BI72G-Series

72W POWER SUPPLY

The BI family of AC/DC switch mode power supplies offers the best mix of cost efficiency and European quality standard. The standardized product is available in a variety of housings, secondary cables / plugs and options of customization.

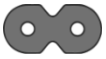
Features

- Ultra low standby losses
- High Efficiency
- Protection class II
- Wide selection of output plugs
- Manufacturing according to ISO 9001
- Short circuit proof

Options

- Customized product marking
- Different secondary cables / plugs available
- Housing modifications possible
- Additional primary inlets available

Specification		
Output Power	72	W
Output Voltage	12 or 24	V
Output current	5	A
Universal input voltage	90 - 264	V
Operating temperature	0 - 40	°C
Efficiency	typ. 90	%
Standby Power	typ. 90	mW
Efficiency level	VI	
Insulation of output	SELV	
Leakage current	≤ 250	µA

Housing versions
Desktop IEC 60320  C8 Inlet
Secondary Connection Cable/Plug -

Approvals			
CE	GS	IECEE CB SCHEME	ETL C US LISTED Intertek

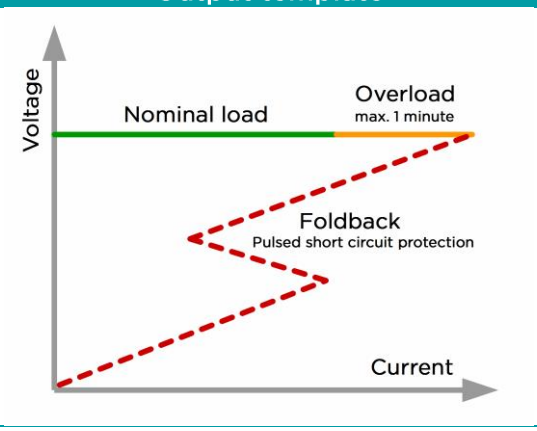
Test standards	
EN 55032 EN 55035 EN 61000-3-2 EN 61000-3-3 FCC Part15 Subpart B	General EMC standards
EN 62368-1	Information technology equipment
UL1310	Class 2 Power Units

BI72G-Series

Parameter	Symbol	Min	Typ.	Max	Unit	Test Cond.
Specifications are subject to change without any notice.						
Input Voltage	U_{IN}	90		264	V_{AC}	
	Operation above the specified maximum input voltage may cause damage. Below the minimum input voltage the unit does not meet the specification.					
Input Current	I_{IN}			1800	mA	
Input Frequency	f_{IN}	47	50	63	Hz	
Efficiency	η		90		%	at full load
Stand-by power	P_{stb}		90	210	mW	without load
International efficiency mark			VI			
Output Power	P_{out}			72	W	
Output Voltage	U_{out}	12		24	V_{DC}	
Output voltage tolerance	$\Delta U_{out\ PCB}$			5	%	at PCB
Ripple Voltage	$U_{r\ rms}$			200	mV_{rms}	
Output Current	I_{out}			5	A	
Max. Overload current	$I_{out\ overload}$			200	% of I_{out}	
	Maximum 1 minute overload duration, followed by 15 minute cooldown period.					
Isolation	Galvanic isolation with safety extra low voltage (SELV) output					
Means of protection		SELV				
Dielectric Strength	Standard	3			kV_{AC}	50Hz sinusoidal waveform
Leakage current	I_{LK}			250	µA	
Operating Temperature	T_{OP}	0		40	°C	free convection
Thermal protection	A thermal shut down protects the power supply and the surroundings form hazardous temperatures. To reset the thermal protection unplug the unit and allow it to cool down.					
Storage Temperature	T_{ST}	-20	25	60	°C	
Humidity				95	%	non condensing
Single component failure	A single component failure does not cause any damage to persons or ambient (fire, explosions, etc).					
Disconnecting device	Desktop	The appliance inlet is considered as disconnecting device. Make sure that the appliance inlet is accessible to the operator.				

Ordering information and part number example					
BI72G	-	xxx	yyy	-	w
		Voltage in Volt after dividing by 10	**Current** in Ampere after dividing by 100		**Input connection** IEC 60320 C8 Inlet

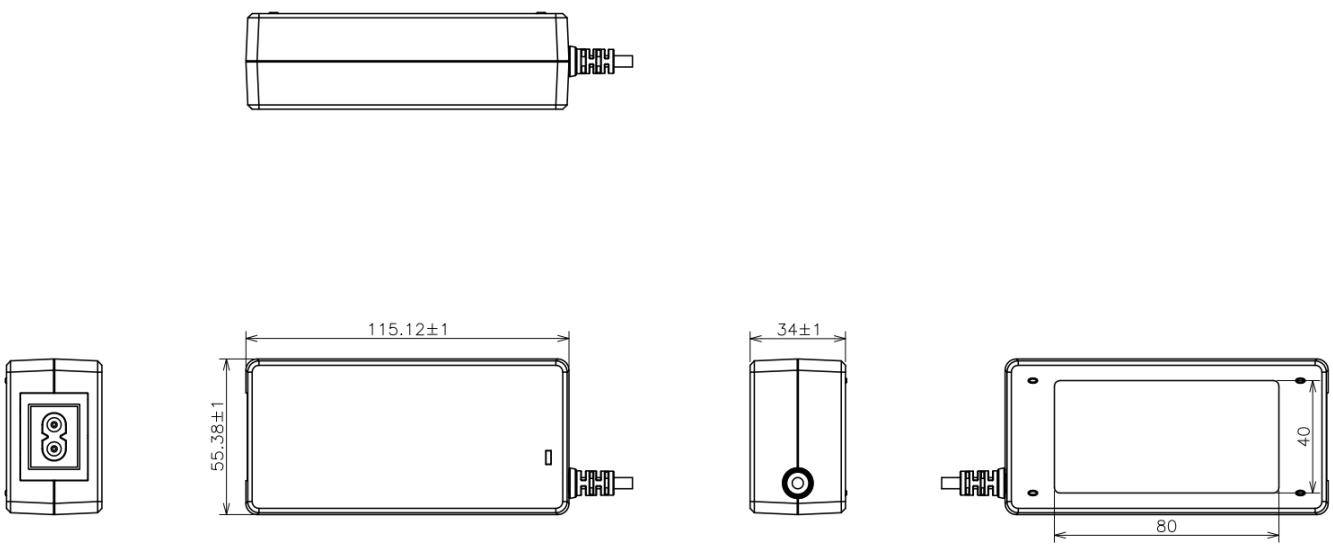
Reliability		
MTBF	60.000 h	at 25°C ambient
Maintainability	The power supply is not to be repaired	

Output template

The power supply is protected against short circuit. A shorted output does not cause any damage, and normal operation will resume once the short is removed.

Marking	Marking plate symbol explanation	
Product name Input parameters Output parameters Safety instructions Date code of production CE marking Approval marks	CE	Conformity with the relevant EU directives.
	c ETL us LISTED Intertek	NRTL Canada / USA Mark issued by Intertek
	GS	Certification Mark, indicating that the product meets the German porduct safety law.
	FC	FCC EMC mark
	RoHS conform	The power supply has to be disposed appropriately according the local regulations for Waste Electrical and Electronic Equipment.
		For indoor use only.
		Class II
	VI	Energy Efficiency Level VI

Certification overview	
Housing	Information Technology
Desktop C8 Inlet	CE GS IECEE CB SCHEME ETL us Intertek

Desktop IEC 60320 C8 Inlet



Packaging and weight

Information on request – depending on configuration of power supply and primary adapters

Energy Efficiency

This power supply family fulfills Directive 2009/125/EC with Commission Regulation (EU) 2019/1782. The vales “Average active efficiency”, “Efficiency at low load” and “No-load power consumption” are typical measured values, measured at one representative sample at an input voltage of 230VAC.

Input specification		
Input Voltage	100-240	VAC
Input Frequency	50-60	Hz

	Output specification		
Output voltage	12	24	VDC
Output current	5	3	A
Output power	60	72	W
Average active efficiency (100%/75%/50%/25%)	88,9	91,7	%
Efficiency at low load (10 %)	91,21	89,31	%
No-load power consumption	90	100	mW

Revision	Date	Author	Change
A	22.09.2022	Mauritz	First edition