

AC-DC switch mode power supply

Features

- Wide range input voltage
- MTBF > 400000 hours at 50 °C
- Lifetime 79000 hours at 50 °C
- Operating temperature range - 40 ÷ 85 °C
- Input fuse protection
- Output short circuit protection
- Low stand by power
- Compliance to: EN60950, EN55014-1, EN55014-2, EN60730-1, EN60730-2-9, EN61010-1, UL60950, CAN/CSA-C22.2 No. 60950-00
- Electrical test on 100 % production
- Protected with resin UL conform, RoHS compliant



Encapsulated

Description

The AC-DC module is a high efficiency AC-DC switch mode constant voltage generator.

Designed for industrial and information technology equipments, performs 3 W output power, typical in multirange applications.

Typical reference value is 12 V, 250 mA.

Upon request and agreement, the power supply can be customized offering different current-voltage level the power supply is available with encapsulated or open frame package



Open frame

Table 1. Device summary

Order code	Package	Connections
SPAC265BC12P0.30	Encapsulated	Comb
SPAC265FC12P0.30	Open frame	

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Obsolete Product(s) - Obsolete Product(s)

1 Electrical characteristics

Table 2. Electrical characteristics (-40 < T_A < 85 °C, unless otherwise specified.)

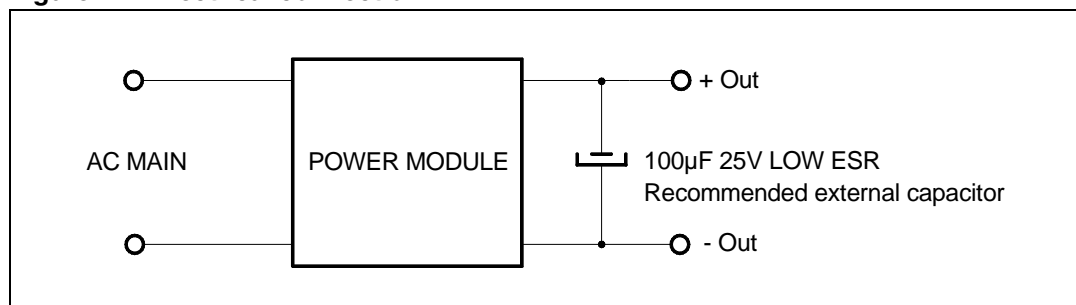
Symbol	Parameter	Test condition	Min	Typ	Max	Unit
V _i	Input voltage	Nominal voltage value	100		240	V _{rms}
V _o	Output voltage	0 < I _o < I _{limit}	11	12	15	V
I _o	Output current	V _o = nominal value	10	250	300	mA
I _{ol}	Output limitation value	V _o > V _{min}	300	350	400	mA
V _{is}	Isolation voltage	Input to output, t = 60 s (EN60730-1)	3750			V _{rms}
T _{op}	Operating ambient temperature		-40		85	°C
T _{stg}	Storage temperature range		-40		90	°C
n	efficiency			75		%
I _{lk}	Leakage current	V _i = 265 V _{rms}			25	μA
	M.T.B.F.	T _a = 50 °C I _o = Max load	400			Kh
	Lifetime	T _a = 50 °C I _o = Max load		79		Kh
	Creepage	EN60730-1	8			mm
	Clearance	EN60730-1	6			mm
	Material insulation class	EN60730-1	A			

- Agency approvals
The charger is compliant with most popular safety and EMC requirements, including:
 - EN60950
 - EN55014-1
 - EN55014-2
 - EN60730-1
 - EN60730-2-9
 - EN61010-1
 - UL60950
 - CAN/CSA-C22.2 No. 60950-00

Caution: It is responsibility of the customer to take care about the assembling compliance with the safety norms

2 Electrical connection

Figure 1. Electrical connection



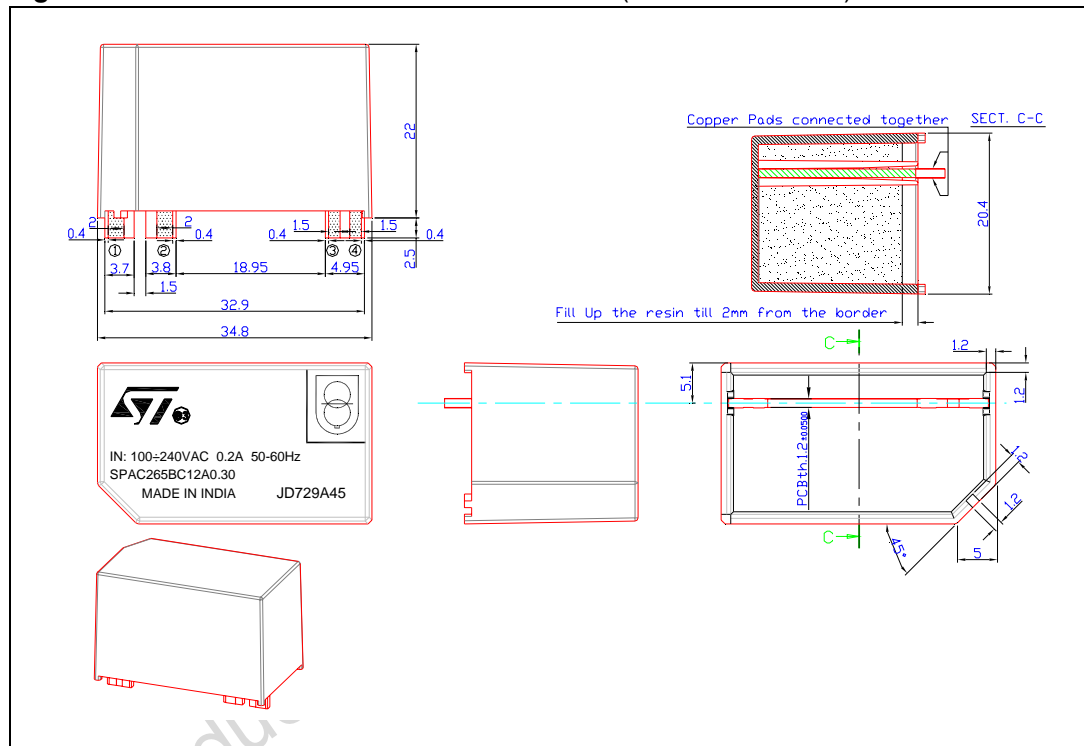
Obsolete Product(s) - Obsolete Product(s)

3 Mechanical dimensions

In order to meet environmental requirements, ST offers these devices in ECOPACK® packages. These packages have a Lead-free second level interconnect . The category of second level interconnect is marked on the package and on the inner box label, in compliance with JEDEC Standard JESD97. The maximum ratings related to soldering conditions are also marked on the inner box label. ECOPACK is an ST trademark. ECOPACK specifications are available at: www.st.com

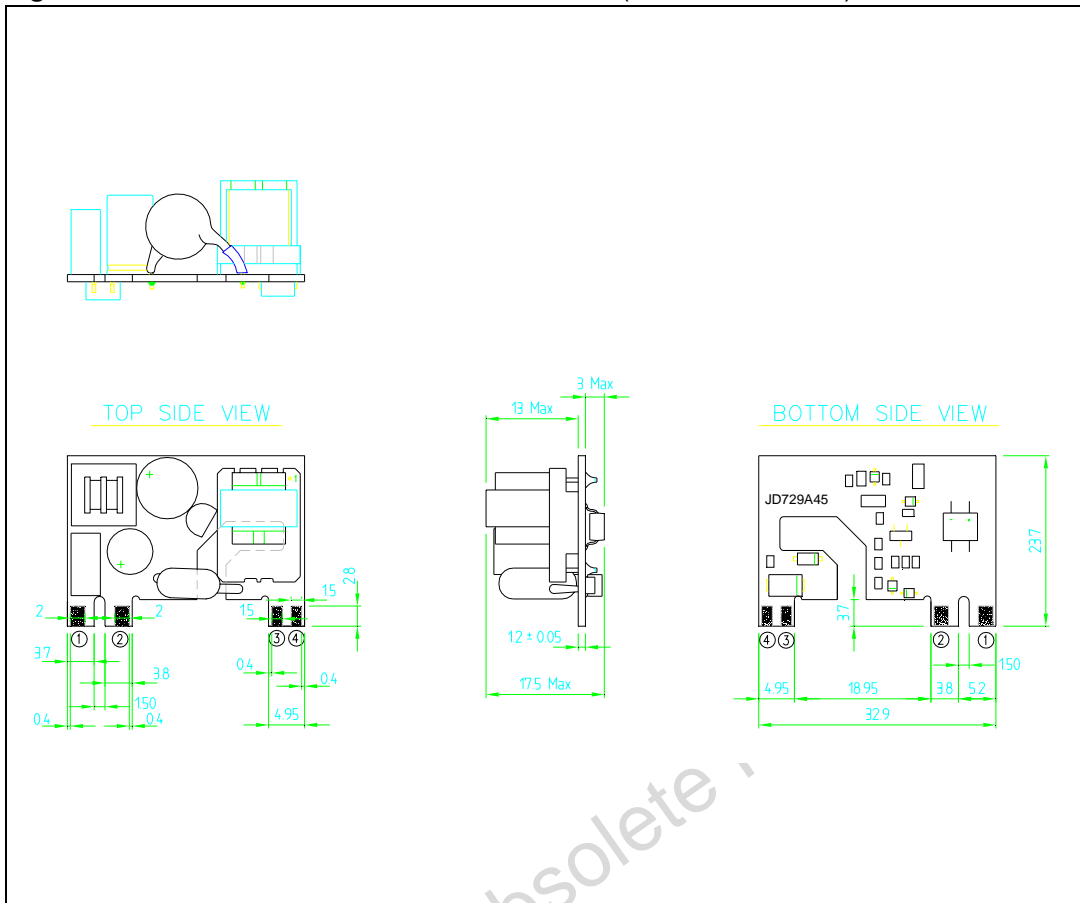
Mechanical dimensions L x W x H = 35 x 20 x 22 on molded box.

Figure 2. SPAC265BC12P0.30 mechanical data(dimensions in mm)



Obsolete Product

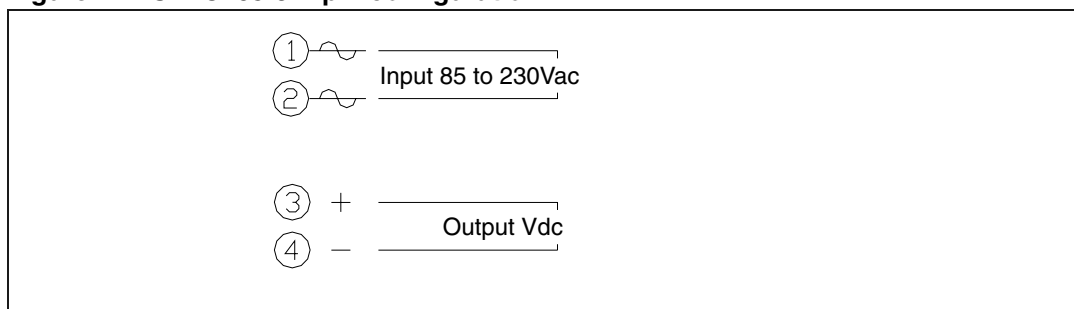
Figure 3. SPAC265FC12P0.30 mechanical data (dimensions in mm)



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4 Connection diagram

Figure 4. SPAC265-3W pin configuration



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5 Ordering information scheme

Table 3. Ordering information scheme

	SPAC	265	X	Y	12	Z	0.35
AC-DC converter							
Max V_{AC} input							
F:Open Frame B:Encapsulated	Package						
C: Comb T:Through Hole	Connection						
Typ VDC Output							
P:Plus M:Minus	Output voltage polarity						
Typ IDC Output							

6 Revision history

Table 4. Document revision history

Date	Revision	Changes
11-Oct-2007	1	Initial release
17-Dec-2007	2	Updated: operating temperature range in cover page and Table 2 on page 3

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