

## 36W 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 country versions on request

Specification		
Output Power	36	W
Output Voltage	12 or 24	V
Output current	3 or 1,5	A
Universal input voltage	90 - 264	V
Operating temperature	0 - 40	°C
Efficiency	typ. 88	%
Standby Power	typ. 65	mW
Efficiency level	VI	
Insulation of output	SELV	
Leakage current	≤ 250	µA

Housing versions			
Wall plug-in, fix or interchangeable			
EU	UK	US	AUS
Secondary Connection			-
Cable/Plug			-

Approvals				

Test standards	
EN 55032 EN 55035 EN 61000-3-2 EN 61000-3-3 FCC Part15 Subpart B	General EMC standards
EN 62368-1 UL 62368-1 AS/NZS 62368.1	Information technology equipment
UL1310	Class 2 Power Units

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	$I_{IN}$			1200	mA	
Input Frequency	$f_{IN}$	47	50	63	Hz	
Efficiency	$\eta$		88		%	at full load
Stand-by power	$P_{stb}$	30	65	100	mW	without load
International efficiency mark		VI				
Output Power	$P_{out}$			36	W	
Output Voltage	$U_{out}$	12		24	$V_{DC}$	
Output voltage tolerance	$\Delta U_{out PCB}$			5	%	at PCB
Ripple Voltage	$U_{rms}$			200	mV <sub>rms</sub>	
Output Current	$I_{out}$			3	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 <sub>AC</sub>	50Hz sinusoidal waveform
Leakage current	$I_{LK}$			250	$\mu A$	
Operating Temperature	$T_{OP}$	0		40	$^{\circ}C$	free convection
Thermal protection	A thermal shut down protects the power supply and the surroundings from hazardous temperatures. To reset the thermal protection unplug the unit and allow it to cool down.					
Storage Temperature	$T_{ST}$	-20	25	60	$^{\circ}C$	
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	Direct plug-in	The power supply itself is the disconnecting device				

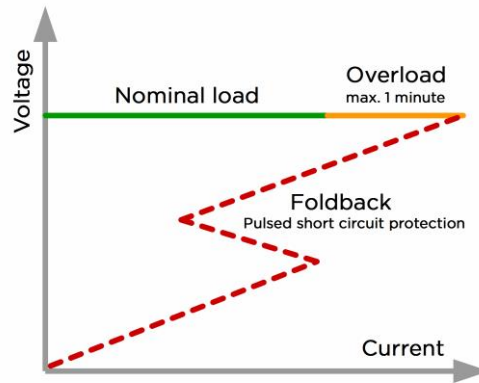
### Ordering information and part number example

BI36L	-	xxx	yyy	-	w	z	u
		Voltage	Current		Housing Type	Primary plug	Secondary connection
		in Volt after dividing by 10	in Ampere after dividing by 100		I Interchangeable plug A Horizontal Case Type	dV EU fixed plug dU US fixed plug dB UK fixed plug dA AUS fixed plug	Blank Cable version

### 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.

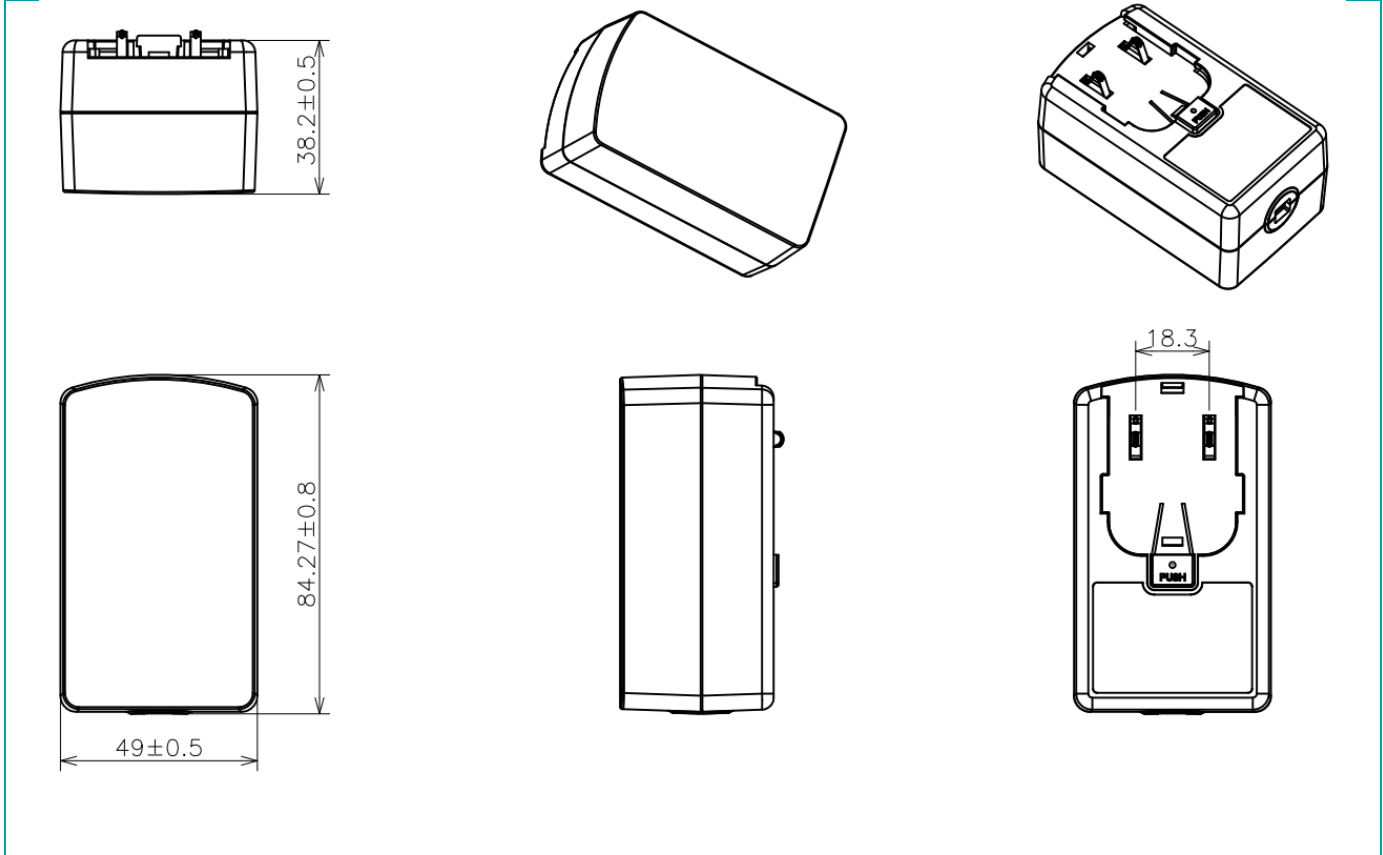
## Marking

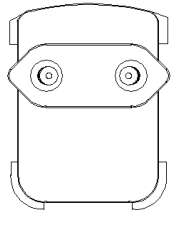
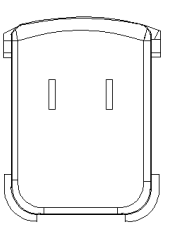
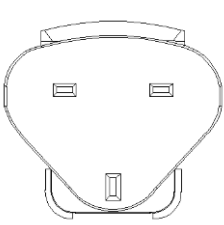
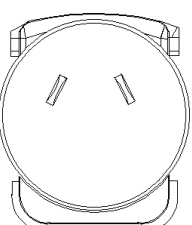
## Marking plate symbol explanation

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

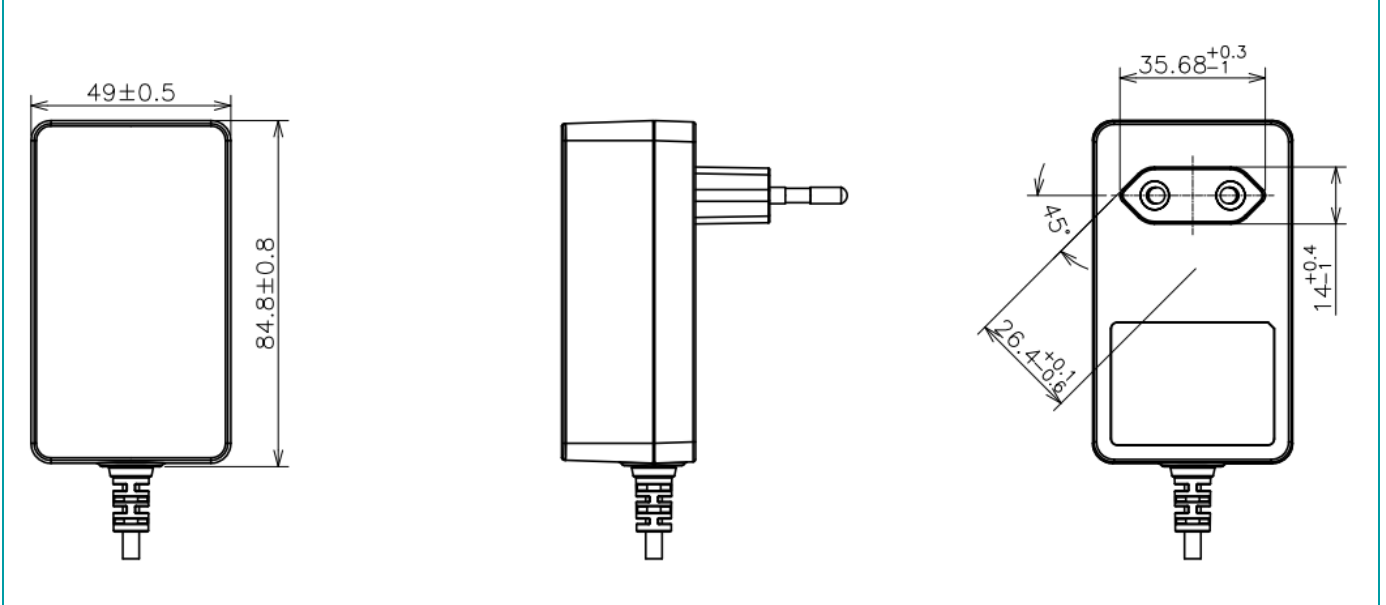
Certification overview	
Housing	Information Technology
Interchangeable Plug	    
EU, UK	  
US, Canada	  
AUS	  

## Interchangeable Plug Housing

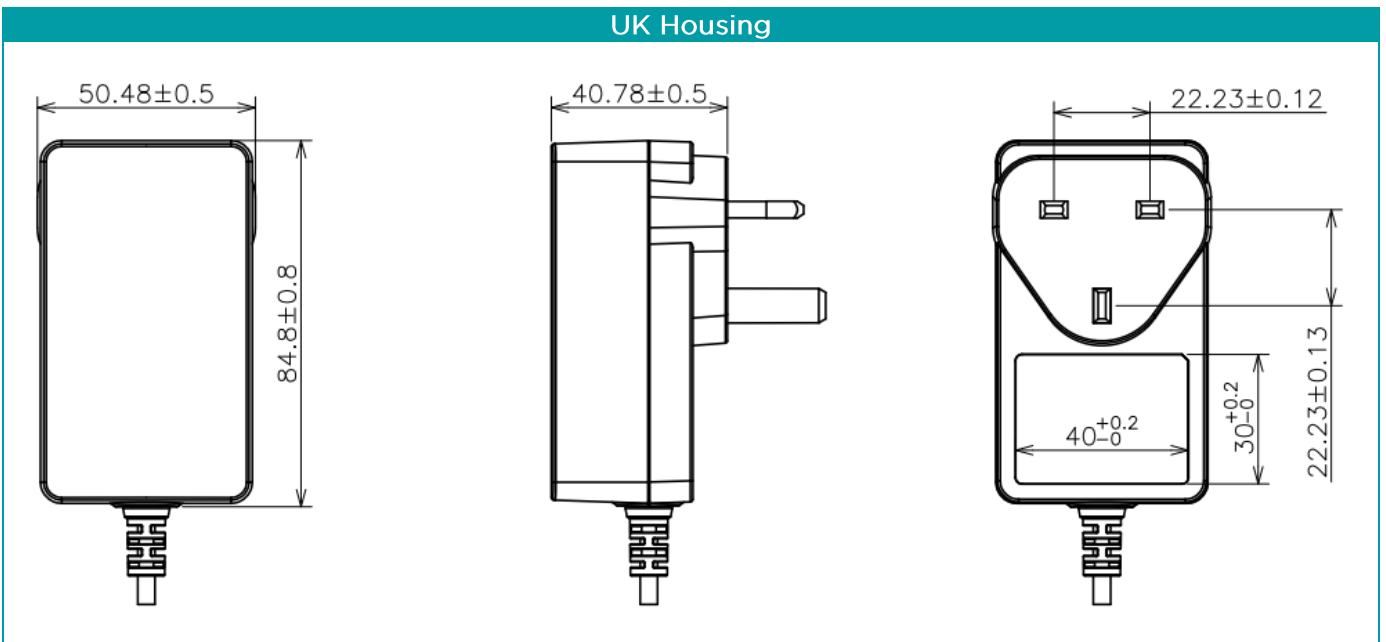


 EU Plug according EN50075	 US Plug according UL1310	 UK Plug according BS1363	 Australia Plug acc. AS/NZS 3112
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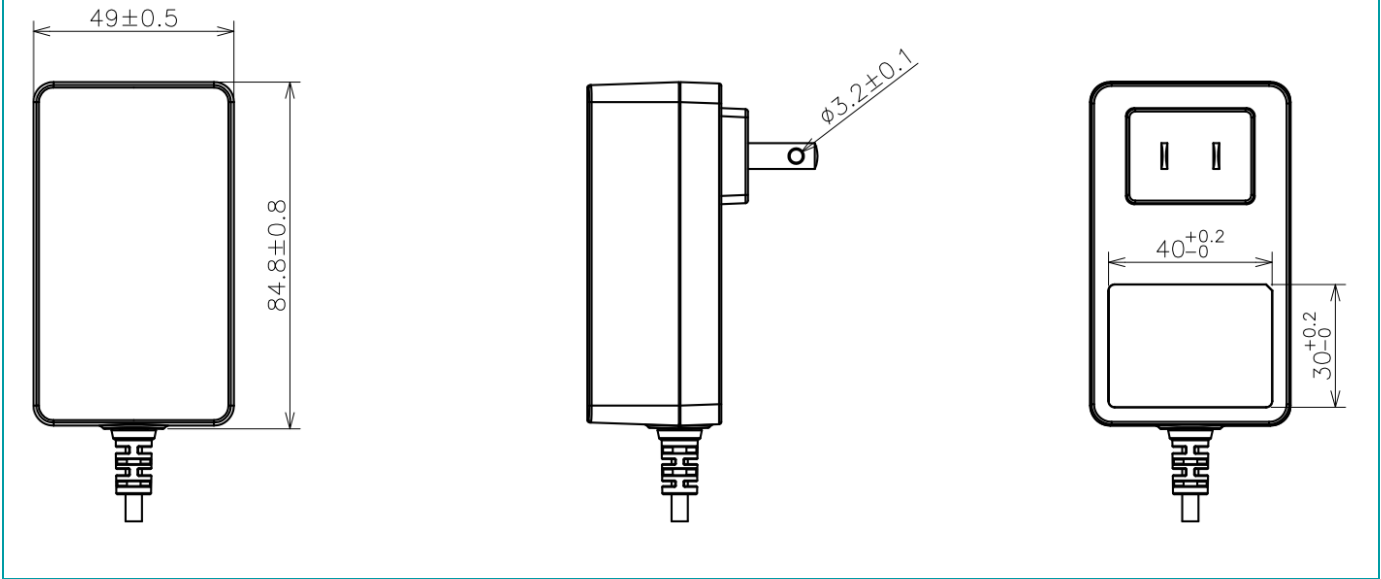
## EU Housing



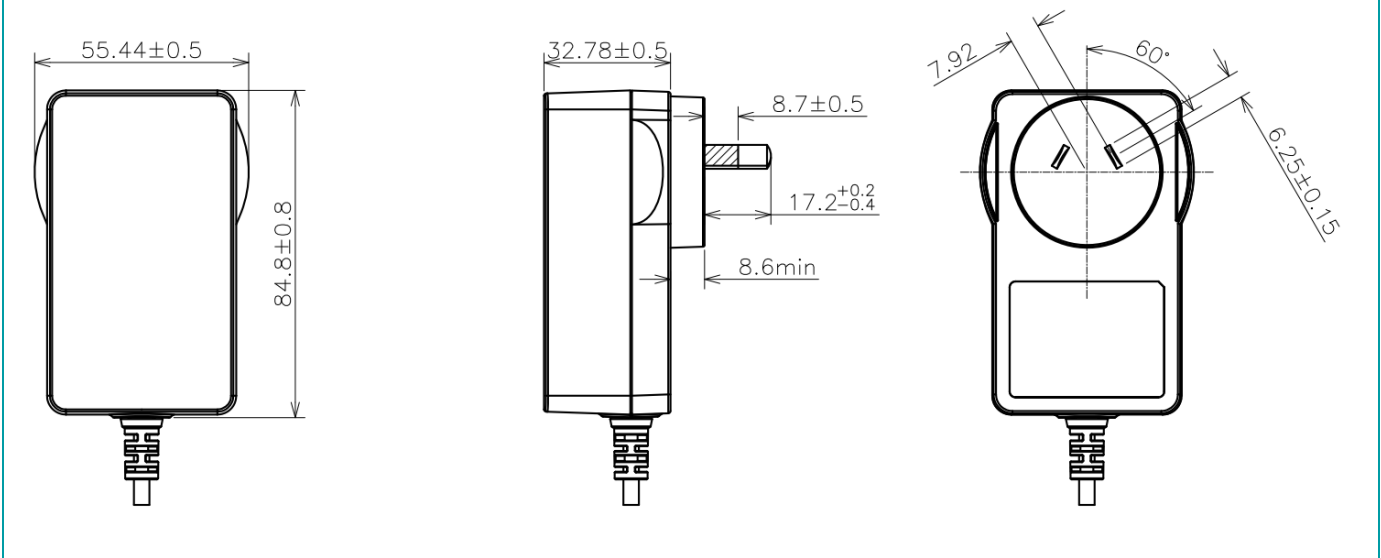
## UK Housing



## US Housing



## AUS Housing



### 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	3	1,5	A
Output power	36	36	W
Average active efficiency (100%/75%/50%/25%)	88,6	88,3	%
Efficiency at low load (10 %)	88,95	82,78	%
No-load power consumption	70	70	mW

Revision	Date	Author	Change
A	22.09.2022	Mauritz	First edition

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