

**FEATURES:**

- Ultra-Wide 4:1 Input
- Continuous Short Circuit Protection
- Remote On/Off control
- Standard package 2"x1.6"
- High efficiency up to 85%
- RoHS compliant

### Models

#### Single output



Model	Input Voltage (V)	Output Voltage (V)	Output Current max (A)	Isolation (VDC)	Efficiency (%)
AM30KW-2403SIZ	9-36	3.3	5.4	1500	78
AM30KW-2405SIZ	9-36	5	6	1500	81
AM30KW-2412SIZ	9-36	12	2.5	1500	84
AM30KW-2415SIZ	9-36	15	2	1500	82
AM30KW-2424SIZ	9-36	24	1.25	1500	82
AM30KW-4803SIZ	18-75	3.3	5.4	1500	78
AM30KW-4805SIZ	18-75	5	6	1500	80
AM30KW-4812SIZ	18-75	12	2.5	1500	83
AM30KW-4815SIZ	18-75	15	2	1500	83
AM30KW-4824SIZ	18-75	24	1.25	1500	83
AM30KW-2403SH30IZ	9-36	3.3	5.4	3000	78
AM30KW-2405SH30IZ	9-36	5	6	3000	81
AM30KW-2412SH30IZ	9-36	12	2.5	3000	84
AM30KW-2415SH30IZ	9-36	15	2	3000	82
AM30KW-2424SH30IZ	9-36	24	1.25	3000	82
AM30KW-4803SH30IZ	18-75	3.3	5.4	3000	78
AM30KW-4805SH30IZ	18-75	5	6	3000	80
AM30KW-4812SH30IZ	18-75	12	2.5	3000	83
AM30KW-4815SH30IZ	18-75	15	2	3000	83
AM30KW-4824SH30IZ	18-75	24	1.25	3000	83

### Models

#### Dual output

Model	Input Voltage (V)	Output Voltage (V)	Output Current max (mA)	Isolation (VDC)	Efficiency (%)
AM30KW-2405DIZ	9-36	±5	±3	1500	81
AM30KW-2412DIZ	9-36	±12	±1.25	1500	82
AM30KW-2415DIZ	9-36	±15	±1	1500	83
AM30KW-4805DIZ	18-75	±5	±3	1500	83
AM30KW-4812DIZ	18-75	±12	±1.25	1500	85
AM30KW-4815DIZ	18-75	±15	±1	1500	85
AM30KW-2405DH30IZ	9-36	±5	±3	3000	81
AM30KW-2412DH30IZ	9-36	±12	±1.25	3000	82
AM30KW-2415DH30IZ	9-36	±15	±1	3000	83
AM30KW-4805DH30IZ	18-75	±5	±3	3000	83
AM30KW-4812DH30IZ	18-75	±12	±1.25	3000	85
AM30KW-4815DH30IZ	18-75	±15	±1	3000	85

NOTE: All specifications in this datasheet are measured at an ambient temperature of 25°C, humidity<75%, nominal input voltage and at rated output load unless otherwise specified.

### Input Specifications

Parameters	Nominal	Typical	Maximum	Units
Voltage range	24	9-36		VDC
	48	18-75		
Filter	$\pi$ (Pi) Network			
Start up time				ms
Recommended input fuse (Slow Blow)	24	4A/250V		
	48	2A/250V		
Absolute Maximum Rating	24		50	VDC
	48		100	
Peak Input Voltage time				ms
On/Off control	ON –TTL High or Open ; OFF – TTL Low or Short			
No Load Input Current				mA

### Isolation Specifications

Parameters	Conditions	Typical	Maximum	Units
Tested I/O voltage	3 sec	1500 & 3000		VDC
Resistance	500VDC	>1000		MOhm

### Output Specifications

Parameters	Conditions	Typical	Maximum	Units
Voltage accuracy		$\pm 2$		%
Over voltage Protection		Zener diode clamp		
Over current protection		>110		%
Short Circuit protection		Continuous		
Short circuit restart		Auto Recovery		
Line voltage regulation	HL-LL	$\pm 0.5$		% of Vin
Load voltage regulation (Single)	25-100%	$\pm 0.5$		%
Load voltage regulation (Dual)	25-100%	$\pm 1$		%
Temperature coefficient		$\pm 0.05$		%/°C
Ripple & Noise	20MHz Bandwidth	150		mV p-p
Voltage adjustment range		$\pm 10$		%
Minimum Load Current		25		% of Max

### General Specifications

Parameters	Conditions	Typical	Maximum	Units
Switching frequency	100% load	250		KHz
Operating temperature	With derating above 70°C	-40 to +85		°C
Storage temperature		-55 to +105		°C
Maximum case temperature			100	°C
Cooling		Free Air Convection		
Humidity			95	% RH
Case material		Nickel coated copper with non-conductive base		
Weight		50		g
Dimensions (L x W x H)		2.00 x 1.60 x 0.40 inches	50.80 x 40.60 x 10.20 mm	
MTBF		> 550 000 hrs (MIL-HDBK -217F, Ground Benign, t=+25°C)		
Maximum soldering temperature				°C
Transient recovery time	25% step change	280		$\mu$ S
Transient recovery deviation				mS

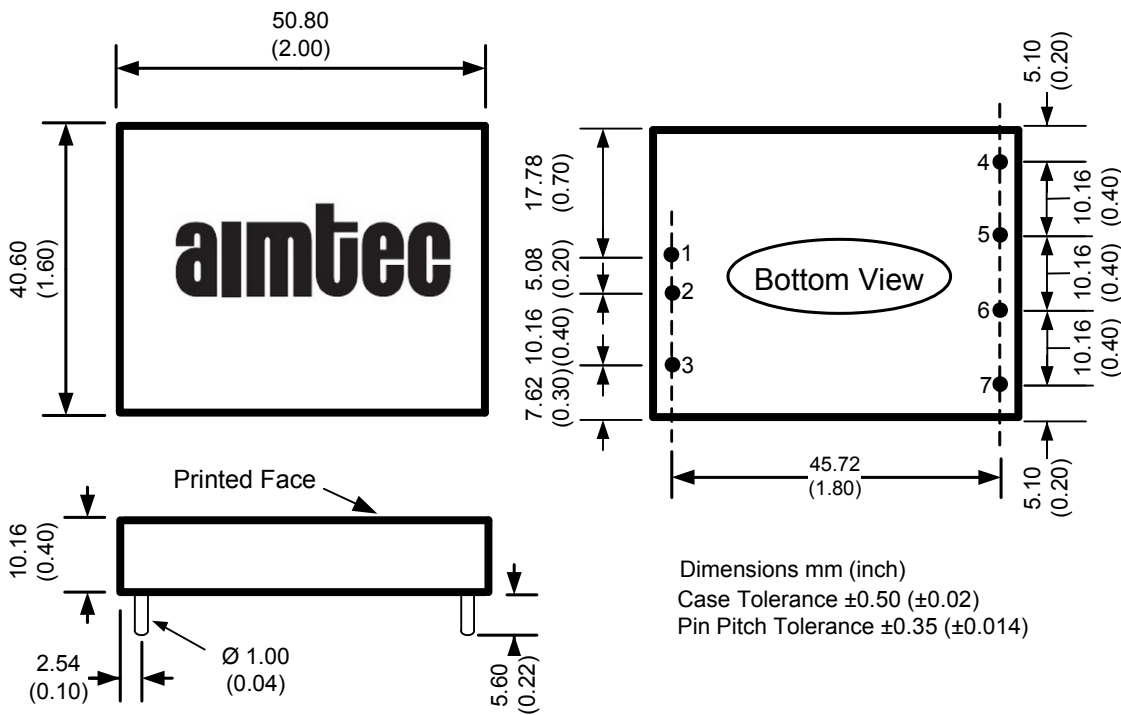
### Safety Specifications

Parameters	
Agency approvals	CE
Standards	EN 55022, EN 55024 class A

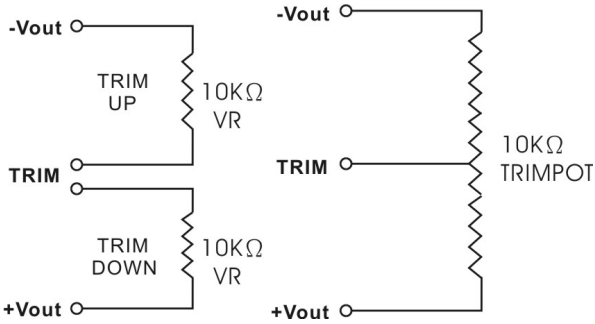
## Pin Out Specifications

Pin	Single	Dual
1	+V Input	+V Input
2	-V Input	-V Input
3	On/OFF Control	On/OFF Control
4	No pin	+V Output
5	+V Output	Common
6	-V Output	-V Output
7	Trim	Trim

## Dimensions

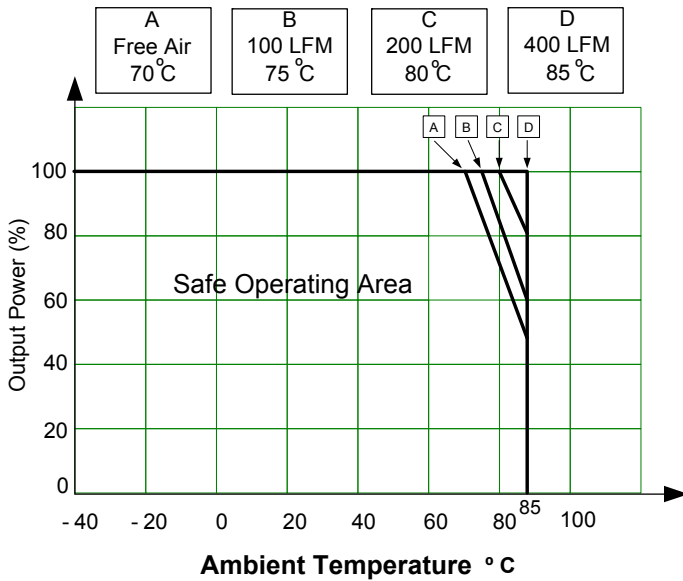


**Trimming**

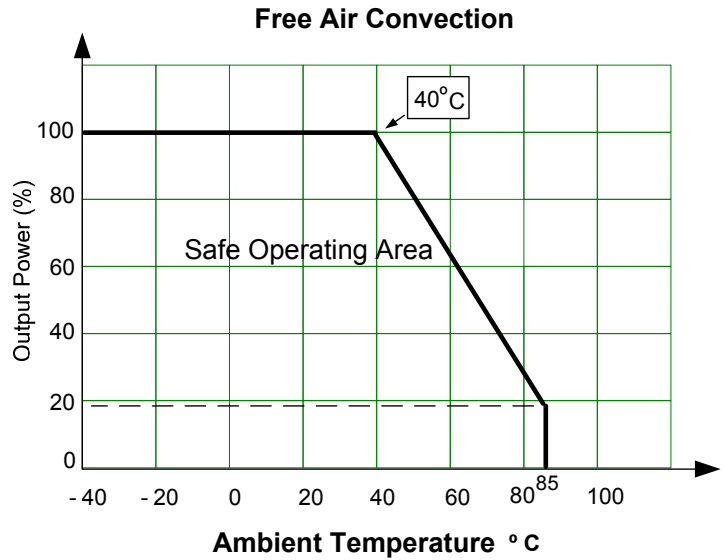


**Derating**

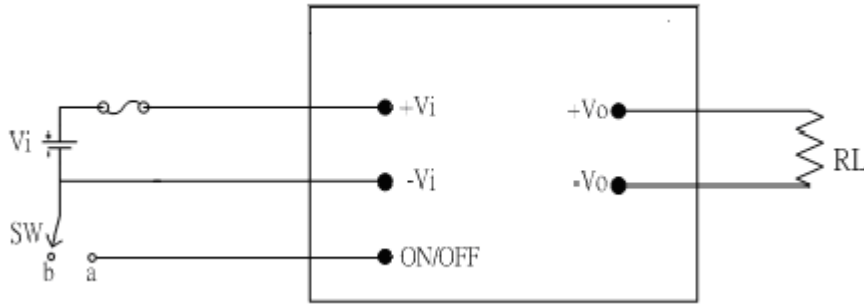
**1500VDC Isolation**



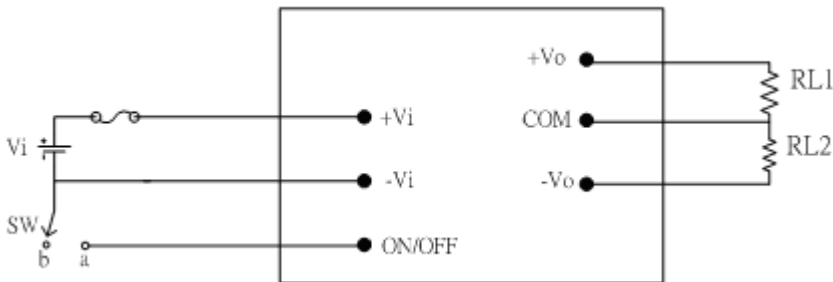
**3000VDC Isolation**



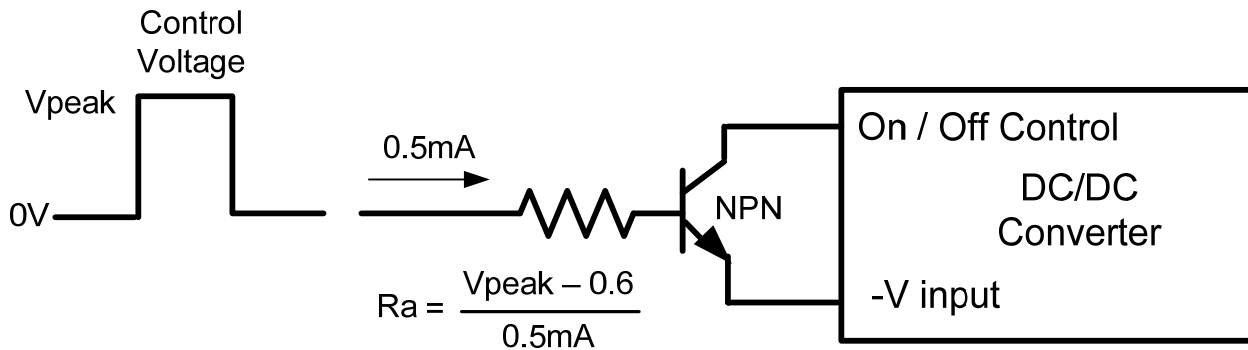
Control ON/OFF pin connection example  
Single Output



Dual Output



Digital Control Circuit:



**NOTE:** 1. Datasheets are updated as needed and as such, specifications are subject to change without notice. Once printed or downloaded, datasheets are no longer controlled by Aimtec; refer to [www.aimtec.com](http://www.aimtec.com) for the most current product specifications. 2. Product labels shown, including safety agency certifications on labels, may vary based on the date manufactured. 3. Mechanical drawings and specifications are for reference only. 4. All specifications are measured at an ambient temperature of 25°C, humidity<75%, nominal input voltage and at rated output load unless otherwise specified. 5. Aimtec may not have conducted destructive testing or chemical analysis on all internal components and chemicals at the time of publishing this document. CAS numbers and other limited information are considered proprietary and may not be available for release. 6. This product is not designed for use in critical life support systems, equipment used in hazardous environments, nuclear control systems or other such applications which necessitate specific safety and regulatory standards other the ones listed in this datasheet. 7. Warranty is in accordance with Aimtec's standard Terms of Sale available at [www.aimtec.com](http://www.aimtec.com).