







(MPM-45-xxST)





















Features

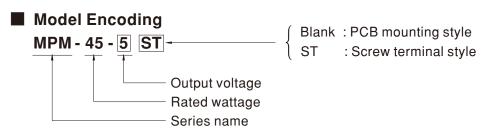
- 3.43"x2.05" compact size
- PCB chassis or screw terminal mounting version
- · Medical safety approved (2 x MOPP) according to ANSI/AAMI ES60601-1 and IEC/BS EN/EN60601-1
- Suitable for BF application with appropriate system consideration
- No load power consumption<0.1W
- Extremely low leakage current
- Wide operating temp. range -30 ~ +80°C
- · EMI Class B without additional components
- Isolation Class II
- Protections: Short circuit / Overload / Over voltage
- No minimum load required
- Operating altitude up to 4000 meters(Note.7)
- 50W peak(10 sec.)
- · 3 years warranty

Applications

- · Portable medical device
- Mobile clinical workstation
- Medical computer monitor
- · Medical examination instrument

Description

MPM-45 is a 45W high density and small size (87x52x29.5mm) AC/DC PCB-mount type medical grade power supply. It features the operation for 80~264VAC, a low no load power consumption less than 0.1W, a high efficiency up to 92.5%, Class II (no FG) double insulation, outstanding dissipation, 2~5G anti-vibration by model, high EMC performance, 4KVAC isolation, etc. The design observes IEC/BS EN/EN60601-1 and ANSI/AAMI ES60601-1 version three with 2 x MOPP level and ultra-low leakage current (<100µA). It is very suitable for BF (patient contact) type medical device or relevant equipment.



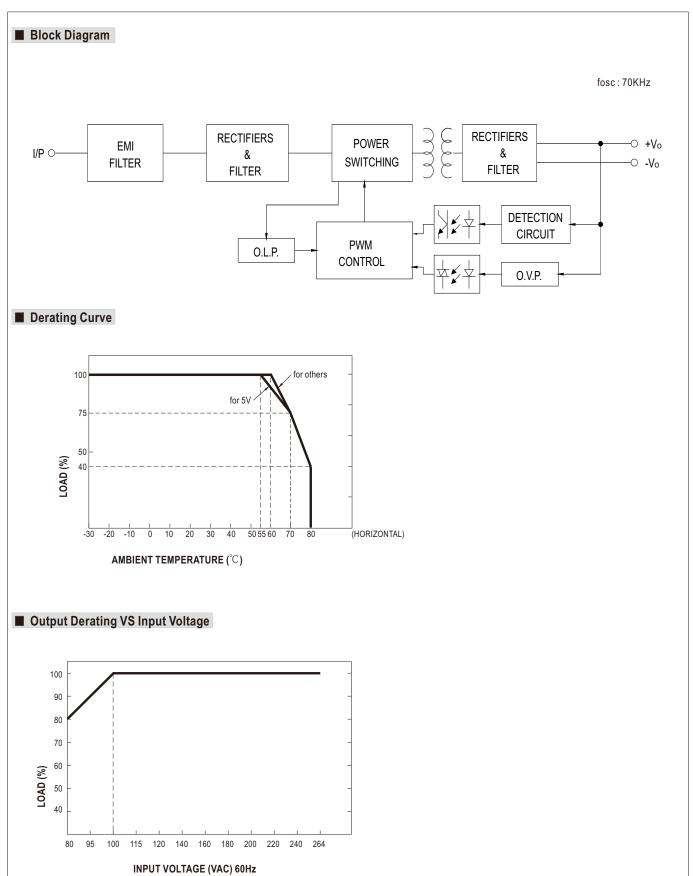


45W AC-DC High Reliable PCB-Mount Green Medical Power Module MPM-45 series

SPECIFICATION

MODEL			MPM-45-5		MPM-45-12	MPM-45-15	5 <u> </u>	MPM-45-24		MPM-45-48	
	DC VOLTA	GE	5V		12V	15V		24V		48V	
ОИТРИТ	Peak(10 sec.)		8.8A		4.13A	3.3A		2.1A		1.05A	
	CURRENT	Convection		8A		3A		1.88A		0.94A	
	RATED	Peak(10 sec.)Note.2			3.75A 49.5W	49.5W		50.4W		50.4W	
	POWER	Convection	40W		45W	45W		45.1W		45.1W	
	RIPPLE & NOISE (max.) Note.3				120mVp-p	120mVp-p		200mVp-p		240mVp-p	
	VOLTAGE TOLERANCE Note.4		<u> </u>		±2.0%	±2.0%		±2.0%		±2.0%	
	LINE REGULATION		±0.5%		±0.5%	±0.5%		±0.5%		±0.5%	
	LOAD REGULATION			±1.0%							
	SETUP, RISE TIME		1000ms, 30ms/230VAC 1000ms, 30ms/115VAC at full load								
	HOLD UP TIME (Typ.)		50ms/230VAC 12ms/115VAC at full load								
INPUT	VOLTAGE RANGE Note.5										
	FREQUENCY RANGE		47 ~ 63Hz								
	EFFICIENCY (Typ.)		88%		91.5%	92.5%		92.5%		92%	
	AC CURRENT (Typ.)		1.2A/115VAC 0.6A/230VAC								
	INRUSH CURRENT (Typ.)		COLD STAR	T 30A/1	15VAC 60A/2	230VAC					
	LEAKAGE CURRENT (max.) Note.6		Touch currer	nt <100 μA/2	264VAC						
	OVERLOAD OVER VOLTAGE OVER TEMPERATURE		115% ~ 135%	6 rated outp	ut power						
			Protection ty	pe : Hiccup ı	mode, recovers au	tomatically after fault	condition is rer	noved			
PROTECTION			5.3 ~ 7.2V		12.6 ~ 16.2V	15.8 ~ 20.3	BV	25.2 ~ 32.4V		50.4 ~ 64.8V	
			Protection ty	pe : Shut do	wn o/p voltage, re-	-power on to recover					
ENVIRONMENT			Protection ty	pe : Shut de	own o/p voltage, r	re-power on to recov	/er				
	WORKING TEMP.		-30 ~ +80°C	(Refer to "De	erating Curve")						
	WORKING HUMIDITY		20 ~ 90% RH	non-conde	nsing						
	STORAGE TEMP.		-40 ~ +85°C								
	TEMP. COEFFICIENT			(0 ~ 60°C)							
		G TEMPERATURE	$\pm 0.03\%^{\circ}$ C (0 ~ 60°C) Wave soldering: 265°C,5s (max.); Manual soldering: 390°C,3s (max.)								
	VIBRATION				, , ,	r 60min. each along X,	, ,				
						•					
					ST:10 ~ 500Hz, 5G 10min./1cycle, period for 60min. each along X, Y, Z axes						
	OPERATING ALTITUDE Note.7		4000 meters / OVC II IEC60601-1, BS EN/EN60601-1, EAC TP TC 004, UL ANSI/AAMI ES60601-1(3.1 version), CAN/CSA-C22 3 rd Edition approved;								
	OPERATIN	GALIIIUDE Note./			0601 1 EACTET	C 004 TH VNST/VVW	II ES60601 1/2	1 vorsion) CA	N/CSA /	C22 2rd Edition cons	ovod:
		GALITIODE Note./	IEC60601-1,	BS EN/EN6			II ES60601-1(3.	1 version), CA	N/CSA-0	C22 3 rd Edition appr	oved;
		TANDARDS	IEC60601-1,	BS EN/EN6 to BS EN/EN	N60335-1(by reque		II ES60601-1(3.	1 version), CA	N/CSA-0	C22 3 rd Edition appr	oved;
	SAFETY ST	TANDARDS	IEC60601-1, Design refer	BS EN/EN6 to BS EN/EN ondary: 2xM	N60335-1(by reque		II ES60601-1(3.	1 version), CA	N/CSA-0	C22 3 rd Edition appr	oved;
	SAFETY ST ISOLATION WITHSTAN	TANDARDS	IEC60601-1, Design refer Primary-Second/P-O/P:4KV/	BS EN/EN6 to BS EN/EN ondary: 2xM AC	N60335-1(by reque	est)	II ES60601-1(3.	1 version), CA	N/CSA-0	C22 3 rd Edition appr	oved;
	SAFETY ST ISOLATION WITHSTAN	TANDARDS I LEVEL D VOLTAGE	IEC60601-1, Design refer Primary-Second/P-O/P:4KV/	BS EN/EN6 to BS EN/EN ondary: 2xM AC	N60335-1(by reque	est)	II ES60601-1(3.		N/CSA-0		roved;
	SAFETY ST ISOLATION WITHSTAN	TANDARDS I LEVEL D VOLTAGE	IEC60601-1, Design refer Primary-Seco I/P-O/P:4KV// I/P-O/P:100M	BS EN/EN6 to BS EN/EN ondary: 2xM AC	N60335-1(by reque	RH	`		Level / N		roved;
	SAFETY ST ISOLATION WITHSTAN ISOLATION	TANDARDS I LEVEL D VOLTAGE I RESISTANCE	IEC60601-1, Design refer Primary-Seco I/P-O/P:4KV/ I/P-O/P:100M Parameter Conducted	BS EN/EN6 to BS EN/EN ondary: 2xM AC	N60335-1(by reque	RH Standard BS EN/EN55011 (CI	SPR11)	Test Class	Level / N		oved;
	SAFETY ST ISOLATION WITHSTAN	TANDARDS I LEVEL D VOLTAGE I RESISTANCE	IEC60601-1, Design refer Primary-Seci I/P-O/P:4KV/ I/P-O/P:100N Parameter Conducted Radiated	BS EN/EN6 to BS EN/EN pondary: 2xM AC // Ohms / 500	N60335-1(by reque	RH Standard BS EN/EN55011 (CI BS EN/EN55011 (CI	SPR11) SPR11)	Test Class Class	Level / N		oved;
	SAFETY ST ISOLATION WITHSTAN ISOLATION	TANDARDS I LEVEL D VOLTAGE I RESISTANCE	IEC60601-1, Design refer Primary-Sect I/P-O/P:4KV/ I/P-O/P:100N Parameter Conducted Radiated Harmonic Co	BS EN/EN6 to BS EN/EN condary: 2xM AC // Ohms / 500	N60335-1(by reque	RH Standard BS EN/EN55011 (CI BS EN/EN55011 (CI BS EN/EN61000-3-	SPR11) SPR11) 2	Test Class	Level / N		roved;
SAFETY &	SAFETY ST ISOLATION WITHSTAN ISOLATION	TANDARDS I LEVEL D VOLTAGE I RESISTANCE	IEC60601-1, Design refer Primary-Sect I/P-O/P:4KV/ I/P-O/P:100N Parameter Conducted Radiated Harmonic Ct Voltage Flick	BS EN/EN6 to BS EN/E1 ondary: 2xM AC If Ohms / 500 urrent er	N60335-1(by reque	RH Standard BS EN/EN55011 (CI BS EN/EN55011 (CI	SPR11) SPR11) 2	Test Class Class	Level / N		roved;
EMC	SAFETY ST ISOLATION WITHSTAN ISOLATION	TANDARDS I LEVEL D VOLTAGE I RESISTANCE	IEC60601-1, Design refer Primary-Sect I/P-O/P:4KV/ I/P-O/P:100N Parameter Conducted Radiated Harmonic Ct Voltage Flick BS EN/EN60	BS EN/EN6 to BS EN/E1 ondary: 2xM AC If Ohms / 500 urrent er	N60335-1(by reque	RH Standard BS EN/EN55011 (CI BS EN/EN55011 (CI BS EN/EN61000-3	SPR11) SPR11) 2	Test Class Class Class	Level / N S B S B	Note	roved;
	SAFETY ST ISOLATION WITHSTAN ISOLATION	TANDARDS I LEVEL D VOLTAGE I RESISTANCE	IEC60601-1, Design refer Primary-Sect I/P-O/P:4KV/ I/P-O/P:100N Parameter Conducted Radiated Harmonic Co Voltage Flick BS EN/EN60 Parameter	BS EN/EN6 to BS EN/E1 ondary: 2xM AC If Ohms / 500 urrent er	N60335-1(by reque	RH Standard BS EN/EN55011 (CI BS EN/EN55010 (CI BS EN/EN61000-3 BS EN/EN61000-3	SPR11) SPR11) 2	Test Class Class Class Test	Level / No B B B B A A	Note	
EMC	SAFETY ST ISOLATION WITHSTAN ISOLATION	TANDARDS I LEVEL D VOLTAGE I RESISTANCE	IEC60601-1, Design refer Primary-Sect I/P-O/P:4KV/ I/P-O/P:100N Parameter Conducted Radiated Harmonic Ct Voltage Flick BS EN/EN60	BS EN/EN6 to BS EN/E1 ondary: 2xM AC If Ohms / 500 urrent er	N60335-1(by reque	RH Standard BS EN/EN55011 (CI BS EN/EN55011 (CI BS EN/EN61000-3	SPR11) SPR11) 2	Test Class Class Class Test Level	Level / N S B S B S A Level / N	Note Vair; Level 4, 8KV (contact
EMC	SAFETY ST ISOLATION WITHSTAN ISOLATION	TANDARDS I LEVEL D VOLTAGE I RESISTANCE	IEC60601-1, Design refer Primary-Sect I/P-O/P:4KV/ I/P-O/P:100N Parameter Conducted Radiated Harmonic Co Voltage Flick BS EN/EN60 Parameter	BS EN/EN6 to BS EN/E1 condary: 2xM AC A/ Ohms / 500 urrent er 601-1-2	N60335-1(by reque	RH Standard BS EN/EN55011 (CI BS EN/EN55010 (CI BS EN/EN61000-3 BS EN/EN61000-3	SPR11) SPR11) 2 3	Test Class Class Class Level Level	Level / N 6 B 6 B 6 A Level / N 1 4, 15KV	Note Vair; Level 4, 8KV om (80MHz~2.7GHz	contact
EMC	SAFETY ST ISOLATION WITHSTAN ISOLATION	TANDARDS I LEVEL D VOLTAGE I RESISTANCE	IEC60601-1, Design refer Primary-Sect I/P-O/P:4KV/ I/P-O/P:100N Parameter Conducted Radiated Harmonic Co Voltage Flick BS EN/EN60 Parameter ESD RF field susc	BS EN/EN6 to BS EN/E1 condary: 2xM AC A/ Ohms / 500 urrent er 601-1-2	N60335-1(by reque	RH Standard BS EN/EN55011 (CI BS EN/EN55011 (CI BS EN/EN61000-3 BS EN/EN61000-3 Standard BS EN/EN61000-4 BS EN/EN61000-4	SPR11) SPR11) 2 3	Test Class Class Class Class Level Level Table	Level / N S B S A Level / N 14, 15KV 13, 10V/n 9, 9~28	Note Vair; Level 4, 8KV (contact
EMC	SAFETY ST ISOLATION WITHSTAN ISOLATION	TANDARDS I LEVEL D VOLTAGE I RESISTANCE	IEC60601-1, Design refer Primary-Sect I/P-O/P:4KV/ I/P-O/P:100N Parameter Conducted Radiated Harmonic Co Voltage Flick BS EN/EN60 Parameter ESD RF field susce	BS EN/EN6 to BS EN/E1 ondary: 2xM AC M Ohms / 50 urrent er 601-1-2 ceptibility	N60335-1(by reque	RH Standard BS EN/EN55011 (CI BS EN/EN55011 (CI BS EN/EN61000-3-: BS EN/EN61000-3-: Standard BS EN/EN61000-4-: BS EN/EN61000-4-: BS EN/EN61000-4-:	SPR11) SPR11) 2 3 2 3 4	Test Class Class Class Class Level Level Level Level	Level / N & B & A Level / N 14, 15KV 13, 10V/ii 9, 9~28 13, 2KV	Note Note Vair; Level 4, 8KV (m(80MHz~2.7GHz V/m(385MHz~5.78	contact
EMC	SAFETY ST ISOLATION WITHSTAN ISOLATION EMC EMISS	TANDARDS I LEVEL D VOLTAGE I RESISTANCE	IEC60601-1, Design refer Primary-Seci I/P-O/P:4KV/ I/P-O/P:100N Parameter Conducted Radiated Harmonic Ct Voltage Flick BS EN/EN60 Parameter ESD RF field susce EFT bursts Surge susce	BS EN/EN6 to BS EN/EN6 to BS EN/EN6 condary: 2xM AC M Ohms / 500 urrent er 601-1-2 ceptibility	N60335-1(by reque	RH Standard BS EN/EN55011 (CI BS EN/EN55011 (CI BS EN/EN61000-3-: BS EN/EN61000-3-: Standard BS EN/EN61000-4-: BS EN/EN61000-4-: BS EN/EN61000-4-: BS EN/EN61000-4-:	SPR11) SPR11) 2 3 2 3 4 5	Test Class Class Class Level Level Level Level Level Level	Level / N 6 B 6 B 6 A Level / N 14, 15KV 13, 10V/t 9, 9~28 13, 2KV 13, 1KV/	Note Vair; Level 4, 8KV om (80MHz~2.7GHz	contact)
EMC	SAFETY ST ISOLATION WITHSTAN ISOLATION EMC EMISS	TANDARDS I LEVEL D VOLTAGE I RESISTANCE	IEC60601-1, Design refer Primary-Sect I/P-O/P:4KV/ I/P-O/P:100N Parameter Conducted Radiated Harmonic Ct Voltage Flick BS EN/EN60 Parameter ESD RF field susce EFT bursts Surge susce Conducted s	BS EN/EN6 to BS EN/EN ondary: 2xM AC AC A Ohms / 50 urrent er 601-1-2 ceptibility ptibility usceptibility	N60335-1(by reque IOPP 0VDC / 25°C / 70%	RH Standard BS EN/EN55011 (CI BS EN/EN55011 (CI BS EN/EN61000-3- BS EN/EN61000-4- BS EN/EN61000-4- BS EN/EN61000-4- BS EN/EN61000-4- BS EN/EN61000-4- BS EN/EN61000-4-	SPR11) SPR11) 2 3 2 4 5 6	Test Class Class Class Level Level Level Level Level Level Level Level	Level / N 6 B 6 B 6 A Level / N 14, 15KV 13, 10V/t 9, 9~28 13, 2KV 13, 1KV/t 13, 10V	Note Note Vair; Level 4, 8KV om (80MHz~2.7GHz V/m(385MHz~5.78	contact
EMC	SAFETY ST ISOLATION WITHSTAN ISOLATION EMC EMISS	TANDARDS I LEVEL D VOLTAGE I RESISTANCE	IEC60601-1, Design refer Primary-Seci I/P-O/P:4KV/ I/P-O/P:100N Parameter Conducted Radiated Harmonic Ct Voltage Flick BS EN/EN60 Parameter ESD RF field susce EFT bursts Surge susce	BS EN/EN6 to BS EN/EN ondary: 2xM AC AC A Ohms / 50 urrent er 601-1-2 ceptibility ptibility usceptibility	N60335-1(by reque IOPP 0VDC / 25°C / 70%	RH Standard BS EN/EN55011 (CI BS EN/EN55011 (CI BS EN/EN61000-3-: BS EN/EN61000-3-: Standard BS EN/EN61000-4-: BS EN/EN61000-4-: BS EN/EN61000-4-: BS EN/EN61000-4-:	SPR11) SPR11) 2 3 2 4 5 6	Test Class Class Class Leve Leve Leve Leve Leve Leve Leve Le	Level / N & B & B & A Level / N 4, 15KV 3, 10V/n 9, 9~28 3, 2KV 3, 1KV/ 13, 10V 14, 30A/n	Note Note Vair; Level 4, 8KV om (80MHz~2.7GHz V/m(385MHz~5.78 Line-Line	contact) GGHz)
EMC	SAFETY ST ISOLATION WITHSTAN ISOLATION EMC EMISS	TANDARDS I LEVEL D VOLTAGE I RESISTANCE	IEC60601-1, Design refer Primary-Sect I/P-O/P:4KV/ I/P-O/P:100N Parameter Conducted Radiated Harmonic Ct Voltage Flick BS EN/EN60 Parameter ESD RF field susce EFT bursts Surge susce Conducted s	BS EN/EN6 to BS EN/E1 ondary: 2xM AC M Ohms / 50 urrent er 601-1-2 ceptibility usceptibilit	N60335-1(by reque IOPP 0VDC / 25°C / 70%	RH Standard BS EN/EN55011 (CI BS EN/EN55011 (CI BS EN/EN61000-3- BS EN/EN61000-4- BS EN/EN61000-4- BS EN/EN61000-4- BS EN/EN61000-4- BS EN/EN61000-4- BS EN/EN61000-4-	SPR11) SPR11) 2 3 4 5 6 8	Test Class Class Class Class Level Level Leve Leve Leve Level Level Level Level Level Level Level Level	Level / N & B & B & A Level / N 14, 15KV 13, 10V/t 19, 9~28 13, 2KV 13, 1KV/ 13, 10V 14, 30A/t 6 dip 0.5	Note Note Vair; Level 4, 8KV om (80MHz~2.7GHz V/m(385MHz~5.78 Line-Line m periods, 30% dip 28	contact) GGHz)
EMC	SAFETY ST ISOLATION WITHSTAN ISOLATION EMC EMISS	TANDARDS I LEVEL D VOLTAGE I RESISTANCE	IEC60601-1, Design refer Primary-Sect I/P-O/P:4KV/ I/P-O/P:100M Parameter Conducted Radiated Harmonic Ct Voltage Flick BS EN/EN60 Parameter ESD RF field susce EFT bursts Surge susce Conducted s Magnetic fie Voltage dip,	BS EN/EN6 to BS EN/EN6 to BS EN/EN6 condary: 2xM AC AC A Ohms / 500 urrent er 601-1-2 ceptibility usceptibility di immunity interruption	N60335-1(by reque IOPP 0VDC / 25°C / 70%	RH Standard BS EN/EN55011 (CI BS EN/EN55011 (CI BS EN/EN61000-3- BS EN/EN61000-4-	SPR11) SPR11) 2 3 4 5 6 8 111	Test Class Class Class Level Level Level Level Level Level Level Level Level	Level / N & B & B & A Level / N 14, 15KV 13, 10V/t 19, 9~28 13, 2KV 13, 1KV/ 13, 10V 14, 30A/t 6 dip 0.5	Note Note Vair; Level 4, 8KV om (80MHz~2.7GHz V/m(385MHz~5.78 Line-Line	contact) GGHz)
EMC (Note 8)	SAFETY ST ISOLATION WITHSTAN ISOLATION EMC EMISS	I LEVEL D VOLTAGE I RESISTANCE SION	IEC60601-1, Design refer Primary-Seci I/P-O/P:4KV/ I/P-O/P:100M Parameter Conducted Radiated Harmonic Ci Voltage Flick BS EN/EN60 Parameter ESD RF field susce EFT bursts Surge susce Conducted s Magnetic fie Voltage dip, 4590.4K hrs	BS EN/EN6 to BS EN/EN ondary: 2xM AC AC A Ohms / 500 urrent er 601-1-2 ceptibility usceptibility id immunity interruption min. Telc	N60335-1(by reque IOPP 0VDC / 25°C / 70% y y ordia SR-332 (Bell	RH Standard BS EN/EN55011 (CI BS EN/EN55011 (CI BS EN/EN61000-3 BS EN/EN61000-4 Core); 563.4K hrs mi	SPR11) SPR11) 2 3 4 5 6 8 11 n. MIL-HDB	Test Class Class Class Class Level	Level / N & B & B & A Level / N 14, 15KV 13, 10V/v 9, 9~28 13, 2KV 13, 1KV/ 14, 30A/v 6 dip 0.5 6 interrup	Note Note Vair; Level 4, 8KV of m(80MHz~2.7GHz V/m(385MHz~5.78 Line-Line m periods, 30% dip 29tions 250 periods	contact) GGHz)
EMC Note 8)	SAFETY ST ISOLATION WITHSTAN ISOLATION EMC EMISS	I LEVEL D VOLTAGE I RESISTANCE SION	IEC60601-1, Design refer Primary-Sect I/P-O/P:4KV/ I/P-O/P:100M Parameter Conducted Radiated Harmonic Ct Voltage Flick BS EN/EN60 Parameter ESD RF field susce EFT bursts Surge susce Conducted s Magnetic fie Voltage dip, 4590.4K hrs PCB mountir	BS EN/EN6 to BS EN/E1 condary: 2xM AC AC A Ohms / 50 urrent er 601-1-2 ceptibility usceptibility interruption min. Telc. g style: 87*	N60335-1(by reque IOPP 0VDC / 25°C / 70% 0VDC / 25°C / 70% y y ordia SR-332 (Bell '52*29.5mm (L*W*	RH Standard BS EN/EN55011 (CI BS EN/EN55011 (CI BS EN/EN61000-3 BS EN/EN61000-4	SPR11) SPR11) 2 3 4 5 6 8 11 n. MIL-HDBhw terminal style	Test Class	Level / N & B & B & A Level / N 14, 15KV 13, 10V/ 14, 9, 9~28 13, 2KV 13, 1KV/ 14, 30A/ 6 dip 0.5 6 interrup	Note Note Vair; Level 4, 8KV of m(80MHz~2.7GHz V/m(385MHz~5.78 Line-Line m periods, 30% dip 29tions 250 periods	contact) GGHz)
EMC (Note 8)	SAFETY ST ISOLATION WITHSTAN ISOLATION EMC EMISS EMC IMMU MTBF DIMENSION PACKING	I LEVEL D VOLTAGE I RESISTANCE SION	IEC60601-1, Design refer Primary-Seci I/P-O/P:4KV/ I/P-O/P:100M Parameter Conducted Radiated Harmonic Ci Voltage Flick BS EN/EN60 Parameter ESD RF field susce EFT bursts Surge susce Conducted s Magnetic fie Voltage dip, 4590.4K hrs PCB mountin	BS EN/EN6 to BS EN/EN6 to BS EN/EN6 condary: 2xM AC AC A Ohms / 500 urrent er 601-1-2 ceptibility usceptibility interruption min. Telcong style: 87* g style: 0.1:	N60335-1(by reque IOPP 0VDC / 25°C / 70% 0VDC / 25°C / 70% y y ordia SR-332 (Bell '52*29.5mm (L*W* 85Kg;60pcs/12.1K	RH Standard BS EN/EN55011 (CI BS EN/EN55011 (CI BS EN/EN61000-3 BS EN/EN61000-3 Standard BS EN/EN61000-4 Core); 563.4K hrs mi H) Scree (g/0.94CUFT Screen	SPR11) SPR11) 2 3 4 5 6 8 11 n. MIL-HDBH w terminal style w terminal style	Test Class Class Class Class Level L	Level / N & B & B & A Level / N 14, 15KV 13, 10V/ 14, 9, 9~28 13, 2KV 13, 1KV/ 14, 30A/ 6 dip 0.5 6 interrup	Note Note Vair; Level 4, 8KV of m(80MHz~2.7GHz V/m(385MHz~5.78 Line-Line m periods, 30% dip 29tions 250 periods	contact) GGHz)
EMC (Note 8)	SAFETY ST ISOLATION WITHSTAN ISOLATION EMC EMISS EMC IMMU MTBF DIMENSIOI PACKING 1. All para	I LEVEL D VOLTAGE I RESISTANCE SION NITY Meters NOT specia	IEC60601-1, Design refer Primary-Sect I/P-O/P:4KV/ I/P-O/P:100M Parameter Conducted Radiated Harmonic Ct Voltage Flick BS EN/EN60 Parameter ESD RF field susce EFT bursts Surge susce Conducted s Magnetic fie Voltage dip, 4590.4K hrs PCB mountin Illy mentioned	BS EN/EN6 to BS EN/EN6 to BS EN/EN6 condary: 2xM AC AC A Ohms / 50 urrent er 601-1-2 ceptibility usceptibility usceptibility interruption min. Telc. g style: 87* g style: 0.1: are measur	N60335-1(by reque IOPP 0VDC / 25°C / 70% 0VDC / 25°C / 70% y y ordia SR-332 (Bell '52*29.5mm (L*W* 85Kg;60pcs/12.1K red at 230VAC inp	RH Standard BS EN/EN55011 (CI BS EN/EN55011 (CI BS EN/EN61000-3 BS EN/EN61000-3 Standard BS EN/EN61000-4 BS EN/EN61000-4 BS EN/EN61000-4 BS EN/EN61000-4 BS EN/EN61000-4 HS EN/EN61000-4 BS EN/EN61000-4	SPR11) SPR11) 2 3 4 5 6 8 11 n. MIL-HDBH w terminal style w terminal style socorate of ambient	Test Class C	Level / N & B & B & A Level / N 14, 15KV 13, 10V/ 14, 9, 9~28 13, 2KV 13, 1KV/ 14, 30A/ 6 dip 0.5 6 interrup	Note Note Vair; Level 4, 8KV of m(80MHz~2.7GHz V/m(385MHz~5.78 Line-Line m periods, 30% dip 29tions 250 periods	contact) GGHz)
EMC (Note 8)	SAFETY ST ISOLATION WITHSTAN ISOLATION EMC EMISS EMC IMMU MTBF DIMENSIOI PACKING 1. All para 2. 33% Du	I LEVEL D VOLTAGE I RESISTANCE SION NITY meters NOT specia	IEC60601-1, Design refer Primary-Seci I/P-O/P:4KV/ I/P-O/P:100M Parameter Conducted Radiated Harmonic Ct Voltage Flick BS EN/EN60 Parameter ESD RF field susce Conducted s Magnetic fie Voltage dip, 4590.4K hrs PCB mountin Illy mentioned within every 3	BS EN/EN6 to BS EN/EN6 to BS EN/EN6 condary: 2xM AC AC A Ohms / 50 urrent er 601-1-2 ceptibility usceptibility usceptibility interruption min. Telca ag style: 87* g style: 0.1: are measur 0 seconds.	N60335-1(by requel IOPP OVDC / 25°C/ 70% y ordia SR-332 (Bell is 52*29.5mm (L*W* 85Kg;60pcs/12.1K red at 230VAC inparent por Average output por	RH Standard BS EN/EN55011 (CI BS EN/EN55011 (CI BS EN/EN61000-3 BS EN/EN61000-3 Standard BS EN/EN61000-4 Core); 563.4K hrs mi H) Scree (g/0.94CUFT Screen	SPR11) SPR11) 2 3 4 5 6 8 11 n. MIL-HDBh w terminal style w terminal style w terminal style of ambient	Test Class C	Level / N 6 B 6 B 6 A Level / N 14, 15KV 13, 10V/(19, 9~28) 13, 2KV 13, 1KV/ 14, 30A/(16, dip 0.5) 6 interrup 6 interrup 6 interrup 6 interrup 6 interrup	Note Note Vair; Level 4, 8KV om (80MHz~2.7GHz V/m(385MHz~5.78 Line-Line m periods, 30% dip 29 of the distributions 250 periods V*H) Gg/0.56CUFT	contact) GGHz)
EMC	SAFETY ST ISOLATION WITHSTAN ISOLATION EMC EMISS EMC IMMU MTBF DIMENSION PACKING 1. All para 2. 33% Du 3. Ripple 8	I LEVEL D VOLTAGE I RESISTANCE SION NITY meters NOT specia	IEC60601-1, Design refer Primary-Sect I/P-O/P:4KV/ I/P-O/P:100M Parameter Conducted Radiated Harmonic Co Voltage Flick BS EN/EN60 Parameter ESD RF field susce EFT bursts Surge susce Conducted s Magnetic fie Voltage dip, 4590.4K hrs PCB mountin PCB mountin Illy mentioned within every 3ied at 20MHz of	BS EN/EN6 to BS EN/EN ondary: 2xM AC M Ohms / 500 M Ohms	N60335-1(by requel IOPP OVDC / 25°C / 70% OVDC / 25°C / 70% y ordia SR-332 (Bell is 52*29.5mm (L*W* 85Kg;60pcs/12.1K red at 230VAC inp Average output pch by using a 12" to	RH Standard BS EN/EN55011 (CI BS EN/EN55011 (CI BS EN/EN55011 (CI BS EN/EN61000-3-: BS EN/EN61000-3-: Standard BS EN/EN61000-4-: BS EN/EN61000-4-: BS EN/EN61000-4-: BS EN/EN61000-4-: BS EN/EN61000-4-: Core); 563.4K hrs mi H) Scree (g/0.94CUFT Scree) Dut, rated load and 2 cower should not excewisted pair-wire terms	SPR11) SPR11) 2 3 4 5 6 8 11 n. MIL-HDBh w terminal style w terminal style w terminal style of ambient	Test Class C	Level / N 6 B 6 B 6 A Level / N 14, 15KV 13, 10V/(19, 9~28) 13, 2KV 13, 1KV/ 14, 30A/(16, dip 0.5) 6 interrup 6 interrup 6 interrup 6 interrup 6 interrup	Note Note Vair; Level 4, 8KV om (80MHz~2.7GHz V/m(385MHz~5.78 Line-Line m periods, 30% dip 29 of the distributions 250 periods V*H) Gg/0.56CUFT	contact) GGHz)
EMC (Note 8)	EMC IMMU MTBF DIMENSIOI 1. All para 2. 33% Du 3. Ripple 8 4. Toleran 5. Derating	I LEVEL D VOLTAGE I RESISTANCE SION NITY Meters NOT special ty cycle maximum of a noise are measured in the control of the c	IEC60601-1, Design refer Primary-Sect I/P-O/P:4KV/ I/P-O/P:100N Parameter Conducted Radiated Harmonic Co Voltage Flick BS EN/EN60 Parameter ESD RF field susce EFT bursts Surge susce Conducted s Magnetic fie Voltage dip, 4590.4K hrs PCB mountin PCB mountin Illy mentioned within every 3 ed at 20MHz ot tolerance, line nder low input	BS EN/EN6 to BS EN/E1 ondary: 2xM AC M Ohms / 50 urrent er 601-1-2 ceptibility usceptibility d immunity interruption min. Telca g style: 87* g style: 0.1; are measur of bandwidth e regulation voltages. F	N60335-1(by requestion of the control of the contro	RH Standard BS EN/EN55011 (CI BS EN/EN55011 (CI BS EN/EN55011 (CI BS EN/EN61000-3-: BS EN/EN61000-3-: Standard BS EN/EN61000-4-: BS EN/EN61000-4-: BS EN/EN61000-4-: BS EN/EN61000-4-: BS EN/EN61000-4-: Core); 563.4K hrs mi H) Scree (g/0.94CUFT Scree) Dut, rated load and 2 cower should not excewisted pair-wire terms	SPR11) SPR11) 2 3 4 5 6 8 11 n. MIL-HDBH w terminal style w terminal style of ambient eed the rated p inated with a 0	Test Class C	Level / N 6 B 6 B 6 A Level / N 14, 15KV 13, 10V/(19, 9~28) 13, 2KV 13, 1KV/ 14, 30A/(16, dip 0.5) 6 interrup 6 interrup 6 interrup 6 interrup 6 interrup	Note Note Vair; Level 4, 8KV om (80MHz~2.7GHz V/m(385MHz~5.78 Line-Line m periods, 30% dip 29 of the distributions 250 periods V*H) Gg/0.56CUFT	contact) GGHz)
EMC (Note 8)	EMC IMMU MTBF DIMENSIOI PACKING 1. All para 2. 33% Du 3. Ripple & 4. Toleran 5. Derating 6. Touch of	I LEVEL D VOLTAGE I RESISTANCE SION NITY Meters NOT special ty cycle maximum with a noise are measured ce : includes set up go may be needed uppurrent was measured to the control of th	IEC60601-1, Design refer Primary-Sect I/P-O/P:4KV/ I/P-O/P:100N Parameter Conducted Radiated Harmonic Ci Voltage Flick BS EN/EN60 Parameter ESD RF field susc EFT bursts Surge susce Conducted s Magnetic fie Voltage dip, 4590.4K hrs PCB mountin Illy mentioned within every 3' ed at 20MHz of tolerance, line nder low input ed from prima	BS EN/EN6 to BS EN	N60335-1(by requestion of the property of the	RH Standard BS EN/EN55011 (CI BS EN/EN55011 (CI BS EN/EN55011) BS EN/EN61000-3 BS EN/EN61000-4 Core); 563.4K hrs mi H) Scree Cg/0.94CUFT Scree Cut, rated load and 2 cover should not exceed wisted pair-wire term on. Cereating curve for moderating curve fo	SPR11) SPR11) 2 3 4 5 6 8 11 n. MIL-HDBH w terminal style w terminal style continued the rated p inated with a 0 ore details.	Test Class Clas	Level / N & B & B & A Level / N 14, 15KV 13, 10V/n 9, 9~28 13, 2KV 13, 1KV/ 14, 30A/n 6 dip 0.5 6 interrup 6 interrup 6 mm (L*V cs/11.3K	Note Note Vair; Level 4, 8KV om (80MHz~2.7GHz V/m(385MHz~5.78 Line-Line m periods, 30% dip 29 totions 250 periods V*H) Gg/0.56CUFT capacitor.	contact) GHz)
EMC (Note 8)	EMC IMMU MTBF DIMENSIOI PACKING 1. All para 2. 33% Du 3. Ripple 8 4. Toleran 5. Derating 6. Touch c 7. The am 8. The pool	I LEVEL D VOLTAGE I RESISTANCE I RESISTANCE N Meters NOT special ty cycle maximum to the control of the contr	IEC60601-1, Design refer Primary-Seci I/P-O/P:4KV/ I/P-O/P:100M Parameter Conducted Radiated Harmonic Ci Voltage Flick BS EN/EN60 Parameter ESD RF field susce EFT bursts Surge susce Conducted s Magnetic fie Voltage dip, 4590.4K hrs PCB mountin PCB mountin Illy mentioned within every 3 ed at 20MHz of tolerance, line der low input ed from prima lerating of 3.5' lered a compo-	BS EN/EN6 to BS EN/EN/EN/EN/EN/EN/EN/EN/EN/EN/EN/EN/EN/E	N60335-1(by requestion of the control of the contro	RH Standard BS EN/EN55011 (CI BS EN/EN55011 (CI BS EN/EN55011 (CI BS EN/EN55011 (CI BS EN/EN61000-3-: Standard BS EN/EN61000-4-: Core); 563.4K hrs mi H) Scree (g/0.94CUFT Scree Cout, rated load and 2 Cower should not exceed wisted pair-wire termion.	SPR11) SPR11) 2 3 2 3 4 5 6 8 11 n. MIL-HDBh w terminal style w terminal style of ambient eed the rated p inated with a 0 ore details. with fan model . The final equi	Test Class Clas	Level / No. 8 B S A S A S A S A S A S A S A S A S A S	Note Note Vair; Level 4, 8KV or (80MHz~2.7GHz V/m(385MHz~5.78 V/m(385MHz~5.78 V/m) Line-Line m periods, 30% dip 29 tions 250 periods V*H) Eg/0.56CUFT capacitor.	contact) GHz)
EMC (Note 8)	EMC IMMU MTBF DIMENSIOI PACKING 1. All para 2. 33% Du 3. Ripple 8 4. Toleran 6. Touch c 7. The am 8. The pow meets E	I LEVEL D VOLTAGE I RESISTANCE I RESISTANCE N Meters NOT special ty cycle maximum to the control of the contr	IEC60601-1, Design refer Primary-Seci I/P-O/P:4KV/ I/P-O/P:100M Parameter Conducted Radiated Harmonic Ci Voltage Flick BS EN/EN60 Parameter ESD RF field susce EFT bursts Surge susce Conducted s Magnetic fie Voltage dip, 4590.4K hrs PCB mountin Illy mentioned within every 3 ed at 20MHz of tolerance, line inder low input ed from prima lerating of 3.5' lered a compoguidance on I	BS EN/EN6 to BS EN/EN/EN/EN/EN/EN/EN/EN/EN/EN/EN/EN/EN/E	N60335-1(by requestion of the control of the contro	RH Standard BS EN/EN55011 (CI BS EN/EN55011 (CI BS EN/EN65011 (CI BS EN/EN61000-3 BS EN/EN61000-4 Core); 563.4K hrs mi H) Scree (g/0.94CUFT Scree Dut, rated load and 2 Dower should not excee wisted pair-wire term on. Derating curve for mo s and of 5°C/1000m ato a final equipment and of a final equipment	SPR11) SPR11) 2 3 2 3 4 5 6 8 11 n. MIL-HDBh w terminal style w terminal style of ambient eed the rated p inated with a 0 ore details. with fan model . The final equi	Test Class Clas	Level / No. 8 B S A S A S A S A S A S A S A S A S A S	Note Note Vair; Level 4, 8KV or (80MHz~2.7GHz V/m(385MHz~5.78 V/m(385MHz~5.78 V/m) Line-Line m periods, 30% dip 29 tions 250 periods V*H) Eg/0.56CUFT capacitor.	contact) GHz)





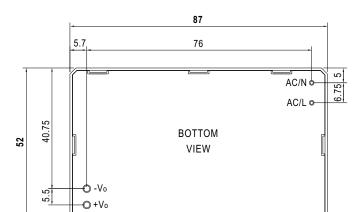
Case No.IRM60

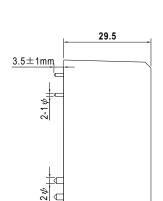
Unit:mm



■ Mechanical Specification

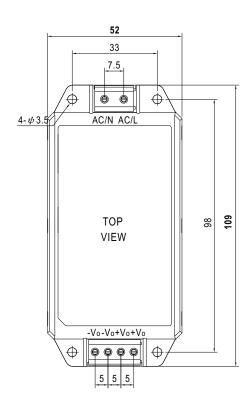
• PCB mounting style (MPM-45)

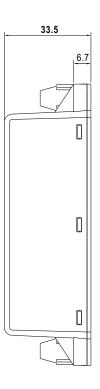




AC/L, AC/N P/N diameter:1 ψ +Vo, -Vo P/N diameter:2 ψ

Screw terminal style (MPM-45-xxST)





■ Installation Manual

Please refer to: http://www.meanwell.com/manual.html