



- ① Series name
- ② Single output
- ③ Output wattage
- ④ Input voltage  
24:DC18 - 36V  
48:DC36 - 76V
- ⑤ Output voltage
- ⑥ Optional  
R :with Remote ON/OFF  
Positive logic control  
T :with Mounting hole  
φ 3.4 thru  
□ :with Addition of a  
Heat sink

MODEL	CBS1002403	CBS1002405	CBS1002412	CBS1002415	CBS1002424	CBS1002428	CBS1004803	CBS1004805	CBS1004812	CBS1004815	CBS1004824	CBS1004828
<b>MAX OUTPUT WATTAGE[W]</b>	77.2	100.0	100.8	100.5	100.8	100.8	77.2	100.0	100.8	100.5	100.8	100.8
<b>DC OUTPUT</b>	3.3V 23.4A	5V 20A	12V 8.4A	15V 6.7A	24V 4.2A	28V 3.6A	3.3V 23.4A	5V 20A	12V 8.4A	15V 6.7A	24V 4.2A	28V 3.6A

## SPECIFICATIONS

	MODEL	*CBS1002403	CBS1002405	CBS1002412	*CBS1002415	*CBS1002424	CBS1002428	CBS1004803	CBS1004805	CBS1004812	CBS1004815	CBS1004824	CBS1004828	
<b>INPUT</b>	<b>VOLTAGE[V]</b>	DC18 - 36						DC36 - 76						
	<b>CURRENT[A]</b>	*1 4.07typ	5.02typ	4.77typ	4.81typ	4.83typ	4.83typ	2.01typ	2.48typ	2.36typ	2.38typ	2.39typ	2.39typ	
	<b>EFFICIENCY[%]</b>	*1 79typ	83typ	88typ	87typ	87typ	87typ	80typ	84typ	89typ	88typ	88typ	88typ	
<b>OUTPUT</b>	<b>VOLTAGE[V]</b>	3.3	5	12	15	24	28	3.3	5	12	15	24	28	
	<b>CURRENT[A]</b>	23.4	20.0	8.4	6.7	4.2	3.6	23.4	20.0	8.4	6.7	4.2	3.6	
	<b>LINE REGULATION[mV]</b>	10max	10max	24max	30max	48max	56max	10max	10max	24max	30max	48max	56max	
	<b>LOAD REGULATION[mV]</b>	10max	10max	24max	30max	48max	56max	10max	10max	24max	30max	48max	56max	
	<b>RIPPLE[mVp-p]</b>	-20 to +100°C *2	80max	80max	120max	120max	120max	120max	80max	80max	120max	120max	120max	120max
		-40 to -20°C *2	120max	120max	150max	150max	150max	150max	120max	120max	150max	150max	150max	150max
	<b>RIPPLE NOISE[mVp-p]</b>	-20 to +100°C *2	120max	120max	150max	150max	150max	150max	120max	120max	150max	150max	150max	150max
		-40 to -20°C *2	200max	200max	200max	200max	250max	250max	200max	200max	200max	200max	250max	250max
	<b>TEMPERATURE REGULATION[mV]</b>	0 to +65°C	35max	50max	120max	150max	240max	280max	35max	50max	120max	150max	240max	280max
		-40 to +100°C	66max	100max	240max	300max	480max	560max	66max	100max	240max	300max	480max	560max
<b>DRIFT[mV]</b>	*3	16max	20max	40max	60max	90max	90max	16max	20max	40max	60max	90max	90max	
<b>START-UP TIME[ms]</b>		200max (DCIN 24V, Io=100%)						200max (DCIN 48V, Io=100%)						
<b>OUTPUT VOLTAGE ADJUSTMENT RANGE[V]</b>	*4	Fixed (TRM pin open), 60 - 110% adjustable by external resistor												
<b>OUTPUT VOLTAGE SETTING[V]</b>		1.98 - 3.63	3.0 - 5.5	7.2 - 13.2	9.0 - 16.5	14.4 - 26.4	16.8 - 30.8	1.98 - 3.63	3.0 - 5.5	7.2 - 13.2	9.0 - 16.5	14.4 - 26.4	16.8 - 30.8	
<b>OVERCURRENT PROTECTION</b>		Works over 105% of rating and recovers automatically												
<b>PROTECTION CIRCUIT AND OTHERS</b>	<b>OVERVOLTAGE PROTECTION[V]</b>	4.00 - 5.50	5.75 - 7.00	13.80 - 16.80	17.25 - 21.00	27.60 - 33.60	32.20 - 39.20	4.00 - 5.50	5.75 - 7.00	13.80 - 16.80	17.25 - 21.00	27.60 - 33.60	32.20 - 39.20	
	<b>REMOTE SENSING</b>	Provided												
	<b>REMOTE ON/OFF</b>	Provided (Negative logic L : ON, H : OFF)												
<b>ISOLATION</b>	<b>INPUT-OUTPUT</b>	DC1,500V or AC1,000V 1minute, Cutoff current = 10mA, DC500V 50MΩ min(20±15°C)												
	<b>INPUT-CASE PIN, BASE PLATE</b>	DC1,500V or AC1,000V 1minute, Cutoff current = 10mA, DC500V 50MΩ min(20±15°C)												
	<b>OUTPUT-CASE PIN, BASE PLATE</b>	AC500V 1minute, Cutoff current = 100mA, DC500V 50MΩ min (20±15°C)												
<b>ENVIRONMENT</b>	<b>OPERATING TEMP., HUMID. AND ALTITUDE</b>	-40 to +100°C (On aluminum base plate), 20 - 95%RH (Non condensing) (Refer to DERATING CURVE), 3,000m (10,000feet) max												
	<b>STORAGE TEMP., HUMID. AND ALTITUDE</b>	-40 to +100°C, 20 - 95%RH (Non condensing), 9,000m (30,000feet) max												
	<b>VIBRATION</b>	10 - 55Hz, 49.0m/s <sup>2</sup> (5G), 3minutes period, 60minutes each along X, Y and Z axis												
	<b>IMPACT</b>	196.1m/s <sup>2</sup> (20G), 11ms, once each along X, Y and Z axis												
<b>SAFETY</b>	<b>AGENCY APPROVALS</b>	UL60950, C-UL, EN60950												
<b>OTHERS</b>	<b>CASE SIZE/WEIGHT</b>	57.9 × 12.7 × 61.0mm (W × H × D) / 83g max												
	<b>COOLING METHOD</b>	Conduction cooling (e.g. heat radiation from the aluminum base plate to the attached heat sink)												

\*1 At rated input(DC24V,DC48V) and rated load.

\*2 Ripple and ripple noise is measured by using measuring board with recommended capacitor Co & the film capacitor 0.1 μF.  
Measured by 20MHz oscilloscope or Ripple-Noise meter (Equivalent to KEISOKU-GIKEN:RM101).

\*3 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.

\*4 When the input voltage is in the range of DC18 - 20V, DC36 - 40V output voltage adjustment range is 60 - 105%.

\* marked models : Consult with us for delivery.