

## 變頻器輸出側三相正弦波電抗濾波器(歐規)(OSW-R)

Inverter Output side Sine Wave of the reactance filter for 3-phase Motor Drives ( OSW-R )  
all-purpose filters to protection Class B , with high symmetrical and asymmetrical insertion loss and  
low leakage current ,conform to IEC 60950 and IEEE519-1992

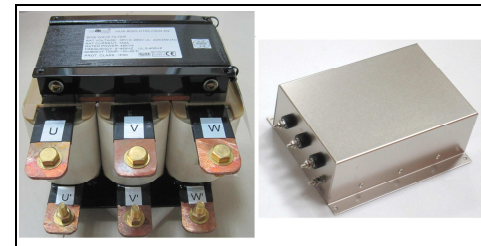
220~480VAC 50/60HZ  $\theta_a$  40°C **CE** LVD (2006/95/EC)  
1.1KW~630KW EMC (2004/108/EC)

Inverter Output side Sine Wave of the reactance filter is a low pass filter can inhibit the inverter switching frequency component and eliminating nearly sine wave phase inverter output voltage, which can reduce the insulation voltage of the motor coil and the resulting bearing current. Extend the cable from the motor and the inverter Distance ( $150M \leq D \leq 2000M$ )

變頻器輸出側正弦波電抗濾波器是一種低通濾波器它能抑制變頻器開關頻率分量並消除變頻器接近正弦波的相間輸出電壓,這樣可以減少馬達線圈的絕緣電壓和產生的軸承電流.延長馬達與變頻器纜線距離D ( $150M \leq D \leq 2000M$ )

The OSW-R series of sine wave filter provides:

- Motor noise free operation.
- Motor normal working operation.
- Extend motor repair cycle.
- Prevent premature aging of the motor coil insulation.
- more efficient use of the capacity of the power system.
- Prevent motor coil winding is the peak voltage breakdown.
- Extend the cable from the motor and the inverter Distance( $150M \leq D \leq 2000M$ )
- meet IEEE519 specification and other power quality standards.
- When you run the application increased equipment life and reliability of the system.
- Any type of power electronic devices with the front end of the six-pulse rectifier load energy efficiency.



本 OSW-R 系列正弦波濾波器提供：

- 馬達無噪音運行。
- 馬達正常工作運行。
- 延長馬達維修周期。
- 防止馬達線圈絕緣過早老化。
- 更有效率的使用電力系統的容量。
- 防止馬達線圈繞組被峰值電壓擊穿。
- 延長馬達與變頻器纜線距離 D( $150M \leq D \leq 2000M$ )
- 符合 IEEE519 規範和其他電源品質標準。
- 在執行應用程式時增加設備的使用壽命和系統的可靠性。
- 任何類型的電力電子設備與前端六脈衝整流器之負載提供節能效率。

# SPECIFICATION

Test Voltage (3 sec) : L to E 3000VAC/2250VDC  
L to L 2000VDC

Insulation Resistance : L to E  $\geq 3000M\Omega$   
L to L  $\geq 2000M\Omega$

Current reduction above 40°C

ambient temperature:  $I = I_n \sqrt{(85-\theta)/45}$

$\theta$  = operating temperature

**馬達與變頻器間距 D:400M 以下**

濾波器/規格&型號&尺寸

RAT VOLTAGE: 3PH 220VAC+10% ~ 480VAC+10%

Motor to Inverter Distance( $150M \leq D \leq 400M$ )

General purpose four-pole (1500r/min) induction motor rated 440VAC/60Hz

FREQUENCY: 0~450HZ UL:0~400HZ

PROT. CLASS : IP00

TYPE	In @ $\delta a 40^{\circ}C$ 60Hz [ A ]	Umax 50/60Hz [ V ]	Overload Current	TYPICAL MOTOR DRIVE RATING [ KW ] (220V) ( 440V)		Capacitanc e connection	MIN. SWITCHING FREQUENCY [ KHZ ]	Temperature Range -25~+150°C Rise [ °C ]	Fig
HUA-9010-0510-OSW-R□	3×5	220±10%  TO  480±10%	1.2×In 1 min. per hour	1.1	2.2	Δ	4	≤ 50	A
HUA-9010-0810-OSW-R□	3×8			2	4	Δ	4	≤ 50	A
HUA-9010-1010-OSW-R□	3×10			2.75	5.5	Δ	4	≤ 50	B
HUA-9010-1510-OSW-R□	3×15			3.75	7.5	Δ	4	≤ 50	B
HUA-9010-2010-OSW-R□	3×20			5.5	11	Δ	4	≤ 50	C
HUA-9010-2510-OSW-R□	3×25			7.5	15	Δ	4	≤ 50	C
HUA-9010-3010-OSW-R□	3×30			9.25	18.5	Δ	4	≤ 50	D
HUA-9020-4010-OSW-R□	3×40			11	22	Y	4	≤ 50	D
HUA-9020-5010-OSW-R□	3×50			15	30	Y	4	≤ 50	E
HUA-9020-6010-OSW-R□	3×60			15	30	Δ	3	≤ 50	E
HUA-9020-8010-OSW-R□	3×80			18.5	37	Δ	3	≤ 50	E
HUA-9020-9010-OSW-R□	3×90			22.5	45	Δ	3	≤ 50	F
HUA-9020-H110-OSW-R□	3×110			27.5	55	Δ	3	≤ 50	F
HUA-9020-H150-OSW-R□	3×150			37.5	75	Δ	3	≤ 50	F
HUA-9020-H180-OSW-R□	3×180			45	90	Δ	3	≤ 50	F
HUA-9020-H210-OSW-R□	3×210			55	110	Δ	3	≤ 50	G
HUA-9020-H270-OSW-R□	3×270	66	132	Δ	3	≤ 50	G		

馬達與變頻器間距 D:2000M 以下

濾波器/規格&型號&尺寸

RAT VOLTAGE: 3PH 380VAC+10% ~ 480VAC+10%

Motor to Inverter Distance(400M ≤ D ≤ 2000M)

General purpose four-pole (1500r/min) induction motor rated 500VAC/60Hz

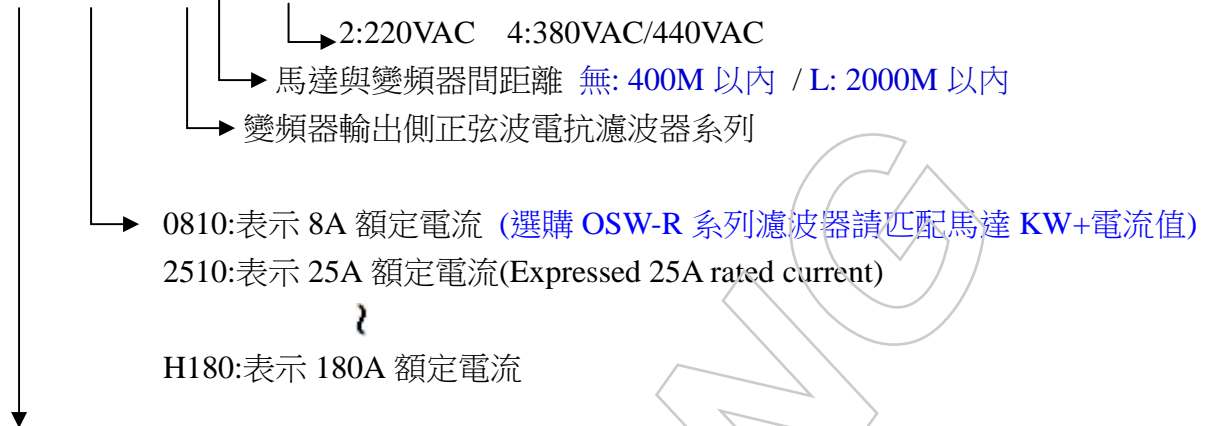
FREQUENCY: 0~450HZ UL:0-400HZ

PROT. CLASS : IP00

TYPE	In @δa40°C 60Hz [ A ]	Umax 50/60Hz [ V ]	Overload Current	TYPICAL MOTOR DRIVE RATING [ KW ]	Capacitance connection	MIN. SWITCHING FREQUENCY [ KHZ ]	Temperature Range -25~+150°C Rise [ °C ]	Fig
HUA-9010-0610-OSWL-R□	3×6	380±10 % TO 480±10 %	1.2×In 1 min. per hour	1.1~1.5	Y	4	≤ 50	A
HUA-9010-0810-OSWL-R□	3×8			2.2~3	Y	4	≤ 50	A
HUA-9010-1010-OSWL-R□	3×10			4	Y	4	≤ 50	B
HUA-9010-2010-OSWL-R□	3×20			5.5~7.5	Y	4	≤ 50	B
HUA-9010-2510-OSWL-R□	3×25			11	Y	4	≤ 50	C
HUA-9020-4010-OSWL-R□	3×40			15~18.5	Y	4	≤ 50	C
HUA-9020-5010-OSWL-R□	3×50			22	Y	4	≤ 50	D
HUA-9020-6410-OSWL-R□	3×64			30	Y	3	≤ 50	D
HUA-9020-8010-OSWL-R□	3×80			37	Y	3	≤ 50	E
HUA-9020-H125-OSWL-R□	3×125			44~55	Δ	3	≤ 50	E
HUA-9020-H180-OSWL-R□	3×180			75~90	Δ	3	≤ 50	E
HUA-9020-H300-OSWL-R□	3×300			110~132	Δ	3	≤ 50	F
HUA-9020-H450-OSWL-R□	3×450			160~200	Δ	3	≤ 50	F
HUA-9020-H500-OSWL-R□	3×500			250	Δ	3	≤ 50	F
HUA-9020-H700-OSWL-R□	3×700			315~355	Δ	2	≤ 50	F
HUA-9020-H750-OSWL-R□	3×750	400	Δ	2	≤ 50	F		
HUA-9020-H900-OSWL-R□	3×900	400~500	Δ	2	≤ 50	F		
HUA-9020-H1200-OSWL-R□	3×1200	560~630	Δ	2	≤ 50	F		

## Order Types (訂購型號說明)

型號:HUA - □ - □ - OSW□-R □



9010:表示 30A 以下額定使用電流 (9010: The following indicates 30A rated current use )

9020:表示 30A 以上額定使用電流 (9020: that the use of current above 30A rated)

PS:選用 OSW-R 濾波器請匹配馬達 **KW** 值為主要考量(特殊電流值皆可訂製)

**Select OSW-R filter Please match the motor current value as the main consideration  
 (Optional OSW-R series of filters, please match motor KW value)  
 (Special current value can be OEM)**

EX: 馬達與變頻器間距離( $150M \leq D \leq 400M$ )

HUA-9020 -8010-OSW-R4 使用於 37KW/480VAC 馬達

EX: Motor to Inverter Distance( $150M \leq D \leq 400M$ )

HUA-9020 -8010-OSW-R4 for use in motor 37KW/480VAC

EX: 馬達與變頻器間距離( $400M \leq D \leq 2000M$ )

HUA-9020 -H125-OSWL-R4 使用於 55KW/480VAC 馬達

EX: Motor to Inverter Distance( $400M \leq D \leq 2000M$ )

HUA-9020 -H125-OSWL-R4 for use in motor 55KW/480VAC

注意: (note)

避免電抗器發燙

訂購使用時建議訂購加大一級額定產品

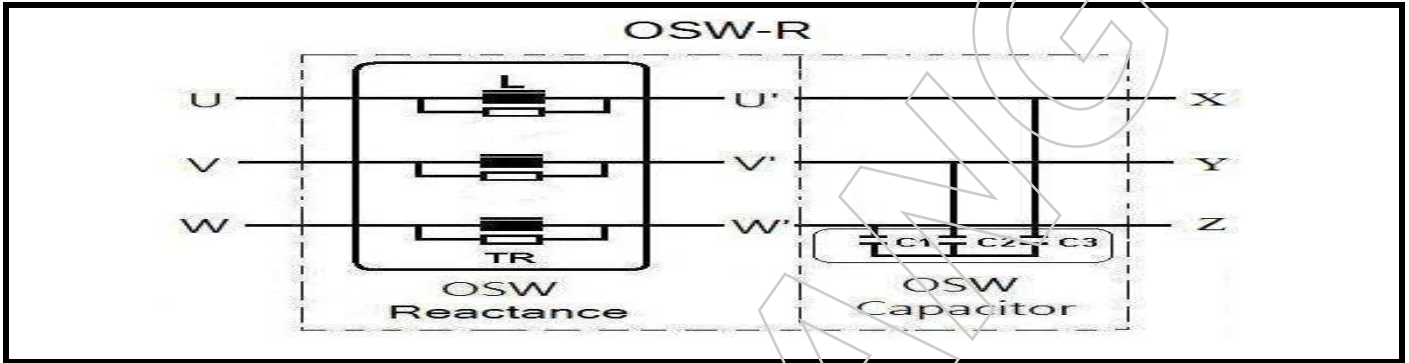
To avoid the reactor hot.

When ordering, it is recommended to order an additional rated product.

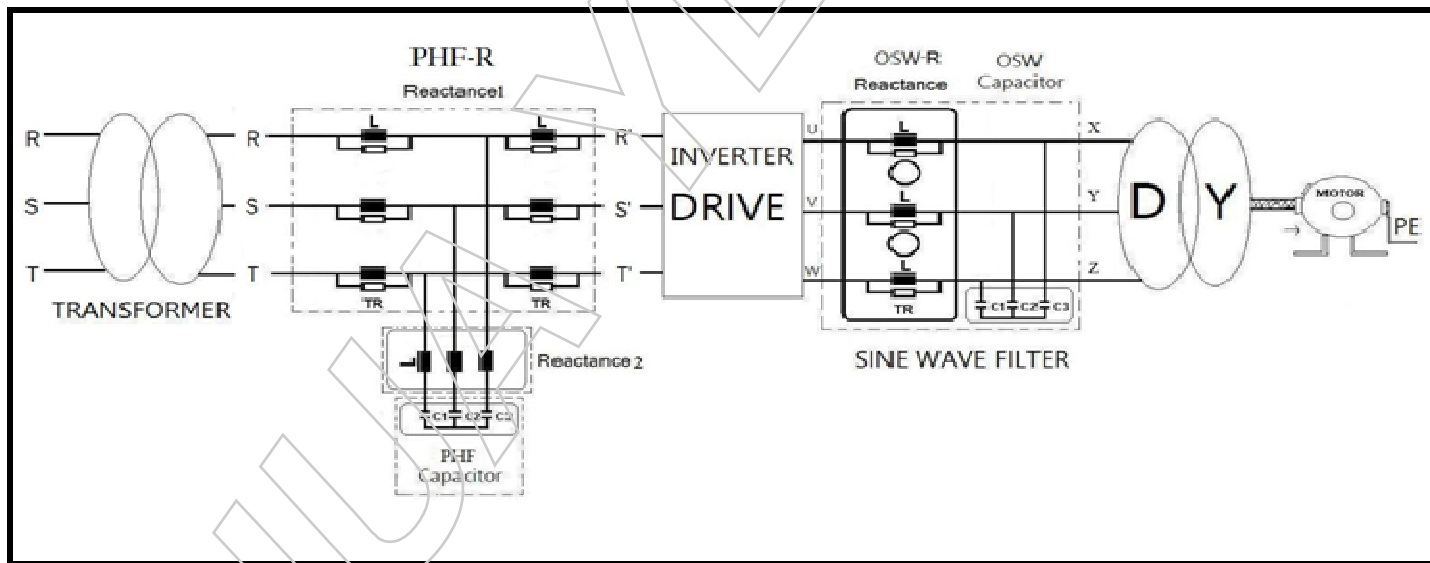
此 OSW-R 變頻器輸出側正弦波濾波器,請安裝時務必確實按照標準接地安裝.

The output sine wave filter of this OSW-R inverter must be installed according to the standard ground.

**Circuit Diagram (電路圖)**



**Installation location (安裝接線位置圖)**



**Dimension (外形尺寸圖) 參考用-實際尺寸以出貨產品尺寸為準**

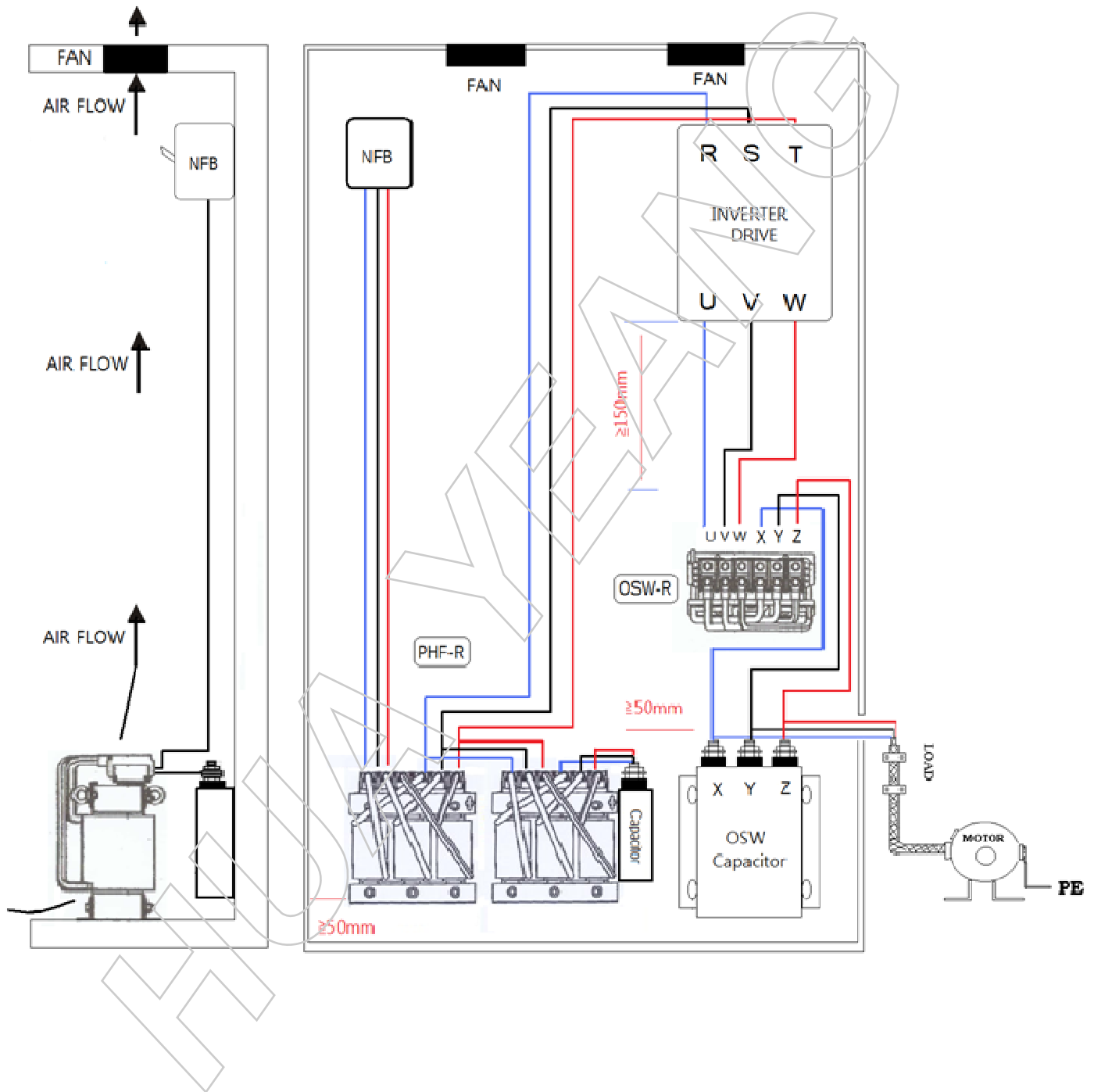
Dimension (Dimensional Drawing) Reference - Actual dimensions are subject to shipping

確認訂購時將提供正確(電抗器+電容組)尺寸圖

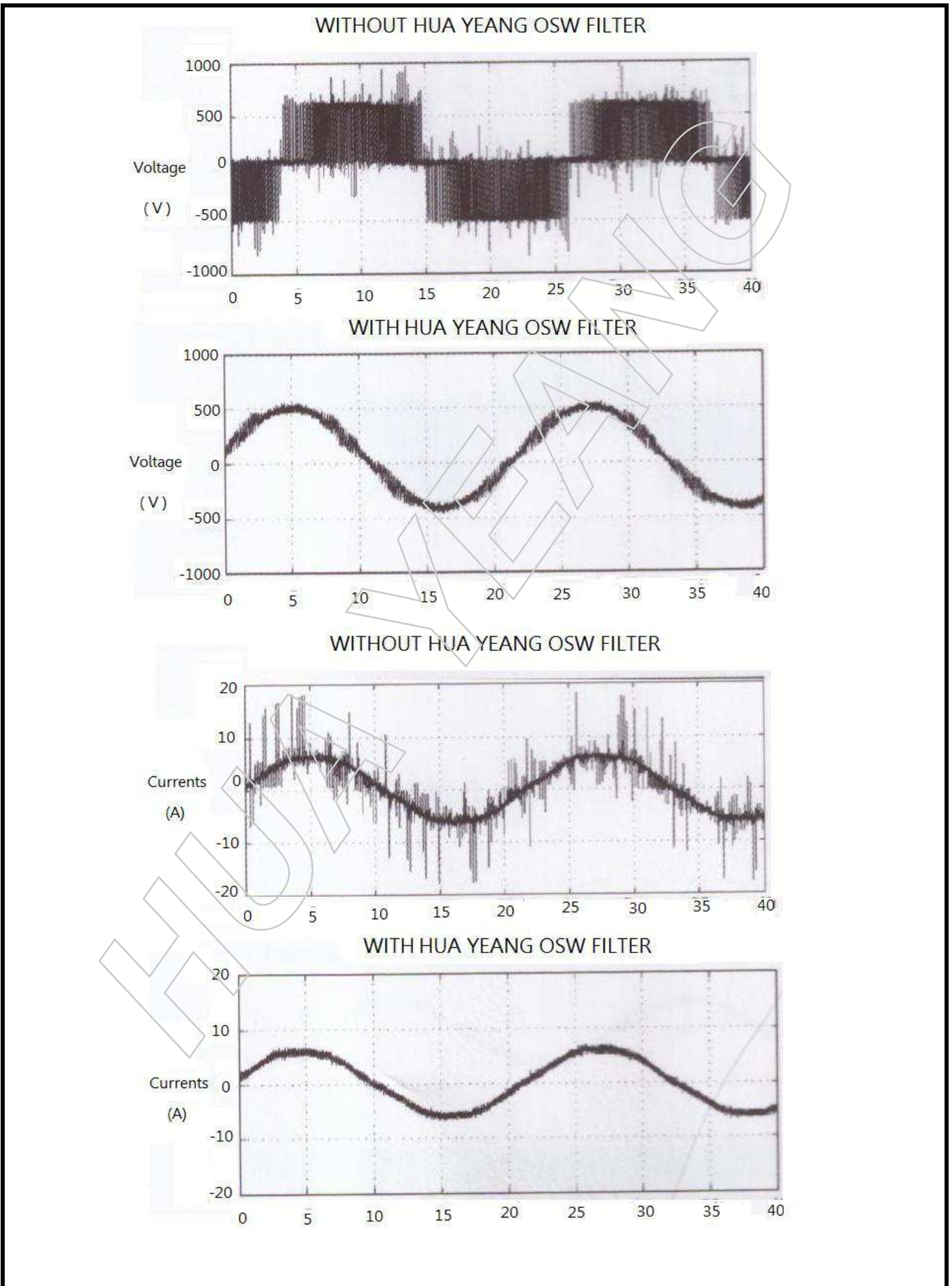
Make sure that the correct (reactor + capacitor) dimensions are available when ordering

**PS: 安裝於盤內時請加裝風扇加強盤內空間通風散熱**

**PS: Installed in the disk when you install a fan to strengthen the disk space ventilation**

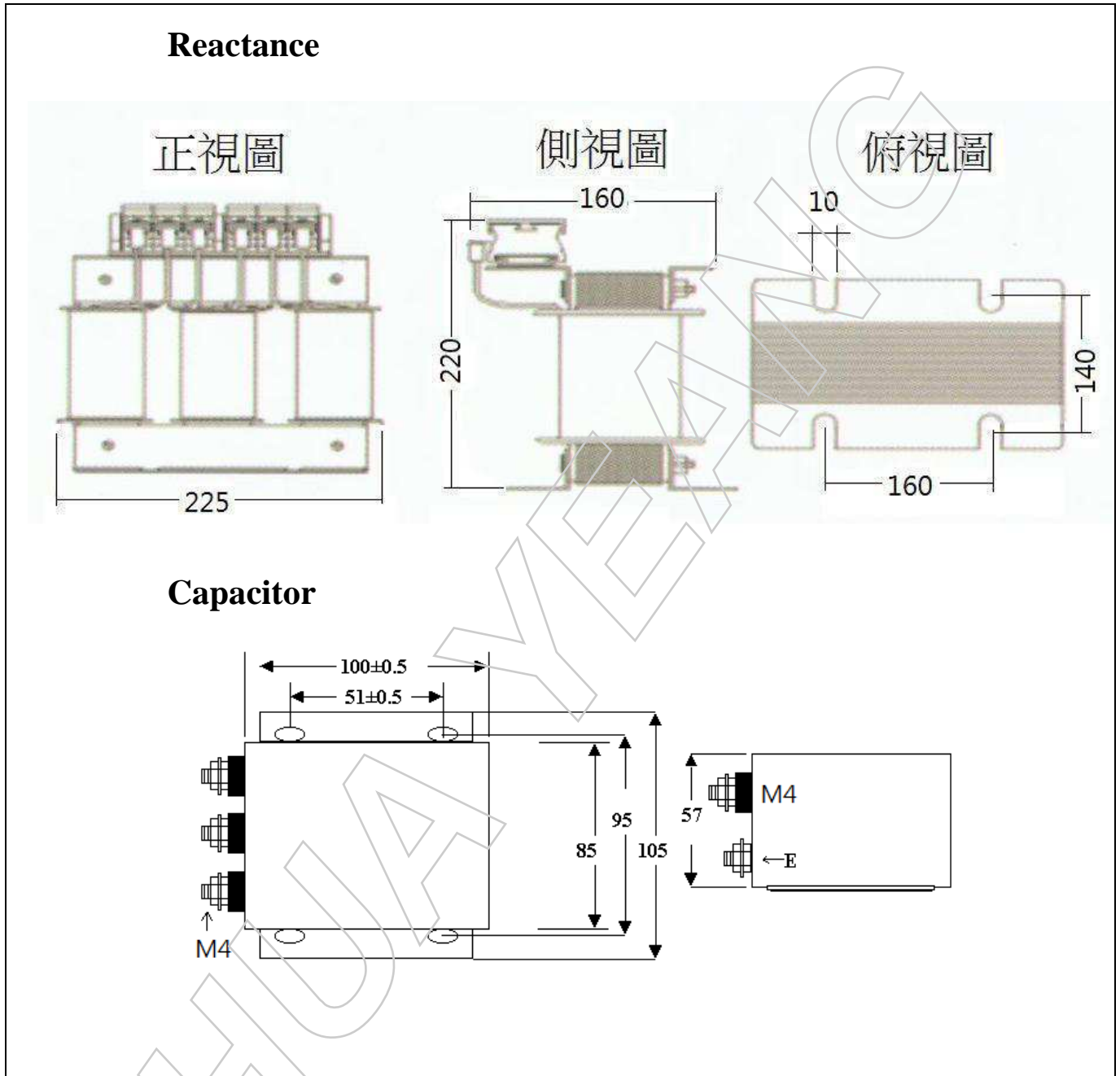


### Measurement data (量測資料-參考圖)



**Dimension (外形尺寸圖) 參考用-實際尺寸以產品出貨尺寸為準**

Reference - Actual dimensions are subject to the product's shipping dimensions

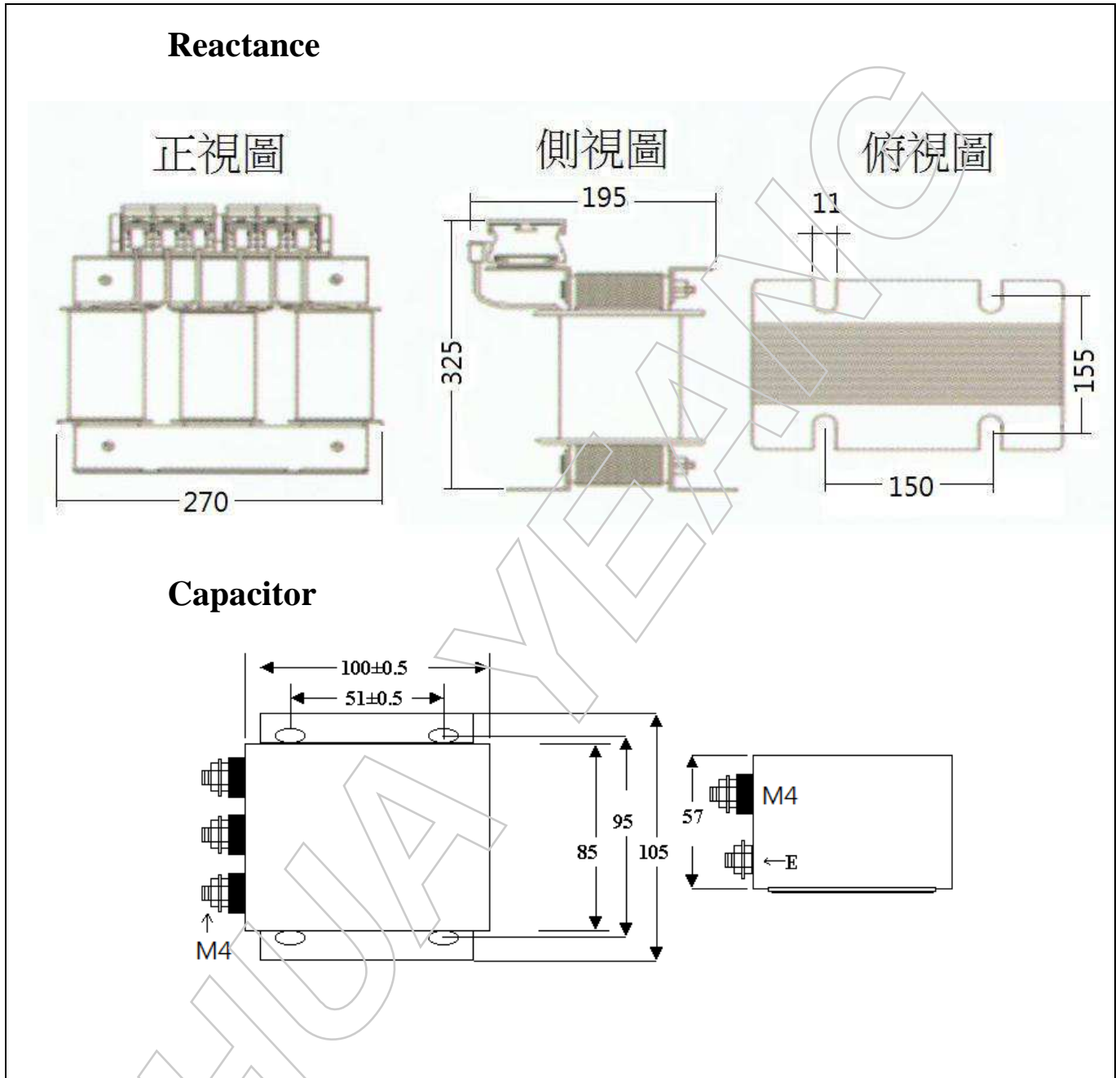


**CASE: Fig A 單位:mm**



**Dimension** (外形尺寸圖) 參考用-實際尺寸以產品出貨尺寸為準

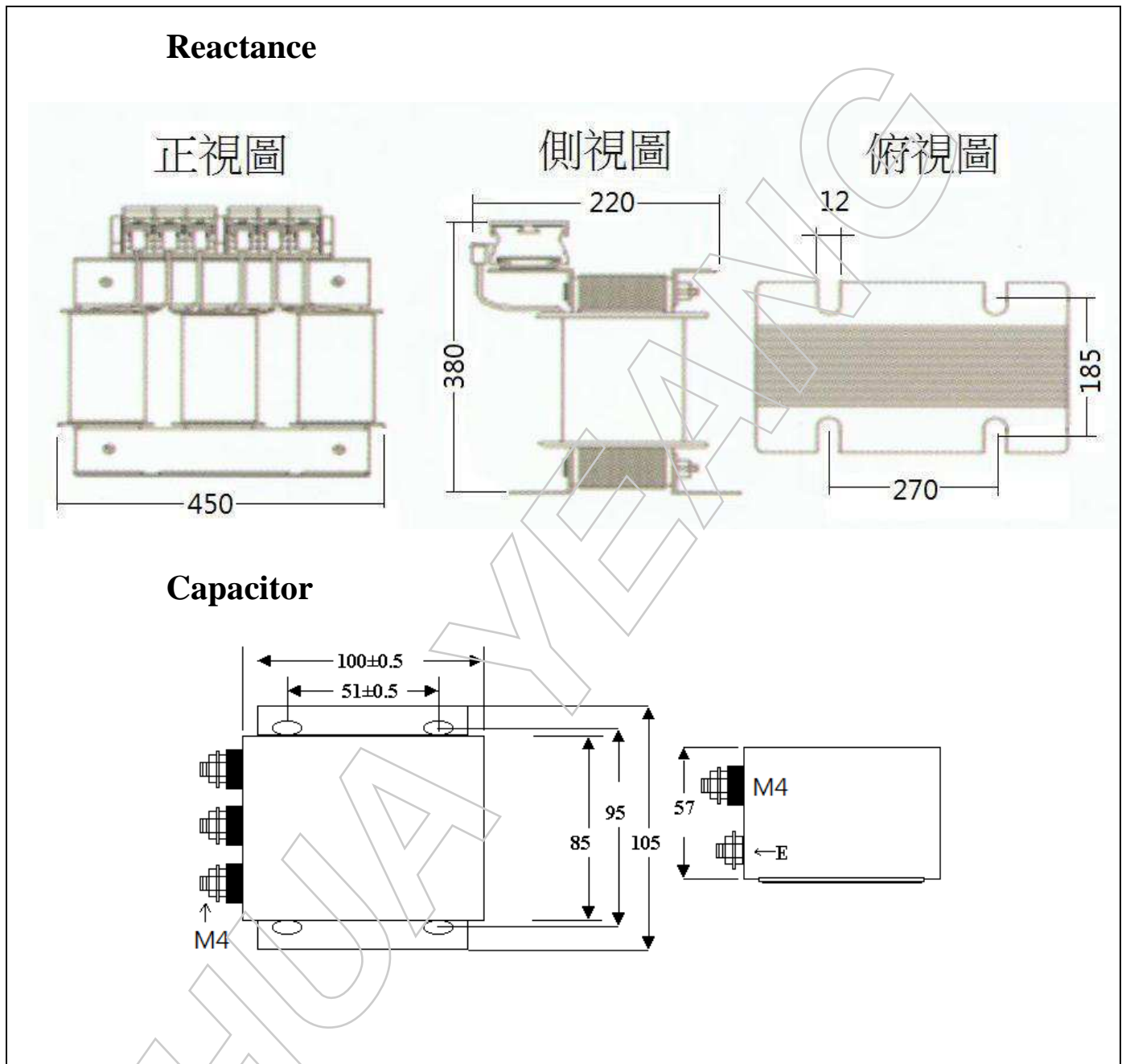
Reference - Actual dimensions are subject to the product's shipping dimensions



**CASE: Fig B 單位:mm**

**Dimension (外形尺寸圖) 參考用-實際尺寸以產品尺寸為準**

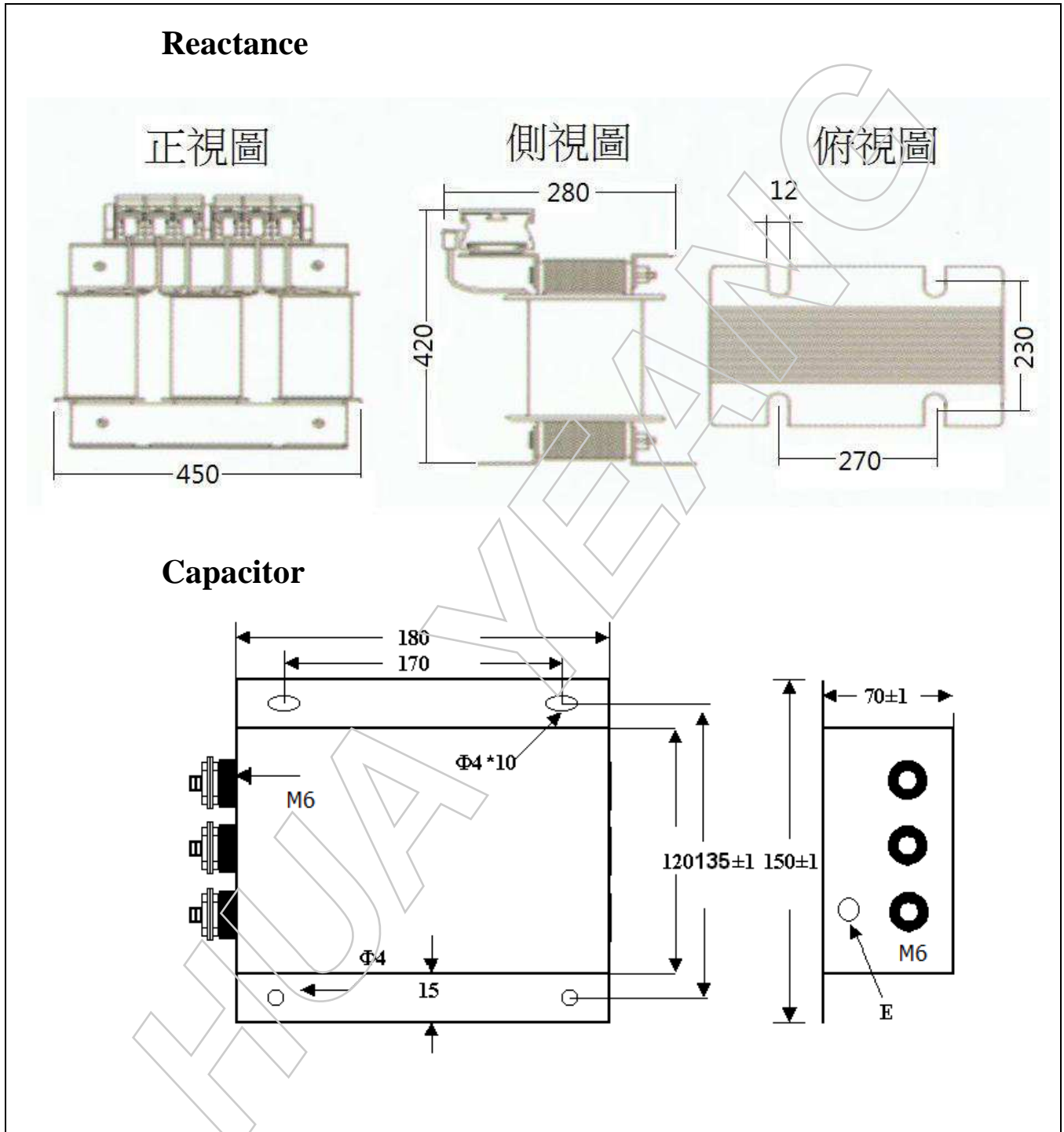
Reference - Actual dimensions are subject to the product's shipping dimensions



**CASE: Fig C 單位:mm**

**Dimension (外形尺寸圖) 參考用-實際尺寸以產品尺寸為準**

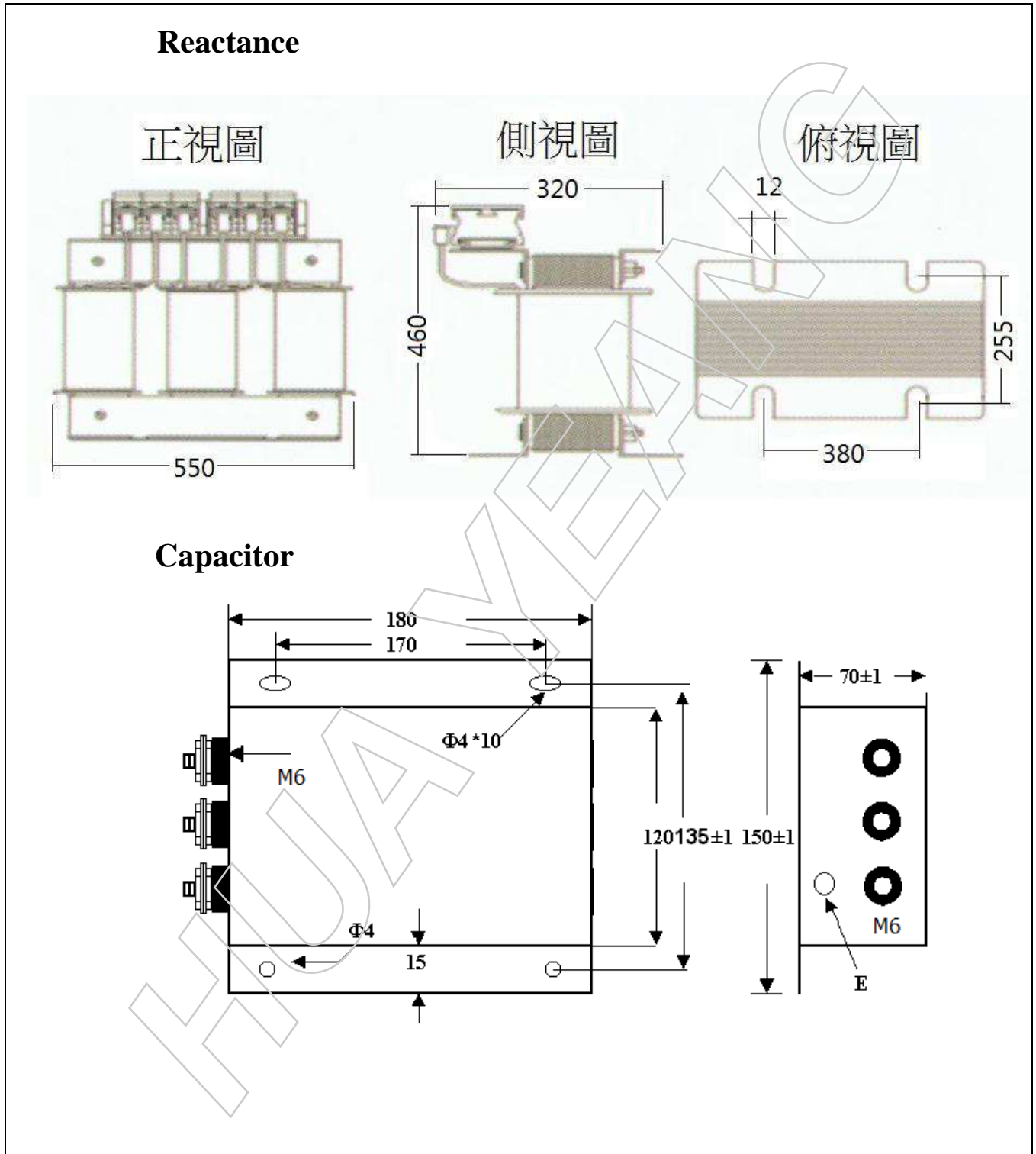
Reference - Actual dimensions are subject to the product's shipping dimensions



**CASE: Fig D 單位:mm**

**Dimension (外形尺寸圖) 參考用-實際尺寸以產品尺寸為準**

Reference - Actual dimensions are subject to the product's shipping dimensions



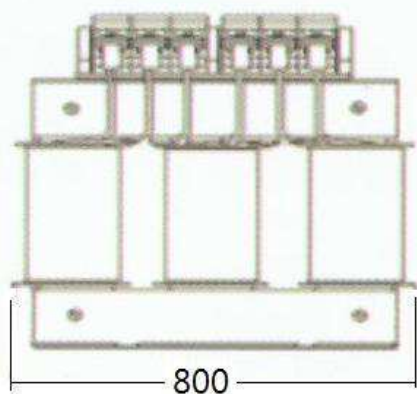
**CASE: Fig E 單位:mm**

**Dimension (外形尺寸圖) 參考用-實際尺寸以產品尺寸為準**

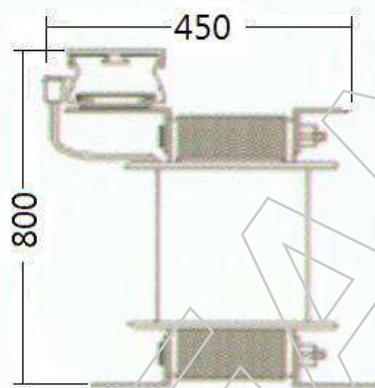
Reference - Actual dimensions are subject to the product's shipping dimensions

**Reactance**

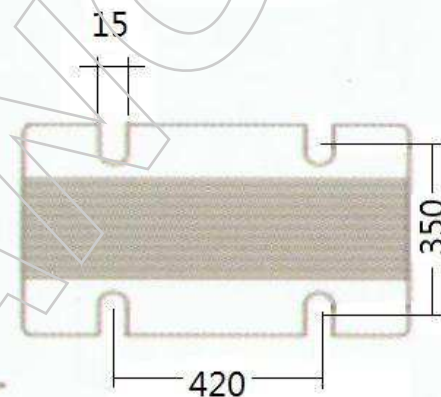
正視圖



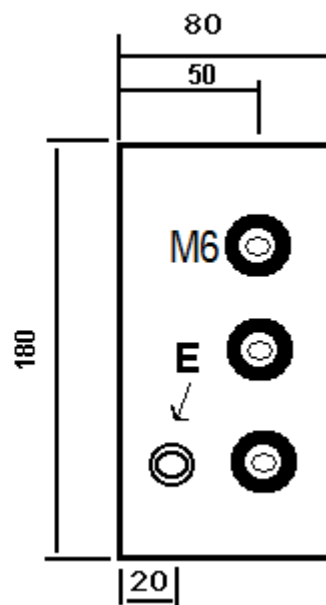
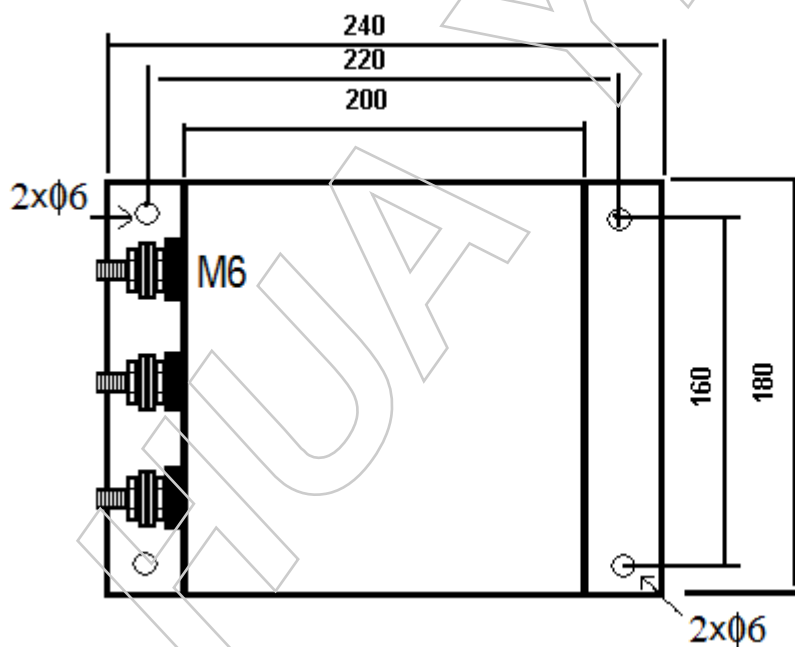
側視圖



俯視圖



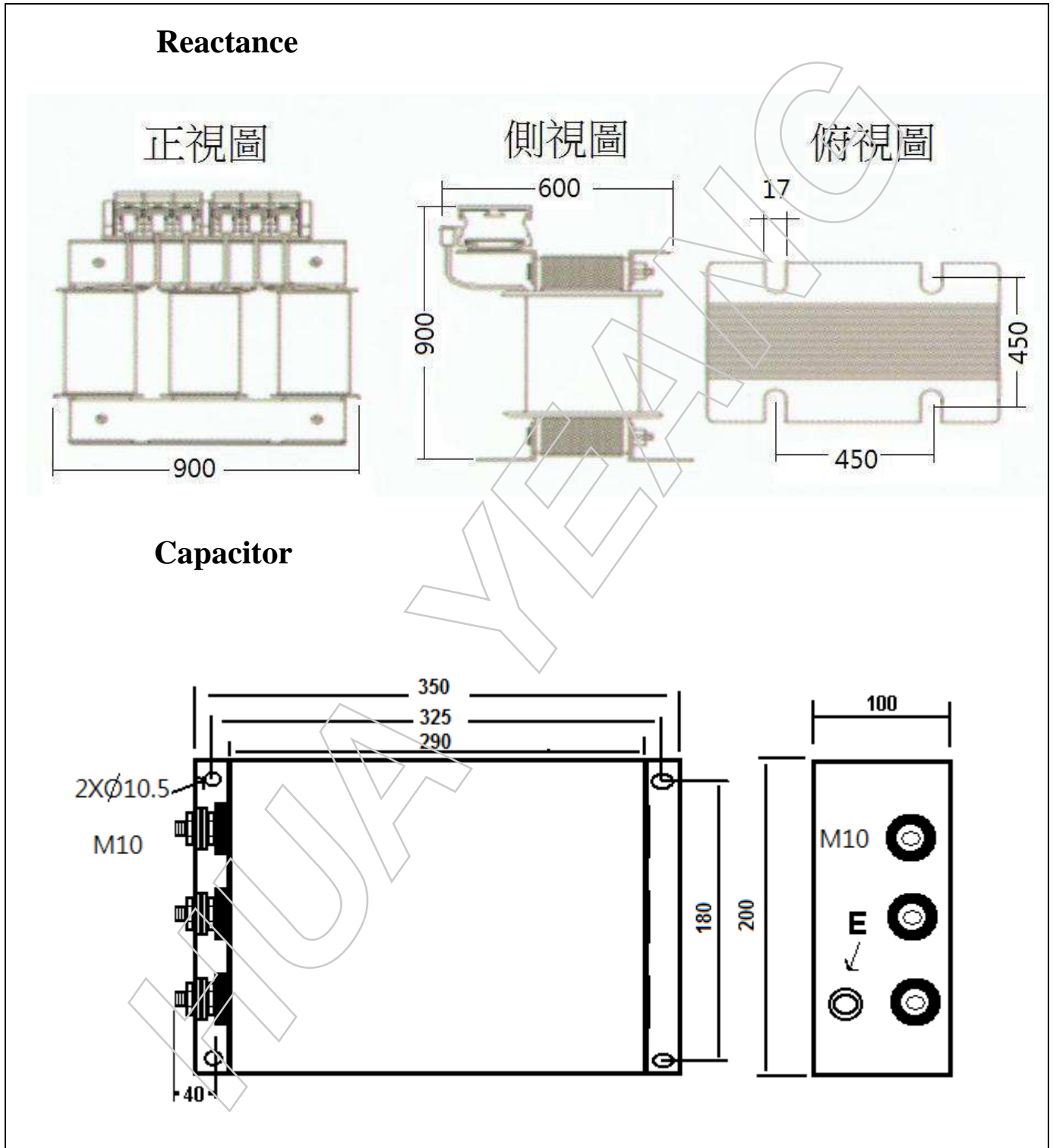
**Capacitor**



**CASE: Fig F 單位:mm**

**Dimension (外形尺寸圖) 參考用-實際尺寸以產品尺寸為準**

Reference - Actual dimensions are subject to the product's shipping dimensions



**CASE: Fig G 單位:mm**