

SPECIFICATIONS

Model:MGT1220

1. **SCOPE:** This specifications is suitable to the AC adaptor of model MGT1220 designed to EI-48 wall mount.

2. **APPLICABLE STANDARDS:** UL1310

3. **AGENCY SAFETY:** UL

4. **SURFACE , STRUCTURE:**

4-1 Surface: Damage, rusting , foam , cracks are not permitted.

4-2 Appearance: Dimensions and express: As attached drawing.

5. **ELECTRICAL CHARACTERISTICS:**

5-1 Primary rated voltage & line frequency: 120 VAC 60 Hz 30 W

5-2 Secondary output ratings:

Input voltage	Output voltage	Tolerance	Rated current	No load voltage
120 VAC 60 Hz	AC 12 V	+/- 5%	1666 mA	AC 15 V Max.

5-3 Exciting current (Io): 70 mA Max. at input 120 VAC 60 Hz without secondary load.

5-4 Primary rated current (Ip): 240 mA Max. at input 120 VAC 60 Hz with output current 1666 mA.

5-5 Ripple voltage: ----- mV (RMS) Max. at input ----- VAC ----- Hz with output current ----- mA.

5-6 Dielectric strength: The specified voltage shall be applied to each item as following without breakdown.

(1) Primary to Secondary & Core: 1.24 KV 60 Hz for one minute.

(2) Secondary to Core: 0.5 KV 60 Hz for one minute. Cut-off current: 1 mA Max.

At an alternative potentials, increasing 20% of voltage may be applied for one second in mass production.

5-7 Insulation test: 500 VDC 100 MΩ Min. between input plug and output plug and case.

5-8 Core loss: Input 120 VAC 60 Hz without secondary load, watts loss shall be under 3.5 W.

5-9 Temperature rise: Input 120 VAC 60 Hz with secondary load 1666 mA, shall not exceed 40 deg on case surface (By thermometer). 75 deg for primary winding (By resistance method). At ambient temp. 25°C.

6. **MECHANICAL CHARACTERISTICS:**

6-1 AC blade pull test: Pull AC blades by 1.5 kg for one minute without pull out from the case.

6-2 Dropping 4 times from 90 cm onto a wooden board 3 cm thickness, and make sure of no electrical hazardous is found, no separateness of enclosure and no internal components are exposed.

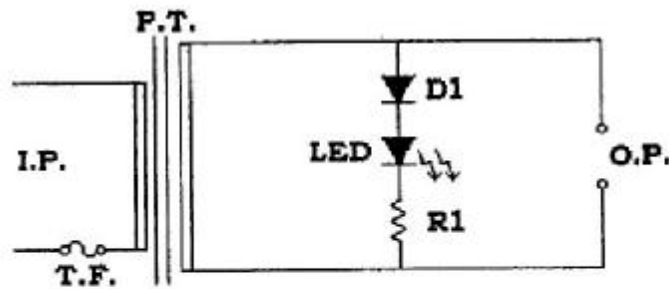
7. **TEMPERATURE RANGE:**

7-1 Normal operating temperature at: -10°C ----- +40°C

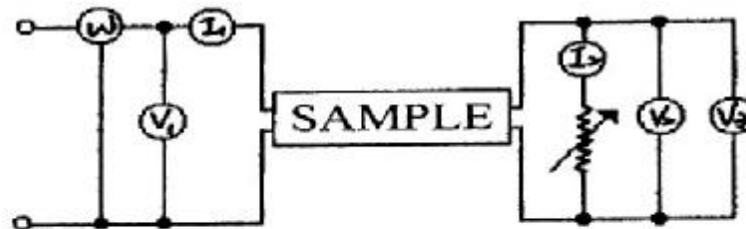
7-2 Storage temperature at: -20°C ----- +70°C

7-3 Normal operating humidity at: 30% ----- 85% R.H.

8. **NET WEIGHT (APPROX.):** 422 g.


CIRCUIT DIAGRAM


SYMBOL	PARTS NAME	SPECIFICATION
I.P.	Input plug	US flat pin
P.T.	Power transformer	EI-48
T.F.	Thermal fuse	130°C 250V 1A
D1	Diode	1N4002 (1A 100V) or better
R1	Resistor	1K Ω (1/4W)
LED		Color: Green 5 \emptyset
O.P.	Output screw	3.5mm \times 6mm

TEST CIRCUIT


- W: wattmeter (class 0.5)
- V1: AC voltmeter (class 0.5)
- I1: AC ammeter (class 0.5)
- V2: AC voltmeter (class 0.5)
- I2: AC ammeter (class 0.5)
- V3: AC rms voltmeter (for ripple test) (class 0.5)
(not apply for AC output)

Note:

Conditions for making measurement and test are follow:
 Ambient temperature: 15°C to 35°C
 Relative humidity: 25% to 85%
 Air pressure: 86kPa to 106kPa

If there is any doubt about the result, measurements shall be made within the following limits:
 Ambient temperature: 25°C \pm 2°C
 Relative humidity: 60% to 70%
 Air pressure: 86kPa to 106kPa

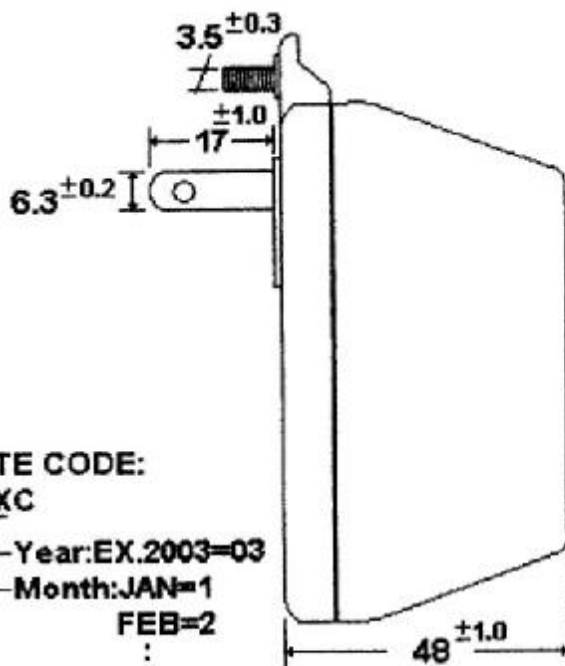
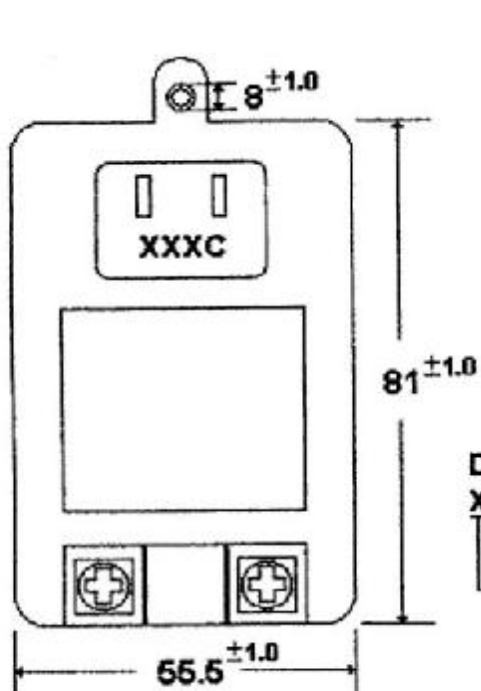


DRAWING NO.

圖 號

Applied model

使用機種



DATE CODE:

XXXC

Year: EX. 2003=03

Month: JAN=1

FEB=2

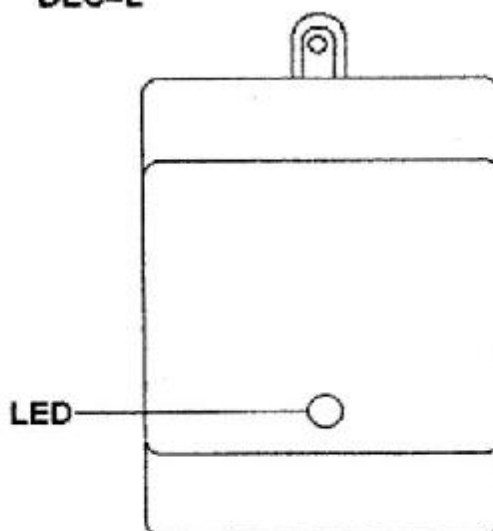
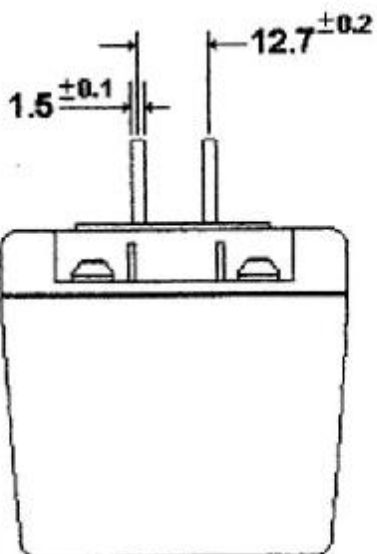
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SEP=9

OCT=J

NOV=K

DEC=L



COLOR	Black	Revised date	Revised status	Approved
UNIT	mm			
MATERIAL	ABS or Noryl			
REVISION				
Prepared by	Allen	Approved by	Issued date	MAR.26.2003



MATERIAL LIST

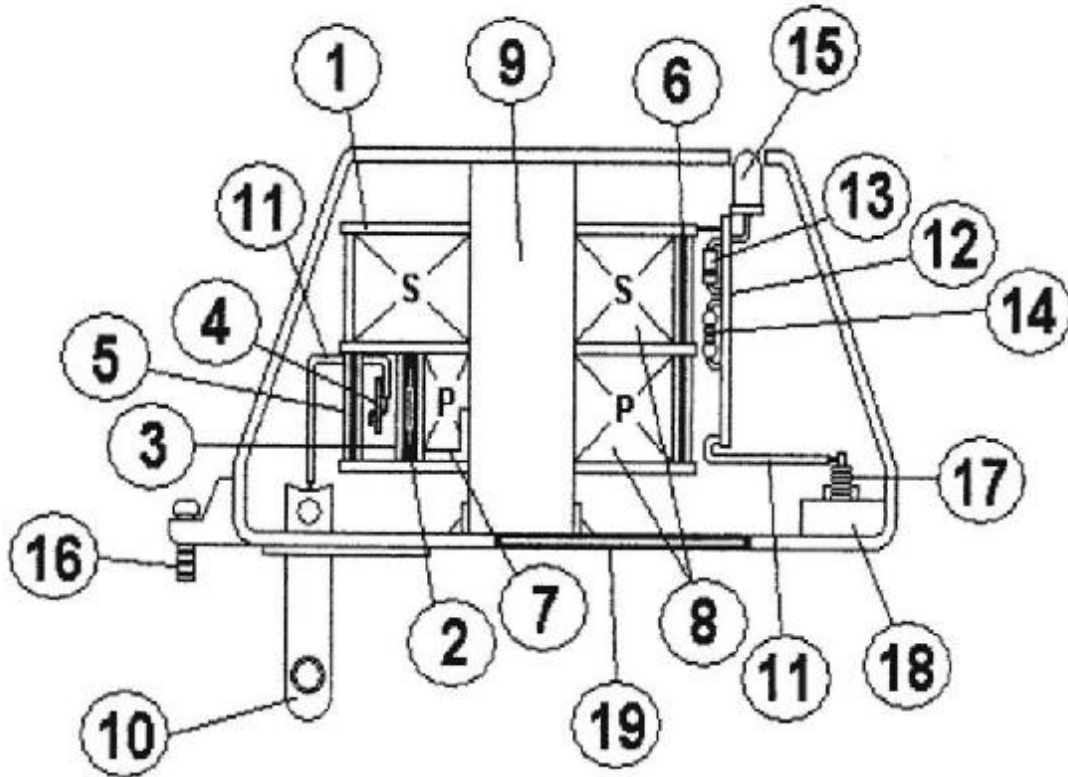
Components & Specification

No.	Components	Specification	Manufacturer	Approval
1	Bobbin	UL Recognized Plastic 94V-2 125°C Nylon 66 Zytel 101L, 0.74 mm Min	E I Dupont de nemours & Co., Ltd	E41938
2	Thermal fuse	F4 (130°C 1A 250V) P4-1A (130°C 1A 250V) A4 (130°C 2A 250V) M33 (130°C 2A 250V) F130 (130°C 1A 250V)	Xiamen Set electronics Aupo electronics Ltd Aupo electronics Ltd Joint Force metal research Matsushita electric Co., Ltd	E214712 E140847 E140847 E142267 E60271
3	Primary wrap	Mylar tape t=0.025 mm 2 turns 31CT or PZ280 Press board t=0.25 mm 1 turn	Nitto Denko corp Yahua Adhesive Tape Co., Ltd Duck Sung Tape Co., Ltd Abekawa Kogyo Co., Ltd.	E34833 E178516 E105147
4	Primary lead wire fixed	Mylar tape t=0.025 mm 2 turns 31CT or PZ280	Nitto Denko corp Yahua Adhesive Tape Co., Ltd Duck Sung Tape Co., Ltd	E34833 E178516 E105147
5	Primary outer wrap	Mylar tape t=0.025 mm 2 turns 31CT or PZ280 Press board t=0.25 mm 1 sheet	Nitto Denko corp Yahua Adhesive Tape Co., Ltd Duck Sung Tape Co., Ltd Abekawa Kogyo Co., Ltd.	E34833 E178516 E105147
6	Secondary wrap	Mylar tape t=0.025 mm 2 turns 31CT or PZ280 Press board t=0.25 mm 1 sheet	Nitto Denko corp Yahua Adhesive Tape Co., Ltd Duck Sung Tape Co., Ltd Abekawa Kogyo Co., Ltd.	E34833 E178516 E105147
7	Primary cross over	Acetate tape t=0.36 mm 1 sheet	Nitto Denko corp Yahua Adhesive Tape Co., Ltd Duck Sung Tape Co., Ltd	E34833 E178516 E105147
8	Winding	Polystyrene enameled copper wire 2UEW wire	Walsin Lihwa electric wire Tai-I electric wire & cable Ta-Ya electric wire & cable	E70566 E85640 E84201
9	Core	Silicon Steel 0.5mm thickness	Kawasaki core New Nippon seitetsu Co., Ltd	
10	Blade	Nickel plated copper 1.5mm thickness US flat pin	Tonlong Corp Or others	
11	Lead wire	PRI: UL 1015 AWG#22 105°C 600V SEC: UL 1007 AWG#22 80°C 300V	Walsin Lihwa electric wire Pacific electric wire & cable Wonderful wire cable Co., Ltd	E70566 E41396 E77981
12	PC board	16mm thickness 94V-0 LS-402	Chih Hsien enterprise	E105119
13	Rectifier	1N4002 (1A 100V) or better	Qua-tron electrics industrial Master instrument corporation	
14	Resistor	1KΩ (1/4W)	Ralec electronic corp Sunlly seitetsu Co., Ltd Or equivalent	
15	LED	Color: Green 5Ø	Sanlly electronics Jyham enterprise Co., Ltd Or others	
16	Fixed screw	3.5mm × 16mm with washer 8Ø (O.D)	Ton Shell screw Co., Ltd Or others	
17	Output screw	3.5mm × 6mm	Ton Shell screw Co., Ltd Or others	
18	Case	Noryl (SE-100;PX-1005) UL94V-1 or ABS	GE plastic Chi Mei enterprise Co., Ltd	E45587 E56070
19	Name plate	0.25 mm thickness PVC	I Hong Or equivalent	



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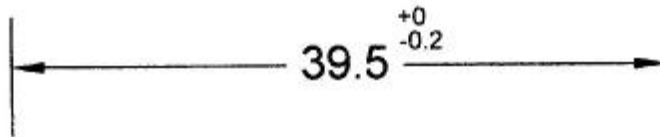


COLOR		Revised date	Revised status	Approved
UNIT				
MATERIAL				
REVISION				
Prepared by	Sean	Approved by	李宗顯	Issued date
				MAR.15.2003




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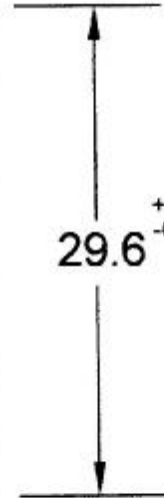


PLUG IN CLASS 2 TRANSFORMER


 LISTED 2524 E197643 CLASS 2 NOT WET CLASS 3 WET

MODEL :MGT1220
 Pri. 120VAC 60Hz 30W
 Sec. 12VAC 20VA

CAUTION
 RISK OF ELECTRIC SHOCK
 DRY LOCATION USE ONLY
 MADE IN CHINA



Background:Black
Letters:Silver

COLOR	黑底銀字	Revised date	Revised status	Approved
UNIT	mm			
MATERIAL	0.25t PVC			
REVISION				
Prepared by	<i>Sean</i>	Approved by		Issred date
				MAR.15.2003



PACKING

DRAWING NO.

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<p>INNER BOX</p>	Length	93 mm +/- 1.0mm
	Width	57 mm +/- 1.0mm
	Highness	70 mm +/- 1.0mm
	Material	Art paper 450 lbs MIN.
	Color	White
	BOX number	BOX- 4834
<p>MASTER CARTON</p>	Length	29.5 cm
	Width	29.5 cm
	Highness	14.0 cm
	Material	5 layers wave cardboard
	PCS/CTN	24 pcs
SHIPING MARKING	Main marking	Side marking

COLOR		Revised date		Revised status		Approved	
UNIT							
MATERIAL							
REVISION							
Prepared by	Sean	Approved by		Issued date	MAR.15.2003		



ELECTRONICS



Customer		Issued date	MAR.26.2003
Part NO.	MGT1220	Designed NO.	YDA-7428

ELECTRICAL TEST DATA

ITEM	SPEC	SAMPLE									
		1	2	3	4	5	6	7	8	9	10
PRIMARY EXCITING CURRENT INPUT 120V-AC 60Hz	70mA Max.	29	29	32							
PRIMARY LOAD CURRENT INPUT 120V-AC 60Hz		211	211	212							
SECONDARY#1 NO LOAD AC VOLTAGE	15VAC MAX.	14.20	14.21	14.20							
SECONDARY#1 LOAD 1.666A AC VOLTAGE	12VAC +/- 5%	11.97	12.00	12.00							
SECONDARY#2 NO LOAD VOLTAGE											
SECONDARY#2 LOAD VOLTAGE											
TEMP. RISE AFTER 4 HRS IN 25°C AMBIENT	75°C MAX.										
HI-POT TEST	PRI. TO SEC & CORE	AC 1.24 KV	OK	OK	OK						
	SEC. TO SEC & CORE	AC 0.5 KV	OK	OK	OK						

Approved by		Checked by		Test by	Allen
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