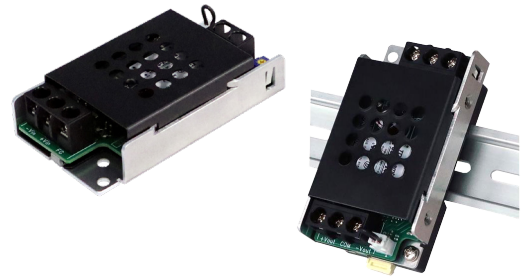


Chassis mount and DIN rail 13.2 to 30W DC-DC converters



The CCGS series integrates TDK-Lambda's widely used CCG range of wide-input DC-DC converters into a robust, self-contained power module. Two mechanical configurations are available: a chassis-mount version and a variant with an integrated DIN-rail bracket, ideal for process control and industrial automation applications. This true all-in-one solution requires no external components and eliminates the need to design or manufacture a PCB, significantly reducing development time and system complexity. The CCGS power module includes an output voltage adjustment trimpot, remote on/off control, and a green LED to indicate output power status. Connection options include either screw terminal blocks or push-in connectors to suit different installation preferences. The CCGS series is certified to IEC/EN/UL/CSA 62368-1 and is backed by a five-year warranty.

Features	Benefits
• Wide 4:1 Input Ranges	• Supports Dual 12/24V or 24/48V System Voltages
• Space Saving Package Types	• Simpler Installation
• Certified to IEC62368-1	• Easier System Compliance
• Reduced Derating at High Ambient Temperatures	• More Useable Power

Model Listing							
Output Power		Output Voltage					
	Input Voltage Range	3.3V	5V	12V	15V	±12V	±15V
15W	9 - 36V	CCGS15-24-03S (*)	CCGS15-24-05S (*)	CCGS15-24-12S (*)	CCGS15-24-15S (*)	CCGS15-24-12D	CCGS15-24-15D
	18 - 76V	CCGS15-48-03S	CCGS15-48-05S	CCGS15-48-12S	CCGS15-48-15S	CCGS15-48-12D	CCGS15-48-15D
30W	9 - 36V	CCGS30-24-03S	CCGS30-24-05S	CCGS30-24-12S	CCGS30-24-15S	CCGS30-24-12D	CCGS30-24-15D
	18 - 76V	CCGS30-48-03S	CCGS30-48-05S	CCGS30-48-12S	CCGS30-48-15S	CCGS30-48-12D	CCGS30-48-15D

Notes

(*) The safety standard certified input voltage range is 18 - 36VDC

Note ±12V dual output models can provide a 24V single output by connecting +Vout and -Vout to the load, leaving the COM unconnected. Similarly, ±15V dual output models can be used as a 30V single output

Part Numbering Scheme

CCGS	30	-24	-12	D	/DIN
Series Name CCGS	Output Power 15 = 15W 30 = 30W	Input Voltage 24 = 9 to 36V 48 = 18 to 76V	Output Voltage 03 = 3.3V 05 = 5V 12 = 12V 15 = 15V	Output S = Single D = Dual	Blank = Standard /DIN = DIN rail bracket /B = Connector /BDIN = Connector and DIN Rail bracket*

* Contact factory for availability & minimum order quantity

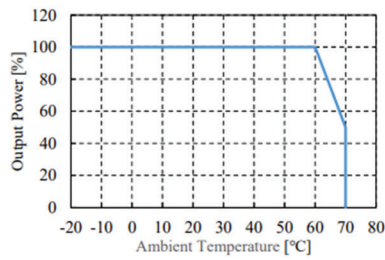
Specifications				
Model		See model selector table		
Input				
Efficiency	%	84 to 87 - See individual model specifications on website		
Conducted & Radiated EMI	-	EN55011/EN55032-A, FCC Class A, VCCI-A		
Immunity	-	IEC61000, see immunity reports on website		
Safety Certifications and Markings	-	IEC/EN/UL/CSA 62368-1, CE and UKCA marks (Altitude < 5,000m)		
Output				
Output Voltage Tolerance ⁽¹⁾	%	See individual model specifications on website		
Output Voltage Adjustment	%	Single output models only.		
Switching Frequency ⁽¹⁾	kHz	See section 2 of instruction manual on website https://product.tdk.com/system/files/ccgs15_30_apl.pdf		
External Load Capacitance (Maximum) ⁽¹⁾	-	See section 11 of instruction manual on website https://product.tdk.com/system/files/ccgs15_30_apl.pdf		
Ripple & Noise	mV	100 to 130, output power and voltage dependent		
Temperature Coefficient	%/°C	0.02		
Minimum Load	-	No minimum load required		
Overcurrent Protection	%	105 minimum, hiccup, automatic recovery		
Overvoltage Protection	-	None		
Overtemperature Protection		None		
Remote Sense		None		
Remote On/Off	-	Short = output ON: Open output OFF		
Parallel Operation	-	Not possible		
Environmental				
Operating Temperature (Ambient) ⁽¹⁾	°C	-20 to +70		
Storage Temperature	°C	-30 to +85		
Humidity (non condensing)	%RH	Operating: 20 to 95, Storage:10 to 95		
Cooling	-	Convection		
Withstand Voltage	Vdc	Input to Ground 1,500, Input to Output 1,500, Output to Ground 1,000 for 1 minute		
Vibration (Non operating)	-	10 - 55Hz (Sweep for 3min), 19.6m/s2 Constant, X,Y,Z 1hour each.		
Shock (Non operating)	-	Less than 196.1m/s2		
Other		Standard model	DIN model	BDIN model
Weight (Typ)	g	95	115	105
Size (WxHxD)	mm	52.0 x 23.5 x 93.0	52.0 x 31.9 x 93.0	52.0 x 31.9 x 93.0
Size (WxHxD)	Inches	2.047 x 0.925 x 3.661	2.047 x 1.256 x 3.661	2.047 x 1.256 x 3.661
MTBF - Telcordia SR-332 issue 3 ⁽¹⁾	Hours	CCGS15-xx-xxS model: 2,349,450, 40°C full load. See reliability data on the website		
Warranty	yrs	5		

Notes

(1) See website for derating, detailed specifications, test methods and installation manual for all models <https://product.tdk.com/en/power/ccgs>

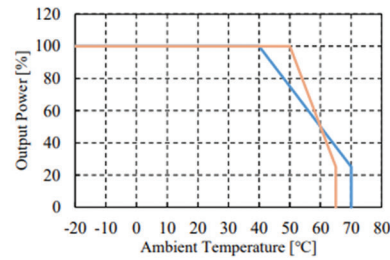
Model derating

CCGS15-S



Ambient Temperature (°C)	Output Power (%)
-20 ~ +60	100
+70	50

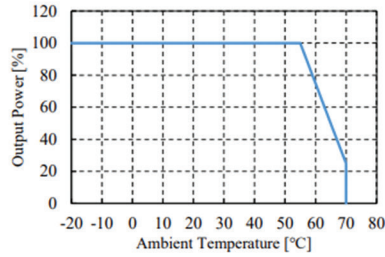
CCGS30-24-05S



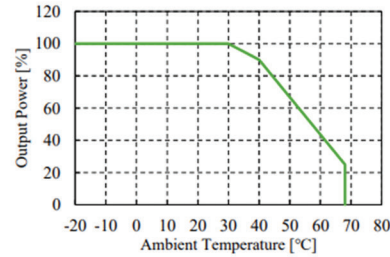
10V < Vin ≤ 18V	
Ambient Temperature (°C)	Output Power (%)
-20 ~ +40	100
+70	25

18V < Vin ≤ 36V	
Ambient Temperature (°C)	Output Power (%)
-20 ~ +50	100
+65	25

CCGS15-D

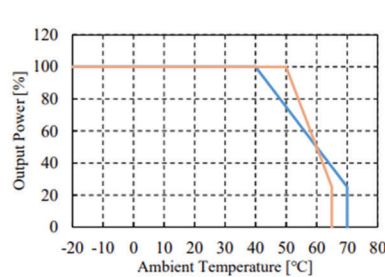


Ambient Temperature (°C)	Output Power (%)
-20 ~ +55	100
+70	25



9V ≤ Vin ≤ 10V	
Ambient Temperature (°C)	Output Power (%)
-20 ~ +30	100
+40	90
+68	25

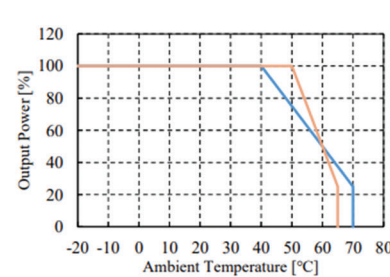
CCGS30-48-xxS



18V ≤ Vin ≤ 36V	
Ambient Temperature (°C)	Output Power (%)
-20 ~ +40	100
+70	25

36V < Vin ≤ 76V	
Ambient Temperature (°C)	Output Power (%)
-20 ~ +50	100
+65	25

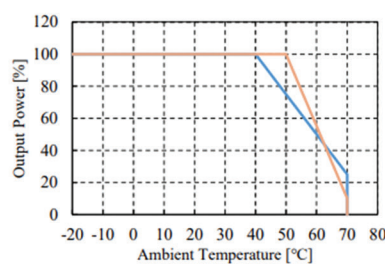
CCGS30-24-03S, 12S, 15S



9V ≤ Vin ≤ 18V	
Ambient Temperature (°C)	Output Power (%)
-20 ~ +40	100
+70	25

18V < Vin ≤ 36V	
Ambient Temperature (°C)	Output Power (%)
-20 ~ +50	100
+65	25

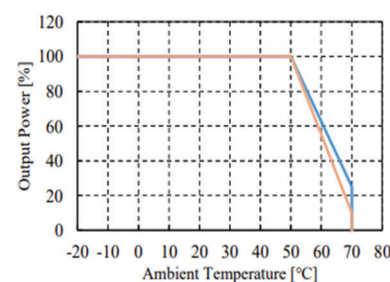
CCGS30-24-xxD



9V ≤ Vin ≤ 18V	
Ambient Temperature (°C)	Output Power (%)
-20 ~ +40	100
+70	25

18V < Vin ≤ 36V	
Ambient Temperature (°C)	Output Power (%)
-20 ~ +50	100
+70	10

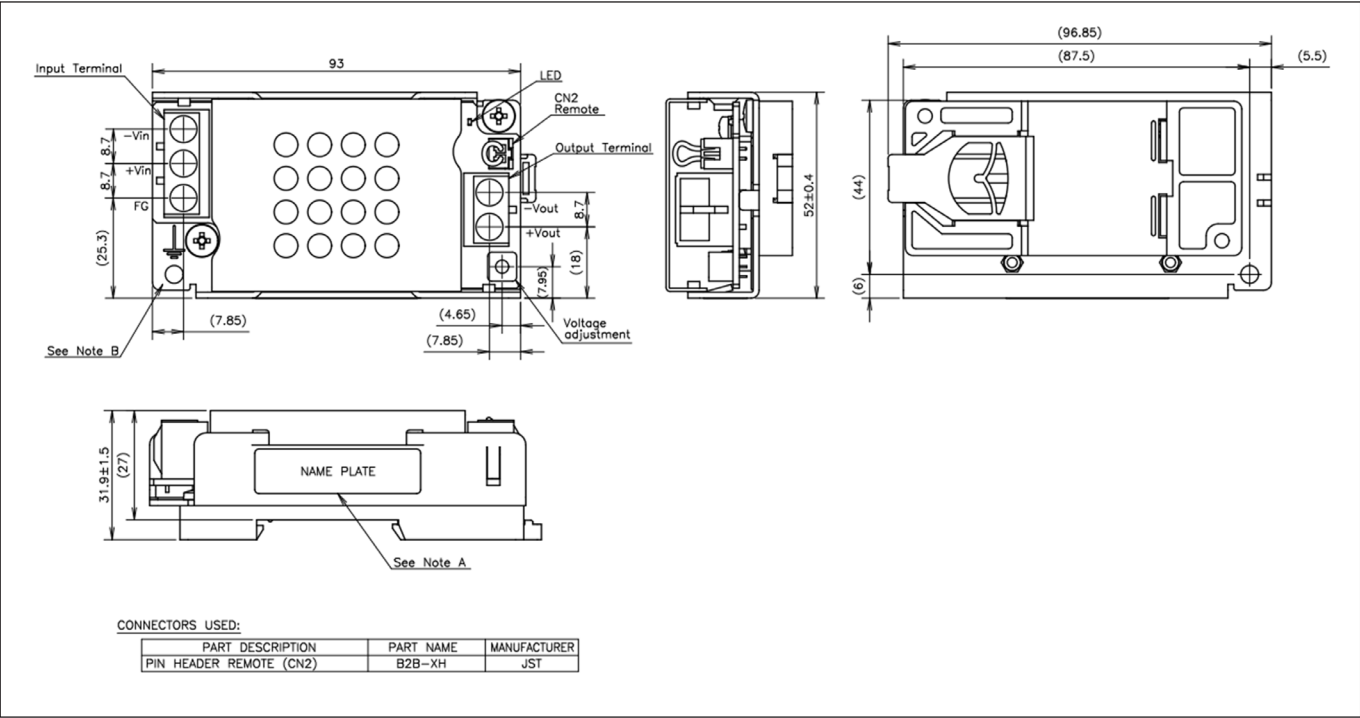
CCGS30-48-xxD



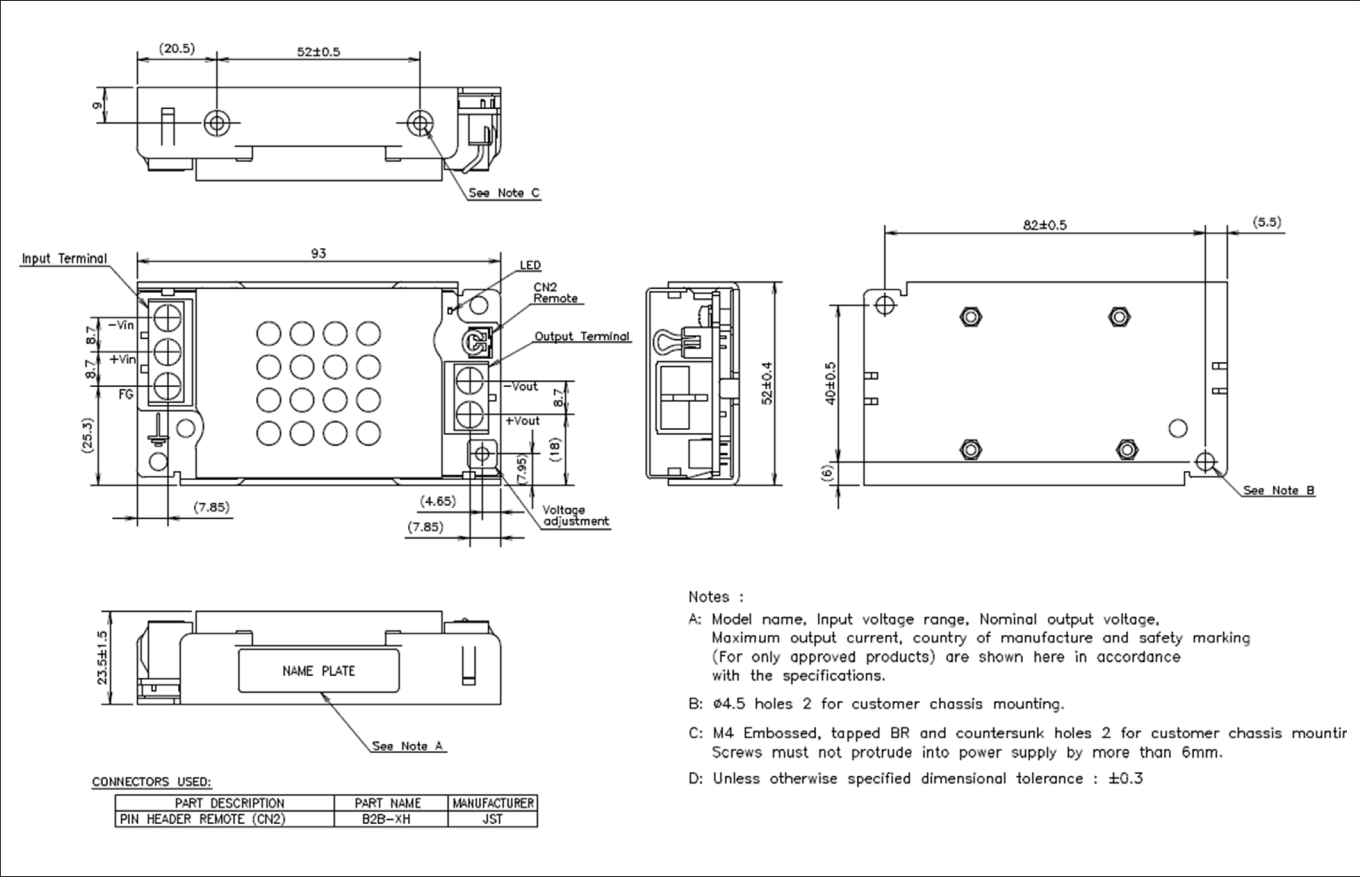
18V ≤ Vin ≤ 36V	
Ambient Temperature (°C)	Output Power (%)
-20 ~ +50	100
+70	25

36V < Vin ≤ 76V	
Ambient Temperature (°C)	Output Power (%)
-20 ~ +50	100
+70	10

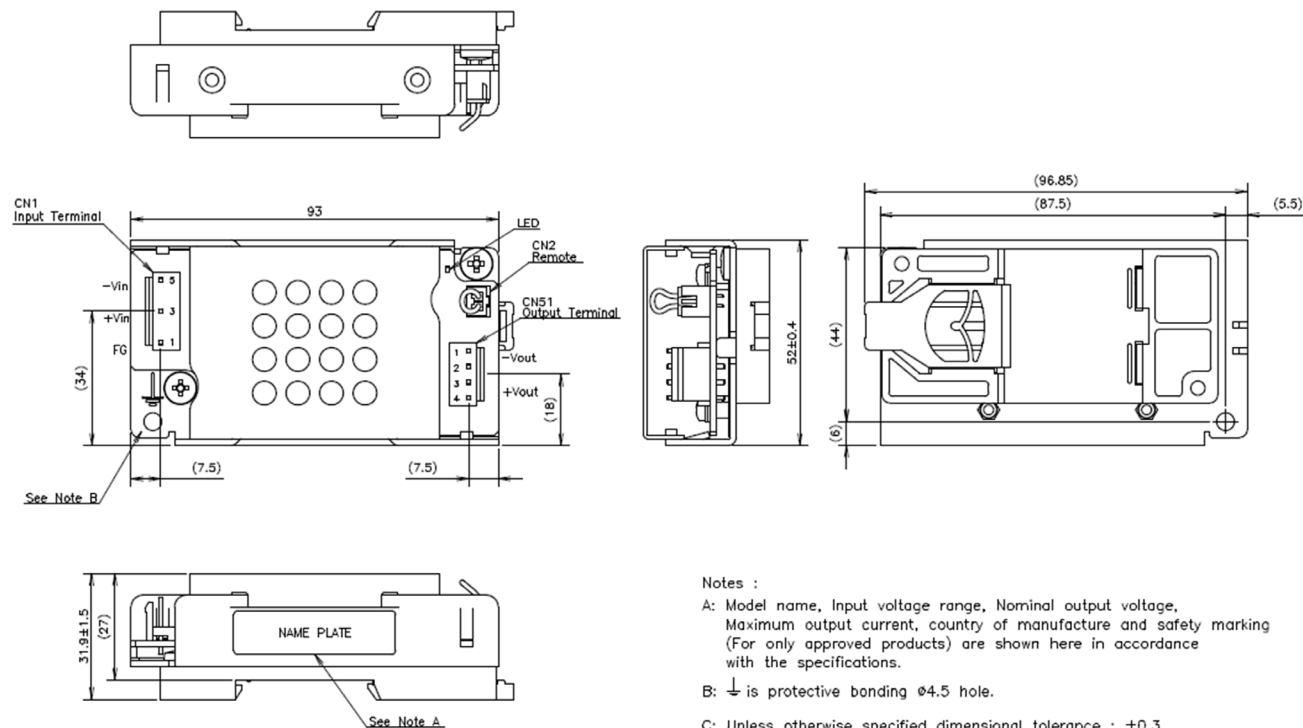
Outline drawing CCGS 15 & 30W



Outline drawing CCGS 15 & 30W DIN Rail



Outline drawing CCGS 15 & 30W DIN Rail + B connectors (/BDIN)



- Notes :
- A: Model name, Input voltage range, Nominal output voltage, Maximum output current, country of manufacture and safety marking (For only approved products) are shown here in accordance with the specifications.
- B: $\downarrow$ is protective bonding $\varnothing 4.5$ hole.
- C: Unless otherwise specified dimensional tolerance : ± 0.3

CONNECTORS USED:

PART DESCRIPTION	PART NAME	MANUFACTURER
PIN HEADER (INPUT SIDE CN1)	B3P5-VH	JST
PIN HEADER (OUTPUT SIDE CN51)	B4P-VH	JST
PIN HEADER REMOTE (CN2)	B2B-XH	JST



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