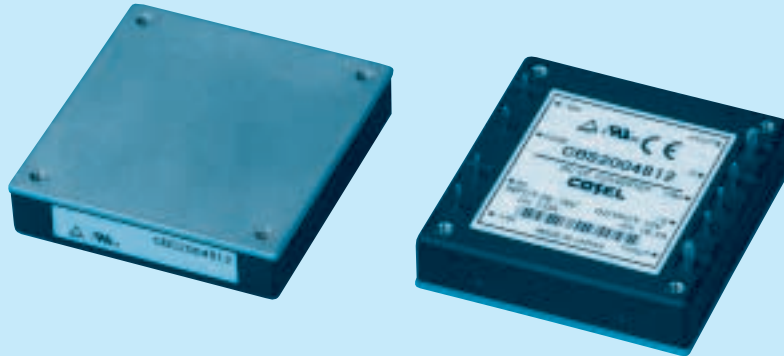




- ① Series name
 ② Single output
 ③ Output wattage
 ④ Input voltage
 24:DC18 - 36V
 48:DC36 - 76V
 ⑤ Output voltage
 ⑥ Optional
 R :with Remote ON/OFF
 Positive logic control
 T :with Mounting hole
 φ 3.4 thru
 F ☐ :with Addition of a
 Heat sink

MODEL	CBS2002403	CBS2002405	CBS2002412	CBS2002415	CBS2002424	CBS2002428	CBS2004803	CBS2004805	CBS2004812	CBS2004815	CBS2004824	CBS2004828
MAX OUTPUT WATTAGE[W]	115.5	150.0	200.4	201.0	201.6	201.6	115.5	150.0	200.4	201.0	201.6	201.6
DC OUTPUT	3.3V 35A	5V 30A	12V 16.7A	15V 13.4A	24V 8.4A	28V 7.2A	3.3V 35A	5V 30A	12V 16.7A	15V 13.4A	24V 8.4A	28V 7.2A

SPECIFICATIONS

	MODEL	CBS2002403	CBS2002405	CBS2002412	CBS2002415	CBS2002424	CBS2002428	CBS2004803	CBS2004805	CBS2004812	CBS2004815	CBS2004824	CBS2004828	
INPUT	VOLTAGE[V]	DC18 - 36						DC36 - 76						
	CURRENT[A]	*1 6.09typ	7.62typ	9.60typ	9.63typ	9.66typ	9.66typ	3.01typ	3.77typ	4.74typ	4.76typ	4.77typ	4.77typ	
	EFFICIENCY[%]	*1 79typ	82typ	87typ	87typ	87typ	87typ	80typ	83typ	88typ	88typ	88typ	88typ	
OUTPUT	VOLTAGE[V]	3.3	5	12	15	24	28	3.3	5	12	15	24	28	
	CURRENT[A]	35.0	30.0	16.7	13.4	8.4	7.2	35.0	30.0	16.7	13.4	8.4	7.2	
	LINE REGULATION[mV]	10max	10max	24max	30max	48max	56max	10max	10max	24max	30max	48max	56max	
	LOAD REGULATION[mV]	10max	10max	24max	30max	48max	56max	10max	10max	24max	30max	48max	56max	
	RIPPLE[mVp-p]	-20 to +100℃ *2	80max	80max	120max	120max	120max	120max	80max	80max	120max	120max	120max	120max
		-40 to -20℃ *2	120max	120max	150max	150max	150max	150max	120max	120max	150max	150max	150max	150max
	RIPPLE NOISE[mVp-p]	-20 to +100℃ *2	120max	120max	150max	150max	150max	150max	120max	120max	150max	150max	150max	150max
		-40 to -20℃ *2	200max	200max	200max	200max	250max	250max	200max	200max	200max	200max	250max	250max
	TEMPERATURE REGULATION[mV]	0 to +65℃	35max	50max	120max	150max	240max	280max	35max	50max	120max	150max	240max	280max
		-40 to +100℃	66max	100max	240max	300max	480max	560max	66max	100max	240max	300max	480max	560max
	DRIFT[mV]	*3	16max	20max	40max	60max	90max	90max	16max	20max	40max	60max	90max	90max
	START-UP TIME[ms]		200max (DCIN 24V, Io=100%)						200max (DCIN 48V, Io=100%)					
PROTECTION CIRCUIT AND OTHERS	OUTPUT VOLTAGE ADJUSTMENT RANGE[V]	Fixed (TRM pin open), 60 - 110% adjustable by external resistor												
		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	
	OUTPUT VOLTAGE SETTING[V]	3.25 - 3.45	4.90 - 5.20	11.74 - 12.46	14.55 - 15.45	23.28 - 24.72	27.16 - 28.84	3.25 - 3.45	4.90 - 5.20	11.74 - 12.46	14.55 - 15.45	23.28 - 24.72	27.16 - 28.84	
ISOLATION	OVERCURRENT PROTECTION	Works over 105% of rating and recovers automatically												
	OVERVOLTAGE PROTECTION[V]	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	
	REMOTE SENSING	Provided												
	REMOTE ON/OFF	Provided (Negative logic L : ON, H : OFF)												
ISOLATION	INPUT-OUTPUT	DC1,500V or AC1,000V 1minute, Cutoff current = 10mA, DC500V 50MΩ min(20±15℃)												
	INPUT-CASE PIN, BASE PLATE	DC1,500V or AC1,000V 1minute, Cutoff current = 10mA, DC500V 50MΩ min(20±15℃)												
	OUTPUT-CASE PIN, BASE PLATE	AC500V 1minute, Cutoff current = 100mA, DC500V 50MΩ min (20±15℃)												
ENVIRONMENT	OPERATING TEMP.,HUMID.AND ALTITUDE	-40 to +100℃ (On aluminum base plate), 20 - 95%RH (Non condensing) (Refer to DERATING CURVE), 3,000m (10,000feet) max												
	STORAGE TEMP.,HUMID.AND ALTITUDE	-40 to +100℃, 20 - 95%RH (Non condensing), 9,000m (30,000feet) max												
	VIBRATION	10 - 55Hz, 49.0m/s ² (5G), 3minutes period, 60minutes each along X, Y and Z axis												
	IMPACT	196.1m/s ² (20G), 11ms, once each along X, Y and Z axis												
SAFETY	AGENCY APPROVALS	UL60950, C-UL, EN60950												
OTHERS	CASE SIZE/WEIGHT	57.9×12.7×61.0mm (W×H×D) / 83g max												
	COOLING METHOD	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%.