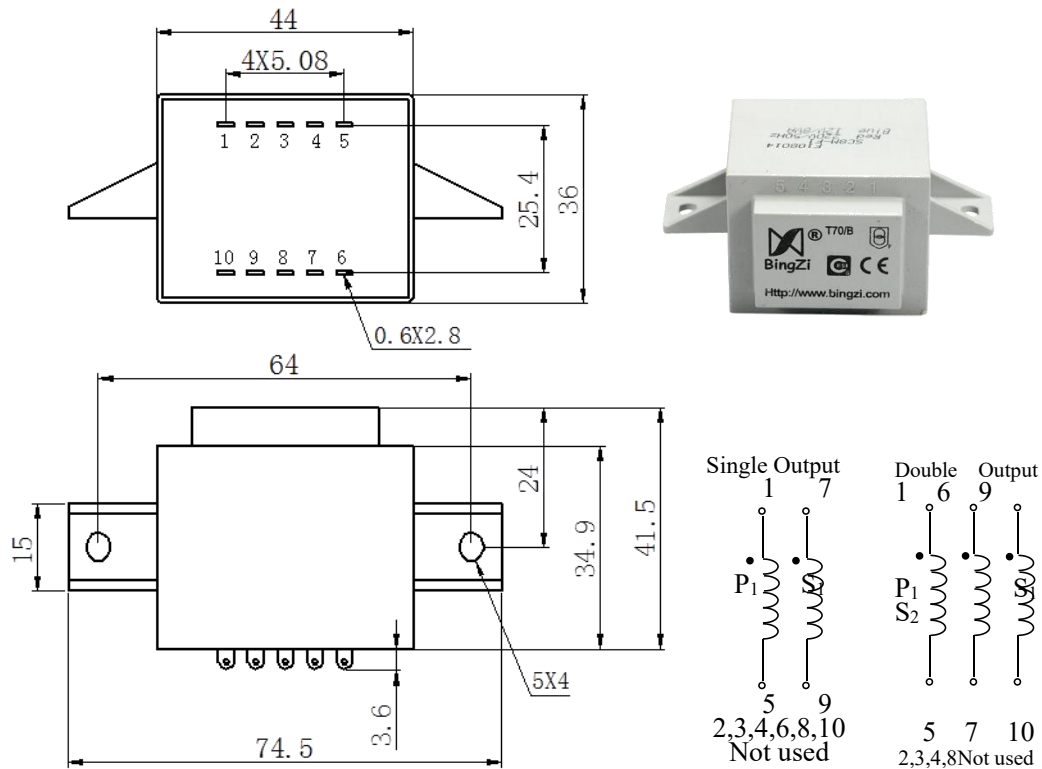
Model	Primary Voltage	Primary Operating Current		Secondary Voltage		Secondary Current (mA)	Equivalent Resistance(Ω)			
		Idle	Full Load	Idle Voltage	Full-load Voltage					
SC3-01	Rating220V Max.242V Frequency50Hz	≤15mA	≤28mA	7.1V	6V	500	2.3			
SC3-01B				8.8V	7.5V	400	3.5			
SC3-02				10.7V	9V	333	5.6			
SC3-03				14.3V	12V	250	9.6			
SC3-04				17.6V	15V	200	14.1			
SC3-05				21.3V	18V	166.6	20.8			
SC3-05B				25.3V	21V	142.8	30.6			
SC3-06				28.7V	24V	125	38			
SC3-06B				32.3V	27V	111	48.4			
SC3-07				Rating220V Max.242V Frequency50Hz	≤15mA	≤28mA	2×7.1V	2×6V	2×250	2×4.5
SC3-07B							2×8.9V	2×7.5V	2×200	2×7.2
SC3-08							2×10.7V	2×9V	2×166.6	2×10.4
SC3-09	2×14.2V	2×12V	2×125				2×17.7			
SC3-10	2×17.7V	2×15V	2×100				2×27.4			
SC3-11	2×21.5V	2×18V	2×83				2×40.7			
SC3-11B	2×25.3V	2×21V	2×71				2×58.5			
SC3-12	2×28.7V	2×24V	2×62.5				2×75.4			
SC3-12B	2×32.4V	2×27V	2×55	2×97						

2. SC8(8VA) (Tolerance ±0.5mm)



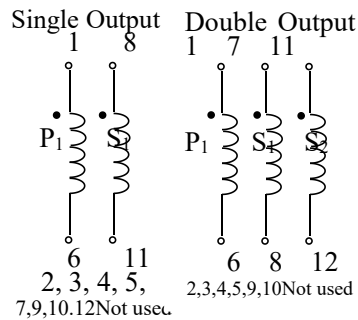
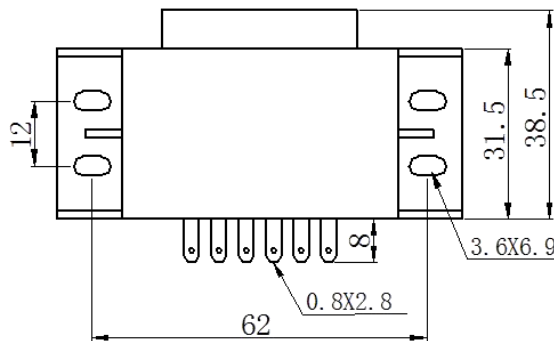
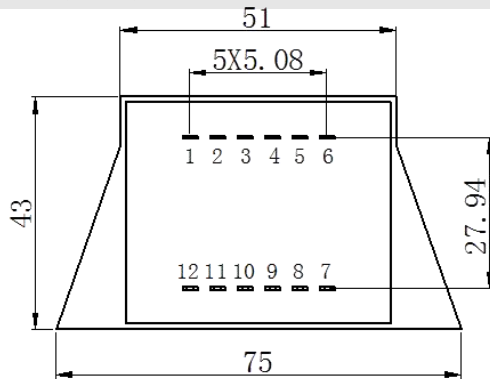
Model	Primary Voltage	Primary Operating Current		Secondary Voltage		Secondary Current (mA)	Equivalent Resistance(Ω)
		Idle	Full Load	Idle Voltage	Full-load Voltage		
SC8-01	Rating220V Max.275V Frequency50Hz	≤16mA	≤45mA	7.8V	6V	1333	1.35
SC8-01B				9.6V	7.5V	1067	1.97
SC8-02				11.6V	9V	889	2.92
SC8-03				15.4V	12V	667	5.2
SC8-04				19.5V	15V	553	8.4
SC8-05				22.7V	18V	444	11.5
SC8-05B				26.7V	21V	381	15.7
SC8-06				29.6V	24V	333	19.5
SC8-06B				34.1V	27V	296	26
SC8-07	Rating220V Max.275V Frequency50Hz	≤16mA	≤45mA	2×7.5V	2×6V	2×667	2×2.2
SC8-07B				2×9.6V	2×7.5V	2×533	2×4
SC8-08				2×11.8V	2×9V	2×444	2×6.3
SC8-09				2×15.5V	2×12V	2×333	2×10.5
SC8-10				2×19.4V	2×15V	2×267	2×16.5
SC8-11				2×23.1V	2×18V	2×222	2×23.4
SC8-11B				2×26.9V	2×21V	2×191	2×32
SC8-12				2×30V	2×24V	2×167	2×39.5
SC8-12B	2×34.5V	2×27V	2×148	2×50.7			

3. SC8M(8VA) (Tolerance $\pm 0.5\text{mm}$)



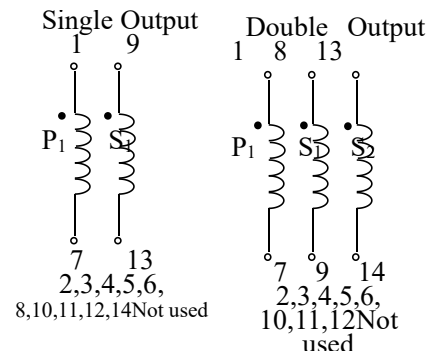
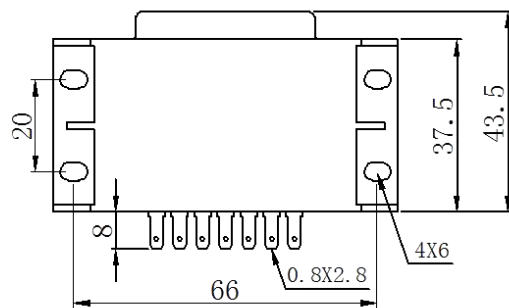
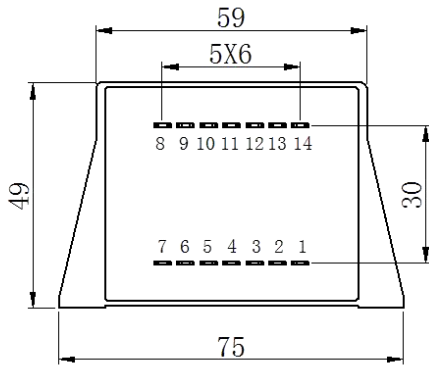
Model	Primary Voltage	Primary Operating Current		Secondary Voltage		Secondary Current (mA)	Equivalent Resistance(Ω)
		Idle	Full Load	Idle Voltage	Full-load Voltage		
SC8M-01	Rating220V Max.275V Frequency50Hz	$\leq 16\text{mA}$	$\leq 45\text{mA}$	7.8V	6V	1333	1.35
SC8M-01B				9.6V	7.5V	1067	1.97
SC8M-02				11.6V	9V	889	2.92
SC8M-03				15.4V	12V	667	5.2
SC8M-04				19.5V	15V	553	8.4
SC8M-05				22.7V	18V	444	11.5
SC8M-05B				26.7V	21V	381	15.7
SC8M-06				29.6V	24V	333	19.5
SC8M-06B				34.1V	27V	296	26
SC8M-07				Rating220V Max.275V Frequency50Hz	$\leq 16\text{mA}$	$\leq 45\text{mA}$	2 \times 7.5V
SC8M-07B	2 \times 9.6V	2 \times 7.5V	2 \times 533				2 \times 4
SC8M-08	2 \times 11.8V	2 \times 9V	2 \times 444				2 \times 6.3
SC8M-09	2 \times 15.5V	2 \times 12V	2 \times 333				2 \times 10.5
SC8M-10	2 \times 19.4V	2 \times 15V	2 \times 267				2 \times 16.5
SC8M-11	2 \times 23.1V	2 \times 18V	2 \times 222				2 \times 23.4
SC8M-11B	2 \times 26.9V	2 \times 21V	2 \times 191				2 \times 32
SC8M-12	2 \times 30V	2 \times 24V	2 \times 167				2 \times 39.5
SC8M-12B	2 \times 34.5V	2 \times 27V	2 \times 148	2 \times 50.7			

4. SC12(12VA) (Tolerance $\pm 0.5\text{mm}$)



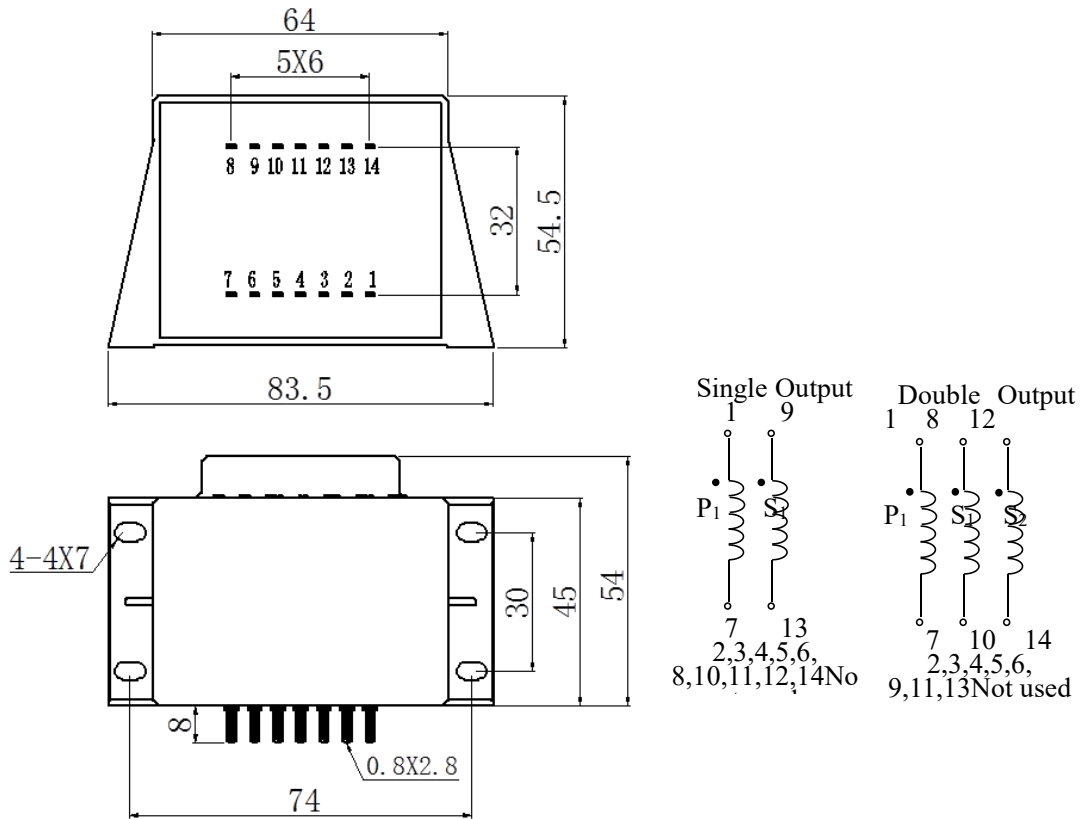
Model	Primary Voltage	Primary Operating Current		Secondary Voltage		Secondary Current (mA)	Equivalent Resistance(Ω)
		Idle	Full Load	Idle Voltage	Full-load Voltage		
SC12-01	Rating220V Max.275V Frequency50Hz	$\leq 25\text{mA}$	$\leq 75\text{mA}$	7.5V	6V	2000	0.8
SC12-01B				9.5V	7.5V	1600	1.3
SC12-02				11.3V	9V	1333	1.8
SC12-03				15.0V	12V	1000	3.2
SC12-04				19.3V	15V	800	5.4
SC12-05				22.8V	18V	666	7.3
SC12-05B				26.9V	21V	571	10.5
SC12-06				29.8V	24V	500	12.4
SC12-06B				34.6V	27V	444	17.3
SC12-07				Rating220V Max.275V Frequency50Hz	$\leq 25\text{mA}$	$\leq 75\text{mA}$	2x7.6V
SC12-07B	2x9.5V	2x7.5V	2x800				2x2.6
SC12-08	2x11.5V	2x9V	2x666				2x3.6
SC12-09	2x15.3V	2x12V	2x500				2x6.5
SC12-10	2x19.0V	2x15V	2x400				2x9.6
SC12-11	2x22.9V	2x18V	2x333				2x14.5
SC12-11B	2x26.7V	2x21V	2x285				2x19.8
SC12-12	2x30.6V	2x24V	2x250				2x26.3
SC12-12B	2x34.4V	2x27V	2x222	2x32.1			

5. SC20(20VA) (Tolerance $\pm 0.5\text{mm}$)



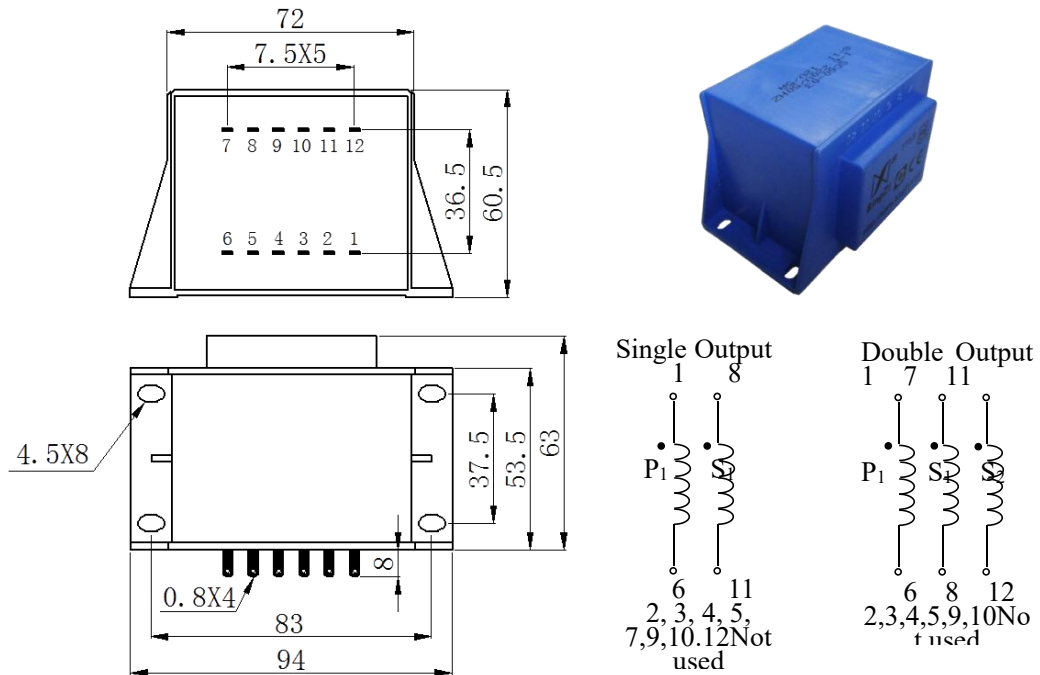
Model	Primary Voltage	Primary Operating Current		Secondary Voltage		Secondary Current (mA)	Equivalent Resistance(Ω)
		Idle	Full Load	Idle Voltage	Full-load Voltage		
SC20-01	Rating220V Max.275V Frequency50Hz	$\leq 40\text{mA}$	$\leq 130\text{mA}$	6.6V	6V	3333	0.27
SC20-01B				8.5V	7.5V	2667	0.42
SC20-02				10.3V	9V	2222	0.65
SC20-03				13.8V	12V	1667	1.11
SC20-04				16.9V	15V	1333	1.4
SC20-05				20.7V	18V	1111	2.55
SC20-05B				24.3V	21V	952	3.57
SC20-06				27.7V	24V	833	4.56
SC20-06B				31.1V	27V	741	5.72
SC20-07				Rating220V Max.275V Frequency50Hz	$\leq 40\text{mA}$	$\leq 130\text{mA}$	2 \times 6.6V
SC20-07B	2 \times 8.5V	2 \times 7.5V	2 \times 1333				2 \times 0.80
SC20-08	2 \times 10.3V	2 \times 9V	2 \times 1111				2 \times 1.39
SC20-09	2 \times 13.8V	2 \times 12V	2 \times 833				2 \times 2.35
SC20-10	2 \times 17.1V	2 \times 15V	2 \times 667				2 \times 3.45
SC20-11	2 \times 20.7V	2 \times 18V	2 \times 556				2 \times 5.22
SC20-11B	2 \times 24.3V	2 \times 21V	2 \times 476				2 \times 7.16
SC20-12	2 \times 27.7V	2 \times 24V	2 \times 417				2 \times 9.45
SC20-12B	2 \times 31.1V	2 \times 27V	2 \times 370	2 \times 11.75			

6. SC40(40VA) (Tolerance $\pm 0.5\text{mm}$)



Model	Primary Voltage	Primary Operating Current		Secondary Voltage		Secondary Current (A)	Equivalent Resistance(Ω)
		Idle	Full Load	Idle Voltage	Full-load Voltage		
SC40-01	Rating220V Max.242V Frequency50Hz	$\leq 35\text{mA}$	$\leq 213\text{mA}$	6.8V	6V	6.666	0.126
SC40-01B				8.6V	7.5V	5.333	0.21
SC40-02				10.2V	9V	4.444	0.28
SC40-03				13.6V	12V	3.333	0.48
SC40-04				17.0V	15V	2.666	0.78
SC40-05				20.6V	18V	2.222	1.2
SC40-05B				24.1V	21V	1.904	1.63
SC40-06				27.4V	24V	1.666	2.04
SC40-06B				30.6V	27V	1.481	2.5
SC40-07				Rating220V Max.242V Frequency50Hz	$\leq 35\text{mA}$	$\leq 213\text{mA}$	2 \times 6.4V
SC40-07B	2 \times 8.6V	2 \times 7.5V	2 \times 2.666				2 \times 0.4
SC40-08	2 \times 10.2V	2 \times 9V	2 \times 2.222				2 \times 0.6
SC40-09	2 \times 13.6V	2 \times 12V	2 \times 1.666				2 \times 1.0
SC40-10	2 \times 17.0V	2 \times 15V	2 \times 1.333				2 \times 1.6
SC40-11	2 \times 20.6V	2 \times 18V	2 \times 1.111				2 \times 2.3
SC40-11B	2 \times 23.6V	2 \times 21V	2 \times 0.952				2 \times 3.0
SC40-12	2 \times 27.4V	2 \times 24V	2 \times 0.833				2 \times 4.3
SC40-12B	2 \times 30.6V	2 \times 27V	2 \times 0.740				2 \times 5.3

7. SC60(60VA) (Tolerance $\pm 0.5\text{mm}$)



Model	Primary Voltage	Primary Operating		Secondary Voltage		Secondary Current (A)	Equivalent Resistance(Ω)
		Idle	Full Load	Idle Voltage	Full-load Voltage		
SC60-01	Rating220V Max.275V Frequency50Hz	$\leq 65\text{mA}$	$\leq 200\text{mA}$	6.6V	6V	10	0.06
SC60-01B				8.2V	7.5V	8	0.1
SC60-02				9.9V	9V	6.67	0.15
SC60-03				13.2V	12V	5	0.26
SC60-04				16.5V	15V	4	0.375
SC60-05				20.1V	18V	3.33	0.63
SC60-05B				23.4V	21V	2.86	0.84
SC60-06				26.5V	24V	2.5	1
SC60-06B				29.8V	27V	2.22	1.35
SC60-07				Rating220V Max.275V Frequency50Hz	$\leq 65\text{mA}$	$\leq 200\text{mA}$	2 \times 6.6V
SC60-07B	2 \times 8.2V	2 \times 7.5V	2 \times 4				2 \times 0.2
SC60-08	2 \times 9.9V	2 \times 9V	2 \times 3.33				2 \times 0.3
SC60-09	2 \times 13.2V	2 \times 12V	2 \times 2.5				2 \times 0.48
SC60-10	2 \times 16.5V	2 \times 15V	2 \times 2				2 \times 0.8
SC60-11	2 \times 19.8V	2 \times 18V	2 \times 1.67				2 \times 1.11
SC60-11B	2 \times 23.1V	2 \times 21V	2 \times 1.43				2 \times 1.54
SC60-12	2 \times 26.4V	2 \times 24V	2 \times 1.25				2 \times 1.95
SC60-12B	2 \times 29.8V	2 \times 27V	2 \times 1.11				2 \times 2.5