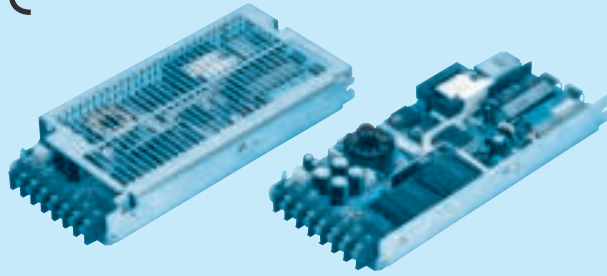


# UAW125S

UA W 125 S -5 -□

① ② ③ ④ ⑤ ⑥



- ① Series name
- ② Autoranging input
- ③ Output wattage
- ④ Single output
- ⑤ Output voltage
- ⑥ Optional \*3
- C :with Coating
- G :Low leakage current
- N :with Cover

The rated load current depends on cooling method that is convection cooling or forced air.

MODEL	UAW125S-3	UAW125S-5	UAW125S-12	UAW125S-24	UAW125S-48
MAX OUTPUT WATTAGE[W]	75	125	126	124.8	124.8
DC OUTPUT (Forced air)	3V 25A	5V 25A	12V 10.5A	24V 5.2A	48V 2.6A

## SPECIFICATIONS

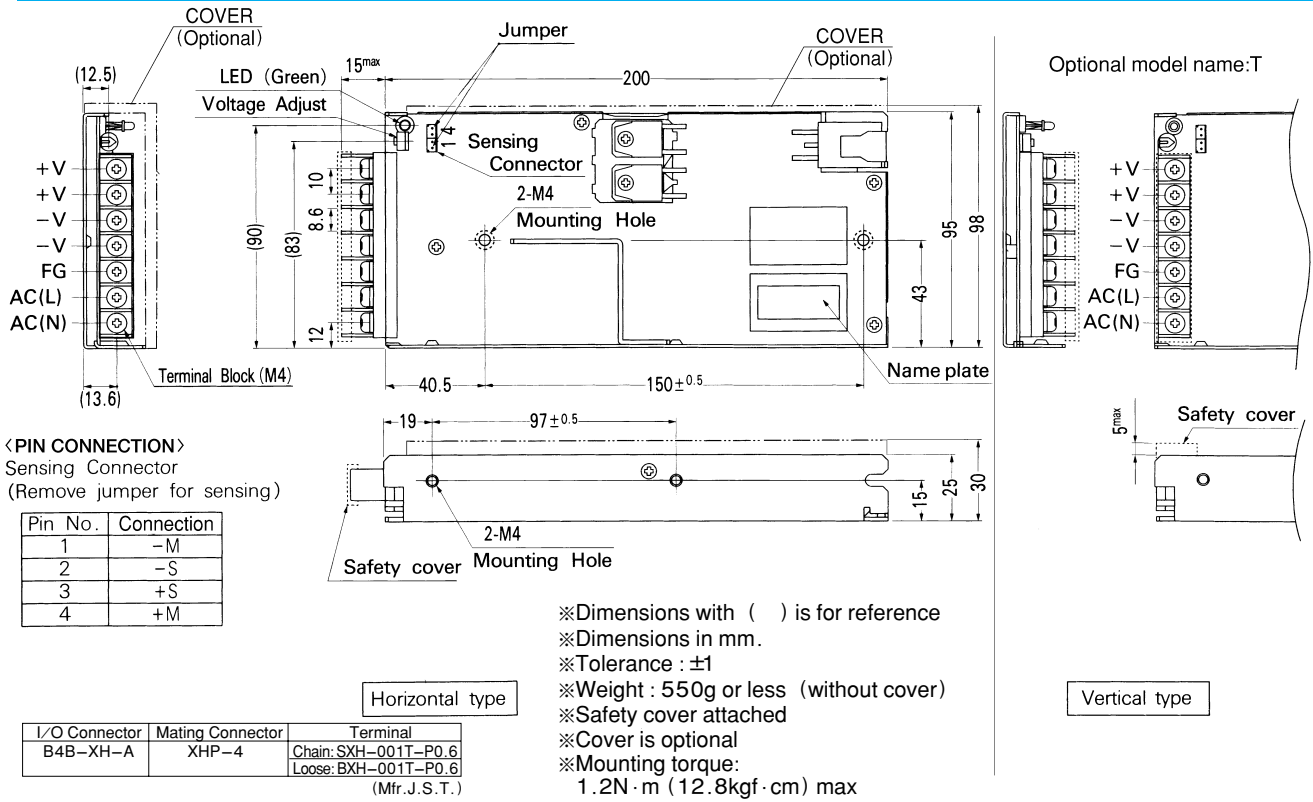
	MODEL	UAW125S-3	UAW125S-5	UAW125S-12	UAW125S-24	UAW125S-48	
INPUT	VOLTAGE[V]	AC85 - 132 / 170 - 264 1 φ (Auto-selectable)					
	CURRENT[A]	ACIN 100V	2.8typ (Io=100%)				
		ACIN 200V	1.5typ (Io=100%)				
	FREQUENCY[Hz]	50/60 (47 - 63)					
	EFFICIENCY[%]	72typ		78typ	82typ	85typ	85typ
	INRUSH CURRENT[A]	ACIN 100V	30typ (Io=100%) (At cold start)				
		ACIN 200V	60typ (Io=100%) (At cold start)				
LEAKAGE CURRENT[ma]	0.75max (60Hz, According to UL, CSA and VDE)						
OUTPUT	VOLTAGE[V]	3	5	12	24	48	
	CURRENT[A]	Forced air	25	25	10.5	5.2	2.6
		Convection	20	20	8.5	4.5	2.2
	LINE REGULATION[mV]	20max	20max	48max	96max	192max	
	LOAD REGULATION[mV]	40max	40max	100max	150max	300max	
	RIPPLE[mVp-p]	0 to +50C *1	80max	80max	120max	120max	150max
		-10 - 0C *1	100max	100max	150max	150max	200max
	RIPPLE NOISE[mVp-p]	0 to +50C *1	120max	120max	150max	150max	200max
		-10 - 0C *1	180max	180max	200max	200max	250max
	TEMPERATURE REGULATION[mV]	40max	50max	120max	240max	480max	
	DRIFT[mV]	*2	12max	20max	48max	96max	192max
START-UP TIME[ms]	500max (ACIN 85/170V, Io=100%)						
HOLD-UP TIME[ms]	10typ (ACIN 85/170V, Io=100%) 20typ (ACIN 100/200V, Io=100%)						
OUTPUT VOLTAGE ADJUSTMENT RANGE[V]	2.85 - 3.6		+10% -5%				
PROTECTION CIRCUIT AND OTHERS	OVERCURRENT PROTECTION	Works over 105% of rating and recovers automatically					
	OVERVOLTAGE PROTECTION	4.00 - 5.25V	Works at 115 - 140% of rating				
	OPERATING INDICATION	LED (Green)					
	REMOTE SENSING	Provided					
ISOLATION	INPUT-OUTPUT	AC3.000V 1minute, Cutoff current = 25mA, DC500V 50MΩ min (At Room Temperature)					
	INPUT-FG	AC2.000V 1minute, Cutoff current = 25mA, DC500V 50MΩ min (At Room Temperature)					
	OUTPUT-FG	AC500V 1minute, Cutoff current = 100mA, DC500V 50MΩ min (At Room Temperature)					
ENVIRONMENT	OPERATING TEMP.,HUMID.AND ALTITUDE	-10 to +55°C, 10 - 90%RH (Non condensing) (Refer to DERATING CURVE), 3.000m (10.000feet) max					
	STORAGE TEMP.,HUMID.AND ALTITUDE	-20 to +75°C, 10 - 90%RH (Non condensing), 9.000m (30.000feet) max					
	VIBRATION	10 - 55Hz, 19.6m/s <sup>2</sup> (2G), 3minutes period, 60minutes each along X, Y and Z axis					
	IMPACT	196.1m/s <sup>2</sup> (20G), 11ms, once each X, Y and Z axis					
SAFETY AND NOISE REGULATIONS	AGENCY APPROVALS	UL60950-1, CSA C22.2 No.234, EN60950-1, EN50178 Complies with IEC60950-1					
	CONDUCTED NOISE	Complies with FCC-B, CISPR22-B, EN55022-B, VCCI-B					
OTHERS	CASE SIZE/WEIGHT	95×25×200mm (without terminal block) (W×H×D) / 550g max (without cover)					
	COOLING METHOD	Convection/Forced air					

\*1 Measured by 20MHz oscilloscope or Ripple-Noise meter(equivalent to KEISOKU-GIKEN:RM101).

\*2 Drift is the change in DC output for an eight hour period after a half-hour warm-up at 25°C, with the input voltage held constant at the rated input/output.

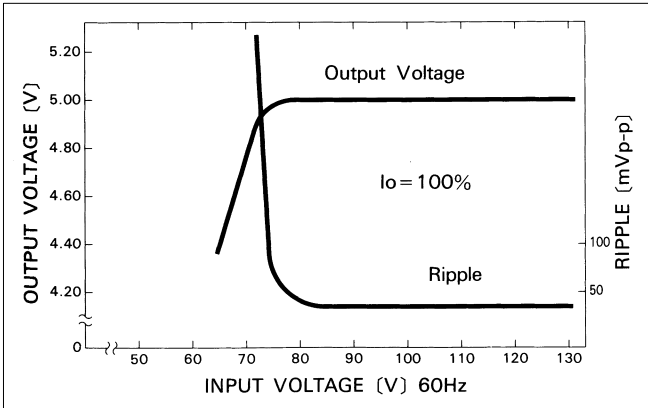
\*3 Please contact us about safety approvals for the model with option.

## External view

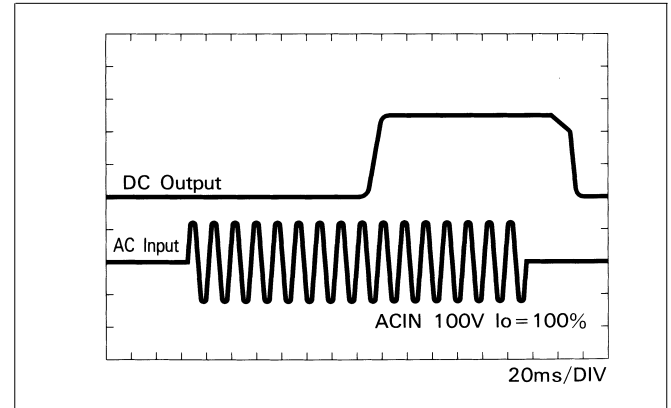


## Performance data

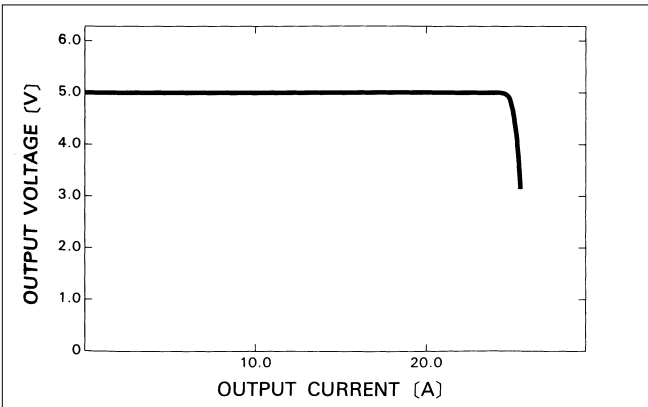
### ■ STATIC CHARACTERISTICS (UAW125S-5)



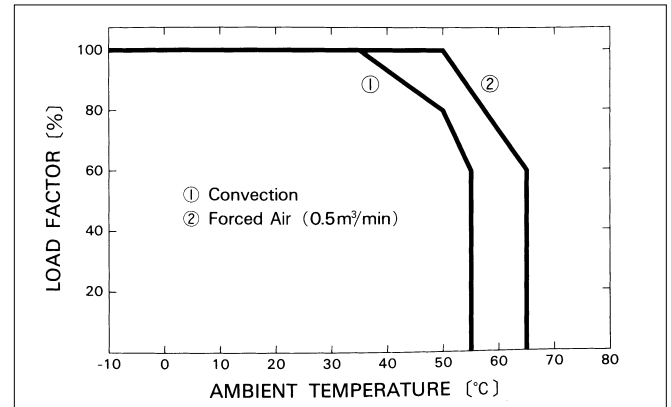
### ■ RISE TIME & FALL TIME (UAW125S-5)



### ■ OVERCURRENT CHARACTERISTICS (UAW125S-5)

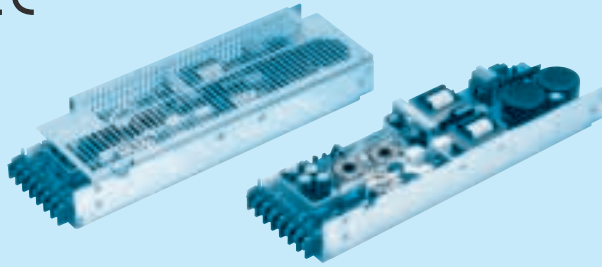


### ■ DERATING CURVE



# UAW250S

① UA ② W ③ 250 ④ S ⑤ -5 ⑥ -□



- ① Series name
- ② Autoranging input
- ③ Output wattage
- ④ Single output
- ⑤ Output voltage
- ⑥ Optional \*3
- C :with Coating
- G :Low leakage current
- N :with Cover
- R :with Remote ON/OFF

Please refer to derating curve, because the rated load current depends on cooling method that is convection cooling or forced air.

MODEL	UAW250S-3	UAW250S-5	UAW250S-12	UAW250S-24	UAW250S-48
MAX OUTPUT WATTAGE[W]	150	250	258	264	249.6
DC OUTPUT	3V 50A	5V 50A	12V 21.5A	24V 11A	48V 5.2A

## SPECIFICATIONS

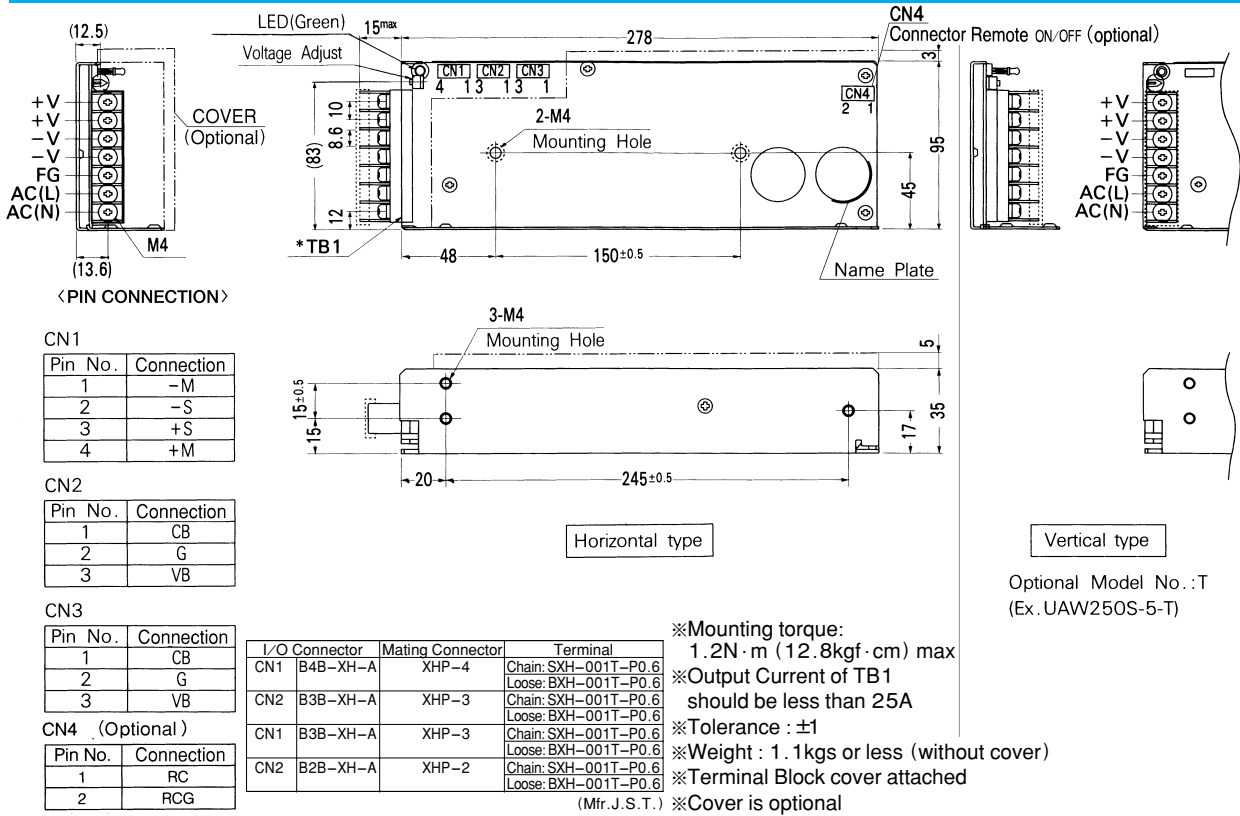
	MODEL	UAW250S-3	UAW250S-5	UAW250S-12	UAW250S-24	UAW250S-48	
INPUT	VOLTAGE[V]	AC85 - 132 / 170 - 264 1 φ (Auto-selectable)					
	CURRENT[A]	ACIN 100V	6typ (Io=100%)				
		ACIN 200V	3typ (Io=100%)				
	FREQUENCY[Hz]	50/60 (47 - 63)					
	EFFICIENCY[%]	70typ		77typ	80typ	83typ	83typ
	INRUSH CURRENT[A]	ACIN 100V	15/40typ (Io=100%) (Primary Surge Current/Secondary Surge Current)				
		ACIN 200V	30/40typ (Io=100%) (Primary Surge Current/Secondary Surge Current)				
LEAKAGE CURRENT[ma]	0.75max (60Hz, According to UL, CSA and VDE)						
OUTPUT	VOLTAGE[V]	3	5	12	24	48	
	CURRENT[A]	50	50	21.5	11	5.2	
	LINE REGULATION[mV]	40max	40max	80max	100max	192max	
	LOAD REGULATION[mV]	80max	80max	120max	160max	300max	
	RIPPLE[mVp-p]	0 to +50°C *1	80max	80max	120max	120max	150max
		-10 - 0°C *1	120max	120max	150max	150max	200max
	RIPPLE NOISE[mVp-p]	0 to +50°C *1	120max	120max	150max	150max	350max
		-10 - 0°C *1	180max	180max	200max	200max	400max
	TEMPERATURE REGULATION[mV]	40max	50max	120max	240max	480max	
	DRIFT[mV]	*2	12max	20max	48max	96max	192max
START-UP TIME[ms]	800max (ACIN 85/170V, Io=100%)						
HOLD-UP TIME[ms]	10typ (ACIN 85/170V, Io=100%) 20typ (ACIN 100/200V, Io=100%)						
OUTPUT VOLTAGE ADJUSTMENT RANGE[V]	2.85 - 3.6		+10%, -5%				
PROTECTION CIRCUIT AND OTHERS	OVERCURRENT PROTECTION	Works over 105% of rating and recovers automatically					
	OVERVOLTAGE PROTECTION	4.00 - 5.25V	Works at 115 - 140% of rating				
	OPERATING INDICATION	LED (Green)					
	REMOTE SENSING	Provided					
ISOLATION	INPUT-OUTPUT	AC3,000V 1minute, Cutoff current = 25mA, DC500V 50MΩ min (At Room Temperature)					
	INPUT-FG	AC2,000V 1minute, Cutoff current = 25mA, DC500V 50MΩ min (At Room Temperature)					
	OUTPUT-FG	AC500V 1minute, Cutoff current = 100mA, DC500V 50MΩ min (At Room Temperature)					
ENVIRONMENT	OPERATING TEMP.,HUMID.AND ALTITUDE	-10 to +55°C, 10 - 90%RH (Non condensing) (Refer to DERATING CURVE), 3,000m (10,000feet) max					
	STORAGE TEMP.,HUMID.AND ALTITUDE	-20 to +75°C, 10 - 90%RH (Non condensing), 9,000m (30,000feet) max					
	VIBRATION	10 - 55Hz, 19.6m/s <sup>2</sup> (2G), 3minutes period, 60minutes each along X, Y and Z axis					
	IMPACT	196.1m/s <sup>2</sup> (20G), 11ms, once each X, Y and Z axis					
SAFETY AND NOISE REGULATIONS	AGENCY APPROVALS	UL60950-1, CSA C22.2 No.234, EN60950-1, EN50178 Complies with IEC60950-1					
	CONDUCTED NOISE	Complies with FCC-B, CISPR22-B, EN55022-B, VCCI-B					
OTHERS	CASE SIZE/WEIGHT	95×35×278mm (without terminal block) (W×H×D) /1.1kg max (without cover)					
	COOLING METHOD	Convection/Forced air					

\*1 Measured by 20MHz oscilloscope or Ripple-Noise meter(equivalent to KEISOKU-GIKEN:RM101).

\*2 Drift is the change in DC output for an eight hour period after a half-hour warm-up at 25°C, with the input voltage held constant at the rated input/output.

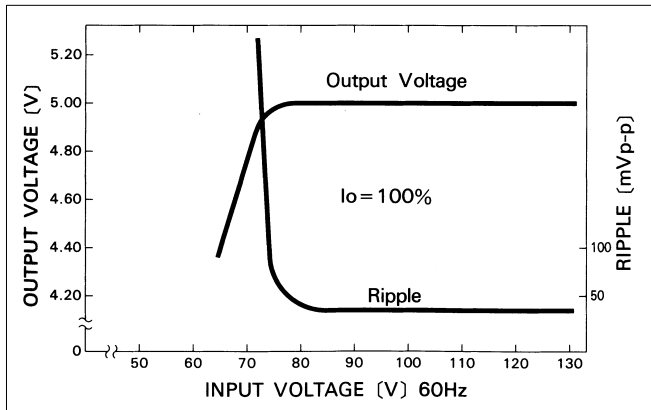
\*3 Please contact us about safety approvals for the model with option.

## External view

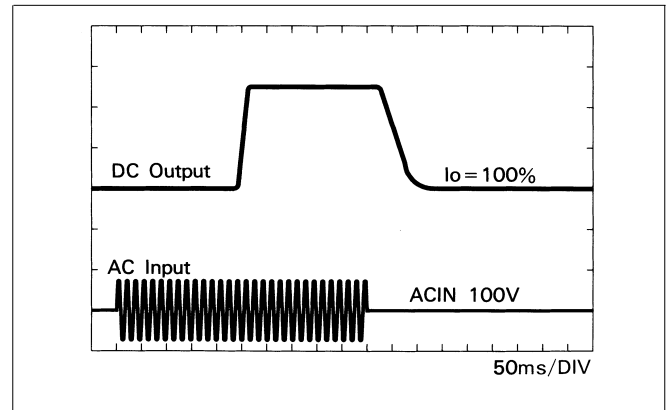


## Performance data

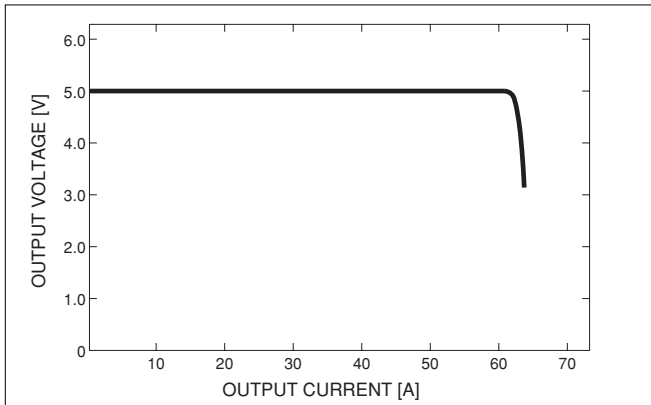
### STATIC CHARACTERISTICS (UAW250S-5)



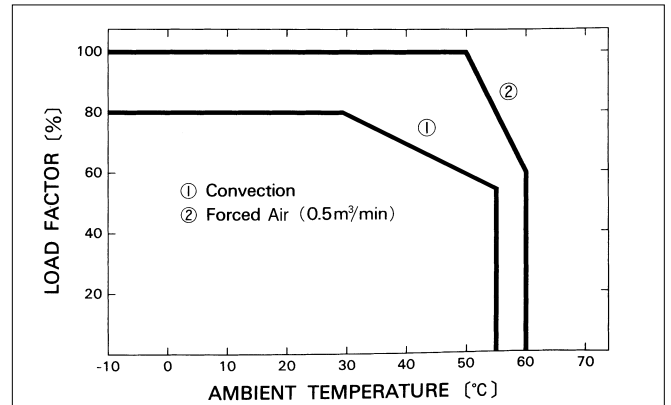
### RISE TIME & FALL TIME (UAW250S-5)



### OVERCURRENT CHARACTERISTICS (UAW250S-5)



### DERATING CURVE



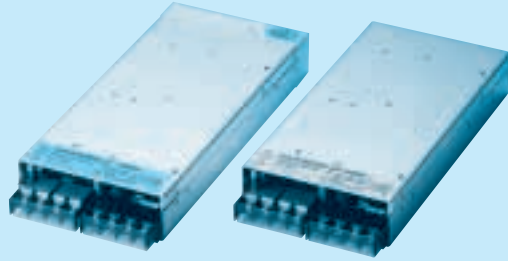
# UAW500S

UA W 500 S -5 -□

① ② ③ ④ ⑤ ⑥



RoHS



- ① Series name
- ② Autoranging input
- ③ Output wattage
- ④ Single output
- ⑤ Output voltage
- ⑥ Optional \*3  
 C :with Coating  
 F :with Fan unit  
 G :Low leakage current

The forced air with the fan is necessary.

MODEL	UAW500S-3	UAW500S-5	UAW500S-12	UAW500S-24
MAX OUTPUT WATTAGE[W]	300	500	516	528
DC OUTPUT	3V 100A	5V 100A	12V 43A	24V 22A

## SPECIFICATIONS

	MODEL	UAW500S-3	UAW500S-5	UAW500S-12	UAW500S-24	
INPUT	VOLTAGE[V]	AC85 - 132 / 170 - 264 1 φ (Auto-selectable)				
	CURRENT[A]	ACIN 100V	12typ (Io=100%)			
		ACIN 200V	6.5typ (Io=100%)			
	FREQUENCY[Hz]	50/60 (47 - 63)				
	EFFICIENCY[%]	70typ		77typ	80typ	83typ
	INRUSH CURRENT[A]	ACIN 100V	15/40typ (Io=100%) (Primary Surge Current/Secondary Surge Current)			
		ACIN 200V	30/40typ (Io=100%) (Primary Surge Current/Secondary Surge Current)			
LEAKAGE CURRENT[ma]	0.75max (60Hz, According to UL, CSA and VDE)					
OUTPUT	VOLTAGE[V]	3	5	12	24	
	CURRENT[A]	100	100	43	22	
	LINE REGULATION[mV]	40max	40max	80max	100max	
	LOAD REGULATION[mV]	80max	80max	120max	160max	
	RIPPLE[mVp-p]	0 to +50°C *1	100max	100max	120max	120max
		-10 - 0°C *1	120max	120max	150max	150max
	RIPPLE NOISE[mVp-p]	0 to +50°C *1	120max	120max	150max	150max
		-10 - 0°C *1	180max	180max	200max	200max
	TEMPERATURE REGULATION[mV]	40max	50max	160max	200max	
	DRIFT[mV]	*2 12max	20max	48max	96max	
	START-UP TIME[ms]	800max (ACIN 85/170V, Io=100%)				
HOLD-UP TIME[ms]	10typ (ACIN 85/170V, Io=100%) 20typ (ACIN 100/200V, Io=100%)					
OUTPUT VOLTAGE ADJUSTMENT RANGE[V]	2.85 - 3.6	+10%, -5%				
PROTECTION CIRCUIT AND OTHERS	OVERCURRENT PROTECTION	Works over 105% of rating and recovers automatically				
	OVERVOLTAGE PROTECTION	4.00 - 5.25V	Works at 115 - 140% of rating			
	OPERATING INDICATION	LED (Green)				
	REMOTE SENSING	Provided				
ISOLATION	INPUT-OUTPUT	AC3,000V 1minute, Cutoff current = 25mA, DC500V 50MΩ min (At Room Temperature)				
	INPUT-FG	AC2,000V 1minute, Cutoff current = 25mA, DC500V 50MΩ min (At Room Temperature)				
	OUTPUT-FG	AC500V 1minute, Cutoff current = 100mA, DC500V 50MΩ min (At Room Temperature)				
ENVIRONMENT	OPERATING TEMP.,HUMID.AND ALTITUDE	-10 to +60°C, 10 - 90%RH (Non condensing) (Refer to DERATING CURVE), 3,000m (10,000feet) max				
	STORAGE TEMP.,HUMID.AND ALTITUDE	-20 to +75°C, 10 - 90%RH (Non condensing), 9,000m (30,000feet) max				
	VIBRATION	10 - 55Hz, 19.6m/s <sup>2</sup> (2G), 3minutes period, 60minutes each along X, Y and Z axis				
	IMPACT	196.1m/s <sup>2</sup> (20G), 11ms, once each X, Y and Z axis				
SAFETY AND NOISE REGULATIONS	AGENCY APPROVALS	UL60950-1, CSA C22.2 No.60950-1, EN60950-1, EN50178 Complies with IEC60950-1				
	CONDUCTED NOISE	Complies with FCC-B, CISPR22-B, EN55022-B, VCCI-B				
OTHERS	CASE SIZE/WEIGHT	140 X 45 X 278 (308) mm (without terminal block) (W X H X D) /2.4kg max, 2.6kg max (with fan unit)				
	COOLING METHOD	Forced air				

\*1 Measured by 20MHz oscilloscope or Ripple-Noise meter(equivalent to KEISOKU-GIKEN:RM101).

\*2 Drift is the change in DC output for an eight hour period after a half-hour warm-up at 25°C, with the input voltage held constant at the rated input/output.

\*3 Please contact us about safety approvals for the model with option.

## External view

### <PIN CONNECTION>

#### TB1

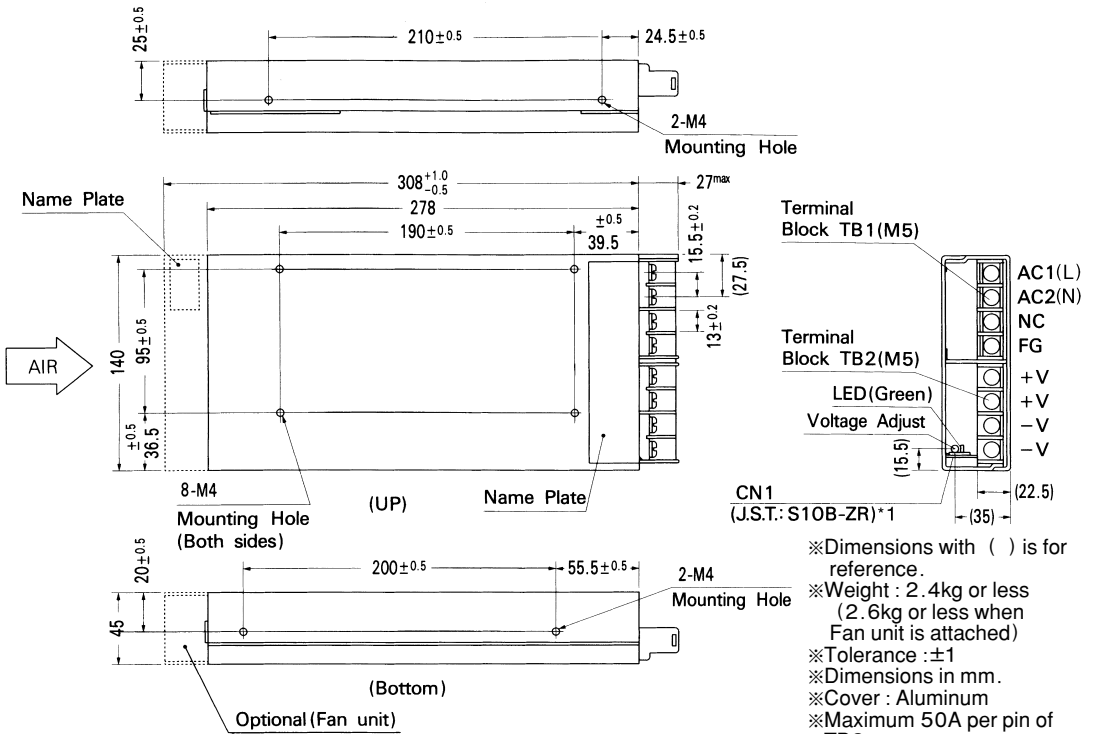
Marking	Function
AC1	Input(L)
AC2	Input(N)
NC	
FG	Frame ground

#### TB2

Marking	Function
+V	+Output
+V	+Output
-V	-Output
-V	-Output

#### CN1 \*A\* means connection is not possible.

Pin	No.
1	A
2	A
3	A
4	-M
5	-S
6	+M
7	A
8	+S
9	VB
10	CB



I/O Connector	Mating Connector	Terminal
CN1	S10B-ZR	ZHR-10
		Chain: SZH-002T-P0.5
		Loose: BZH-002T-P0.5

(Mfr. J.S.T.)

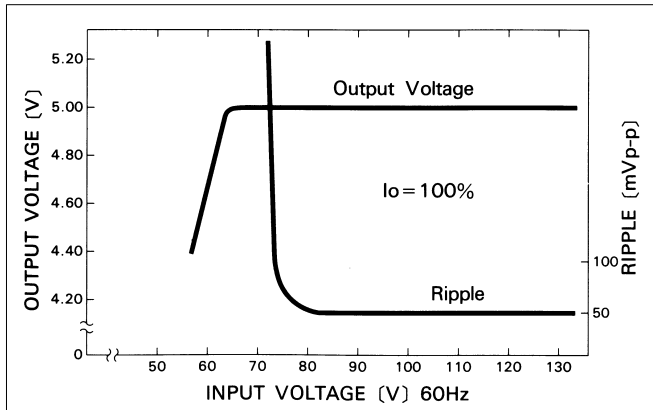
※Mounting torque:  
1.2N·m (12.8kgf·cm) max

※Dimensions with ( ) is for reference.  
 ※Weight : 2.4kg or less  
 (2.6kg or less when Fan unit is attached)  
 ※Tolerance : ±1  
 ※Dimensions in mm.  
 ※Cover : Aluminum  
 ※Maximum 50A per pin of TB2.

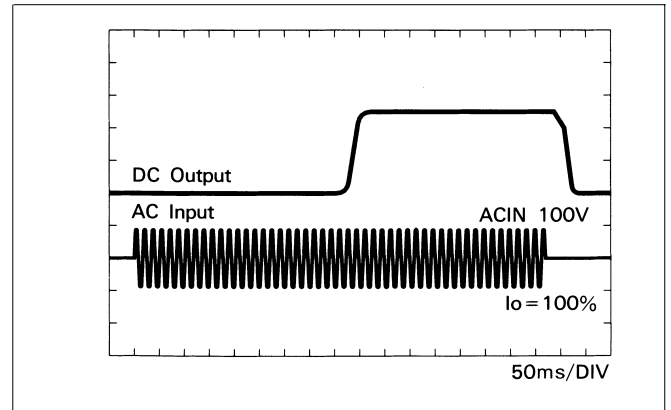
\*1 when shipment, connector for -M, -S and +M, +S is attached.

## Performance data

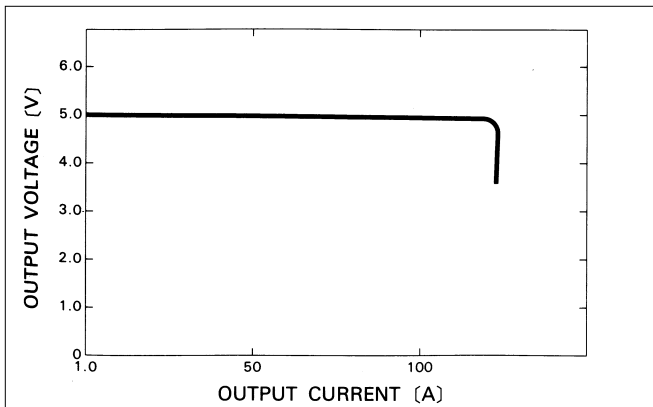
### ■STATIC CHARACTERISTICS (UAW500S-5)



### ■RISE TIME & FALL TIME (UAW500S-5)



### ■OVERCURRENT CHARACTERISTICS (UAW500S-5)



### ■DERATING CURVE

