

SPECIFICATION FOR APPROVAL

CUSTOMER: JAMES

PART NO: 2236789

MODEL NO: DCU120020

DESIGNED NO: G2421 RoHS

REVISION: 1-1

CATEGORY: EI-41 REGULATED ADAPTOR

DATE SUBMITTED: 2025.09.12

SAMPLE SUBMITTED SAMPLE 0 SPECIFICATION 1	CONCLUSION		APPROVED
			REJECTED
			CONDITION APP'D

CUSTOMER'S SIGNATURE:

浩源實業有限公司
HAWK'S AIM INDUSTRIAL CO., LTD.
高雄市前鎮區新衙路 286-8 號 5F-2
5F-2, No. 286-8, Shin-Ya Road, Chien-Chen
District, Kaohsiung, Taiwan 806
Tel: 07-8418448 Fax: 07-8419997

MODEL NO: DCU120020
CUSTOMER P/N: 2236789
DESCRIPTION: EI-41 REGULATED ADAPTOR
ISSUED DATE: 2025.09.12
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REV	DESCRIPTION	DATE
1-0	INITIAL RELEASED	2017.03.15
1-1	CHANGE BOBBIN & CASE	2025.09.12

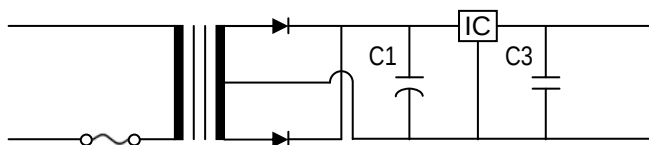
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1.0 ELECTRICAL CHARACTERISTIC:

- 1.1 INPUT RATED VOLTAGE AND LINE FREQUENCY: 120 VAC 60 Hz.
- 1.2 INPUT EXCITING CURRENT (I_o): 90 mA RMS MAX. AT INPUT 120 VAC 60 Hz.
- 1.3 INPUT LOAD CURRENT (I_P): 130 mA RMS MAX. INPUT 120 VAC 60 Hz OUTPUT FULL LOAD.
- 1.4 EMPTY LOSS: X W MAX, AT INPUT X VAC X Hz.
- 1.5 ELECTRICAL CIRCUIT:



1.6 OUTPUT RATED VOLTAGE AND CURRENT:

TEST POINT	FULL LOAD RATED VOLTAGE	RATED CURRENT	RIPPLE VOLTAGE r.m.s.	NO LOAD VOLTAGE
120V±10% 108V	12VDC±5%	200mA	X 50mV MAX.	12VDC±5%

- 1.7 D.C.RESISTANCE:PRIMARY X Ω±5%, MEASURED AT 25°C AMBIENT TEMPERATURE.
- 1.8 HI-POT TEST: 1240 VAC 50/60HZ FOR 60 SECONDS BETWEEN INPUT TO OUTPUT PLUG AND CASE NORMAL PERFORMANCE. (LEAKAGE CURRENT 1mA)
- 1.9 INSULATION RESISTANCE TEST: 500 VDC SUPPLIED, 100 MΩ MIN, BETWEEN INPUT TO OUTPUT PLUG AND CASE.
- 1.10 TEMPERATURE RISE TEST: INPUT 120 VAC 60 Hz, OUTPUT LOAD 0.2 A FOR INPUT COIL 75 °C MAX (BY USE RESISTANCE METHOD) ON CASE SURFACE X °C MAX (BY USE THERMOMETER METHOD) AT 25°C AMBIENT TEMPERATURE.
- 1.11 HUMIDITY TEST: IN AN AMBIENT TEMPERATURE 40±2 °C AND 90-95 % R.H FOR 4 HOURS, AFTER 10 MINUTES OUT OF THE OVEN, THE UNIT SHOULD MEET ITEM 1.8 REQUIREMENTS, AND INSULATION RESISTANCE SHALL BE 10M OHMS MIN.

2.0 MECHANICAL PERFORMANCE:

- 2.1 STRAIN RELIEF TEST: AT NORMAL POSITION, 20 LBS TO OUTPUT CORD FOR 60 SECONDS EACH, THERE SHALL BE NO BREAKAGE DISPLACEMENT.
- 2.2 DROP TEST: DROPPED FREELY FROM 3 FEET HEIGHT ONTO A CONCRETE FLOOR COVERED WITH 1/8 INCH VINYL TILE 3 TIMES FROM 3 DIFFERENT SURFACE THE UNIT SHOULD MEET THE ITEM 1.8 、1.9.

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- 2.3 BENDING TEST: THE PLUG AND S/R SHOULD WITHSTAND WEIGHT OF 200 GRAM, IT SWINGING FROM LEFT TO RIGHT AT AN ANGLE OF 120 DEGREE FOR 300 CYCLES, AND 15-20 CYCLES PER MINUTE, THE CORD SHALL BE CONDUCTIBLE.

3.0 SAFETY STANDARD:

☒UL/CUL ☐GS ☐CE ☐PSE ☐BSMI

4.0 APPEARANCE REQUIREMENTS:

- 4.1 APPEARANCE: DAMAGE AND RUSTING ARE NOT PERMITTED.

5.0 ENVIRONMENTAL CONDITION:

- 5.1 OPERATING TEMPERATURE RANGE: -10°C ----- +40°C
5.2 STORAGE TEMPERATURE RANGE: -20°C ----- +55°C
5.3 OPERATING HUMIDITY RANGE: 30-85% R.H.

6.0 INSPECTION ON LINE:

- 6.1 THE TEST ITEMS FOR EACH PRODUCE.

◇ PRIMARY EXCITING CURRENT
◇ CORE LOSS
◇ OUTPUT VOLTAGE
◇ INPUT CURRENT AND POWER AT RATED LOAD
◇ FOREIGN MASS BY SHOCK
◇ POLARITY OF OUTPUT PLUG
◇ HI-POT TEST
◇ APPERANCE

- 6.2 THE TEST ITEM FOR PART OF PRODUCTS.

◇ HUM OPERATING AT RATED LOAD
◇ D.C.RESISTANCE
◇ INSULATION TEST

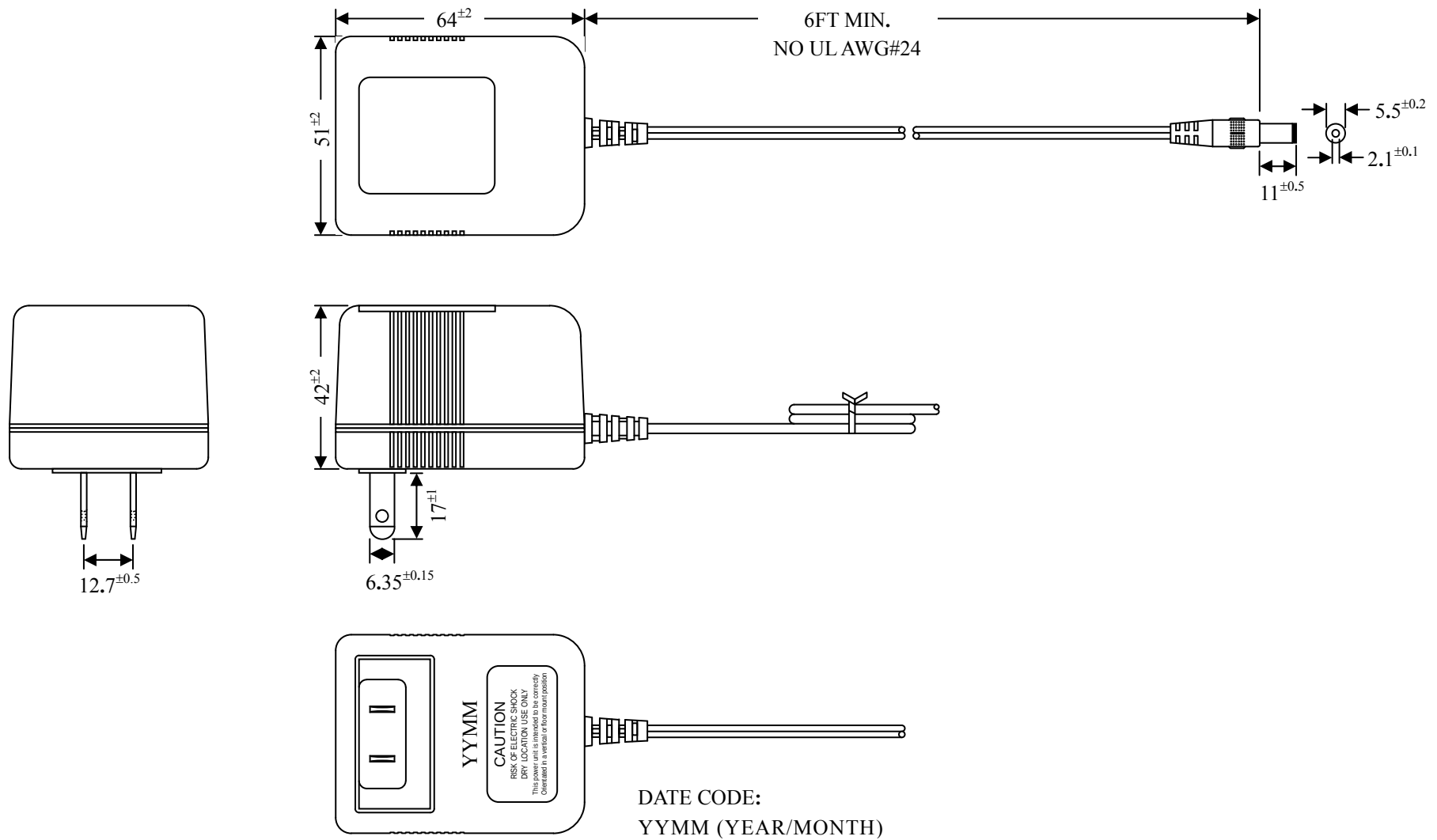
- 7.0 NET WEIGHT: 226.5 g

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8.0 APPEARANCE DIMENSIONS: (UNIT:mm)

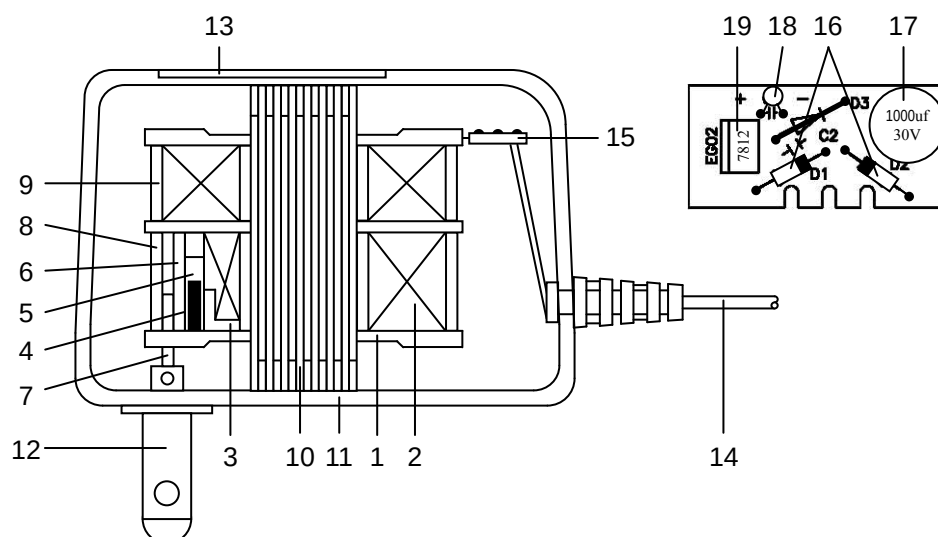


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9.0 MATERIAL LIST:



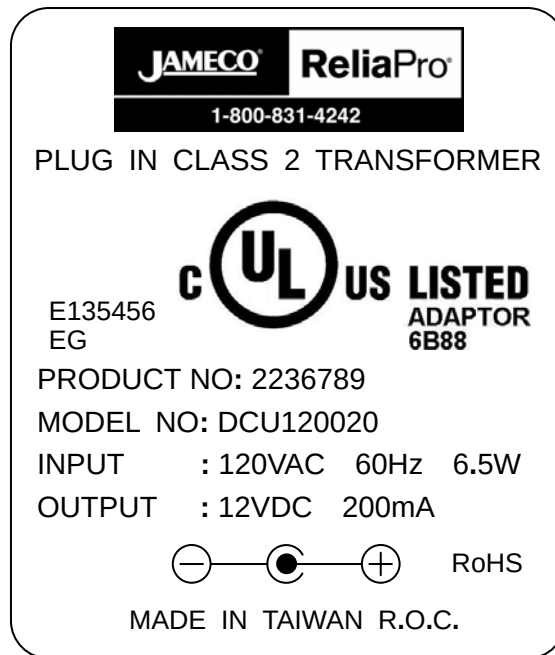
NO.	DESCRIPTION	MATERIAL	SPEC. & Q'TY	MANUFACTURE
1	BOBBIN	POLYAMIDE 66 (PA66) N200SL (E88637)		GRAND PACIFIC PETROCHEMICAL CORP JENG SHINN INDUSTRIAL CO.
2	ENAMELED WIRE	POLYURETHANE ENAMELED COPPER WIRE (E247604) WIRE (E85640(S))		FU CHUN SHIN MACHINERY MFR CO., LTD. MANUFACTURE CO., LTD. TAI-L ELECTRIC WIRE & CABLE CO., LTD.
3	PRIMARY CROSSOVER	ACETATE CLOTH TAPE	0.17mm(2P)	CHYUN YIH TAPE CO., LTD.
4	THERMAL CUTOFF	L20 (E142267) A2-F(E140847)	115°C 115°C	JOINT FORCE METAL RESEARCH & CO.,LTD. AUPO ELECTRONICS LTD.
5	INSULATION BETWEEN PRIMARY WINDING & THERMAL CUTOFF	ACETATE CLOTH TAPE	0.17mm(2P)	CHYUN YIH TAPE CO., LTD.
6	INSULATION BETWEEN PRIMARY WINDING & LEAD CONNECTION	POLYESTER FILM TAPE (E81174(S))	0.05mm(4T)	QUN YI TAPE (DONGGUAN) CO., LTD. CHYUN YIH TAPE CO., LTD.
7	PRIMARY LEAD WIRE	UL 1015 AWG#22 (E193578)		REI HSING ELECTRIC WIRE AND CABLE CO., LTD.
8	PRIMARY OUTER WRAP	POLYESTER FILM TAPE (E81174(S)) PRESS BOARD	0.025mm(2T) 0.25mm(1P)	QUN YI TAPE (DONGGUAN) CO., LTD. CHYUN YIH TAPE CO., LTD. ABEKAWA KOGYO CO., LTD.
9	SECONDARY OUTER WRAP	POLYESTER FILM TAPE (E81174(S)) PRESS BOARD	0.025mm(2T) 0.25mm(1P)	QUN YI TAPE (DONGGUAN) CO., LTD. CHYUN YIH TAPE CO., LTD. ABEKAWA KOGYO CO., LTD.
10	CORE	SILICON STEEL	0.5mm	KUO GEE INDUSTRIAL CO., LTD.
11	ENCLOSURE	NORYL SE100X (E161759)		SABIC INNOVATIVE PLASTICS CHINA CO., LTD. HWA YUE LTD.
12	PRIMARY BLADES	NICKEL PLATING		SPREAD PROFIT ELECTRONIC (DONG GUAN) CO., LTD.
13	NAMEPLATE	PLASTIC FILM	0.2mm	GUANG MING YOU TONG PRINTING FACTORY
14	OUTPUT CORD	FLEXIBLE CORD	AWG#24 NO UL	WU LI ELECTRIC WIRE & CABLE CO., LTD. MING SHENG ENTERPRISE CO., LTD. LU HER WIRES & CABLE CO., LTD.
15	RECTIFIER BOARD	P.C.B.(E105119) P.C.B.(E310297)	94V-0	CHIH HSIEN ENTERPRISE CO., LTD. TOP HILL ELECTRONICS CO., LTD.
16	DIODES	1N4001---7		MASTER INSTRUMENT CORPORATION SHANGHAI LTD.
17	CAPACITOR	C1:1000uf/30V		FUH YIN ELECTRONICS CO., LTD.
18	CERAMINC CAPACITORS	C3:104pf/50V		JYH CHUNG ELECTRONIC CO., LTD. HONG WEI ELECTRONICS CO., LTD.
19	IC	7812		STMicroelectronics

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10.0 NAMEPLATE DRAWING: (UNIT:mm)



- 1.MATERIAL: Plastic Film
- 2.THICKMESS: 0.2
- 3.PRINTING:WORD:BLACK / BACKGROUND: SILVER

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