

C-A Series

15W Encapsulated AC/DC-Converters



- Switching Power Modules for PCB Mounting
- Fully Encapsulated Plastic Case
- Universal Input Range 90 to 260VAC, 47 to 440Hz
- Regulated Output
- Low Ripple and Noise
- High Efficiency up to 84%
- CE, cUL, TUV Approvals
- 2-Year Product Warranty



Selection Guide (valid at nominal input voltage, full load and 25°C after warm-up time, unless otherwise stated)

Ordering Code	Input Voltage (VAC)	Output Voltage (VDC)	Max. Output Current (mA)	Efficiency Current (%)
C-A15-5S	90-260VAC or 120-370VDC	5	3000	75
C-A15-12S	90-260VAC or 120-370VDC	12	1250	80
C-A15-15S	90-260VAC or 120-370VDC	15	1000	80
C-A15-24S	90-260VAC or 120-370VDC	24	625	84
C-A15-5D	90-260VAC or 120-370VDC	±5	±1500	75
C-A15-12D	90-260VAC or 120-370VDC	±12	±650	79
C-A15-15D	90-260VAC or 120-370VDC	±15	±500	79
C-A15-5S12D	90-260VAC or 120-370VDC	5/±12	2000/±200	75
C-A15-5S15D	90-260VAC or 120-370VDC	5/±15	2000±150	75

Specifications (valid at nominal input voltage, full load and 25°C after warm-up time, unless otherwise stated)

Input Data

Voltage	90-260 VAC or 120-370 VDC
Frequency	47-440 Hz
Current (Full Load)	280 mA max. (115 VAC) / 170 mA max. (230 VAC)
Inrush Current (<2ms)	10 A max. (115 VAC) / 20 A max. (230 VAC)
Leakage Current	0.75 mA max.
External Fuse (Recommended)	1.5 A Slow Blow Type

Output Data

Voltage	See "Selection Guide" table
Voltage Accuracy	±2%
Current	See "Selection Guide" table

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Specifications (valid at nominal input voltage, full load and 25°C after warm-up time, unless otherwise stated)

Output Data (Continued)

Line Regulation	5S12D, 5S15D All Other Types	±1% / ±5% typ. ±0.5% typ.
Load Regulation (5-100%)	5S, 12S, 15S, 24S 5D, 12D, 15D 5S12D, 5S15D	±0.5% typ. ±0.3% typ. ±2%/±5% typ.
Minimum Load	5S12D, 5S15D All Other Types	5V 10% (200mA) 0%
Maximum Capacitive Load (depending on model)		470-23,000µF
Ripple & Noise		<0.5% Vout +50mV max. (Vp-p)
Efficiency		See "Selection Guide" table
Hold-Up Time		15 ms min.
Switching Frequency		100 kHz

Protection Data

Over Current Protection	Hiccup Technique, Auto-Recovery
Over Voltage Protection	Zener Diode Clamp
Short Circuit Protection	Hiccup Mode, Indefinite (Automatic Recovery)

Isolation Data

Input-Output	3000VAC
Input-FG	1500VAC
Output-FG	500VAC

Environmental Data

Operating Temperature	-25°C to +71°C
Storage Temperature	-40°C to +85°C
Temperature Coefficient	0.02%/°C
Humidity	95% RH
MTBF (MIL-HDBK-217F)	>200,000h at 25°C

Physical Data

Dimension (L x W x H)	74.0 x 54.0 x 22.0 mm (2.91" x 2.13" x 0.87")
Case Material (Flammability to UL 94V-0)	Plastic Resin + Fiberglass
Weight	140 g
Cooling Method	Free Air Convection

Safety Approvals

Agency Approvals	UL/cUL, CE, TUV
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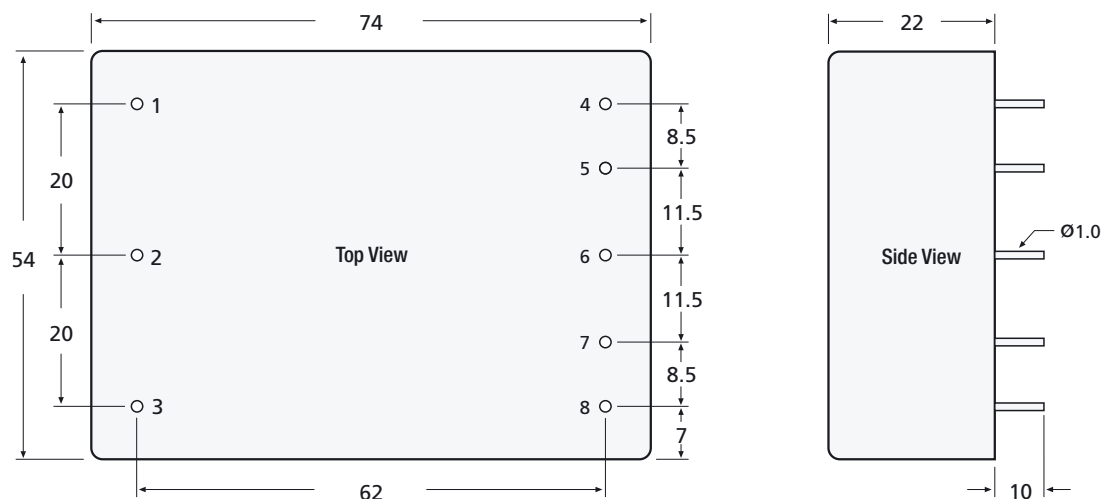
EMC

EMI (Conducted & Radiated Emission)	EN 55022 Class B
EMS (Noise Immunity)	EN 55024

C-A Series

15W Isolated DC/DC-Converters

Package Style and Pinning (mm)



Pin Connections

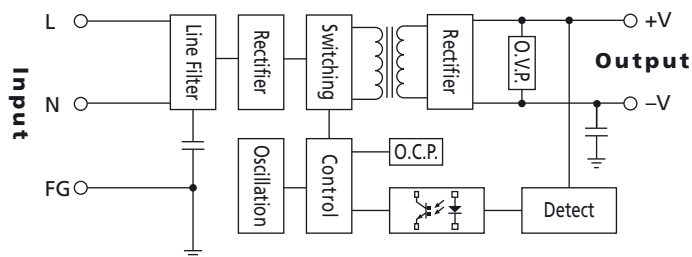
Pin #	Single	Dual	Triple
1	FG	FG	FG
2	ACin	ACin	ACin
3	ACin	ACin	ACin
4	No Pin	No Pin	-DCout
5	-DCout	-DCout	Common
6	No Pin	Common	+DCout
7	+DCout	+DCout	Common
8	No Pin	No Pin	+5Vout

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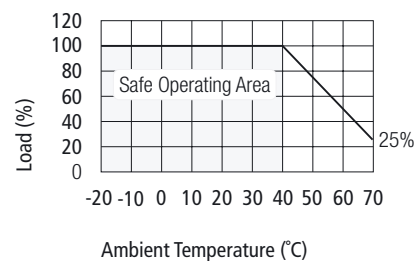
15W Encapsulated AC/DC-Converters

Block Diagrammes

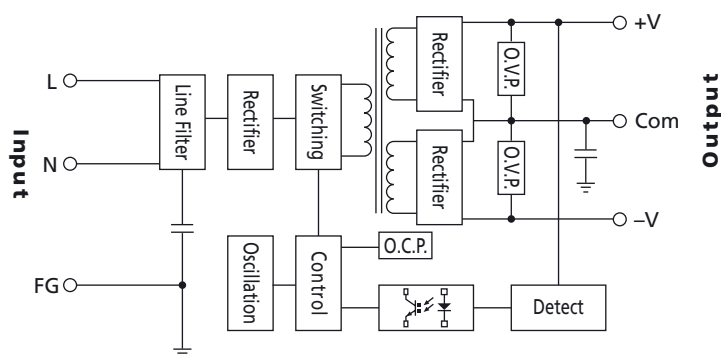
Single Ouput



Derating Curve



Dual Ouput



Triple Ouput

