TL-200T-D SERIES

Product features:

115/230VAC AC input

Up to 85% efficiency

Auxiliary output voltage adjustable

Built-in auxiliary power supply

DC output indication

Protection type: short circuit/overload

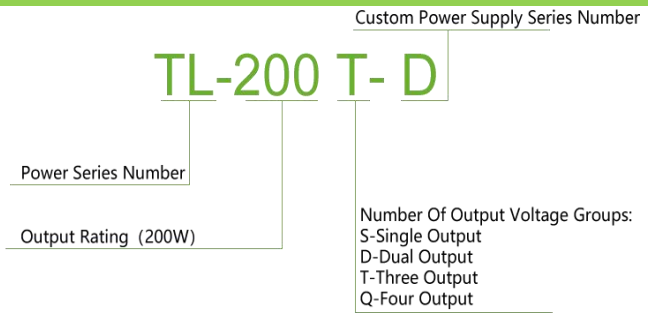
Optional moisture barrier spray

5-year warranty

Product Description:

The TL-200T-D is a 200W three-output chassis-type AC-to-DC power supply. The input voltage range of this power supply is 115/230VAC, and it can provide DC output voltages of 36V 10A, 24V 5A, and 42V 3A simultaneously for a long time. The operating ambient temperature can reach 50℃.

Model Naming Rules:

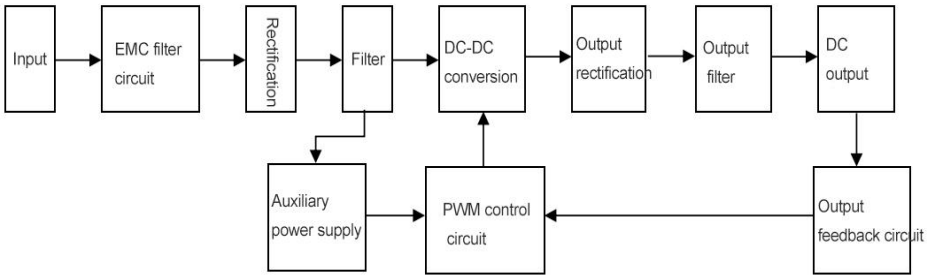


Model		TL-200T-D		
Output Characteristics	DC Voltage	36V	24V	42V
	Rated Current	10A	5A	3A
	Current Range	0-10A	0-5A	0-3A
	Rated Power	360W	120W	126W
	Ripple and Noise(maximum) Note 2	300mVp-p	300mVp-p	300mVp-p
	Voltage Accuracy Note 3	±2%	±2%	±2%
	Linear Rate Of Adjustment	±0.5%	±0.5%	±2%
	Load Adjustment Ratio	±2%	±2%	±2%
	Start-up, Rise Time	300 milliseconds, 50 milliseconds (at full load).		
	Hold Time (Typ.)	16ms/230VAC		
Input Characteristics	Voltage Range	115/230VAC		
	Frequency Range	47-63Hz		
	Efficiency (Typ.)	85%		
	AC Current (Typ.)	5A/220VAC		
	Surge Current (Typ.)	35A/230VAC		
	Leakage Current	< 1.0mA/250VAC		

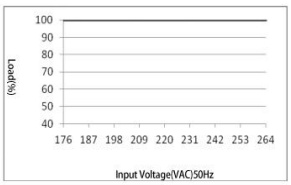
Protecting Characteristics	**Overloading**	110% - 180% of the rated output power.		
		Protection type: Shutdown and limit mode, which can be automatically restored after the abnormal removal of the load.		
	Overvoltage	Overvoltage range: 36V - 42V; 42V - 49V; 24V - 32V.		
		Protection type: Shut off the output voltage and restore it after restarting.		
	Overtemperature	Shut off the output voltage and it will be automatically restored after the temperature drops.		
Functional Characteristics	**Output Voltage Adjustment**	The output voltage can be adjusted within the range of plus or minus 10% of the rated output.		
	Auxiliary Power	14V@0.5A（±5%）		
Environmental Characterization	**Operating Temperature**	-20℃ to +60℃ (refer to the "derating curve").		
	Operating Humidity	20% to 90% RH, non-condensing.		
	Storage Temperature、Humidity	-40~+85℃，10~95% RH		
	Temperature Coefficient	±0.02%/℃（0-50℃）		
	Vibration Resistance	10 to 500 Hz, 2G for 10 minutes per cycle, 60 minutes for each of the X, Y, and Z axes.		
Safety Regulations And Compatibility Note 5	**Safty Norm**	UL 62368-1, TUV EN 55032, EAC TP TC 004, CCC GB4943.1, BSMI CNS14336-1 Certificated by		
	Pressure Resistance	1/P-0/P:3KVAC　1/P-FG:2KVAC　0/P-FG:0.5KVAC		
	Insulation Resistance	1/P-0/P,1/P-FG,0/P-FG:100M　Ohms/500VDC/25°C/70% RH		
	Electromagnetic Compatibility Emission	Parameter	Standard	Test level/Remarks
		Conducted	EN55032(CISPR32)/EN55011(CISPR11)	Class B
		Radiated	EN55032(CISPR32)/EN55011(CISPR11)	Class A
		Harmonic Current	EN61000-3-2	
		Voltage Flicker	EN61000-3-3	
	EMC Immunity	EN55024，EN61204-3，EN61000-6-2，CCC GB17625.1，GB/T9254，BSMI CNS13438		
		Parameter	Standard	Test level/Remarks
		ESD	EN61000-4-2	Level 3,8kV air; Level 2,4kV contact
		Radiated	EN61000-4-3	Level 3
		EFT/Burst	EN61000-4-4	Level 3
		Surge	EN61000-4-5	Level 4,4Kv/Line-Earth;Level 3,2KV/Line-Line
		Conducted	EN61000-4-6	Level 3
		Magnetic Field	EN61000-4-8	Level 4
		Voltage Dips and Interruptions	EN61000-4-11	>95% dip 0.5 periods,30% dip 25 periods，>95% interruptions 250 periods
Other Parameters	**MTBF**	~313.1Khrs TelcordiaSR-332(Bellcore)；~116.75Khrs MIL-HDBK-217F(25°C)		
	Outline Dimension	180*106*40mm		
	Packing Size	210*116*55mm		
	Net Weight	0.5kg		
	Gross Weight	0.55kg		

Application Areas	Industrial control or automation devices Test and measurement instruments Laser-related machines Aging equipment RF applications
Remark	1. Unless otherwise specified, all specification parameters are measured under the conditions of an input of 230VAC, rated load and an ambient temperature of 25°C. 2. Measurement method for ripple and noise: Use a 12-inch twisted pair wire, and at the same time, connect capacitors of 0.1 μF and 47 μF in parallel at the terminal. Conduct the measurement under a bandwidth of 20 MHz. 3. Accuracy: It includes setting error, linear regulation and load regulation. 4. In case of low-voltage input, derated output is required. Please refer to the output derating curve for details. 5. The power supply should be regarded as a part of the components within the system. All EMC tests are carried out with the test samples installed on a metal iron plate which is 1 mm in thickness, 360 mm in length and 360 mm in width. The power supply needs to be verified in terms of electromagnetic compatibility in combination with the terminal equipment. 6. When the altitude exceeds 2,000 meters (6,500 feet), for the fanless models, the ambient temperature decreases at a rate of 3.5 °C per 1,000 meters, while for the models with fans, the ambient temperature decreases at a rate of 5 °C per 1,000 meters.

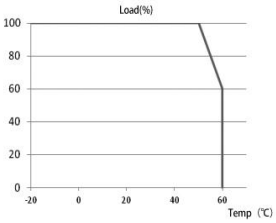
■ Schematic



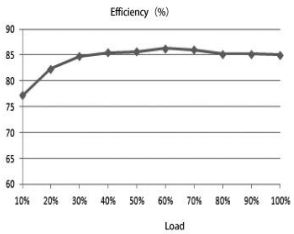
Static characteristic curve:



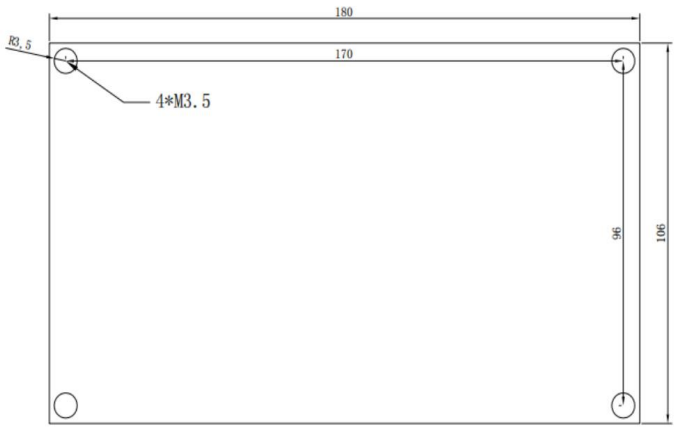
Reduction curve:



Load-efficiency (%):



■ Mounting Dimensions
Unit: mm



Hole Number	Recommended Screw Models	Maximum Penetration Depth L	Recommended Installation Torque
①	M3	4mm	4-6Kgf-cm
②	M3	4mm	4-6Kgf-cm

TL-300Q-A SERIES

Product features:

176-264V AC input (Note: CN2 can be switched to 115/230Vac by connecting to a switch)

Up to 85% efficiency

Auxiliary output voltage adjustable

Built-in auxiliary power supply

DC output indication

Protection type: short circuit/overload

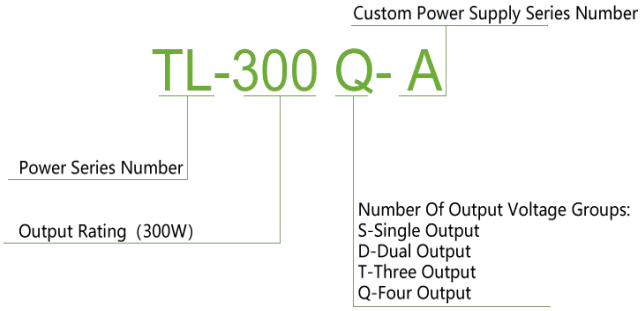
Optional moisture barrier spray

5-year warranty

Product Description:

The TL-300Q-A is a 300W four-output bare-board type AC-to-DC power supply. The input voltage range of the entire series is 176 - 264VAC. It can simultaneously provide DC outputs of 36V 8A, 24V 6A, 42V 6A, and 24V 6A. The operating temperature can reach 50℃.

Model Naming Rules:

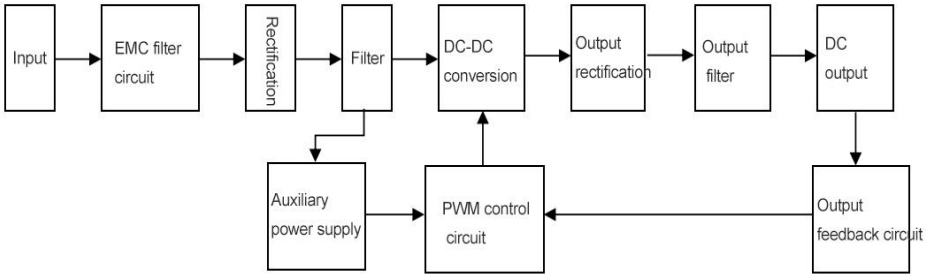


Model		TL-300Q-A			
Output Characteristics	DC Voltage	36V	24V	42V	24V
	Rated Current	8A (Max)	6A (Max)	6A (Max)	6A (Max)
	Current Range	0-8A	0-6A	0-6A	0-6A
	Rated Power	288W	144W	252W	144W
	Ripple and Noise(maximum) Note 2	300mVp-p	200mVp-p	400mVp-p	200mVp-p
	Voltage Accuracy Note 3	±1%	±1%	±1%	±1%
	Linear Rate Of Adjustment	±1%	±1%	±1%	±1%
	Load Adjustment Ratio	±0.5%	±0.5%	±0.5%	±0.5%
	Start-up, Rise Time	300 milliseconds, 50 milliseconds (at full load).			
	Hold Time (Typ.)	16ms/230VAC			
Input Characteristics	Voltage Range	176-264VAC			
	Frequency Range	47-63Hz			
	Efficiency (Typ.)	85%			
	AC Current (Typ.)	2.2A/220VAC			
	Surge Current (Typ.)	40A/230VAC			
	Leakage Current	< 2.0mA/240VAC			

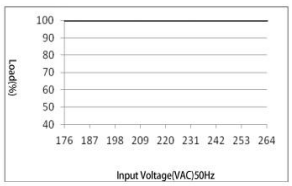
Protecting Characteristics	**Overloading**	130% - 180% of the rated output power.		
		Protection type: constant voltage limit mode, automatic recovery after abnormal load removal.		
Functional Characteristics	**Output Voltage Adjustment**	36V fixed output, 2-way 24V output adjustable within ±10%, 42V ±5% adjustable.		
	Auxiliary Power	12V@0.5A（±5%）		
Environmental Characterization	**Operating Temperature**	-20℃ to +60℃ (refer to the "derating curve").		
	Operating Humidity	20% to 90% RH, non-condensing.		
	Storage Temperature、Humidity	-40~+85℃，10~95% RH		
	Temperature Coefficient	±0.02%/℃（0-50℃）		
	Vibration Resistance	10 to 500 Hz, 2G for 10 minutes per cycle, 60 minutes for each of the X, Y, and Z axes.		
Safety Regulations And Compatibility Note 5	**Safty Norm**	UL 62368-1, TUV EN 55032, EAC TP TC 004, CCC GB4943.1, BSMI CNS14336-1 Certificated by		
	Pressure Resistance	1/P-0/P:3KVAC　1/P-FG:2KVAC　0/P-FG:0.5KVAC		
	Insulation Resistance	1/P-0/P,1/P-FG,0/P-FG:100M　Ohms/500VDC/25°C/70% RH		
	Electromagnetic Compatibility Emission	Parameter	Standard	Test level/Remarks
		Conducted	EN55032(CISPR32)/EN55011(CISPR11)	Class B
		Radiated	EN55032(CISPR32)/EN55011(CISPR11)	Class A
		Harmonic Current	EN61000-3-2	
		Voltage Flicker	EN61000-3-3	
	EMC Immunity	EN55024，EN61204-3，EN61000-6-2，CCC GB17625.1，GB/T9254，BSMI CNS13438		
		Parameter	Standard	Test level/Remarks
		ESD	EN61000-4-2	Level 3,8kV air; Level 2,4kV contact
		Radiated	EN61000-4-3	Level 3
		EFT/Burst	EN61000-4-4	Level 3
		Surge	EN61000-4-5	Level 4,4Kv/Line-Earth;Level 3,2KV/Line-Line
		Conducted	EN61000-4-6	Level 3
		Magnetic Field	EN61000-4-8	Level 4
		Voltage Dips and Interruptions	EN61000-4-11	>95% dip 0.5 periods,30% dip 25 periods, >95% interruptions 250 periods
Other Parameters	**MTBF**	~313.1Khrs TelcordiaSR-332(Bellcore)；~116.75Khrs　MIL-HDBK-217F(25°C)		
	Outline Dimension	220*140*55mm		
	Packing Size	242*154*62mm		
	Net Weight	0.75kg		
	Gross Weight	0.8kg		

Application Areas	Industrial control or automation devices Test and measurement instruments Laser-related machines Aging equipment RF applications
Remark	1. Unless otherwise specified, all specification parameters are measured under the conditions of an input of 230VAC, rated load and an ambient temperature of 25°C. 2. Measurement method for ripple and noise: Use a 12-inch twisted pair wire, and at the same time, connect capacitors of 0.1 μF and 47 μF in parallel at the terminal. Conduct the measurement under a bandwidth of 20 MHz. 3. Accuracy: It includes setting error, linear regulation and load regulation. 4. In case of low-voltage input, derated output is required. Please refer to the output derating curve for details. 5. The power supply should be regarded as a part of the components within the system. All EMC tests are carried out with the test samples installed on a metal iron plate which is 1 mm in thickness, 360 mm in length and 360 mm in width. The power supply needs to be verified in terms of electromagnetic compatibility in combination with the terminal equipment. 6. When the altitude exceeds 2,000 meters (6,500 feet), for the fanless models, the ambient temperature decreases at a rate of 3.5 °C per 1,000 meters, while for the models with fans, the ambient temperature decreases at a rate of 5 °C per 1,000 meters.

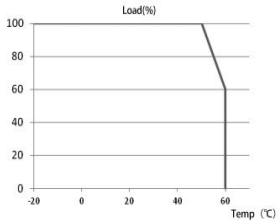
■ Schematic



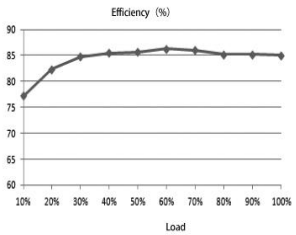
Static characteristic curve:



Reduction curve:

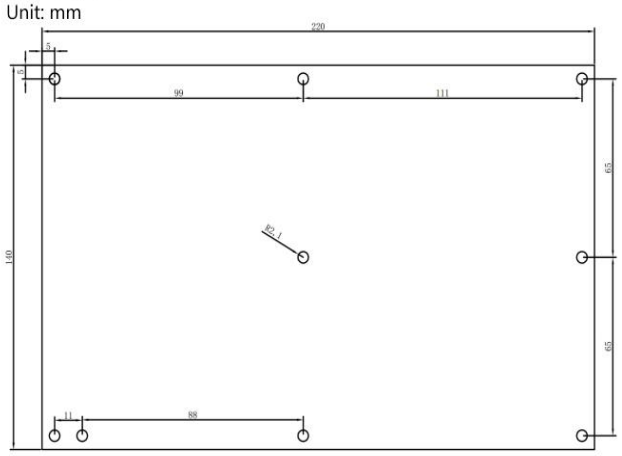


Load-efficiency (%):



■ Mounting Size

Unit: mm



Hole number	Recommended screw model	Maximum penetration depth L	Recommended installation torque
①	M3	6mm	4-6Kgf-cm
②	M3	4mm	4-6Kgf-cm
③	M3	2mm	4-6Kgf-cm

TL-400Q-A SERIES

Product features:

176-264V AC input (Note: CN1 can be switched to 115/230Vac by connecting to a switch)

Up to 85% efficiency

Auxiliary output voltage adjustable

Built-in auxiliary power supply

DC output indication

Protection type: short circuit/overload

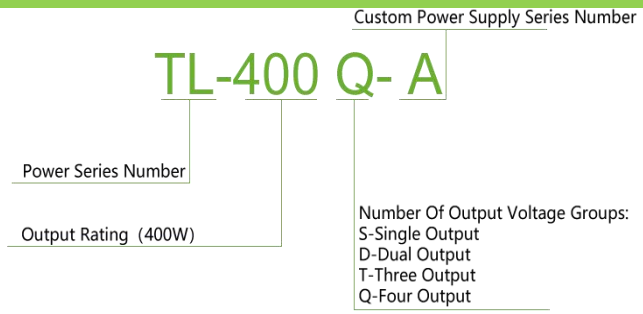
Optional moisture barrier spray

5-year warranty

Product Description:

The TL-400Q-A is a 400W four-output bare-board type AC-to-DC power supply. The input voltage range of the entire series is 176 - 264VAC. It can simultaneously provide DC outputs of 36V 11A, 24V 6A, 42V 9A, and 24V 6A. The operating temperature can reach 50℃.

Model Naming Rules:

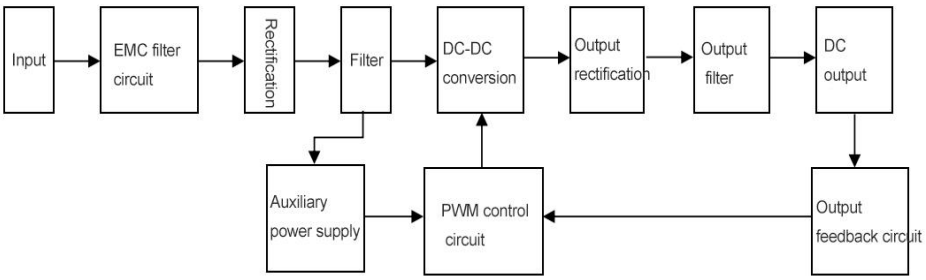


Model		TL-400Q-A			
Output Characteristics	DC Voltage	36V	24V	42V	24V
	Rated Current	11A(Max)	12A(Max)	9A(Max)	12A(Max)
	Current Range	0-11A	0-12A	0-9A	0-12A
	Rated Power	396W	144W	378W	144W
	Ripple and Noise(maximum) Note 2	300mVp-p	200mVp-p	400mVp-p	200mVp-p
	Voltage Accuracy Note 3	±1%	±1%	±1%	±1%
	Linear Rate Of Adjustment	±1%	±1%	±1%	±1%
	Load Adjustment Ratio	±0.5%	±0.5%	±0.5%	±0.5%
	Start-up, Rise Time	300 milliseconds, 50 milliseconds (at full load).			
	Hold Time (Typ.)	16ms/230VAC			
Input Characteristics	Voltage Range	176-264VAC			
	Frequency Range	47-63Hz			
	Efficiency (Typ.)	85%			
	AC Current (Typ.)	2.2A/220VAC			
	Surge Current (Typ.)	40A/230VAC			
	Leakage Current	< 2.0mA/240VAC			

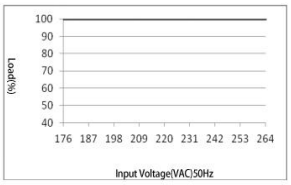
Protecting Characteristics	**Overloading**	110% - 140% of the rated output power.		
		Protection type: constant voltage limit mode, automatic recovery after abnormal load removal.		
Functional Characteristics	**Output Voltage Adjustment**	36V fixed output, 2-way 24V output adjustable within ±10%, 42V ±5% adjustable.		
	Auxiliary Power	12V@0.5A（±5%）		
Environmental Characterization	**Operating Temperature**	-20℃ to +60℃ (refer to the "derating curve").		
	Operating Humidity	20% to 90% RH, non-condensing.		
	Storage Temperature、Humidity	-40~+85℃，10~95% RH		
	Temperature Coefficient	±0.02%/℃（0-50℃）		
	Vibration Resistance	10 to 500 Hz, 2G for 10 minutes per cycle, 60 minutes for each of the X, Y, and Z axes.		
Safety Regulations And Compatibility Note 5	**Safty Norm**	UL 62368-1, TUV EN 55032, EAC TP TC 004, CCC GB4943.1, BSMI CNS14336-1 Certificated by		
	Pressure Resistance	1/P-0/P:3KVAC　1/P-FG:2KVAC　0/P-FG:0.5KVAC		
	Insulation Resistance	1/P-0/P,1/P-FG,0/P-FG:100M　Ohms/500VDC/25°C/70% RH		
	Electromagnetic Compatibility Emission	Parameter	Standard	Test level/Remarks
		Conducted	EN55032(CISPR32)/EN55011	Class B
		Radiated	EN55032(CISPR32)/EN55011	Class A
		Harmonic	EN61000-3-2	
		Voltage Flicker	EN61000-3-3	
	EMC Immunity	EN55024，EN61204-3，EN61000-6-2，CCC GB17625.1，GB/T9254，BSMI CNS13438		
		Parameter	Standard	Test level/Remarks
		ESD	EN61000-4-2	Level 3,8kV air; Level 2,4kV
		Radiated	EN61000-4-3	Level 3
		EFT/Burst	EN61000-4-4	Level 3
		Surge	EN61000-4-5	Level 4,4Kv/Line-Earth;Level 3,2KV/Line-Line
		Conducted	EN61000-4-6	Level 3
		Magnetic Field	EN61000-4-8	Level 4
		Voltage Dips and Interruptions	EN61000-4-11	>95% dip 0.5 periods,30% dip 25 periods, >95% interruptions 250 periods
Other Parameters	**MTBF**	~313.1Khrs TelcordiaSR-332(Bellcore)；~116.75Khrs MIL-HDBK-217F(25°C)		
	Outline Dimension	220*140*55mm		
	Packing Size	242*154*62mm		
	Net Weight	0.8kg		
	Gross Weight	0.85kg		

Application Areas	Industrial control or automation devices Test and measurement instruments Laser-related machines Aging equipment RF applications
Remark	1. Unless otherwise specified, all specification parameters are measured under the conditions of an input of 230VAC, rated load and an ambient temperature of 25°C. 2. Measurement method for ripple and noise: Use a 12-inch twisted pair wire, and at the same time, connect capacitors of 0.1 μF and 47 μF in parallel at the terminal. Conduct the measurement under a bandwidth of 20 MHz. 3. Accuracy: It includes setting error, linear regulation and load regulation. 4. In case of low-voltage input, derated output is required. Please refer to the output derating curve for details. 5. The power supply should be regarded as a part of the components within the system. All EMC tests are carried out with the test samples installed on a metal iron plate which is 1 mm in thickness, 360 mm in length and 360 mm in width. The power supply needs to be verified in terms of electromagnetic compatibility in combination with the terminal equipment. 6. When the altitude exceeds 2,000 meters (6,500 feet), for the fanless models, the ambient temperature decreases at a rate of 3.5 °C per 1,000 meters, while for the models with fans, the ambient temperature decreases at a rate of 5 °C per 1,000 meters.

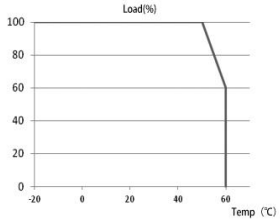
■ Schematic



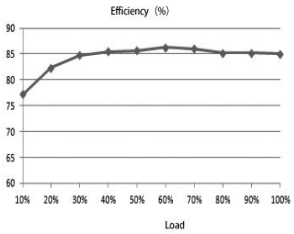
Static characteristic curve:



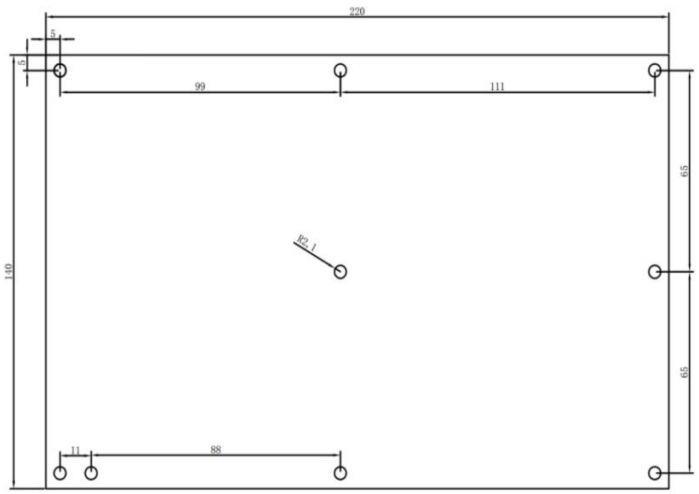
Reduction curve:



Load-efficiency (%):

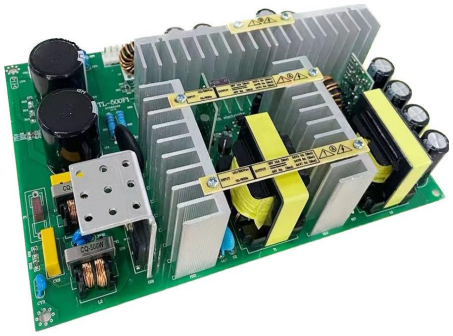


■ Mounting Dimensions Unit: mm



Hole Number	Recommended Screw Models	Maximum Penetration Depth	Recommended Installation Torque
①	M3	6mm	4-6Kgf-cm
②	M3	4mm	4-6Kgf-cm
③	M3	2mm	4-6Kgf-cm

TL-500F-A SERIES



Product features:

176-264V AC input (Note: CN2 can be switched to 115/230Vac by connecting to a switch)

Up to 85% efficiency

uxiliary output voltage adjustable

Built-in auxiliary power supply

DC output indication

Protection type: short circuit/overload

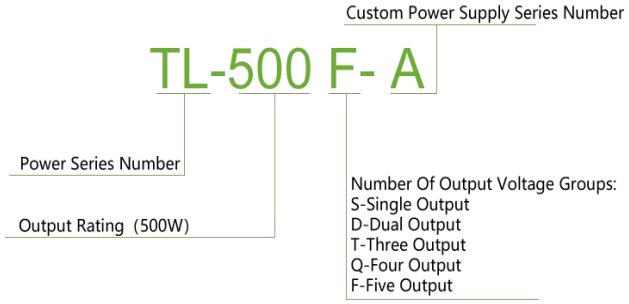
Optional moisture barrier spray

5-year warranty

Product Description:

The TL-500F-A is a 500W five-output bare-board type AC-to-DC power supply. The input voltage range of the entire series is 176 - 264VAC. It can simultaneously provide DC outputs of 36V 14A, 42V 9A, 24V 6A, 24V 6A, and 24V 6A. The operating temperature can reach 50℃.

Model Naming Rules:

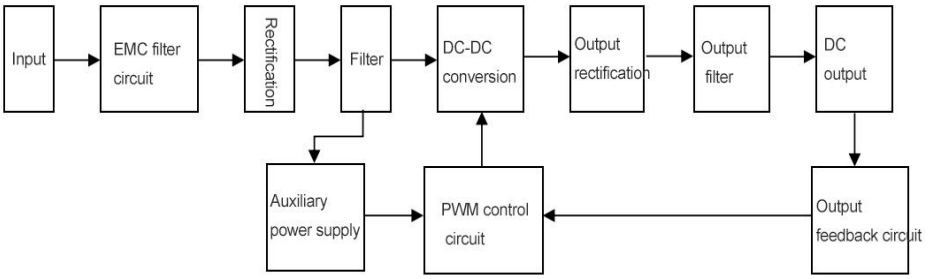


Model		TL-500F-A				
Output Characteristics	DC Voltage	36V	42V	24V	24V	24V
	Rated Current	14A(Max)	9A(Max)	6A(Max)	6A(Max)	6A(Max)
	Current Range	0-14A	0-9A	0-6A	0-6A	0-6A
	Rated Power	504W	378W	144W	144W	144W
	Ripple and Noise(maximum) Note 2	300mVp-p	400mVp-p	200mVp-p	200mVp-p	200mVp-p
	Voltage Accuracy Note 3	±1%	±1%	±1%	±1%	±1%
	Linear Rate Of Adjustment	±1%	±1%	±1%	±1%	±1%
	Load Adjustment Ratio	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
	Start-up, Rise Time	300 milliseconds, 50 milliseconds (at full load).				
	Hold Time (Typ.)	16ms/230VAC				
Input Characteristics	Voltage Range	176-264VAC				
	Frequency Range	47-63Hz				
	Efficiency (Typ.)	85%				
	AC Current (Typ.)	3.7A/220VAC				
	Surge Current (Typ.)	40A/230VAC				
	Leakage Current	< 2.0mA/240VAC				

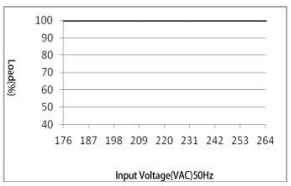
Protecting Characteristics	**Overloading**	130% - 180% of the rated output power.		
		Protection type: constant voltage limit mode, automatic recovery after abnormal load removal.		
Functional Characteristics	**Output Voltage Adjustment**	36V, 42V and 3-channel 24V outputs are adjustable within ±10%.		
	Auxiliary Power	18V@0.5A（±5%）		
Environmental Characterization	**Operating Temperature**	-20℃ to +60℃ (refer to the "derating curve").		
	Operating Humidity	20% to 90% RH, non-condensing.		
	Storage Temperature、Humidity	-40~+85℃，10~95% RH		
	Temperature Coefficient	±0.02%/℃（0-50℃）		
	Vibration Resistance	10 to 500 Hz, 2G for 10 minutes per cycle, 60 minutes for each of the X, Y, and Z axes.		
Safety Regulations And Compatibility Note 5	**Safty Norm**	UL 62368-1, TUV EN 55032, EAC TP TC 004, CCC GB4943.1, BSMI CNS14336-1 Certificated by		
	Pressure Resistance	1/P-0/P:3KVAC　1/P-FG:2KVAC　0/P-FG:0.5KVAC		
	Insulation Resistance	1/P-0/P,1/P-FG,0/P-FG:100M　Ohms/500VDC/25°C/70% RH		
	Electromagnetic Compatibility Emission	Parameter	Standard	Test level/Remarks
		Conducted	EN55032(CISPR32)/EN55011(CISPR11)	Class B
		Radiated	EN55032(CISPR32)/EN55011(CISPR11)	Class A
		Harmonic Current	EN61000-3-2	
		Voltage Flicker	EN61000-3-3	
	EMC Immunity	EN55024，EN61204-3，EN61000-6-2，CCC GB17625.1，GB/T9254，BSMI CNS13438		
		Parameter	Standard	Test level/Remarks
		ESD	EN61000-4-2	Level 3,8kV air; Level 2,4kV contact
		Radiated	EN61000-4-3	Level 3
		EFT/Burst	EN61000-4-4	Level 3
		Surge	EN61000-4-5	Level 4,4Kv/Line-Earth;Level 3,2KV/Line-Line
		Conducted	EN61000-4-6	Level 3
		Magnetic Field	EN61000-4-8	Level 4
		Voltage Dips and Interruptions	EN61000-4-11	>95% dip 0.5 periods,30% dip 25 periods, >95% interruptions 250 periods
Other Parameters	**MTBF**	~313.1Khrs TelcordiaSR-332(Bellcore)；~116.75Khrs MIL-HDBK-217F(25°C)		
	Outline Dimension	240*160*55mm		
	Packing Size	246*172*62mm		
	Net Weight	1.25kg		
	Gross Weight	1.3kg		

Application Areas	Industrial control or automation devices Test and measurement instruments Laser-related machines Aging equipment RF applications
Remark	1. Unless otherwise specified, all specification parameters are measured under the conditions of an input of 230VAC, rated load and an ambient temperature of 25°C. 2. Measurement method for ripple and noise: Use a 12-inch twisted pair wire, and at the same time, connect capacitors of 0.1 μF and 47 μF in parallel at the terminal. Conduct the measurement under a bandwidth of 20 MHz. 3. Accuracy: It includes setting error, linear regulation and load regulation. 4. In case of low-voltage input, derated output is required. Please refer to the output derating curve for details. 5. The power supply should be regarded as a part of the components within the system. All EMC tests are carried out with the test samples installed on a metal iron plate which is 1 mm in thickness, 360 mm in length and 360 mm in width. The power supply needs to be verified in terms of electromagnetic compatibility in combination with the terminal equipment. 6. When the altitude exceeds 2,000 meters (6,500 feet), for the fanless models, the ambient temperature decreases at a rate of 3.5 °C per 1,000 meters, while for the models with fans, the ambient temperature decreases at a rate of 5 °C per 1,000 meters.

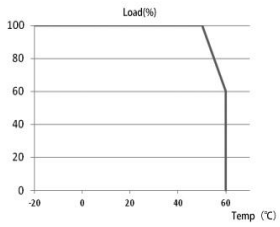
■ Schematic



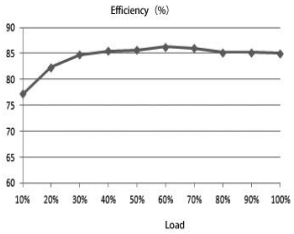
Static characteristic curve:



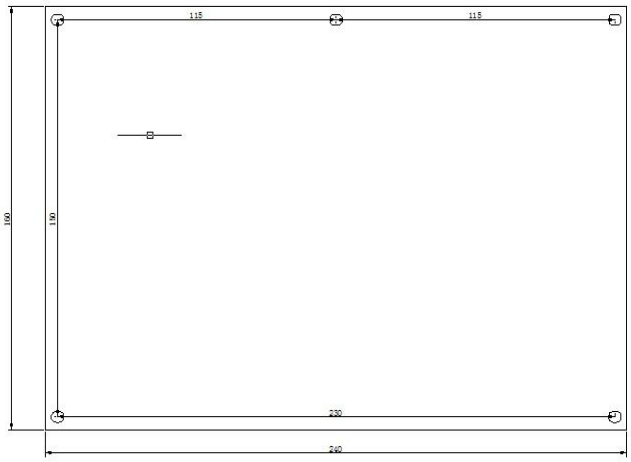
Reduction curve:



Load-efficiency (%):

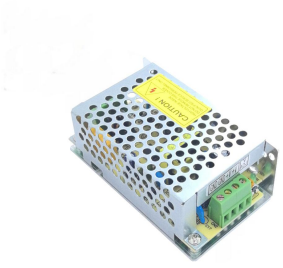


■ Mounting Size
Unit: mm



Hole number	Recommended screw model	Maximum penetration depth L	Recommended Installation Torque
①	M3	6mm	4-6Kgf-cm
②	M3	4mm	4-6Kgf-cm
③	M3	2mm	4-6Kgf-cm

TL-10D SERIES



Product features:

176~265VAC wide voltage AC input

Adjustable output voltage

Built-in auxiliary power supply

DC output indication

Protection type: short circuit/overload

Product Description:

The TL-10D, as a 10W dual-output chassis-type power supply, features stable and reliable performance. Its input voltage ranges from 176 to 265VAC, and it can provide two DC outputs in parallel for a long time. It can still operate efficiently even when the working ambient temperature reaches as high as 55℃. It is widely applicable to power supply scenarios for various industrial and electronic devices. With its precise voltage output and excellent environmental adaptability, it safeguards the stable operation of all kinds of equipment.

Model Naming Rules:

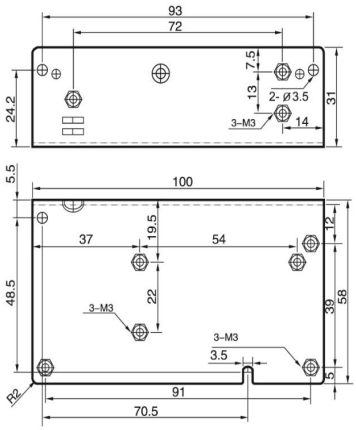
TL- 10 D

Power Series Number

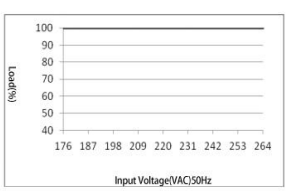
Output Rating (10W)

Number Of Output Voltage Groups:
S-ingle Output
D-Dual Output
T-Three Output
Q-Four Output
F-Five Output

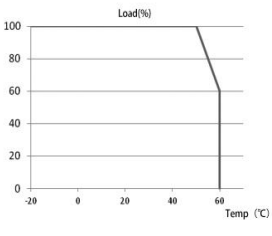
Model		TL-10D-A		TL-10D-B		TL-10D-C	
Output Characteristics	Output Voltage	5V	12V	5V	15V	5V	24V
	Output Current	0.2A~1.8A	0.1A~0.5A	0.2A~1.8A	0.1A~0.5A	0.2A~1.8A	0.05A~0.3A
	Ripple	50mV	100mV	50mV	100mV	50mV	100mV
	Efficiency	69%		70%		72%	
	Rated Power	10W					
	Linear Adjustment Rate	≤0.5%					
	Adjustable Output Voltage Range	±5%					
	Rise Time	50ms (230Vac at full load)					
	Hold Time	20ms (230Vac at full load)					
Input Characteristics	Input Voltage Range	176~265VAC/200-360VDC					
	Input Frequency	47~63HZ					
	Surge Current	40A/230VAC (cold)					

Protective Properties	**Dielectric Strength**	Vin～Vout/1500VAC/min Vin～FG/1500VAC/min Vout～FG/500VAC/min
	Leakage Current	＜0.5mA/230VAC
	Protective Function	Short-circuit protection (self-recovery)　Overload protection within 115% - 150% (self-recovery)
	MTBF	MTBF≥5×10^5h
Design Standard	**Safty Standard**	The design conforms to GB4943.　EN 62368-1　UL 62368-1
	EMC Standard	Designed to EN 55032.ClassC　EN61000-3-2,3　EN61000-4-2,3,4,5,6,8,11
Environmental Characteristics	**Working Temperature**	0℃～45℃@100%,-10℃@80%,60℃@40%
	Storage Temperature	-20℃～85℃
	Relative Humidity	20% to 90% RH (no condensation)
Other Parameters	**EMI Filter**	Internal band EMI filter
	Finished Product Guarantee	100% full load aging
	Quality Assurance	5-year warranty
	Cooling Mode	Natural cooling
	Net Weight	0.122kg
	Gross Weight	0.128kg
	Installation Mode	Vertical/horizontal installation
Measure	**Outline Dimension**	100×58×31mm
	Packing Size	bubble wrap
	Installation Size	
	Aapplication	Household appliances Information industry Industrial control Production and manufacturing industry Electrical apparatus Instruments and meters Financial equipment Coal mine safety power supply

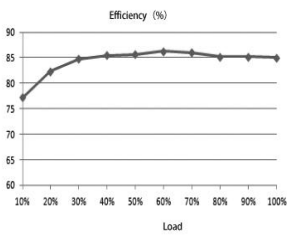
Static characteristic curve:



Reduction curve:



Load-efficiency (%):



TL-25D SERIES

Product features:

176~265VAC wide voltage AC input

Adjustable output voltage

Built-in auxiliary power supply

DC output indication

Protection type: short circuit/overload

Product Description:

The TL-25D, as a 25W dual-output chassis-type power supply, features stable and reliable performance. Its input voltage ranges from 176 to 265VAC, and it can provide two DC outputs in parallel for a long time. It can still operate efficiently even when the working ambient temperature reaches as high as 55℃. It is widely applicable to power supply scenarios for various industrial and electronic devices. With its precise voltage output and excellent environmental adaptability, it safeguards the stable operation of all kinds of equipment.

Model Naming Rules:

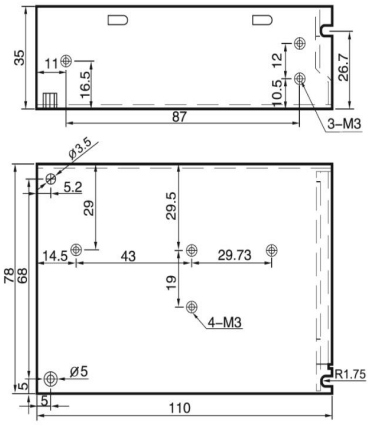
TL- 25 D

Power Series Number

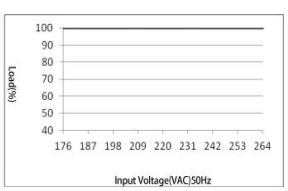
Output Rating (25W)

Number Of Output Voltage Groups:
S-Single Output
D-Dual Output
T-Three Output
Q-Four Output
F-Five Output

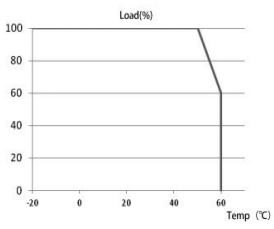
Model		TL-25D-A		TL-25D-B		TL-25D-C		TL-25D-D	
Output Characteristics	Output Voltage	5V	5V	5V	12V	5V	24V	12V	5V
	Output Current	0.4A~4A	0A~1A	0.3A~3A	0A~1A	0.3A~2.5A	0A~0.5A	0.2A~2A	0A~1A
	Ripple	100mV	100mV	100mV	100mV	100mV	150mV	100mV	100mV
	Efficiency	70%		71%		72%		72%	
	Rated Power	25W							
	Linear Adjustment Rate	≤0.5%							
	Adjustable Output Voltage Range	±5%							
	Rise Time	50ms (230Vac at full load)							
	Hold Time	20ms (230Vac at full load)							
Input Characteristics	Input Voltage Range	176~265VAC/200-360VDC							
	Input Frequency	47~63HZ							
	Surge Current	40A/230VAC (cold)							

Protective Properties	**Dielectric Strength**	Vin～Vout/1500VAC/min Vin～FG/1500VAC/min Vout～FG/500VAC/min
	Leakage Current	< 0.5mA/230VAC
	Protective Function	Short-circuit protection (self-recovery) Overload protection within 115% - 150% (self-recovery)
	MTBF	MTBF≥5×10^5h
Design Standard	**Safty Standard**	The design conforms to GB4943. EN 62368-1 UL 62368-1
	EMC Standard	Designed to EN 55032.ClassC EN61000-3-2,3 EN61000-4-2,3,4,5,6,8,11
Environmental Characteristics	**Working Temperature**	0℃～45℃@100%,-10℃@80%,60℃@40%
	Storage Temperature	-20℃～85℃
	Relative Humidity	20% to 90% RH (no condensation)
Other Parameters	**EMI Filter**	Internal band EMI filter
	Finished Product Guarantee	100% full load aging
	Quality Assurance	5-year warranty
	Cooling Mode	Natural cooling
	Net Weight	0.227kg
	Gross Weight	0.249kg
	Installation Mode	Vertical/horizontal installation
Measure	**Outline Dimension**	110×78×35mm
	Packing Size	118×85×42mm
	Installation Size	
	Aapplication	Household appliances Information industry Industrial control Production and manufacturing industry Electrical apparatus Instruments and meters Financial equipment Coal mine safety power supply

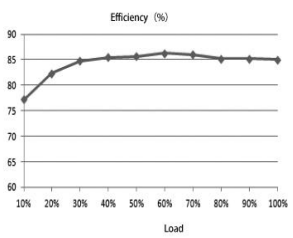
Static characteristic curve:



Reduction curve:



Load-efficiency (%):



TL-35D SERIES

Product features:

176~265VAC wide voltage AC input

Adjustable output voltage

Built-in auxiliary power supply

DC output indication

Protection type: short circuit/overload

Product Description:

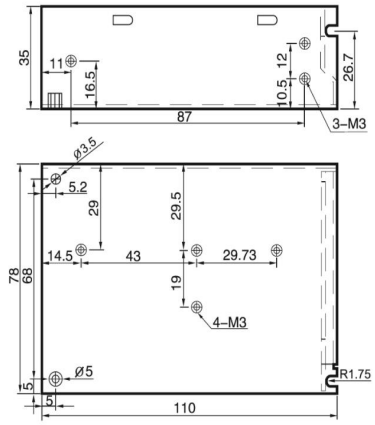
The TL-35D, as a 35W dual-output chassis-type power supply, features stable and reliable performance. Its input voltage ranges from 176 to 265VAC, and it can provide two DC outputs in parallel for a long time. It can still operate efficiently even when the working ambient temperature reaches as high as 55℃. It is widely applicable to power supply scenarios for various industrial and electronic devices. With its precise voltage output and excellent environmental adaptability, it safeguards the stable operation of all kinds of equipment.

Model Naming Rules:

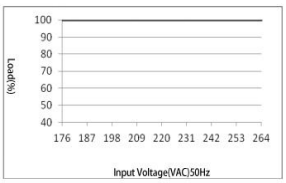
TL- 35 D

- TL: Power Series Number
- 35: Output Rating (35W)
- D: Number Of Output Voltage Groups:
  S-Single Output
  D-Dual Output
  T-Three Output
  Q-Four Output
  F-Five Output

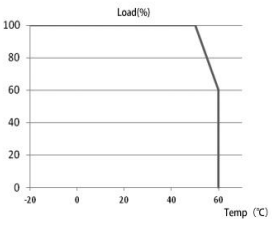
Model		TL-35D-A		TL-35D-B		TL-35D-C		TL-35D-D	
Output Characteristics	Output Voltage	5V	12V	5V	24V	12V	5V	24V	5V
	Output Current	0.5A~5A	0A~1A	0.3A~5A	0A~0.8A	0.3A~2.5A	0A~1A	0.2A~1.5A	0A~1A
	Ripple	100mV	100mV	100mV	150mV	100mV	100mV	100mV	100mV
	Efficiency	70%		71%		71%		72%	
	Rated Power	35W							
	Linear Adjustment Rate	≤0.5%							
	Adjustable Output Voltage Range	±5%							
	Rise Time	50ms (230Vac at full load)							
	Hold Time	20ms (230Vac at full load)							
Input Characteristics	Input Voltage Range	176~265VAC/200-360VDC							
	Input Frequency	47~63HZ							
	Surge Current	40A/230VAC (cold)							

Protective Properties	**Dielectric Strength**	Vin～Vout/1500VAC/min Vin～FG/1500VAC/min Vout～FG/500VAC/min
	Leakage Current	< 0.5mA/230VAC
	Protective Function	Short-circuit protection (self-recovery) Overload protection within 115% - 150% (self-recovery)
	MTBF	MTBF≥5×10^5h
Design Standard	**Safty Standard**	The design conforms to GB4943. EN 62368-1 UL 62368-1
	EMC Standard	Designed to EN 55032.ClassC EN61000-3-2,3 EN61000-4-2,3,4,5,6,8,11
Environmental Characteristics	**Working Temperature**	0℃～45℃@100%,-10℃@80%,60℃@40%
	Storage Temperature	-20℃～85℃
	Relative Humidity	20% to 90% RH (no condensation)
Other Parameters	**EMI Filter**	Internal band EMI filter
	Finished Product Guarantee	100% full load aging
	Quality Assurance	5-year warranty
	Cooling Mode	Natural cooling
	Net Weight	0.328kg
	Gross Weight	0.358kg
	Installation Mode	Vertical/horizontal installation
Measure	**Outline Dimension**	110×78×35mm
	Packing Size	118×85×42mm
	Installation Size	
Aapplication		Household appliances Information industry Industrial control Production and manufacturing industry Electrical apparatus Instruments and meters Financial equipment Coal mine safety power supply

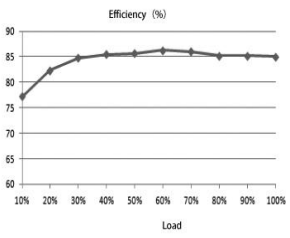
Static characteristic curve:



Reduction curve:



Load-efficiency (%):



TL-60D SERIES

Product features:

176~265VAC wide voltage AC input

Adjustable output voltage

Built-in auxiliary power supply

DC output indication

Protection type: short circuit/overload

Product Description:

The TL-60D, as a 60W dual-output chassis-type power supply, features stable and reliable performance. Its input voltage ranges from 176 to 265VAC, and it can provide two DC outputs in parallel for a long time. It can still operate efficiently even when the working ambient temperature reaches as high as 55℃. It is widely applicable to power supply scenarios for various industrial and electronic devices. With its precise voltage output and excellent environmental adaptability, it safeguards the stable operation of all kinds of equipment.

Model Naming Rules:

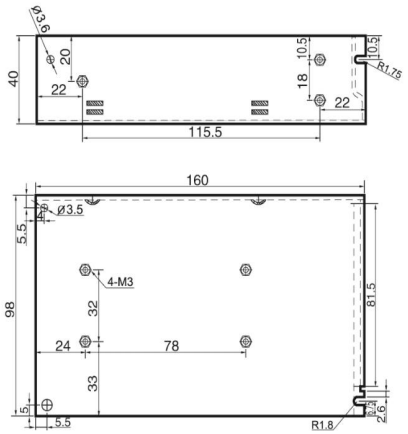
TL- 60 D

Power Series Number

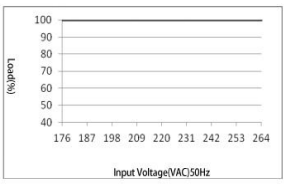
Output Rating (60W)

Number Of Output Voltage Groups:
S-Single Output
D-Dual Output
T-Three Output
Q-Four Output
F-Five Output

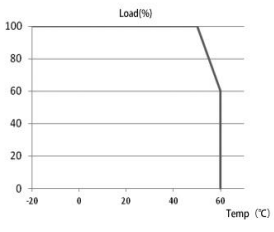
Model		TL-60D-A		TL-60D-B		TL-60D-C		TL-60D-D	
Output Characteristics	Output Voltage	5V	12V	5V	24V	12V	5V	24V	5V
	Output Current	0.6A~6A	0A~2A	0.5A~6A	0A~1A	0.4A~4A	0A~2A	0.2A~2A	0A~2A
	Ripple	80mV	150mV	80mV	100mV	100mV	100mV	100mV	100mV
	Efficiency	72%		73%		74%		75%	
	Rated Power	60W							
	Linear Adjustment Rate	≤0.5%							
	Adjustable Output Voltage Range	±5%							
	Rise Time	50ms (230Vac at full load)							
	Hold Time	20ms (230Vac at full load)							
Input Characteristics	Input Voltage Range	176~265VAC/200-360VDC							
	Input Frequency	47~63HZ							
	Surge Current	40A/230VAC (cold)							

Protective Properties	**Dielectric Strength**	Vin～Vout/1500VAC/min Vin～FG/1500VAC/min Vout～FG/500VAC/min
	Leakage Current	< 0.5mA/230VAC
	Protective Function	Short-circuit protection (self-recovery) Overload protection within 115% - 150% (self-recovery)
	MTBF	MTBF≥5×10^5h
Design Standard	**Safty Standard**	The design conforms to GB4943. EN 62368-1 UL 62368-1
	EMC Standard	Designed to EN 55032.ClassC EN61000-3-2,3 EN61000-4-2,3,4,5,6,8,11
Environmental Characteristics	**Working Temperature**	0℃～45℃@100%,-10℃@80%,60℃@40%
	Storage Temperature	-20℃～85℃
	Relative Humidity	20% to 90% RH (no condensation)
Other Parameters	**EMI Filter**	Internal band EMI filter
	Finished Product Guarantee	100% full load aging
	Quality Assurance	5-year warranty
	Cooling Mode	Natural cooling
	Net Weight	0.49kg
	Gross Weight	0.494kg
	Installation Mode	Vertical/horizontal installation
Measure	**Outline Dimension**	160×98×40mm
	Packing Size	165×104×50mm
	Installation Size	
	Aapplication	Household appliances Information industry Industrial control Production and manufacturing industry Electrical apparatus Instruments and meters Financial equipment Coal mine safety power supply

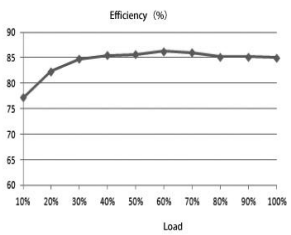
Static characteristic curve:



Reduction curve:



Load-efficiency (%):



TL-100D SERIES

Product features:

176~265VAC wide voltage AC input

Adjustable output voltage

Built-in auxiliary power supply

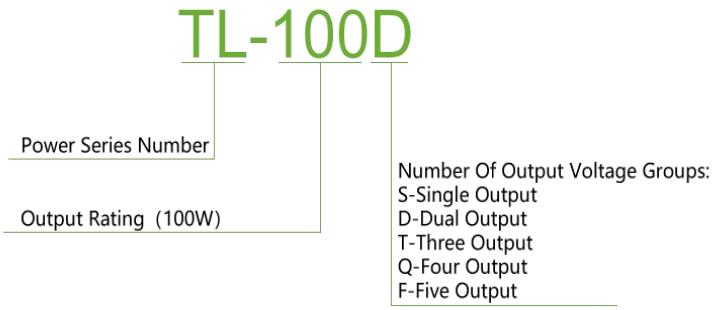
DC output indication

Protection type: short circuit/overload

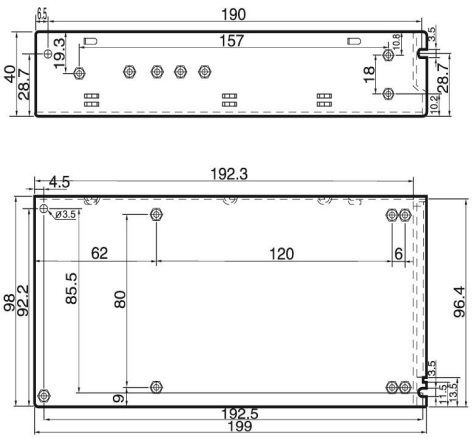
Product Description:

The TL-100D, as a 100W dual-output chassis-type power supply, features stable and reliable performance. Its input voltage ranges from 176 to 265VAC, and it can provide two DC outputs in parallel for a long time. It can still operate efficiently even when the working ambient temperature reaches as high as 55℃. It is widely applicable to power supply scenarios for various industrial and electronic devices. With its precise voltage output and excellent environmental adaptability, it safeguards the stable operation of all kinds of equipment.

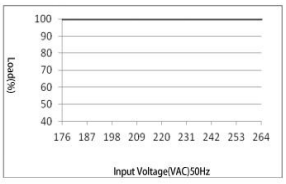
Model Naming Rules:



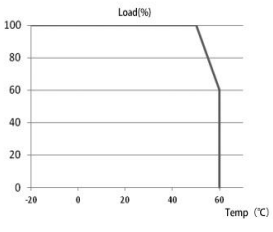
Model		TL-100D-A		TL-100D-B		TL-100D-C		TL-100D-D	
Output Characteristics	Output Voltage	5V	12V	5V	24V	12V	5V	24V	5V
	Output Current	1.5A~15A	0A~2A	1.5A~15A	0A~1A	0.7A~7A	0A~2A	0.4A~4A	0A~2A
	Ripple	100mV	100mV	100mV	150mV	100mV	100mV	100mV	100mV
	Efficiency	73%		74%		75%		76%	
	Rated Power	100W							
	Linear Adjustment Rate	≤0.5%							
	Adjustable Output Voltage Range	±5%							
	Rise Time	50ms (230Vac at full load)							
	Hold Time	20ms (230Vac at full load)							
Input Characteristics	Input Voltage Range	176~265VAC/200-360VDC							
	Input Frequency	47~63HZ							
	Surge Current	40A/230VAC (cold)							

Protective Properties	**Dielectric Strength**	Vin～Vout/1500VAC/min Vin～FG/1500VAC/min Vout～FG/500VAC/min
	Leakage Current	< 0.5mA/230VAC
	Protective Function	Short-circuit protection (self-recovery)　Overload protection within 115% - 150% (self-recovery)
	MTBF	MTBF≥5×10^5h
Design Standard	**Safty Standard**	The design conforms to GB4943.　EN 62368-1　UL 62368-1
	EMC Standard	Designed to EN 55032.ClassC　EN61000-3-2,3　EN61000-4-2,3,4,5,6,8,11
Environmental Characteristics	**Working Temperature**	0℃～45℃@100%,-10℃@80%,60℃@40%
	Storage Temperature	-20℃～85℃
	Relative Humidity	20% to 90% RH (no condensation)
Other Parameters	**EMI Filter**	Internal band EMI filter
	Finished Product Guarantee	100% full load aging
	Quality Assurance	5-year warranty
	Cooling Mode	Natural cooling
	Net Weight	0.552kg
	Gross Weight	0.592kg
	Installation Mode	Vertical/horizontal installation
Measure	**Outline Dimension**	199×98×40mm
	Packing Size	205×106×46mm
	Installation Size	
Aapplication		Household appliances Information industry Industrial control Production and manufacturing industry Electrical apparatus Instruments and meters Financial equipment Coal mine safety power supply

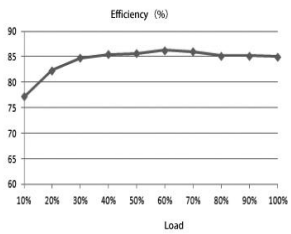
Static characteristic curve:



Reduction curve:



Load-efficiency (%):



TL-150D SERIES

Product features:

176~265VAC wide voltage AC input

Adjustable output voltage

Built-in auxiliary power supply

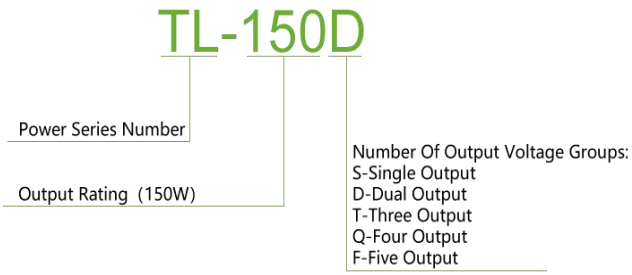
DC output indication

Protection type: short circuit/overload

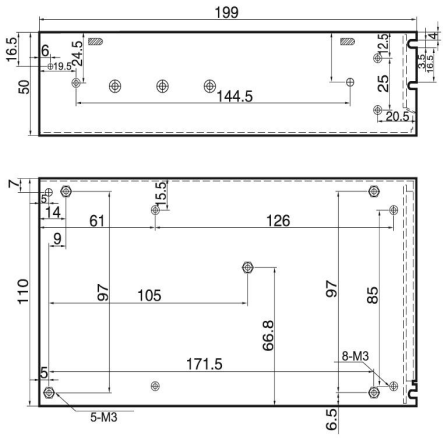
Product Description:

The TL-150D, as a 150W dual-output chassis-type power supply, features stable and reliable performance. Its input voltage ranges from 176 to 265VAC, and it can provide two DC outputs in parallel for a long time. It can still operate efficiently even when the working ambient temperature reaches as high as 55℃. It is widely applicable to power supply scenarios for various industrial and electronic devices. With its precise voltage output and excellent environmental adaptability, it safeguards the stable operation of all kinds of equipment.

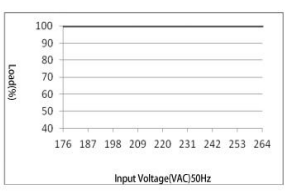
Model Naming Rules:



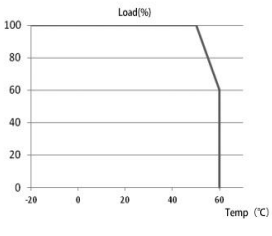
Model		TL-150D-A		TL-150D-B		TL-150D-C		TL-150D-D	
Output Characteristics	Output Voltage	5V	12V	5V	24V	12V	5V	24V	5V
	Output Current	1.2A~12A	0.5A~5A	1A~10A	0.4A~4A	0A~11.5A	0A~3A	0A~5.8A	0A~3A
	Ripple	100mV	100mV	100mV	100mV	100mV	100mV	100mV	100mV
	Efficiency	74%		77%		74%		77%	
	Rated Power	150W							
	Linear Adjustment Rate	≤0.5%							
	Adjustable Output Voltage Range	±5%							
	Rise Time	50ms (230Vac at full load)							
	Hold Time	20ms (230Vac at full load)							
Input Characteristics	Input Voltage Range	176~265VAC/200-360VDC							
	Input Frequency	47~63HZ							
	Surge Current	40A/230VAC (cold)							

Protective Properties	**Dielectric Strength**	Vin～Vout/1500VAC/min Vin～FG/1500VAC/min Vout～FG/500VAC/min
	Leakage Current	< 0.5mA/230VAC
	Protective Function	Short-circuit protection (self-recovery) Overload protection within 115% - 150% (self-recovery)
	MTBF	MTBF≥5×10^5h
Design Standard	**Safty Standard**	The design conforms to GB4943. EN 62368-1 UL 62368-1
	EMC Standard	Designed to EN 55032.ClassC EN61000-3-2,3 EN61000-4-2,3,4,5,6,8,11
Environmental Characteristics	**Working Temperature**	0℃～45℃@100%,-10℃@80%,60℃@40%
	Storage Temperature	-20℃～85℃
	Relative Humidity	20% to 90% RH (no condensation)
Other Parameters	**EMI Filter**	Internal band EMI filter
	Finished Product Guarantee	100% full load aging
	Quality Assurance	5-year warranty
	Cooling Mode	Natural cooling
	Net Weight	0.583kg
	Gross Weight	0.623kg
	Installation Mode	Vertical/horizontal installation
Measure	**Outline Dimension**	199×110×50mm
	Packing Size	208×147×57mm
	Installation Size	
Aapplication		Household appliances Information industry Industrial control Production and manufacturing industry Electrical apparatus Instruments and meters Financial equipment Coal mine safety power supply

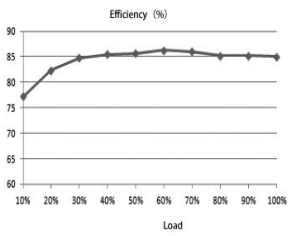
Static characteristic curve:



Reduction curve:



Load-efficiency (%):



TL-25T SERIES

Product features:

176~265VAC wide voltage AC input

Adjustable output voltage

Built-in auxiliary power supply

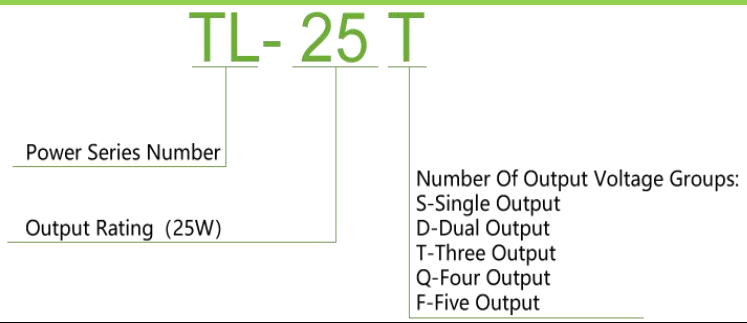
DC output indication

Protection type: short circuit/overload

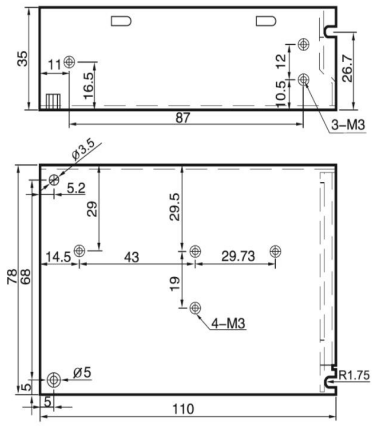
Product Description:

The TL-25T, as a 25W three-way output chassis-type power supply, features stable and reliable performance. Its input voltage ranges from 176 to 265VAC. It can perform long-term parallel dual-channel DC output and still operate efficiently even when the working environment temperature is as high as 55℃. It is widely applicable to the power supply scenarios of a variety of industrial and electronic equipment. With its precise voltage output and excellent environmental adaptability, it safeguards the stable operation of all kinds of equipment.

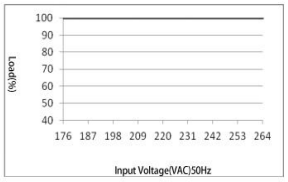
Model Naming Rules:



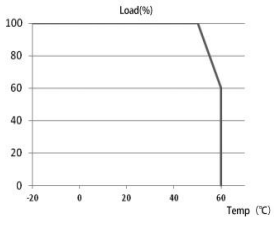
Model		TL-25T-A			TL-25T-B		
Output Characteristics	Output Voltage	5V	12V	-12V	5V	15V	-15V
	Output Current	0.3A~3A	0A~0.5A	0A-0.5A	0.3A~3A	0.1A~0.5A	0.1A~0.5A
	Ripple	100mV	100mV	100mV	100mV	100mV	150mV
	Efficiency	68%			69%		
	Rated Power	25W					
	Linear Adjustment Rate	≤0.5%					
	Adjustable Output Voltage Range	±5%					
	Rise Time	50ms（230Vac，满载时） 50ms (230Vac at full load)					
	Hold Time	20ms（230Vac，满载时） 20ms (230Vac at full load)					
Input Characteristics	Input Voltage Range	176~265VAC/200-360VDC					
	Input Frequency	47~63HZ					
	Surge Current	40A/230VAC（冷态） 40A/230VAC (cold)					

Protective Properties	**Dielectric Strength**	Vin～Vout/1500VAC/min Vin～FG/1500VAC/min Vout～FG/500VAC/min
	Leakage Current	＜0.5mA/230VAC
	Protective Function	Short-circuit protection (self-recovery)　Overload protection within 115% - 150% (self-recovery)
	MTBF	MTBF≥5×10^5h
Design Standard	**Safty Standard**	The design conforms to GB4943.　EN 62368-1　UL 62368-1
	EMC Standard	Designed to EN 55032.ClassC　EN61000-3-2,3　EN61000-4-2,3,4,5,6,8,11
Environmental Characteristics	**Working Temperature**	0℃～45℃@100%,-10℃@80%,60℃@40%
	Storage Temperature	-20℃～85℃
	Relative Humidity	20% to 90% RH (no condensation)
Other Parameters	**EMI Filter**	Internal band EMI filter
	Finished Product Guarantee	100% full load aging
	Quality Assurance	5-year warranty
	Cooling Mode	Natural cooling
	Net Weight	0.227kg
	Gross Weight	0.249kg
	Installation Mode	Vertical/horizontal installation
Measure	**Outline Dimension**	110×78×35mm
	Packing Size	118×85×42mm
	Installation Size	
	Aapplication	Household appliances Information industry Industrial control Production and manufacturing industry Electrical apparatus Instruments and meters Financial equipment Coal mine safety power supply

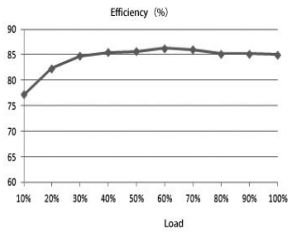
Static characteristic curve:



Reduction curve:



Load-efficiency (%):



TL-35T SERIES

Product features:

176~265VAC wide voltage AC input

Adjustable output voltage

Built-in auxiliary power supply

DC output indication

Protection type: short circuit/overload

Product Description:

The TL-35T, as a 35W three-way output chassis-type power supply, features stable and reliable performance. Its input voltage ranges from 176 to 265VAC. It can perform long-term parallel dual-channel DC output and still operate efficiently even when the working environment temperature is as high as 55℃. It is widely applicable to the power supply scenarios of a variety of industrial and electronic equipment. With its precise voltage output and excellent environmental adaptability, it safeguards the stable operation of all kinds of equipment.

Model Naming Rules:

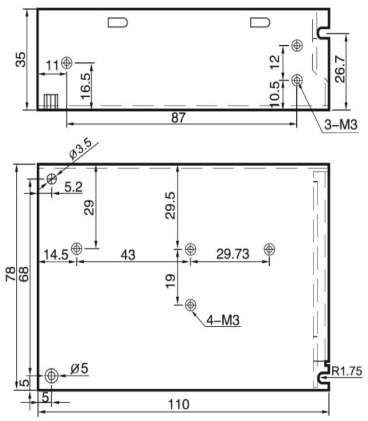
TL- 35 T

Power Series Number

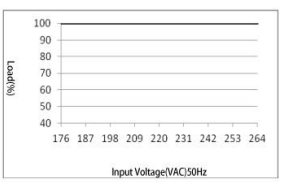
Output Rating (35W)

Number Of Output Voltage Groups:
S-Single Output
D-Dual Output
T-Three Output
Q-Four Output
F-Five Output

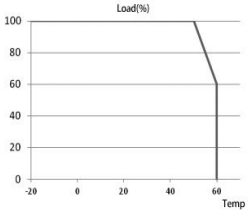
Model		TL-35T-A			TL-35T-B			TL-35T-C		
Output Characteristics	Output Voltage	5V	12V	-12V	5V	15V	-15V	5V	12V	-5V
	Output Current	0.5A~3.5A	0.1A~1.2A	0.1A-1.2A	0.5A~3.5A	0.1A~0.8A	0A~0.5A	0.5A~3.5A	0.1A~1.2A	0A~1A
	Ripple	100mV	100mV	100mV	100mV	120mV	120mV	100mV	100mV	100mV
	Efficiency	69%			70%			68%		
	Rated Power	35W								
	Linear Adjustment Rate	≤0.5%								
	Adjustable Output Voltage Range	±5%								
	Rise Time	50ms (230Vac at full load)								
	Hold Time	20ms (230Vac at full load)								
Input Characteristics	Input Voltage Range	176~265VAC/200-360VDC								
	Input Frequency	47~63HZ								
	Surge Current	40A/230VAC (cold)								

Protective Properties	**Dielectric Strength**	Vin～Vout/1500VAC/min Vin～FG/1500VAC/min Vout～FG/500VAC/min
	Leakage Current	< 0.5mA/230VAC
	Protective Function	Short-circuit protection (self-recovery)　Overload protection within 115% - 150% (self-recovery)
	MTBF	MTBF≥5×10^5h
Design Standard	**Safty Standard**	The design conforms to GB4943.　EN 62368-1　UL 62368-1
	EMC Standard	Designed to EN 55032.ClassC　EN61000-3-2,3　EN61000-4-2,3,4,5,6,8,11
Environmental Characteristics	**Working Temperature**	0℃～45℃@100%,-10℃@80%,60℃@40%
	Storage Temperature	-20℃～85℃
	Relative Humidity	20% to 90% RH (no condensation)
Other Parameters	**EMI Filter**	Internal band EMI filter
	Finished Product Guarantee	100% full load aging
	Quality Assurance	5-year warranty
	Cooling Mode	Natural cooling
	Net Weight	0.328kg
	Gross Weight	0.358kg
	Installation Mode	Vertical/horizontal installation
Measure	**Outline Dimension**	110×78×35mm
	Packing Size	118×85×42mm
	Installation Size	
	Aapplication	Household appliances Information industry Industrial control Production and manufacturing industry Electrical apparatus Instruments and meters Financial equipment Coal mine safety power supply

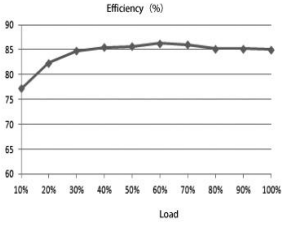
Static characteristic curve:



Reduction curve:



Load-efficiency (%):



Lynn Power

Lynn Electronic Technology(Jiangsu) Co.,Ltd.

TL-50T SERIES

Product features:

176~265VAC wide voltage AC input

Adjustable output voltage

Built-in auxiliary power supply

DC output indication

Protection type: short circuit/overload

Product Description:

The TL-50T, as a 50W three-way output chassis-type power supply, features stable and reliable performance. Its input voltage ranges from 176 to 265VAC. It can perform long-term parallel dual-channel DC output and still operate efficiently even when the working environment temperature is as high as 55℃. It is widely applicable to the power supply scenarios of a variety of industrial and electronic equipment. With its precise voltage output and excellent environmental adaptability, it safeguards the stable operation of all kinds of equipment.

Model Naming Rules:

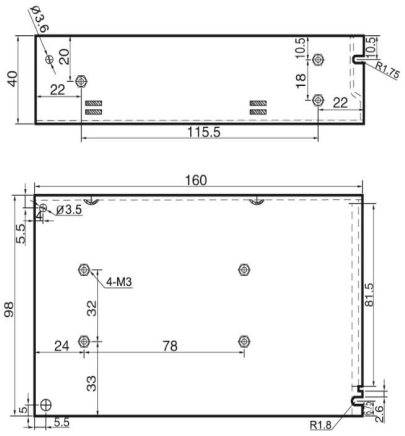
TL- 50 T

Power Series Number

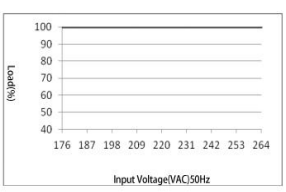
Output Rating (50W)

Number Of Output Voltage Groups:
S-Single Output
D-Dual Output
T-Three Output
Q-Four Output
F-Five Output

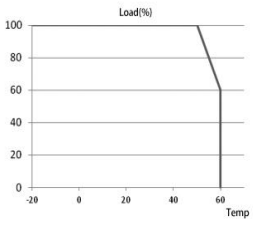
Model		TL-50T-A			TL-50T-B			TL-50T-C		
Output Characteristics	Output Voltage	5V	12V	-12V	5V	15V	-15V	5V	12V	-5V
	Output Current	0.6A~7A	0.1A~1A	0.1A-1A	0.6A~4A	0.1A~1A	0.1A~1A	0.6A~7A	0.1A~1A	0.1A~1A
	Ripple	100mV	100mV	100mV	100mV	100mV	100mV	100mV	100mV	100mV
	Efficiency	68%			69%			68%		
	Rated Power	50W								
	Linear Adjustment Rate	≤0.5%								
	Adjustable Output Voltage Range	±5%								
	Rise Time	50ms (230Vac at full load)								
	Hold Time	20ms (230Vac at full load)								
Input Characteristics	Input Voltage Range	176~265VAC/200-360VDC								
	Input Frequency	47~63HZ								
	Surge Current	40A/230VAC (cold)								

Protective Properties	**Dielectric Strength**	Vin～Vout/1500VAC/min Vin～FG/1500VAC/min Vout～FG/500VAC/min
	Leakage Current	< 0.5mA/230VAC
	Protective Function	Short-circuit protection (self-recovery) Overload protection within 115% - 150% (self-recovery)
	MTBF	MTBF≥5×10^5h
Design Standard	**Safty Standard**	The design conforms to GB4943. EN 62368-1 UL 62368-1
	EMC Standard	Designed to EN 55032.ClassC EN61000-3-2,3 EN61000-4-2,3,4,5,6,8,11
Environmental Characteristics	**Working Temperature**	0℃～45℃@100%,-10℃@80%,60℃@40%
	Storage Temperature	-20℃～85℃
	Relative Humidity	20% to 90% RH (no condensation)
Other Parameters	**EMI Filter**	Internal band EMI filter
	Finished Product Guarantee	100% full load aging
	Quality Assurance	5-year warranty
	Cooling Mode	Natural cooling
	Net Weight	0.378kg
	Gross Weight	0.412kg
	Installation Mode	Vertical/horizontal installation
Measure	**Outline Dimension**	160×98×40mm
	Packing Size	165×104×50mm
	Installation Size	
	Aapplication	Household appliances Information industry Industrial control Production and manufacturing industry Electrical apparatus Instruments and meters Financial equipment Coal mine safety power supply

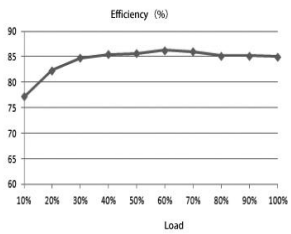
Static characteristic curve:



Reduction curve:



Load-efficiency (%):



TL-70T SERIES

Product features:

176~265VAC wide voltage AC input

Adjustable output voltage

Built-in auxiliary power supply

DC output indication

Protection type: short circuit/overload

Product Description:

The TL-70T, as a 70W three-way output chassis-type power supply, features stable and reliable performance. Its input voltage ranges from 176 to 265VAC. It can perform long-term parallel dual-channel DC output and still operate efficiently even when the working environment temperature is as high as 55℃. It is widely applicable to the power supply scenarios of a variety of industrial and electronic equipment. With its precise voltage output and excellent environmental adaptability, it safeguards the stable operation of all kinds of equipment.

Model Naming Rules:

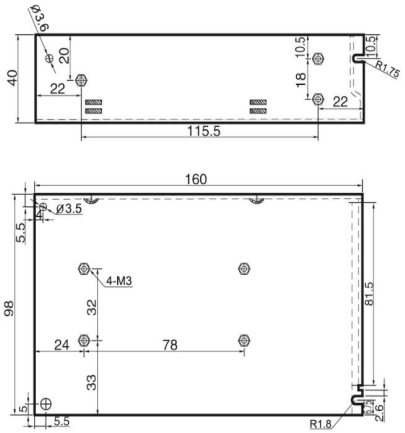
TL- 70 T

Power Series Number

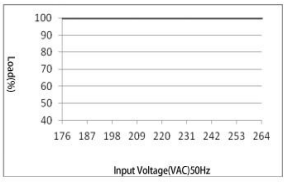
Output Rating (70W)

Number Of Output Voltage Groups:
S-Single Output
D-Dual Output
T-Three Output
Q-Four Output
F-Five Output

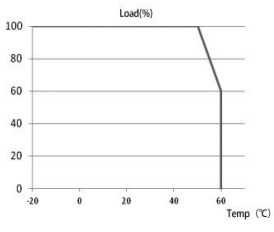
Model		TL-70T-A			TL-70T-B			TL-70T-C		
Output Characteristics	Output Voltage	5V	12V	-12V	5V	15V	-15V	5V	12V	-5V
	Output Current	0.5A~6A	0A~2A	0.2A-1.5A	0.6A~7A	0A~2A	0A~1A	0.7A~8A	0A~2A	0A~1.5A
	Ripple	100mV	100mV	100mV	100mV	100mV	100mV	100mV	100mV	100mV
	Efficiency	71%			72%			70%		
	Rated Power	70W								
	Linear Adjustment Rate	≤0.5%								
	Adjustable Output Voltage Range	±5%								
	Rise Time	50ms (230Vac at full load)								
	Hold Time	20ms (230Vac at full load)								
Input Characteristics	Input Voltage Range	176~265VAC/200-360VDC								
	Input Frequency	47~63HZ								
	Surge Current	40A/230VAC (cold)								

Protective Properties	**Dielectric Strength**	Vin～Vout/1500VAC/min Vin～FG/1500VAC/min Vout～FG/500VAC/min
	Leakage Current	< 0.5mA/230VAC
	Protective Function	Short-circuit protection (self-recovery) Overload protection within 115% - 150% (self-recovery)
	MTBF	MTBF≥5×10^5h
Design Standard	**Safty Standard**	The design conforms to GB4943. EN 62368-1 UL 62368-1
	EMC Standard	Designed to EN 55032.ClassC EN61000-3-2,3 EN61000-4-2,3,4,5,6,8,11
Environmental Characteristics	**Working Temperature**	0℃～45℃@100%,-10℃@80%,60℃@40%
	Storage Temperature	-20℃～85℃
	Relative Humidity	20% to 90% RH (no condensation)
Other Parameters	**EMI Filter**	Internal band EMI filter
	Finished Product Guarantee	100% full load aging
	Quality Assurance	5-year warranty
	Cooling Mode	Natural cooling
	Net Weight	0.354kg
	Gross Weight	0.390kg
	Installation Mode	Vertical/horizontal installation
Measure	**Outline Dimension**	160×98×40mm
	Packing Size	165×104×50mm
	Installation Size	
	Aapplication	Household appliances Information industry Industrial control Production and manufacturing industry Electrical apparatus Instruments and meters Financial equipment Coal mine safety power supply

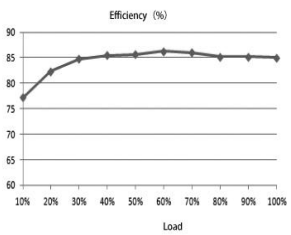
Static characteristic curve:



Reduction curve:



Load-efficiency (%):



TL-100T SERIES

Product features:

176~265VAC wide voltage AC input

Adjustable output voltage

Built-in auxiliary power supply

DC output indication

Protection type: short circuit/overload

Product Description:

The TL-100T, as a 100W three-way output chassis-type power supply, features stable and reliable performance. Its input voltage ranges from 176 to 265VAC. It can perform long-term parallel dual-channel DC output and still operate efficiently even when the working environment temperature is as high as 55℃. It is widely applicable to the power supply scenarios of a variety of industrial and electronic equipment. With its precise voltage output and excellent environmental adaptability, it safeguards the stable operation of all kinds of equipment.

Model Naming Rules:

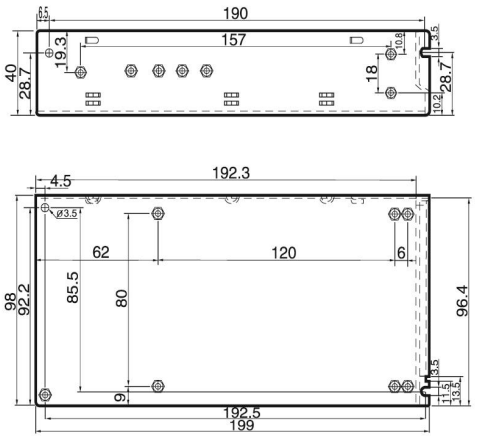
TL-100T

Power Series Number

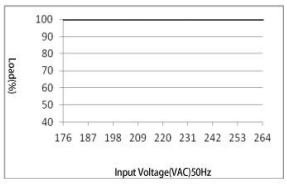
Output Rating (100W)

Number Of Output Voltage Groups:
S-Single Output
D-Dual Output
T-Three Output
Q-Four Output
F-Five Output

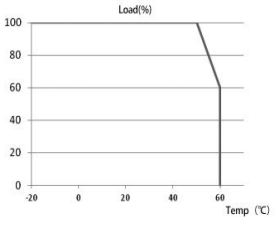
Model		TL-100T- B			TL-100T-C		
Output Characteristics	Output Voltage	5V	12V	-12V	5V	15V	-15V
	Output Current	2A~12A	0A~2.5A	0A-1.5A	2A~12A	0A~2.5A	0A~1.5A
	Ripple	80mV	100mV	100mV	80mV	100mV	100mV
	Efficiency	73%			74%		
	Rated Power	100W					
	Linear Adjustment Rate	≤0.5%					
	Adjustable Output Voltage Range	±5%					
	Rise Time	50ms (230Vac at full load)					
	Hold Time	20ms (230Vac at full load)					
Input Characteristics	Input Voltage Range	176~265VAC/200-360VDC					
	Input Frequency	47~63HZ					
	Surge Current	40A/230VAC (cold)					

Protective Properties	**Dielectric Strength**	Vin～Vout/1500VAC/min Vin～FG/1500VAC/min Vout～FG/500VAC/min
	Leakage Current	＜0.5mA/230VAC
	Protective Function	Short-circuit protection (self-recovery)　Overload protection within 115% - 150% (self-recovery)
	MTBF	MTBF≥5×10^5h
Design Standard	**Safty Standard**	The design conforms to GB4943.　EN 62368-1　UL 62368-1
	EMC Standard	Designed to EN 55032.ClassC　EN61000-3-2,3　EN61000-4-2,3,4,5,6,8,11
Environmental Characteristics	**Working Temperature**	0℃～45℃@100%,-10℃@80%,60℃@40%
	Storage Temperature	-20℃～85℃
	Relative Humidity	20% to 90% RH (no condensation)
Other Parameters	**EMI Filter**	Internal band EMI filter
	Finished Product Guarantee	100% full load aging
	Quality Assurance	5-year warranty
	Cooling Mode	Natural cooling
	Net Weight	0.453kg
	Gross Weight	0.456kg
	Installation Mode	Vertical/horizontal installation
Measure	**Outline Dimension**	199×98×40mm
	Packing Size	205×106×46mm
	Installation Size	
Aapplication		Household appliances Information industry Industrial control Production and manufacturing industry Electrical apparatus Instruments and meters Financial equipment Coal mine safety power supply

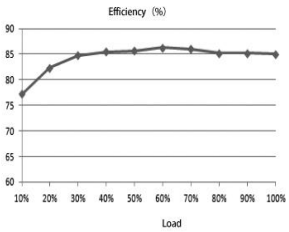
Static characteristic curve:



Reduction curve:



Load-efficiency (%):



TL-150T SERIES

Product features:

176~265VAC wide voltage AC input

Adjustable output voltage

Built-in auxiliary power supply

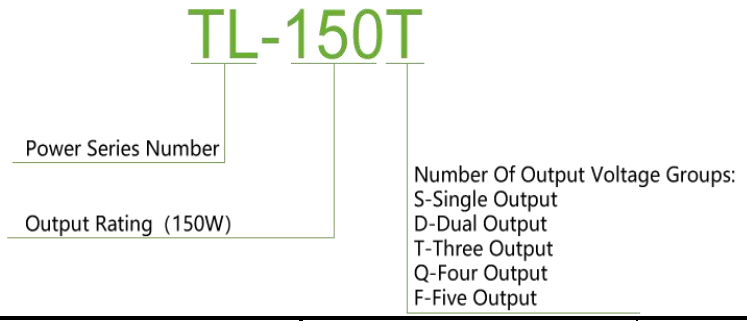
DC output indication

Protection type: short circuit/overload

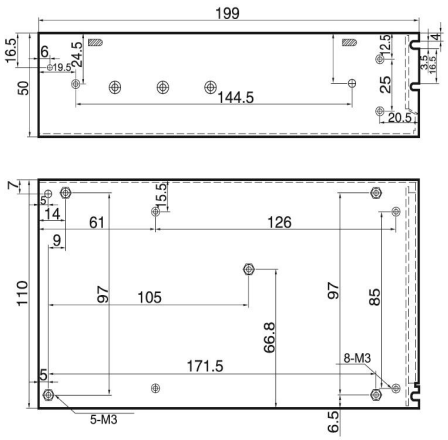
Product Description:

The TL-150T, as a 150W three-way output chassis-type power supply, features stable and reliable performance. Its input voltage ranges from 176 to 265VAC. It can perform long-term parallel dual-channel DC output and still operate efficiently even when the working environment temperature is as high as 55℃. It is widely applicable to the power supply scenarios of a variety of industrial and electronic equipment. With its precise voltage output and excellent environmental adaptability, it safeguards the stable operation of all kinds of equipment.

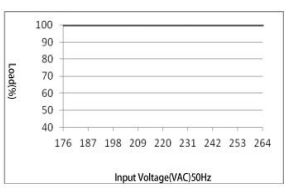
Model Naming Rules:



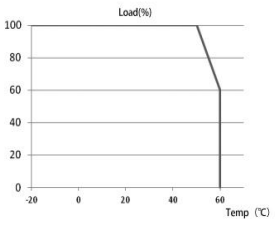
Model		TL-150T- A			TL-150T-B		
Output Characteristics	Output Voltage	5V	12V	-12V	24V	5V	-5V
	Output Current	1.5A~15A	0A~2A	0A-2A	0.5A~5A	0A~2A	0A~2A
	Ripple	80mV	120mV	120mV	150mV	80mV	80mV
	Efficiency	80%			78%		
	Rated Power	150W					
	Linear Adjustment Rate	≤0.5%					
	Adjustable Output Voltage Range	±5%					
	Rise Time	50ms (230Vac at full load)					
	Hold Time	20ms (230Vac at full load)					
Input Characteristics	Input Voltage Range	176~265VAC/200-360VDC					
	Input Frequency	47~63HZ					
	Surge Current	40A/230VAC (cold)					

Protective Properties	**Dielectric Strength**	Vin～Vout/1500VAC/min Vin～FG/1500VAC/min Vout～FG/500VAC/min
	Leakage Current	< 0.5mA/230VAC
	Protective Function	Short-circuit protection (self-recovery)　Overload protection within 110% - 130% (self-recovery)
	MTBF	MTBF≥5×10^5h
Design Standard	**Safty Standard**	The design conforms to GB4943.　EN 62368-1　UL 62368-1
	EMC Standard	Designed to EN 55032.ClassC　EN61000-3-2,3　EN61000-4-2,3,4,5,6,8,11
Environmental Characteristics	**Working Temperature**	0℃～45℃@100%,-10℃@80%,60℃@40%
	Storage Temperature	-20℃～85℃
	Relative Humidity	20% to 90% RH (no condensation)
Other Parameters	**EMI Filter**	Internal band EMI filter
	Finished Product Guarantee	100% full load aging
	Quality Assurance	5-year warranty
	Cooling Mode	Natural cooling
	Net Weight	0.703kg
	Gross Weight	0.750kg
	Installation Mode	Vertical/horizontal installation
Measure	**Outline Dimension**	199×110×50mm
	Packing Size	208×147×57mm
	Installation Size	
	Aapplication	Household appliances Information industry Industrial control Production and manufacturing industry Electrical apparatus Instruments and meters Financial equipment Coal mine safety power supply

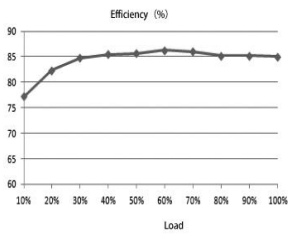
Static characteristic curve:



Reduction curve:



Load-efficiency (%):



TL-60Q SERIES

Product features:

176~265VAC wide voltage AC input

Adjustable output voltage

Built-in auxiliary power supply

DC output indication

Protection type: short circuit/overload

Product Description:

The TL-60Q, as a 60W four-channel output chassis-type power supply, boasts stable and reliable performance. Its input voltage ranges from 176 to 265VAC. It can perform parallel dual-channel DC output for a long time and still operate efficiently even when the working environment temperature reaches as high as 55 °C. It is widely applicable to the power supply scenarios of various industrial and electronic equipment. With its precise voltage output and excellent environmental adaptability, it safeguards the stable operation of all kinds of equipment.

Model Naming Rules:

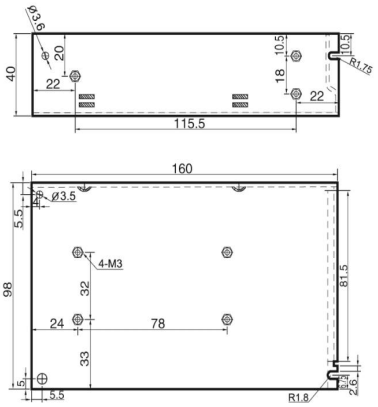
TL- 60 Q

Power Series Number

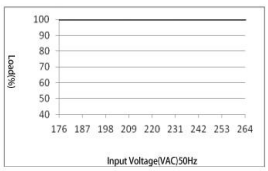
Output Rating (60W)

Number Of Output Voltage Groups:
S-Single Output
D-Dual Output
T-Three Output
Q-Four Output
F-Five Output

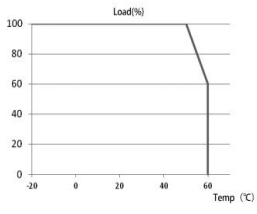
Model	Model	TL-60Q-A				TL-60Q-B				TL-60Q-C			
Output Characteristics	Output Voltage	5V	12V	-12V	24V	5V	15V	-15V	24V	5V	-5V	12V	-12V
	Output Current	0.8A~4A	0A~0.5A	0A~0.5A	0A~1A	0.6A~3A	0A~0.5A	0A~0.5A	0A~1A	1.4A~7A	0A~0.5A	0A~1A	0A~0.5A
	Ripple	60mV	100mV	100mV	150mV	60mV	100mV	100mV	150mV	60mV	150mV	100mV	100mV
	Efficiency	65%				66%				66%			
	Rated Power	60W											
	Linear Adjustment Rate	≤0.5%											
	Adjustable Output Voltage Range	±5%											
	Rise Time	50ms (230Vac at full load)											
	Hold Time	20ms (230Vac at full load)											
Input Characteristics	Input Voltage Range	176~265VAC/200-360VDC											
	Input Frequency	47~63HZ											
	Surge Current	40A/230VAC (cold)											

Protective Properties	**Dielectric Strength**	Vin～Vout/1500VAC/min Vin～FG/1500VAC/min Vout～FG/500VAC/min
	Leakage Current	< 0.5mA/230VAC
	Protective Function	Short-circuit protection (self-recovery) Overload protection within 115% - 150% (self-recovery)
	MTBF	MTBF≥5×10^5h
Design Standard	**Safty Standard**	The design conforms to GB4943. EN 62368-1 UL 62368-1
	EMC Standard	Designed to EN 55032.ClassC EN61000-3-2,3 EN61000-4-2,3,4,5,6,8,11
Environmental Characteristics	**Working Temperature**	0℃～45℃@100%,-10℃@80%,60℃@40%
	Storage Temperature	-20℃～85℃
	Relative Humidity	20% to 90% RH (no condensation)
Other Parameters	**EMI Filter**	Internal band EMI filter
	Finished Product Guarantee	100% full load aging
	Quality Assurance	5-year warranty
	Cooling Mode	Natural cooling
	Net Weight	0.406kg
	Gross Weight	0.440kg
	Installation Mode	Vertical/horizontal installation
Measure	**Outline Dimension**	160×98×40mm
	Packing Size	165×104×50mm
	Installation Size	
	Aapplication	Household appliances Information industry Industrial control Production and manufacturing industry Electrical apparatus Instruments and meters Financial equipment Coal mine safety power supply

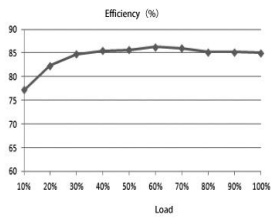
Static characteristic curve:



Reduction curve:



Load-efficiency (%):



TL-100Q SERIES

Product features:

176~265VAC wide voltage AC input

Adjustable output voltage

Built-in auxiliary power supply

DC output indication

Protection type: short circuit/overload

Product Description:

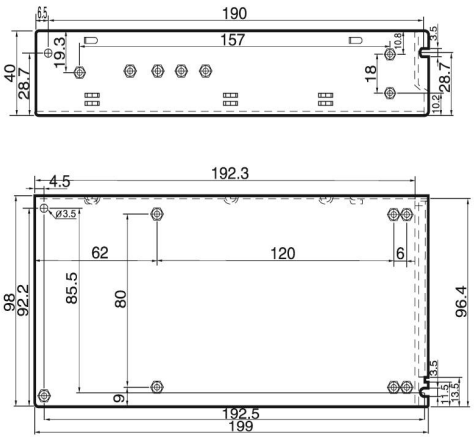
The TL-100Q, as a100W four-channel output chassis-type power supply, boasts stable and reliable performance. Its input voltage ranges from 176 to 265VAC. It can perform parallel dual-channel DC output for a long time and still operate efficiently even when the working environment temperature reaches as high as 55 °C. It is widely applicable to the power supply scenarios of various industrial and electronic equipment. With its precise voltage output and excellent environmental adaptability, it safeguards the stable operation of all kinds of equipment.

Model Naming Rules:

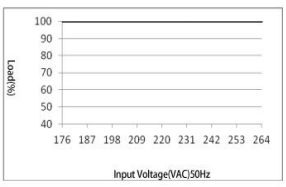
TL-100Q

- TL: Power Series Number
- 100: Output Rating (100W)
- Q: Number Of Output Voltage Groups:
  S-Single Output
  D-Dual Output
  T-Three Output
  Q-Four Output
  F-Five Output

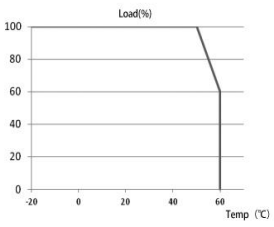
Model		TL-100Q-A				TL-100Q-B			
Output Characteristics	Output Voltage	5V	12V	-12V	24V	5V	15V	-15V	24V
	Output Current	1.2A~6A	0A~1A	0A~0.5A	0A-2A	1.2A~6A	0A~1A	0A~0.5A	0A-2A
	Ripple	100mV	120mV	120mV	200mV	100mV	150mV	150mV	200mV
	Efficiency	82%				82%			
	Rated Power	100W							
	Linear Adjustment Rate	≤0.5%							
	Adjustable Output Voltage Range	±5%							
	Rise Time	50ms (230Vac at full load)							
	Hold Time	20ms (230Vac at full load)							
Input Characteristics	Input Voltage Range	176~265VAC/200-360VDC							
	Input Frequency	47~63HZ							
	Surge Current	40A/230VAC (cold)							

Protective Properties	**Dielectric Strength**	Vin～Vout/1500VAC/min Vin～FG/1500VAC/min Vout～FG/500VAC/min
	Leakage Current	＜0.5mA/230VAC
	Protective Function	Short-circuit protection (self-recovery)　Overload protection within 115% - 150% (self-recovery)
	MTBF	MTBF≥5×10^5h
Design Standard	**Safty Standard**	The design conforms to GB4943.　EN 62368-1　UL 62368-1
	EMC Standard	Designed to EN 55032.ClassC　EN61000-3-2,3　EN61000-4-2,3,4,5,6,8,11
Environmental Characteristics	**Working Temperature**	0℃～45℃@100%,-10℃@80%,60℃@40%
	Storage Temperature	-20℃～85℃
	Relative Humidity	20% to 90% RH (no condensation)
Other Parameters	**EMI Filter**	Internal band EMI filter
	Finished Product Guarantee	100% full load aging
	Quality Assurance	5-year warranty
	Cooling Mode	Natural cooling
	Net Weight	0.453kg
	Gross Weight	0.456kg
	Installation Mode	Vertical/horizontal installation
Measure	**Outline Dimension**	199×98×40mm
	Packing Size	205×106×46mm
	Installation Size	
Aapplication	**Aapplication**	Household appliances Information industry Industrial control Production and manufacturing industry Electrical apparatus Instruments and meters Financial equipment Coal mine safety power supply

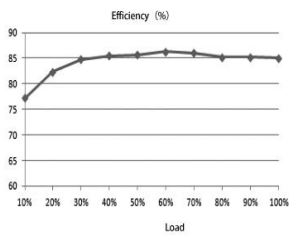
Static characteristic curve:



Reduction curve:



Load-efficiency (%):



TL-150Q SERIES

Product features:

176~265VAC wide voltage AC input

Adjustable output voltage

Built-in auxiliary power supply

DC output indication

Protection type: short circuit/overload

Product Description:

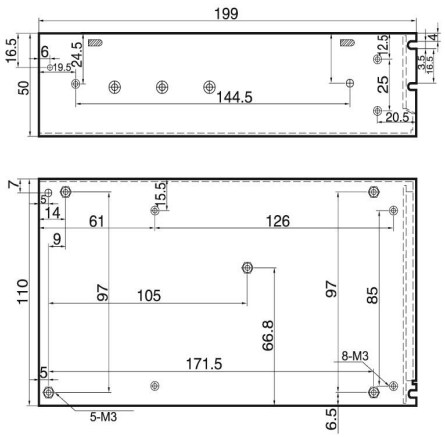
The TL-150Q, as a150W four-channel output chassis-type power supply, boasts stable and reliable performance. Its input voltage ranges from 176 to 265VAC. It can perform parallel dual-channel DC output for a long time and still operate efficiently even when the working environment temperature reaches as high as 55 °C. It is widely applicable to the power supply scenarios of various industrial and electronic equipment. With its precise voltage output and excellent environmental adaptability, it safeguards the stable operation of all kinds of equipment.

Model Naming Rules:

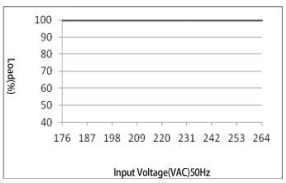
TL-150Q

- Power Series Number
- Output Rating (150W)
- Number Of Output Voltage Groups:
  S-Single Output
  D-Dual Output
  T-Three Output
  Q-Four Output
  F-Five Output

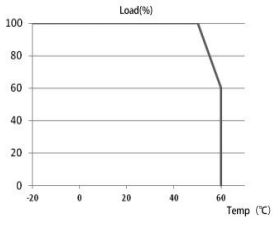
Model		TL-150Q-A				TL-150Q-B			
Output Characteristics	Output Voltage	5V	12V	-12V	24V	5V	15V	-15V	24V
	Output Current	1.6A~8A	0A~2A	0A~2A	0A-2A	1.2A~6A	0A~3A	0A~2A	0A-2A
	Ripple	100mV	150mV	150mV	200mV	100mV	150mV	150mV	200mV
	Efficiency	82%				82%			
	Rated Power	150W							
	Linear Adjustment Rate	≤0.5%							
	Adjustable Output Voltage Range	±5%							
	Rise Time	50ms (230Vac at full load)							
	Hold Time	20ms (230Vac at full load)							
Input Characteristics	Input Voltage Range	176~265VAC/200-360VDC							
	Input Frequency	47~63HZ							
	Surge Current	40A/230VAC (cold)							

Protective Properties	**Dielectric Strength**	Vin～Vout/1500VAC/min Vin～FG/1500VAC/min Vout～FG/500VAC/min
	Leakage Current	< 0.5mA/230VAC
	Protective Function	Short-circuit protection (self-recovery) Overload protection within 110% - 130% (self-recovery)
	MTBF	MTBF≥5×10^5h
Design Standard	**Safty Standard**	The design conforms to GB4943. EN 62368-1 UL 62368-1
	EMC Standard	Designed to EN 55032.ClassC EN61000-3-2,3 EN61000-4-2,3,4,5,6,8,11
Environmental Characteristics	**Working Temperature**	0℃～45℃@100%,-10℃@80%,60℃@40%
	Storage Temperature	-20℃～85℃
	Relative Humidity	20% to 90% RH (no condensation)
Other Parameters	**EMI Filter**	Internal band EMI filter
	Finished Product Guarantee	100% full load aging
	Quality Assurance	5-year warranty
	Cooling Mode	Natural cooling
	Net Weight	0.695kg
	Gross Weight	0.744kg
	Installation Mode	Vertical/horizontal installation
Measure	**Outline Dimension**	199×110×50mm
	Packing Size	208×147×57mm
	Installation Size	
	Aapplication	Household appliances Information industry Industrial control Production and manufacturing industry Electrical apparatus Instruments and meters Financial equipment Coal mine safety power supply

Static characteristic curve:



Reduction curve:



Load-efficiency (%):