

* PLUG EL - 451A CERTIFICATE :



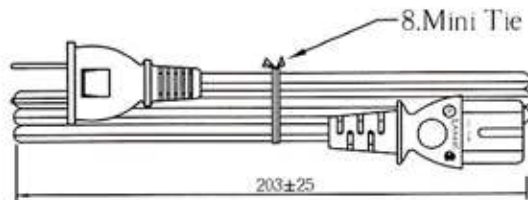
* NOTES :

- 1). PLUG : EL - 451A NEMA I-15P COLOR BLACK IPC.
UL FILE NO. E88446
- 2). CABLE : SPT-2 18AWG x 2C 60° C BLACK IPC.
UL FILE NO. E162604
MARKING : (UL) SPT-2 E162604 2x18AWG(0.824mm²) VW-1 60°C 300V
CHING CHENG CSA TYPE LL61597 SPT-2 2x0.824mm²
(18AWG) 75°C 300V FT2
- 3). CONNECTOR : EL-713A COLOR BLACK IPC.
UL FILE NO.E88446

* CONNECTOR : EL-713A CERTIFICATE :



NO	NAME	MATERIAL LIST	QTY	UNIT	REMARK
1	BLADE	EL-451A	2	PCS.	RoHS COMPLIANCE
2	HOOD	YMC3-22B	1	PCS.	RoHS COMPLIANCE
3	PLUG BODY	PVC COMPOUND : CC-9DP-40P COLOR BLACK UL FILE E26289	15	G.	RoHS COMPLIANCE
4	CABLE	SPT-2 18AWGX2C 60 °C COLOR BLACK	1830	mm.	RoHS COMPLIANCE
5	CONNECTOR	PVC COMPOUND : CC-9DP-50P COLOR BLACK UL FILE E26289	23	G.	RoHS COMPLIANCE
6	TERMINAL	CODE : EL-713A	2	PC.	RoHS COMPLIANCE
7	HOOD	CODE : 713	1	PC.	RoHS COMPLIANCE
8	MINI TIE	COLOR BLACK	1	PC.	RoHS COMPLIANCE



REVISION	DATE	DESCRIPTION	CHECK
3	22-01-2020	Add Marking Ⓢ on EL-713A plug	
2	01-02-2019	Part no. 451713CT286 Change to 451A713AT286	
1	24-01-2019	1.Add Marking Ampere 10A 125V on EL-451A plug 2.Delete Lable MAX.10A 125V on cable.	

APPROVED BY

CHECKED BY

DRAWING BY

CUSTOMER NUMBER

FACTORY NUMBER

AC15WNA(1)R

EL-451A+ EL-713A

Signature 22 JAN 2020

Signature 22-Jan-20

Signature 22-Jan-20



CUSTOMER : .PHIHONG

TYPE : POWER CORD

UNIT : mm.

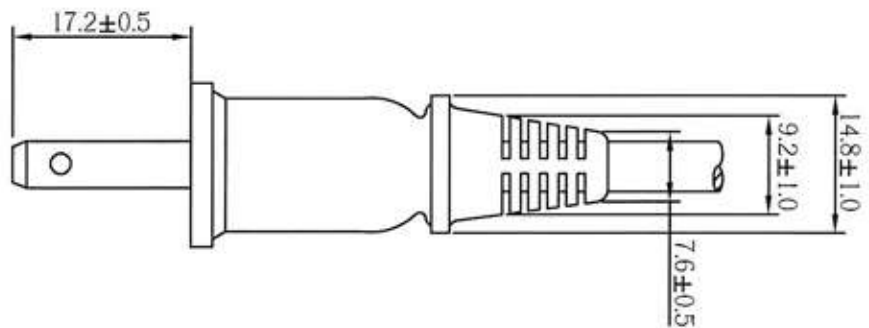
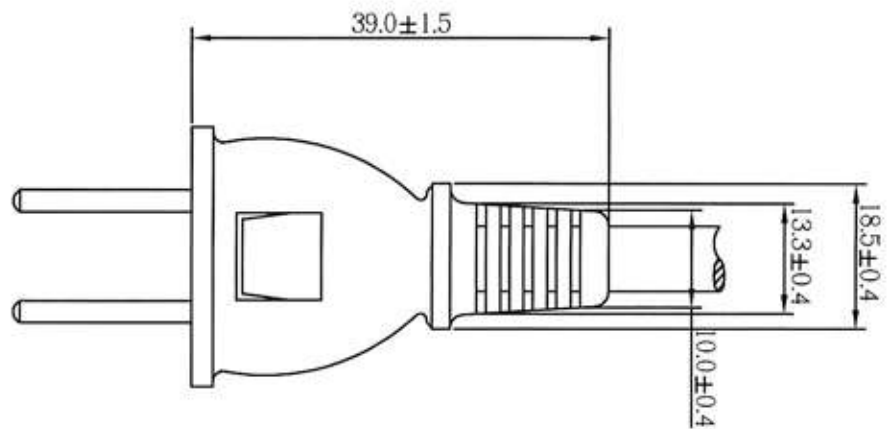
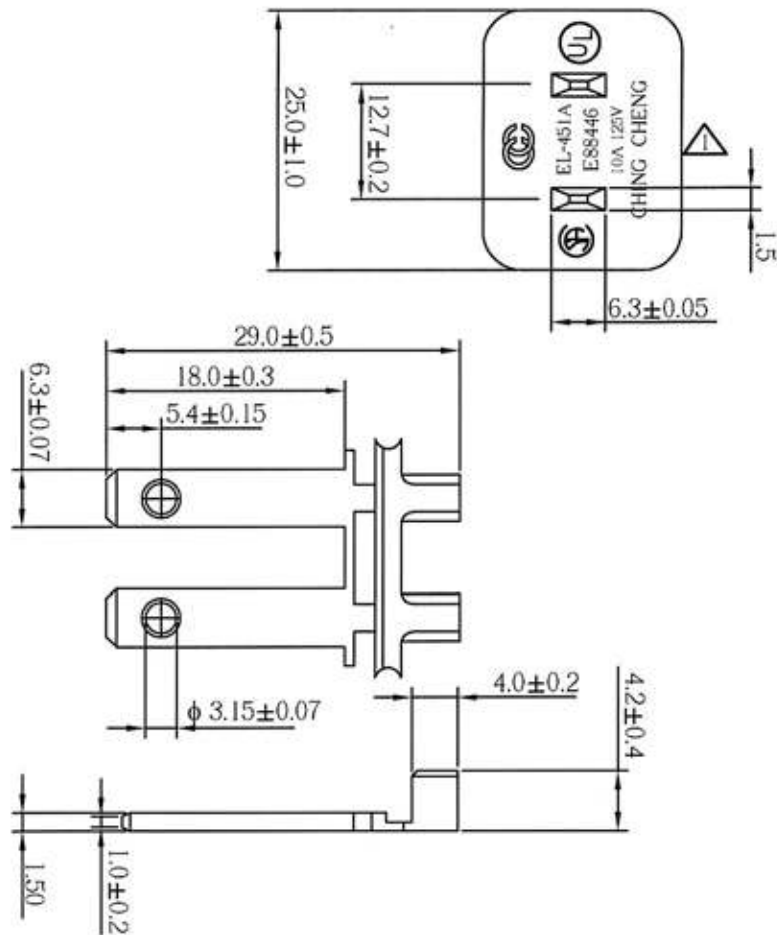
Date : Jan 22.,2020

SCALE :

CHECK

REV : 03

CHING CHENG WIRE MATERIAL (THAILAND) CO.,LTD.

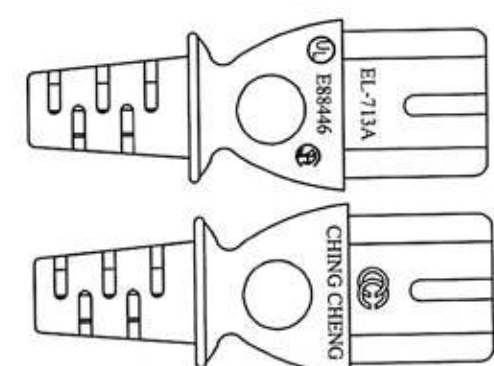
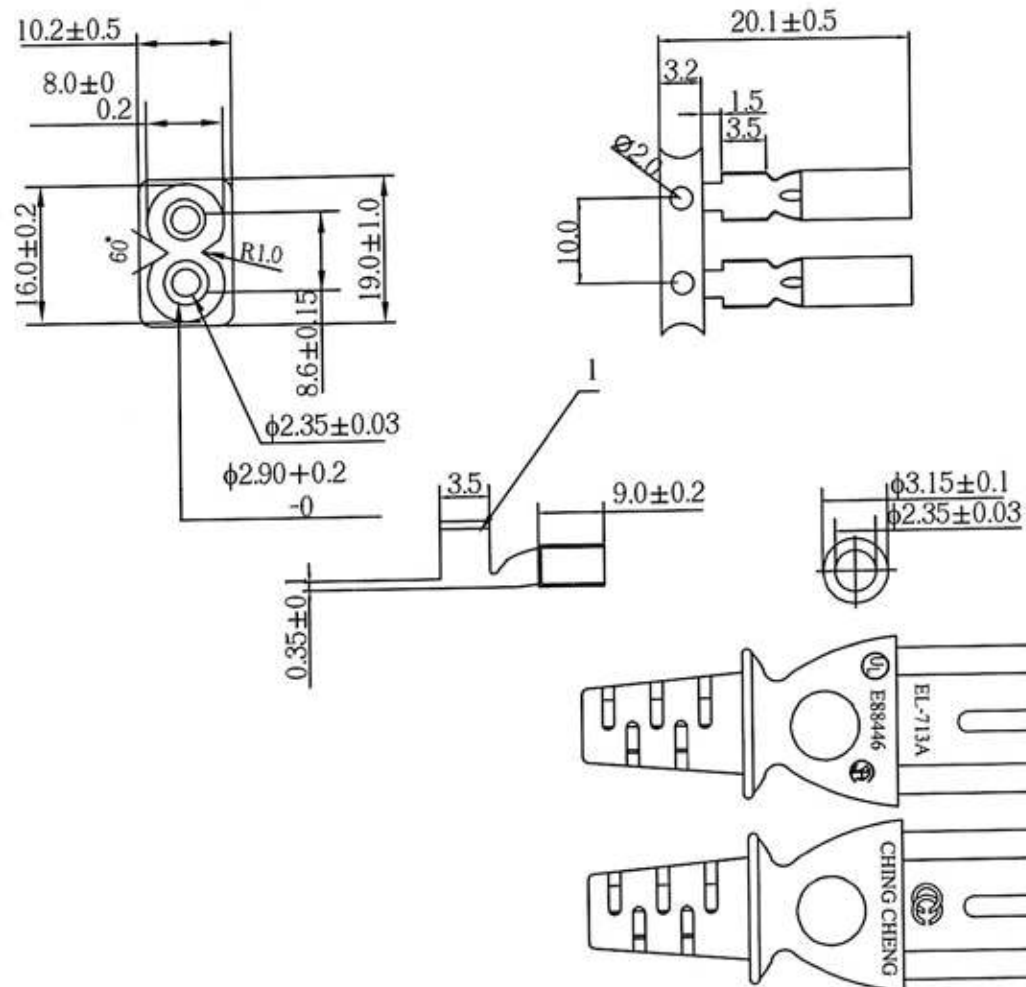
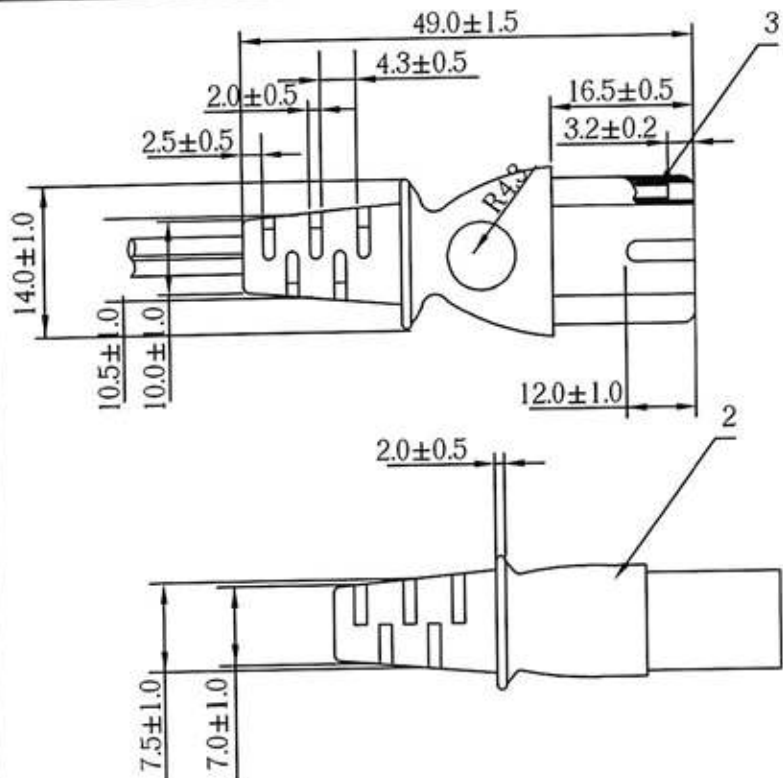


- *NOTE :
- 1). PLUG EL-451A
TERMINAL : EL-451A
BRASS/NICKEL
 - 2). HOOD 451A : YMC3-22B
 - 3). PVC BODY : CC-9DP-50P
COLOR BLACK

PLUG INJECTION TOLERANCES :	
10.0 BELOW	± 0.2
10.1 – 20.0	± 0.3
20.1 – 30.0	± 0.4
30.1 – 40.0	± 0.5

	24-01-2019	Add Marking Ampere 10A 125V on EL-451A plug.	
REVISION	DATE	DESCRIPTION	CHECK
CUSTOMER:LinVox	APPROVED BY		25 JAN 2019
DWG. NO. : EL-451A	CHECKED BY		25-Jan-19
	DESIGNED BY		
	DRAWING BY		
SCALE :	DATE : Nov 14,2018	PART NO	
UNIT : mm.			
	CHING CHENG WIRE MATERIAL (THAILAND) CO.,LTD.		





NOTES:

- 1). CONNECTOR :EL-713A
UL FILE NO.E88446
Will Follow IEC 60320/C7 and Testing requirement will be follow
UL 817 Precisely.
TERMINAL : EL-713A
- 2). PVC BODY : CC-8DP-50P COLOR BALCK
UL FILE E202490
- 3). HOOD

PLUG INJECTION
TOLERANCES :

10.0 BELOW	± 0.2
10.1 - 20.0	± 0.3
20.1 - 30.0	± 0.4
30.1 - 40.0	± 0.5

CUSTOMER:LinVox	APPROVED BY	
DWG. NO. : EL-713A	CHECKED BY	
	DESIGNED BY	
	DRAWING BY	
	DATE : Nov 14,2018	PART NO: EL - 713A

SCALE : UNIT : mm. CHING CHENG WIRE MATERIAL (THAILAND) CO.,LTD.

CHING CHENG WIRE MATERIAL (THAILAND) CO.,LTD.

SPECIFICATION

1). SCOPE:
 THIS SPECIFICATION IS APPLIED TO MEET UL AND CSA REQUIREMENT FOR SAFETY THE POWER SUPPLY CORD CONFORMING TO UL AND CSA REGISTERIED. REFERENCE STANDARD :
 UL NO. : 62,498,817
 CSA NO.: C22.2 ,NO 21,42,49
 FILE NO.
 UL : E88446 ,E162604
 CSA : LR57248 , LL61597

2). CONSTRUCTION AND DIMENSIONS:
 IN ACCORDINGWITH THE FOLLOWING TABLES AND ATTACHED DRAWING:

TABLE 1

	CAT NO.	RATING		APPROVED NO.
		A	V	
ATTACHMENT PLUG CAP	EI-451A			UL & CSA
CONNEDTOR BODY	EL-713A			UL & CSA
PVC FLEXIBLE CORD	SPT-2 18AWG x 2G 60°C	10	300	UL & CSA

TABLE 2

	UL	CSA	MANUFACTURER
ATTACHMENT PLUG CAP	E88446	LR-57248	CHING CHENG
CORD	E162604	LL61597	CHING CHENG
PVC FLEXIBLE CORD	E202490		UL & CSA

TABLE

CONDUCTOR		PVC JACKET			TEMP RATING	
NOMINAL AREA	CONSTRUCTION	MIN.THICK	AVG.THICK	OD	°C	
18 /2	PCS/mm	mm	mm	mm	UL	CSA
	41 /0.16±0.005	1.02	1.14	3.5x6.9±0.10	60	75

2-1. CABLE MARKING : SPT-2 18AWGX2C 60°C 300V

(UL) SPT-2 E162604 2X18AWG(0.824mm²) VW-1 60°C 300V CHING CHENG

CSA TYPE LL61597 SPT-2 2x0.824mm²(18AWG) 75°C 300V FT2

3). CHARACTERISTIC :

3-1. INSULATION RESISTANCE :

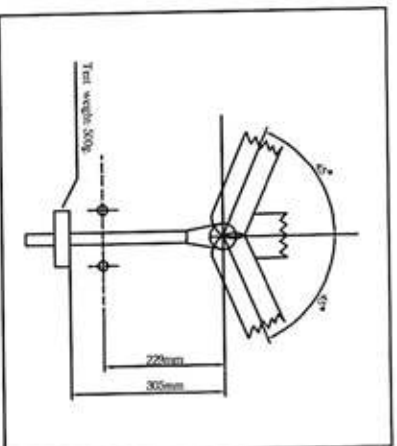
THE INSULATION RESISTANCE SHALL BE NOT LESS 100 MEGAOHMS MEASURE BY MAGEETO MEGAOHMS METER WHICH HAS OPEN- CIRCUIT OUTPUT OF 500 VDC AT TERPERATURE OF 25° C.

3-2. DIELECTRIC STRENGTHH :

THE PLUG OR CONNECTOR SHALL BE CAPABLE OF WITHSTANDING 2000 V AC AND CUT-OFF CURRENT MAX. 1 mA. FOR EACH CONNECTOR WITHOUT BREAKDOWN FOR A PERIOD OF 1 MIN.

3-3. BENDING TEST :

THE SPECIMEN SHALL BE CAPABLE OF WITHSTANDING APPLY 2500 TIMES AND BENDING TO 45° C OF RIGHT AND LEFT-HAND SIDE WITH A RATE OF APPROXIMATE 30 TIME PER MINUTE AND CORD SHALL BE APPLIED A WEIGHT OF 0.5 Kgs. AFTER THIS TESTED THE SPECIMEN SHALL NOT DAMAGE.



3-4 MOISTURE RESISTANCE :

PUT SPECIMEN INTO A HUMIDITY CABINET CONTAINING AIR WITH A RELATIVE HUMIDITY MAINTAINED BETWEEN 91% AND 95% THE TEMPERATURRE OF 40° C ± 2 FOR 168 HOURS. AFTER THIS TESTED THE SPECIMENS SHALL NOT DAMAGE.

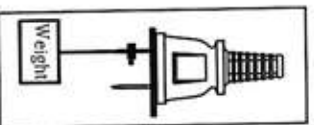
3-5 HEAT RESISTANCE :

KEEP SPECIMEN AT 100° C ± 2 CIRCULATING OVEN FOR 1 HOURS. THE SPECIMENS IS CLAMPED BETWEEN STEEL JAWS HAVING A CYLINDRICAL FACE OF 25 mm RADIUS A WIDTH OF 15 mm AND A LENGTH OF 50 mm. THE CORNER ARE ROUNDED WITH A RADIUS OF 25 mm. THE SPECIMEN IS CLAMPED IN SUCH A WAY THAT THE JAWS PRESS AGAINST IT IN THE AREA WHERE IT IS GRIPPED IN NORMAL USD. THE CENTER LINE OF THE JAWS. AFETR JAWS ARE REMOVED AND THE SPECIMEN SHALL SHOW NOT DAMAGE WITHIN THE MEANING OF THIS STANDARD.

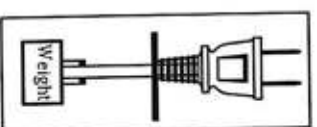
3-6 SECURITY OF BLADES :

- 3-6-1. ON THE BLADES & CONNECTORS, EACH BLADE SHALL BE CAPABLE OF WITHSTANDING A PULL OF 20 LBS FOR 2 MINUTES, CAN NOT BREAKING.
- 3-6-2. ON BLADES & MOULDING, EACH BLADE SHALL BE CAPABLE OF WITHSTANDING A PULL OF 20 LBS FOR 2 MINUTES, BLADE CAN NOT PULL OVER 2.4 mm.
- 3-6-3. ON BLADE & MOULDING, EACH WIRE SHALL BE CAPABLE OF WITHSTANDING A PULL OF 30 LBS FOR 2 MINUTES NO DIFFERENCE.
- 3-6-4. SECURITY OF BLADES TSETED :
THE FITTINGS SHALL BE SECURITY SUPPORTED BY A FLAT MOUNTED HORIZONTALLY, A STRAIGHT PULL OF THE SPECIMEN WEIGHT SHALL BE APPLIED FOR A SPECIMEN TIMES.
* AT AFTER, A PULL SHALL BE APPLIED TO EACH POLARIZE BLADE INDEPENDENTLY AND THE BOTH BLADES AT ONCE.

Between an attachment
Plug and Blade



Between an attachment
Plug and Flexible cord.



- 3-7. ABRUPT :
EACH CORD SET OF POWER SUPPLY CORD SHALL BE OF WITHSTANDING ABRUPT STRIKING STEEL YARD WEIGHT 3 LBS ON THE WIRE IN 10 INCH ABRUPT PULL 20 TMS, CAN NOT BREAKOUT.

- 3.8. FLAMMABILITY BY VW-1 :
A VERTICAL SPECIMEN OF THE FINISHED WIRE SHALL NOT BE FLAMED LONGER THAN 1 MINUTE, FOLLOWING FIVE 15 SEC. APPLICATION OF FLAME. THE PERIOD BETWEEN APPLICATION IS : (1) 15 SEC. IF THE SPECIMEN FLAMED CEASES WITHIN 15 SEC. OR (2) THE DURATION OF THE SPECIMEN FLAME, IF THE SPECIMEN FLAMED PERSISTS LONGER THAN 15 SEC. THE SPECIMEN SHALL NOT IGNITE COMBUSTIBLE MATERIALS IN ITS VICINITY OR DAMAGE MORE THAN 25% OF THE INDICATOR GLAG DURING BETWEEN OR AFTER APPLICATION.

4). APPEARANCE :
IT SHALL NOT SHOW DAMAGES ON THE SURFACE OF THE PLUG AND
CONNECTOR OR FLEXIBLE CORD.

- 5). ALL CORD SHALL BE TESTER 100% TO THE FOLLOWING TESTS :
1. GROUND INTEGRITY TES.
 2. CONTINUITY & POLARITY TEST.
 3. DIELECTRIC STRENGTH OF PLUG / CONNECTOR TEST.