Medical Industrial Test Comm Broadcast

15-60W Medical AC-DC PCB-Mount Power Supplies

Features	Benefits
• Medical certifications at 5000m	• Suitable for B & BF applications worldwide
• I/O isolation 4KVAC, 2 x MoPP	• Patient protection at 250VACrms working voltage
• Low off-load power draw	• Efficient environmental footprint
• Class II (no ground needed)	• Simple system integration

Photo (KMS60A shown)

Specification

Model		KMS15A	KMS30A	KMS60A
Input Voltage Range (1)	-	90-264VAC 47-440Hz* or 120-370VDC*		
Inrush Current Limiting (115 / 230VAC) (2)	A	20 / 40A	30 / 60A	55 / 95A
Input Current (115 / 230VAC)	mA	385 / 250mA	650 / 400mA	1500 / 1000mA
Off-load Power Draw	W	<0.1W	<0.15W	<0.3W
Recommended External Fuse	-	3.15A (slow blow type)		
Temperature Coefficient	-	±0.05%/°C		
Voltage Set Accuracy	%	±2%		
Minimum Load	-	None		
Overcurrent Protection	-	Hiccup mode, automatic recovery		
Overvoltage Protection	%	Yes, Zener diode clamp		
Hold-up Time (115 / 230VAC)	ms	15 / 56ms (typ)	>10ms	
Leakage Current (Touch)	mA	<0.1mA at 264VAC		
Operating Temperature (3)	-	- 40°C to +80°C, derate linearly to 30% load from 50°C to 80°C		
Maximum Case Temperature	-	90°C (83°C <115VAC)	85°C (78°C <115VAC)	80°C (73°C <115VAC)
Storage Temperature	-	-40°C to +90°C		
Humidity	%RH	10% to 95% RH (non-condensing)		
Cooling	-	Convection		
Withstand Voltage	VAC	Input to output: 4kVAC, 2 x MOPPs		
Immunity	-	EN61000-4-2, -3, -4, -5, -6, -8, -11		
Altitude	m	5000m		
Safety Agency Certification	-	IEC/EN 62368-1, IEC/EN 60950-1, ANSI/AAMI ES60601-1, IEC/EN 60601-1		
Conducted and Radiated EMI	-	EN55011 Class B		
Weight	g	59g	130g	280g
Size (LxWxH)	mm	52.5 x 27.5 x 23.5	64.0 x 45.0 x 23.5	89.0 x 63.5 x 27.0
Mounting & Case	-	PC board mountable, Chassis mount options with screw terminals, Plastic resin fiberglass case (UL 94V-0)		
MTBF	hrs	200,000 to 400,000 hours, model dependant		
Warranty	yrs	3 years		

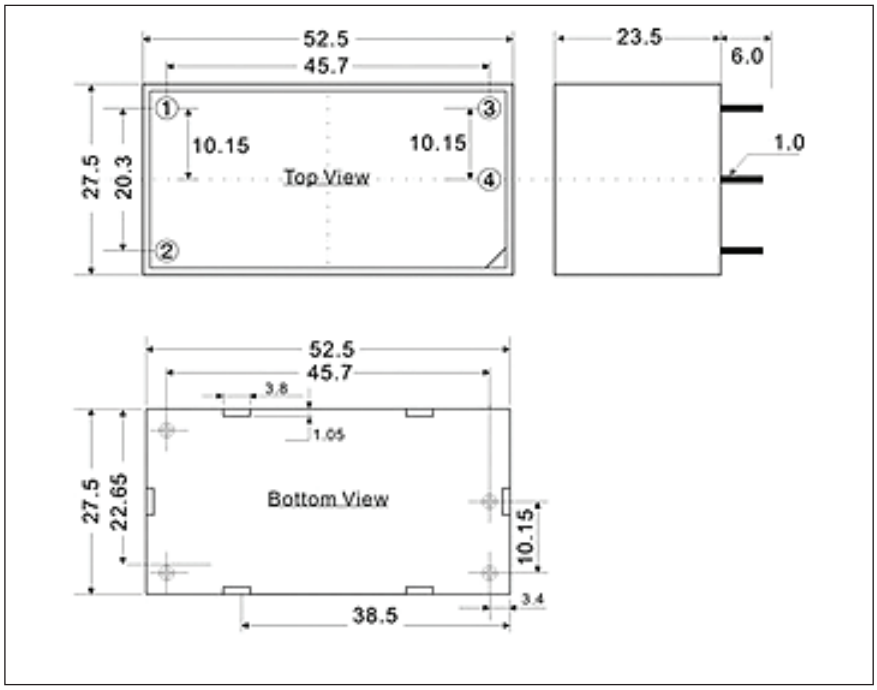
(1) Derate linearly to 80% load below 110VAC (100VAC for KMS15A)
(2) Cold start, 25°C ambient
(3) Derate linearly to 80% load below -30C.
* Safety certified for AC input, 47-63Hz only

Model Selector Single Output

MODEL	Output Voltage (V)	Maximum Current (A)	Power (W)	Output Ripple & Noise (mV)	Line Regulation (%)	Load Regulation (%)	Efficiency (%)	Maximum Capacitive Load (µF)
KMS15A-5	5V	3A	15W	120mV	±25mV	±50mV	79%	7000
KMS30A-5	5V	5A	25W	100mV	±25mV	±50mV	84%	6800
KMS60A-5	5.1V	10A	51W	100mV	±25mV	±75mV	86%	10000
KMS15A-9	9V	1.666A	15W	120mV	±45mV	±90mV	80%	5000
KMS60A-9	9V	6.666A	60W	100mV	±45mV	±135mV	87%	5000
KMS15A-12	12V	1.25	15W	120mV	±60mV	±120mV	84%	1500
KMS30A-12	12V	2.5A	30W	150mV	±60mV	±120mV	89%	1600
KMS60A-12	12V	5A	60W	120mV	±60mV	±120mV	88%	5000
KMS15A-15	15V	1A	15W	150mV	±75mV	±150mV	84%	1000
KMS30A-15	15V	2A	30W	150mV	±75mV	±150mV	86%	1200
KMS60A-15	15V	4A	60W	150mV	±75mV	±150mV	86%	4000
KMS15A-24	24V	0.625	15W	240mV	±120mV	±240mV	85%	470
KMS30A-24	24V	1.25A	30W	240mV	±120mV	±240mV	86%	470
KMS60A-24	24V	2.5A	60W	240mV	±120mV	±240mV	87%	2000

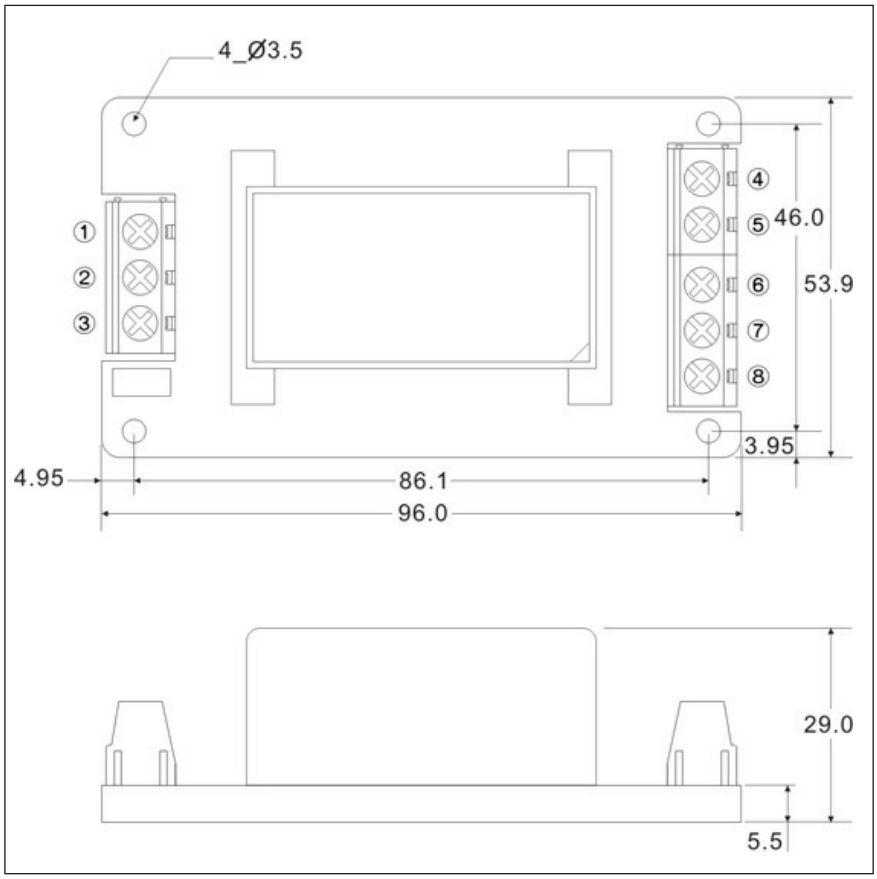
For chassis mount screw terminal options add **/SC** to part number. Example: **KMSA30-24/SC**

Outline Drawing KMSA15



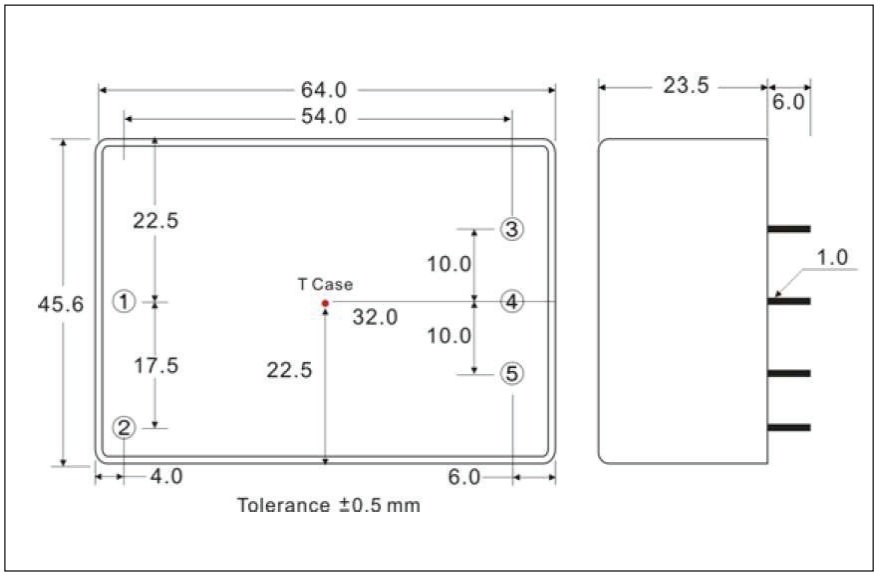
KMSA15	
Pin No.	**Function**
1	AC in (L)
2	AC in (N)
3	+DC Out
4	-DC Out

Outline Drawing KMSA15 - Screw Terminal



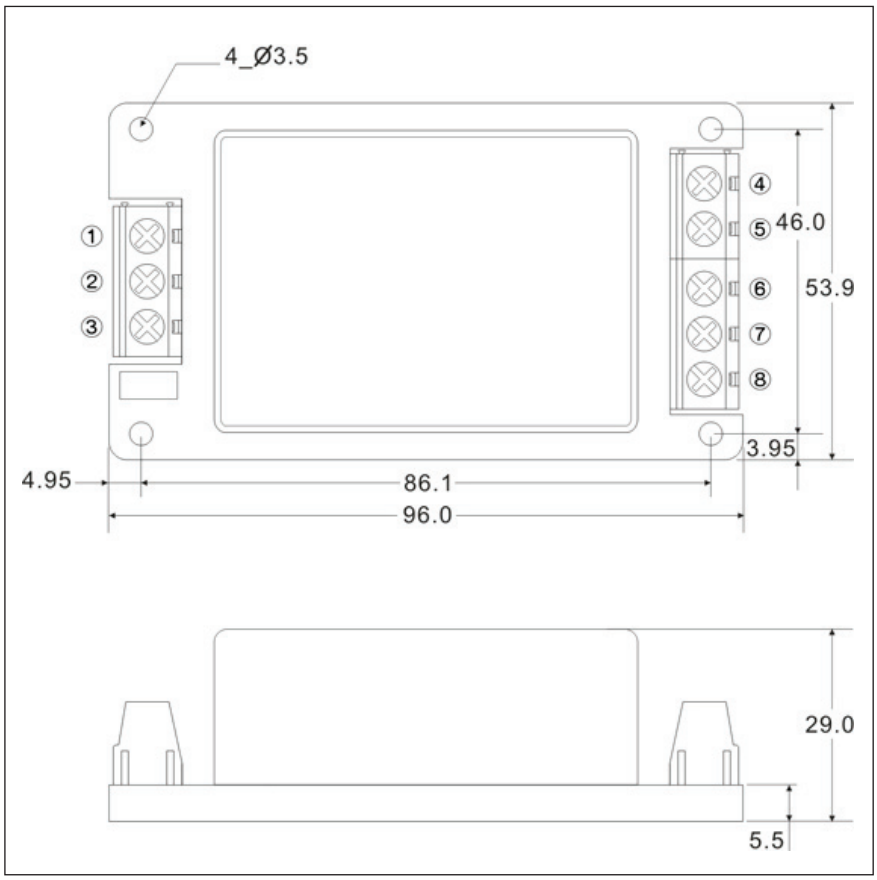
KMSA15	
Pin No.	**Single**
1	No Connection
2	AC in (L)
3	AC in (N)
4	No Connection
5	+DC Out
6	-DC Out
7	No Connection
8	No Connection

Outline Drawing KMSA30



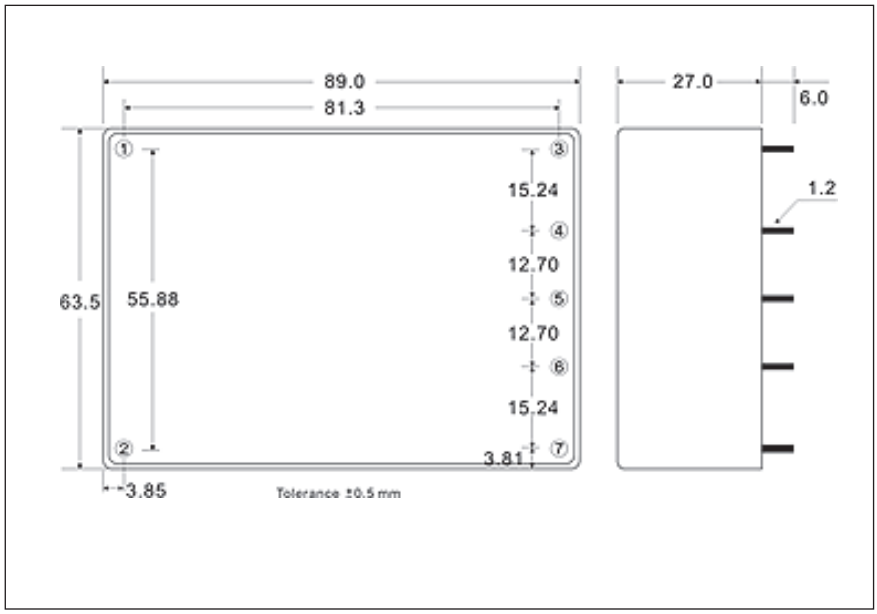
KMSA30	
Pin No.	**Function**
1	AC in (N)
2	AC in (L)
3	-DC Out
4	No Pin
5	+DC Out

Outline Drawing KMSA30 - Screw Terminal



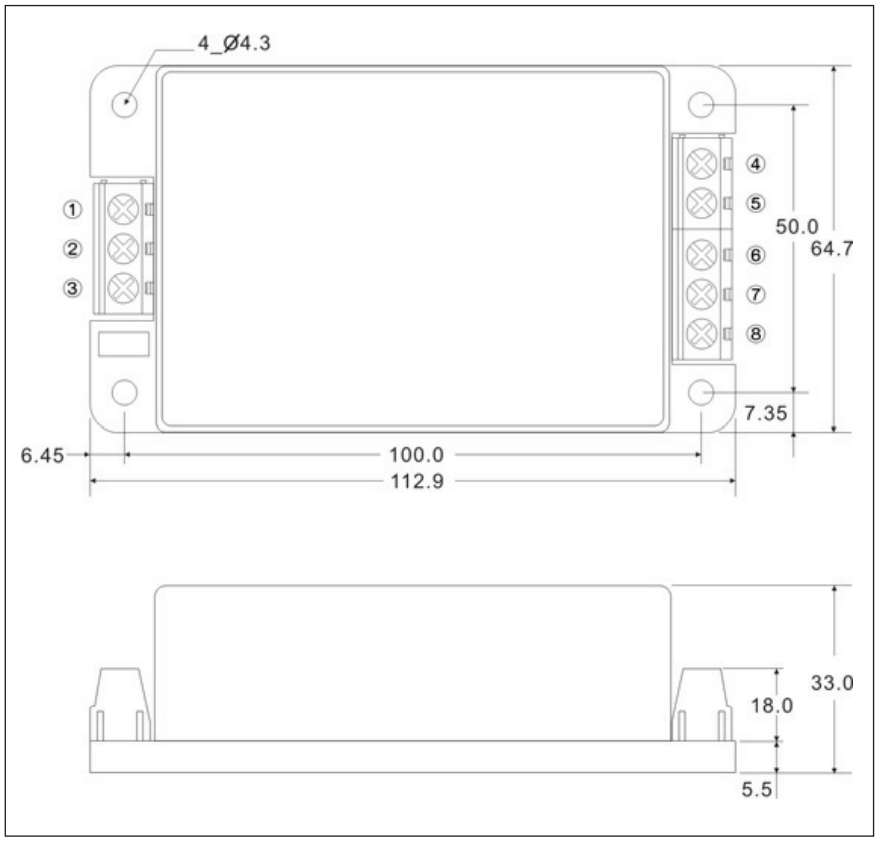
KMSA30	
Pin No.	**Single**
1	AC in (N)
2	No Connection
3	AC in (L)
4	No Connection
5	-DC Out
6	No Connection
7	+DC Out
8	No Connection

Outline Drawing KMSA60



KMSA60	
Pin No.	**Function**
1	AC in (L)
2	AC in (N)
3	+DC Out
4	No Pin
5	-DC Out
6	No Pin
7	No Pin

Outline Drawing KMSA60 - Screw Terminal



KMSA60	
Pin No.	**Single**
1	No Connection
2	AC in (L)
3	AC in (N)
4	+DC Out
5	No Connection
6	-DC Out
7	No Connection
8	No Connection

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