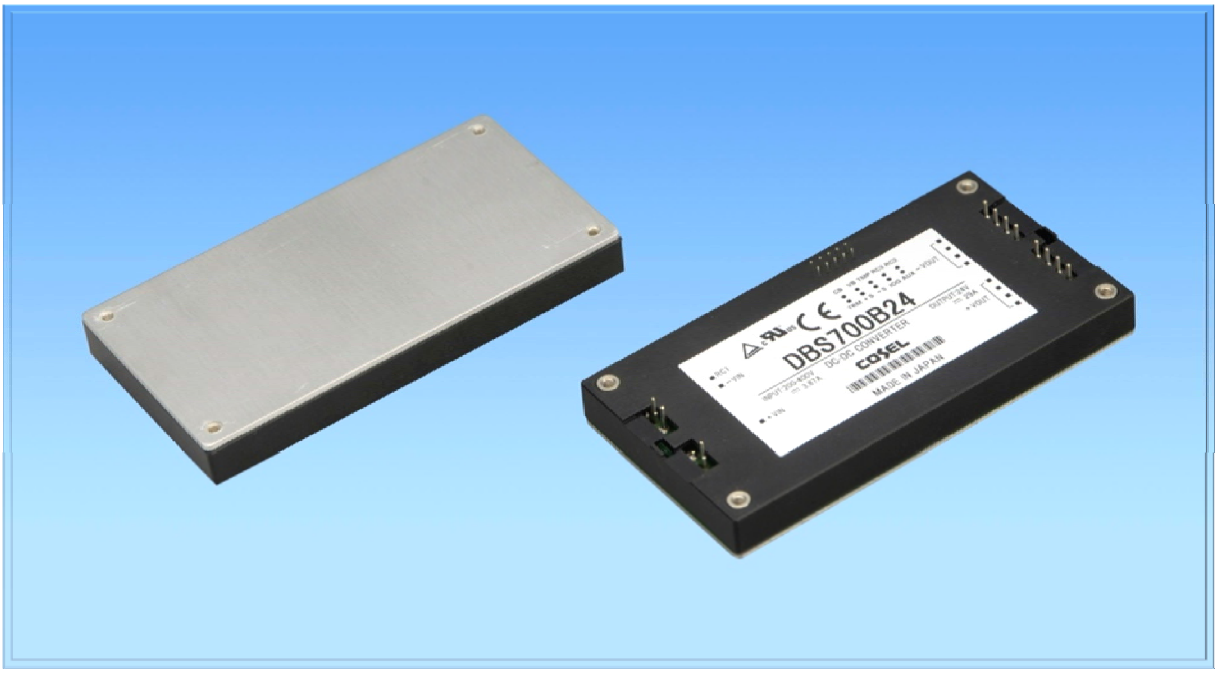
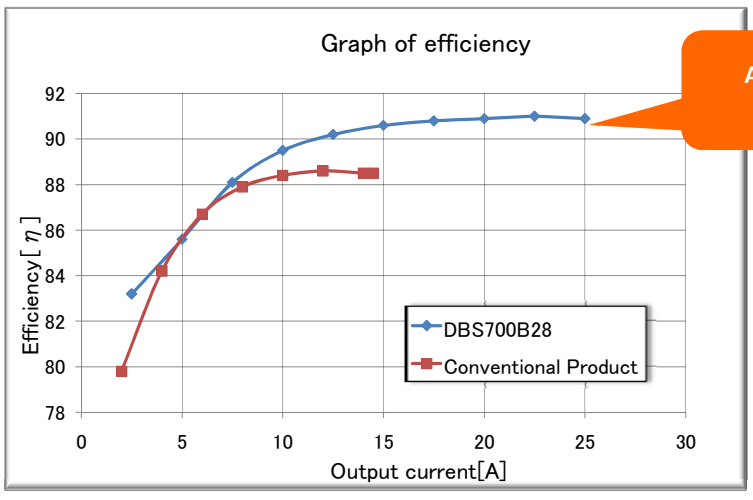
DBS700series



Feature

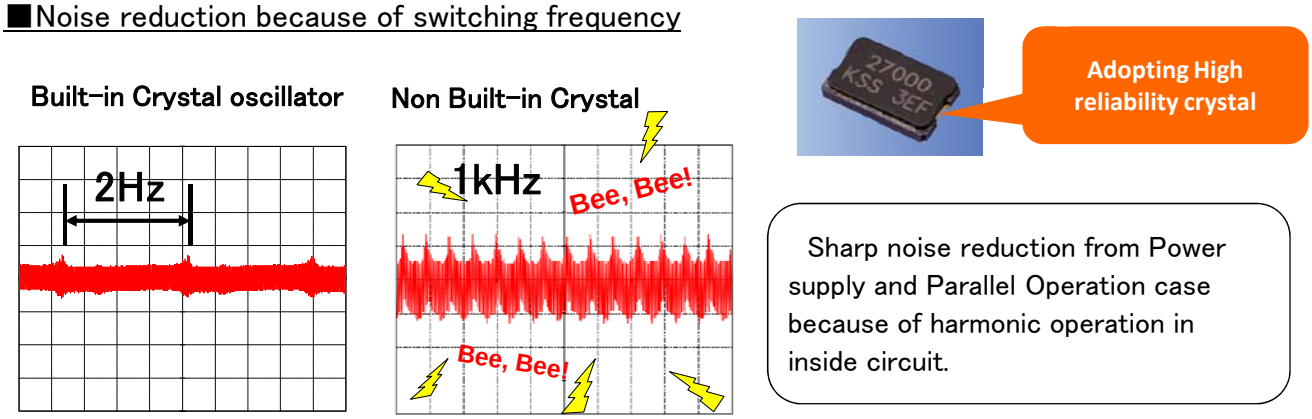
- ■Output700W as a maximum power supply of full brick size.
- ■Decreasing beat-noise by adopting a crystal oscillator.
- ■Built-in Common-mode current reduction circuit.
- ■Getting uniformity specifications by built-in Microcomputer.
- ■Achieved Over 90% High efficiency.
- ■Parallel operation, Series operation and n+1 redundant operation are available.



Achieved Over 90% Efficiency

CODICO GmbH
Zwingenstrasse 6-8, A-2380 Perchtoldsdorf
Tel. Vienna +43/(0)1/86 305 - 0
Fax Vienna +43/(0)1/86 305 - 5000
e-mail: office@codico.com
www.codico.com

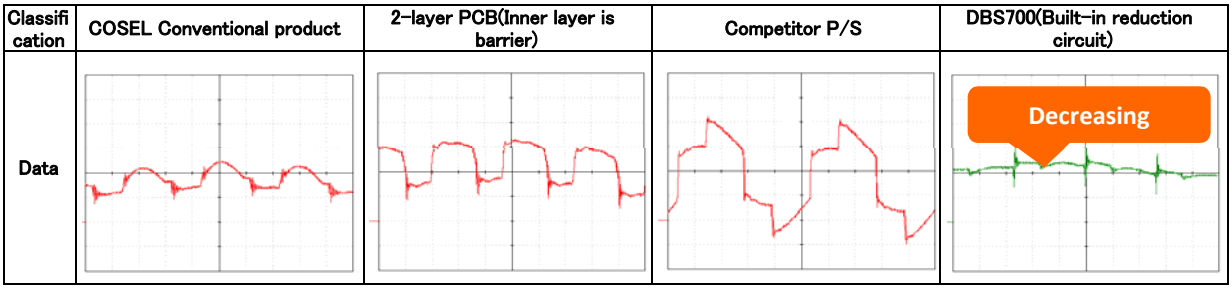
■Noise reduction because of switching frequency



Sharp noise reduction from Power supply and Parallel Operation case because of harmonic operation in inside circuit.

Beat noise frequency shape of Parallel Operation

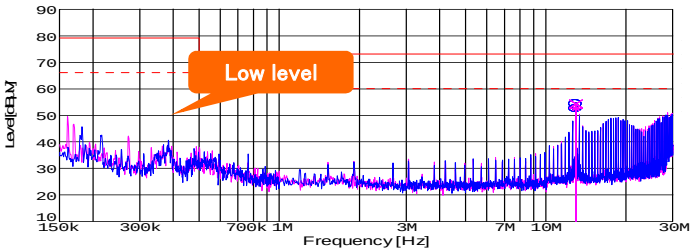
■Decreasing EMI by adopting Common current reduction



5V／div　1us/div

Common Current frequency shape of a ground

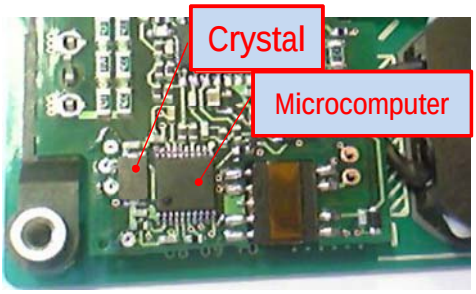
Line conduction



■Getting uniformity by built-in Microcomputer

Basic control of P/S like output control is quick response because of Analog Control.

Getting uniformity specification because of Digital-control by Microcomputer.



CODICO®

COSEL Power module type

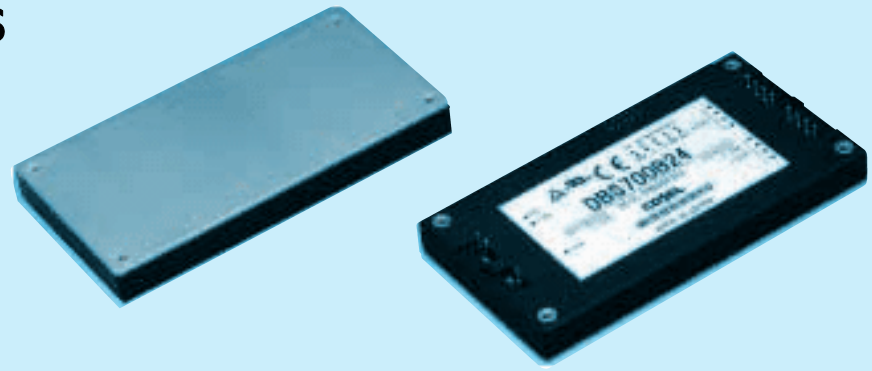
DBS700B

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

c UL us TÜV Rheinland CE (LVD)
RoHS



MODEL	DBS700B24	DBS700B28	DBS700B48
MAX OUTPUT WATTAGE[W]	696	700	696
DC OUTPUT	24V 29A	28V 25A	48V 14.5A

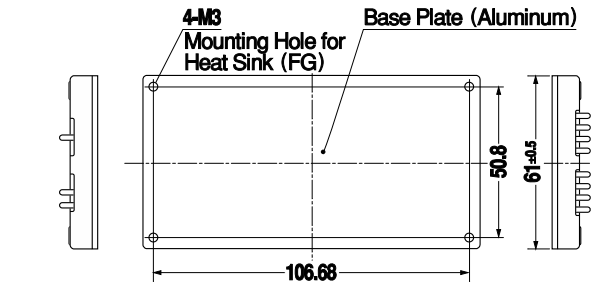
SPECIFICATIONS

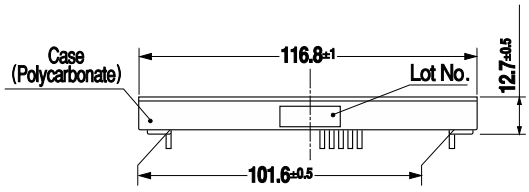
	MODEL		DBS700B24	DBS700B28	DBS700B48
INPUT	VOLTAGE[V]		DC200 - 400		
	CURRENT[A]	*1	2.76typ	2.76typ	2.73typ
	EFFICIENCY[%]	*1	90.0typ	90.5typ	91.0typ
OUTPUT	VOLTAGE[V]		24	28	48
	CURRENT[A]		29	25	14.5
	LINE REGULATION[mV]		95max	95max	120max
	LOAD REGULATION[mV]		190max	190max	240max
	RIPPLE[mVp-p]	0 to +100℃ *2	120max	120max	200max
		-40 to 0℃ *2	160max	160max	250max
	RIPPLE NOISE[mVp-p]	0 to +100℃ *2	150max	150max	250max
		-40 to 0℃ *2	180max	180max	400max
	TEMPERATURE REGULATION[mV]	0 to +65℃	280max	280max	480max
		-40 to +100℃	480max	480max	960max
	DRIFT[mV]	*3	90max	90max	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]		23.28 - 24.72	27.16 - 28.84	46.56 - 49.44
PROTECTION CIRCUIT AND OTHERS	OVERCURRENT PROTECTION		Works over 105% of rating and recovers automatically		
	OVERVOLTAGE PROTECTION		27.60 - 33.60V	32.20 -39.20V	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		
OTHERS	CASE SIZE/WEIGHT		61×12.7×116.8mm (W×H×D) / 180g max		
	COOLING METHOD		Conduction cooling (e.g. heat radiation from the aluminum base plate to the attached heat sink)		

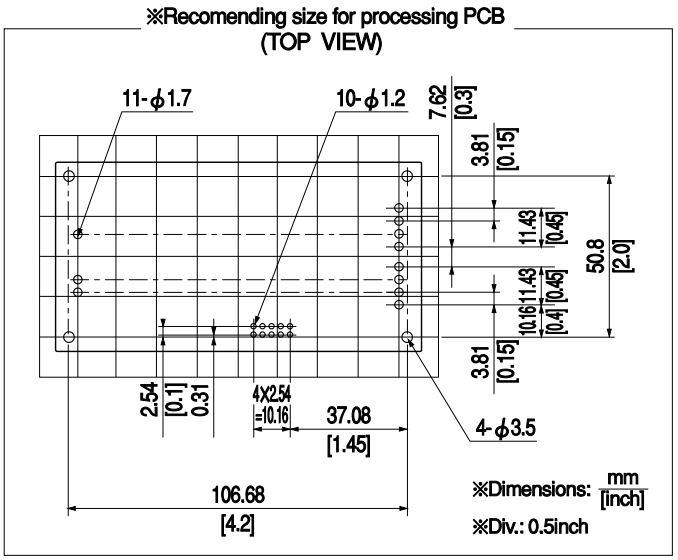
*1 At rated input(DC280V) and rated load.
*2 Ripple and ripple noise is measured by using measuring board with the recommended capacitor Co & the film capacitor 0.1μF. Refer to the manual.
*3 Drift is the change in DC output for an eight hour period after a half-hour warm-up at 25℃, with the input voltage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

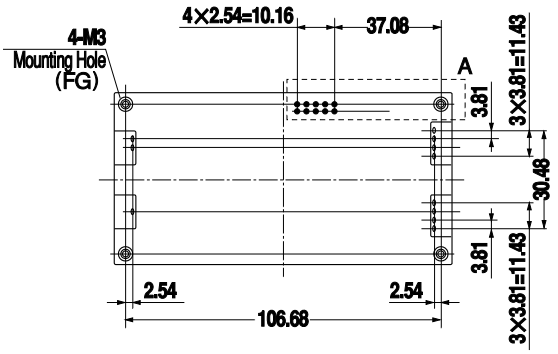
DBS

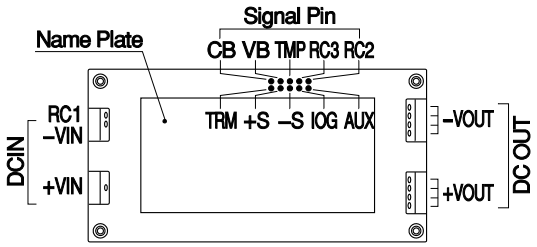
External view

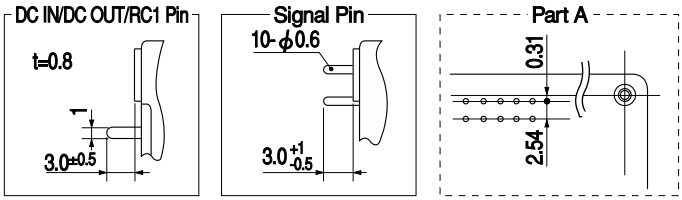








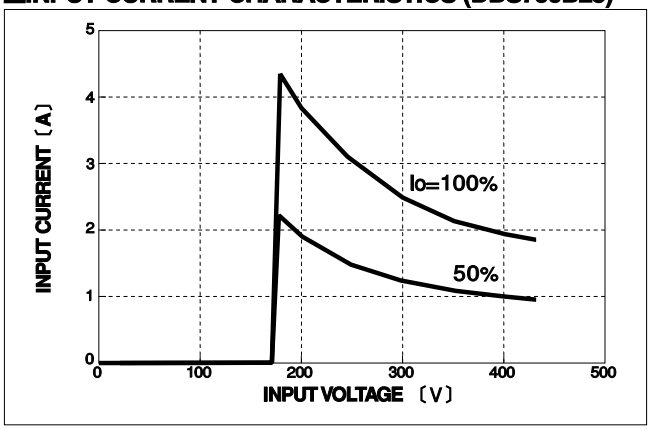




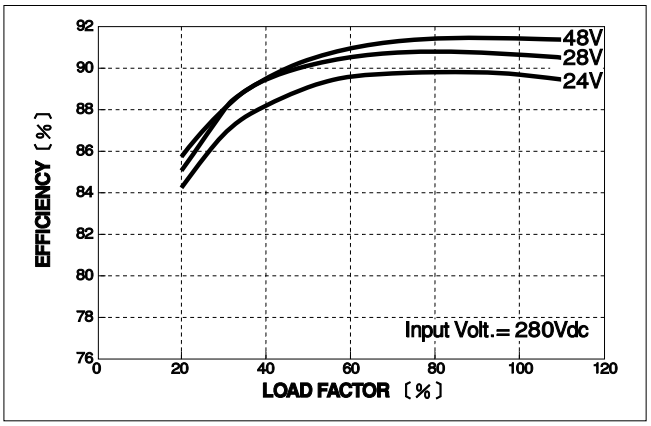
※Weight: 180g or less
※Tolerance: ±0.3
※Base Plate: Aluminum
※Dimensions in mm.
※Mounting hole screwing torque: 0.4N·m(5.0kgf·cm)

Performance data

■INPUT CURRENT CHARACTERISTICS (DBS700B28)



■EFFICIENCY CHARACTERISTICS



DBS