

# 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, lo=100%) 0.6A typ (ACIN 220V, lo=100%)				
	FREQUENCY	50/60Hz(47~63Hz)									
	EFFICIENCY	80% Typ	80% Typ	80% Typ	80% Typ	80% Typ					
	INRUSH CURRENT	20A Typ(ACIN 110V, lo=100%)/40A Typ(ACIN 220V, lo=100%) at cold start									
OUTPUT	VOLTAGE [V]	<b>5</b>	<b>5</b>	<b>5</b>	<b>9</b>	<b>5</b>	<b>12</b>	<b>5</b>	<b>15</b>	<b>5</b>	<b>24</b>
	CURRENT [A]	<b>8.0</b>	<b>2.0</b>	<b>6.4</b>	<b>2.0</b>	<b>5.2</b>	<b>2.0</b>	<b>5.5</b>	<b>1.5</b>	<b>3.0</b>	<b>1.5</b>
	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°C [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, lo=100%)									
	HOLDING TIME [msec]	10 Typ(ACIN 85V, lo=100%)									
PROTECTION	OVER CURRENT PROTECTION	Works at over 110% of rating and recovers automatically									
	OVER VOLTAGE PROTECTION	Works at 115~140% of rating									
ISOLATION	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.)									
ENVIRONMENT	OPERATING TEMP. & HUMID.	-10~+50°C, 20~90%RH(Non condensing)									
	STORAGE TEMP. & HUMID.	-20~+75°C, 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]	<b>9</b>	<b>9</b>	<b>12</b>	<b>12</b>	<b>15</b>	<b>15</b>	<b>24</b>	<b>24</b>
	CURRENT [A]	<b>3.5</b>	<b>2.0</b>	<b>2.0</b>	<b>2.0</b>	<b>1.6</b>	<b>1.6</b>	<b>1.0</b>	<b>1.0</b>
	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°C [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°C, 20~90%RH (Non condensing)							
	STORAGE TEMP. & HUMID.	-20~+75°C, 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

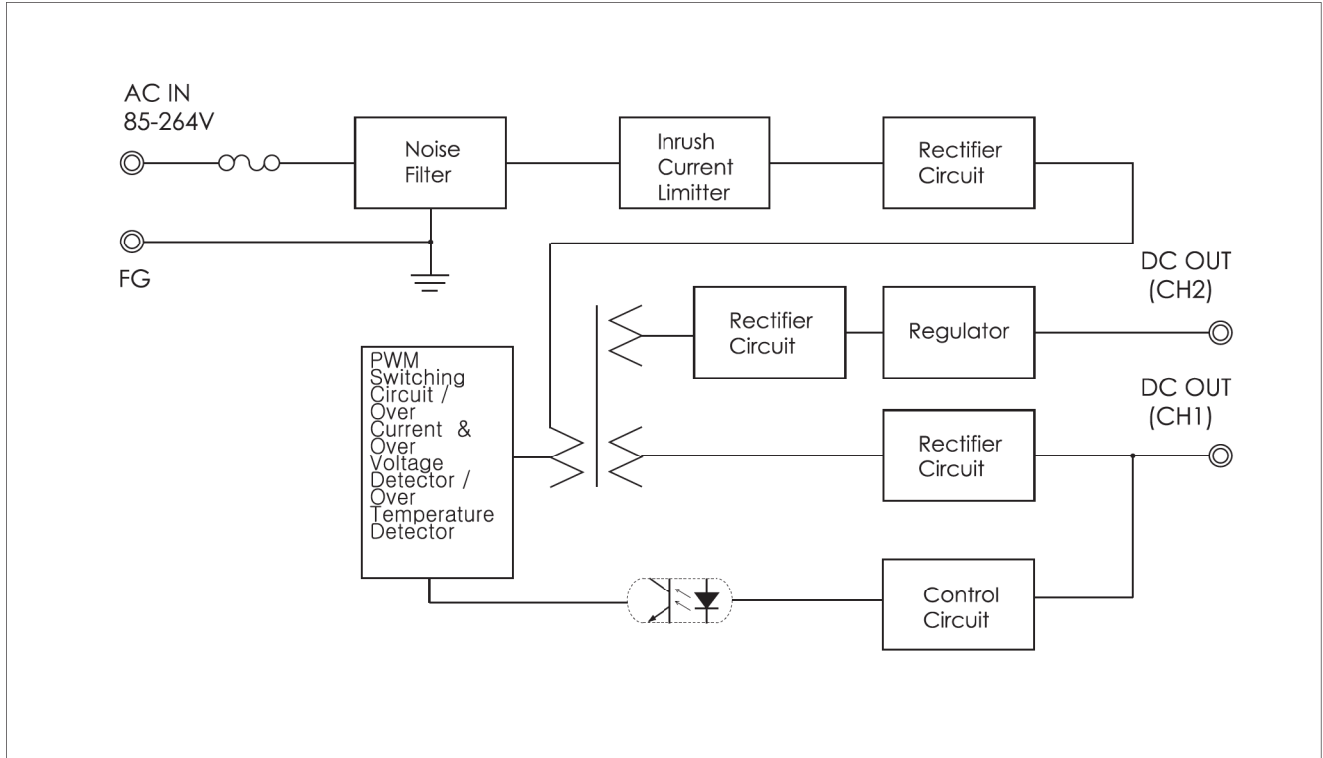
- **9V4.4A 5V2A/  
12V3.3A 5V2A/  
15V2.6A 5V2A/  
24V1.6A 5V2A/  
2-Channel Output**
- **Wide Input Voltage Range (AC85-264V)**
- **Built-in Inrush Current Limiter, Over Current Protector and Over Voltage Protector**
- **Over Temperature Protection**
- **Auto-Restart Mode**

### SPECIFICATIONS

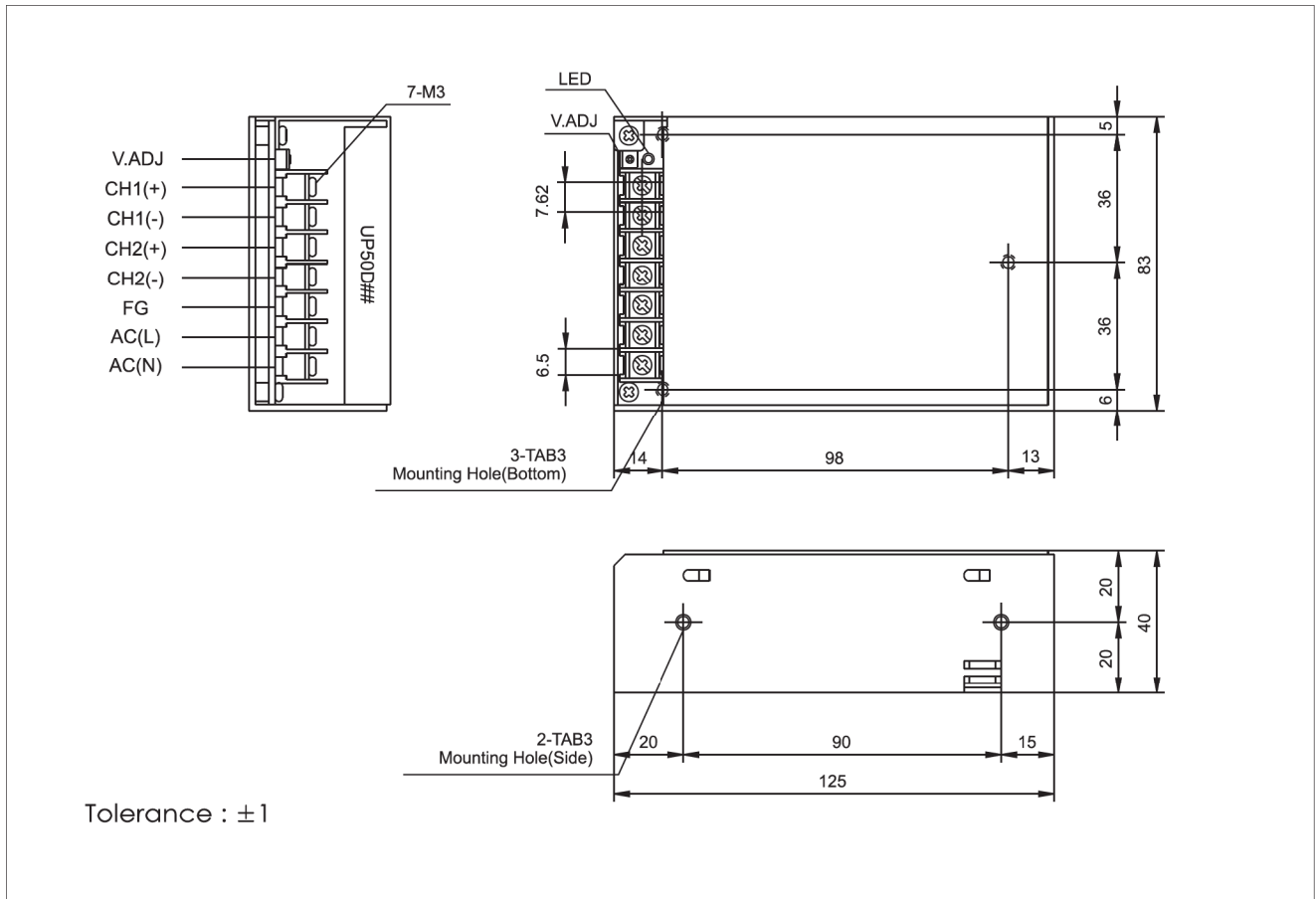
Item		UP50DBA		UP50DCA		UP50DDA		UP50DEA	
INPUT	VOLTAGE	AC85~264V						0.7A typ (ACIN 110V, Io=100%) 0.35A typ (ACIN 220V, Io=100%)	
	FREQUENCY	50/60Hz(47~63Hz)							
	EFFICIENCY	80% Typ		80% Typ		80% Typ		80% Typ	
	INRUSH CURRENT	20A Typ(ACIN 110V, Io=100%)/ 40A Typ(ACIN 220V, Io=100%) at cold start							
OUTPUT	VOLTAGE [V]	<b>9</b>	<b>5</b>	<b>12</b>	<b>5</b>	<b>15</b>	<b>5</b>	<b>24</b>	<b>5</b>
	CURRENT [A]	<b>4.4</b>	<b>2.0</b>	<b>3.3</b>	<b>2.0</b>	<b>2.6</b>	<b>2.0</b>	<b>1.6</b>	<b>2.0</b>
	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°C [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%)							
PROTECTION	OVER CURRENT PROTECTION	Works at over 110% of rating and recovers automatically							
	OVER VOLTAGE PROTECTION	Works at over 115~140% of rating							
ISOLATION	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.)							
ENVIRONMENT	OPERATING TEMP. & HUMID.	0~+50°C, 20~90%RH (Non condensing)							
	STORAGE TEMP. & HUMID.	-20~+75°C, 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



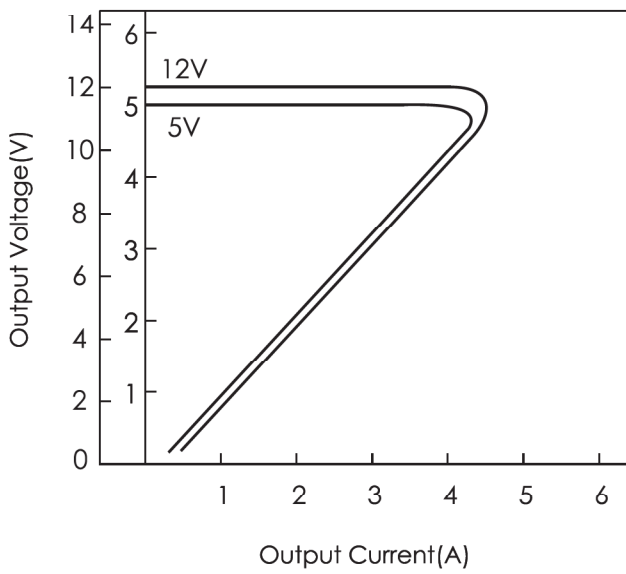
DIMENSIONS(UNITS : MM)



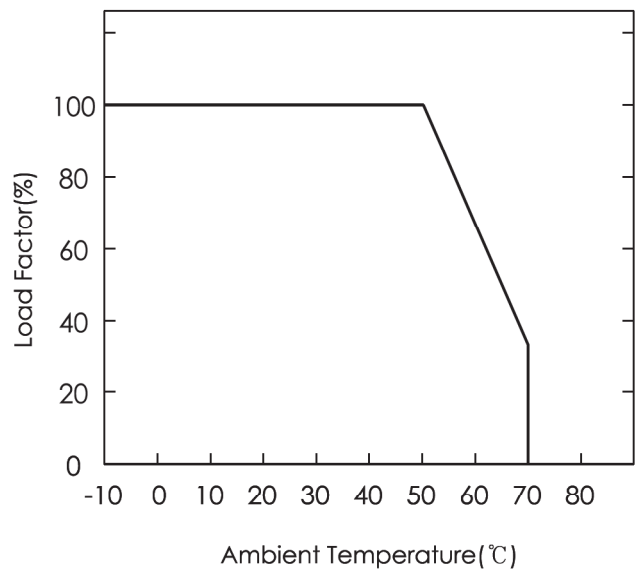
S.M.P.S

# 21. 50D Series(50DAC)

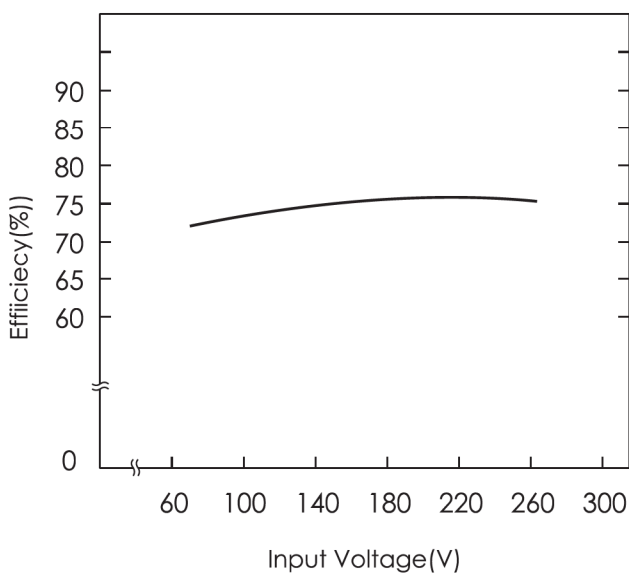
**A. OVER CURRENT CHARACTERISTICS**



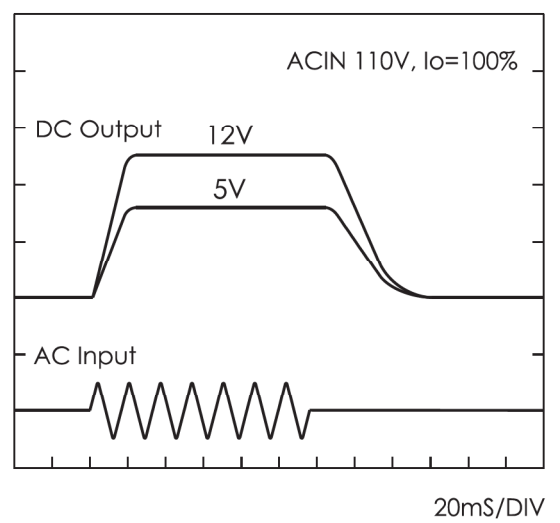
**B. DERATING CHARACTERISTICS**



**C. EFFICIENCY CHARACTERISTICS**

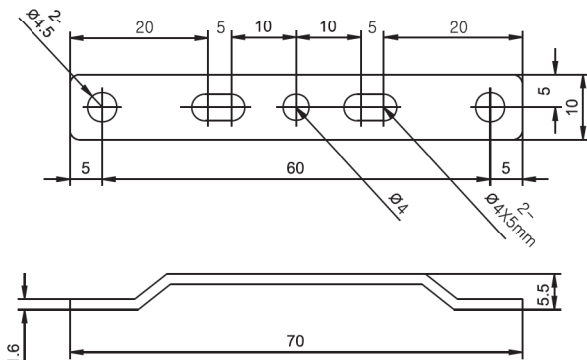
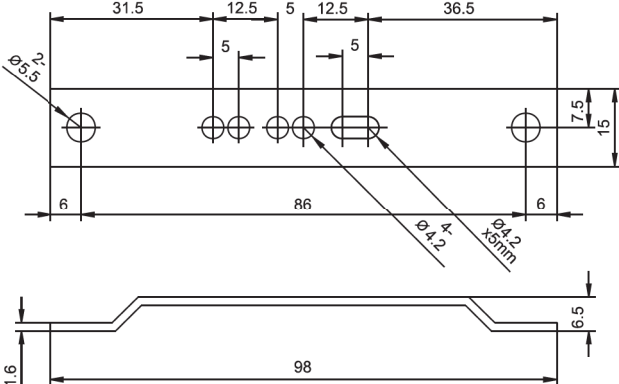
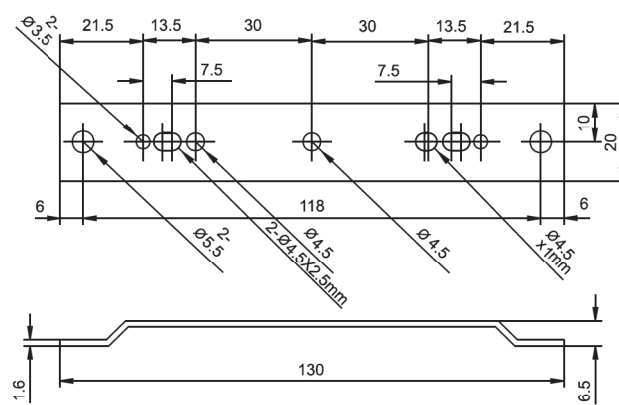


**D. RISING/FALLING TIME CHARACTERISTICS**



S.M.P.S

# 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 showing top and side views. The top view shows a rectangular bracket with a total length of 70 mm and a width of 10 mm. It features five circular holes with diameters of <math>\phi 4.5</math> mm. The hole positions are defined by dimensions: 5 mm from the left edge to the first hole, 20 mm between the first and second holes, 5 mm between the second and third holes, 10 mm between the third and fourth holes, 5 mm between the fourth and fifth holes, and 20 mm from the fifth hole to the right edge. The side view shows a thickness of 1.6 mm and a mounting flange height of 6.5 mm.</p>
BRACKET-B	300S Series 400S Series	 <p>Technical drawing of Bracket B showing top and side views. The top view shows a rectangular bracket with a total length of 98 mm and a width of 15 mm. It features five circular holes with diameters of <math>\phi 5.5</math> mm. The hole positions are defined by dimensions: 6 mm from the left edge to the first hole, 31.5 mm between the first and second holes, 5 mm between the second and third holes, 12.5 mm between the third and fourth holes, 5 mm between the fourth and fifth holes, and 36.5 mm from the fifth hole to the right edge. The side view shows a thickness of 1.6 mm and a mounting flange height of 6.5 mm.</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 showing top and side views. The top view shows a rectangular bracket with a total length of 130 mm and a width of 20 mm. It features six circular holes with diameters of <math>\phi 3.5</math> mm. The hole positions are defined by dimensions: 6 mm from the left edge to the first hole, 21.5 mm between the first and second holes, 13.5 mm between the second and third holes, 30 mm between the third and fourth holes, 13.5 mm between the fourth and fifth holes, and 21.5 mm from the fifth hole to the right edge. The side view shows a thickness of 1.6 mm and a mounting flange height of 6.5 mm.</p>

S.M.P.S