

HUA 高性能/高電流輸入端電源電抗器(AC/DC 電抗器)

Input power reactor for 3-phase power system.

ACL (AC reactor) /DCL (DC reactor)

HUA Series, all-purpose filters to Protection Class A EN55011

0~480V AC / 0~1000V DC 0 HZ /50 HZ /60HZ θ_a 40°C *CE*

CONFORMS
TO IEC 60 950
UL 1283
EN 133200

本系列是一種電抗器，具體地說，ACL 是一種零序濾波器用的電抗，本實用新型的純感性零序濾波器專用電抗提供了一種對正常電流為無窮大阻抗，而對零序諧波電流為低阻抗的電抗器，其包括三相，三相分別和電源的三相連接，三相中都設置繞組，經過每相的繞組的正反向磁場的磁感應強度大小相等，方向相反，互相抵消，每一相中的磁感應強度為零，本電抗對三相交流電為高阻抗，三相交流電幾乎不能通過，對零序諧波電流為低阻抗，零序諧波電流幾乎可以完全流過，這樣就可以讓三相交流電安全通過，然後將零序諧波引向地端，可以濾除電源中零序諧波。

DCL 是使用於變頻器上面,主要功用是降低電源側高次諧波含量,提高變頻器輸入側功率因數由 70%提高至 90%以上,抑制由於輸入電壓不平衡所導致的三相電流的不平衡度.

This series is a reactor, specifically, ACL is a filter with a zero sequence reactance, the present invention for pure emotional zero sequence filter reactance of a normal current is infinite impedance, zero sequence harmonic current low impedance of the reactor, including the three-phase, three-phase connection and power, respectively, and are set in three-phase winding, same size to the strength of the magnetic induction through the pros and cons of each phase winding in opposite directions cancel each other out, the magnetic flux density of each phase is zero, the reactance for the high-impedance three-phase AC, three-phase alternating current is almost not pass zero sequence harmonic current, low impedance, zero sequence harmonic currents almost completely flow through, so that can make the three-phase alternating current safe passage of zero sequence harmonic lead to side, the power possible to filter out the zero-sequence harmonic.

DCL is used in the inverter above, the main function is to reduce the high harmonic content of the power supply side, to improve the inverter input power factor from 70% to 90% inhibition caused by the unbalanced input voltage three-phase current balance.

應用原理：

一種純感性零序濾波器專用電抗，其包括三相，三相分別和電源的三相連接，三相中都設置繞組，其特徵在於：經過每相的繞組的正反向磁場的磁感應強度大小相等，方向相反，互相抵消，使每一相中的磁感應強度為零。

Application of Principle:

A purely inductive reactance of zero-sequence-specific filters, which includes a three-phase, three-phase, respectively, and power connections are set in three-phase winding, its characteristics is that: After the pros and cons of each phase winding to the size of the magnetic field strength of the magnetic induction equal in opposite directions, cancel each other out, each phase of the magnetic induction intensity is zero.

應用範圍：

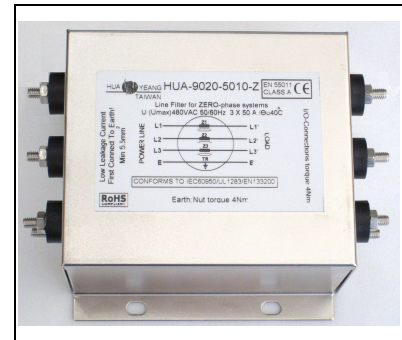
變頻器、UPS、PLC、CNC驅動器及自動化設備.....等

Applications:

Inverters, UPS, PLC, CNC drive and automation equipment, etc.

產品優點：

- _ 體積小
- _ 高透磁率
- _ 頻帶範圍寬
- _ 高飽和磁通密度
- _ 降低電源側高次諧波含量
- _ 提高變頻器輸入側功率因數
- _ 抑制由於輸入電壓不平衡所導致的三相電流的不平衡度
- _ 高衰減特性，可有效抑制變頻設備對外所產生的輻射干擾。



Advantages:

- _ Small size
- _ High permeability magnetic rate
- _ A wide frequency range
- _ High saturation flux density
- _ Reduce the high harmonic content of the supply side
- _ Improve the power factor of the inverter input side
- _ Inhibition of the input voltage unbalance three-phase current unbalance factor
- _ High attenuation characteristics, which can effectively inhibit conversion of radiation generated by the external device interference.

Specification

Test Voltage (1 min) :

ACL R/ S/ T to E 1500VAC/2250VDC R to S / R to T / S to T 1500VDC

DCL P to E /P1 to E 1500VAC/2250VDC

Insulation Resistance :

ACL R/ S/ T to E $\geq 3000M\Omega$ R to S / R to T / S to T $\geq 2000M\Omega$

DCL P to E /P1 to E $\geq 3000M\Omega$

Current reduction above 40°C ambient temperature: $I = I_n \sqrt{(85-\theta)/45}$

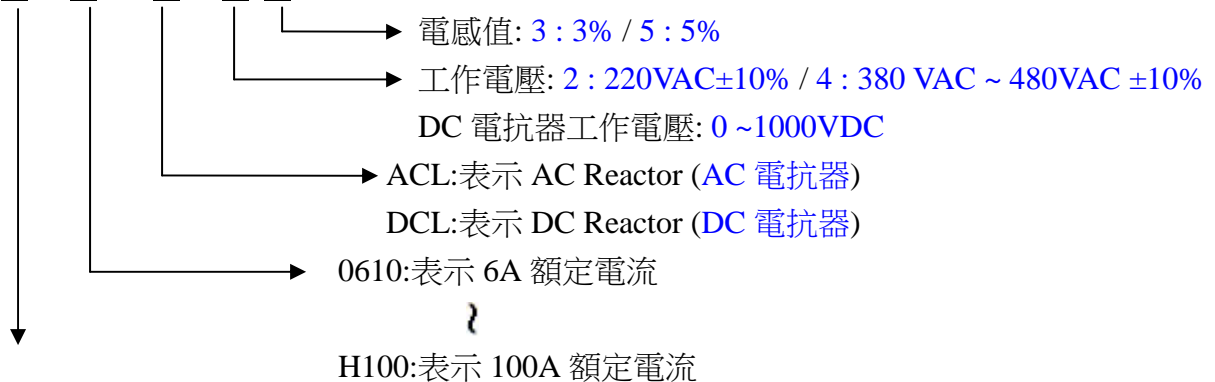
θ = operating temperature

零相濾波器(電抗器)/規格&型號&尺寸

TYPE	In @ $\delta a 40^{\circ}C$ [A]	Umax 0/50/60Hz [v]	Overload Current	Resistance L-L' $\pm 15\%$ [m Ω]	Max. leakage current @480v/60hz		Temperature Rise $^{\circ}C$	Temperature Range $^{\circ}C$	Fig	
					In3-phase system [mA]	Worst Case [mA]			ACL	DCL
HUA-9010-1010-Z□-□□	3×10	ACL 0/50/60Hz 220VAC TO 480VAC DCL 0Hz 1000VDC	1.2×In 1 min. per hour	22.3	≤2	≤1	≤30	-25~+85	A	A
HUA-9010-1610-Z□-□□	3×16			20		≤1	≤30	-25~+85	A	A
HUA-9010-2010-Z□-□□	3×20			15		≤1	≤30	-25~+85	A	A
HUA-9010-3010-Z□-□□	3×30			2.5		≤1	≤30	-25~+85	A	A
HUA-9020-4010-Z□-□□	3×40			2.4		≤1	≤30	-25~+85	A	A
HUA-9020-5010-Z□-□□	3×50			2.3		≤1	≤30	-25~+85	A	A
HUA-9020-6410-Z□-□□	3×64			1.17		≤1	≤30	-25~+85	B	B
HUA-9020-8010-Z□-□□	3×80			1.1		≤1	≤30	-25~+85	B	B
HUA-9020-H100-Z□-□□	3×100			0.8		≤1	≤30	-25~+85	B	B
HUA-9020-H150-Z□-□□	3×150			0.6		≤1	≤30	-25~+85	C	B
HUA-9020-H180-Z□-□□	3×180			0.5		≤1	≤30	-25~+85	C	B
HUA-9020-H200-Z□-□□	3×200			0.4		≤1	≤30	-25~+85	C	B
HUA-9020-H250-Z□-□□	3×250			0.37		≤1	≤30	-25~+85	D	B
HUA-9020-H300-Z□-□□	3×300	0.37	≤1	≤30	-25~+85	D	B			

Order Types (訂購型號說明)

型號:HUA - □ - □ - Z□ - □ □



9010:表示 30A 以下額定使用電流

9020:表示 30A 以上額定使用電流

EX: HUA-9020-5010-ZACL-25 額定電流: 50A / AC 電抗器 / 工作電壓: 220VAC / 電感值: 5%

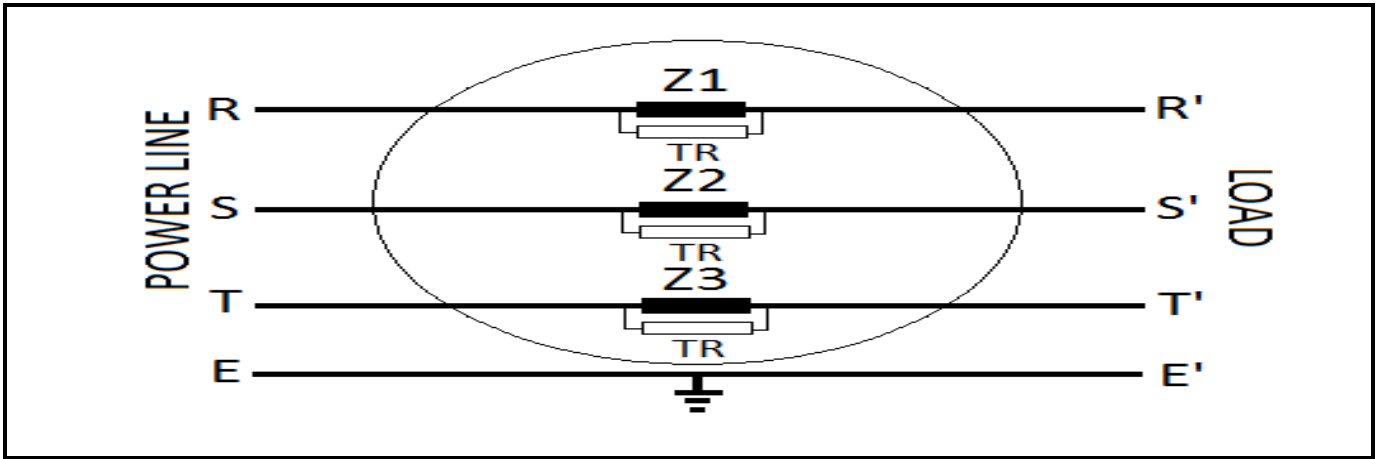
PS:選用濾波器請以變頻器標示全載電流為主要考量

全載電流*1.2~1.5=濾波器安全電流(三相電源請勿除 $\sqrt{3}$ 即可)

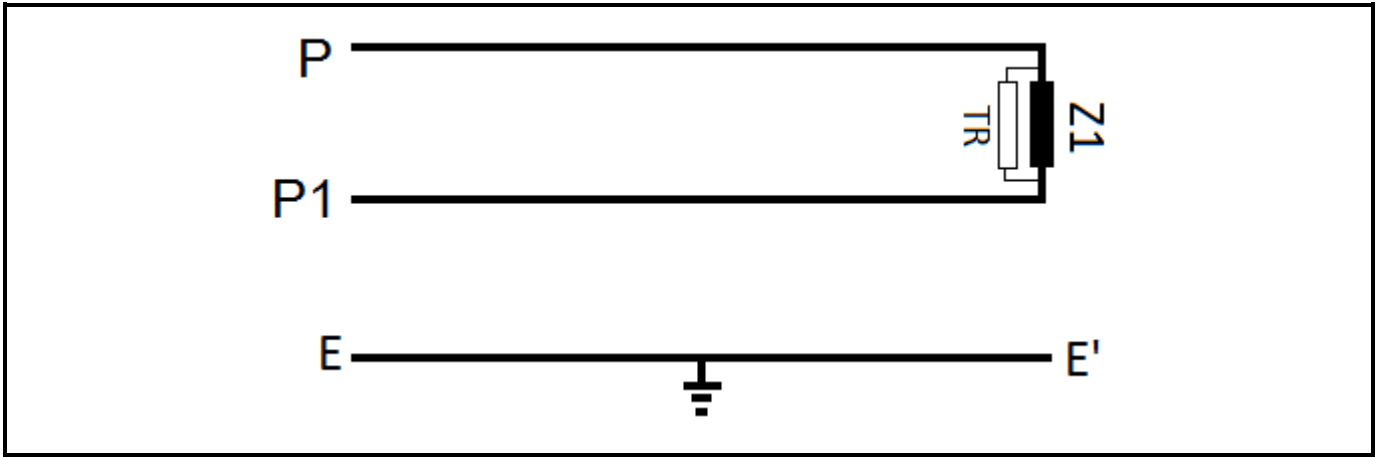
變頻器(伺服馬達)馬力 X 746 / 工作電壓 = 工作電流 EX: (INV(HP) X 746(W) / V = A)

Circuit Diagram (電路圖)

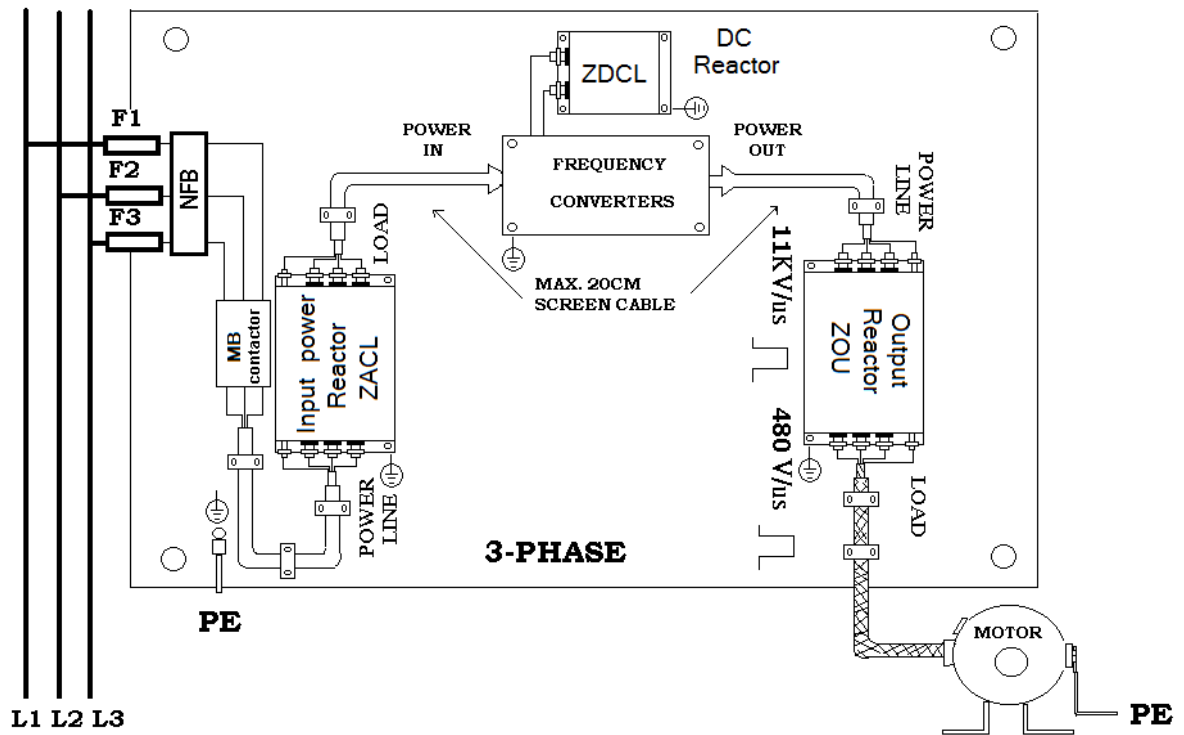
ZACL (AC reactor)



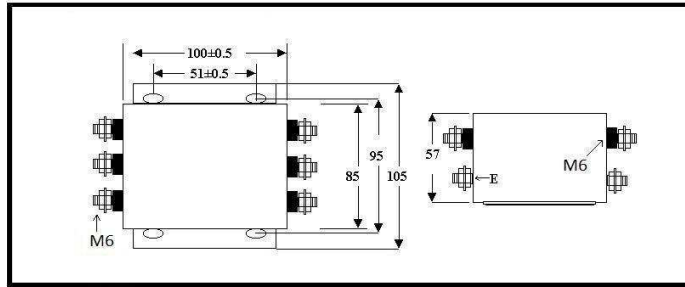
ZDCL (DC reactor)



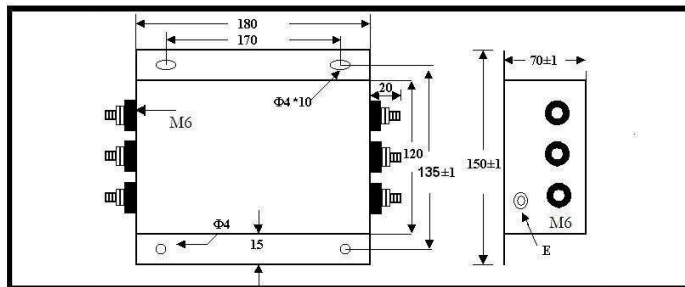
Wiring diagram (接線圖)



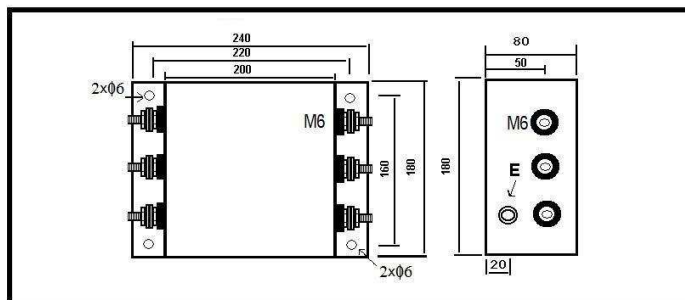
Dimension (外形尺寸圖) ZACL (AC reactor)



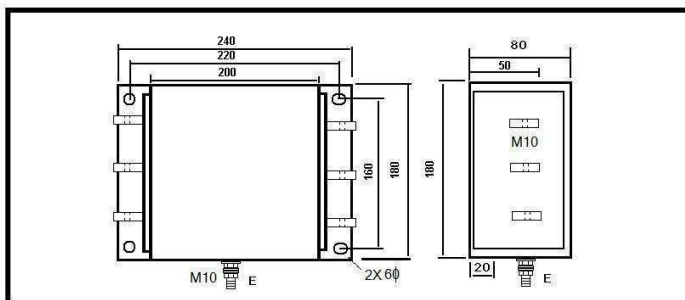
CASE: FIG A 單位:mm



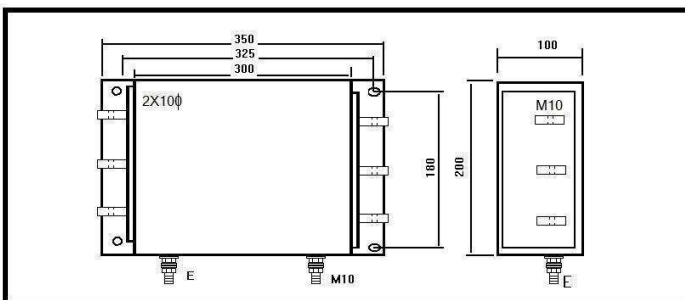
CASE: FIG B 單位:mm



CASE: FIG C 單位:mm

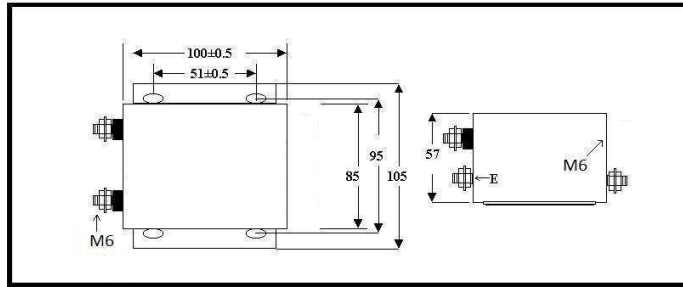


CASE: FIG D 單位:mm

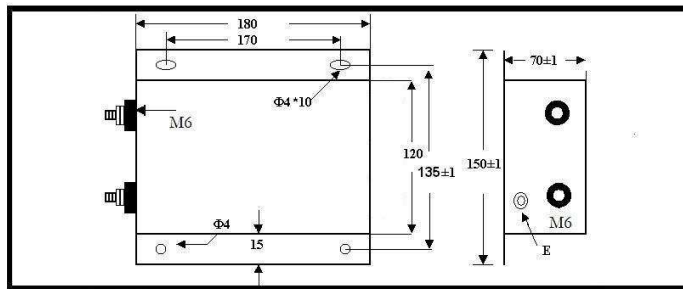


CASE: FIG E 單位:mm

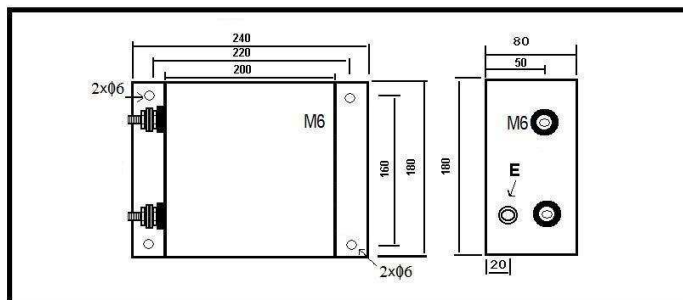
Dimension (外形尺寸圖) ZDCL (DC reactor)



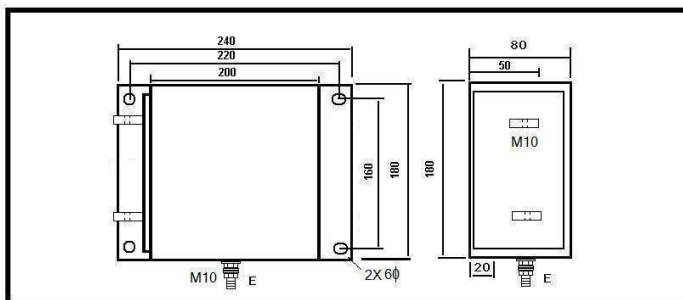
CASE: FIG A 單位:mm



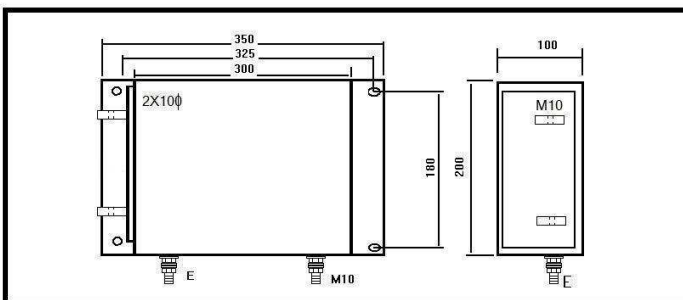
CASE: FIG B 單位:mm



CASE: FIG C 單位:mm



CASE: FIG D 單位:mm



CASE: FIG E 單位:mm