

# 15S Series



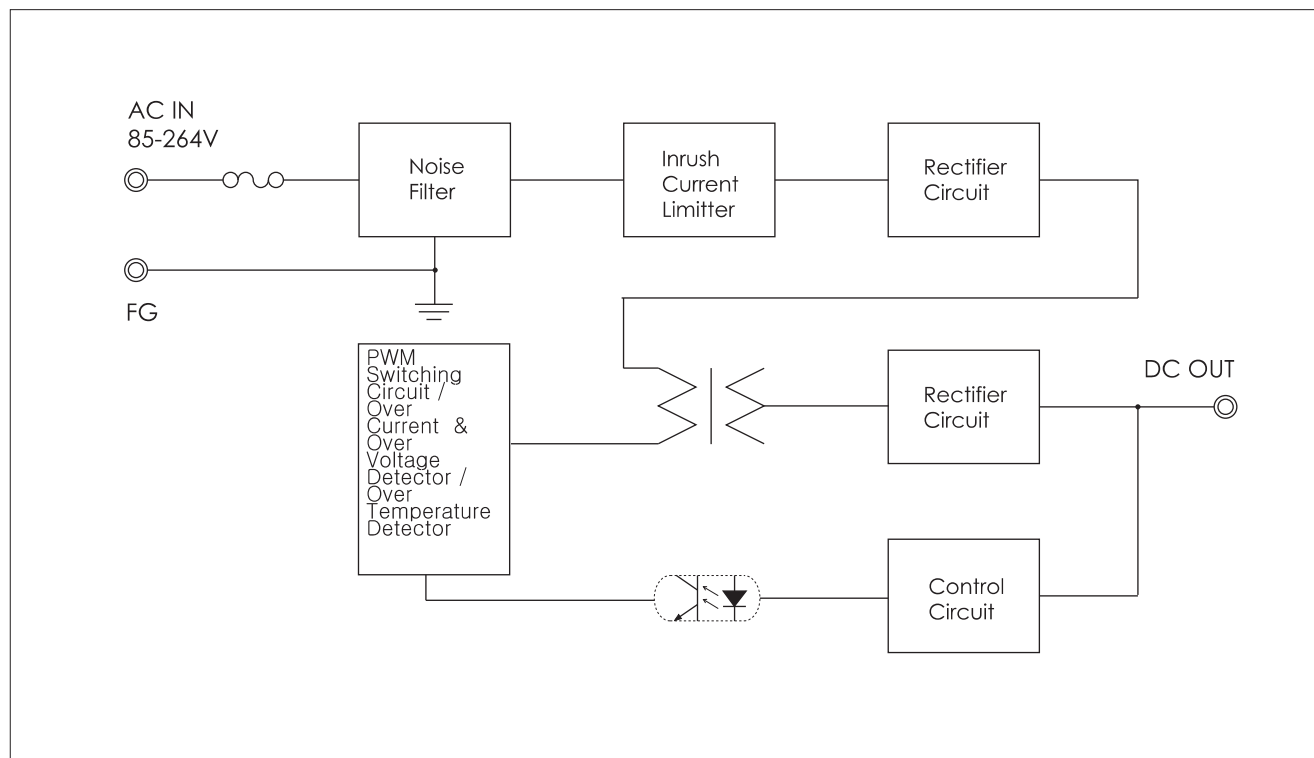
## 15W 1-Channel

- **5V3A/9V1.6A/12V1.2A/15V1A/24V0.6A/36V0.4A/48V0.3A Output**
- **Wide Input Voltage Range (AC85-264V)**
- **Built-in Inrush Current Limiter, Over Current Protector and Over Voltage Protector**
- **Over Temperature Protection**
- **Auto-Restart Mode**
- **Approved by EN 60950-1 C €**

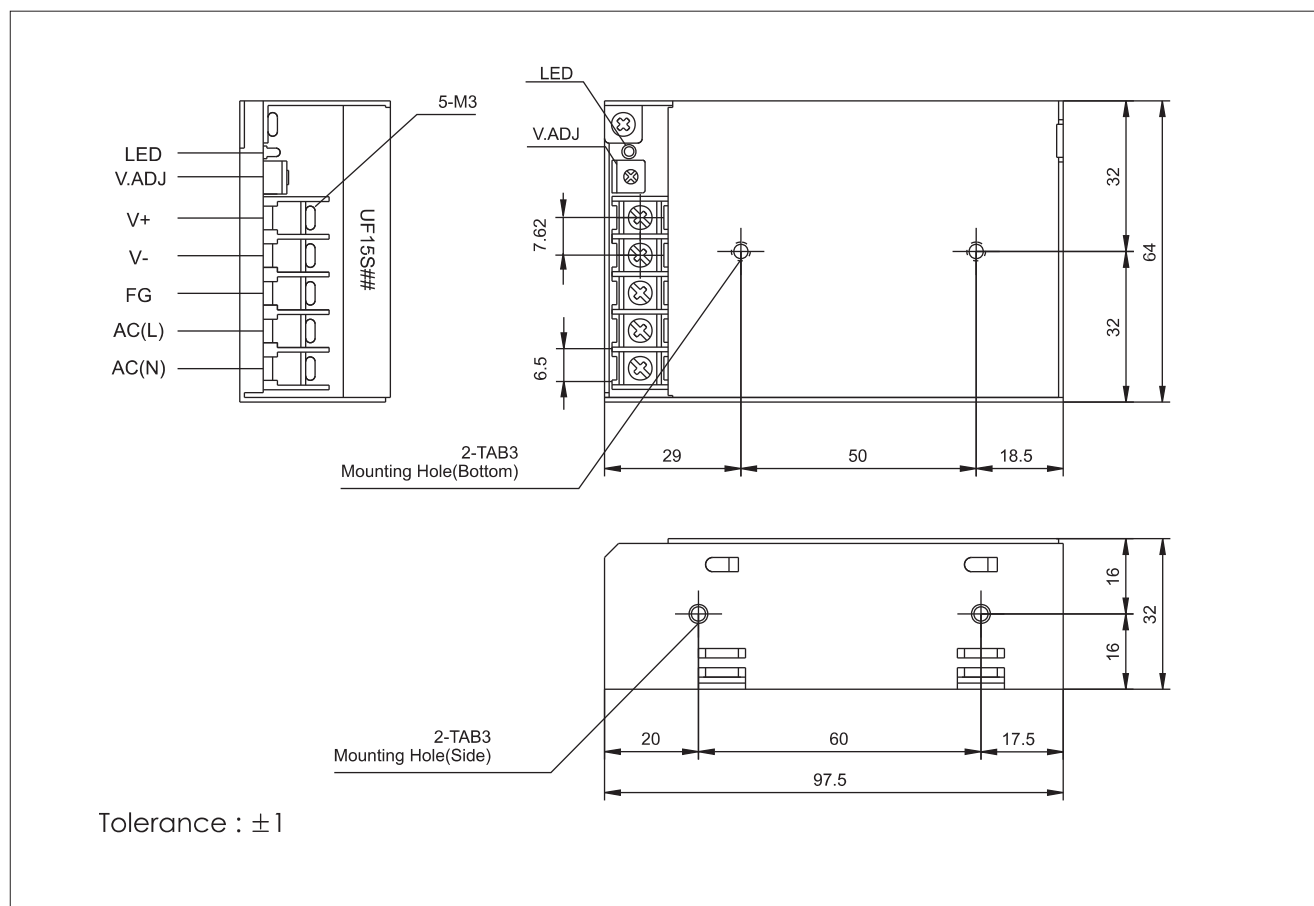
### SPECIFICATIONS

Item		UP15S05	UP15S09	UP15S12	UP15S15	UP15S24	UP15S36	UP15S48
INPUT	VOLTAGE	AC85~264V					0.4A typ (ACIN 110V, Io=100%) 0.2A typ (ACIN 220V, Io=100%)	
	FREQUENCY	50/60Hz(47~63Hz)						
	EFFICIENCY	75% Typ	75% Typ	75% Typ	78% Typ	80% Typ	83% Typ	85% Typ
	INRUSH CURRENT	20A Typ(ACIN 110V, Io=100%)/40A Typ(ACIN 220V, Io=100%) at cold start						
OUTPUT	VOLTAGE [V]	5	9	12	15	24	36	48
	CURRENT [A]	3.0	1.6	1.2	1.0	0.6	0.4	0.3
	LINE REGULATION [mV]	25 Max	45 Max	60 Max	75 Max	120 Max	180 Max	240 Max
	LOAD REGULATION [mV]	50 Max	90 Max	120 Max	150 Max	240 Max	360 Max	480 Max
	RIPPLE [mVp-p]	50 Max	90 Max	120 Max	150 Max	240 Max	360 Max	480 Max
	RIPPLE NOISE [mVp-p]	100 Max	140 Max	170 Max	200 Max	290 Max	410 Max	530 Max
	TEMPERATURE DRIFT,0-50℃[mV]	50 Max	90 Max	120 Max	150 Max	240 Max	360 Max	480 Max
	RISE TIME [msec]	100 Max (ACIN 85V, Io=100%)						
HOLDING TIME [msec]	10 Typ(ACIN 85V, Io=100%)							
PROTEC-TION	OVER CURRENT PROTECTION	Works at over 110% of rating and recovers automatically						
	OVER VOLTAGE PROTECTION	Works at 115~140% of rating						
ISOLAT-ION	INPUT-OUTPUT	AC3,000V for 1 minute, DC500V 100Mohm (At room temp. & humid.)						
	INPUT-CASE, FG	AC1,500V for 1 minute, DC500V 100Mohm (At room temp. & humid.)						
	OUTPUT-CASE	AC500V for 1 minute, DC500V 100Mohm (At room temp. & humid.)						
ENVIRON-MENT	OPERATING TEMP. & HUMID.	-10~+50℃, 20~90%RH(Non condensing)						
	STORAGE TEMP. & HUMID.	-20~+75℃, 20~90%RH(Non condensing)						
	VIBRATION	10~50Hz at 1G 3 minutes period, 30 minutes along X, Y and Z axis						
	IMPACT	10G for 20 msec, Once on each X, Y and Z axis						
	APPROVALS	CE	CE	CE	CE	CE		

### BLOCK DIAGRAM



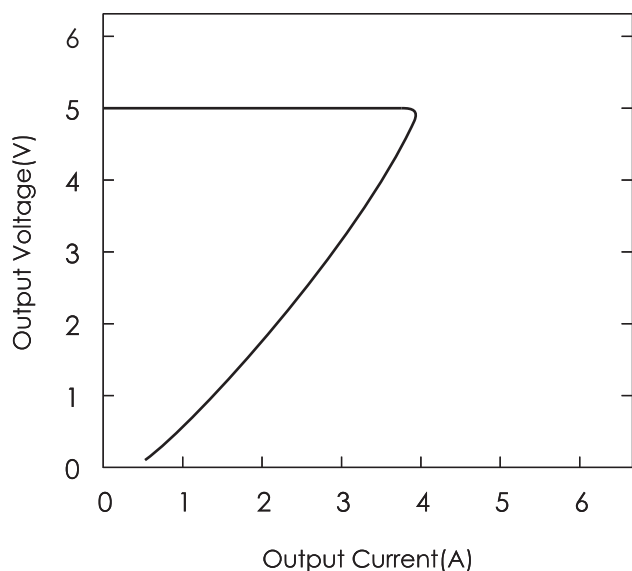
**DIMENSIONS(UNITS : MM)**



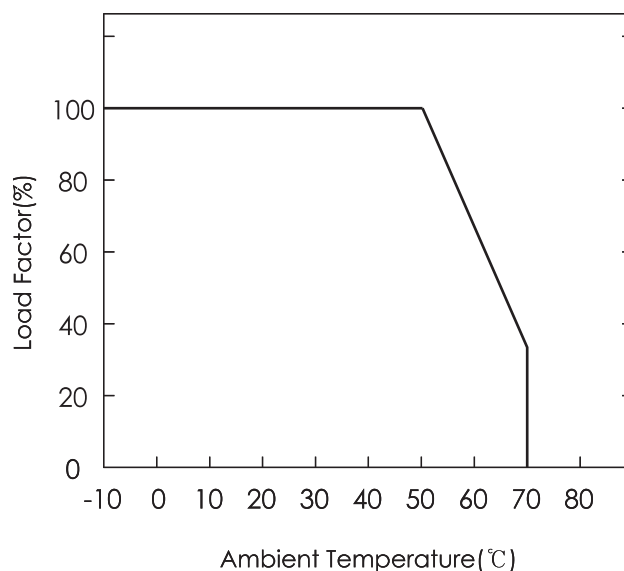
# Characteristic Curve

## 1. 15S/15SN Series(15S05)

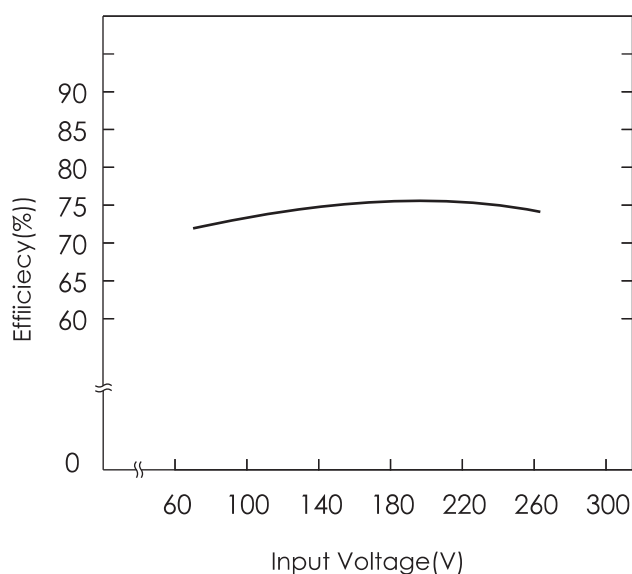
**A. OVER CURRENT CHARACTERISTICS**



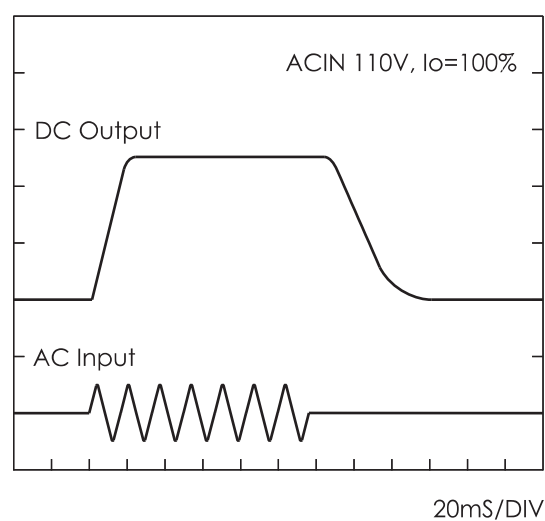
**B. DERATING CHARACTERISTICS**



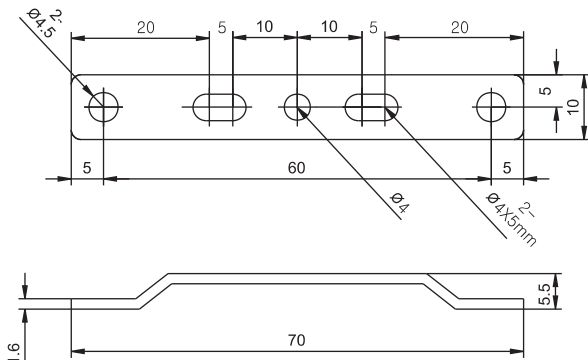
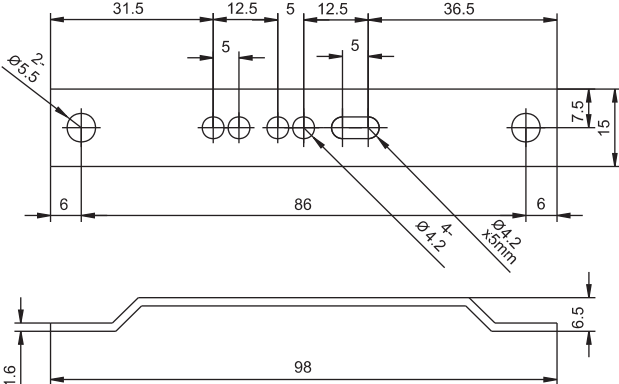
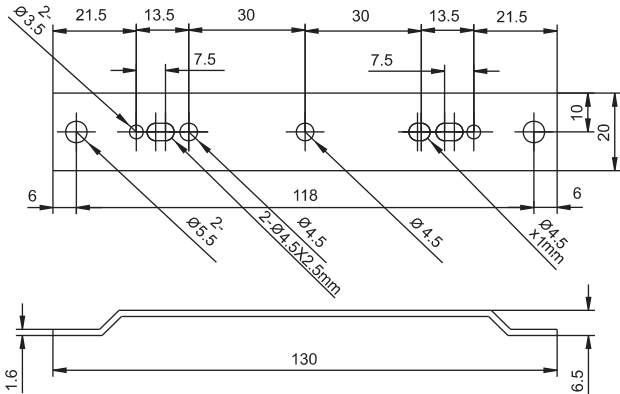
**C. EFFICIENCY CHARACTERISTICS**



**D. RISING/FALLING TIME CHARACTERISTICS**



BRACKET

MODEL	APPLICATION	DIMENSIONS(UNIT:mm)
BRACKET-A	15S Series 30S Series 50S Series 75S Series 100S Series 150S Series 200S Series 220S Series 15D Series 30D Series 50D Series 15T Series 30T Series 50T Series	 <p>Technical drawing of Bracket-A. The top view shows a rectangular plate with a total width of 60mm and a total length of 70mm. It features five mounting holes with a diameter of <math>\phi 4.5</math>mm. The hole positions are defined by dimensions: 20mm from the left edge to the first hole, 5mm between the first and second holes, 10mm between the second and third holes, 10mm between the third and fourth holes, 5mm between the fourth and fifth holes, and 20mm from the fifth hole to the right edge. The plate has a thickness of 1.6mm and a raised section with a height of 5.5mm. The side view shows a profile with a total length of 70mm and a height of 5.5mm.</p>
BRACKET-B	300S Series 400S Series	 <p>Technical drawing of Bracket-B. The top view shows a rectangular plate with a total width of 86mm and a total length of 98mm. It features five mounting holes with a diameter of <math>\phi 5.5</math>mm. The hole positions are defined by dimensions: 31.5mm from the left edge to the first hole, 12.5mm between the first and second holes, 5mm between the second and third holes, 12.5mm between the third and fourth holes, and 36.5mm from the fourth hole to the right edge. The plate has a thickness of 1.6mm and a raised section with a height of 6.5mm. The side view shows a profile with a total length of 98mm and a height of 6.5mm.</p>
BRACKET-C	500S Series 600S Series 650S Series 750S Series 850S Series 1000S Series 1200S Series 1500S Series	 <p>Technical drawing of Bracket-C. The top view shows a rectangular plate with a total width of 118mm and a total length of 130mm. It features five mounting holes with a diameter of <math>\phi 4.5</math>mm. The hole positions are defined by dimensions: 21.5mm from the left edge to the first hole, 13.5mm between the first and second holes, 30mm between the second and third holes, 30mm between the third and fourth holes, 13.5mm between the fourth and fifth holes, and 21.5mm from the fifth hole to the right edge. The plate has a thickness of 1.6mm and a raised section with a height of 6.5mm. The side view shows a profile with a total length of 130mm and a height of 6.5mm.</p>

# C E R T I F I C A T E



of Conformity  
Low Voltage Directive 73/23/EEC  
as last amended by EEC Directive 93/68/EEC

Registration No.: AN 50012284 0001

Report No.: 13000499 001

Holder: Union Elecom Co., Ltd.  
34-2, Samjeong-dong, Ojeong-gu  
Bucheon, Gyeonggi-do 421-150  
Rep. of Korea

Product: Schaltnetzteil  
Switching Mode Power Supply

Identification: Type Designation : UP15S\*\*  
UP30S\*\*  
\*\* = 05, 09, 12, 15, or 24  
Serial no. : n.a. (Prototype)

This certificate of conformity is based on an evaluation of a sample of the above mentioned product. Technical Report and documentation are at the Licence Holder's disposal. This is to certify that the tested sample is in conformity with all revision of Annex I of Council Directive 73/23/EEC, in its latest amended version, referred to as the Low Voltage Directive. This certificate does not imply assessment of the series-production of the product and does not permit the use of a TÜV Rheinland mark of conformity. The holder of the certificate is authorized to use this certificate in connection with the EC declaration of conformity according to Annex III of the Directive.



Certification Body

Dr. R. Frankenberger

Cologne, 06.05.2002

TÜV Rheinland Product Safety GmbH - Am Grauen Stein - D-51105 Köln