

15 to 30W DC-DC Converters

Features

- ◆ Industry Standard 1 x 1" Footprint
- ◆ Wide Range DC Input 9 - 36 or 18 - 76V
- ◆ High Efficiency - Up to 92%
- ◆ Six Sided Shielding



Key Market Segments & Applications



Specifications		CCG15/CCG30							
Nominal Output Voltage	VDC	3.3V	5V	12V	15V	24V	30V	±12V	±15V
Input Voltage Range	VDC	9 - 36V or 18 - 76VDC							
Input Current	A	See model selector							
Output Voltage Adjustment	VDC	2.97 - 3.63	4.5 - 5.5	10.8 - 13.2	13.5 - 16.5	None			
Output Voltage Accuracy	%	±2%				±5%			
Ripple & Noise (max) pk-pk	mV	70	70	95	95	190	190	95	95
Line Regulation (max)	mV	13.2	20	48	60	120	150	60	75
Load Regulation (max)	mV	13.2	20	48	60	240	300	120	150
Cross Regulation (1)	mV	Not applicable						480	600
Overcurrent Protection	%	>105% (Hiccup current style)							
Overvoltage Protection	%	-							
Remote On/Off	-	Standard: Low = ON, Open = OFF. Positive Logic (/P suffix): Open = ON, Low = OFF							
Operating Temperature	°C	-40°C to +110°C Case, -40°C to +85°C Ambient. See installation manual for operation above 60°C							
Storage Temperature	°C	-55°C to +125°C							
Temperature Coefficient	%/°C	0.02%/°C							
Humidity (non condensing)	%RH	5 - 95% RH Operating and Non Operating							
Cooling	-	Convection or forced air							
Withstand Voltage	VAC	Input to Case: 1kVDC; Input to Output 1.5kVDC; Output to Case: 1kVDC							
Isolation Resistance	MΩ	>100M at 25°C and 70%RH, Output to Case 500VDC							
Vibration	-	Non Operating, 10-55Hz (sweep for 3 min.) Amplitude 1.52mm constant (Max 90.8m/s ²) X,Y,Z 1 hour each							
Shock	-	490.3m/s ²							
Safety Agency Certifications	-	IEC/EN/UL/CSA60950-1, IEC/EN/UL/CSA62368-1 and CE Mark							
Weight (Typ)	g	20							
Size (WxHxD)	in (mm)	1.0 x 0.39 x 1.0" (25.4 x 9.9 x 25.4)							
Warranty	yrs	5 Years							

Note: See Installation Manual for full details, test methods of parameters and application notes

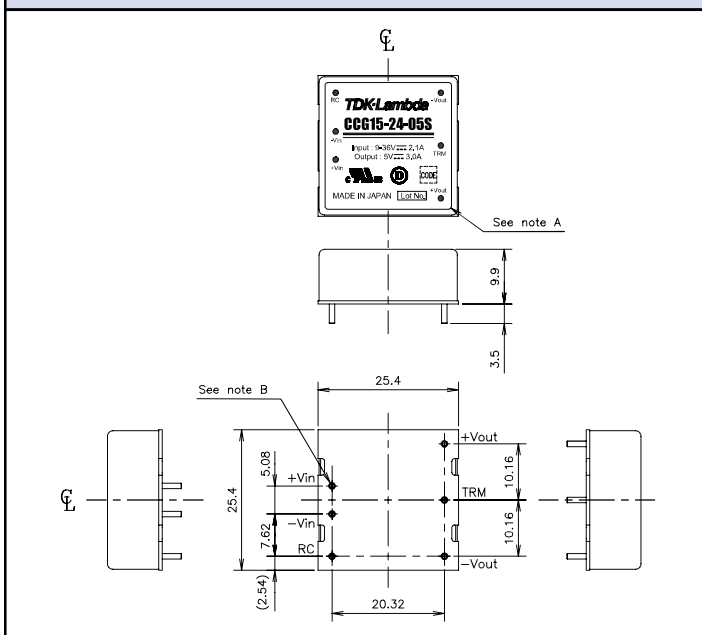
(1) Dual outputs only. One output at 100%, the other output at 20% load

Output Ratings

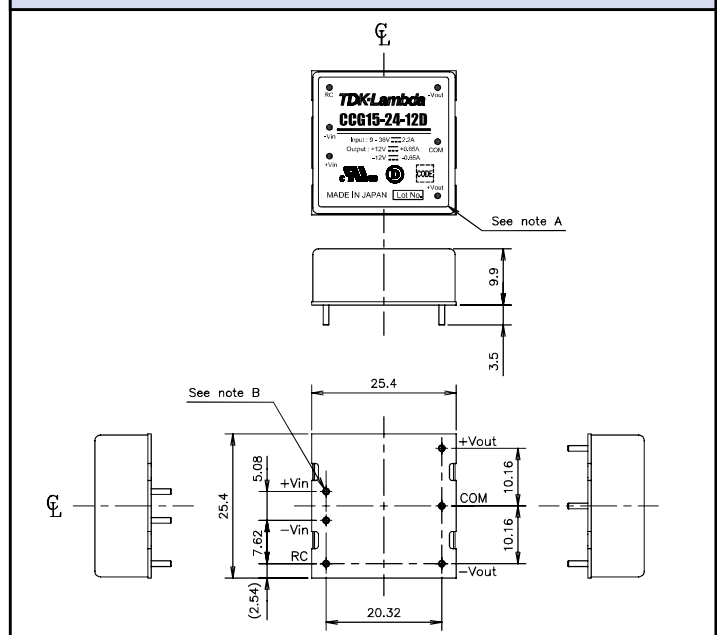
Model	Output Voltage (V)	Output Current (A)	Input Voltage (V)	Maximum Power (W)	Input Current at Nominal Input (A)	Efficiency (%) (100% load, nominal input)
CCG15-24-03S	3.3	4	9 - 36	13.2	0.65	85
CCG30-24-03S	3.3	7	9 - 36	23.1	1.12	86
CCG15-24-05S	5	3	9 - 36	15.0	0.72	87
CCG30-24-05S	5	6	9 - 36	30.0	1.4	89
CCG15-24-12S	12	1.3	9 - 36	15.6	0.74	88
CCG30-24-12S	12	2.5	9 - 36	30.0	1.4	89
CCG15-24-15S	15	1	9 - 36	15.0	0.71	88
CCG30-24-15S	15	2	9 - 36	30.0	1.4	89
CCG15-24-12D (2)	24	0.65	9 - 36	15.6	0.73	89
CCG30-24-12D (2)	24	1.25	9 - 36	30.0	1.4	89
CCG15-24-15D (2)	30	0.5	9 - 36	15.0	0.7	90
CCG30-24-15D (2)	30	1	9 - 36	30.0	0.38	91
CCG15-24-12D	±12V	±0.65	9 - 36	15.6	0.73	89
CCG30-24-12D	±12V	±1.25	9 - 36	30.0	1.4	89
CCG15-24-15D	±15V	±0.5	9 - 36	15.0	0.7	90
CCG30-24-15D	±15V	±1.0	9 - 36	30.0	0.38	91
CCG15-48-03S	3.3	4	18 - 76	13.2	0.32	85
CCG30-48-03S	3.3	7	18 - 76	23.1	0.55	87
CCG15-48-05S	5	3	18 - 76	15.0	0.36	87
CCG30-48-05S	5	6	18 - 76	30.0	0.69	90
CCG15-48-12S	12	1.3	18 - 76	15.6	0.37	88
CCG30-48-12S	12	2.5	18 - 76	30.0	0.69	90
CCG15-48-15S	15	1	18 - 76	15.0	0.36	88
CCG30-48-15S	15	2	18 - 76	30.0	0.69	91
CCG15-48-12D (2)	24	0.65	18 - 76	15.6	0.37	89
CCG30-48-12D (2)	24	1.25	18 - 76	30.0	0.69	91
CCG15-48-15D (2)	30	0.5	18 - 76	15.0	0.35	90
CCG30-48-15D (2)	30	1	18 - 76	30.0	0.68	92
CCG15-48-12D	±12V	±0.65	18 - 76	15.6	0.37	89
CCG30-48-12D	±12V	±1.25	18 - 76	30.0	0.69	91
CCG15-48-15D	±15V	±0.5	18 - 76	15.0	0.35	90
CCG30-48-15D	±15V	±1.0	18 - 76	30.0	0.68	92

Note (2): CCG can be used as a single output between +Vout and -Vout without COM connected.

Outline Drawing Single Output



Outline Drawing Dual Output



Options

Suffix	Description
Blank	Negative Logic Remote On/Off
/P	Positive Logic Remote On/Off

For Additional Information, please visit
<https://product.tdk.com/info/en/products/power/index.html>

