

Features

- Wide voltage input:90-264VAC/127-370VDC
- Operating temperature range: -30°C~+70°C
- DC OK Function
- Isolation voltage 4000VAC 5mA 1Minute
- High flame retardant plastic shell package
- Heat dissipation method: natural cooling
- Output voltage optional
- Good short circuit, over load, over voltage protection

Product Picture



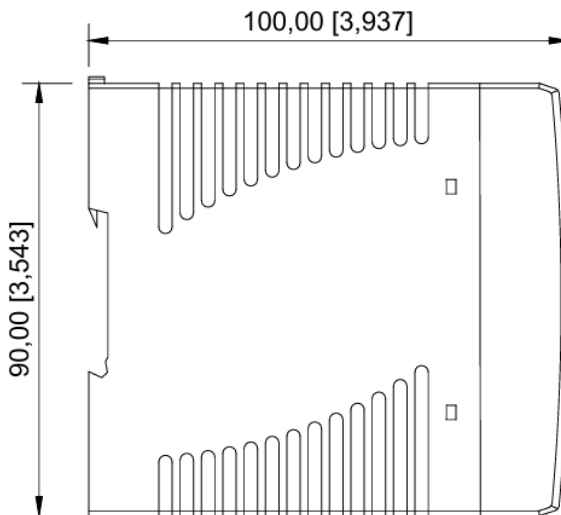
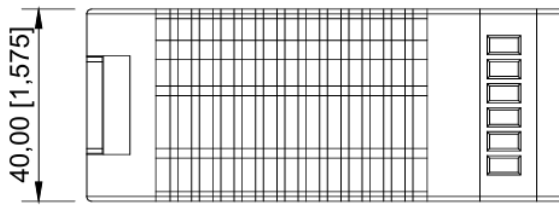
EMC-EN55032
EN55035
LVD-EN62368



Dimensions

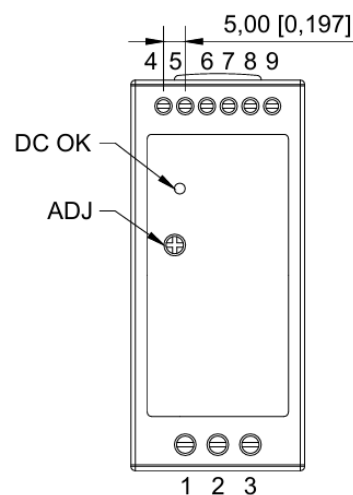
GBDG220S__-30W Series Dimensions

Top view



Front view

Pin	Function
1	GND
2	AC(N)
3	AC(L)
4	+Vo
5	+Vo
6	-Vo
7	-Vo
8,9	DC OK



Right view

Note:

Dimension Unit: mm[inch]

DC OK: indicates the output status indicator

Wiring range: Input :22-12AWG, output: 20-12 AWg

Tightening torque: Max0.4N·m

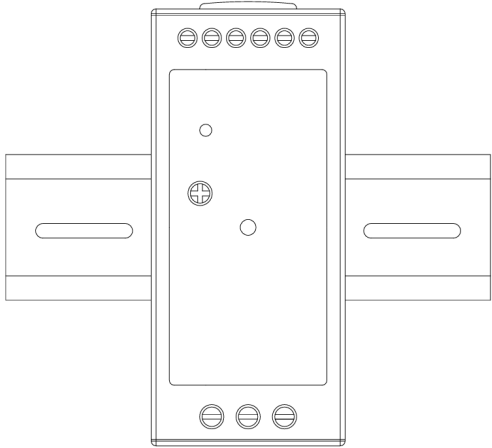
Unmarked tolerance: $\pm 0.25[\pm 0.01]$

ADJ: Output voltage adjustment knob

Tightening torque: Max0.4N·m

The device layout is for reference only.

Installation Diagram



DIN-rail mountable: TS35/7.5 or TS35/15
(For reference only, not included in the power supply)

Application

Industrial control systems, semiconductor manufacturing equipment, factory automation, electromechanical equipment, etc

Selection Guide

Model	Input(V)	Output (V \pm 2%)	Current (mA)	Output Adjustable Range ADJ(V)	Efficiency (%)	Isolation (VAC)	Weight (g \pm 0.5)	Certification
GBDG220S05-30W	90-264VAC (127-370VDC)	5	6000	4.75-5.5	80	4000		
GBDG220S09-30W		9	3333	8.0-10.5	85	4000		
GBDG220S12-30W		12	2500	10.8-13.2	85	4000		
GBDG220S15-30W		15	2000	13.5-16.5	85	4000		
GBDG220S24-30W		24	1250	21.6-26.4	85	4000		
GBDG220S48-30W		48	625	43.2-55.2	86	4000		

Note: Our company can customize the module power supply with any input and output for customers. If you have special needs, please call our company. Unless otherwise specified, the input = Vi. The specifications of the module power supply should comply with the provisions of Table 1 and be applicable to the full temperature range (-40 $^{\circ}$ C \leq Tc \leq 85 $^{\circ}$ C)

Electrical Specifications

Specification	Symbol	Conditions Vi , -40 $^{\circ}$ C \leq Tc \leq 85 (Unless otherwise specified)	Min	Max	Unit
Output Voltage	Vo	Full Load	Vo-2%	Vo+2%	V
Output Current	Iomax	—	—	P(Power)/ U(Output voltage)	A
Output Ripple Noise Voltage	Vp-p	Full Load, Vi, BW=20MHz, Normal Temperature	80	150	mV
Voltage Regulation	Sv	Vimin、Vi、Vimax, Full Load	—	$\leq \pm 1$	%
Load Adjustment	Si	Vi, Io=(10%~100%)Iomax	—	$\leq \pm 1$	%
Insulation Resistance	RI	Test Voltage: 500VDC	100	—	M Ω

Mechanical Specifications

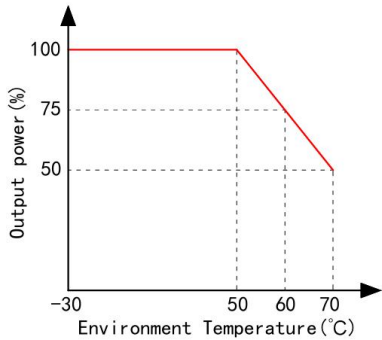
Size	40.00 x 90.00 x 100.00 mm
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General Specifications

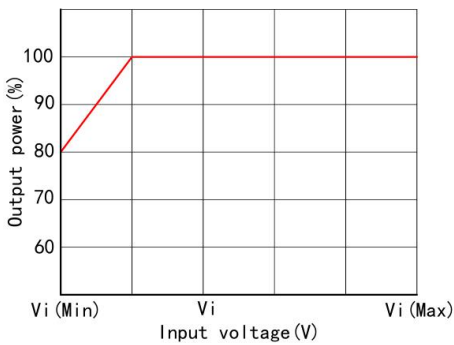
EMC Specifications	Electromagnetic compatibility emission	Compliant with EN55032(CISPR32)、EN61204-3 Class B、EN61000-3-2,-3、EAC TP TC 020、CNS 13438
	Electromagnetic compatibility immunity	Compliant with EN61000-4-2,3,4,5,6,8,11、EN55024、EN61000-6-2(EN50082-2)、EN61204-3、Class A heavy industry standard、EAC TP TC 020
Temperature Excursion	$\leq \pm 0.02\%/^{\circ}\text{C}$	
Storage Temperature	$-40^{\circ}\text{C}\sim 85^{\circ}\text{C}$	
Input Frequency	47Hz~63Hz	
Humidity	20%~90%RH	
Leakage Current	$<1\text{mA}/240\text{VDC}$	
MTBF	$>500000\text{H}$	

Typical Specification Curves

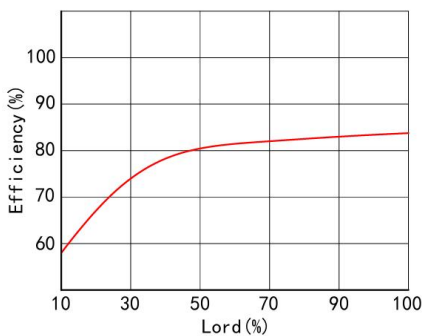
Temperature Chart



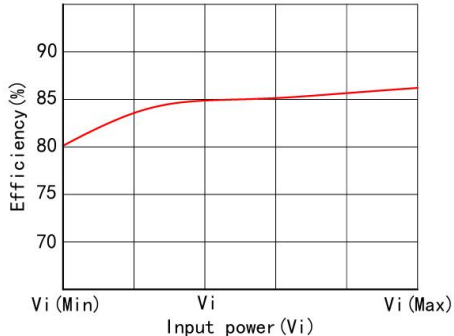
Static Specification Graph



Efficiency/Load graph



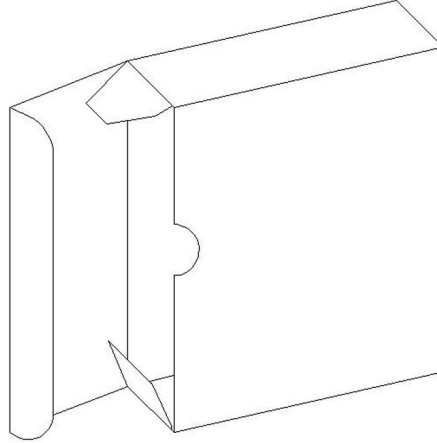
Efficiency/Input Voltage Graph



Precautions

Package

This series of switching power supplies are packaged in independent heat shrink film cartons.



Transport

The package containing the module is allowed to be transported by any means of transport, which should avoid direct rain and snow and mechanical damage.

Store

The module should be stored in a warehouse where the ambient temperature is -40 degrees ~ 85 degrees, the relative humidity is 20%~90%, and the surrounding environment is free from acidic, alkaline and other harmful gases.

Note: The above are the performance indicators of the product series listed in this manual. Some indicators of non-standard products may exceed the above requirements, so if there is any inconsistency between the manual and the product specification documents, please refer to the specification documents. If you have special needs, please contact us directly.