

RELIABLE POWER FOR EVER

maxfine[®]



MIT SERIES
INDUSTRIAL UPS

CE

TECHNICAL PARAMETERS

MODEL		MIM - 10 ÷ 100kVA	MIT - 10 ÷ 160kVA		
TECHNOLOGY		Low Frequency On - line double conversion			
INPUT	Nominal voltage	400V three phase			
	Voltage range	± 20% three phase			
	Frequency	50/60 Hz ±5%			
	Power factor	≥0.8			
	Current harmonic distortion	<5% with harmonic filter			
	Soft Start	0-100% in 10sec			
BYPASS	Nominal voltage	Single phase 230V	400V three phase		
	Permitted voltage range	±15% (selectable from ±10% to ± 25% from front panel)			
	Frequency	50/60 Hz			
	Permitted Frequency range	±2% (selectable from ±1% to ± 5% from front panel)			
	Standard features	Back feed protection split bypass line			
BATTERIES	Type	Maintenance-free lead acid VRLA AGM / GEL : NiCd			
	Maximum recharge current (A)	0.2 x c10			
	AC ripple voltage	<1%			
OUT PUT	Number of phase	1 + N	3 + N		
	Rated voltage	Single phase 230V	Three phase 400Vac		
	Regulation of the output voltage	220 ÷244 Vac phase / neutral (from control panel)	348 ÷ 424 Vac phase / neutral (from control panel)		
	Crest factor (ipeak/Irms)	3:1			
	Static stability	±1%			
	Dynamic stability	±5%			
	Frequency	50/60 Hz configurable			
	Overload	110% ,125%,150% of the rated current for 5h/10/1'			
	Frequency stability	±0.05% on mains failure, ±2% (selectable from ± 1% to ± 5%) with mains supply present			
SYSTEM	Remote signaling	Volt free contacts			
	Remote controls	EPO and Bypass			
	Communication	RS232 + remote contacts			
	Operating temperature	0°C + +40°C			
	Relative humidity	<95% non condensing			
	Colour	Light grey (RAL 7035)			
	Acoustic noise @ 1 metre	10-80kVA 54-62dBA at 1m,100-160kVA 54-65dBA at 1m			
	Protection degree	IP20			
	Efficiency Smart Mode	up to 98%			
	Compliance	VFI-SS-111 IEC EN62040-(1,2,3);EN62040-1-1; EN50081-2;EN50091-2;EN62040-1-2; EN60529; EN60664; EN60755; EN60950 (CEI74-2); EN61000-2-2; EN61000-4-(1,2,3,4,5,6,8,11); EN55022; EN50141; EN60269-1; IEC146 (CEI22) European Directive LV73/23/EC and 93/68/EC;89/336;EMC 2004/108/EC			
MODEL	POWER kVA / kW	UPS DIMENSION D x W x H mm	N.W WEIGHT kg	INTERNAL BATTERY	INPUT / OUT PUT
MIM 10k	10 / 8	600 x 800 x 1900	200	Yes	III / I
MIM 15K	15 / 12	600 x 800 x 1900	200	Yes	III / I
MIM 20K	20 / 16	600 x 800 x 1900	220	Yes	III / I
MIM 30K	30 / 24	600 x 800 x 1900	230	Yes	III / I
MIM 40K	40 / 32	600 x 800 x 1900	290	No	III / I
MIM 60K	60 / 48	600 x 800 x 1900	340	No	III / I
MIM 80K	80 / 64	800 x 800 x 1900	440	No	III / I
MIM 100K	100 / 80	800 x 800 x 1900	440	No	III / I

Product specifications are subject to change without further notice.



MIT 10 - 160K

PRODUCT
FEATURES

INDUSTRIAL SPECIAL UPS

Security for key equipment is continuing to run, we offer all serial of uninterruptible AC power system and relative distribution and complete power distribution products, including individual products, integrated system, personal network security, IT, medical systems, provide good power protection and stable operation for manufacturing.

HIGH - RELIABILITY INDUSTRIAL GRADE DESIGN:

MIM/MIT system is comprised of power special- purpose UPS, DBW bypass regulator cabinet, PDU series feeder cabinet. Maxfine company apply herself to the development of electricity demands for power plant, substations, power distribution products are designed with online double conversion, zero conversion function. Main applications including electric power long distance, RTU, power carrier wave, power monitoring and so, on. When the utility power is normal, single phase 220V (or three-phase 380V). After isolation, rectification and filtering through the inverter to provide a stable power supply to the load; if the input AC power is abnormal or power failure, the backup power system by the DC screen provide power supply through non-return diode inverter. When the DC screen occurs voltage shortage or power break, the static switch transfer to bypass for power supply; When the electricity is restored, the inverter automatically switches to utility power and provide power supply under inverter mode, even the inverter overload or fault and transfer power supply under bypass mode, also give a warning signal at the same time.

TECHNICAL PARAMETERS

MODEL	POWER kVA / kW	UPS DIMENSION W x D x H mm	N.W WEIGHT kg	INTERNAL BAT- TERIES	INPUT / OUT PUT
MIT 10k	10 / 8	800 x 800 x 1900	200	Yes	III / III
MIT 15K	15 / 12	800 x 800 x 1900	220	Yes	III / III
MIT 20K	20 / 16	800 x 800 x 1900	230	Yes	III / III
MIT 30K	30 / 24	800 x 800 x 1900	290	Yes	III / III
MIT 40K	40 / 32	800 x 800 x 1900	340	No	III / III
MIT 60K	60 / 48	800 x 800 x 1900	440	No	III / III
MIT 80K	80 / 64	1200 X 800 X 1900	520	No	III / III
MIT 100K	100 / 80	1200 X 800 X 1900	770	No	III / III
MIT 120K	120 / 96	1200 X 800 X 1900	855	No	III / III
MIT 160K	160 / 128	1400 X 800 X 1900	1300	No	III / III

APPLICATION:

Petroleum, chemical industry, gas and power station...

KEY FEATURES:

- Adopt full digital control technology
- Intelligent detection and monitoring function
- Digital control and static switch zero switching input/output full isolation
- DC UPS isolated with utility power completely
- Cubicle design with power standard
- Multifunctional protection for over voltage, low voltage
- Over current, short circuit and so on
- Large screen LCD monitor English and Spanish operation interface.
- Ultra long 256 event records, user-friendly analysis and management to the situation of power supply.
- Static bypass has a strong anti-overload capacity.

CONTROL SYSTEM

Adopt microprocessor bus control technology and ensure the real time control of rectifier, inverter, static switch as well as coordination of each power part, characterized by increased control of aging, higher reliability. It also enhance the efficiency of complete UPS system and the output technical parameters are better than that of the general capacity of equipment.

RECTIFIER

6 pulse or 12 pulse fully controlled bridge (6 or 12 SCR) composed of rectifier, its function is input AC 380 V rectified for DC 405V or so. Control features for the "slope" start, that is to say the output voltage of rectifier within 10 seconds form the 0V to 405 V and no impact on the power grid.

INVERTER

6 IGBT high power, tubes of SPWM (sinusoidal pulse width modulation) composed of all control bridge. It's function is to transform DC voltage for standard sinusoidal AC voltage by special () zero phase shift zigzag type isolation transformation and become AC220V as load required; In addition, the transformer can eliminate from such as computer (non-linear load) reflect three times harmonic current capacity. Control feature adopt a "slow-down gate voltage" protection technology and greatly reduce the disturbance shutoff of inverter (inverter and static switch change each other), and increase

the overload capacity of complete UPS system, short circuit and anti-overload are better than general UPS, especially it's anti-short circuit capacity is unmatched by similar devices.

Inverter of UPS have a strong overload capacity

110% load - 60 minutes

125% load - 10 minutes

125% load - 10 minutes

150% load - 1 minute

200% single phase load - 30 seconds

Inverter has a strong capacity of anti-output short circuit current limiting and anti-step load impact.

ADVANTAGES

290% rated current 5 seconds, even if the user inadvertently causes the output short circuit or severe overload, the output current is still limited to a suitable range, rather than increasing without limit, thus make sure UPD has a long term and reliable running base.

STATIC SWITCH:**Not Sync Automatically Switch:**

When the bypass of UPS and inverter are not synchronized. DTS9310 can automatically implement not sync switch, such as city electricity surge pulse width <5ms can ensure no power cut off. When the bypass exceed limit, UPS will detect the bypass every 20ms, as long as the phase angle difference of bypass and inverter come back to the normal range, not synchronized bypass switch can be realized.

INTELLIGENT MONITORING:

Via RS 232 / RS 485m passive contact and power transmitter signal to transfer working status of UPS and real-time data to the DCS system, finally realize intelligent monitoring.

UNIQUE OPTION:

- SNMP Card
- AS400 Card
- Signal Transmitter
- Bypass Isolation and Voltage Regulation
- Increase feeder circuit (standard for 8 loops)
- 12 pulse Rectifier
- The appearance of special models (standard dimension : 800 x 600 x 2260 mm)



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