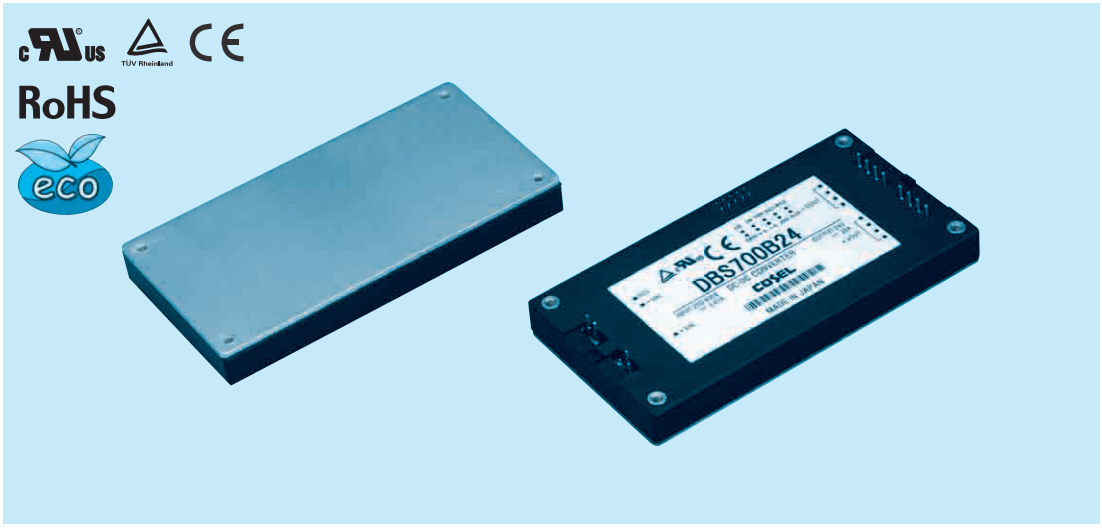
COSEL DC-DC Converters Bus Converter·Power Module Type

DBS700B

Ordering information

DB	S	700	B	28	
①	②	③	④	⑤	



①Series name
②Single output
③Output wattage
④Input voltage
B :DC200 - 400V
⑤Output voltage

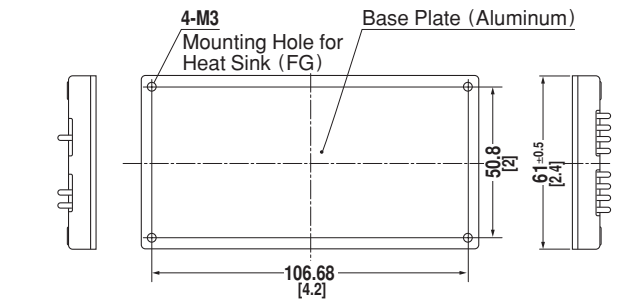
MODEL	DBS700B12	DBS700B24	DBS700B28	DBS700B36	DBS700B48
MAX OUTPUT WATTAGE[W]	696	696	700	702	696
DC OUTPUT	12V 58A	24V 29A	28V 25A	36V 19.5A	48V 14.5A

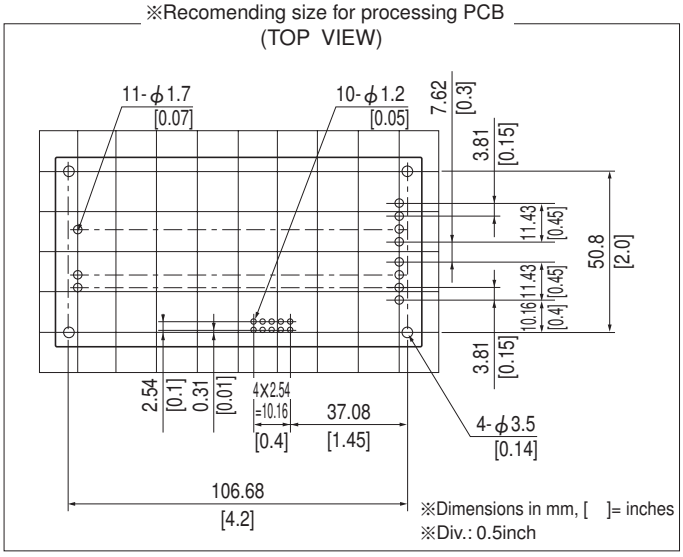
SPECIFICATIONS

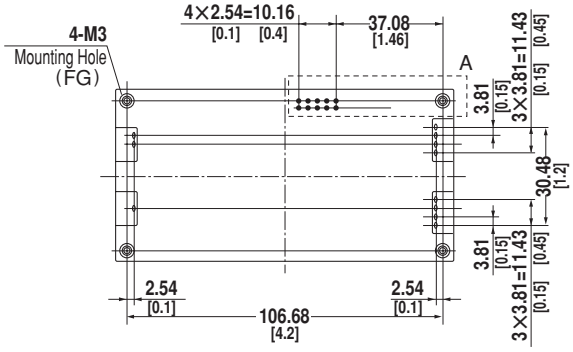
	MODEL		DBS700B12	DBS700B24	DBS700B28	DBS700B36	DBS700B48
INPUT	VOLTAGE[V]		DC200 - 400				
	CURRENT[A]	*1	2.76typ	2.76typ	2.76typ	2.76typ	2.73typ
	EFFICIENCY[%]	*1	90.0typ	90.0typ	90.5typ	90.0typ	91.0typ
OUTPUT	VOLTAGE[V]		12	24	28	36	48
	CURRENT[A]		58	29	25	19.5	14.5
	LINE REGULATION[mV]		40max	95max	95max	95max	120max
	LOAD REGULATION[mV]		100max	190max	190max	200max	240max
	RIPPLE[mVp-p]	0 to +100℃*2	120max	120max	120max	150max	200max
		-40 to 0℃*2	160max	160max	160max	200max	250max
	RIPPLE NOISE[mVp-p]	0 to +100℃*2	150max	150max	150max	200max	250max
		-40 to 0℃*2	180max	180max	180max	240max	400max
	TEMPERATURE REGULATION[mV]	0 to +65℃	120max	280max	280max	360max	480max
		-40 to +100℃	200max	480max	480max	680max	960max
	DRIFT[mV]	*3	40max	90max	90max	120max	180max
	START-UP TIME[ms]		200max (DCIN 280V, Io=100%)				
	OUTPUT VOLTAGE ADJUSTMENT RANGE	*4	Fixed (TRM pin open), 60 - 110% adjustable by external VR or external voltage				
	OUTPUT VOLTAGE SETTING[V]		11.64 - 12.36	23.28 - 24.72	27.16 - 28.84	34.92 - 37.08	46.56 - 49.44
PROTECTION CIRCUIT AND OTHERS	OVERCURRENT PROTECTION		Works over 105% of rating and recovers automatically				
	OVERVOLTAGE PROTECTION		13.80 - 16.80V	27.60 - 33.60V	32.20 - 39.20V	41.40 - 50.40V	55.20 - 63.00V
	REMOTE SENSING		Provided				
	REMOTE ON/OFF		Provided (On both side of input and output)				
ISOLATION	INPUT-OUTPUT		AC3,000V 1minute, Cutoff current = 10mA, DC500V 50MΩ min (20±15℃)				
	INPUT-FG		AC2,000V 1minute, Cutoff current = 10mA, DC500V 50MΩ min (20±15℃)				
	OUTPUT-FG		AC500V 1minute, Cutoff current = 100mA, DC500V 50MΩ min (20±15℃)				
	OUTPUT-RC2,RC3		AC100V 1minute, Cutoff current = 100mA, DC100V 10MΩ 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/s², 3minutes period, 60minutes each along X, Y and Z axis				
	IMPACT		196.1m/s², 11ms once each along X, Y and Z axis				
SAFETY	AGENCY APPROVALS		UL60950-1, C-UL, EN60950-1, EN50178				
OTHERS	CASE SIZE/WEIGHT		61×12.7×116.8mm [2.4×0.5×4.6 inches] (W×H×D) / 180g max				
	COOLING METHOD		Conduction cooling (e.g. heat radiation from the aluminum base plate to the attached heat sink)				

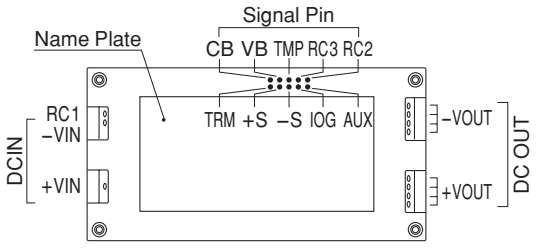
*1 At rated input(DC280V) and rated load.
*2 Ripple and ripple noise is measured by using measuring board with the recommended capacitor Co & the film capacitor 0.1μF. Refer to the manual.
*3 Drift is the change in DC output for an eight hour period after a half-hour warm-up at 25℃, with the input voltage held constant at the rated input/output.
*4 Refer to the manual for the input range.

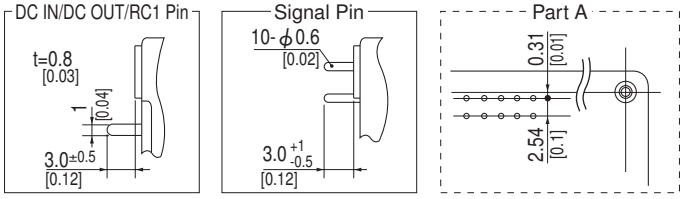
External view









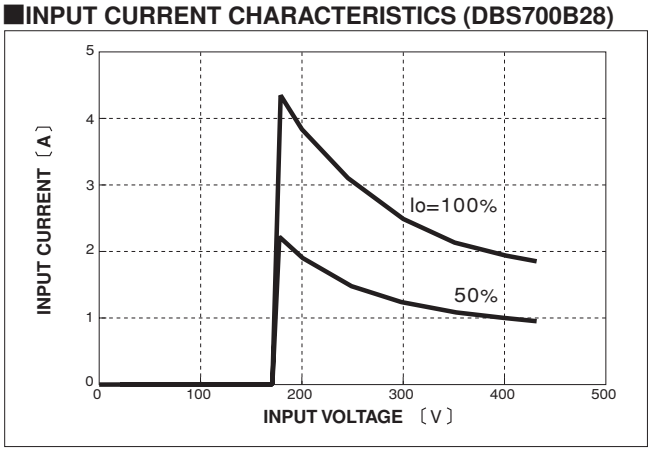


※Weight: 180g max
※Tolerance: ±0.3 [±0.012]
※Base Plate: Aluminum
※Dimensions in mm, [ ]= inches
※Mounting hole screwing torque: 0.49N·m(5.0kgf·cm)

DBS

Performance data

■INPUT CURRENT CHARACTERISTICS (DBS700B28)



■EFFICIENCY CHARACTERISTICS (DBS700B28)