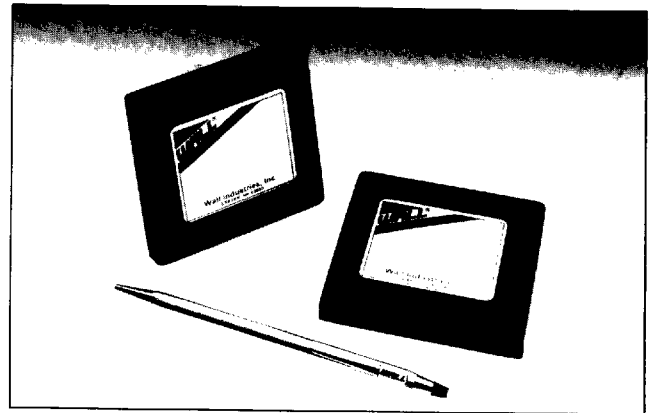


CA SERIES

25 TO 40 WATTS

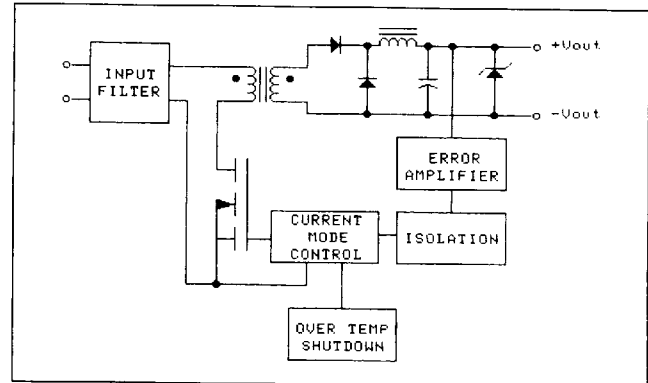
FEATURES

- Ultra Wide Input (4:1)
- 12 Watts per Cubic Inch
- LC Input Filter
- 500VDC Minimum Input/Output Isolation
- Regulated Outputs
- Thermal Shutdown
- Parallel Capability on Single Output Modules



The CA Series from Wall Industries

The CA series of single, dual and triple output DC/DC converters perform over an ultra-wide input voltage range (4:1), providing indefinite short circuit and overvoltage protection. Without a heatsink, the CA Series' design technology allows for a dense, 12 watts per cubic inch output power from a 3 x 3 x 0.375" case. These current mode control forward converters are designed for improved transient response and reduced stress on switching components.



Single Simplified Schematic (Dual and Triple Similar)

SPECIFICATIONS

All specifications apply @ + 25°C ambient unless otherwise noted.

INPUT SPECIFICATIONS

Input Voltage Range	9-36, 20-72, 55-110 VDC
Nominal Input	24, 48, 74VDC
Input Filter	LC input filter
Remote On/Off Control	Open Collector TTL

OUTPUT SPECIFICATIONS

Output Current	see table
Voltage Tolerance	± 1% Primary, ± 2% Auxiliary
Output Trim (External)	± 10% (Primary Only)
Line Regulation	0.5%
Load Regulation	± 1% Singles (See Note 5)
Ripple/Noise	≤ 75mV (P-P)
Transient Response	<200 µsec to within ± 1% Vout

Due to advances in technology, specifications subject to change without notice.

GENERAL SPECIFICATIONS

Efficiency (Typical)	80%
Isolation Voltage, input to output	500 VDC (min)
Isolation Resistance, input to output	500MΩ
Switching Frequency	250KHz (typical)

ENVIRONMENTAL SPECIFICATIONS

Operating Temperature	-25 to +85°C (case)
Storage Temperature	-55 to +100°C
Humidity (non-condensing)	20% to 95% R.H.
Temperature Coefficient	0.02%/°C max typical

PHYSICAL SPECIFICATIONS

Shielding	6-sided shielding
Weight	approx 4.0 oz.
Case Material	Black coated metal, non-conductive baseplate

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SINGLE/DUAL/TRIPLE OUTPUT

CA SERIES

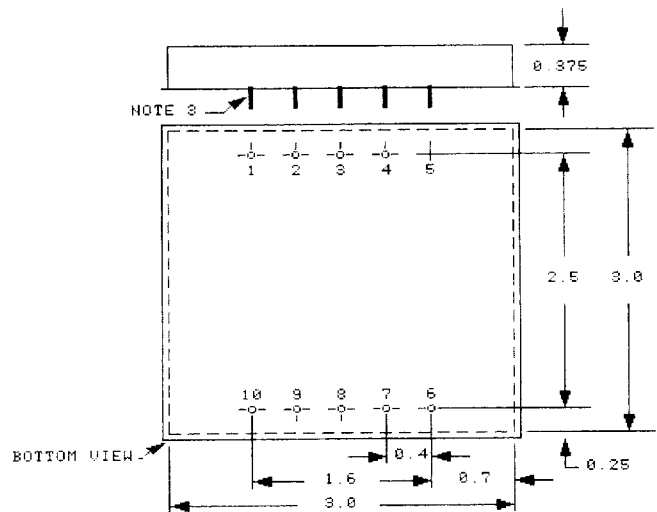
Input Voltage (VDC)	Output Voltage (VDC)	Output Current (Amps)	Overvoltage Protection	Model Number
9-36	5	5	6.2	CA24S5-25
		8		CA24S5-40
	12	2.5	15	CA24S12-30
		3.3		CA24S12-40
	15	2	18	CA25S15-30
		2.6		CA24S15-40
	± 12	1.25	15	CA24D12-30
	± 15	1	18	CA24D15-30
	+5/± 12	4/0.42	6.2/15	CA24T12-30
	+5/± 15	4/0.33	6.2/18	CA24T15-30
20-72	5	5	6.2	CA48S5-25
		8		CA48S5-40
	12	2.5	15	CA48S12-30
		3.3		CA48S12-40
	15	2	18	CA48S15-30
		2.6		CA48S15-40
	± 12	1.25	15	CA48D12-30
	± 15	1	18	CA48D15-30
	+5/± 12	4/0.42	6.2/15	CA48T12-30
	+5/± 15	4/0.33	6.2/18	CA48T15-30
55-110	5	5	6.2	CA74S5-25
		8		CA74S5-40
	12	2.5	15	CA74S12-30
		3.3		CA74S12-40
	15	2	18	CA74S15-30
		2.6		CA74S15-40
	± 12	1.25	15	CA74D12-30
	± 15	1	18	CA74D15-30
	+5/± 12	4/0.42	6.2/15	CA74T12-30
	+5/± 15	4/0.33	6.2/18	CA74T15-30

Options: [Must be specified by customer by adding the appropriate letter(s) on to the end of model number.]

A: Input Voltage. Pin 3 = -VDC In, Pin 4 = +VDC

l: Industrial temperature grade components. Allows operating temperature of -40°C to $+85^{\circ}\text{C}$ (case) and storage temperature of -55°C to $+100^{\circ}\text{C}$.

P: Paralleling capability for singles. See application guide "Paralleling the PD and CA Series".



Notes

1. All case and pin dimensions are reference only unless otherwise noted.
2. Header plate protrudes 0.025"; typical four sides.
3. P.C. pins: 0.04" dia x 0.18" long (min); typical nine places.
4. Pin to pin tolerance $\pm 0.01"$. Pin dimension tolerance $\pm 0.005"$.
5. Duals: 1/4 load to full load: $\pm 1\%$ and no load to full load: $\pm 5\%$.
Triples: 10% minimum load required on primary output, $\pm 1\%$.
6. Significant capacitive load may inhibit start-up and operation, consult factory.

Pin Functions			
Pin	Single	Dual	Triple
1	Remote On/Off	Remote ON/Off	Remote On/Off
2	Case	Case	Case
3	+In	+In	+In
4	-In	-In	-In
5	No Pin	No Pin	No Pin
6	N/C	-Out	-12, -15 Out
7	N/C	Output Common	+12, +15 Out
8	Output Common	Output Common	Output Common
9	+Out	+ Out	+5 Out
10	Output Adjust	Output Adjust	Output Adjust

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