

220S Series

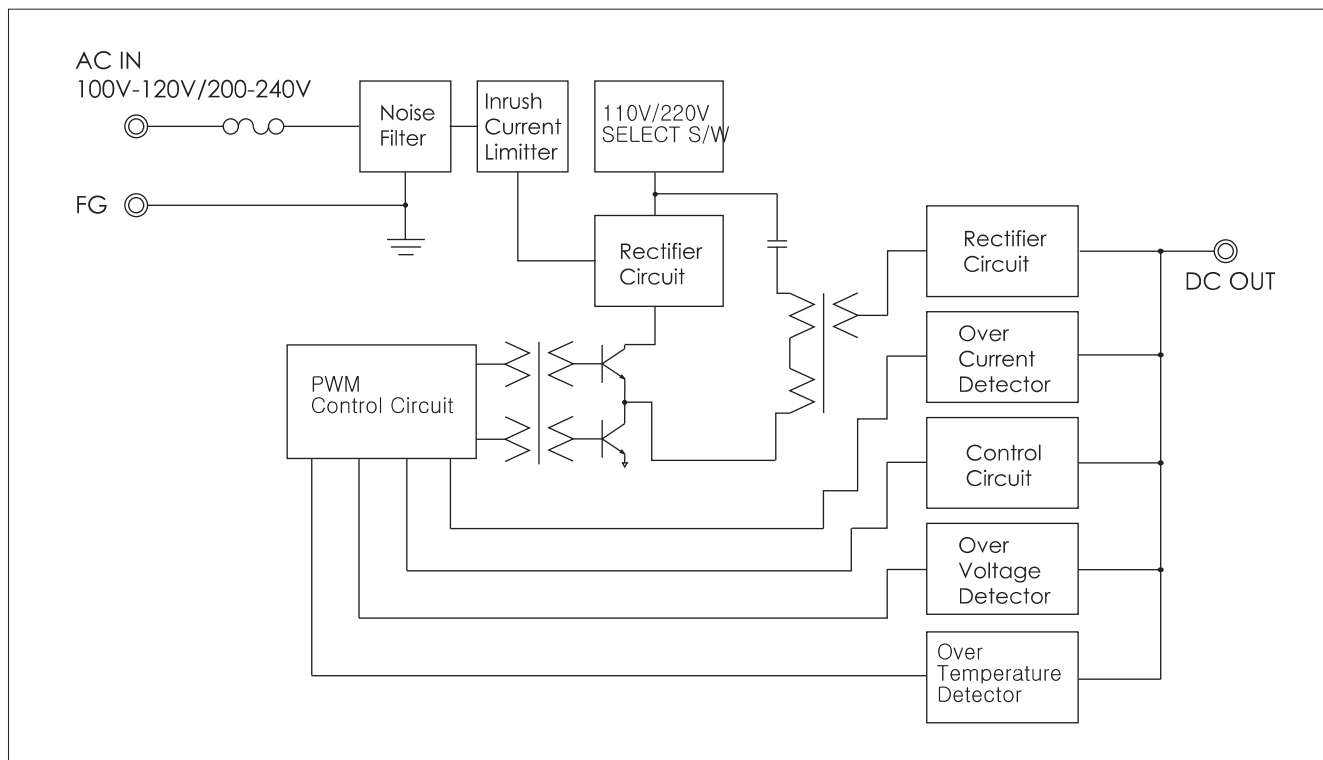
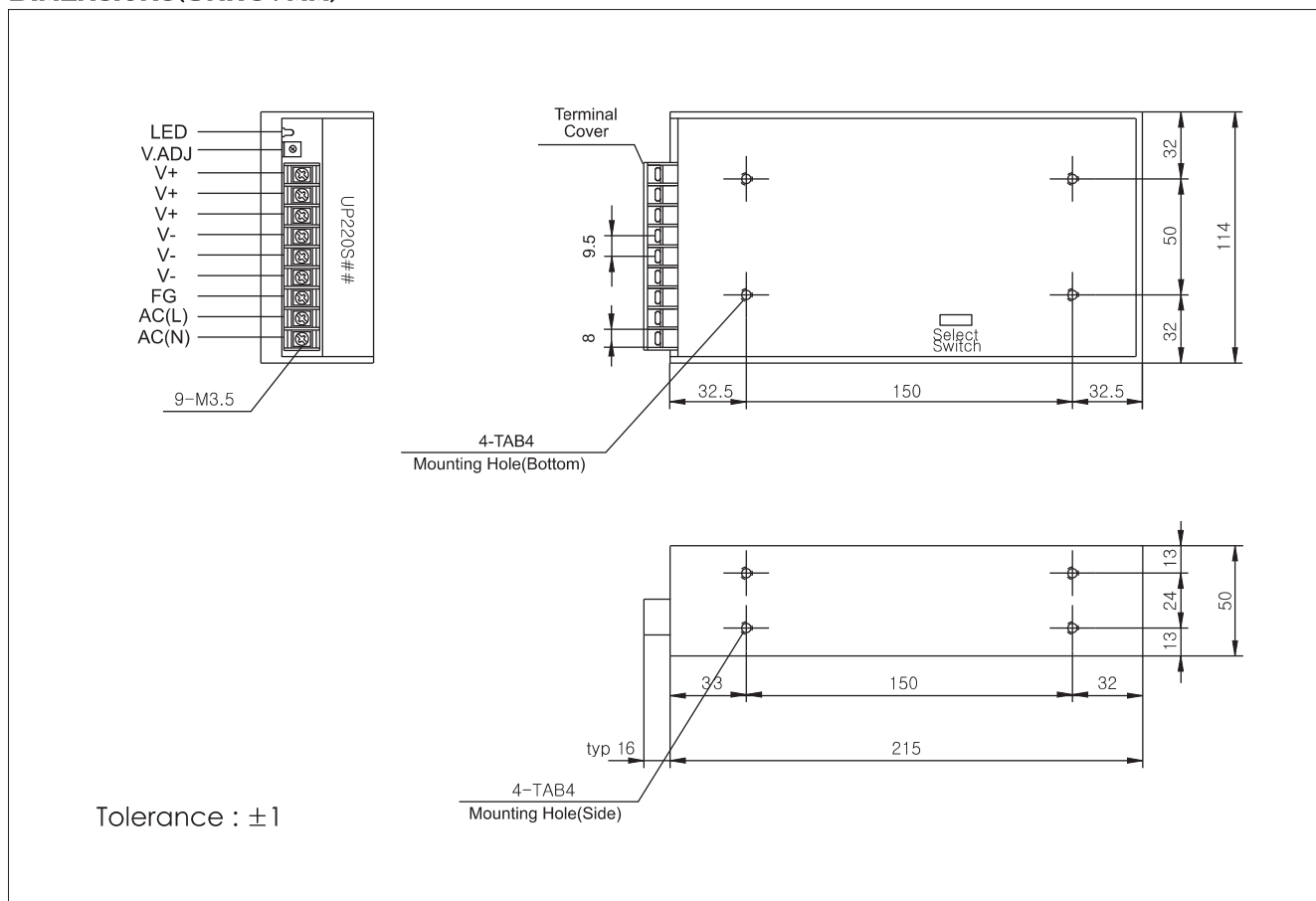


220W 1-Channel

- **5V44A/12V18.3A/15V14.6A/24V9.1A/36V6.1A/48V4.5A Output**
- **Dual Input Voltage Range (AC100-120V/AC200-240V)**
- **Built-in Inrush Current Limiter, Over Current Protector and Over Voltage Protector**
- **Over Temperature Protection**
- **Approved by EN 60950-1 CE**

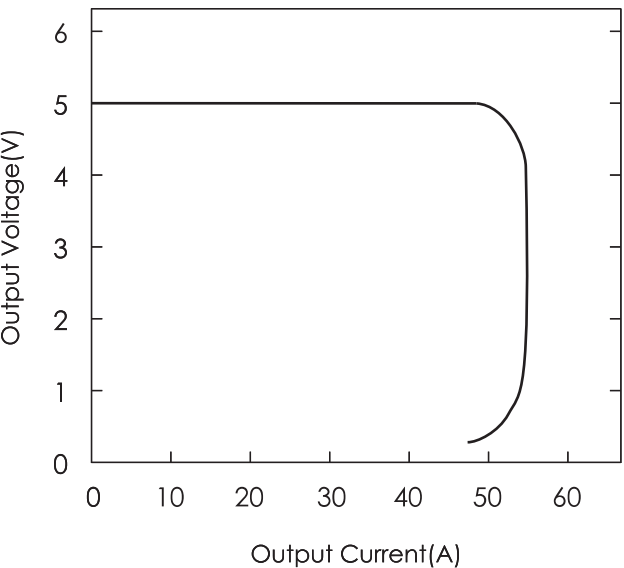
SPECIFICATIONS

Item		UP220S05	UP220S12	UP220S15	UP220S24	UP220S36	UP220S48
INPUT	VOLTAGE	AC100~120V/200~240V 4.4A typ (ACIN 110V, Io=100%) 2.2A typ (ACIN 220V, Io=100%)					
	FREQUENCY	50/60Hz(47~63Hz)					
	EFFICIENCY	80% Typ	82% Typ	82% Typ	85% Typ	85% Typ	85% Typ
	INRUSH CURRENT	20A Typ(ACIN 110V, Io=100%)/40A Typ(ACIN 220V, Io=100%) at cold start					
OUTPUT	VOLTAGE [V]	5	12	15	24	36	48
	CURRENT [A]	44.0	18.3	14.6	9.1	6.1	4.5
	LINE REGULATION [mV]	25 Max	60 Max	75 Max	120 Max	180 Max	240 Max
	LOAD REGULATION [mV]	50 Max	120 Max	150 Max	240 Max	360 Max	480 Max
	RIPPLE [mVp-p]	50 Max	120 Max	150 Max	240 Max	360 Max	480 Max
	RIPPLE NOISE [mVp-p]	100 Max	170 Max	200 Max	290 Max	410 Max	530 Max
	TEMPERATURE DRIFT,0-50℃ [mV]	50 Max	120 Max	150 Max	240 Max	360 Max	480 Max
	RISE TIME [msec]	600 Max (ACIN 100V/200V, Io=100%)					
HOLDING TIME [msec]	15 Typ(ACIN 100V/200V, 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	10~55Hz 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		

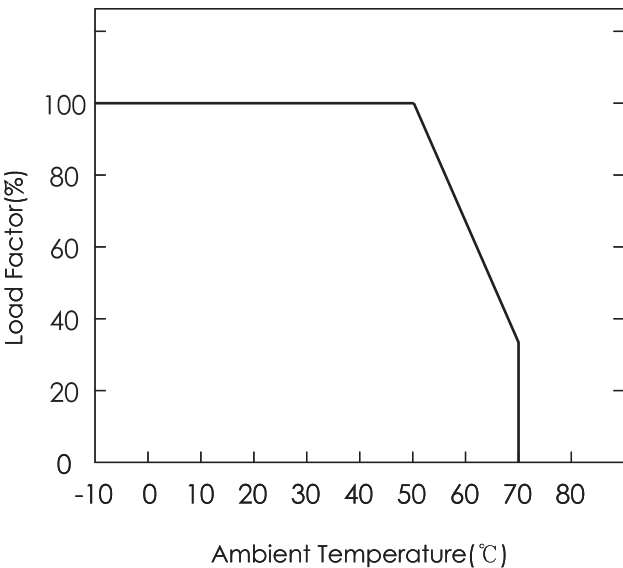
220S Series**BLOCK DIAGRAM****DIMENSIONS(UNITS : MM)**

8. 220S Series(220S05)

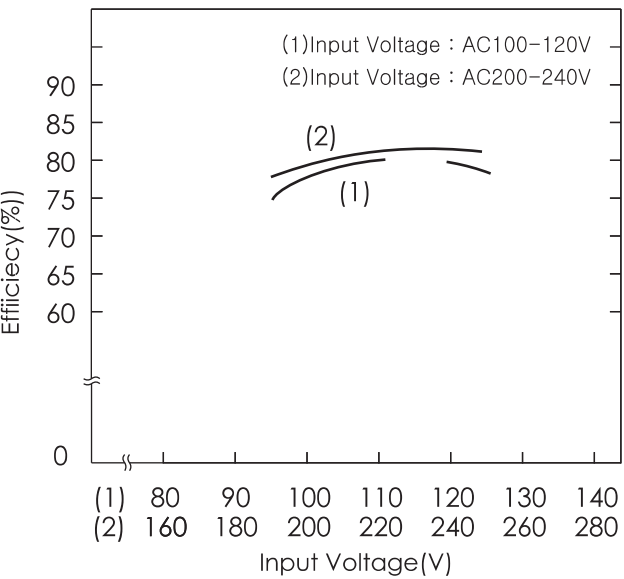
A. OVER CURRENT CHARACTERISTICS



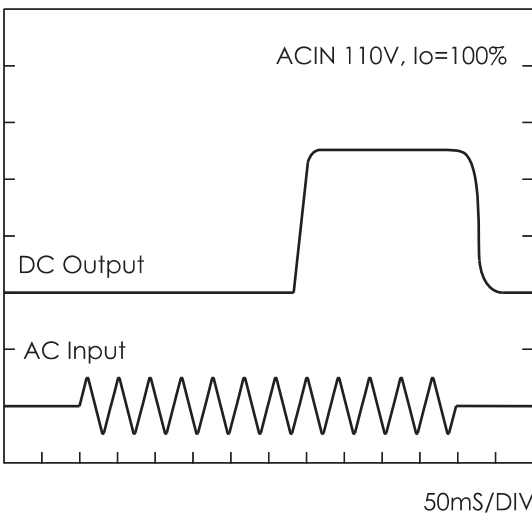
B. DERATING CHARACTERISTICS



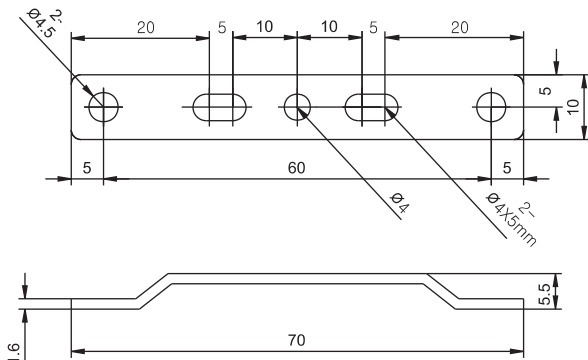
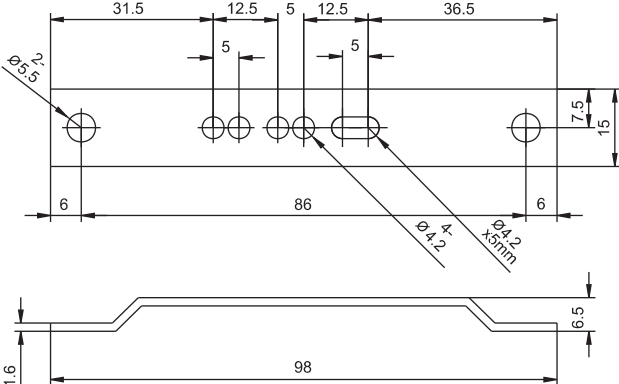
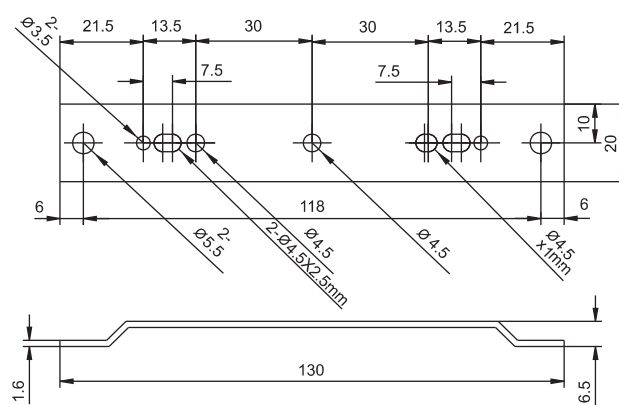
C. EFFICIENCY CHARACTERISTICS



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 $\phi 4.5$mm. The hole spacing is 20mm between the first and second, 5mm between the second and third, 10mm between the third and fourth, 5mm between the fourth and fifth, and 20mm from the fifth hole to the right edge. The plate has a thickness of 1.6mm and a raised section on the right side with a height of 5.5mm. The side view shows a profile with a total length of 70mm and a height of 1.6mm.</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 $\phi 5.5$mm. The hole spacing is 31.5mm between the first and second, 12.5mm between the second and third, 5mm between the third and fourth, 12.5mm between the fourth and fifth, and 36.5mm from the fifth hole to the right edge. The plate has a thickness of 1.6mm and a raised section on the right side with a height of 6.5mm. The side view shows a profile with a total length of 98mm and a height of 1.6mm.</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 $\phi 4.5$mm. The hole spacing is 21.5mm between the first and second, 13.5mm between the second and third, 30mm between the third and fourth, 30mm between the fourth and fifth, and 13.5mm between the fifth and sixth, and 21.5mm from the sixth hole to the right edge. The plate has a thickness of 1.6mm and a raised section on the right side with a height of 6.5mm. The side view shows a profile with a total length of 130mm and a height of 1.6mm.</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 50021877 0002

Report No.: 13001281 002

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 Designations: UP200S**
UP220S**
** = 05, 12, 15, or 24
UP300S**
** = 05, 12, 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.

Cologne, 21.02.2003



Certification Body

Dr. R. Frankenberger

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

CE The CE marking may be used if all relevant and effective EC Directives are complied with. CE