

# 50D Series(1)



## 50W 2-Channel

- **5V8A 5V2A/  
5V6.4A 9V2A/  
5V5.2A 12V2A  
5V5.5A 15V1.5A  
5V3A 24V1.5A  
2-Channel 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**

### SPECIFICATIONS

Item		UP50DAA		UP50DAB		UP50DAC		UP50DAD		UP50DAE		
INPUT	VOLTAGE	AC85~264V								1.2A typ (ACIN 110V, Io=100%) 0.6A typ (ACIN 220V, Io=100%)		
	FREQUENCY	50/60Hz(47~63Hz)										
	EFFICIENCY	80% Typ		80% Typ		80% Typ		80% Typ		80% Typ		
	INRUSH CURRENT	20A Typ(ACIN 110V, Io=100%)/40A Typ(ACIN 220V, Io=100%) at cold start										
OUTPUT	VOLTAGE [V]	5	5	5	9	5	12	5	15	5	24	
	CURRENT [A]	8.0	2.0	6.4	2.0	5.2	2.0	5.5	1.5	3.0	1.5	
	LINE REGULATION [mV]	25 Max	25 Max	25 Max	45 Max	25 Max	60 Max	25 Max	75 Max	25 Max	120 Max	
	LOAD REGULATION [mV]	50 Max	50 Max	50 Max	90 Max	50 Max	120 Max	50 Max	150 Max	50 Max	240 Max	
	RIPPLE [mVp-p]	50 Max	50 Max	50 Max	90 Max	50 Max	120 Max	50 Max	150 Max	50 Max	240 Max	
	RIPPLE NOISE [mVp-p]	100 Max	100 Max	100 Max	140 Max	100 Max	170 Max	100 Max	200 Max	100 Max	290 Max	
	TEMPERATURE DRIFT,0-50℃ [mV]	50 Max	50 Max	50 Max	90 Max	50 Max	120 Max	50 Max	150 Max	50 Max	240 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	10~55Hz 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											

# 50D Series(2)



## 50W 2-Channel

- **9V3.5A 9V2A/  
12V2A 12V2A/  
15V1.6A 15V1.6A/  
24V1A 24V1A/  
2-Channel 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**

### SPECIFICATIONS

Item		UP50DBB		UP50DCC		UP50DDD		UP50DEE		
INPUT	VOLTAGE	AC85~264V						1.2A typ (ACIN 110V, Io=100%) 0.6A typ (ACIN 220V, Io=100%)		
	FREQUENCY	50/60Hz(47~63Hz)								
	EFFICIENCY	80% Typ		80% Typ		80% Typ		80% Typ		
	INRUSH CURRENT	15A Typ(ACIN 110V, Io=100%) / 30A Typ(ACIN 220V, Io=100%) at cold start								
OUTPUT	VOLTAGE [V]	9	9	12	12	15	15	24	24	
	CURRENT [A]	3.5	2.0	2.0	2.0	1.6	1.6	1.0	1.0	
	LINE REGULATION [mV]	45 Max	45 Max	60 Max	60 Max	75 Max	75 Max	120 Max	120 Max	
	LOAD REGULATION [mV]	90 Max	90 Max	120 Max	120 Max	150 Max	150 Max	240 Max	240 Max	
	RIPPLE [mVp-p]	90 Max	90 Max	120 Max	120 Max	150 Max	150 Max	240 Max	240 Max	
	RIPPLE NOISE [mVp-p]	140 Max	140 Max	170 Max	170 Max	200 Max	200 Max	290 Max	290 Max	
	TEMPERATURE DRIFT,0-50℃ [mV]	90 Max	90 Max	120 Max	120 Max	150 Max	150 Max	240 Max	240 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 over 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.	0~+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									

# 50D Series(3)



## 50W 2-Channel

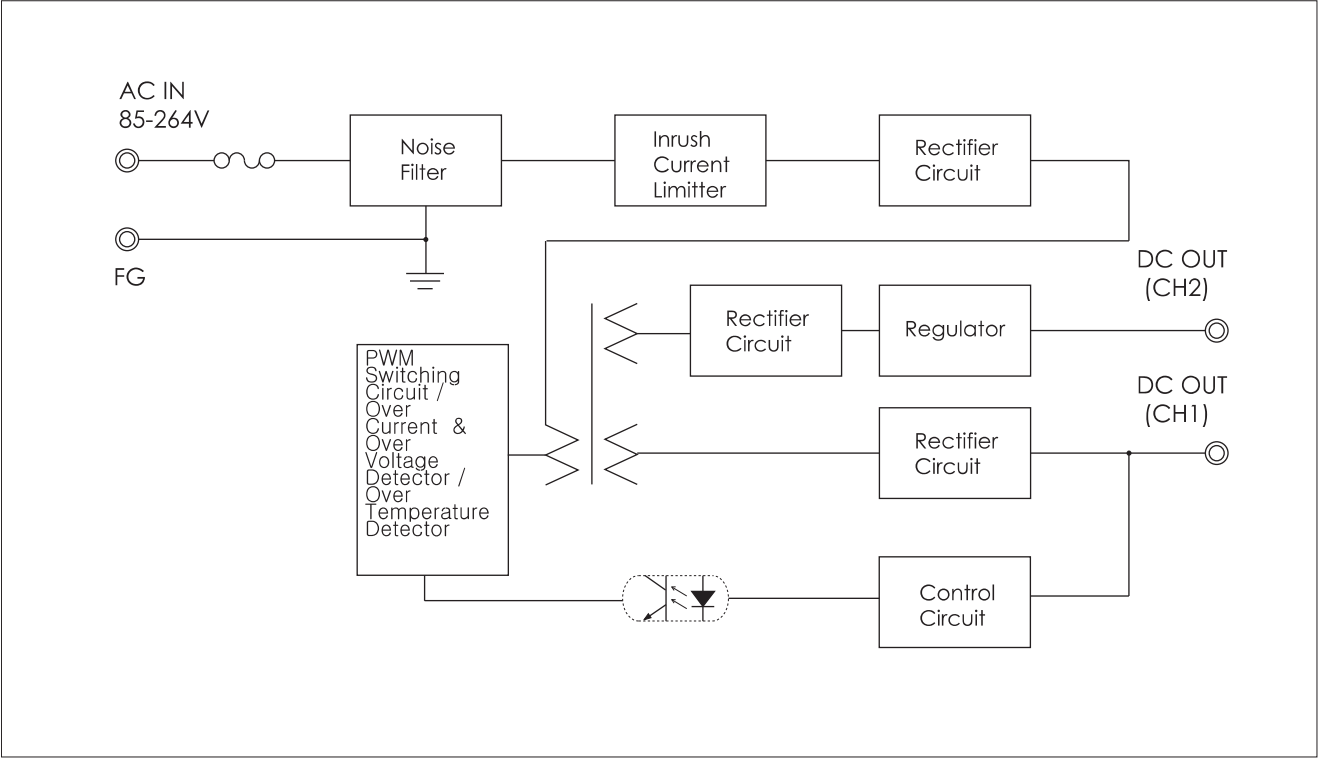
- **9V4.4A 5V2A/  
12V3.3A 5V2A/  
15V2.6A 5V2A/  
24V1.6A 5V2A/  
2-Channel Output**
- **Wide Input Voltage Range  
(AC85-264V)**
- **Built-in Inrush Current  
Limiter, Over Current  
Protector and Over  
Voltage Protector**
- **Over Temperature  
Protection**
- **Auto-Restart Mode**

### SPECIFICATIONS

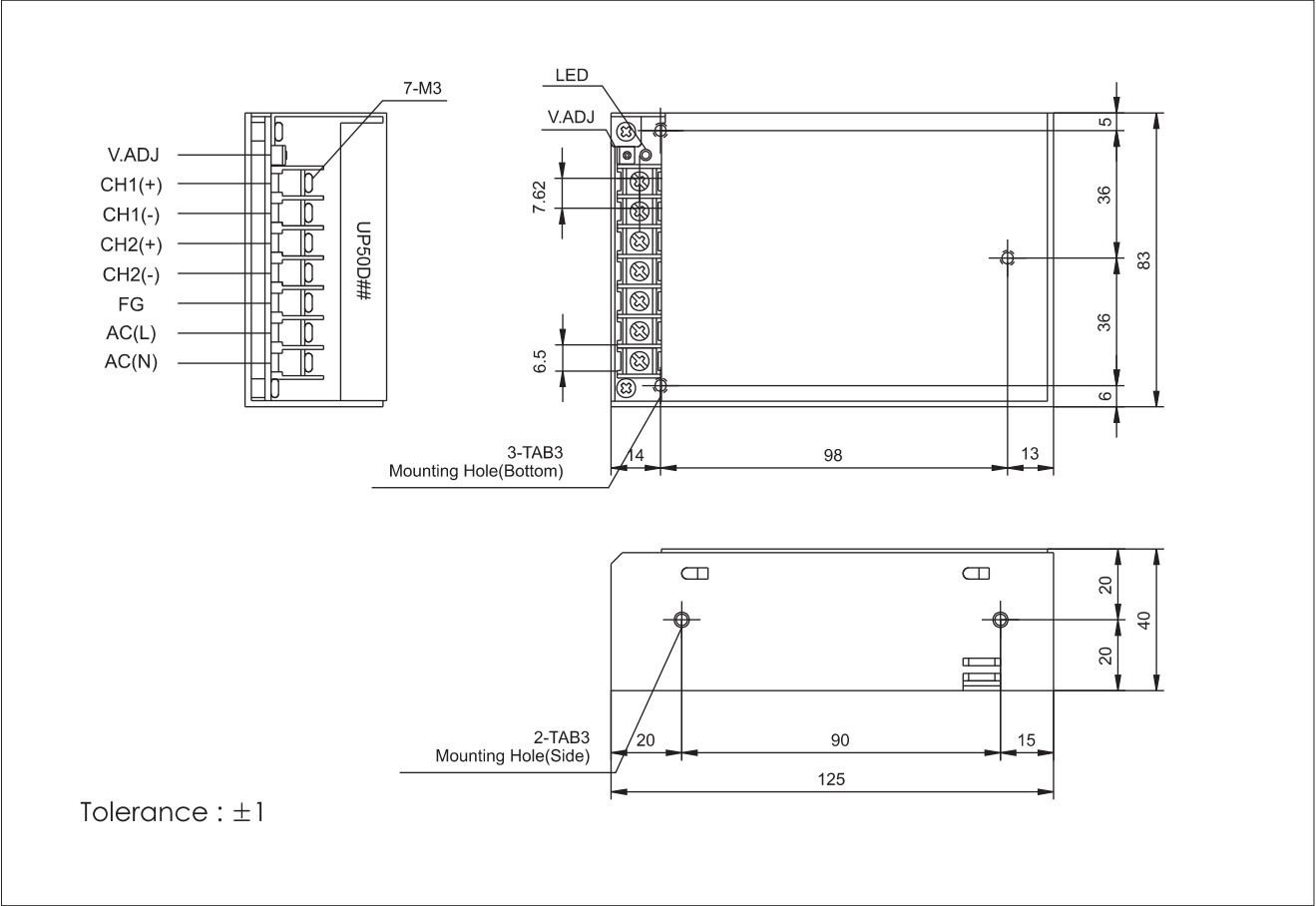
Item		UP50DBA		UP50DCA		UP50DDA		UP50DEA		
INPUT	VOLTAGE	AC85~264V						0.7A typ (ACIN 110V, Io=100%) 0.35A typ (ACIN 220V, Io=100%)		
	FREQUENCY	50/60Hz(47~63Hz)								
	EFFICIENCY	80% Typ		80% Typ		80% Typ		80% Typ		
	INRUSH CURRENT	20A Typ(ACIN 110V, Io=100%)/ 40A Typ(ACIN 220V, Io=100%) at cold start								
OUTPUT	VOLTAGE [V]	9	5	12	5	15	5	24	5	
	CURRENT [A]	4.4	2.0	3.3	2.0	2.6	2.0	1.6	2.0	
	LINE REGULATION [mV]	45 Max	25 Max	60 Max	25 Max	75 Max	25 Max	120 Max	25 Max	
	LOAD REGULATION [mV]	90 Max	50 Max	120 Max	50 Max	150 Max	50 Max	240 Max	50 Max	
	RIPPLE [mVp-p]	90 Max	50 Max	120 Max	50 Max	150 Max	50 Max	240 Max	50 Max	
	RIPPLE NOISE [mVp-p]	140 Max	100 Max	170 Max	100 Max	200 Max	100 Max	290 Max	100 Max	
	TEMPERATURE DRIFT,0-50℃ [mV]	90 Max	50 Max	120 Max	50 Max	150 Max	50 Max	240 Max	50 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 over 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.	0~+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									

50D Series

BLOCK DIAGRAM

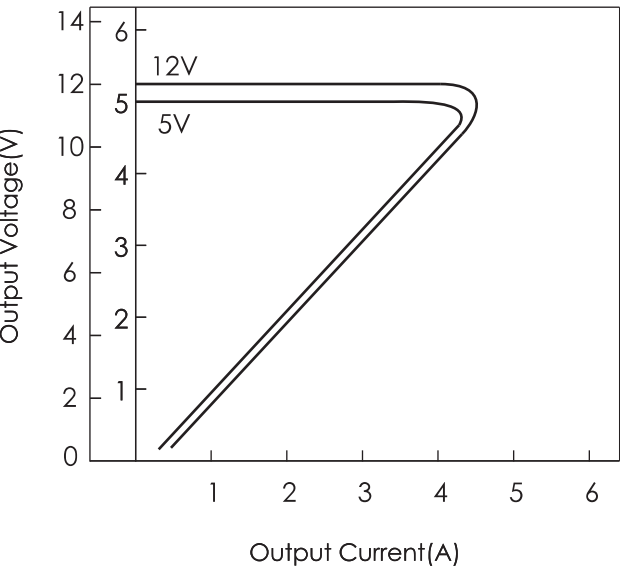


DIMENSIONS(UNITS : MM)

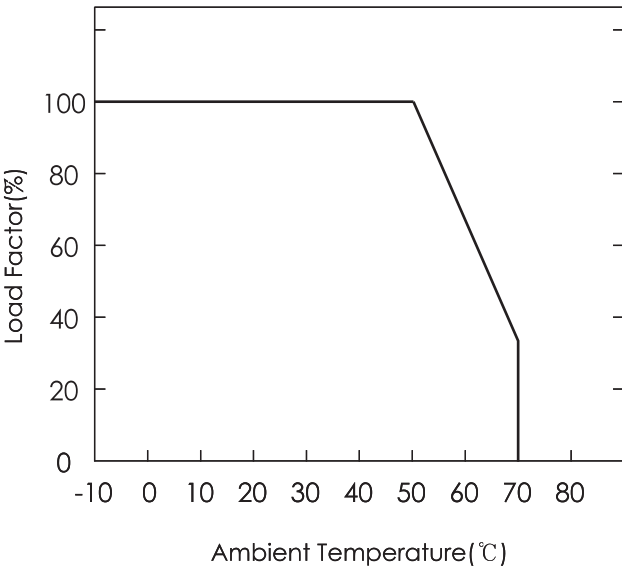


# 21. 50D Series(50DAC)

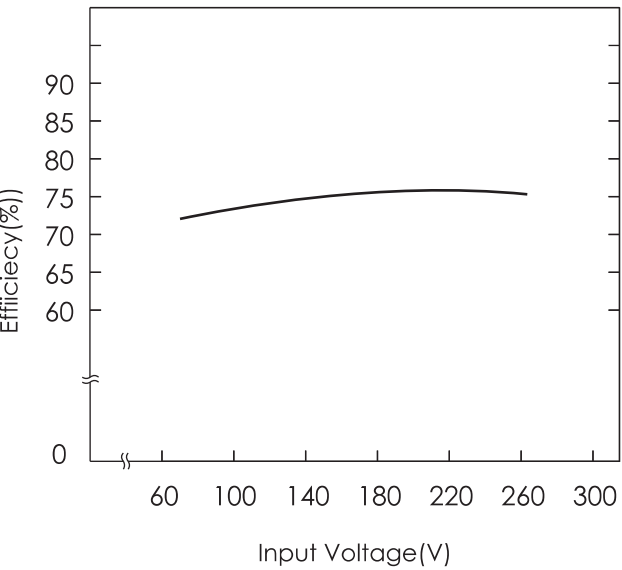
A. OVER CURRENT CHARACTERISTICS



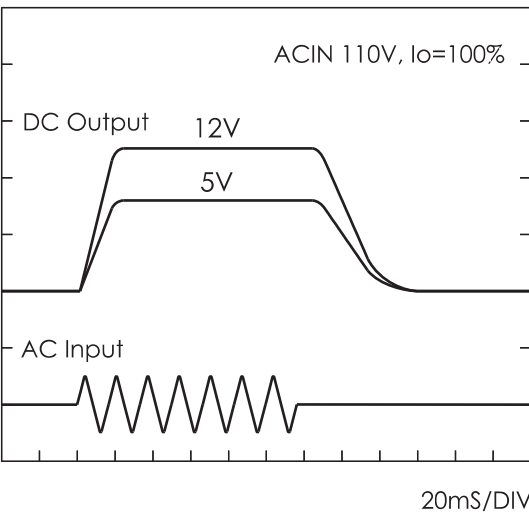
B. DERATING CHARACTERISTICS



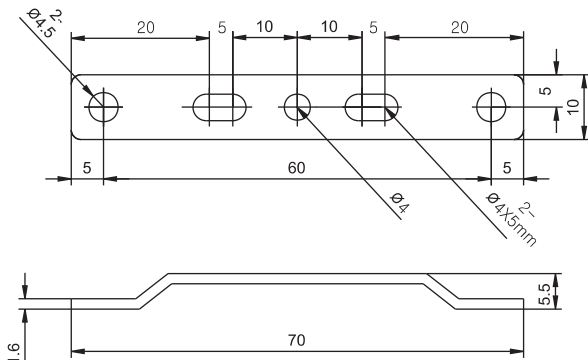
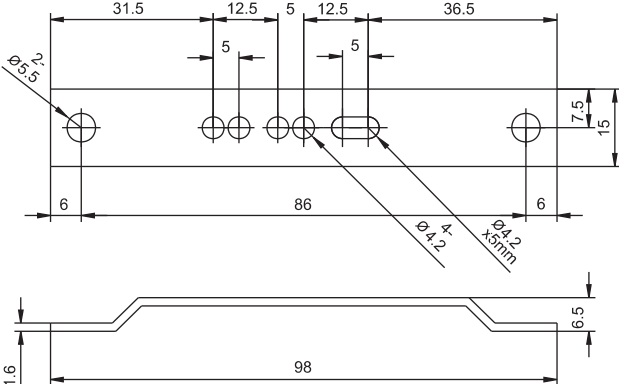
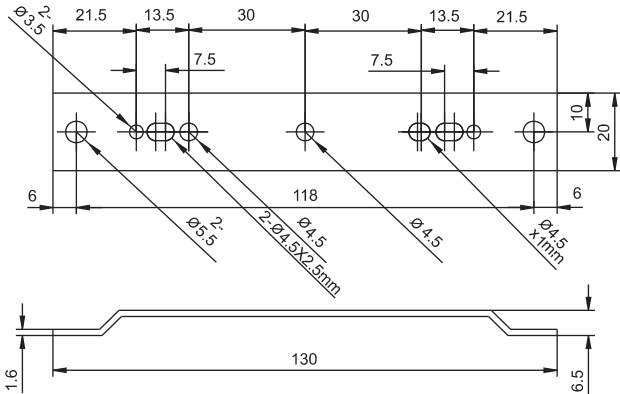
C. EFFICIENCY CHARACTERISTICS



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 mounting flange with a height of 5.5mm. The side view shows a profile with a total length of 70mm and a mounting flange with 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 mounting flange with a height of 6.5mm. The side view shows a profile with a total length of 98mm and a mounting flange with 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 mounting flange with a height of 6.5mm. The side view shows a profile with a total length of 130mm and a mounting flange with a height of 6.5mm.</p>