

노이즈필터

Noise Filter 濾波器 Woonyoung



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DIGITAL PROTECTIVE RELAY

안전을 위한 주의사항 Guidelines for Safety

- “안전을 위한 주의사항”은 제품을 안전하고 올바르게 사용하여 사고나 위험을 미리 막기 위한 것이므로 반드시 지켜 주십시오.
- 주의사항은 “경고”와 “주의”의 두 가지로 구분되어 있으며 “경고”와 “주의”的 의미는 다음과 같습니다.

⚠ 경고 지시사항을 위반하였을 때 심각한 상해나 사망이 발생할 가능성이 있는 경우입니다.

⚠ 주의 지시사항을 위반하였을 때 경미한 상해나 제품손상이 발생할 가능성이 있는 경우입니다.

제품과 사용설명서에 표시된 **⚠** 그림기호의 의미를 특정 조건 하에서 위험이 발생 할 우려가 있으므로 주의하라는 기호입니다.

⚠ 경고

- 인명이나 재산상에 영향이 큰 기기 (예: 원자력제어, 의료기기, 차량, 철도, 항공, 연소장치, 오락기기 등 또는 안전장치)에 사용할 경우 반드시 2종으로 안전장치를 부착한 후 사용하여 주십시오.
 - 화재, 인명사고, 재산상의 손실이 발생할 수 있습니다.
- 반드시 패널에 취부하여 사용하시고 FG 또는 \perp 단자는 절지하여 주십시오.
 - 감전의 우려가 있습니다.
- 전원이 인가된 상태에서 결선 및 점검, 보수를 하지 마십시오.
 - 감전의 우려가 있습니다.
- 자사 수리기술자 이외에는 제품을 개조하지 마십시오.
 - 감전의 화재의 우려가 있습니다.
- 입력 전원사양을 반드시 확인하시고 전원 연결 시 반드시 단자번호를 확인하시고 연결하십시오.
 - 화재의 우려가 있습니다.
- 전원을 차단한 직후에 부하측 단자를 만지지 마십시오.
 - 감전의 우려가 있습니다.

⚠ 주의

- 실외에서 사용하지 마십시오.(옥외용은 별도주문)
 - 제품의 수명이 짧아지는 원인이 되며 감전의 우려가 있습니다.
- 전원 및 부하선 연결 시에는 부하전류에 따른 전선의 굵기에 유의하여 주십시오.
 - 전류에 비하여 전선의 굵기가 가늘면 화재의 위험이 있습니다.
- 단자대의 나사는 규정토크로 조여 주십시오.

규정토크(TORQUE) - M 3.5 : 0.6 ~ 1.2 N(6~12Kgf.cm), M 4 : 1.3 ~ 1.5 N(10~14Kgf.cm), M 5 : 2.1 ~ 3.0 N(15~25Kgf.cm)

나사가 풀리면 접촉불량으로 화재의 우려가 있습니다.
- 반드시 정격과 성능 범위내에서 사용하여 주십시오.
 - 제품의 수명이 단축되고 고장 발생의 원인이 됩니다.
- 청소시 물, 유기용제 등의 사용을 금합니다.
 - 감전 및 화재와 제품변형의 우려가 있습니다.
- 가연성가스, 폭발성가스, 습기, 직사광선, 복사열, 진동, 충격이 있는 장소에서의 설치 및 운전을 금합니다.
 - 제품수명 단축 및 고장, 화재, 폭발의 위험이 있습니다.
- 제품의 내부로 먼지나 배선찌꺼기 등의 유해한 도체가 유입되지 않도록 하여주십시오.
 - 고장 및 화재의 우려가 있습니다.
- 동작 중 방열판류에는 고열이 발생하므로 절대 만지지 마십시오.
 - 감전 및 화상의 우려가 있습니다.
- 제품폐기 시에는 산업폐기물로서 처리하여 주십시오.

Guidelines for safety is to use product safe and properly and prevent accidents or dangers. Never forget to keep it.

Guidelines can be classified into two, warning and caution, and their meanings are as follows.

⚠ Warning When there is the possibility that serious injury or death can occur when violating directions.

⚠ Caution When there is the possibility that slight injury or the damage of products can occur when violating directions.

The meaning of **⚠** lexigram indicated on the products and instructions is to handle with care as any danger can occur under specific conditions.

⚠ Warning

- When using in instruments that have great influence on lives or properties(for examples: nuclear energy control, medical equipment, vehicles, railroad, aviation, combustion apparatus, entertainment systems or safety device), use after being sure to attach duplex safety device.
 - There may be fire, loss of lives, or property damages.
- Use after being sure to attach to panel, and ground FG or \perp a terminal.
 - There may be the possibility of electric shock.
- Don't connect, inspect and repair under the power-up.
 - There may be the possibility of electric shock.
- Don't remodel products except by the company's engineers.
 - There may be the possibility of fire or electric shock.
- Be sure to check input power source options, and connect after checking terminal number when connecting power sources.
 - There may be the possibility of fire.
- Don't touch the terminal of load side immediately after power source is cut off.
 - There may be the possibility of electric shock.

⚠ Caution

- Don't use outdoors (for outdoor, separate order)
 - It can be a cause of product's life becoming short, and there may be the possibility of electric shock.
- When connecting power source and load wiring, pay attention to the thickness of cables according to load current.
 - There may be the danger of fire if the thickness of cables is thin for the current.
- Tighten the screw of port by the regulated torque.

The regulated torque - M 3.5 : 0.6 ~ 1.2 N(6~12Kgf.cm), M4 : 1.3~1.5 N(10~14Kgf.cm), M 5 : 2.1 ~ 3.0 N(15~25Kgf.cm)

 - If the screw comes loose, there may be the possibility of fire because of bad contact.
- Be sure to use within the range of rating and performance.
 - Product's life is shortened, and it may be a cause of troubles.
- Don't use water or organic solvent when cleaning.
 - There may be the possibility of electric shock, fire and product deformation.
- Don't install or operate in places with inflammable gas, explosive gas, direct ray of light, radiation heat, vibration and shock.
 - There may be the possibility of troubles and fire.
- Make sure that harmful conductors such as dust or fragments of cables may not be flowed into the inside of product.
 - There may be the possibility of trouble or fire.
- Never touch during operation as there is superheat on the radiator board.
 - There may be the possibility of trouble or fire.
- Dispose as industrial waste when discarding products.

주문시 확인 승낙 사항

Items to be verified and approved when ordering products

운영 제품을 구입하는 고객 여러분께 !

저희 운영 제품을 애용해 주셔서 대단히 감사합니다.

본 카탈로그에서 당사 제품을 주문하실 경우, 견적서, 계약서, 사양서 등에 특기사항이 없는 경우에는 다음의 적합 용도조건, 보증내용등을 적용합니다.
아래 내용을 확인하시고 승낙하신 후 주문해 주십시오.

1. 보증 내용

① 보증기간

당사 제품의 보증기간은 구입 후 또는 지정 장소 납입 후 1년으로 합니다.

② 보증 범위

상기 보증 기간 중에 당사측의 책임으로 당사 제품에 고장이 발생한 경우 대체제품 제공 또는 수리를 제품 구입 장소에서 무상으로 실시합니다.
단, 고장의 원인에 다음에 해당하는 경우에는 이 보증 대상 범위에서 제외됩니다.

- a) 본 카탈로그 또는 사양서에 기재되어 있는 이외의 조건, 환경, 취급 및 사용에 의한 경우
 - b) 당사 제품 이외의 원인에 의한 경우
 - c) 당사 이외에 의한 개조 또는 수리에 의한 경우
 - d) 당사 제품의 본래 사용법 이외의 사용에 의한 경우
 - e) 당시 출하 당시의 과학, 기술 수준으로는 예측 할 수 없었던 경우
 - f) 기타 천재지변, 재해 등 당사측의 책임이 아닌 원인에 의한 경우
- 참고로 여기서의 보증은 당사 제품 단품의 보증을 의미하는 것이며, 당사 제품 고장에 의해 유발되는 손해는 보증 대상에서 제외됩니다.

2. 책임의 제한

- ① 당사 제품에 기 인해 발생한 특별손해, 간접손해, 또는 소극적 손해에 대해 당사는 일체의 책임을 지지 않습니다.
- ② 프로그래밍 가능한 당사제품에 대해 당사 이외의 자가 실시한 프로그램 또는 그에 의해 발생한 결과에 대해 당사는 일체의 책임을 지지 않습니다.

3. 적합 용도의 조건

- ① 당사 제품을 다른 제품과 조합해서 사용하는 경우에 적합해야 할 규격, 법규 및 규제는 고객이 직접 확인해 주십시오.
또 고객이 사용하시는 시스템, 기계, 장치에 대한 당사제품의 적합성은 고객이 직접 확인해 주십시오.
이 것이실시되지 않는 경우 당사는 당사 제품의 적합성에 대해 책임을 지지 않습니다.
- ② 다음 용도에 사용하는 경우, 당사 영업 담당자와 상담하고 사양서 등을 통해 확인하는 한편 정격, 성능에 대해 여유를 주거나 만일 고장이 발생해도 위험을 최소화 할 수 있는 안전 회로 등의 안전 대책을 2종으로 강구해 주십시오.
 - a) 실외, 잠재적인 화학적 오염 또는 전기적 방해를 받는 용도 또는 본 카탈로그에 기재되지 않는 조건이나 환경에서 사용.
 - b) 원자력 제어설비, 소각설비, 철도, 항공, 차량설비, 의료용 기계, 반도체 제조장비, 오락기계, 안전장치 및 행정 기관이나 개별 업계의 규제에 따른 설비
 - c) 인명이나 재산에 위협이 미칠 수 있는 시스템, 기계, 장치
 - d) 가스, 수도, 전기의 공급 시스템, 24시간 연속 운전 시스템 등 높은 신뢰성이 필요한 설비
 - e) 자동차(2륜차 포함) 탑재 설비
 - f) 기 타상기(a)~(e)에 준하며 고도의 안전성이 필요한 용도
- ③ 고객이 당사 제품을 인명이나 재산에 중대한 위험을 미치는 용도에 사용하는 경우에는 시스템 전체적으로 위험을 알리거나 여유 있는 설계에 의해 필요한 안전성을 확보할 수 있도록 설계되어 있는지 당사 제품이 전체적으로 의도한 용도에 적절히 배전, 설치 되어 있는지 반드시 고객이 직접 사전에 확인해 주십시오.
- ④ 본 카탈로그에 기재되어 있는 용도는 참고용이므로 채택 시에는 기기, 장치의 기능과 안전성을 확인 한 후에 사용해 주십시오.
- ⑤ 당사 제품의 잘못된 사용으로 고객 또는 제 3자에게 예기치 않는 손해가 발생하지 않도록 사용상의 금지 사항 및 주의 사항을 완전히 숙지 한 후 반드시 지켜 주십시오.

4. 사양변경

- 본 카탈로그에 기재된 제품의 사양 및 동봉품은 개선 또는 기타 사유에 의해 필요에 따라 변경될 수 있습니다.
- 당사 영업 담당자와 상담하고 당사 제품의 실제 사양을 확인해 주십시오.

5. 서비스의 범위

- 당사 제품의 가격에는 기술자 파견 등의 서비스 비용은 포함되어 있지 않습니다.
- 원하실 경우에는 당사 영업 담당자와 상담해 주십시오.

6. 적용 범위

- 상기 사항은 대한민국 내에서의 거래 및 사용을 전제로 합니다.
- 해외에서의 거래 및 사용에 대해서는 당사 영업 담당자와 사전에 상담해 주십시오.

Dear customers who purchase Woon Young products!

Thank you for purchasing Woon Young products.

If there is no particular information on estimates, contracts or specifications when you order products from this catalog, the following conditions of use and warranty shall apply. Please place orders after you read and approve the following items.

1. Content of Warranty

① Warranty period

The warranty period of this product shall be 1 year from the date of purchase or from the day the product is delivered to a designated place.

② Scope of warranty

If failure occurs due to reasons attributable to this company during the above-said warranty period, this company will provide substitute products or repair the product free of charge at the place of purchase. However, if the cause of failure is one of the following, it shall be excluded from being eligible for warranty benefits.

- a) Products were handled or used under the conditions and environment not entered in this catalog or in specification.
- b) Failure occurred due to reasons other than those caused by this product.
- c) Failure occurred due to modification or repairs performed by persons other than this company.
- d) Failure occurred because the product was used based on the method other than the original usage of this product.
- e) Failure was not expected by the scientific and technical levels prevailing at the time of shipment.
- f) Failure occurred due to causes beyond the control of this company, e.g. natural disasters and accidents.

Warranty as specified herein means the warranty covering only the product of this company, and any damage caused by the failure of this product shall be excluded from being eligible for warranty coverage.

2. Limitations on responsibility

- ① This company shall not be held liable whatsoever for any special damage, indirect damage or passive damage caused by this product of this company.
- ② This company shall not be held liable whatsoever for any programming performed by persons other than this company on the programmable products or for the results of such programming.

3. Conditions of compatibility

- ① Please check the standards, laws and regulations applicable when this product is used in combination with other products. In addition, be sure to check the compatibility of this product covering the systems, machines and devices used by you. If you fail to take actions as above, this company shall not be held liable for the compatibility of the product.
- ② If the product is used for the following purposes, discuss details with the sales manager of this company based on the provided specifications. At the same time, allow sufficient rating and performance, or take appropriate safety measures through the safety circuits that can minimize risks even if failure occurs.
 - a) Using the product outside or under environment exposed to potential chemical pollution or electric interference, or using the products under the conditions or environment not specified in this catalog.
 - b) Nuclear controllers, incinerators, railways, aviation, vehicles, medical equipment, semiconductor manufacturing equipment, game machines, safety devices and equipment regulated by administrative agencies or individual maker.
 - c) Systems, machines and devices that can cause personal or property damage.
 - d) Equipment requiring high degree of reliability, e.g. gas, water and electricity supply systems, and 24-hour continuous operation systems.
 - e) Automobile (Including two-wheeled vehicles) mounted equipment
 - f) Other purposes equivalent to the above-said paragraph a) through e) requiring high degree of safety.
- ③ If the product is used for purposes that might induce serious personal or property damage, be sure that you inform risks covering the entire system in advance or verify whether the product is designed to ensure required safety or whether the product is properly connected and installed to suit the intended overall purposes.
- ④ The purposes of the products shown in this catalog are only for reference purposes. Apply such purposes only after you check the functions and the safety of the equipment and devices.
- ⑤ To prevent unexpected damage to you or to third parties resulting from improper use of this product, be sure to use the product after you thoroughly read and understand items related to prohibitions and caution during use.

4. Changing specifications

The products and specifications entered in this catalog are subject to change as needed for improvement or for other reasons. Discuss with the sales manager of this company and verify actual specifications of the products.

5. Range of service

The product prices do not contain any service expenses, e.g. dispatch of technicians. If you need any services, discuss with the sales manager of this company.

6. Scope of application

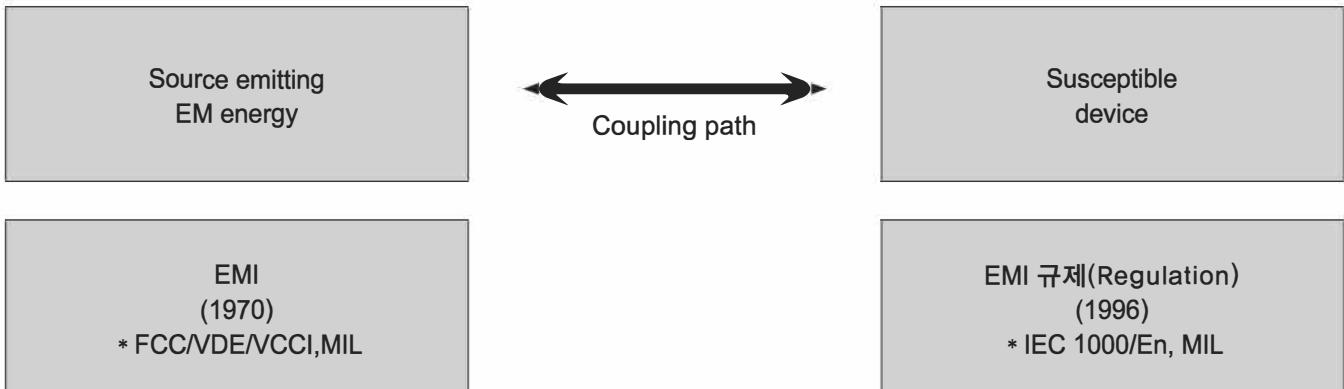
Items described above are on the premise that the products are traded and used in the Republic of Korea. Discuss with the sales manager of this company regarding overseas transactions and uses.

1. 전자파 장해 개요 (EMI)

최근의 디지털 기술과 반도체 기술 등의 급속한 발달에 따라 전자산업 및 컴퓨터 기술에 눈부신 발전을 가져왔습니다 따라서 전기 · 전자장치의 경량화, 소형화, 고속화와 광대역화가 가능하게 되고, 또한 이들을 적은 구동 에너지로도 동작시킬수 있는 반면 이들은 인위적인 제어가 어려운 자연 현상을 원인으로 하는 미소한 전자파장해 에도 민감하게 반응하여 오동작을 잘 일으키게 되고, 또 많은 전기 · 전자장치가 사회 각 분야에 보급됨에 따라 전자파 밀집도가 증가하고 전자파환경을 나쁘게 만드는 경우가 늘어나 나쁜 환경에 설치된 기기가 원래의 목표대로 동작치 않아 사회에 혼란을 일으키거나, 인체 장해의 가능성성이 제시되고 있는 등 많은 문제점들이 나타나고 있습니다.

우리의 생활환경에서도 전기면도기를 사용할 때, 텔레비전 수상기의 화

Electronic industry and technology of computer have faced brilliant development because of recent dramatic advance of digital technology and semiconductor etc. it is therefore possible to see lighter, smaller, speedy electric and electronic devices in a large area. On one hand, these can be operated by small energy to start. On the other hand, there are many problems caused by it. It operates so sensitively even by minute electromagnetic and causes error of operation, density of electromagnetic is increased as so many electric and electronic products are distributed to every corner of society which also causes worse environment of electronic wave. Devices which are installed under the environment mentioned above operate wrongly enough to cause confusion in the society or increase concern about the bad effect



(Fig1)

면에 노이즈가 발생하는 경우를 비롯하여, 전기톱을 사용하는 제재소 근처에서 차량 오디오가 잡음을 일으키는 경우, 화려한 장미전구 아래에서 무선 리모콘 이 동작되지 않는 경우 등, 대수롭지 않게 무시되는 것으로부터, 자동차 전자제어장치의 전자파장해로 급출발, 급정지, 급가속에 의한 교통사고가 일어난 경우, CNC 선반의 전자파장해로 인해 선반헤드가 갑자기 이동하면서 치구작업을 하고 있던 작업자가 사망한 경우, 원자력 발전소의 전자제어부의 전자파장해로 인한 원자로 비상정지 사태 발생, 무선단말기 사용자의 전자파 인체장해 가능성 등, 매우 심각한 사회문제를 일으키는 것까지 매우 우다양한 형태로 전자파장해 현상이 나타나고 있습니다. 이러한 현상들은 과거에 구체적인 원인이 모를 때는 원인 불명으로 처리되거나, 어느 정도 성가신 정도로 그냥 그렇게 넘어갔으나, 전자파장해 현상에 대한 궤적적인 연구가 시작되면서 그 원인 이 밝혀지고 따라서 피해측에서의 강력한 대책이 요구되고 있는 실정입니다.

on human body.

There are many interception of electromagnetic in our society. With regard to trivial occasions occur in our daily life, there are when electronic shaving machine is used, noise occurs on TV screen, audio of vehicle is interfered by neighboring saw milling, wireless remote controller does not work under the flamboyant lamp etc.

The examples of more serious occasions are traffic accident occurs from unprepared start, stop, acceleration by interception of electronic wave of electronic controller, operator is killed as shelf head all of sudden operates because of electromagnetic interception of CNC shelf, emergent stop of nuclear reactor happens due to electromagnetic interception at electronic controller of atomic power station and possible harm on human body from electromagnetic etc. Though these phenomena were treated with unknown reason or regarded forgettable, they are now clarified in detail and fundamental measure from the victims.

1. Overview of interception of electromagnetic (EMI)

전자파장해 문제가 성립하기 위해 서는 그림 1과 같이 기본적으로 장해원(source), 결합경로(coupling path), 감응체(susceptor)가 동시에 존재해야 합니다. 이러한 전자파장해 현상은 장해원으로 부터의 과도한 불요전자파의 방출에 의해 서도 발생하지만, 피해장치 자체의 약한 전자파내성에 의해서도 발생합니다. 이러한 전자파장해 문제를 줄이기 위해서는 우선 장해원의 수나 출력 등을 줄여 다른 장치에 방해를 주지 않도록 하여야 하고, 또한 어느 정도의 전자기적 환경 내에 서도 장치가 의도된 동작을 할 수 있도록 내성을 강화시켜 주어야 합니다. 사회에 보급되는 다양한 전기·전자장치들이 서로 조화를 이루어 공존할 수 있는 것을 "전자파환경의 양립성"이라 하고 이러한 능력을 갖게 하는 것이 EMI/EMC 연구의 궁극적인 목표입니다. 세계각국은 이러한 목표를 달성하기 위해 '70년대 후반부터 불요전자파 방출 규제(흔히 EMI 규제라 부른다)를 시행하고 있으며, '96년 1월 1일부터 유럽연합을 중심으로 전자파내성 규제(흔히 EMS 규제라 부른다)가 본격적으로 시작되고 있습니다. 현대적 개념의 전자파양립성은 우리가 동작시키려는 장치의 입장에서 보는 것으로, 전기·전자 장치나 시스템을 설치하려는 위치의 전자파환경에서 설계상에 의도된 성능을 가지고 제대로 동작할 수 있는 능력을 뜻하며, 이에 서한 단계 더 나아가서 장치나 시스템이 새로 추가될 때 기존의 전자파환경에 변화를 가져와 거기에 이미 있었던 다른 기기에 영향을 주지 않아야 하는 것도 의도하는 것으로 매우 적극적이고, 포괄적인 개념으로 발전되고 있습니다. 이렇게 발전되어온 EMI/EMC의 정의를 최근의 IEEE 사전(ANSI/IEEE Std. 100-1988)은 다음과 같이 내리고 있습니다.

위의 정의로부터 단순히 EMC라고 부르는 경우는 포괄적인 의미의 두 번째 용어 정의로 해석할 있으며, 흔히 EMI/EMC라고 부르는 경우의 EMC는 첫 번째 용어 정의로서 EMS와 같은 의미를 가지는 것으로 이해할 수 있습니다.

In order to establish the issue of electromagnetic interception, source, coupling path and susceptor etc. basically must be available at the same time as per Picture 1. Though phenomena of electromagnetic interception occur from excessive electromagnetic from the source, they are also caused from insufficient tolerance of devices. In order to reduce the problem of electromagnetic, number or output of source must be decreased in order not to intercept other devices, strengthening the tolerance of electromagnetic of the devices so that they can operate as intended under the electromagnetic environment to some extent. Compatibility of electronic wave environment indicates that various electric and electronic devices coexist harmoniously and it is the ultimate objective of EMI/EMC study. Each country in the world have implemented EMI, restriction of electromagnetic since late 1970s to achieve the objective and more seriously started its regulation as EMS regulation mainly led by EU was announced in 1 Jan. 1996. Modern concept of compatibility of electronic has been developed very proactively and comprehensively from the perspective of the devices which we intent to operate. Particularly, it means the ability of electric and electronic devices operate as designed under the electromagnetic environment where the devices are planned to install and further, additional electromagnetic of new device or system do not impact on the existing electromagnetic environment without influencing the adjacent existing devices. Definition of EMI/EMS which have been developed as mentioned above are now redefined by IEEE(ANSI/IEEE Std. 100-1988) as below.

EMI : A measure of electromagnetic radiation from equipment

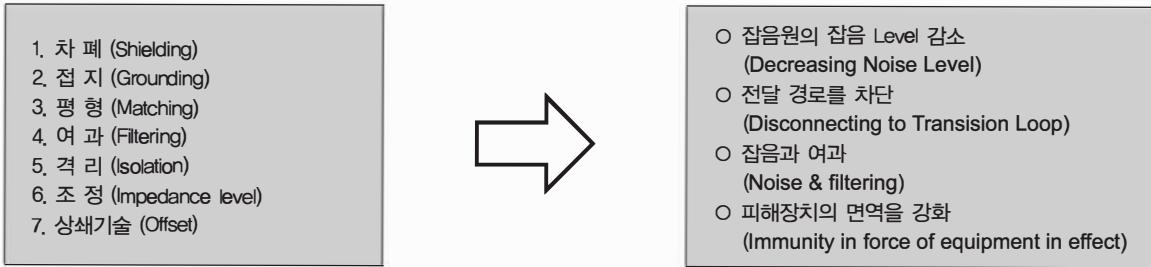
EMC : 1) A measure of equipment tolerance to external electro magnetic fields.

2) The ability of a device to function satisfactorily in its electro magnetic environment without introducing intolerable disturbance to that environment

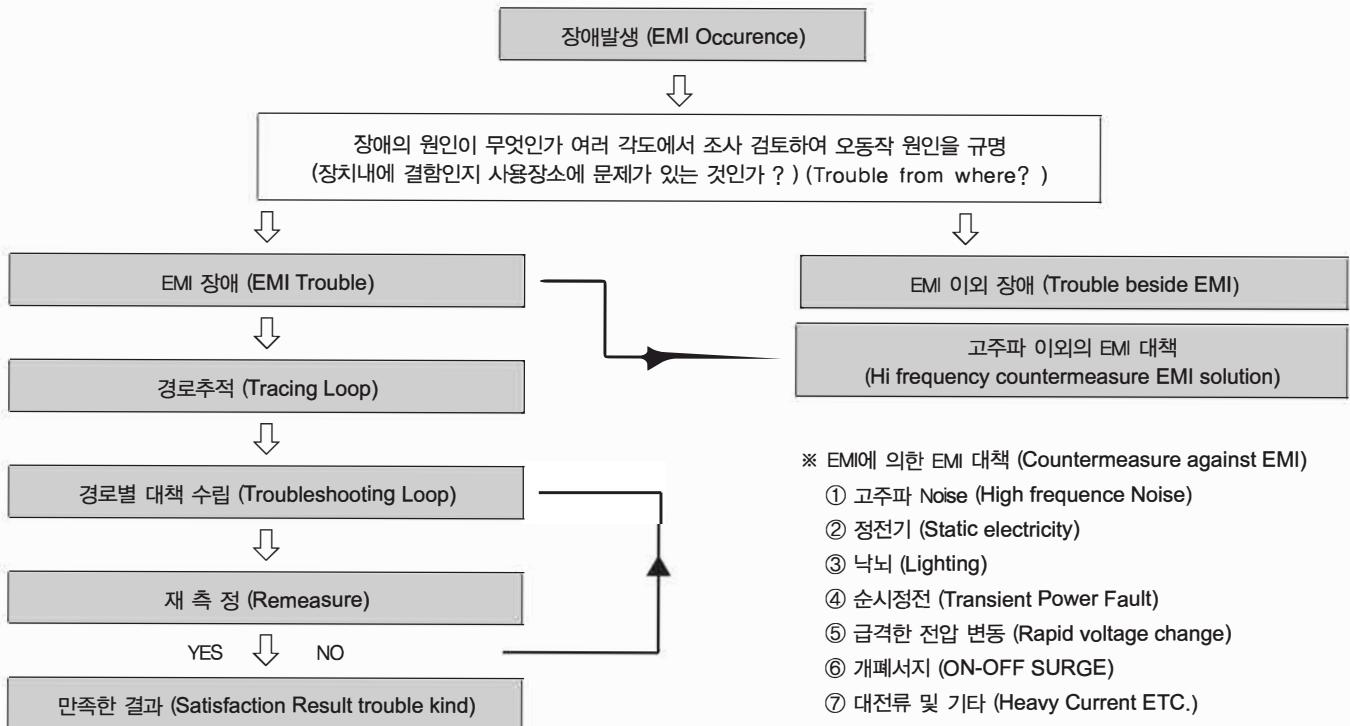
(or to other devices)

1. 전자파 장해 개요 (EMI) Overview of interception of electromagnetic (EMI)

1 – 1. EMI 해결방법 (Solution for EMI)



1 – 2. EMI 대책 수립절차와 발생 요인 (Countermeasure against EMI)



NOISE 종류 (Noise Mode)		오동작 현상 (Trouble Kind)	NOISE 와 오동작의 상관관계 (Relation between Noise & Trouble)
A	직류적 Noise (DC Noise)		→ A, B, C
B	상용주파수 Noise (Frequency Noise)	<ul style="list-style-type: none"> Analogue 입력의 Data Shift (Analog input is Data Shift) Anabgue 입력 Data의 흐트러짐 (Disturbance of analog input Data) Digital 입력의 변화 (Digital input change) Pulse 입력의 변화 (Pulse input change) Pulse 입력의 Data Shift (Pulse input data shift) CPU 정지 (CPU stop) 메모리에 잘못 기록됨 (Wrong writing to memory) Data 전송에러 (Data Transmission error) 잘못된 출력 (Wrong output) 부품파손 CRT화면의 찌그러짐 (CRT screen distortion) 	→ B, C, D
C	RFI(EMI)		→ A, B, D
D	EFT		→ A, B
E	SURGE or ESD		→ E, F
F	순시정전 (Transient Power Fault)		→ D, E, F
G	자계 (magnetic fields)		→ C, D, E
			→ D, E
			→ A, B, D, E
			→ G

2. NOISE 발생의 3대 요소 Three factors of noise generation

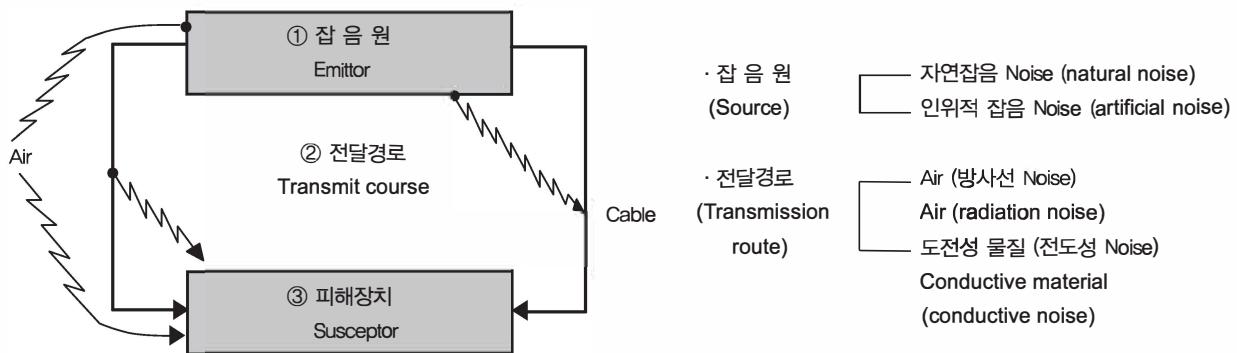


TABLE 1

2 - 1. 전기제어 장치의 Noise 경로 (Noise channel of electronic controller)

NOISE의 전달 경로는 공중으로 전달되는 복사 Noise와 주전원 Line으로 전달되는 전도 Noise 2 종류가 있습니다.

(There are two types including radiation noise which is transferred to the air and conductive noise which is delivered to the major electric power line.)

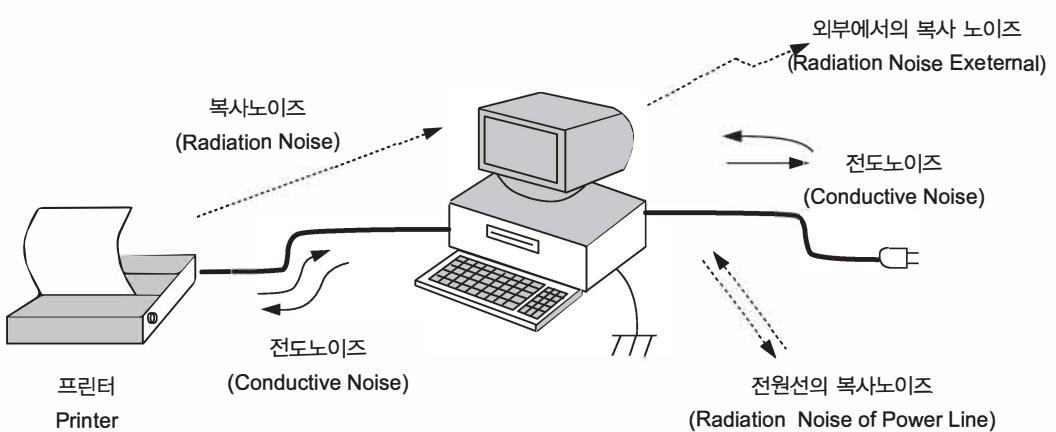


TABLE 2

3. 전도 노이즈 Conductive noise

3 – 1. Common Mode, Normal Mode Noise

전도 노이즈는 표 3 과 같이 Line과 어스간을 전달하는 Common Mode Noise(비대칭잡음)과 Line 간을 왕복하는 Normal Mode Noise(대칭잡음)가 있습니다. 특수한 경우를 제외한 이 2 종류의 노이즈가 항상 존재합니다.

Concerning conductive noise, there are two types as manifested in Table 3 such as common mode noise which delivers between line and us and normal mode which moves around between lines. Other than exceptional case, these two type of noise always exist.

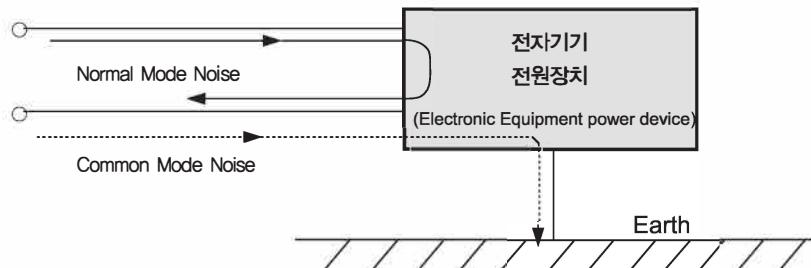


TABLE 3

3 – 2. Noise Filter의 원리 (Principle of noise filter)

가장 일반적인 Noise Filter의 회로는 표4와 같습니다.

The most common circuit of noise filter is indicated in Table 4.

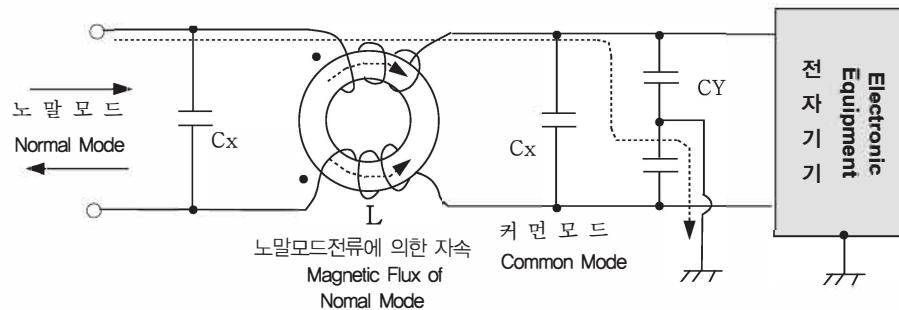
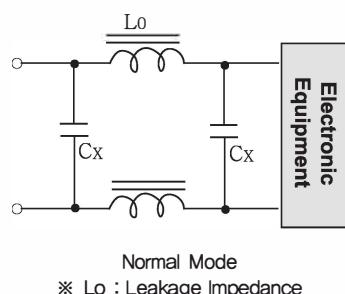


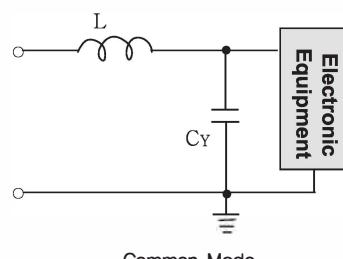
TABLE 4

노이즈 필터는 일종의 저감 Filter이며 또 차단 주파수는 높은 주파수에서 감쇄 효과가 있습니다. 노이즈 필터용으로 사용하는 코일은 Common Mode Choke Coil이며 1개의 Core에 2개의 권선이 동상에 있습니다. 이 때문에 통상 전원 전류에서는 내부의 자속이 없어지게 됩니다. 인덕턴스는 대부분 없어서 노말모드 노이즈의 감쇄효과는 그다지 없습니다. Common Mode 전류에 대해서는 커다란 인덕턴스를 얻도록 된 제품입니다. 이에 对地콘덴서 Cy와 함께 콤먼모드 노이즈의 감쇄에 크게 기여합니다. 또한 노말모드 노이즈에 대해서는 콘덴서 Cx 를 삽입 하므로써 감쇄 효과를 얻도록 된 제품입니다. 위와 같이 표4의 필터는 Normal Mode, Common Mode의 양 노이즈의 저지에 효과가 있습니다. 각각의 모드에서 등가회로는 표5와 같습니다.

Noise filter is kind of low pass filter and frequency of interception is reduced at the high frequency. Coil of noise filter is common mode choke coil and there are two coils in one core at the same phase. Because of it, magnetic flux electricity disappears at the electric current in general frequency. Because inductance mostly disappears, the effect of reduction of normal noise is not great. It is a product which obtains large inductance for common mode current. It reduces substantially common mode noise with condenser CY to the ground. Reduction can be obtained by inserting condenser Cx in terms of normal mode noise. Filter at the Table 4 intervenes noise of both normal mode and common mode. Equivalent circuit of each mode is as indicated in Table 5.



Normal Mode
※ Lo : Leakage Impedance



Common Mode

TABLE 5

4. 전자파 규제에 대한 규격 및 참고자료 Specification relevant to the regulation of electromagnetic and references

1990년 전기, 전자기기의 사용 급증으로 이들 기기에서 발생하는 불요전자파에 의한 통신 장해 및 기기 오동작으로 인한 산업재해 유발을 예방하고 선진국 보호무역주의에 적극 대처 하므로서 국내 전파 환경 보호 및 국내 제품의 국제 경쟁력을 제고하기 위해 국내 EMI 검정 규칙이 시행되어오고 있다.

EMI regulation has been implemented since 1990 in order to prevent industrial accident resulted from impediment of communication and error of devices by electromagnetic of electric and electronic devices and to cope with the protective trade regime of developed countries so that domestic environment can be protected and international competitiveness of domestic products can be strengthened.

4 - 1. 전자파 적합등록 / 세부대상 기기 (Detailed item)

대상기기 (Relevant device)	EMI std.	EMS std.	세부사항기기류 (Detailed item)
<ul style="list-style-type: none"> 1) 산업과학, 의료용 등 고주파 이용기기류 <ul style="list-style-type: none"> - 약사법에 의한 의료 용구 - 호흡보조기, 내장기능대용기, 보육기등 - 방사선 진료장치, 비전리 진단장치, 전기 수술기등 - 전자파 관련 모든 의료용구 1) Device to use high frequency such as industrial science and medical <ul style="list-style-type: none"> - Medical devices by pharmaceutical and medical law. - Breathing assistance, device to replace organ, device to care child - Radiation device, diagnosis of non ionization, electric operating device etc. - All medical devices relevant to electromagnetic. 			<p>산업, 과학의료 및 가정용으로 고주파 에너지를 발생하거나 이를 부분적으로 이용하도록 설계된 장치 및 기기로서 전기용품 안전관리법 및 약사법에 의한 형식승인 및 품목허가 대상기기</p> <p>Equipment or devices for industrial, scientific/medical and housing application which are designed to create high frequency energy or partly use. They are governed by safety control law of electric devices and application and permission regulation of pharmaceutical law.</p>
<ul style="list-style-type: none"> 2) 자동차 및 불꽃 점화 엔진 구동기기류 <ul style="list-style-type: none"> - 승용자동차 - 4.5톤 이하 승합, 화물 및 특수자동차 - 모든 자동차 2) Engine machine for automobile and ignition <ul style="list-style-type: none"> - Automobile vehicle of below 4.5ton, truck / special vehicle - All automobiles 	1997. 7. 1 1998. 1. 1 1999. 1. 1 2000. 1. 1	2000. 1. 1 1998. 1. 1 1999. 1. 1 2000. 1. 1	<p>전파통신이나 방송수신등에 방해가 되는 기기로서 자동차 관리법의 규정에 의하여 형식승인을 얻어야 하는 기기로 한다. 다만 이륜자동차와 자동차의 최고속도가 매시 25Km 이하인 자동차는 제외</p> <p>Devices which intercept electronic communication or broadcasting and must be approved according to law of automobile control except vehicle of two wheels and automobile of which max. speed per hour is less than 25Km..</p>
3) 방송 수신 기기 Receiver device for broadcast	1997. 1. 1	2000. 1. 1	<p>9KHz부터 1GHz까지의 주파수 범위내의 방송 또는 유사 정보를 수신하기 위한 음성 및 텔레비전 수신기와 이에 직접 연결되어 음성 또는 시각정보를 생성하거나 재생하기 위한 기기로서 전기용품 안전관리법에 의한 형식승인 대상 기기로 한다.</p> <p>Voice and TV receiver to receive broadcast from 9KHz to 1GHz or similar data. And devices to create or renew voice or visual data by direct connect to them. They are governed by safety control law of electric goods in terms of specification.,</p>

4. 전자파 규제에 대한 규격 및 참고자료 Specification relevant to the regulation of electromagnetic and references

대상기기 (Relevant device)	EMI std.	EMS std.	세부사항기기류 (Detailed item)
4) 가정용 전기기기 및 전동기기류 Electronic devices and motor at home appliance	1997. 7. 1	2000. 1. 1	가정용 전기기기, 휴대용 전동공구, 전기가열장치 및 기타 전기기기로서 전기용품 안전관리법에 의한 형식승인 대상 기기로 한다. Electric device for home, portable tool, electric heating device and other electric devices. They are governed by safety control law of electric goods in terms of specification..
5) 형광등 등 조명기기류 Fluorescent light and lighting etc.	1997. 7. 1	2000. 1. 1	9KHz부터 400GHz까지 주파수대에서의 형광등 및 조명 기능을 가지는기구또는장치로서전기용품안전관리법에 의한 형식승인 대상기기로 한다 Devices or equipment with the function of fluorescent light and lighting etc. for in 9KHz to 400GHz. They are governed by safety control law of electric goods in terms of specification..
6) 고전압 설비 및 그 부속기기류 Facility of high voltage and annexed devices	To be determine	2000. 1. 1	추후 결정 (It is subject to be decided later.)
7) 정보기기류 Information device etc.	1997. 7. 1	2000. 1. 1	전자파 적합등록 및 규칙 제2조 제3호의 규정(데이터 및 통신 메세지의 입력, 출력, 저장, 검색, 전송 또는 제어 등의 주요기능과 정보 전송용으로 작동되는 1개 이상의 터미널 포트를 갖춘 기기로서 600볼트 이하의 공급전압을 가진 기기중 전파법 제2조 제4호의 규정에 의한 무선설비를 제외 한기기)에 의한 기기로서 컴퓨터와 그 주변기기, 터미널 포트가 있는 내장 구성품 및 유선통신 단말기 등으로 한다 Device governed by registration of electromagnetic and article 2 and 3 (device which has a function of data / communication, input/output/save/search/transmit or control of message and operates for information transmission with more than one terminal port and has less than 600 volt supply other than wireless facility which is governed by article 2 and 4 frequency law) and components which have computer, relevant equipment and terminal port and wire communication terminal etc.

4. 전자파 규제에 대한 규격 및 참고자료 Specification relevant to the regulation of electromagnetic and references

4 - 2. 정보기기류의 세부 품목 (Detailed item of information devices)

(전자파 적합 등록 규칙 제2조 제2호의 규정에 의한 정보기기)

(Information devices in accordance with Article 2 .2 of registration of electromagnetic)

4. 전자파 규제에 대한 규격 및 참고자료 Specification relevant to the regulation of electromagnetic and references

4 - 3. 전자파 방지기준 (방사 / 전도) Standard to prevent electromagnetic (Radiation / Conduction)

Part	제 / 개정 (Regulation / Revision)			
	Distance(m)	Frequency(MHz)	Strength (dBuV/m)	
1) 산업, 과학, 의료용 등 고주파 이용 기기류 Devices of high frequency such as industrial, scientific and medical	방사기준 Standard of radiation	30	30 ~ 230 230 ~ 1000	30 37
	전도기준 Standard of conduction	-	0.15 ~ 5 5 ~ 30	56 ~ 46 50
2) 자동차류 (Automobiles etc.) · 광대역기준 (Wide area) · 협대역기준 (Narrow area)	-	10	30 ~ 1000 30 ~ 1000	34 ~ 45 24 ~ 35
3) 방송수신기기류 Receiver of broadcast	방사기준 Standard of radiation	3	3000 하 300 ~ 1000	57 56
	전도기준 Standard of conduction	-	0.15 ~ 30	56 ~ 46
4) 가정용 전기기기 및 전동기기류 Electric devices appliance at home	방사기준 Standard of radiation	3	30 ~ 300	35 ~ 45 (dBpW)
	전도기준 Standard of conduction	-	0.15 ~ 30	59 ~ 46
5) 형광등 등 조명기기류 (Fluorescent light and lighting etc.)	-	-	-	형광등의 삽입 손실 기준 등 4개 기준 (4 standards loss of insertion of fluorescent light)
6) 고전압 설비 및 그부속기기류 High voltage facility and components	-	-	-	추후 제정 (To be decided)

4 - 3 - 1. 정보기기류 (Information Devices)

I) 전도기준 (Standard Conduction)

Part	Frequency (MHz)	한계치(dB μ V) (Limit)		주1) 준 첨두치로 측정한 값이 평균치의 허용기준 이내 이면 평균치의 허용기준에 만족하는 것으로 볼 It is content with the permission standard of the average if it measures within the permission standard of the average in quasi peak.
		준첨두치(Quasi peak)	평균치(Average)	
A급기기 Class : A	0.15 ~ 0.5 0.5 ~ 30	79 73	66 60	주2) 주파수의 대수적 증가에 따라 직선적으로 감소 It decreases in a linear line according to the logarithmic increase of frequency.
B급기기 Class : B	0.15 ~ 0.5 0.5 ~ 5 5 ~ 30	66 ~ 56 (주2) Refer,2 56 60	56 ~ 46 (주2) Refer,2 46 50	

II) 방사기준 (Standard of radiation)

Frequency (MHz)	준첨두치 한계치 (dB μ V/m/m) Quasi peak limit	
	Class : A (10cm)	Class : B (10cm)
30 ~ 230 230 ~ 1000	40 47	30 37

4. 전자파 규제에 대한 규격 및 참고자료 Specification relevant to the regulation of electromagnetic and references

4 - 4. 전자파 내성기준 (EMS/Electromagnetic Susceptibility)

Part	Test Part	Frequency (MHz)	Standard	Remark
① 산업, 과학, 의료용 등 고주파 이용기기류 일반내성기준 General EMS standard Devices of high frequency such as industrial, scientific and medical	정전기방전 (ESD) 전자파방사 (REF)	30 ~ 500	4KV 3V/m	—
② 자동차 (Automobiles etc.)	전자파방사 (REF)	20 ~ 1000	20V/m	—
③ 방송수신기기류 (Receiver of broadcast)	전자파방사 (REF) RF전도전류 (RF-CC)	0.15 ~ 150 26 ~ 30	Audio, Video S/N 40dB	Apply Level 125dB _{1/2} V
④ 가정용전기기류 Electric devices/motor at home appliance	정전기방전 (ESD) 전자파방사 (REF) 서지 (Surge)	80 ~ 1000	4KV 3V/m 1KV	—
⑤ 형광등 등 조명기기류 Fluorescent light and lighting etc.	정전기방전 (ESD) 전자파방사 (REF)	— 30 ~ 500	4KV 3V/m	—
⑥ 고전압설비 및 그부속 기기류 High voltage facility and components	정전기방전 (ESD) 전자파방사 (REF)	— 30 ~ 500	4KV 3V/m	—

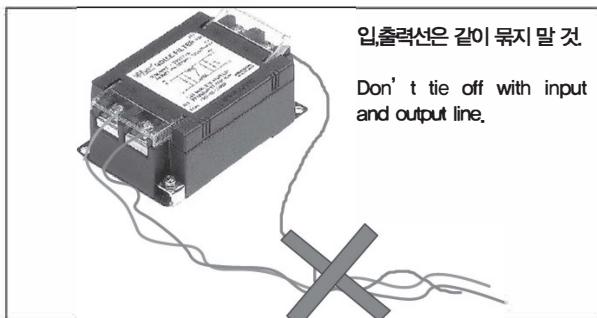
4 - 4 - 1. 정보기기류 (Information Devices)

Test Part	Test Terminal	Std.	Unit	Class	Remark
정전기 방전 (ESD)	표면 단자 Terminal	8(None Touch) 4(Touch)	KV	B	—
전자파 방사 (REF)	표면 단자 Terminal	80 ~ 1000	MHz V/m	A	—
전기적 빠른 과도현상 (Brust)	입출력 교류 전 원 단 자 Power Terminal	1 5 / 50 5	KV (Peak) Tr / Th ns KHz (Repeated)	B	—
	입출력 교류 전원 단자 외 Control Terminal	0.5 5 / 50 5	KV (Peak) Tr / Th ns KHz (Repeated)	B	—
서 지 (Surge)	적용단자 Application Ter.	1 1.2 / 50	KV (Peak) Tr / Th ns	B	—

5. NOISE FILTER 사용상 주의 Precaution in using noise filter

1) Noise Filter의 입,출력은 분리하고 가깝게 붙이지 않도록 하여 주십시오.

Please separate input and output wire of noise filter not to be closer each other.



입, 출력선을 가까이 붙이거나 또는 묶으면 Coupling에 의하여 Filter로 제거한 노이즈를 재차 걸러내야 합니다. 또 가깝게 붙이지 않더라도 입력선을 함체내에 같이 배선되면 함체내에 Noise가 방사됩니다. Noise Filter는 기기의 입구에 설치하고 입출력 배선은 가능한 차폐를 하여 주십시오.

When input and output line are closer or combined, noise must be screened repeatedly by coupling of filter. If input line is wired together in the container though not combined, noise is radiated. Noise filter must be installed at the entry of device and wiring of input and output are required to be shield if possible.

2) Noise Filter의 접지단자는 함체에 최단거리에 접속하여 주십시오.

Please connect ground earth terminal of noise filter in the shortest distance

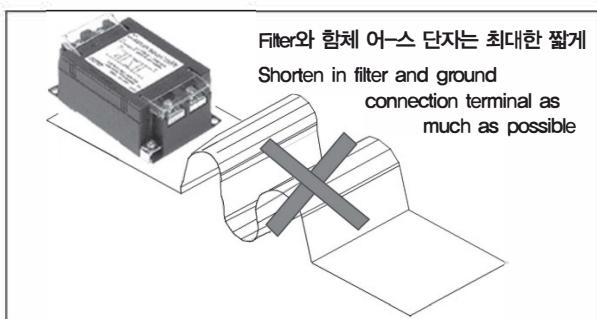


Common Mode Noise는 Noise Filter 속에 Condenser를 통하여 어스로 흐릅니다. 어스 Line을 길게 엮어놓으면 어스 임피던스가 높아지든지 감쇄 특성이 저하 됩니다. Filter의 금속 Case가 접지단자를 겸하는 것이므로 필터를 함체에 전기적으로 밀착하여 주십시오.

Common mode noise flows to earth through condenser in the noise filter. If earth line is tied long, either earth impedance is higher or effect of decrease is weakened. Because metal case of filter is also earth terminal, filter must be close to electrically the panel as much as possible.

3) Noise Filter의 접지점(취부점)과 함체의 접지점은 최대한 짧게 하여 주십시오.

Please shorten the earth point between earth point of noise filter and that of panel as much as possible.

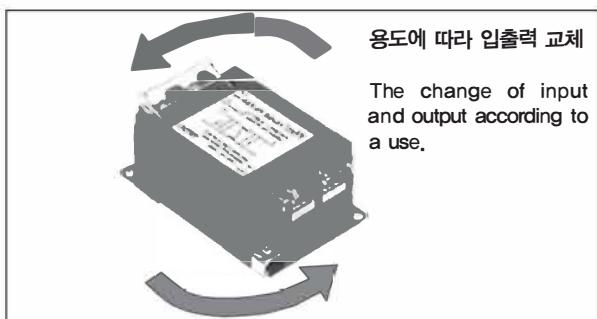


Noise Filter의 어스에는 Noise 전류와 Line주파수에 의하여 누설전류가 흐릅니다. 따라서 함체내를 전기적으로 빈틈없이 밀착 고정하여 주십시오.

Common mode noise and leakage current of power flows to earth terminal therefor must electrically close filter and in the panel.

4) Noise Filter의 삽입방향에 주의하여 주십시오.

Please be aware of the direction to insert at the noise filter



NOISE FILTER는 외래 NOISE에 대해서도 유출 노이즈와 같이 효과가 있습니다만 내부회로는 입출력 대칭일 경우가 보통입니다. 일반적으로 입출력 임피던스는 주파수에 의해 일치하지 않습니다. 또 사용하는 LINE의 기기 임피던스도 각각 다릅니다. NOISE FILTER에서는 입력 방향을 표시합니다만 보다 효과를 높이기 위해서는 반대 방향도 비교하여 좋은 결과를 얻는 방향으로 설치하여 주십시오.

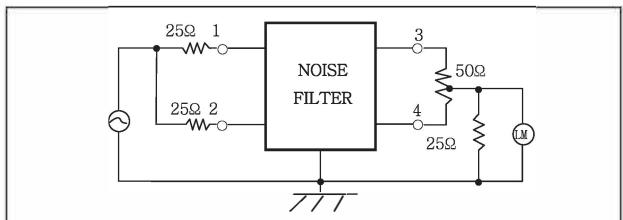
Though noise filter has an similar effect of leaking noise for external noise, internal circuit is commonly symmetry between input and output. Impedance of input and output are in general inconsistent with the frequency. Impedance of device of line to be used is also different. Though direction of input is indicated at noise filter, it is recommended to install in a consideration of the opposite direction.

NOISE FILTER

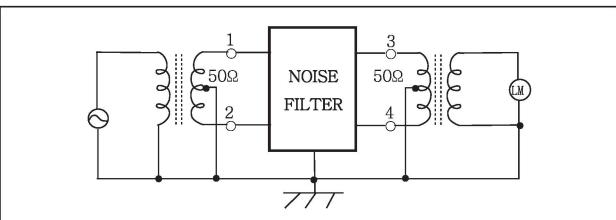
노이즈 필터

6. NOISE FILTER 의 측정방법 Noise Filter Test Method**6 – 1. 감쇄특성, 정특성 (Attenuation character and static characteristic)**

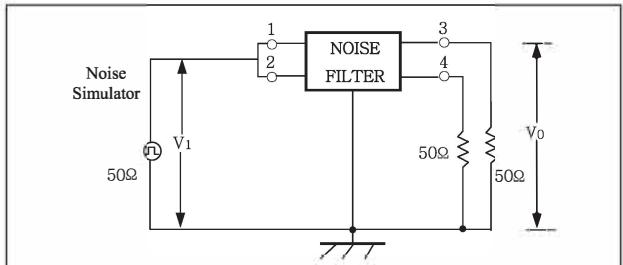
- 커먼 모드(Common Mode)비대칭파 (Asymmetrical)



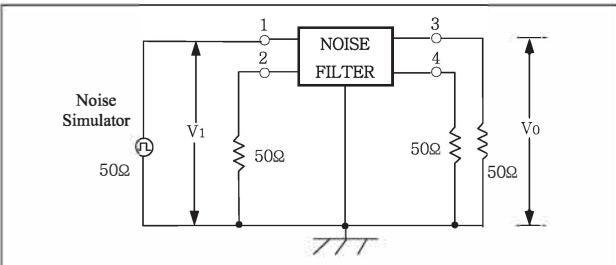
- 노말 모드(Normal Mode)대칭파 (Symmetrical)

**6 – 2. PULSE 감쇠특성, 정특성 (Attenuation character, static characteristic)**

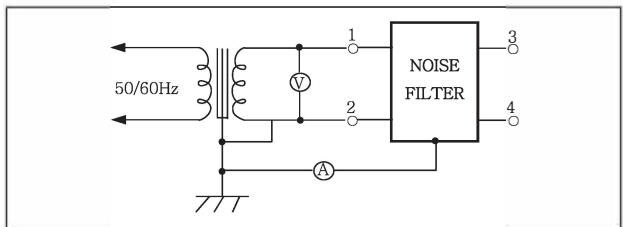
- 커먼 모드(Common Mode)비대칭파 (Asymmetrical)



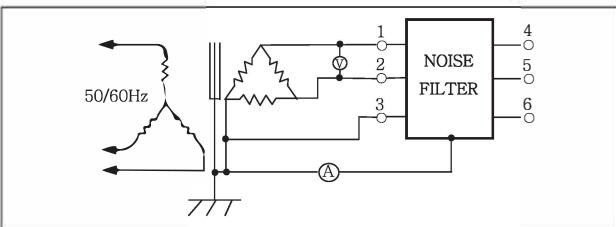
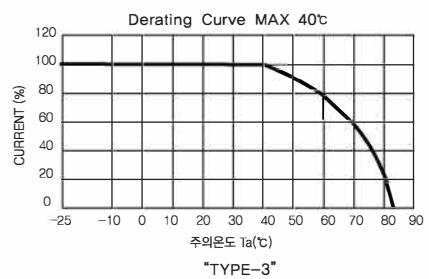
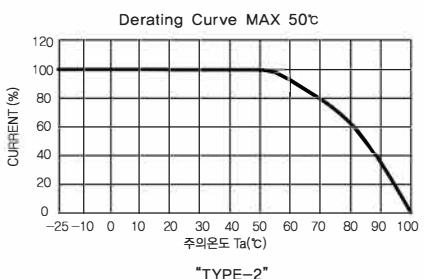
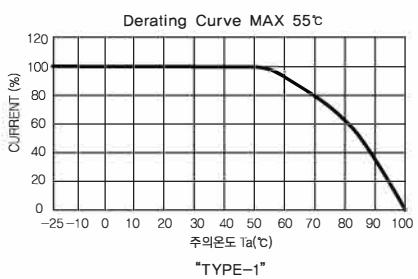
- 노말 모드(Normal Mode)대칭파 (Symmetrical)

**6 – 3. 대지(對地)누설전류 (Ground Leakage Current)**

- 단상 (1Phase)



- 삼상 (3Phase)

**6 – 4. Derating Curve****7. 인버터 후단용 NOISE FILTER (Noise filter at the output stage of inverter)**

현재 산업용 기계장치의 주류를 이루는 제품에 있어 EMI는 설비가 올바르게 동작을 수행하는데 치명적인 방해요소가 되고있다. 정상동작을 방해하고 프로그램 등을 파괴시킨다. 특히 인버터를 채용한 장비이거나 모터를 제어하는 기능을 가진 장비는 자체적인 자동작의 피해뿐만 아니라 인접한 설비까지도 피해를 준다. 인버터의 경우와 같이 스위칭을 통해 전원을 변환하는 장치의 출력을 동작 전원으로 사용하거나 그 가까이에 위치한 전자기기는 출력을 따라 유출되는 EMI의 영향을 받게 된다.

특히, PWM방식인 인버터의 경우 출력이 펄스 방식인 PWM파형으로 그 자체가 매우 큰 EMI를 가지게 된다.

전자기기를 EMI로 부터 보호하기 위하여 인버터 후단용 전용 노이즈 필터를 전원 장치등의 후단에 장치 하므로서 출력선을 따라서 유출되는 EMI의 크기를 줄여 주어 장비의 안전한 동작에 도움을 주는 역할을 하게 된다.

For most industrial machines and devices, EMI poses as a critical interference to the successful operation of equipment. It hinders normal operation and destroys programs. If an error occurs, an equipment which uses an inverter or an equipment carrying an ability to control motor causes damage not only to itself but also to other adjacent equipment. As in the case of an inverter, an electric equipment which uses, as its operating power supply, the output of the device which converts power supply through switching or an electronic equipment located nearby will be affected by EMI discharged along the output line.

In the case of PWM inverter in particular, output is PWM waveform, the pulse system which in itself carries extremely large level of EMI. To protect electronic equipment from EMI, noise filters designed for installing at the output stage of the inverter are mounted at the back of the power supply system to reduce the amplitude of EMI discharged along the output line helping equipment operate in a safe way.

TRANS-SINCET

REACTOR

MOTOR/SHRINK

TYPING

SMPSS

NOISE FILTER

HOLD/FREEZE

SPARE PART

RELAY

ELD-GEF

ZCT

PANEL-METER

CT=VT

SHUNT-FAN

NOISE FILTER

노이즈 필터

NOISE FILTER 모델 설명 (MODEL EXPLANATION)

WY N F - S 06 T 1 A(D)

- 취부유형 (Mounting type)
 - D : DIN Rail type
 - A : Option
- 품질유형 (Quality Type)
 - A : 보급형 (General type)
 - B : 고급형 (High Quality type)
 - C : 인버터후단용 (Inverter output type)
 - M : 고감쇄형(다단형) (Multi-stage type)
(High Attenuation)
- 케이스유형 (Case Type)
 - 1 : 플라스틱 케이스 (Plastic case)
 - 2 : 철재 케이스 (Steel case)
- 연결 단자 유형 (Connection Type)
 - A : 땡식 단자형 (Soldering type)
 - B : 볼트형 (Bolt type)
 - C : 콘센트형 (Outlet type)
 - L : 리드형 (Cable type)
 - P : PCB형 (PCB insert type)
 - S : Busbar형 (Bus-bar type)
 - T : Terminal block형 (Terminal block type)
- 정격전류 (Rated current)
 - 05 : 5A
 - 100 : 100A
 - 200 : 200A
 - 300 : 300A
 - 500 : 500A
 - 1000 : 1000A
- 필터 유형 (Filter Type)
 - S : 1Ø 250V
 - SH : 1Ø 500V
 - T : 3Ø 250V
 - TH : 3Ø 500V
 - 4TH : 3Ø4W 500V
 - D : DC 250V
 - DH : DC 500V
- WYF :운영노이즈필터 (Woonyoung Noise Filter)
N : New(NF) Series Type

NOISE FILTER**1Ø AC 250V 고감쇄형 Multi-stage type**

● 1Ø AC 250V

AC 250V

**고감쇄형(경제형)
1Ø Multi-Stage Type**

MODEL	CURRENT (A)	VOLTAGE (V)	SAFETY STANDARDS	PAGE
WYFS06T1M(D)	6	250	CE	490
WYFS10T1M(D)	10		CE	
WYFS15T1M(D)	15		CE	
WYFS20T1M(D)	20		CE	
WYFS30T1M(D)	30		CE	

**N형 고감쇄형
1Ø Multi-Stage Type**

MODEL	CURRENT (A)	VOLTAGE (V)	SAFETY STANDARDS	PAGE
WYNFS06T2M	6	250	CE	491
WYNFS10T2M	10		CE	
WYNFS15T2M	15		CE	
WYNFS20T2M	20		CE	
WYNFS30T2M	30		CE	
WYNFS40T2M	40		CE	
WYNFS50T2M	50		CE	
WYNFS60T2M	60		CE	
WYNFS80T2M	80		CE	
WYNFS100T2M	100		CE	
WYNFS120T2M	120		CE	
WYNFS150T2M	150		CE	

**고감쇄형
1Ø Multi-Stage Type**

MODEL	CURRENT (A)	VOLTAGE (V)	SAFETY STANDARDS	PAGE
WYFS06T2M	6	250	CE	493
WYFS10T2M	10		CE	
WYFS15T2M	15		CE	
WYFS20T2M	20		CE	
WYFS30T2M	30		CE	
WYFS40T2M	40		CE	
WYFS50T2M	50		CE	
WYFS60T2M	60		CE	
WYFS80T2M	80		CE	
WYFS100T2M	100		CE	

NOISE FILTER**3Ø AC 250V 고감쇄형 Multi-stage type****● 3Ø AC 250V****AC 250V**
**N형 고감쇄형
3Ø Multi-Stage Type**

MODEL	CURRENT (A)	VOLTAGE (V)	SAFETY STANDARDS	PAGE
WYNFT05T2M	5	250	CE	500
WYNFT10T2M	10		CE	
WYNFT15T2M	15		CE	
WYNFT20T2M	20		CE	
WYNFT30T2M	30		CE	
WYNFT40T2M	40		CE	
WYNFT50T2M	50		CE	
WYNFT60T2M	60		CE	
WYNFT80T2M	80		CE	
WYNFT100T2M	100		CE	
WYNFT120T2M	120		CE	
WYNFT150T2M	150		CE	
WYNFT200T2M	200	250	CE	501
WYNFT250T2M	250		CE	

**고감쇄형
3Ø Multi-Stage Type**

MODEL	CURRENT (A)	VOLTAGE (V)	SAFETY STANDARDS	PAGE
WYFT05T2M	5	250	CE	502
WYFT10T2M	10		CE	
WYFT15T2M	15		CE	
WYFT20T2M	20		CE	
WYFT30T2M	30		CE	
WYFT40T2M	40		CE	
WYFT50T2M	50		CE	
WYFT60T2M	60		CE	
WYFT80T2M	80		CE	
WYFT100T2M	100		CE	
WYFT120T2M	120		CE	
WYFT150T2M	150		CE	
WYFT200T2M	200	250	CE	503
WYFT250T2M	250		CE	
WYFT300T2M	300		CE	
WYFT400T2M	400		CE	
WYFT500T2M	500	250	CE	504
WYFT600T2M	600		CE	
WYFT800T2M	800		CE	
WYFT1000T2M	1000		CE	
WYFT1200T2M	1200		CE	505

NOISE FILTER

노이즈 필터

3Ø AC 500V 고감쇄형 Multi-stage type

● 3Ø AC 500V

N형 고감쇄형
3Ø Multi-Stage Type

MODEL	CURRENT (A)	VOLTAGE (V)	SAFETY STANDARDS	PAGE
WYNFTH05T2M	5	500	CE	507
WYNFTH10T2M	10		CE	
WYNFTH15T2M	15		CE	
WYNFTH20T2M	20		CE	
WYNFTH30T2M	30		CE	
WYNFTH40T2M	40		CE	
WYNFTH50T2M	50		CE	
WYNFTH60T2M	60		CE	
WYNFTH80T2M	80		CE	
WYNFTH100T2M	100		CE	
WYNFTH120T2M	120		CE	
WYNFTH150T2M	150		CE	
WYNFTH200T2M	200		CE	
WYNFTH250T2M	250		CE	

AC 500V

고감쇄형
3Ø Multi-Stage Type

MODEL	CURRENT (A)	VOLTAGE (V)	SAFETY STANDARDS	PAGE
WYFTH05T2M	5	500	CE	509
WYFTH10T2M	10		CE	
WYFTH15T2M	15		CE	
WYFTH20T2M	20		CE	
WYFTH30T2M	30		CE	
WYFTH40T2M	40		CE	
WYFTH50T2M	50		CE	
WYFTH60T2M	60		CE	
WYFTH80T2M	80		CE	
WYFTH100T2M	100		CE	
WYFTH120T2M	120		CE	
WYFTH150T2M	150		CE	
WYFTH200T2M	200		CE	
WYFTH250T2M	250		CE	
WYFTH300T2M	300	500	CE	511
WYFTH400T2M	400		CE	
WYFTH500T2M	500		CE	
WYFTH600T2M	600		CE	
WYFTH800T2M	800	500	CE	513
WYFTH1000T2M	1000		CE	
WYFTH1200T2M	1200		CE	

NOISE FILTER

3P4W AC 500V, DC 50V 125V 400V

**3P4W 전용 Noise Filter**

- 3P4W Series 500V



MODEL	CURRENT (A)	VOLTAGE (V)	SAFETY STANDARDS	PAGE
WYF4TH20T2M	20	500	CE	524
WYF4TH30T2M	30		CE	
WYF4TH40T2M	40		CE	
WYF4TH50T2M	50		CE	
WYF4TH60T2M	60		CE	
WYF4TH80T2M	80		CE	
WYF4TH100T2M	100		CE	
WYF4TH120T2M	120		CE	
WYF4TH150T2M	150		CE	
WYF4TH200T2M	200		CE	
WYF4TH250T2M	250	525	CE	525
WYF4TH300T2M	300		CE	
WYF4TH400T2M	400		CE	
WYF4TH500T2M	500		CE	
WYF4TH600T2M	600		CE	
			CE	

DC Noise Filter

- DC 50V, 125V, 400V



MODEL	CURRENT (A)	VOLTAGE (V)	SAFETY STANDARDS	PAGE
WYFD06T1A(D)	6	12VDC ~ 50VDC	CE	556
WYFD10T1A(D)	10		CE	
WYFD15T1A(D)	15		CE	
WYFD20T1A(D)	20		CE	
WYFD30T1A(D)	30		CE	
WYFD06T1A(D)	6	60VDC ~ 125VDC	CE	557
WYFD10T1A(D)	10		CE	
WYFD15T1A(D)	15		CE	
WYFD20T1A(D)	20		CE	
WYFD30T1A(D)	30		CE	
WYFD06T1A(D)	6	150VDC ~ 400VDC	CE	558
WYFD10T1A(D)	10		CE	
WYFD15T1A(D)	15		CE	
WYFD20T1A(D)	20		CE	
WYFD30T1A(D)	30		CE	

NOISE FILTER

1Ø, 3Ø AC 250, 500V 고급형 High Quality type

노이즈 필터



● 1Ø, 3Ø AC 250 & 500V

AC 250 · 500V

고급형(EMI Filter)
1Ø High Quality Type

MODEL	CURRENT (A)	VOLTAGE (V)	SAFETY STANDARDS	PAGE
WYFS03C2M	3	250	CE	590
WYFS06C2M	6		CE	
WYFS10C2M	10		CE	
WYFS15C2M	15		CE	
WYFS30C2M	30		CE	

고급형
1Ø High Quality Type

MODEL	CURRENT (A)	VOLTAGE (V)	SAFETY STANDARDS	PAGE
WYFS06T1B(D)	6	250	KCE	530
WYFS10T1B(D)	10		KCE	
WYFS15T1B(D)	15		KCE	
WYFS20T1B(D)	20		KCE	
WYFS30T1B(D)	30		KCE	
WYFS40T1B(D)	40		KCE	
WYFS50T1B(D)	50		KCE	

N형 고급형
3Ø High Quality type

MODEL	CURRENT (A)	VOLTAGE (V)	SAFETY STANDARDS	PAGE
WYNFT40T2B	40	250	CE	535
WYNFT50T2B	50		CE	
WYNFTH40T2B	40	500	CE	538
WYNFTH50T2B	50		CE	

고급형
3Ø High Quality Type

MODEL	CURRENT (A)	VOLTAGE (V)	SAFETY STANDARDS	PAGE
WYFT05T1B(D)	5	250	KCE	534
WYFT10T1B(D)	10		KCE	
WYFT15T1B(D)	15		KCE	
WYFT20T1B(D)	20		KCE	
WYFT30T1B(D)	30		KCE	
WYFT40T2B	40		CE	536
WYFT50T2B	50		CE	
WYFTH05T1B(D)	5	500	KCE	537
WYFTH10T1B(D)	10		KCE	
WYFTH15T1B(D)	15		KCE	
WYFTH20T1B(D)	20		KCE	
WYFTH30T1B(D)	30		KCE	
WYFTH40T2B	40		CE	539
WYFTH50T2B	50		CE	

NOISE FILTER

1Ø, 3Ø AC 250, 500V 보급형 General type

**1Ø AC 250 보급형 General type**

- 1Ø AC 250 & 500V

	MODEL	CURRENT (A)	VOLTAGE (V)	SAFETY STANDARDS	PAGE
1Ø PCB Type	WYFS01P1	1	250	CE	548
	WYFS02P1	2		CE	
	WYFS03P1	3		CE	
	WYFS06P1	6		CE	
	WYFS01P3	1		CE	
	WYFS02P3	2		CE	
1Ø Wire Type	WYFS03P3	3	250	CE	549
	WYFS06P3	6		CE	
	WYFS03L1	3		CE	
	WWYFS06L1	6		CE	
	WYFS03A3	3		CE	
	WYFS06A3	6		CE	
1Ø PIN Type	WYFS03A2	3	250	CE	551
	WYFS06A2	6		CE	
	WYFS06TD	6	250	CE, UL	552
	WYFS10TD	10		CE, UL	
	WYFS15TD	15		CE, UL	
	WYFS20TD	20		CE, UL	

	MODEL	CURRENT (A)	VOLTAGE (V)	SAFETY STANDARDS	PAGE
N형 보급형 1Ø General Type	WYNFS40T2A	40	250	CE	557
	WYNFS50T2A	50		CE	
	WYNFS60T2A	60		CE	
	WYNFS80T2A	80		CE	
	WYNFS100T2A	100		CE	
	WYNFS120T2A	120		CE	
	WYNFS150T2A	150		CE	

	MODEL	CURRENT (A)	VOLTAGE (V)	SAFETY STANDARDS	PAGE
보급형 1Ø General Type	WYFS03TM	3	250	CE	554
	WYFS06TM	6		CE	
	WYFS06T1A(D)	6		CE, UL	555
	WYFS10T1A(D)	10		CE, UL	
	WYFS15T1A(D)	15		CE, UL	
	WYFS20T1A(D)	20		CE, UL	
	WYFS30T1A(D)	30		CE, UL	
보급형 1Ø General Type	WYFS40T1A(D)	40	250	CE	556
	WYFS50T1A(D)	50		CE	
	WYFS60T2A	60		CE	
	WYFS80T2A	80		CE	
	WYFS100T2A	100		CE	
	WYFS120T2A	120		CE	
보급형 1Ø General Type	WYFS150T2A	150	250	CE	558
	WYFS200T2A	200		CE	
	WYFSH06T1A(D)	6	500	CE	559
	WYFSH10T1A(D)	10		CE	
	WYFSH15T1A(D)	15		CE	
	WYFSH20T1A(D)	20		CE	

AC 250, 500V

NOISE FILTER**3Ø AC 250, 500V 보급형 General type****3Ø AC 250 & 500V****AC 250, 500V**
**N형 보급형
3Ø General Type**
**보급형
3Ø General Type**

MODEL	CURRENT (A)	VOLTAGE (V)	SAFETY STANDARDS	PAGE
WYNFT40T2A	40	250	CE	573
WYNFT50T2A	50		CE	
WYNFT60T2A	60		CE	
WYNFT80T2A	80		CE	
WYNFT100T2A	100		CE	
WYNFT120T2A	120		CE	
WYNFT150T2A	150		CE	
WYNFT200T2A	200		CE	
WYNFT250T2A	250		CE	
WYNFTH40T2A	40		CE	
WYNFTH50T2A	50	500	CE	579
WYNFTH60T2A	60		CE	
WYNFTH80T2A	80		CE	
WYNFTH100T2A	100		CE	
WYNFTH120T2A	120		CE	
WYNFTH150T2A	150		CE	
WYNFTH200T2A	200		CE	
WYNFTH250T2A	250		CE	
WYFT05T1A(D)	5	250	KEC, UL	572
WYFT10T1A(D)	10		KEC, UL	
WYFT15T1A(D)	15		KEC, UL	
WYFT20T1A(D)	20		KEC, UL	
WYFT30T1A(D)	30		KEC, UL	
WYFT40T2A	40	250	CE	574
WYFT50T2A	50		CE	
WYFT60T2A	60		CE	
WYFT80T2A	80		CE	
WYFT100T2A	100		CE	
WYFT120T2A	120		CE	
WYFT150T2A	150		CE	
WYFT200T2A	200		CE	
WYFT250T2A	250		CE	
WYFT300T2A	300	250	CE	575
WYFT400T2A	400		CE	
WYFT500T2A	500		CE	
WYFT600T2A	600		CE	
WYFT800T2A	800	250	CE	577
WYFT1000T2A	1000		CE	
WYFT1200T2A	1200		CE	
WYFTH05T1A(D)	5	500	KEC, UL	578
WYFTH10T1A(D)	10		KEC, UL	
WYFTH15T1A(D)	15		KEC, UL	
WYFTH20T1A(D)	20		KEC, UL	
WYFTH30T1A(D)	30		KEC, UL	
WYFTH40T2A	40	500	CE	580
WYFTH50T2A	50		CE	
WYFTH60T2A	60		CE	
WYFTH80T2A	80		CE	
WYFTH100T2A	100		CE	
WYFTH120T2A	120		CE	
WYFTH150T2A	150		CE	
WYFTH200T2A	200		CE	
WYFTH250T2A	250		CE	
WYFTH300T2A	300	500	CE	581
WYFTH400T2A	400		CE	
WYFTH500T2A	500		CE	
WYFTH600T2A	600		CE	
WYFTH800T2A	800	500	CE	582
WYFTH1000T2A	1000		CE	
WYFTH1200T2A	1200		CE	

NOISE FILTER**3Ø AC 250, 500V 인버터후단용 Inverter output type****● 3Ø AC 250 & 500V****AC 250 · 500V**
**인버터후단용
3Ø Inverter output type**

MODEL	CURRENT (A)	VOLTAGE (V)	SAFETY STANDARDS	PAGE
WYNFT40T2C	40	250	CE	573
WYNFT50T2C	50		CE	
WYNFT60T2C	60		CE	
WYNFT80T2C	80		CE	
WYNFT100T2C	100		CE	
WYNFT120T2C	120		CE	
WYNFT150T2C	150		CE	
WYNFT200T2C	200		CE	
WYNFT250T2C	250		CE	
WYNFT40T2C	40		CE	
WYNFT50T2C	50	500	CE	579
WYNFT60T2C	60		CE	
WYNFT80T2C	80		CE	
WYNFT100T2C	100		CE	
WYNFT120T2C	120		CE	
WYNFT150T2C	150		CE	
WYNFT200T2C	200		CE	
WYNFT250T2C	250		CE	
WYFT05T1C(D)	5	250	KC CE ML	572
WYFT10T1C(D)	10		KC CE ML	
WYFT15T1C(D)	15		KC CE ML	
WYFT20T1C(D)	20		KC CE ML	
WYFT30T1C(D)	30		KC CE ML	
WYFT40T2C	40	250	CE	574
WYFT50T2A	50		CE	
WYFT60T2C	60		CE	
WYFT80T2C	80		CE	
WYFT100T2C	100		CE	
WYFT120T2C	120		CE	
WYFT150T2C	150		CE	
WYFT200T2C	200		CE	
WYFT250T2C	250		CE	
WYFT300T2C	300	250	CE	575
WYFT400T2C	400		CE	
WYFT500T2C	500	250	CE	576
WYFT600T2C	600		CE	
WYFT800T2C	800		CE	
WYFT1000T2C	1000		CE	
WYFT1200T2C	1200	250	CE	577
WYFTH05T1C(D)	5		KC CE ML	
WYFTH10T1C(D)	10		KC CE ML	
WYFTH15T1C(D)	15		KC CE ML	
WYFTH20T1C(D)	20		KC CE ML	
WYFTH30T1C(D)	30	500	KC CE ML	578
WYFTH40T2C	40		CE	
WYFTH50T2C	50		CE	
WYFTH60T2C	60		CE	
WYFTH80T2C	80		CE	
WYFTH100T2C	100		CE	
WYFTH120T2C	120		KC CE	
WYFTH150T2C	150		KC CE	
WYFTH200T2C	200		KC CE	
WYFTH250T2C	250		KC CE	
WYFTH300T2C	300	500	KC CE	581
WYFTH400T2C	400		KC CE	
WYFTH500T2C	500	500	KC CE	582
WYFTH600T2C	600		KC CE	
WYFTH800T2C	800		KC CE	
WYFTH1000T2C	1000		KC CE	
WYFTH1200T2C	1200	500	CE	583

노이즈필터
Noise Filter

1Ø 고감쇄형(Multi-Stage Type)

• 1Ø 250V 6~150A



NOISE FILTER

1Ø 250V 고감쇄형 Multi-Stage Type

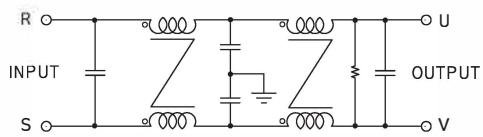
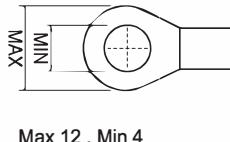
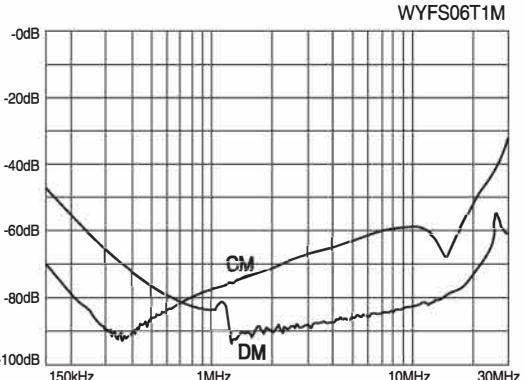
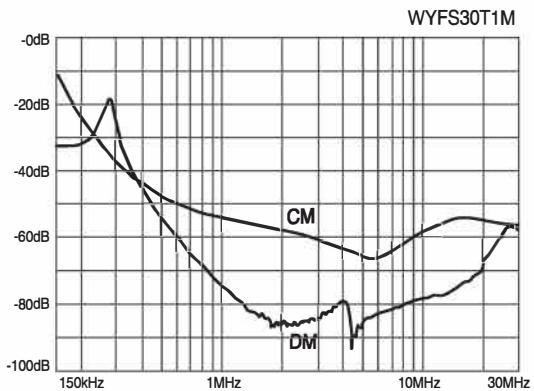
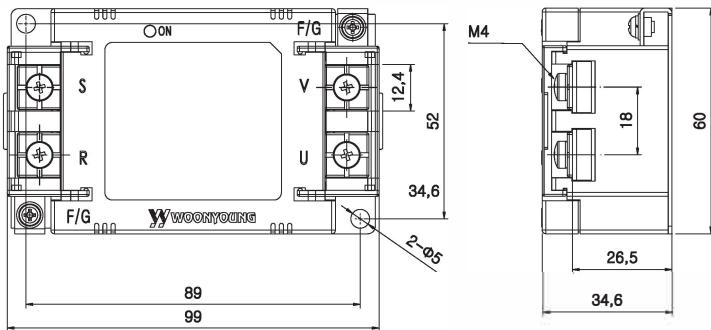
**Features**

- 2 Mounting Option
 - WYF****D : Din Rail Mounting
 - WYF**** : Screw Mounting
- Wide Band : High Attenuation
- Band Width : 150KHz~30MHz
- Low Leakage
- RoHS Compliant
- KC(HK03001–18007A)

Specifications

ITEM \ MODEL	SYMBOL	WYFS06T1M (D)	WYFS10T1M (D)	WYFS15T1M (D)	WYFS20T1M (D)	WYFS30T1M (D)
Rated Voltage	V			250		
Rated Current	A	6	10	15	20	30
Frequency	Hz			50/60		
Dielectric Withstand	V			2000		
Insulation Resistance	MΩ			500		
Leakage Current	mA			1.8		
Operating Temperature	°C		-25°C ~ +100°C [Refer to Derating Curve TYPE-1]			
Operating Humidity	RH			35~85%RH		
Weight	kg			0.2		

※ "D" : DIN-Rail type of page 184 / Derating Curve of page 103

Circuit Diagram**Terminal****Characteristics****Dimension**

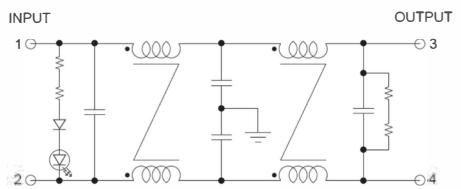
NOISE FILTER**N Series 1Ø 250V 고감쇄형 Multi-Stage Type****CE RoHS****Features**

- Wide Band : High Attenuation
- Band Width : 150KHz~30MHz
- RoHS Compliant

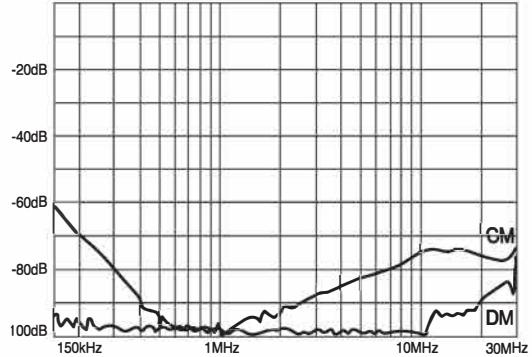
Specifications

ITEM	MODEL	SYMBOL	WYNF S06T2M	WYNF S10T2M	WYNF S15T2M	WYNF S20T2M	WYNF S30T2M	WYNF S40T2M	WYNF S50T2M	
Rated Voltage	V		250Vac							
Rated Current	A		6A	10A	15A	20A	30A	40A	50A	
Frequency	Hz		50/60							
Dielectric Withstand	V		1500Vac for one 1minute							
Insulation Resistance	MΩ		DC 100MΩ at the 500Vdc							
Leakage Current	mA		≤9mA at the 250Vac							
Operating Temperature	℃		-25°C ~ +100°C [Refer to Derating Curve TYPE-1]							
Operating Humidity	RH		35~85%RH							
Weight	kg		2.4							

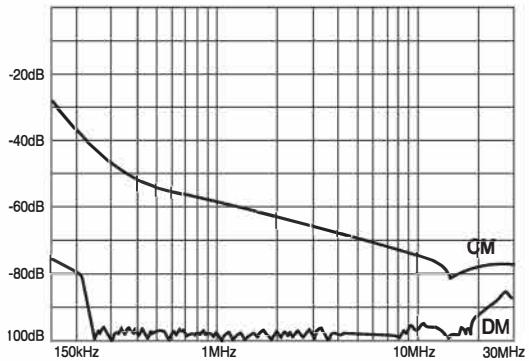
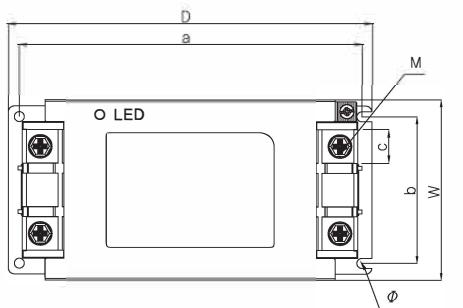
※ Derating Curve of page 103

Circuit Diagram**Terminal**Max 10, Min 4 (6~20A)
Max 16, Min 5 (30~50A)**Characteristics**

WYNFS06T2M



WYNFS50T2M

**Dimension**

MODEL	W	H	D	a	b	c	d	M	Ø
WYNFS06~20T2M	70.5	45	202	194	51.5	10.5	33	4	5
WYNFS30~50T2M	79.2	48.3	242	232	60	13	33.5	5	5

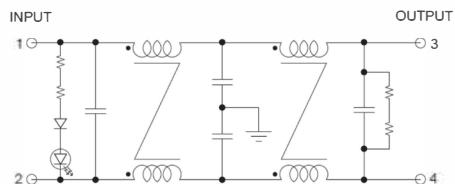
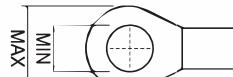
NOISE FILTER**N Series 1Ø 250V 고감쇄형 Multi-Stage Type****CE RoHS****Features**

- Wide Band : High Attenuation
- Band Width : 150kHz~30MHz
- RoHS Compliant

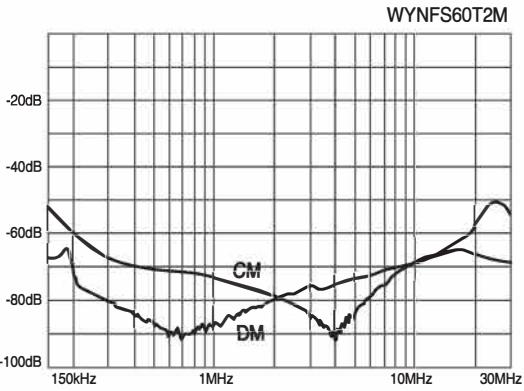
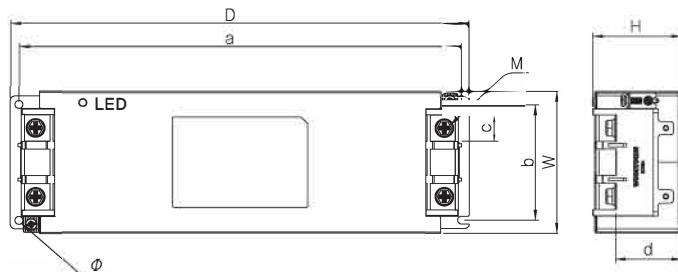
Specifications

ITEM \ MODEL	SYMBOL	WYNFS60T2M	WYNFS80T2M	WYNFS100T2M	WYNFS120T2M	WYNFS150T2M
Rated Voltage	V	250Vac				
Rated Current	A	60A	80A	100A	120A	150A
Frequency	Hz	50/60				
Dielectric Withstand	V	1500Vac for one minute				
Insulation Resistance	MΩ	DC 100MΩ at the 500Vdc				
Leakage Current	mA	≤9mA at the 250Vac				
Operating Temperature	°C	-25°C ~ +100°C [Refer to Derating Curve TYPE-1]				
Operating Humidity	RH	35~85%RH				
Weight	kg	4.5		5.2		

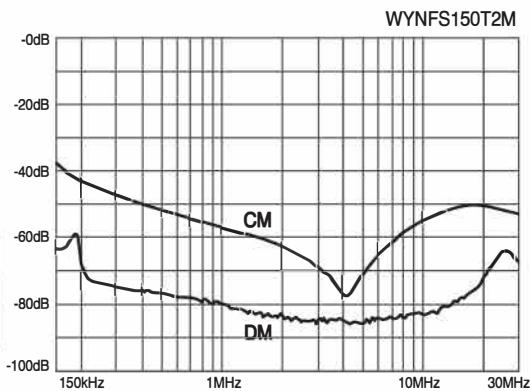
※ Derating Curve of page 103

Circuit Diagram**Terminal**

Max 16, Min 6 (60~80A)
Max 23, Min 8 (100~150A)

Characteristics**Dimension**

MODEL	W	H	D	a	b	c	d	M	Ø
WYNFS60~80T2M	91	57.2	295	284.5	74	17	42.3	6	5
WYNFS100~150T2M	115	75	384.7	368	96	24	58	8	5



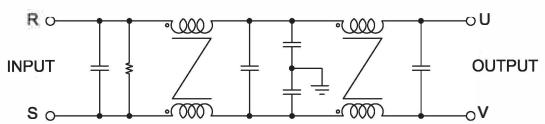
NOISE FILTER**1Ø 250V 고감쇄형 Multi-Stage Type****CE RoHS****Features**

- High Attenuation
- High Voltage Pulse Noise
- 2 Stage Filter
- Band Width : 150KHz~30MHz
- RoHS Compliant

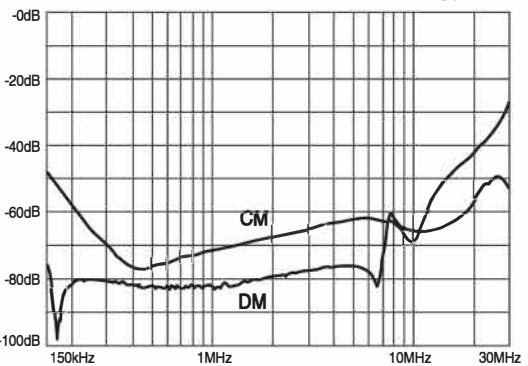
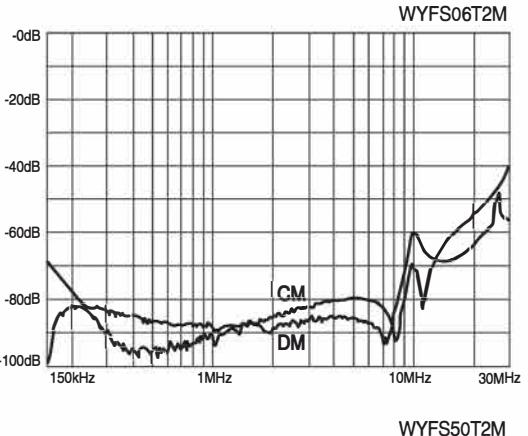
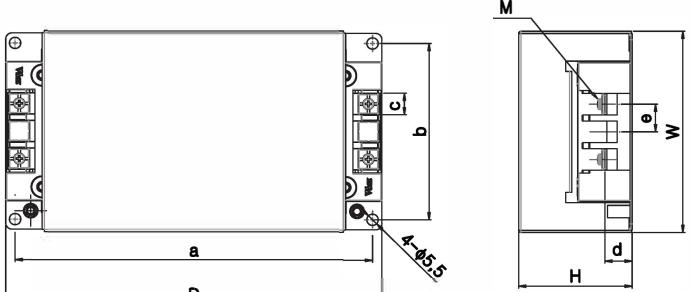
Specifications

ITEM	MODEL	SYMBOL	WYFS06T2M	WYFS10T2M	WYFS15T2M	WYFS20T2M	WYFS30T2M	WYFS40T2M	WYFS50T2M
Rated Voltage	V					250			
Rated Current	A		6	10	15	20	30	40	50
Frequency	Hz					50/60			
Dielectric Withstand	V					1500			
Insulation Resistance	MΩ					500			
Leakage Current	mA					9			
Operating Temperature	℃					-25°C ~ +100°C [Refer to Derating Curve TYPE-1]			
Operating Humidity	RH					35~85%RH			
Weight	kg			0.8				1.7	

※ Derating Curve of page 103

Circuit Diagram**Terminal**

Max 10, Min 4 (6~20A)
Max 14, Min 4 (30~50A)

Characteristics**Dimension**

MODEL	W	H	D	a	b	c	d	e
WYFS06~20T2M	98	55	184	175	86	10.5	13	13.5
WYFS30~50T2M	116	75	234	219	98	15	18	27.5

NOISE FILTER

1Ø 250V 고감쇄형 Multi-Stage Type

CE RoHS

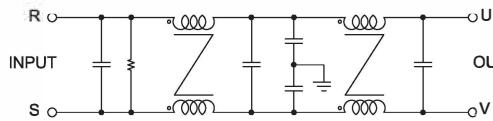
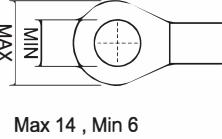
**Features**

- High Attenuation
- High Voltage Pulse Noise
- 2 Stage Filter
- Band Width : 150KHz~30MHz
- RoHS Compliant

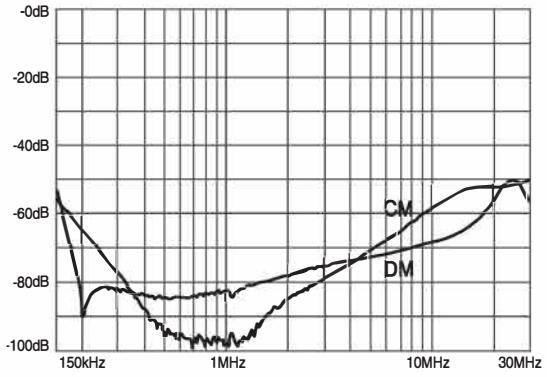
Specifications

ITEM	MODEL	SYMBOL	WYFS60T2M	WYFS80T2M	WYFS100T2M
Rated Voltage	V			250	
Rated Current	A		60	80	100
Frequency	Hz			50/60	
Dielectric Withstand	V			1500	
Insulation Resistance	MΩ			500	
Leakage Current	mA			9	
Operating Temperature	°C		-25°C ~ +100°C [Refer to Derating Curve TYPE-1]		
Operating Humidity	RH			35~85%RH	
Weight	kg			2,8	

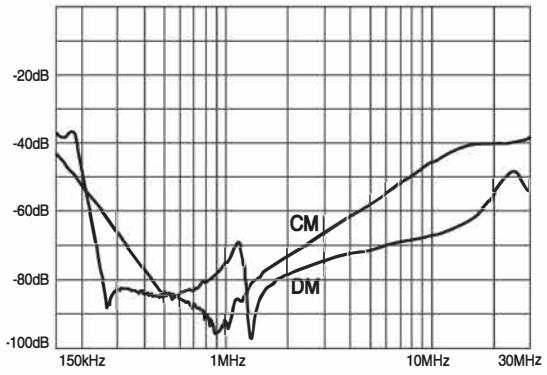
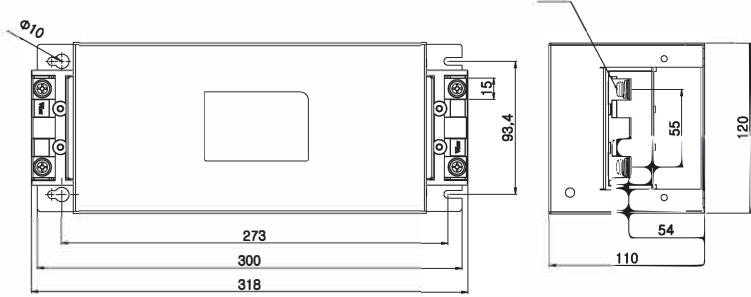
※ Derating Curve of page 103

Circuit Diagram**Terminal****Characteristics**

WYFS60T2M



WYFS100T2M

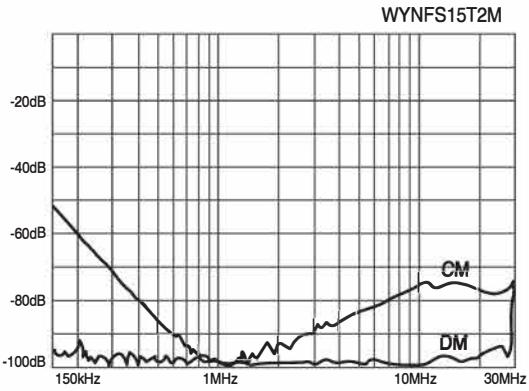
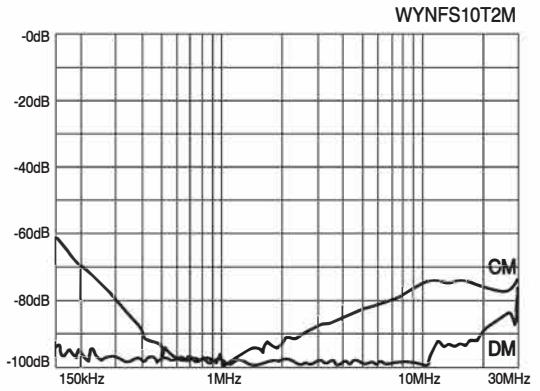
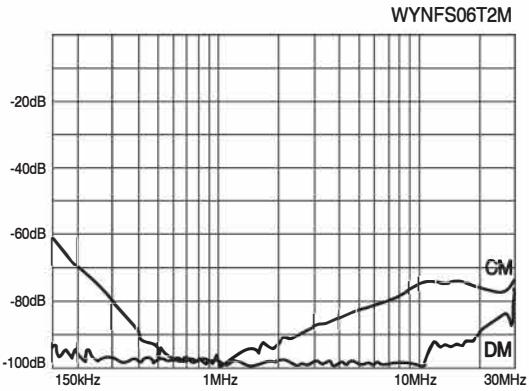
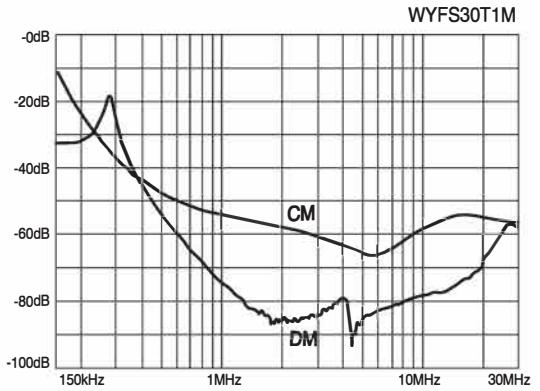
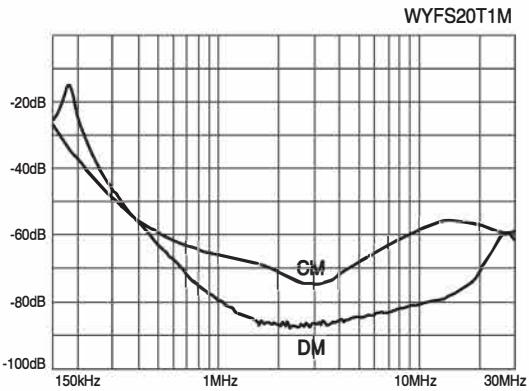
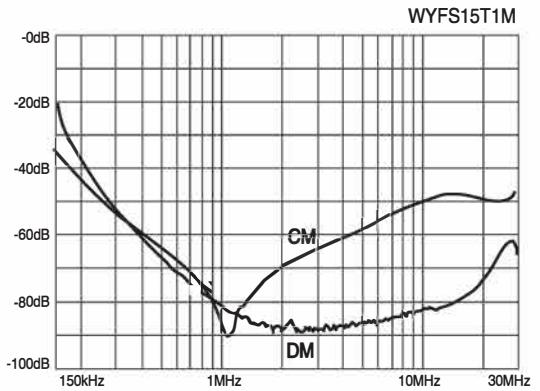
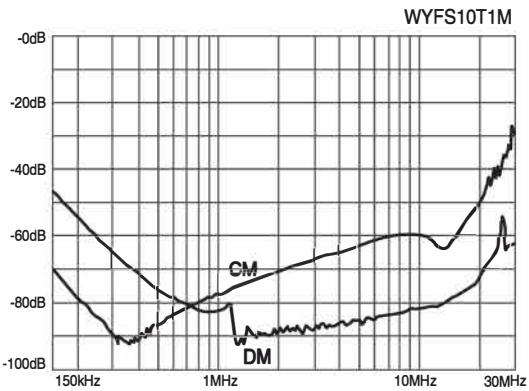
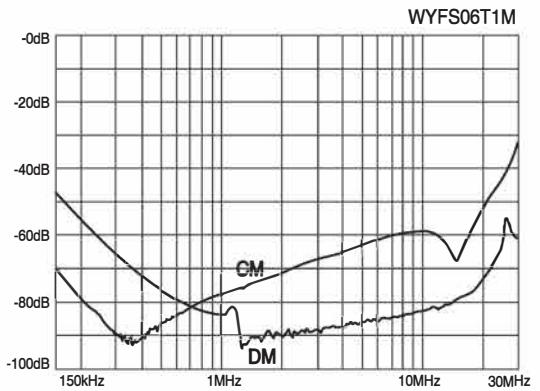
**Dimension**

NOISE FILTER

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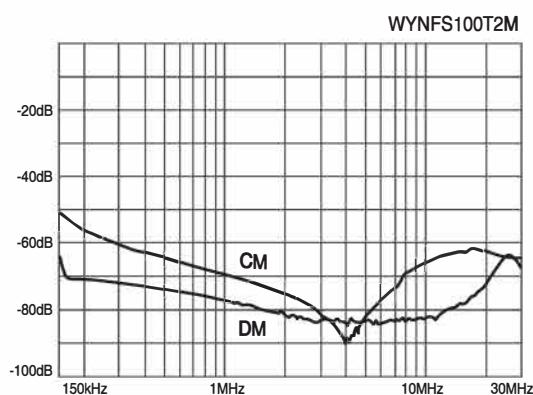
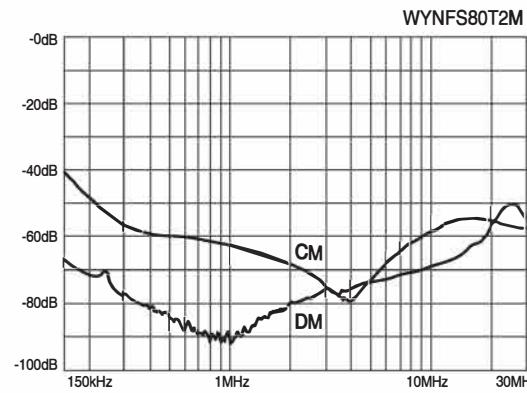
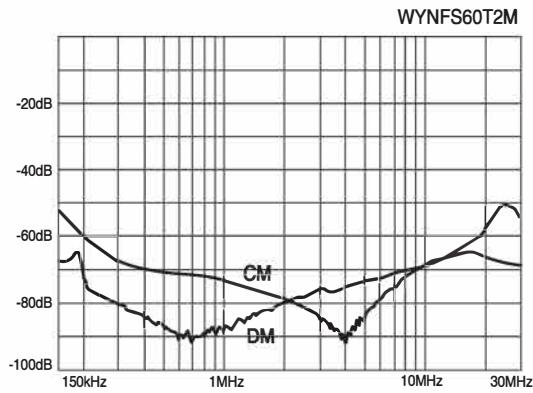
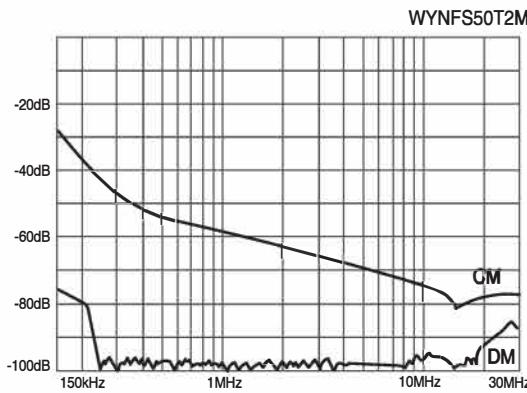
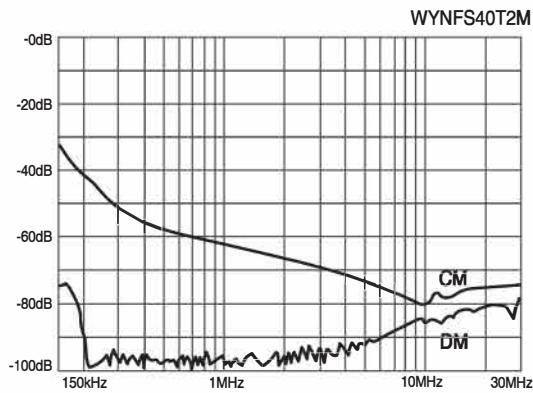
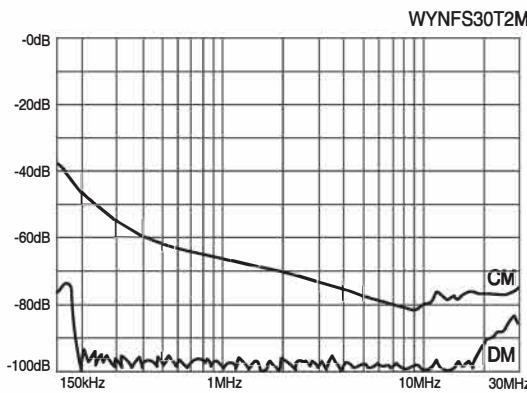
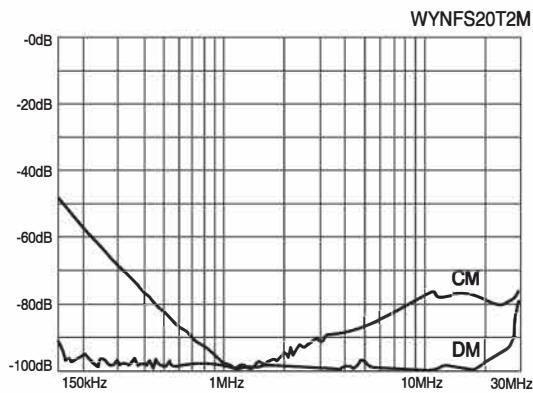
1Ø 250V 고감쇄형 Characteristics

CE RoHS

Characteristics

※ CM : Common mode, DM : Differential mode

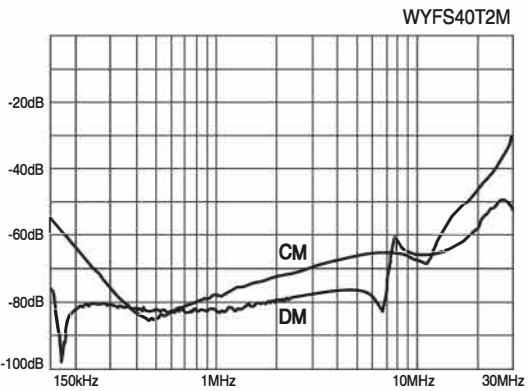
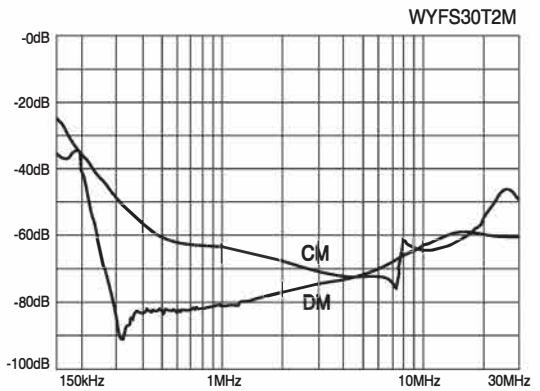
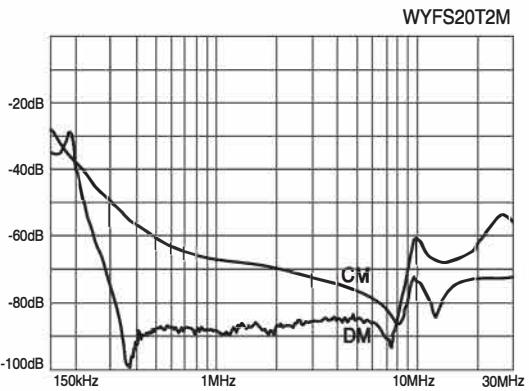
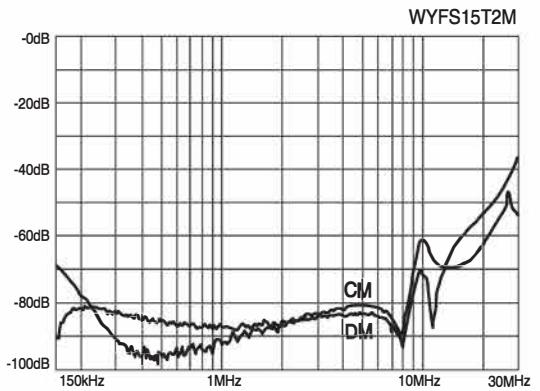
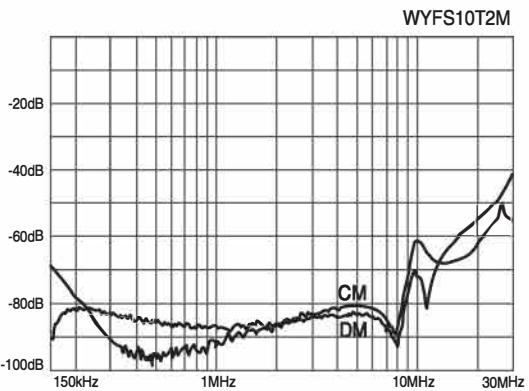
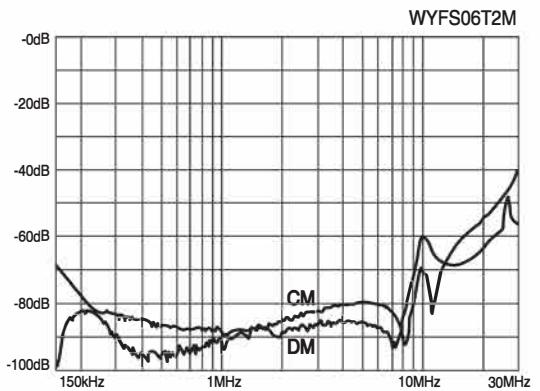
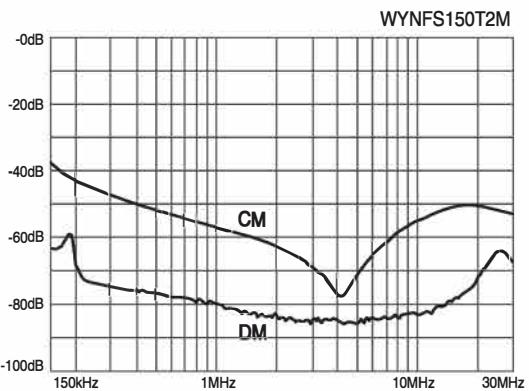
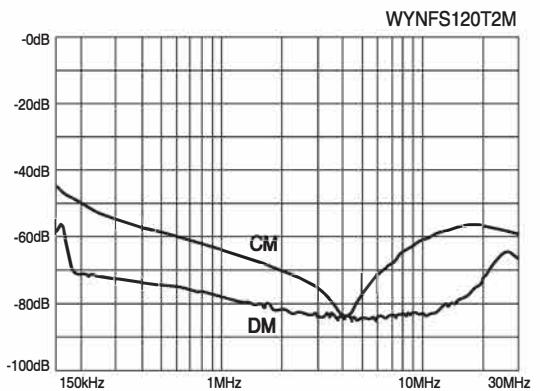
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= INDUCTORREACTOR
= CAPACITORTRANSFORMER
= COUPLED COILTIP
= TUNINGSMP
= SAWNOISE
FILTERHARMONIC
FILTERSPANNER
= TORQUE WRENCHRELAY
= RELAYELD
= GEARZCT
= ZCTMETER
= METERCIT
= VITSHUNT
= FAN

NOISE FILTER**N Series 1Ø 250V 고감쇄형 Characteristics****CE RoHS****Characteristics**

※ CM : Common mode, DM : Differential mode

NOISE FILTER

노이즈 필터

1Ø 250V 고감쇄형 Characteristics**CE RoHS****Characteristics**

※ CM : Common mode, DM : Differential mode

TRANSISTOR

REACTOR

SSR

TIP

SMP

NOISE FILTER

HIFI

SPD

RELAY

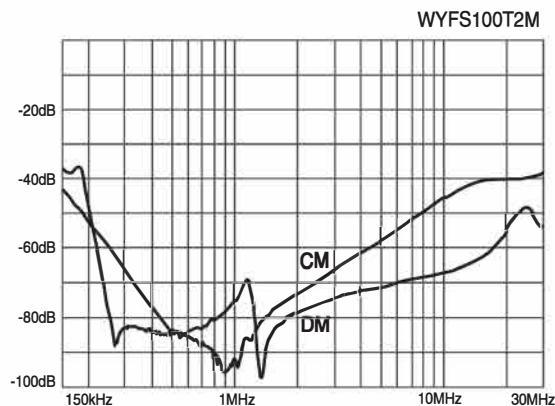
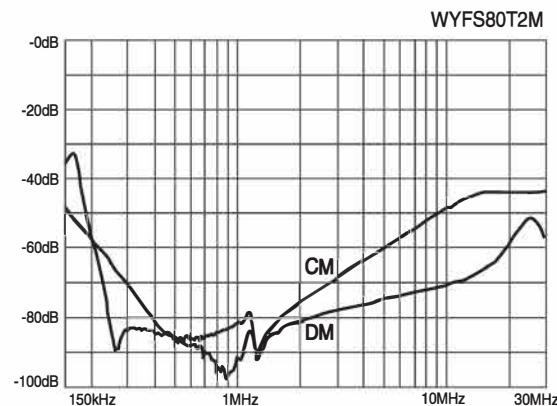
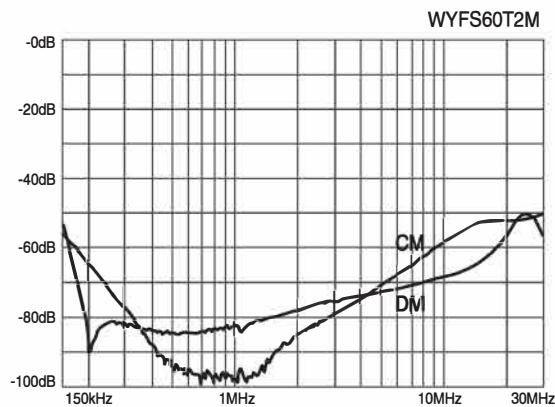
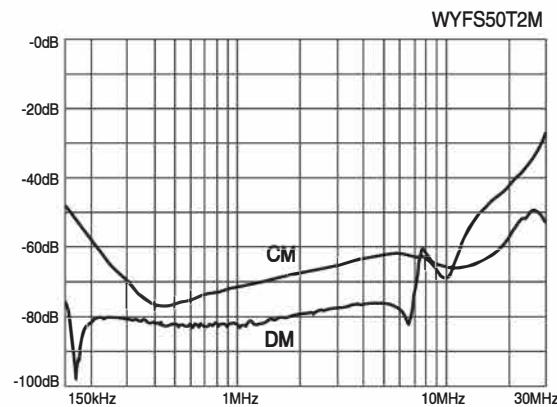
ELD

ZCT

METER

CIVIT

SHUNT

NOISE FILTER**N Series 1Ø 250V 고감쇄형 Characteristics****CE RoHS****● Characteristics**

노이즈필터
Noise Filter

3Ø 고감쇄형(Multi-Stage Type)



- 3Ø 250V 5~1200A
- 3Ø 500V 5~1200A

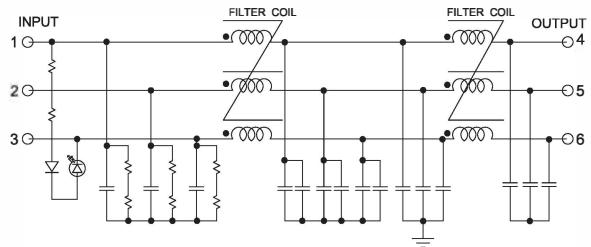
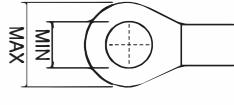
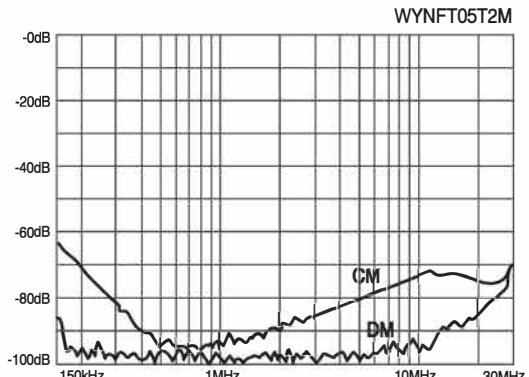
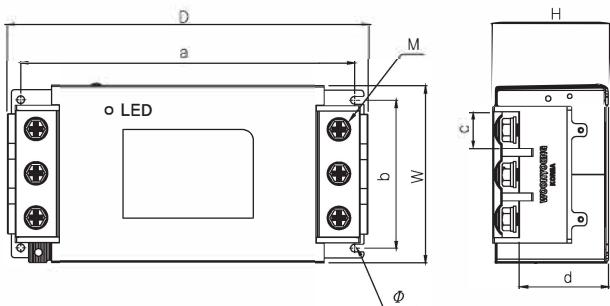
NOISE FILTER**N Series 3Ø 250V 고감쇄형 Multi-Stage Type****CE RoHS****Features**

- Wide Band : High Attenuation
- Band Width : 150KHz~30MHz
- RoHS Compliant
- Inverter Output Type : Model Type "C" (WYNFT05T2C)

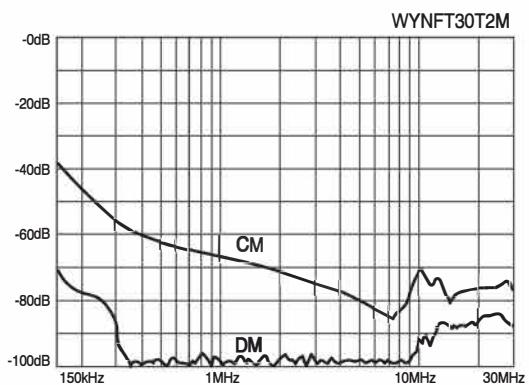
Specifications

ITEM	MODEL	SYMBOL	WYNFT05T2M	WYNFT10T2M	WYNFT15T2M	WYNFT20T2M	WYNFT30T2M
Rated Voltage	V			250Vac			
Rated Current	A	5A	10A	15A	20A	30A	
Frequency	Hz			50/60			
Dielectric Withstand	V			1500Vac for one minute			
Insulation Resistance	MΩ			DC 100MΩ at the 500Vdc			
Leakage Current	mA			≤4.5mA at the 250Vac			
Operating Temperature	℃			-25°C ~ +100°C [Refer to Derating Curve TYPE-2]			
Operating Humidity	RH			35~85%RH			
Weight	kg		1.2		2.2		

※ Derating Curve of page 103

Circuit Diagram**Terminal**Max 10, Min 4 (5~15A)
Max 12, Min 5 (20~30A)**Characteristics****Dimension**

MODEL	W	H	D	a	b	c	d	M	Ø
WYNFT5~15T2M	70.5	45	202	194	51.5	10.5	33	4	5
WYNFT20~30T2M	79.2	48.3	242	232	60	13	33.5	5	5



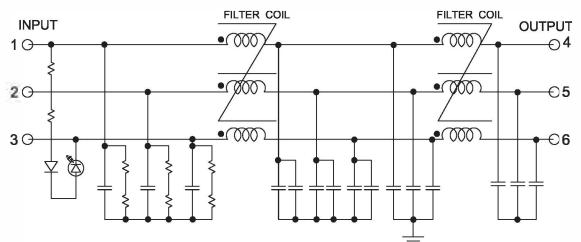
NOISE FILTER**N Series 3Ø 250V 고감쇄형 Multi-Stage Type****CE RoHS****Features**

- Wide Band : High Attenuation
- Band Width : 150kHz~30MHz
- RoHS Compliant
- Inverter Output Type : Model Type "C" (WYNFT40T2C)

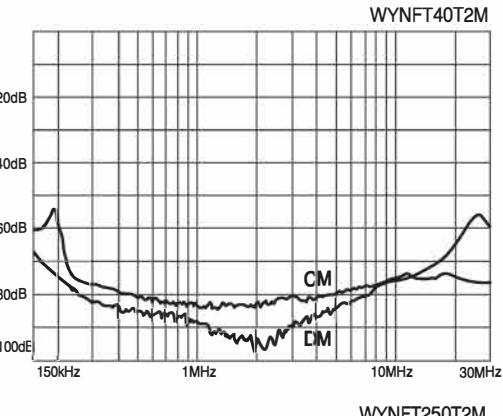
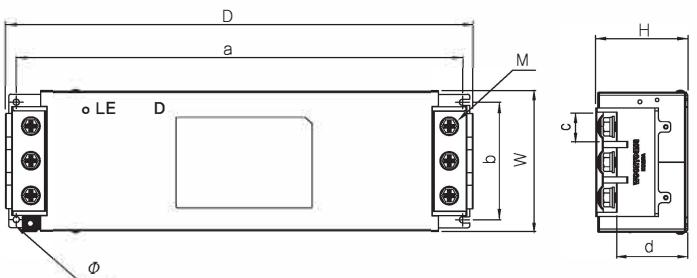
Specifications

ITEM	MODE	SYMBOL	WYNF T40T2M	WYNF T50T2M	WYNF T60T2M	WYNF T80T2M	WYNF T100T2M	WYNF T120T2M	WYNF T150T2M	WYNF T200T2M	WYNF T250T2M
Rated Voltage	V										250Vac
Rated Current	A		40A	50A	60A	80A	100A	120A	150A	200A	250A
Frequency	Hz										50/60
Dielectric Withstand	V										1500Vac for one 1minute
Insulation Resistance	MΩ										DC 100MΩ at the 500Vdc
Leakage Current	mA										≤16mA at the 250Vac
Operating Temperature	℃										-25°C ~ +100°C [Refer to Derating Curve TYPE-2]
Operating Humidity	RH										35~85%RH
Weight	kg		2.2			3.5					4.5

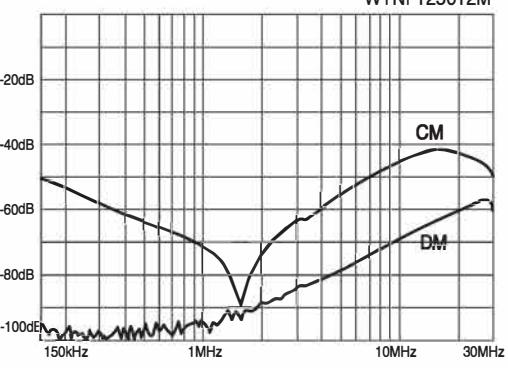
※ Derating Curve of page 103

Circuit Diagram**Terminal**

Max 16, Min 6 (40~50A)
Max 23, Min 8 (60~100A)
Max 28, Min 8 (120~250A)

Characteristics**Dimension**

MODEL	W	H	D	a	b	c	d	M	Ø
WYNFT40~50T2M	91	57.2	295	284.5	74	17	42.3	6	5
WYNFT60~100T2M	115	75	385.2	368	96	24	58	8	5
WYNFT120~250T2M	170.8	151.6	446.5	416	140	28.5	120.1	8	6.5



NOISE FILTER

노이즈 필터

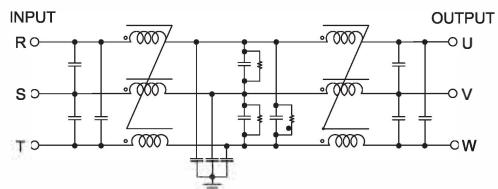
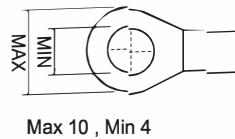
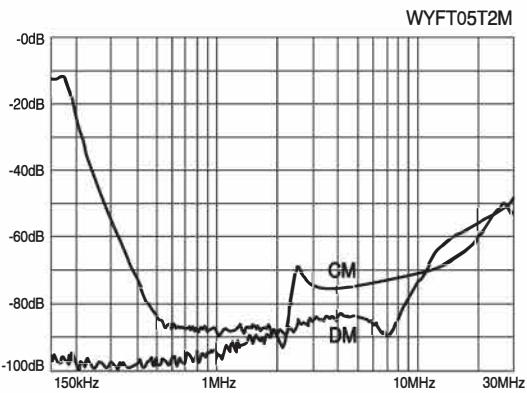
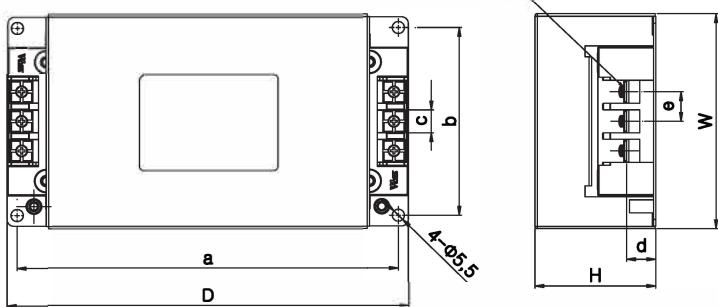
3Ø 250V 고감쇄형 Multi-Stage Type**CE RoHS****Features**

- High Attenuation
- High Voltage Pulse Noise
- 2 Stage Filter
- Band Width : 150KHz~30MHz
- RoHS Compliant
- Inverter Output Type : Model Type "C"
(WYFT05T2C)

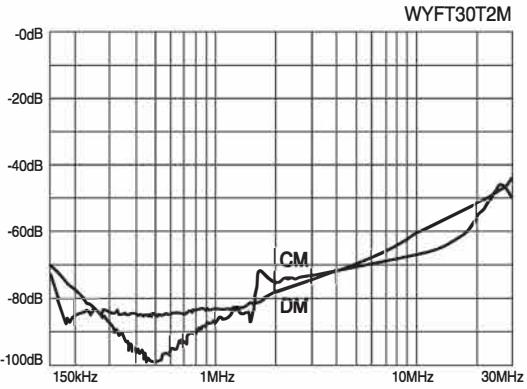
Specifications

ITEM	MODEL	SYMBOL	WYFT05T2M	WYFT10T2M	WYFT15T2M	WYFT20T2M	WYFT30T2M
Rated Voltage	V				250		
Rated Current	A		5	10	15	20	30
Frequency	Hz				50/60		
Dielectric Withstand	V				1500		
Insulation Resistance	MΩ				500		
Leakage Current	mA				27		
Operating Temperature	°C			-25°C ~ +100°C [Refer to Derating Curve TYPE-2]			
Operating Humidity	RH				35~85%RH		
Weight	kg		1.2			1.7	

※ Derating Curve of page 103

Circuit Diagram**Terminal****Characteristics****Dimension**

MODEL	W	H	D	a	b	c	d	e
WYFT05~15T2M	98	55	184	175	86	10.5	13	13.5
WYFT20~30T2M	116	75	234	219	98	10.5	14	13.5



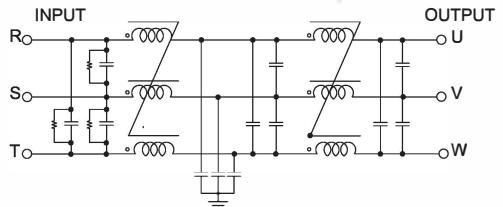
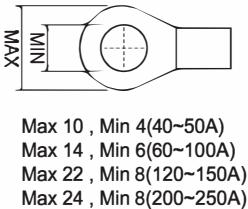
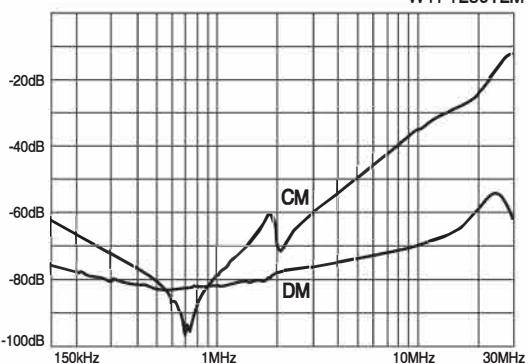
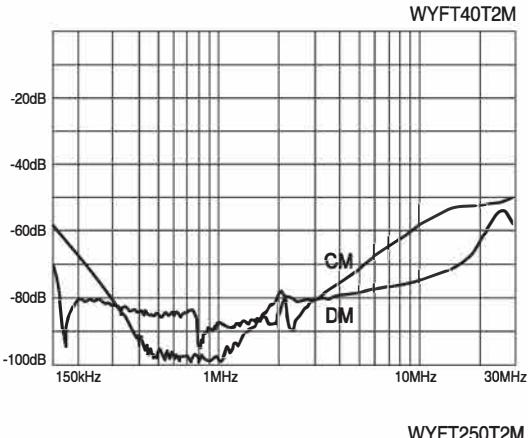
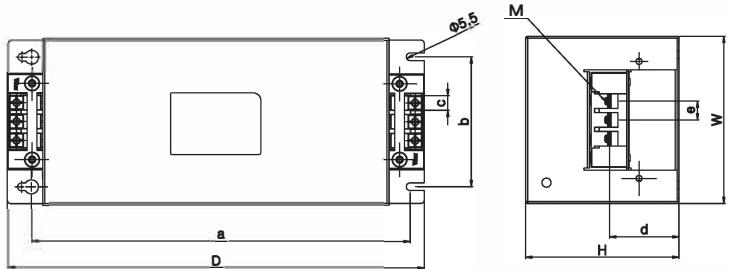
NOISE FILTER**3Ø 250V 고감쇄형 Multi-Stage Type****CE RoHS****Features**

- High Attenuation
- High Voltage Pulse Noise
- 2 Stage Filter
- Band Width : 150KHz~30MHz
- RoHS Compliant
- Inverter Output Type : Model Type "C" (WYFT40T2C)

Specifications

ITEM	MODE M	SYMBOL L	WYF T40T2M	WYF T50T2M	WYF T60T2M	WYF T80T2M	WYF T100T2M	WYF T120T2M	WYF T150T2M	WYF T200T2M	WYF T250T2M
Rated Voltage	V						250				
Rated Current	A	40	50	60	80	100	120	150	200	250	
Frequency	Hz					50/60					
Dielectric Withstand	V					1500					
Insulation Resistance	MΩ					500					
Leakage Current	mA					27					
Operating Temperature	℃					-25°C ~ +100°C [Refer to Derating Curve TYPE-2]					
Operating Humidity	RH					35~85%RH					
Weight	kg	3.5			7.0		10.5		12.0		

※ Derating Curve of page 103

Circuit Diagram**Terminal****Characteristics****Dimension**

MODEL	W	H	D	a	b	c	d	e	M
WYFT40~50T2M	124	110	306	273	93	10.5	50	13.5	M4
WYFT60~100T2M	140	130	410	373	113	15	60	27.5	M6
WYFT120~150T2M	170	163	458	417	143	23	71	35	M8
WYFT200~250T2M	170	163	467	417	143	25	76	38.5	M8

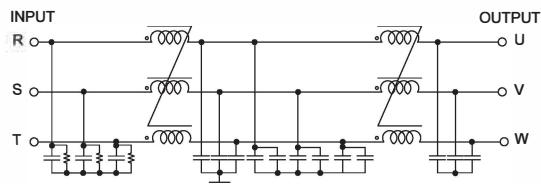
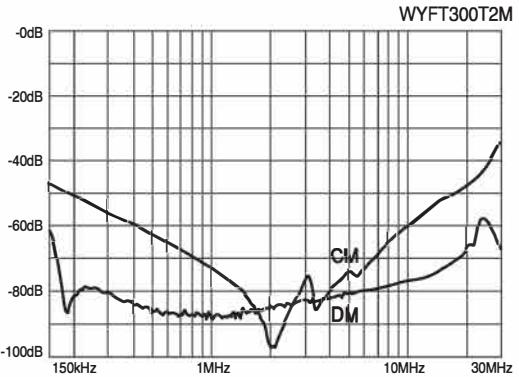
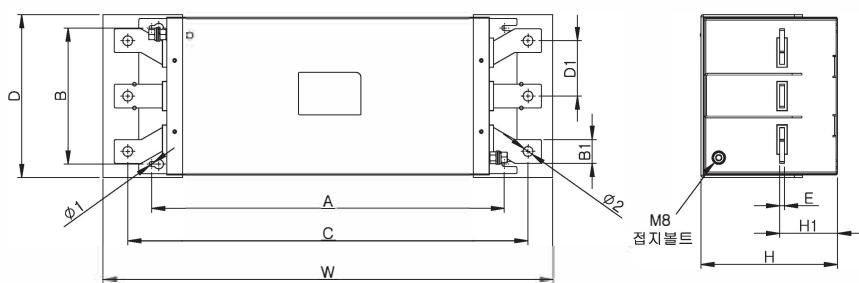
NOISE FILTER**3Ø 250V 고감쇄형 Multi-Stage Type****CE RoHS****Features**

- High Attenuation
- High Voltage Pulse Noise
- 2 Stage Filter
- Band Width : 150KHz~30MHz
- RoHS Compliant
- Inverter Output Type : Model Type "C"
(WYFT300T2C)

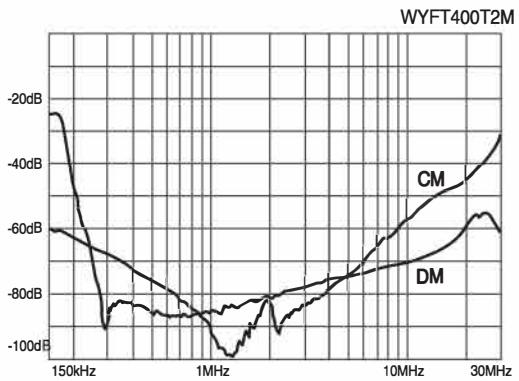
Specifications

ITEM	MODE M	SYMBOL	WYFT300T2M	WYFT400T2M
Rated Voltage	V		250	
Rated Current	A		300	400
Frequency	Hz		50/60	
Dielectric Withstand	V		1500	
Insulation Resistance	MΩ		500	
Leakage Current	mA		27	
Operating Temperature	°C		-25°C ~ +100°C [Refer to Derating Curve TYPE-2]	
Operating Humidity	RH		35~85%RH	
Weight	kg		12.5	15.5

※ Derating Curve of page 103

Circuit Diagram**Characteristics****Dimension**

MODEL	W	H	D	A	B	C	B1	D1	H1	E	Ø1	Ø2
300A	528	173	206	448	172	466	30	55	67	6	6.4	12.5
400A	570	173	206	448	172	508	30	55	67	6	6.4	12.5



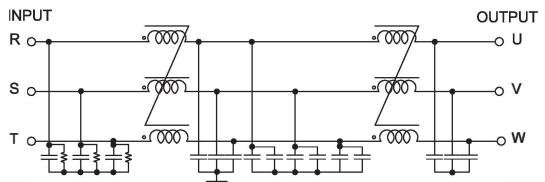
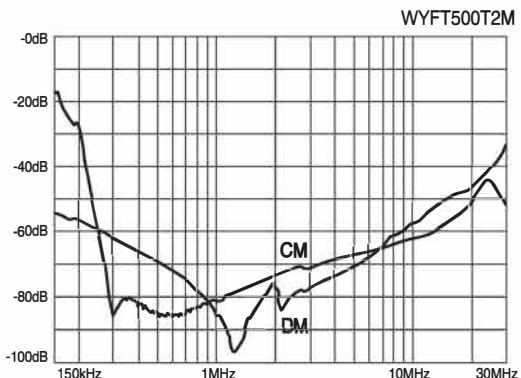
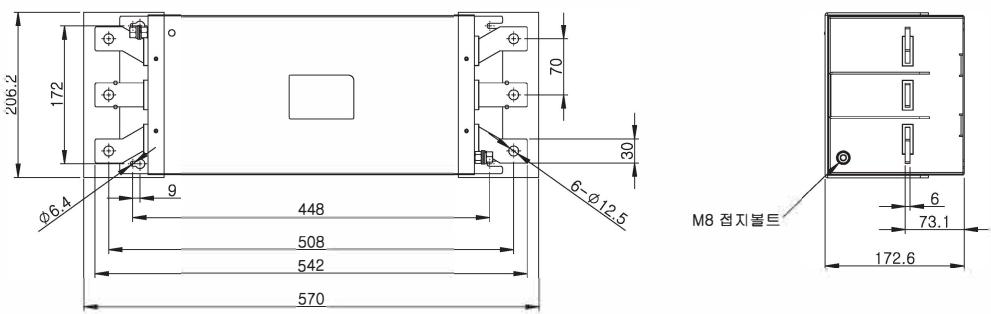
NOISE FILTER**3Ø 250V 고감쇄형 Multi-Stage Type****CE RoHS****Features**

- High Attenuation
- High Voltage Pulse Noise
- 2 Stage Filter
- Band Width : 150KHz~30MHz
- RoHS Compliant
- Inverter Output Type : Model Type "C" (WYFT500T2C)

Specifications

ITEM	MODE M	SYMBOL	WYFT500T2M
Rated Voltage	V		250
Rated Current	A		500
Frequency	Hz		50/60
Dielectric Withstand	V		1500
Insulation Resistance	MΩ		300
Leakage Current	mA		27
Operating Temperature	°C		-25°C ~ +100°C [Refer to Derating Curve TYPE-2]
Operating Humidity	RH		35~85%RH
Weight	kg		16

※ Derating Curve of page 103

Circuit Diagram**Characteristics****Dimension**

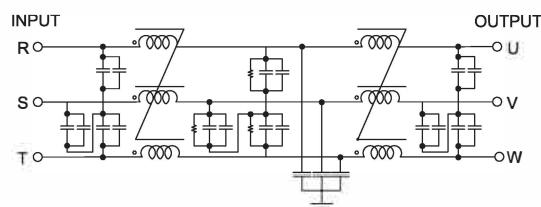
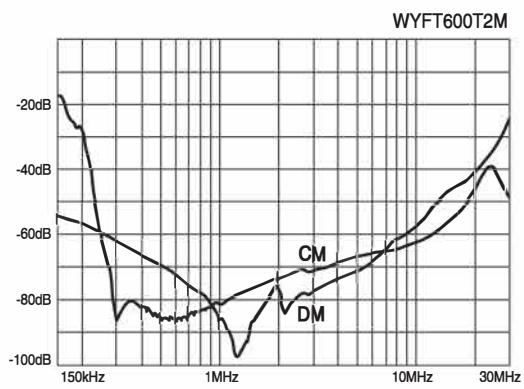
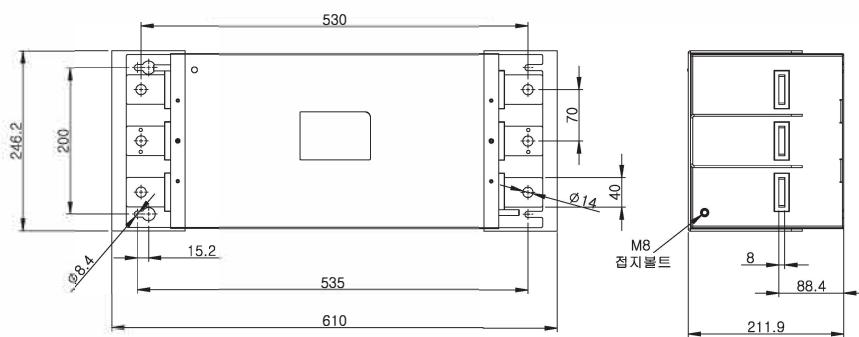
NOISE FILTER**3Ø 250V 고감쇄형 Multi-Stage Type****CE RoHS****Features**

- High Attenuation
- High Voltage Pulse Noise
- 2 Stage Filter
- Band Width : 150KHz~30MHz
- RoHS Compliant
- Inverter Output Type : Model Type "C"
(WYFT600T2C)

Specifications

ITEM \ MODEL	SYMBOL	WYFT600T2M	WYFT800T2M	WYFT1000T2M	WYFT1200T2M
Rated Voltage	V		250		
Rated Current	A	600	800	1000	1200
Frequency	Hz		50/60		
Dielectric Withstand	V		1500		
Insulation Resistance	MΩ		500		
Leakage Current	mA		27		
Operating Temperature	°C	-25°C ~ +100°C [Refer to Derating Curve TYPE-2]			
Operating Humidity	RH	35~85%RH			
Weight	kg	23			

※ Derating Curve of page 103

Circuit Diagram**Characteristics****Dimension**

NOISE FILTER

노이즈 필터

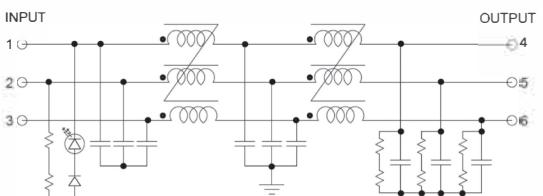
N Series 3Ø 500V 고감쇄형 Multi-Stage Type**CE RoHS****Features**

- Wide Band : High Attenuation
- Band Width : 150KHz~30MHz
- RoHS Compliant
- Inverter Output Type : Model Type "C" (WYNFTH05T2C)

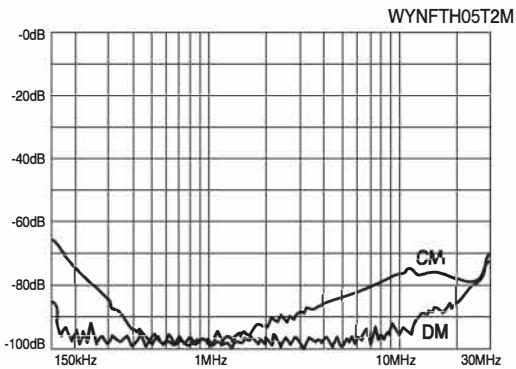
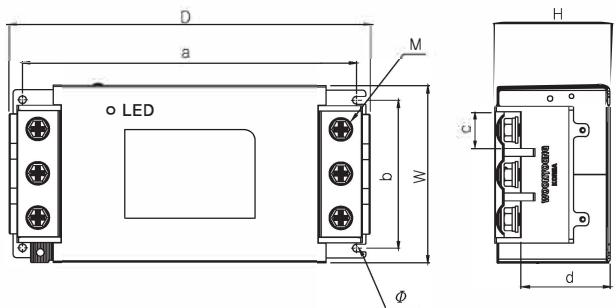
Specifications

ITEM	MODEL	SYMBOL	WYNFTH05T2M	WYNFTH10T2M	WYNFTH15T2M	WYNFTH20T2M	WYNFTH30T2M
Rated Voltage	V		500Vac				
Rated Current	A		5A	10A	15A	20A	30A
Frequency	Hz		50/60				
Dielectric Withstand	V		1500Vac for one minute				
Insulation Resistance	MΩ		DC 100MΩ at the 500Vdc				
Leakage Current	mA		≤4.5mA at the 250Vac				
Operating Temperature	°C		-25°C ~ +100°C [Refer to Derating Curve TYPE-2]				
Operating Humidity	RH		35~85%RH				
Weight	kg		1.2			2.2	

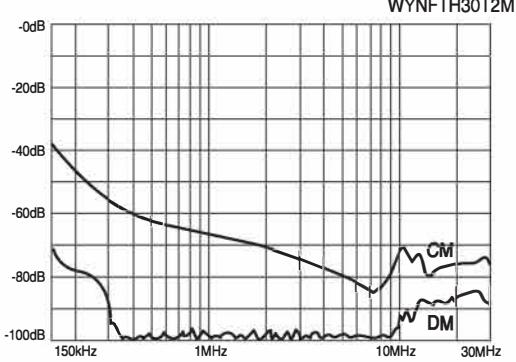
※ Derating Curve of page 103

Circuit Diagram**Terminal**

Max 10, Min 4 (40~60A)
Max 12, Min 5 (80~120A)

Characteristics**Dimension**

MODEL	W	H	D	a	b	c	d	M	Ø
WYNFTH5~15T2M	70.5	45	202	194	51.5	10.5	33	4	5
WYNFTH20~30T2M	79.2	48.3	242	232	60	13	33.5	5	5



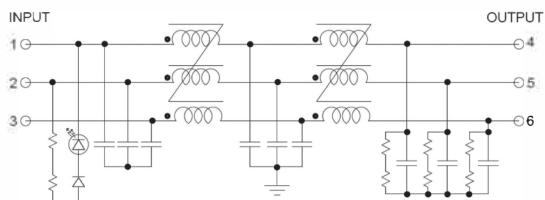
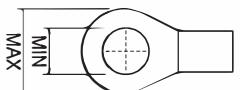
NOISE FILTER**N Series 3Ø 500V 고감쇄형 Multi-Stage Type****CE RoHS****Features**

- Wide Band : High Attenuation
- Band Width : 150kHz~30MHz
- RoHS Compliant
- Inverter Output Type : Model Type "C" (WYNFTH40T2C)

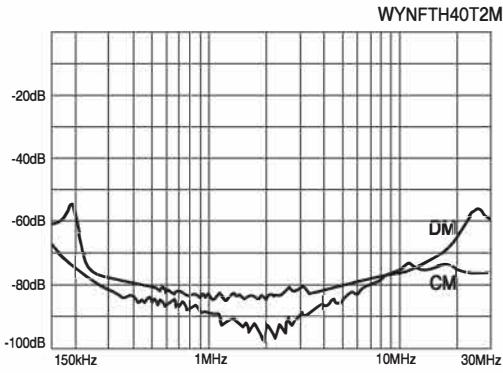
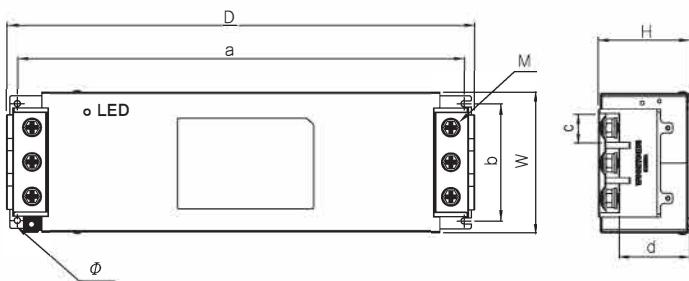
Specifications

ITEM	MODEL	SYMBOL	WYNF TH40T2M	WYNF TH50T2M	WYNF TH60T2M	WYNF TH80T2M	WYNF TH100T2M	WYNF TH120T2M	WYNF TH150T2M	WYNF TH200T2M	WYNF TH250T2M
Rated Voltage	V										500Vac
Rated Current	A		40A	50A	60A	80A	100A	120A	150A	200A	250A
Frequency	Hz										50/60
Dielectric Withstand	V						1500Vac for one minute				
Insulation Resistance	MΩ						DC 100MΩ at the 500Vdc				
Leakage Current	mA						≤26mA at the 250Vac				
Operating Temperature	°C						-25°C ~ +100°C [Refer to Derating Curve TYPE-2]				
Operating Humidity	RH						35~85%RH				
Weight	kg		2.2			3.5					4.5

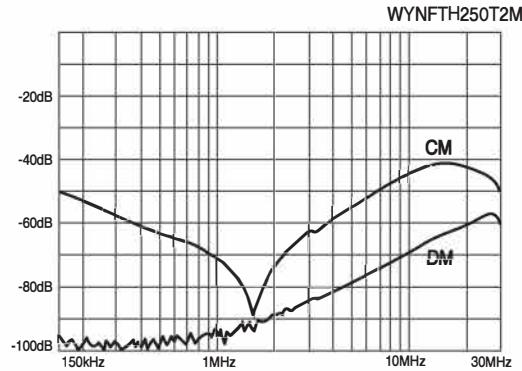
※ Derating Curve of page 103

Circuit Diagram**Terminal**

Max 16, Min 6 (40~50A)
Max 23, Min 8 (60~100A)
Max 28, Min 8 (120~250A)

Characteristics**Dimension**

MODEL	W	H	D	a	b	c	d	M	Ø
WYNFTH40~50T2M	91	57.2	295	284.5	74	17	42.3	6	5
WYNFTH60~100T2M	115	75	385.2	368	96	24	58	8	5
WYNFTH120~250T2M	170.8	151.6	446.5	416	140	28.5	120.1	8	6.5



3Ø 500V 고감쇄형 Multi-Stage Type

CE RoHS



Features

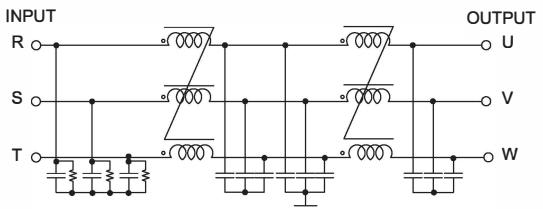
- High Attenuation
- High Voltage Pulse Noise
- 2 Stage Filter
- Band Width : 150KHz~30MHz
- RoHS Compliant
- Inverter Output Type : Model Type "C"
(WYFT05T2C)

Specifications

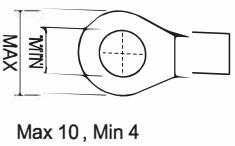
ITEM	MODEL	SYMBOL	WYFT05T2M	WYFT10T2M	WYFT15T2M	WYFT20T2M	WYFT30T2M
Rated Voltage	V				500		
Rated Current	A	5	10	15	20	30	
Frequency	Hz			50/60			
Dielectric Withstand	V			1500			
Insulation Resistance	MΩ			500			
Leakage Current	mA			54			
Operating Temperature	°C		-25°C ~ +100°C [Refer to Derating Curve TYPE-2]				
Operating Humidity	RH			35~85%RH			
Weight	kg		0.8			1.7	

※ Derating Curve of page 103

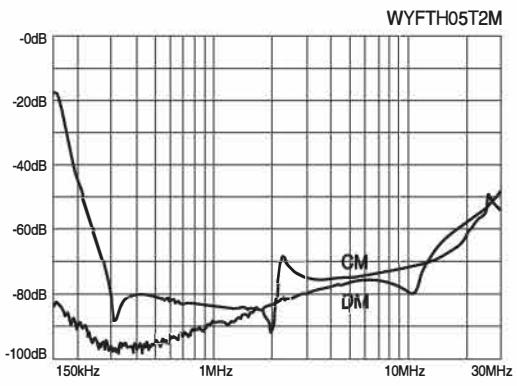
Circuit Diagram



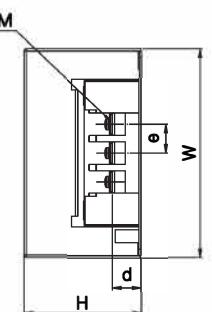
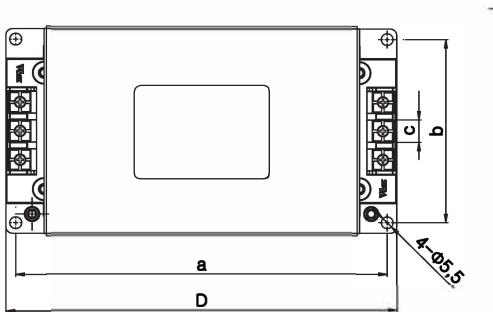
Terminal



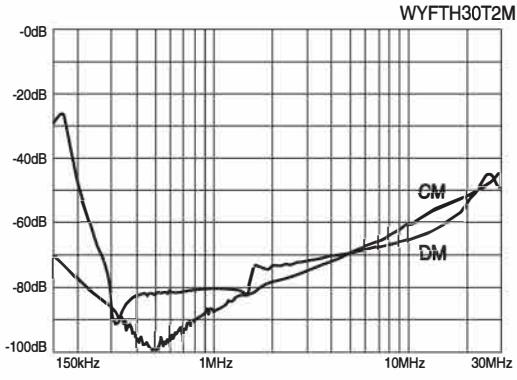
Characteristics



Dimension



MODEL	W	H	D	a	b	c	d	e
WYFT05~15T2M	98	55	184	175	86	10.5	13	13.5
WYFT20~30T2M	116	75	234	219	98	10.5	14	13.5



NOISE FILTER

3Ø 500V 고감쇄형 Multi-Stage Type

CE RoHS

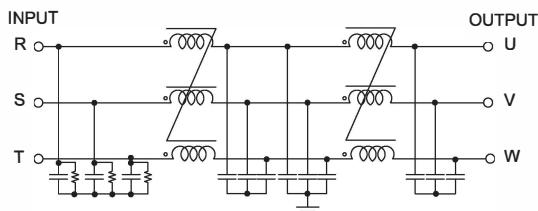
**Features**

- High Attenuation
- High Voltage Pulse Noise
- 2 Stage Filter
- Band Width : 150KHz~30MH
- RoHS Compliantz
- Inverter Output Type : Model Type "C"
(WYFTH40T2C)

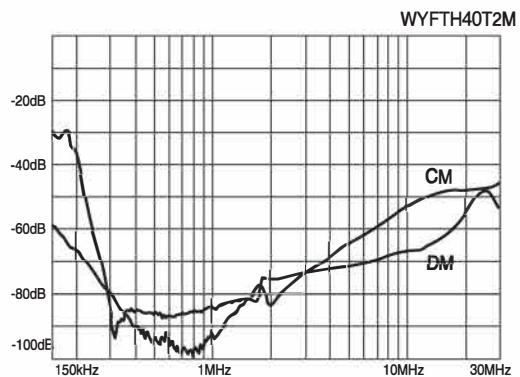
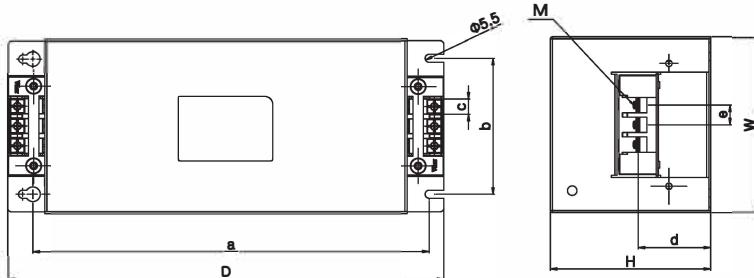
Specifications

ITEM	MODEL	SYMBOL	WYF TH40T2M	WYF TH50T2M	WYF TH60T2M	WYF TH80T2M	WYF TH100T2M	WYF TH120T2M	WYF TH150T2M	WYF TH200T2M	WYF TH250T2M
Rated Voltage	V						500				
Rated Current	A		40	50	60	80	100	120	150	200	250
Frequency	Hz						50/60				
Dielectric Withstand	V						1500				
Insulation Resistance	MΩ						500				
Leakage Current	mA						54				
Operating Temperature	°C						-25°C ~ +100°C [Refer to Derating Curve TYPE-2]				
Operating Humidity	RH						35~85%RH				
Weight	kg		3.5				7.0			10.5	12.0

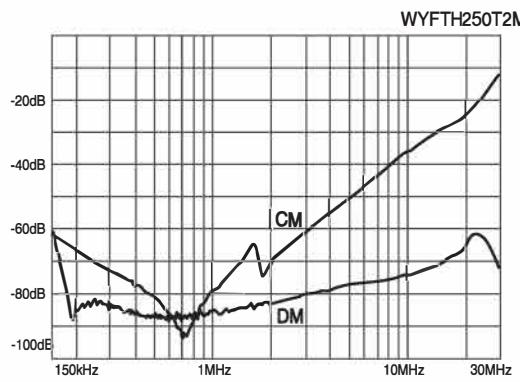
※ Derating Curve of page 103

Circuit Diagram**Terminal**

Max 10 , Min 4(40~50A)
Max 14 , Min 6(60~100A)
Max 22 , Min 8(120~150A)
Max 24 , Min 8(200~250A)

Characteristics**Dimension**

MODEL	W	H	D	a	b	c	d	e	M
WYFT40~50T2M	124	110	300	273	93	10.5	50	13.5	M4
WYFT60~100T2M	140	130	400	373	113	15	60	27.5	M6
WYFT120~150T2M	170	163	444	417	143	23	71	35	M8
WYFT200~250T2M	170	163	444	417	143	25	76	38.5	M8



NOISE FILTER

3Ø 500V 고감쇄형 Multi-Stage Type

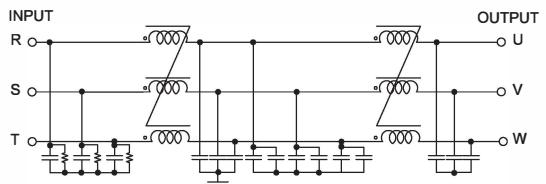
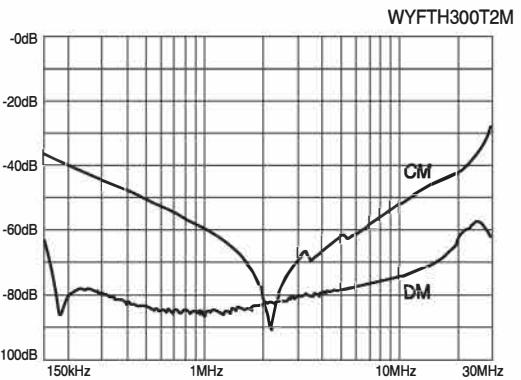
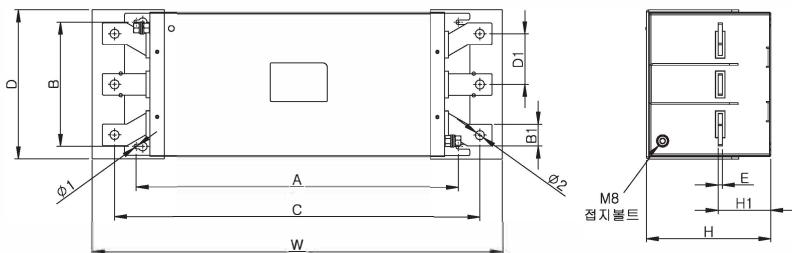
**Features**

- High Attenuation
- High Voltage Pulse Noise
- 2 Stage Filter
- Band Width : 150KHz~30MHz
- RoHS Compliant
- Inverter Output Type : Model Type "C" (WYFTH300T2C)

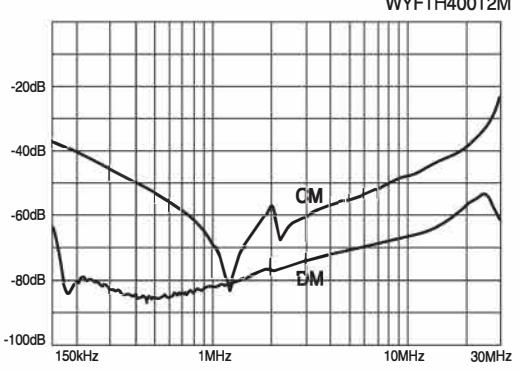
Specifications

ITEM	MODEL	SYMBOL	WYFTH300T2M	WYFTH400T2M
Rated Voltage	V		500	
Rated Current	A		300	400
Frequency	Hz		50/60	
Dielectric Withstand	V		1500	
Insulation Resistance	MΩ		500	
Leakage Current	mA		54	
Operating Temperature	°C		-25°C ~ +100°C [Refer to Derating Curve TYPE-2]	
Operating Humidity	RH		35~85%RH	
Weight	kg		12,5	15,5

※ Derating Curve of page 103

Circuit Diagram**Characteristics****Dimension**

MODEL	W	H	D	A	B	C	B1	D1	H1	E	Ø1	Ø2
300A	528	173	206	448	172	466	30	55	67	6	6,4	12,5
400A	570	173	206	448	172	508	30	55	67	6	6,4	12,5



NOISE FILTER

3Ø 500V 고감쇄형 Multi-Stage Type

CE RoHS

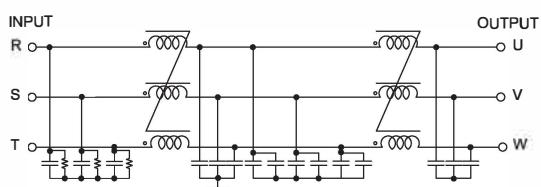
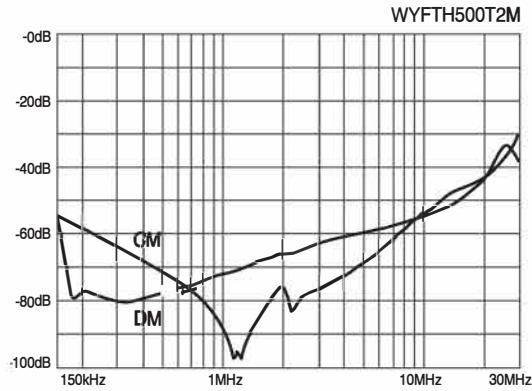
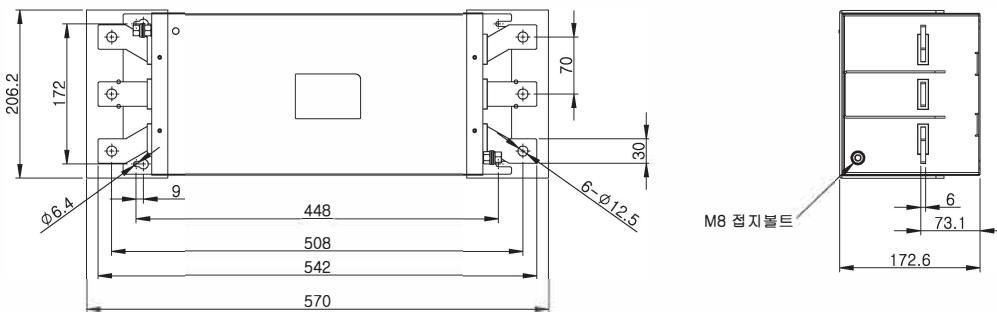
**Features**

- High Attenuation
- High Voltage Pulse Noise
- 2 Stage Filter
- Band Width : 150KHz~30MHz
- RoHS Compliant
- Inverter Output Type : Model Type "C" (WYFTH500T2C)

Specifications

ITEM	MODEL	SYMBOL	WYFTH500T2M
Rated Voltage	V		500
Rated Current	A		500
Frequency	Hz		50/60
Dielectric Withstand	V		1500
Insulation Resistance	MΩ		500
Leakage Current	mA		54
Operating Temperature	°C		-25°C ~ +100°C [Refer to Derating Curve TYPE-2]
Operating Humidity	RH		35~85%RH
Weight	kg		16

※ Derating Curve of page 103

Circuit Diagram**Characteristics****Dimension**

NOISE FILTER

3Ø 500V 고감쇄형 Multi-Stage Type

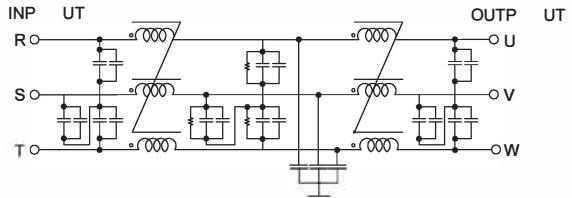
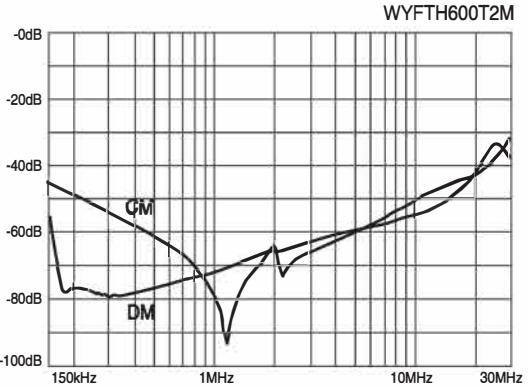
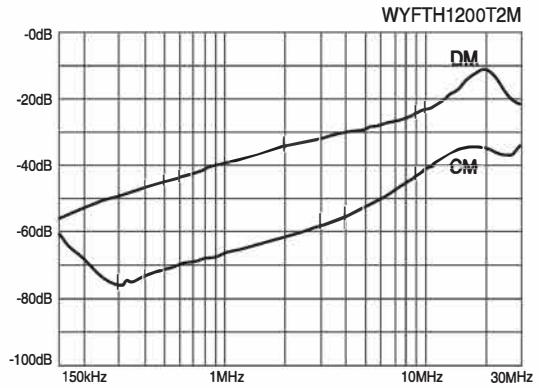
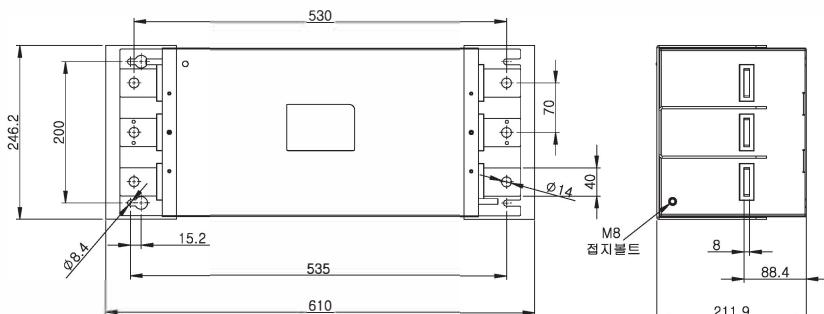
**Features**

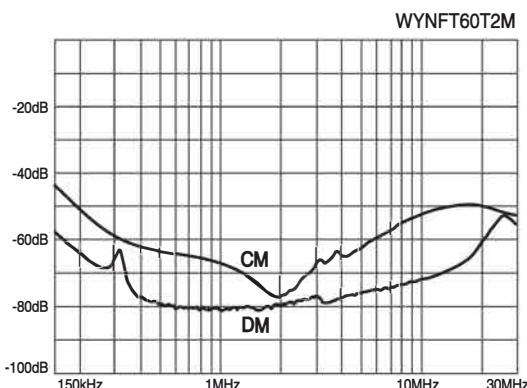
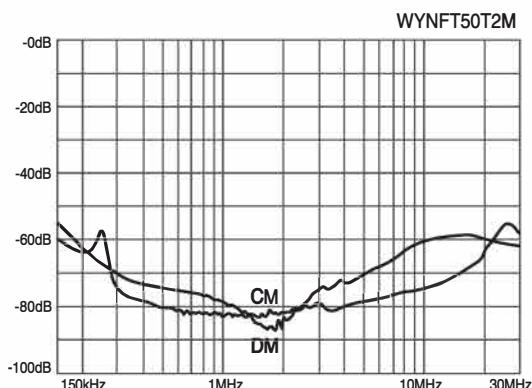
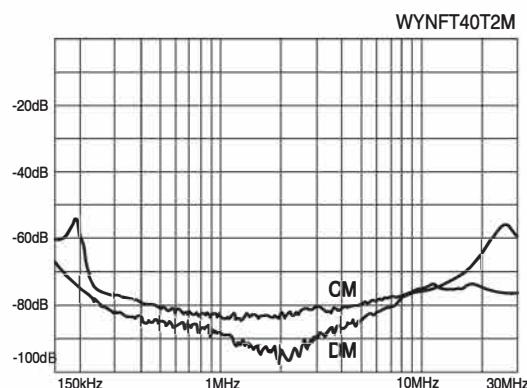
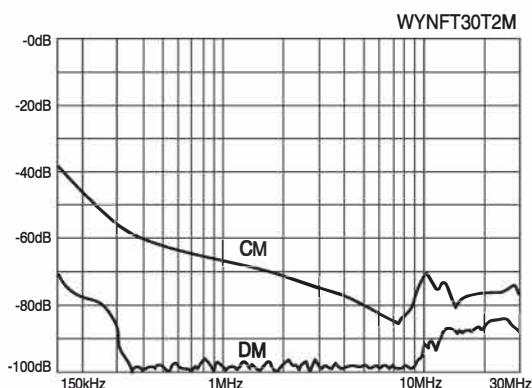
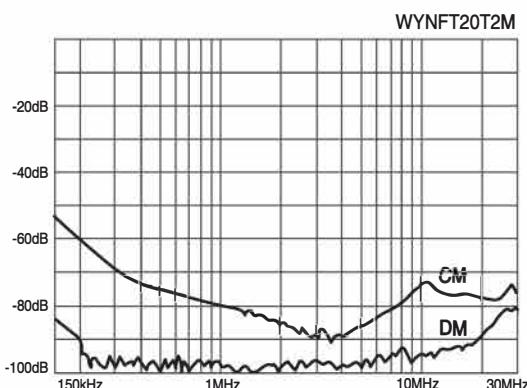
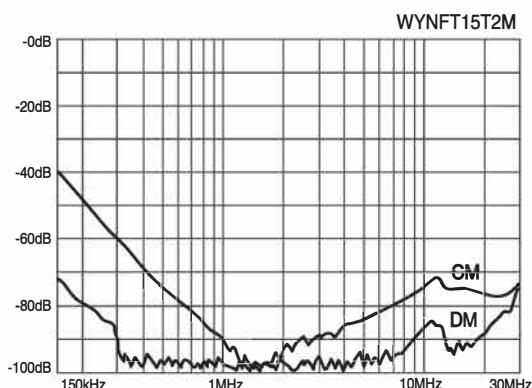
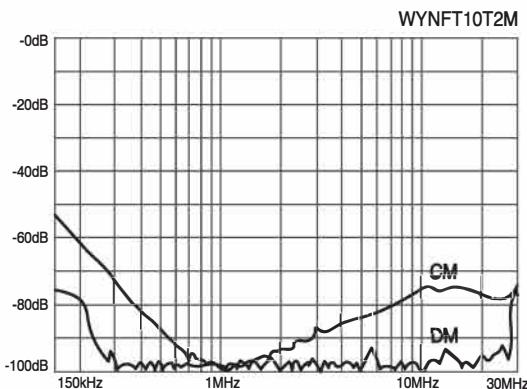
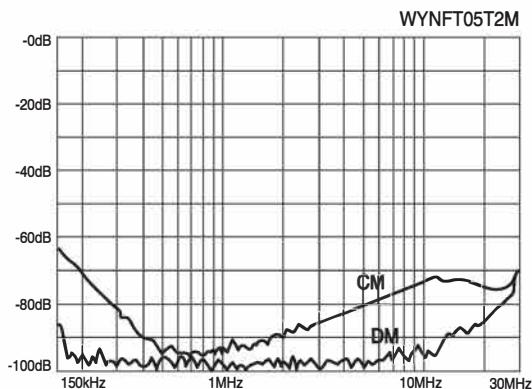
- High Attenuation
- High Voltage Pulse Noise
- 2 Stage Filter
- Band Width : 150KHz~30MHz
- RoHS Compliant
- Inverter Output Type : Model Type "C" (WYFTH600T2C)

Specifications

ITEM	MODE M	SYMBOL	WYFTH600T2M	WYFTH800T2M	WYFTH1000T2M	WYFTH1200T2M
Rated Voltage	V			500		
Rated Current	A		600	800	1000	1200
Frequency	Hz			50/60		
Dielectric Withstand	V			1500		
Insulation Resistance	MΩ			500		
Leakage Current	mA			54		
Operating Temperature	°C		-25°C ~ +100°C	[Refer to Derating Curve TYPE-2]		
Operating Humidity	RH			35~85%RH		
Weight	kg			23		

※ Derating Curve of page 103

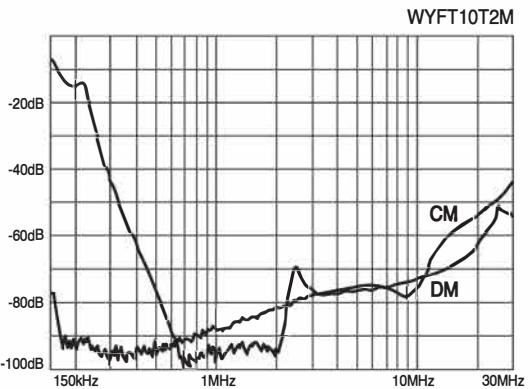
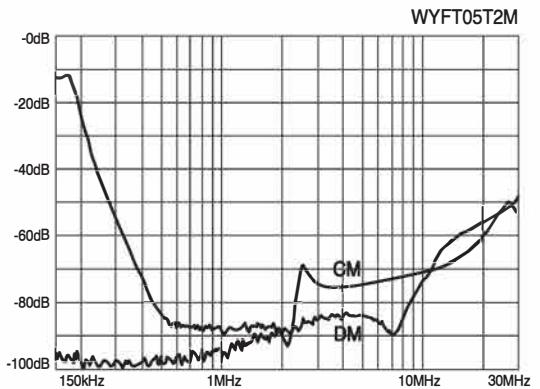
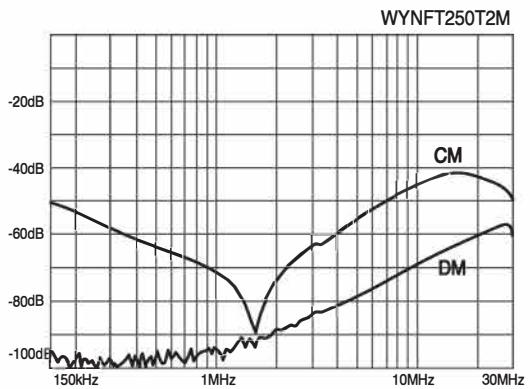
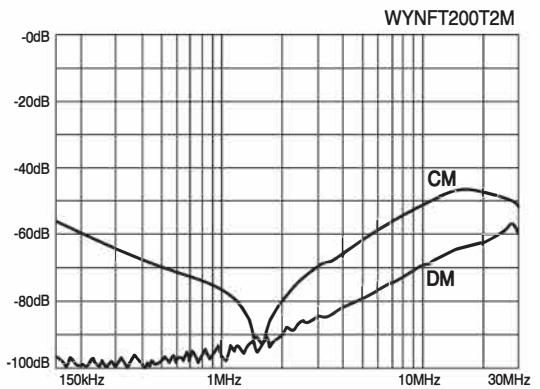
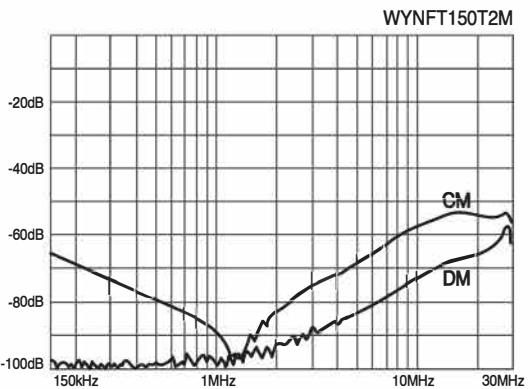
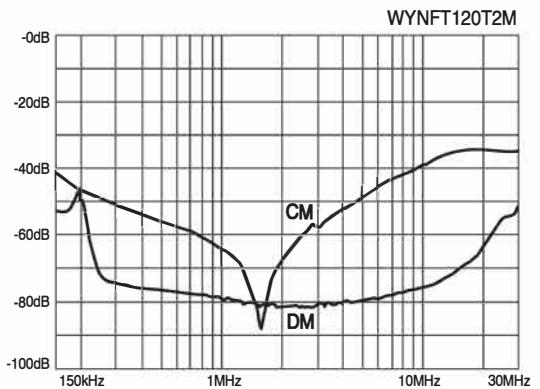
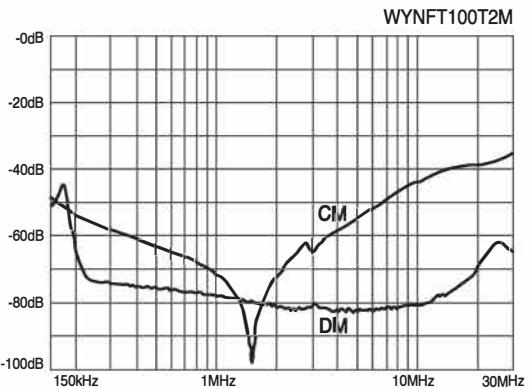
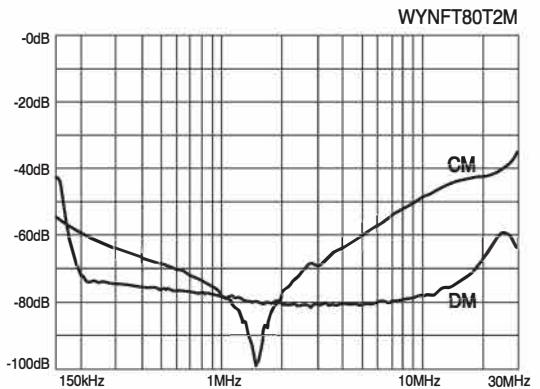
Circuit Diagram**Characteristics****Dimension**

NOISE FILTER**3Ø 250~500V 고감쇄형 Characteristics****CE RoHS****Characteristics**

※ CM : Common mode, DM : Differential mode

NOISE FILTER

노이즈 필터

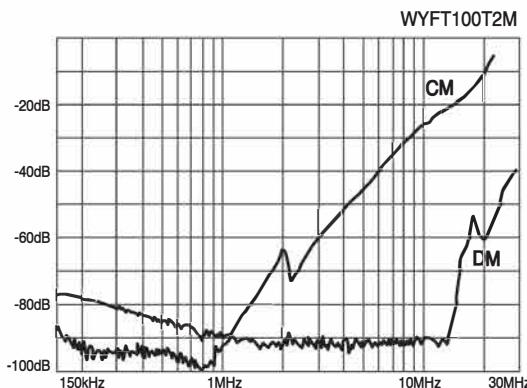
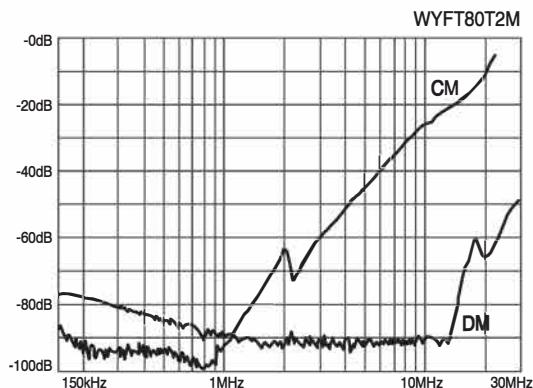
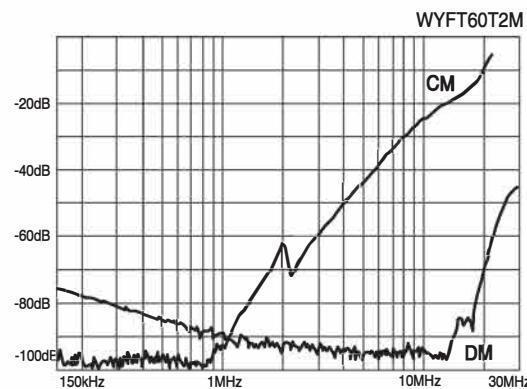
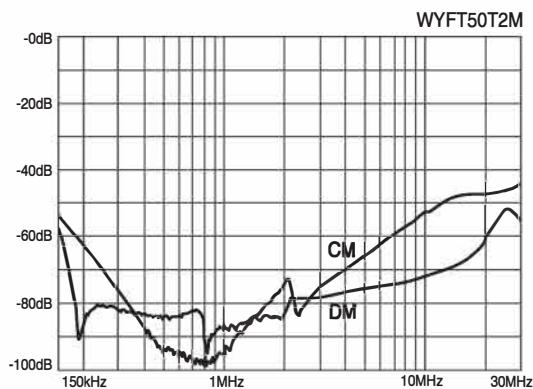
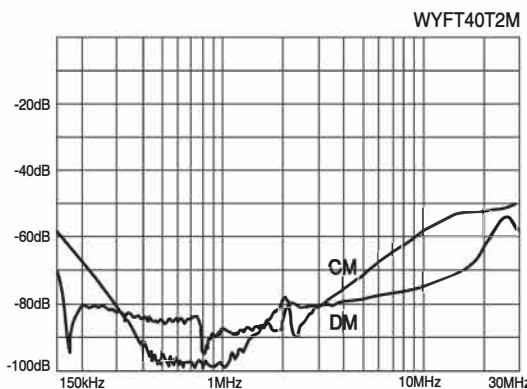
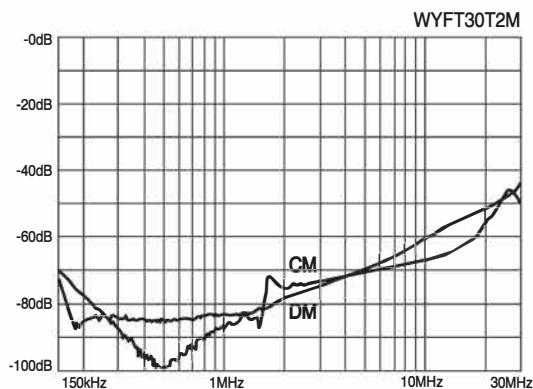
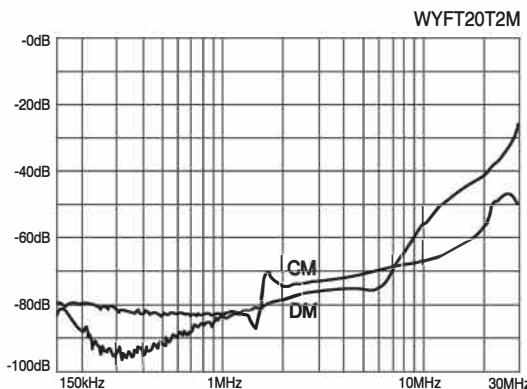
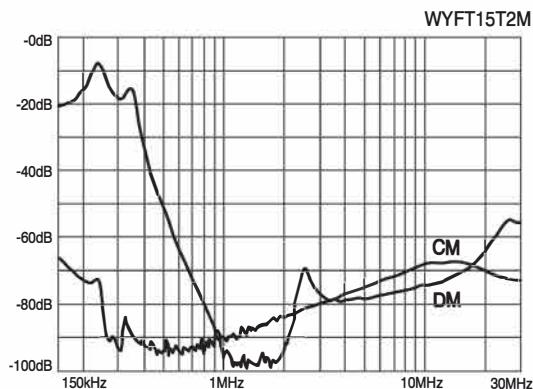
3Ø 250~500V 고감쇄형 Characteristics**CE RoHS****Characteristics**

※ CM : Common mode, DM : Differential mode

TRANS=NCT
트랜스포머REACTOR
리액터SSR
마진재설계레이아웃TPR
전압조정기SMP
스위칭파워N/F
노이즈필터H/F
하모그레인SPD
서지보호기RELAY
보호계전기ELD
누전제로보기ZCT
전지연장기METER
판넬메터CT
계기용전류계기SHUNT
센트리얼/센트리얼

NOISE FILTER

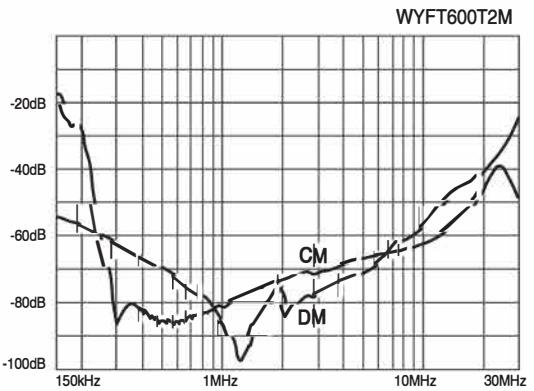
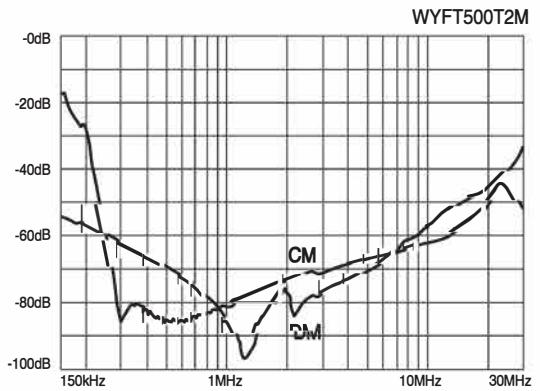
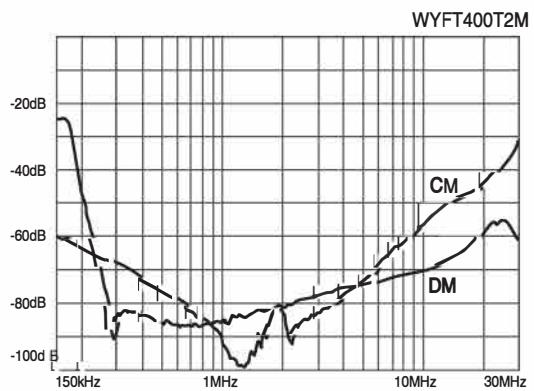
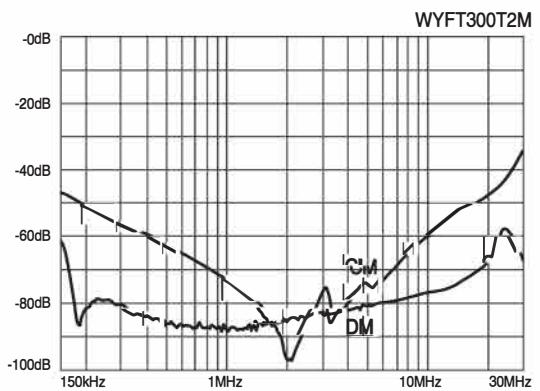
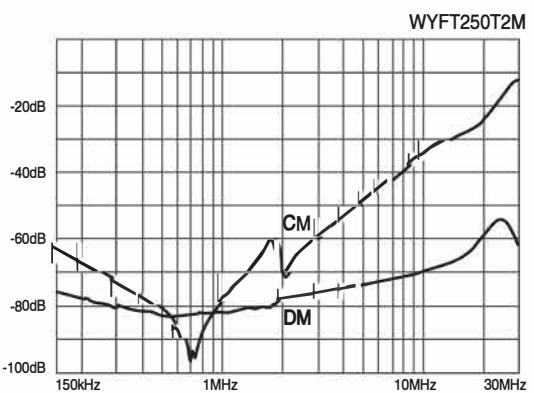
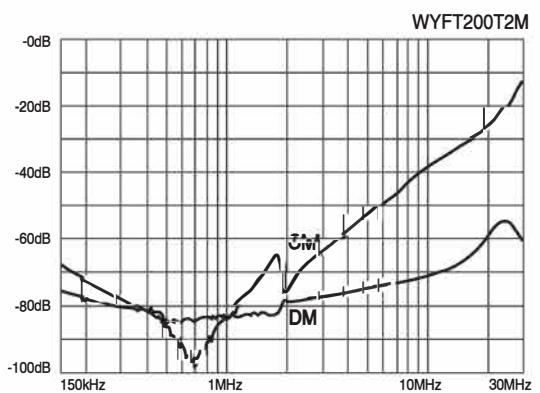
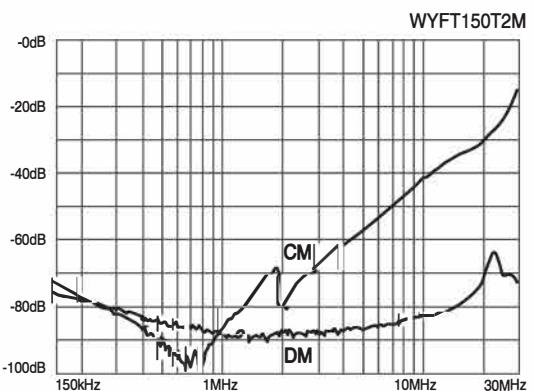
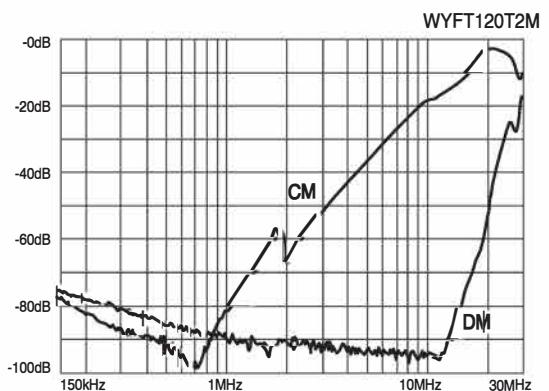
노이즈 필터

3Ø 250~500V 고감쇄형 Characteristics**CE RoHS****Characteristics**

※ CM : Common mode, DM : Differential mode

NOISE FILTER

노이즈 필터

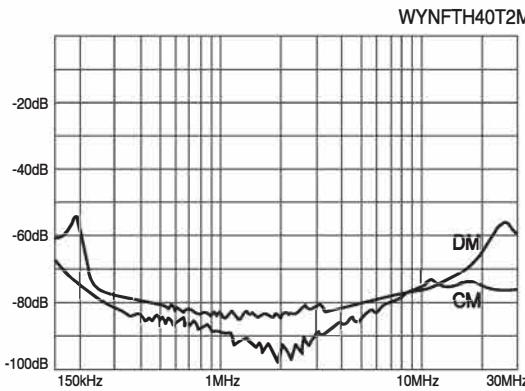
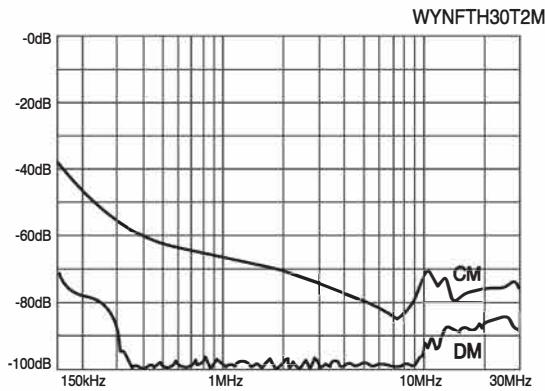
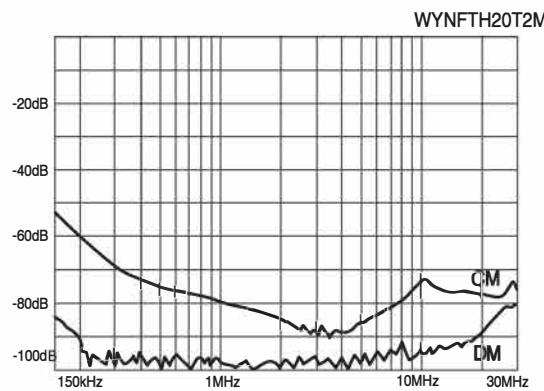
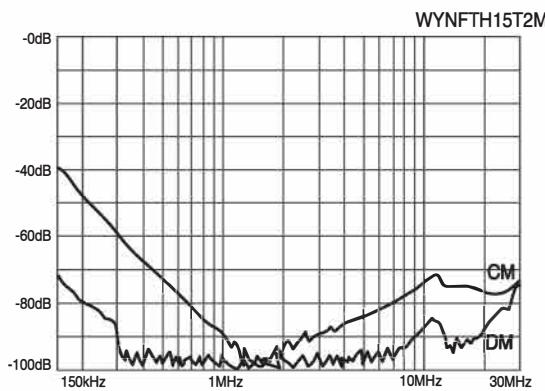
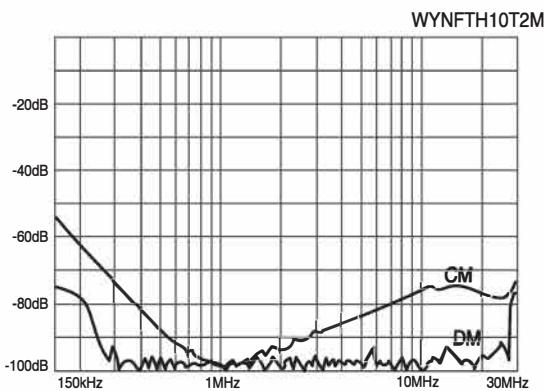
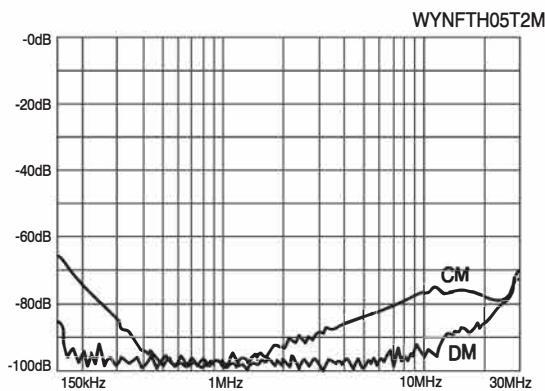
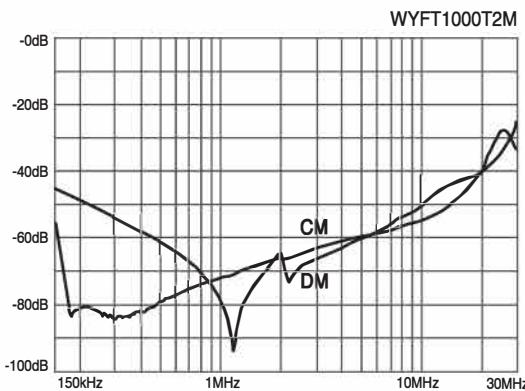
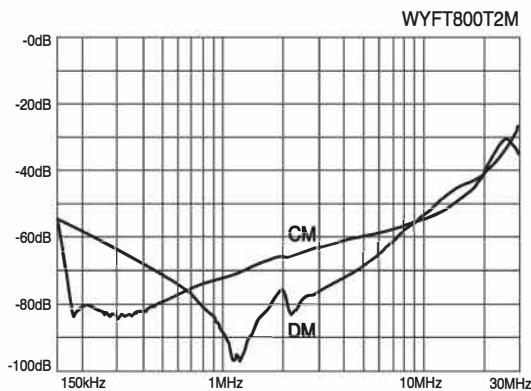
3Ø 250~500V 고감쇄형 Characteristics**CE RoHS****Characteristics**

※ CM : Common mode, DM : Differential mode

TRANSISTOR
리액터
REACTOR마진제어회로
SSR전류조정기
TPR스위칭파워
SMPs노이즈필터
N / F하모그레인
H / F서지보호기
SPD보통계전기
RELAY누전제로보기
ELD-GFER전류제한기
ZCT파라미터
PARAMETER계기판제조기
CET-VIT센트리/팬
SHUNT-FAN

NOISE FILTER

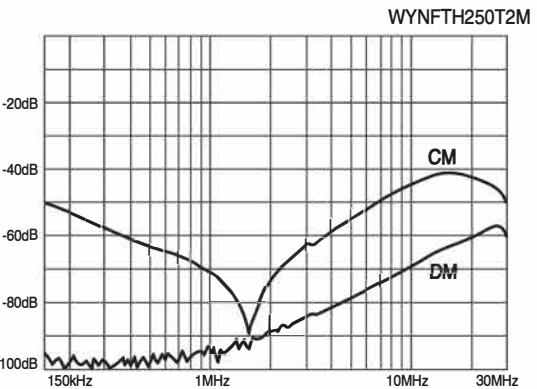
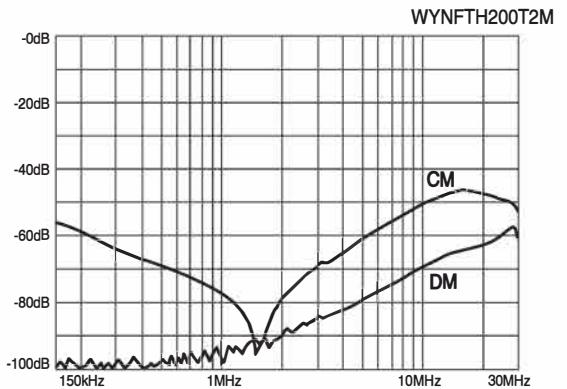
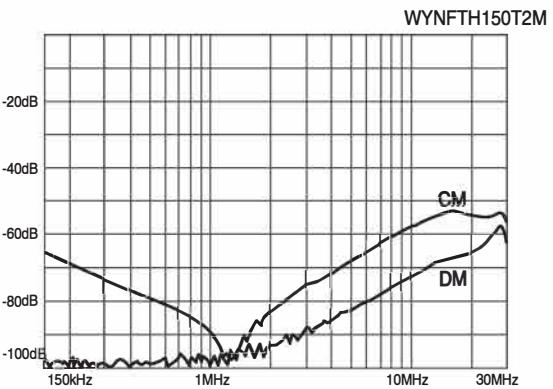
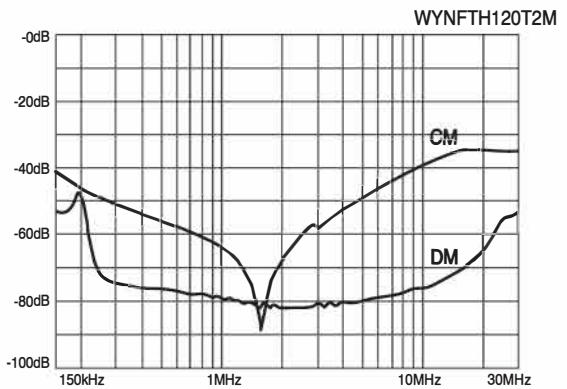
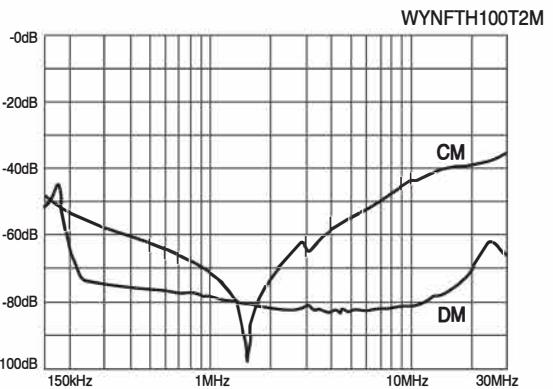
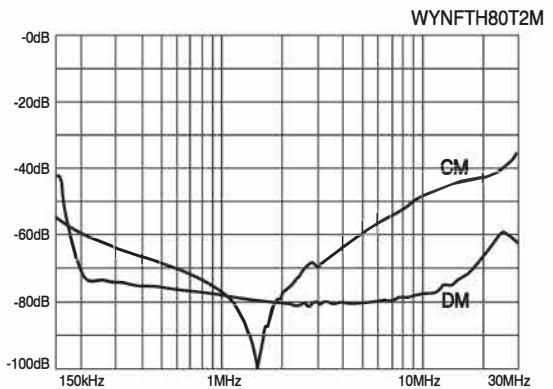
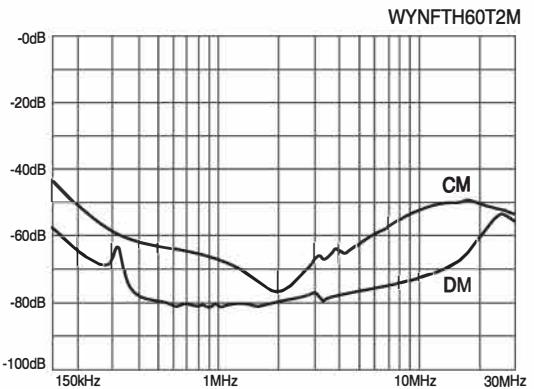
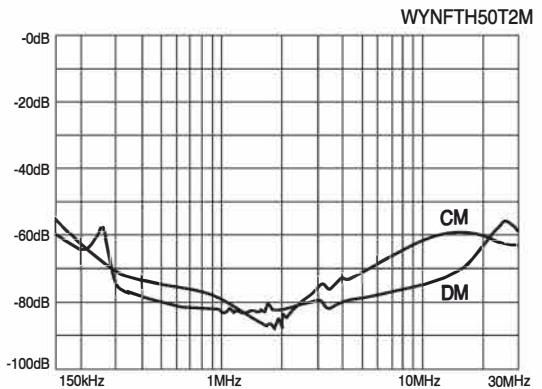
노이즈 필터

3Ø 250~500V 고감쇄형 Characteristics**CE RoHS****Characteristics**

※ CM : Common mode, DM : Differential mode

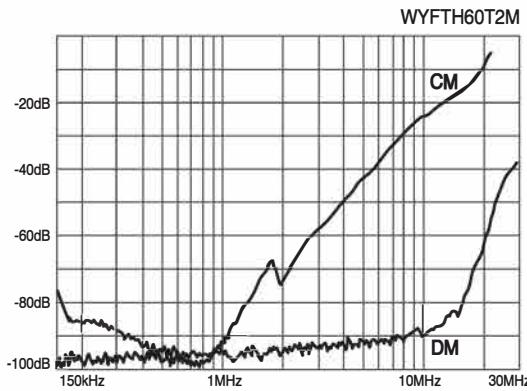
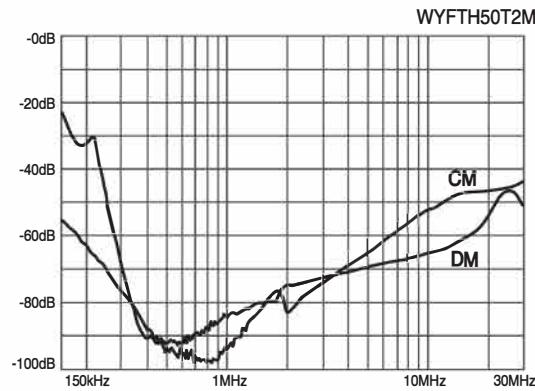
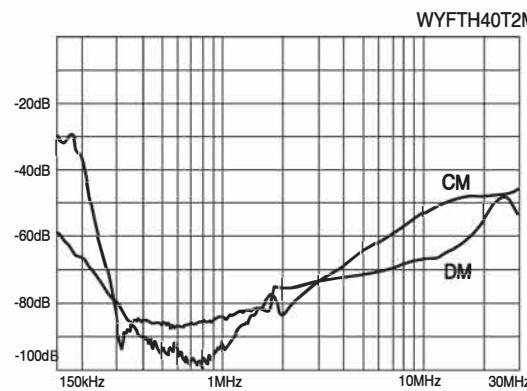
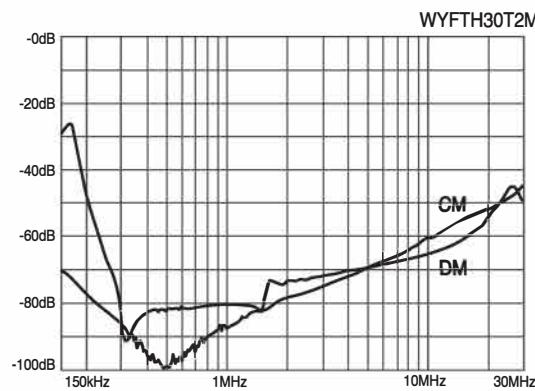
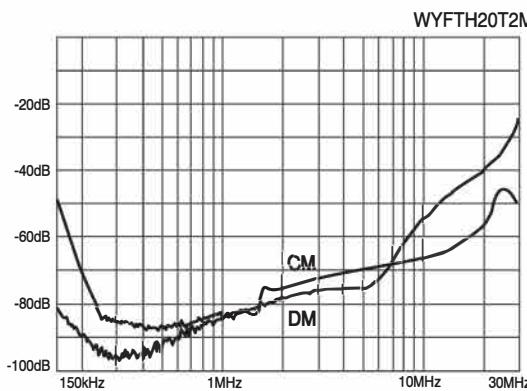
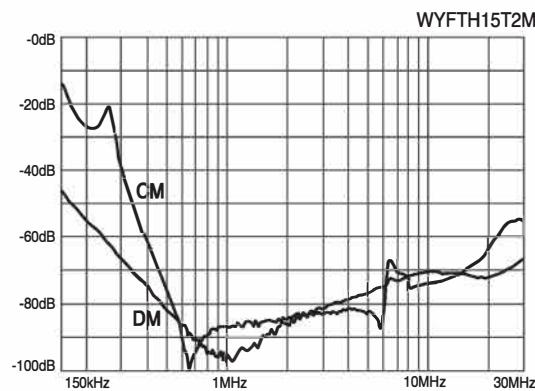
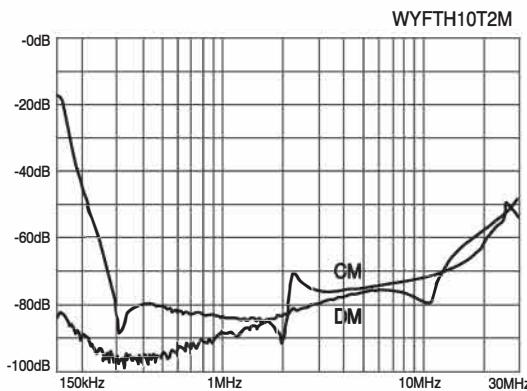
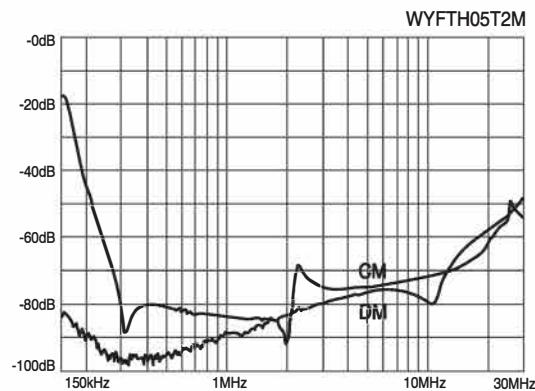
NOISE FILTER

노이즈 필터

3Ø 250~500V 고감쇄형 Characteristics**CE RoHS****Characteristics**

※ CM : Common mode, DM : Differential mode

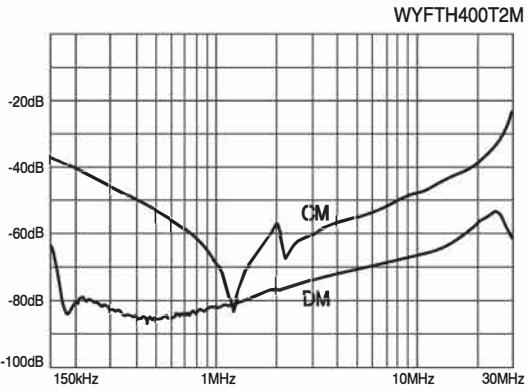
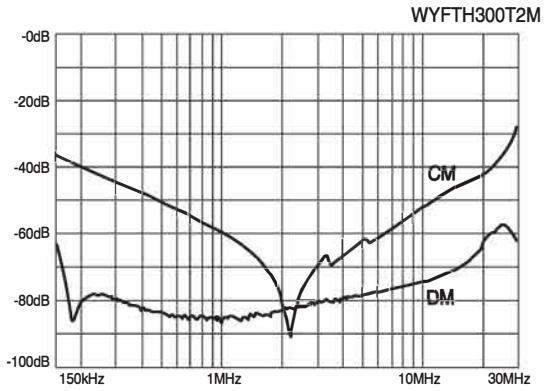
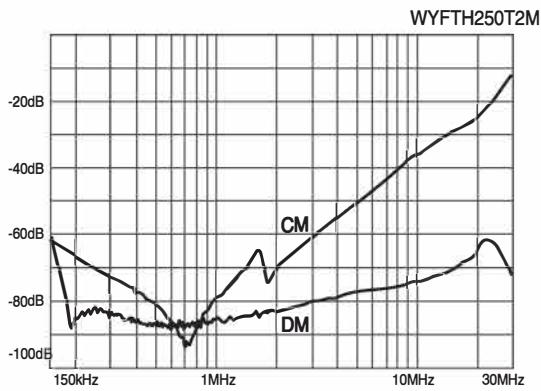
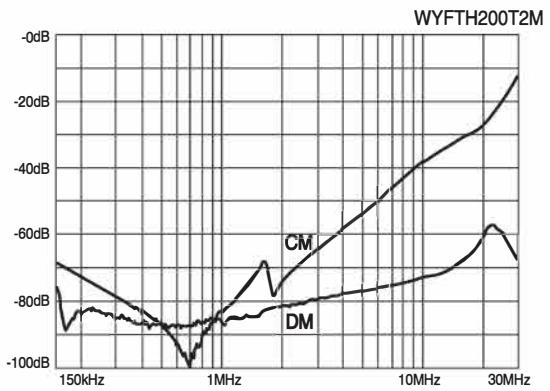
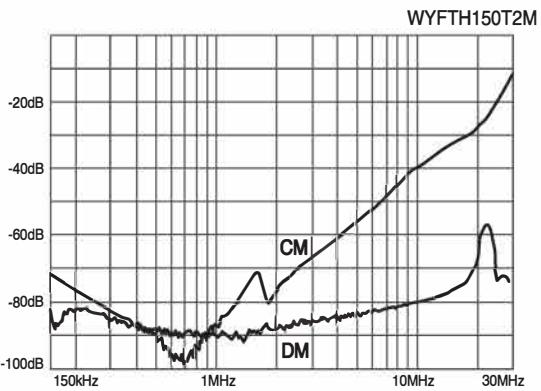
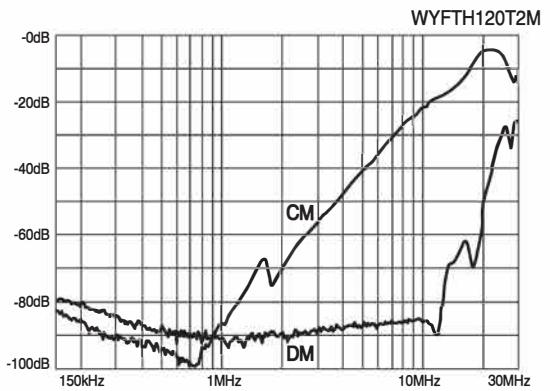
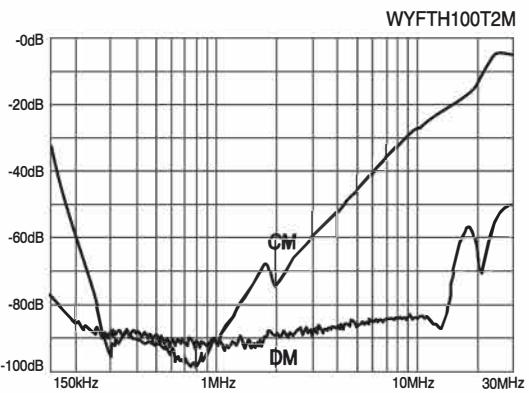
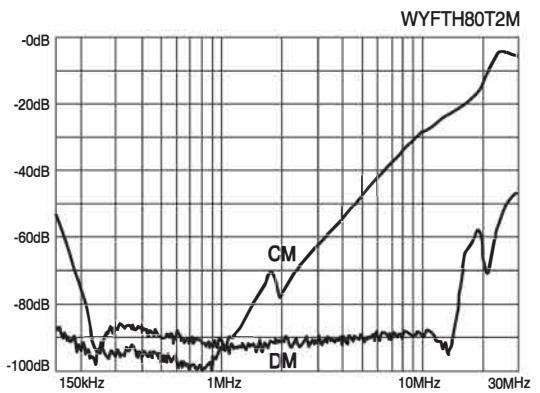
TRANSFORMER
= INDUCTORREACTOR
= REACTORSSR
= SOLID STATE RELAYTIP
= THERMOPILESMP
= SURGE PROTECTORNOISE FILTER
= NOISE FILTERH/F
= HIGH FREQUENCYSP
= SURGE PROTECTORRELAY
= RELAYELD
= ELDZCT
= ZCTMETER
= METERCIT
= CIRCUIT BREAKERSHUNT
= SHUNT

NOISE FILTER**3Ø 250~500V 고감쇄형 Characteristics****Characteristics**

※ CM : Common mode, DM : Differential mode

NOISE FILTER

노이즈 필터

3Ø 250~500V 고감쇄형 Characteristics**CE RoHS****Characteristics**

※ CM : Common mode, DM : Differential mode

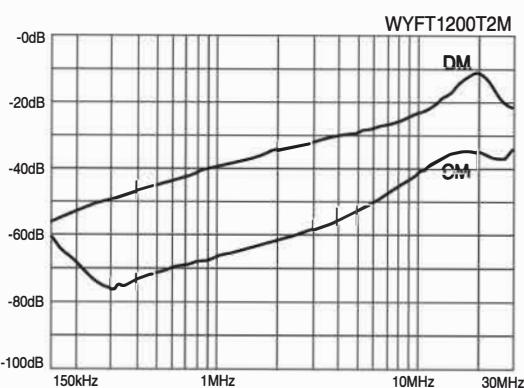
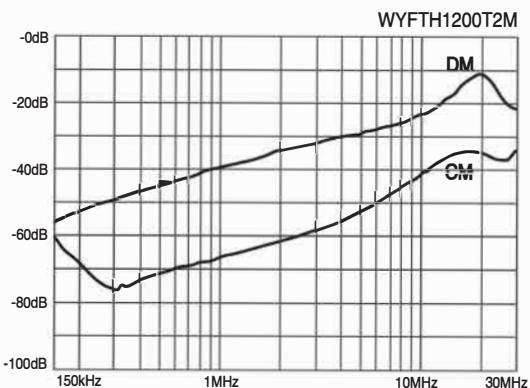
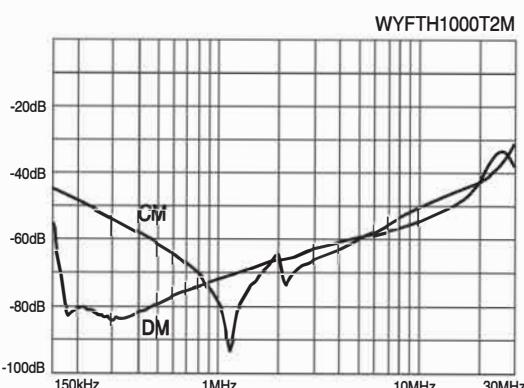
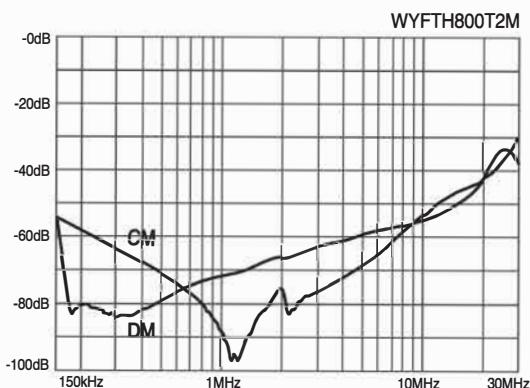
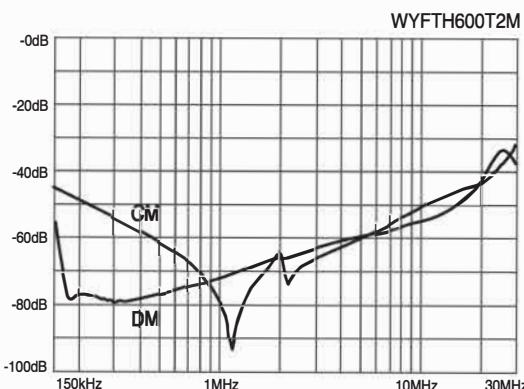
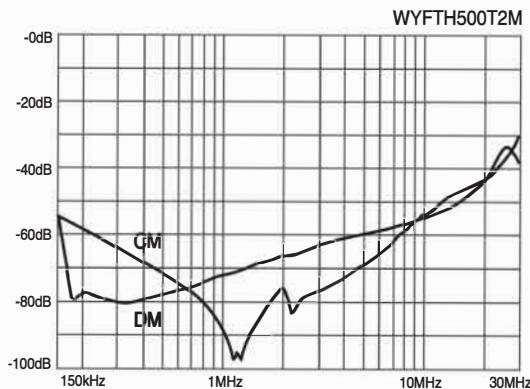
TRANSISTOR
리액터SSR
마진재설계라이TPR
전압조정기SMP
스위칭파워N / F
노이즈필터H / F
하모니크필터SPD
서지보호기RELAY
보호계전기ELD
누전제로보기ZCT
역전류제한기METER
판넬метрCIT
계기설정장치SHUNT
센트리얼/센트리얼

NOISE FILTER

3Ø 250~500V 고감쇄형 Characteristics

CE RoHS

● Characteristics



※ CM : Common mode, DM : Differential mode

**3P4W
노이즈필터
Noise Filter**

3P4W 전용 노이즈필터



• 3P4W 500V 20~400A



Warning

HIGH LEAKAGE CURRENT

The protective earth connections shall be the first to be made when the noise filter is installed and the last to be disconnected.



Danger

DANGER OF ELECTRIC SHOCK

Noise filters contain components that store an electric charge. Dangerous voltages can continue to exist at the filter terminals for longer than five minutes even after the power has been switched off.



Features

본 노이즈필터는 250~500V의 계통에 적용되며 기존의 삼상 선로에만 적용하던 것을 3P4W 선로의 중성 선에도 필터를 적용하여 AVR, UPS, 의료기장비 및 기타 3상4선식 선로에 적용되는 노이즈필터입니다.

This is multi stage(premium) type of noise filter which is normally used to AVR, UPS, medical equipment and 3phase-4wire system line is available to use between 250V and 500V and not only to 3wire system but also 3phase-4wire system line.

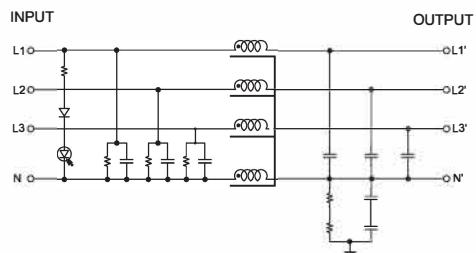
- Wide Band : High Attenuation
- Band Width : 150kHz~30MHz
- RoHS Compliant
- Inverter Output Type : Model Type"C"
(WYF4TH20T2C)

Specifications

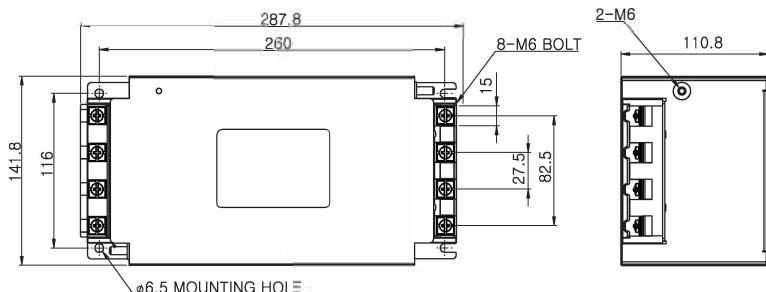
ITEM	MODEL	SYMBOL	WYF4TH20T2M	WYF4TH30T2M
Rated Voltage	V		500	
Rated Current	A		20	30
Frequency	Hz		50/60	
Dielectric Withstand	V		1500	
Insulation Resistance	MΩ		300	
Leakage Current	mA		25(at the 500 Vac)	
Operating Temperature	°C		-25°C ~ +100°C [Refer to Derating Curve TYPE-2]	
Operating Humidity	RH		35~85%RH	
Weight	kg		2.0	

※ Derating Curve of page 103

Circuit Diagram



Dimension



Terminal



Max 14 , Min 6

3P4W 500V

CE RoHS



Features

본 노이즈필터는 250~500V의 계통에 적용되며 기존의 삼상 선로에만 적용하던 것을 3P4W 선로의 중성 선에도 필터를 적용하여 AVR, UPS, 의료기장비 및 기타 3상4선식 선로에 적용되는 노이즈필터입니다.

This is multi stage(premium) type of noise filter which is normally used to AVR, UPS, medical equipment and 3phase-4wire system line is available to use between 250V and 500V and not only to 3wire system but also 3phase-4wire system line.

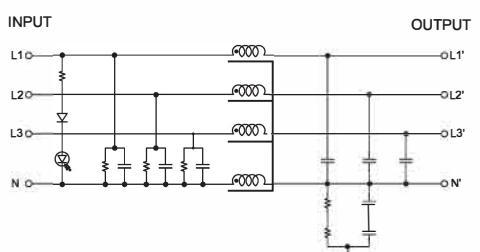
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- Band Width : 150kHz~30MHz
- RoHS Compliant
- Inverter Output Type : Model Type "C"
(WYF4TH40T2C)

Specifications

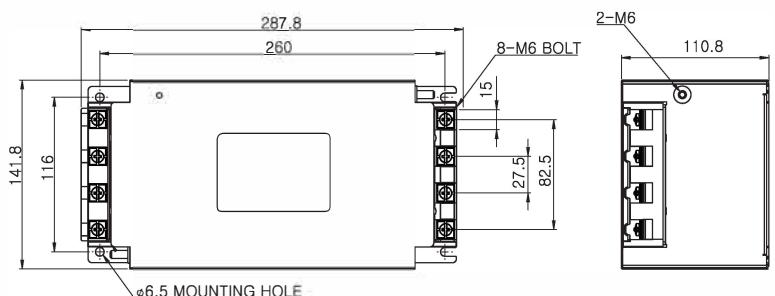
ITEM	MODEL	SYMBOL	WYF4TH40T2M	WYF4TH50T2M	WYF4TH60T2M
Rated Voltage	V			500	
Rated Current	A		40	50	60
Frequency	Hz			50/60	
Dielectric Withstand	V			1500	
Insulation Resistance	MΩ			300	
Leakage Current	mA			45(at the 500 Vac)	
Operating Temperature	°C		-25°C ~ +100°C [Refer to Derating Curve TYPE-2]		
Operating Humidity	RH			35~85%RH	
Weight	kg		4.2		5.1

※ Derating Curve of page 103

Circuit Diagram



Dimension



Terminal



Max 14 , Min 6

NOISE FILTER**3P4W 500V****CE RoHS****Features**

본 노이즈필터는 250~500V의 계통에 적용되며 기존의 삼상 선로에만 적용하는 것을 3P4W 선로의 중성 선에도 필터를 적용하여 AVR, UPS, 의료기장비 및 기타 3상4선식 선로에 적용되는 고감쇄형(Multi-stage) 노이즈필터입니다.

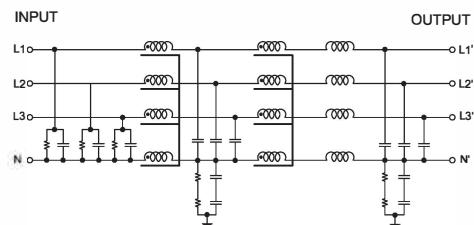
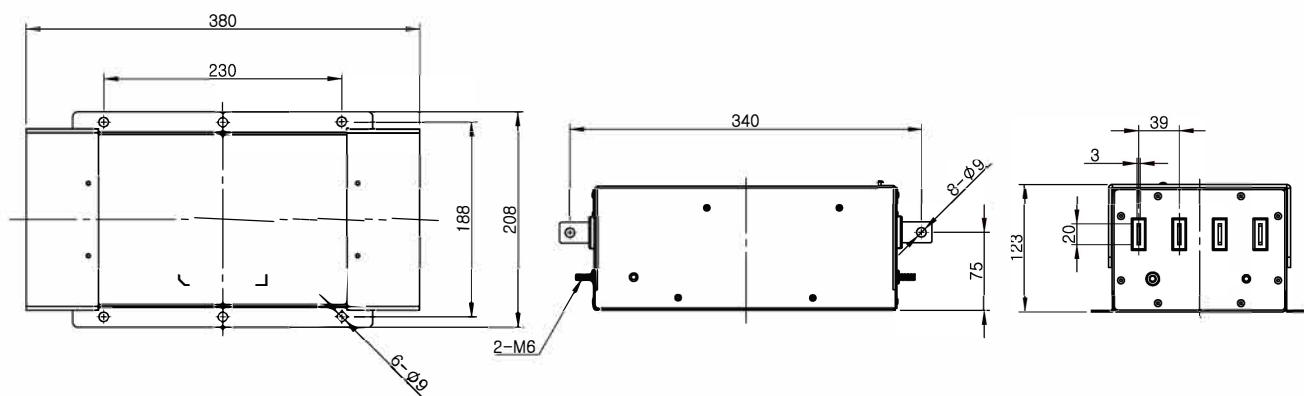
This is multi stage(premium) type of noise filter which is normally used to AVR, UPS, medical equipment and 3phase-4wire system line is available to use between 250V and 500V and not only to 3wire system but also 3phase-4wire system line.

- Wide Band : High Attenuation
- Band Width : 150kHz~30MHz
- RoHS Compliant
- Inverter Output Type : Model Type"C"
(WYF4TH80T2C)

Specifications

ITEM	MODEL	SYMBOL	WYF4TH80T2M	WYF4TH100T2M	WYF4TH120T2M	WYF4TH150T2M
Rated Voltage	V			500		
Rated Current	A		80	100	120	150
Frequency	Hz			50/60		
Dielectric Withstand	V			1500		
Insulation Resistance	MΩ			300		
Leakage Current	mA			45(at the 500 Vac)		
Operating Temperature	°C		-25°C ~ +100°C [Refer to Derating Curve TYPE-2]			
Operating Humidity	RH			35~85%RH		
Weight	kg		5.1		6.0	

※ Derating Curve of page 103

Circuit Diagram**Dimension**

3P4W 500V

CE RoHS



Features

본 노이즈필터는 250~500V의 계통에 적용되며 기존의 삼상 선로에만 적용하던 것을 3P4W 선로의 중성 선에도 필터를 적용하여 AVR, UPS, 의료기장비 및 기타 3상4선식 선로에 적용되는 고감쇄형(Multi-stage) 노이즈필터입니다.

This is multi stage(premium) type of noise filter which is normally used to AVR, UPS, medical equipment and 3phase-4wire system line is available to use between 250V and 500V and not only to 3wire system but also 3phase-4wire system line.

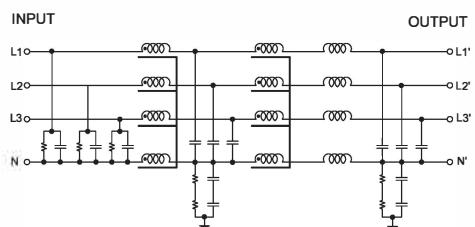
- Wide Band : High Attenuation
- Band Width : 150kHz~30MHz
- RoHS Compliant
- Inverter Output Type : Model Type "C" (WYF4TH200T2C)
- WYF4TH200T2M~WYF4TH400T2M : KC(HK03001~16005A)

Specifications

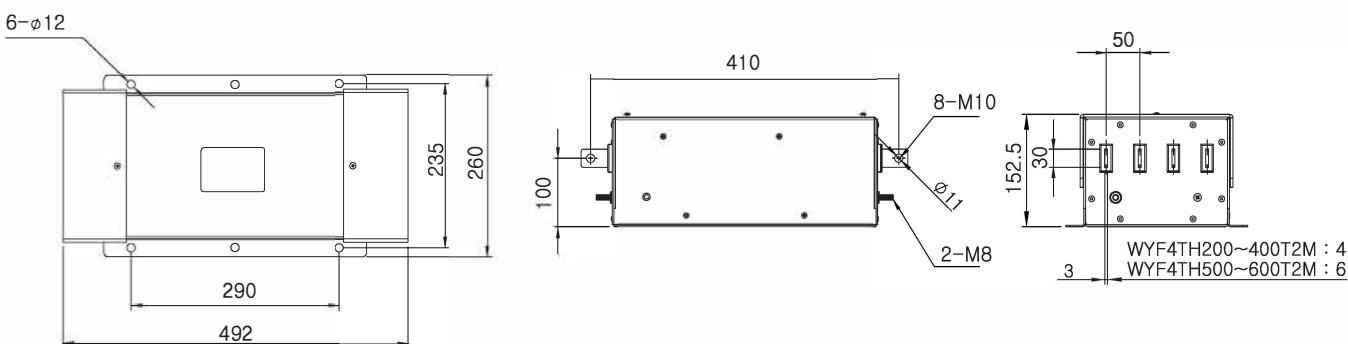
ITEM	MODEL	SYMBOL	WYF4TH200T2M	WYF4TH250T2M	WYF4TH300T2M	WYF4TH400T2M	WYF4TH500T2M	WYF4TH600T2M
Rated Voltage	V				500			
Rated Current	A		200	250	300	400	500	600
Frequency	Hz				50/60			
Dielectric Withstand	V				1500			
Insulation Resistance	MΩ				300			
Leakage Current	mA				90(at the 500 Vac)			
Operating Temperature	°C				-25°C ~ +100°C [Refer to Derating Curve TYPE-2]			
Operating Humidity	RH				35~85%RH			
Weight	kg		6.5		7.1		7.8	

※ Derating Curve of page 103

Circuit Diagram



Dimension



노이즈필터
Noise Filter

1Ø 고급형(High Quality Type)

• 1Ø 250V 6~50A



NOISE FILTER

1Ø 250V 고급형 High Quality Type

**Features**

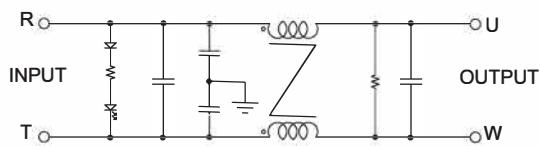
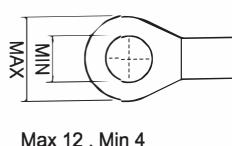
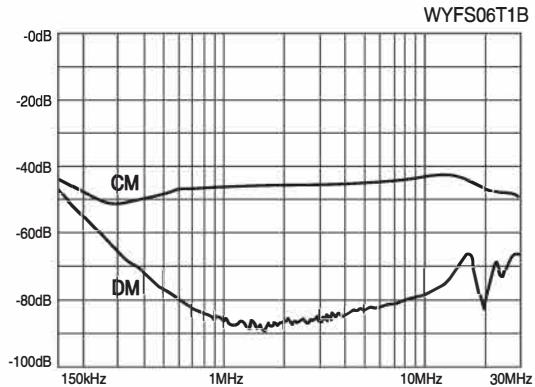
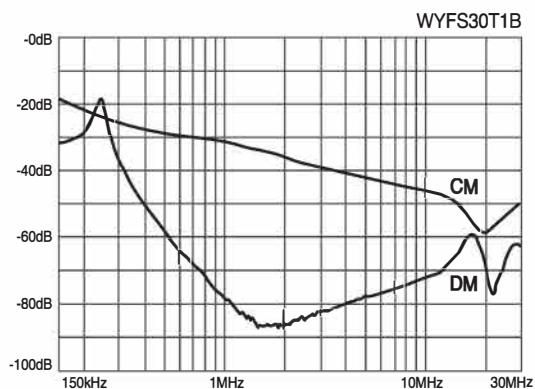
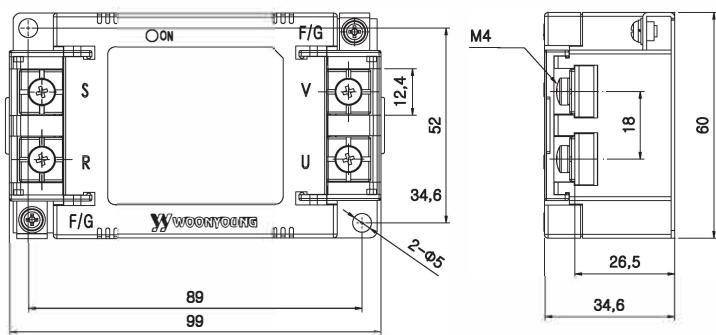
- 2 Mounting Option
 - WYF****D : Din Rail Mounting
 - WYF**** : Screw Mounting
- Wide Band : High Attenuation
- Band Width : 150KHz~30MHz
- Low Leakage
- RoHS Compliant
- KC(안전인증)

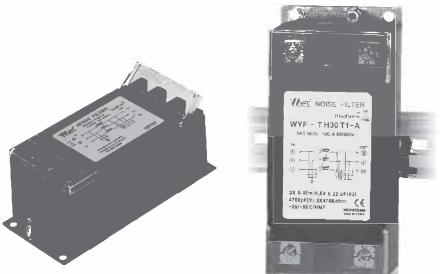
Approved by HH03009-10002C

Specifications

ITEM \ MODEL	SYMBOL	WYFS06T1B (D)	WYFS10T1B (D)	WYFS15T1B (D)	WYFS20T1B (D)	WYFS30T1B (D)
Rated Voltage	V			250		
Rated Current	A	6	10	15	20	30
Frequency	Hz			50/60		
Dielectric Withstand	V			1500		
Insulation Resistance	MΩ			500		
Leakage Current	mA			0.8		
Operating Temperature	°C		-25°C ~ +100°C [Refer to Derating Curve TYPE-1]			
Operating Humidity	RH			35~85%RH		
Weight	kg			0.3		

※ "D" : DIN-Rail type of page 184 / Derating Curve of page 103

Circuit Diagram**Terminal****Characteristics****Dimension**

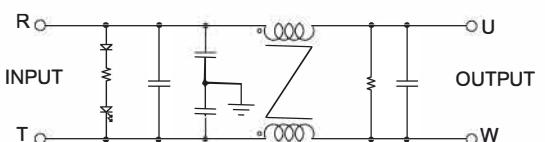
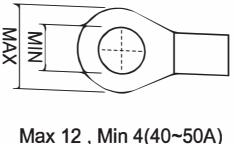
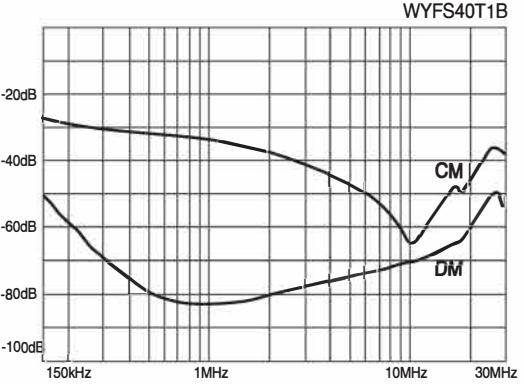
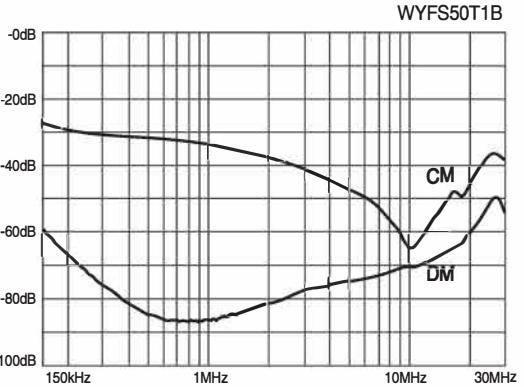
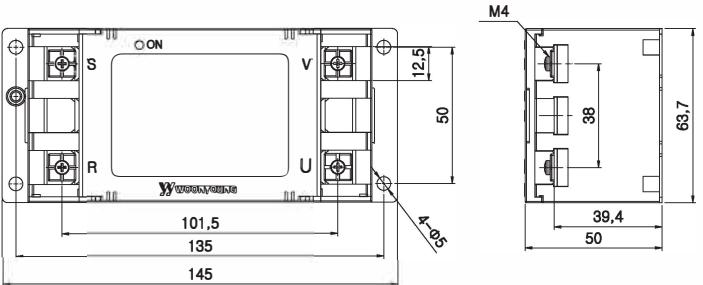
NOISE FILTER**1Ø 250V 고급형 High Quality Type****CE RoHS****Features**

- 2 Mounting Option
 - WYF****D : Din Rail Mounting
 - WYF**** : Screw Mounting
- Wide Band : High Attenuation
- Band Width : 150KHz~30MHz
- Low Leakage
- RoHS Compliant

Specifications

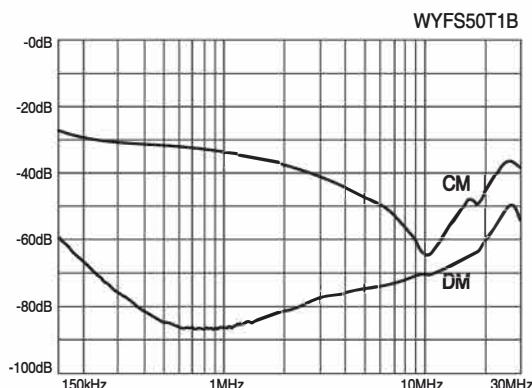
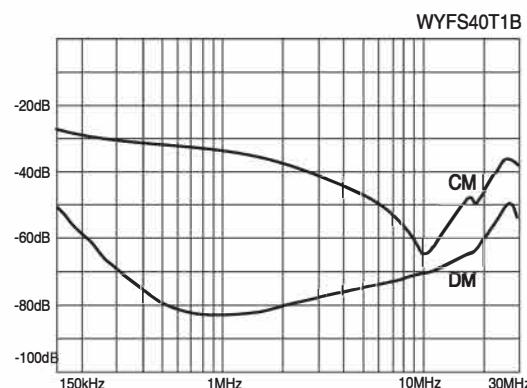
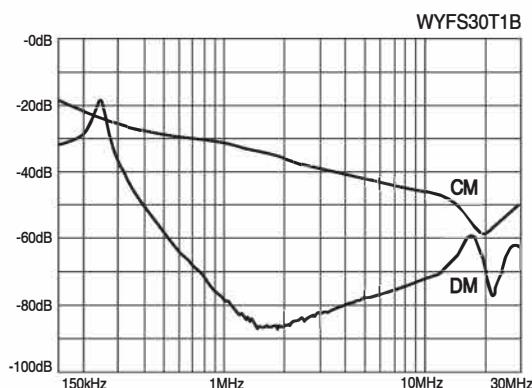
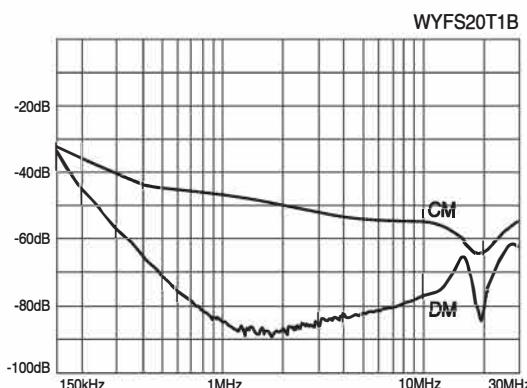
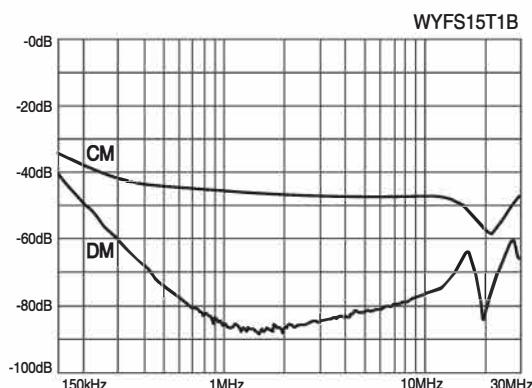
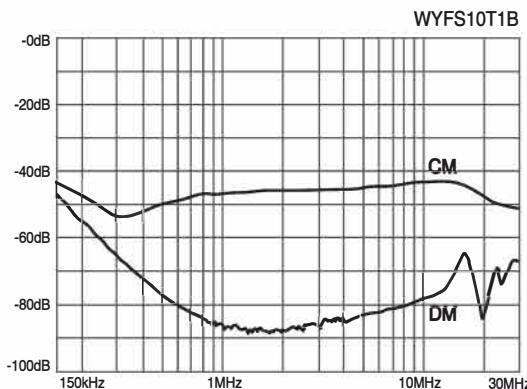
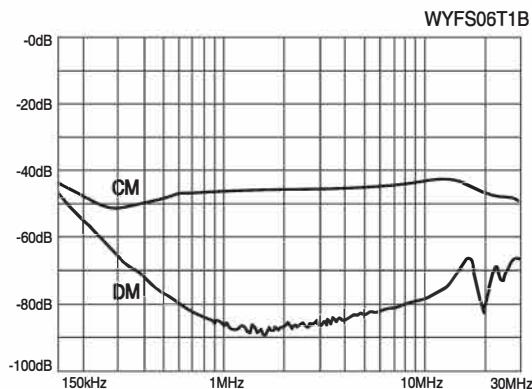
ITEM	MODEL	SYMBOL	WYFS40T1B (D)	WYFS50T1B (D)
Rated Voltage	V		250	
Rated Current	A		40	50
Frequency	Hz		50/60	
Dielectric Withstand	V		1500	
Insulation Resistance	MΩ		500	
Leakage Current	mA		0.8	
Operating Temperature	℃		-25°C ~ +100°C [Refer to Derating Curve TYPE-1]	
Operating Humidity	RH		35~85%RH	
Weight	kg		0.5	

※ "D" : DIN-Rail type of page 184 / Derating Curve of page 103

Circuit Diagram**Terminal****Characteristics****Dimension**

NOISE FILTER**1Ø 250V 고급형 Characteristics**

● Characteristics



※ CM : Common mode, DM : Differential mode

노이즈필터 Noise Filter

3Ø 고급형(High Quality Type)



- 3Ø 250V 5~50A
- 3Ø 500V 5~50A

NOISE FILTER

3Ø 250V 고급형 High Quality Type

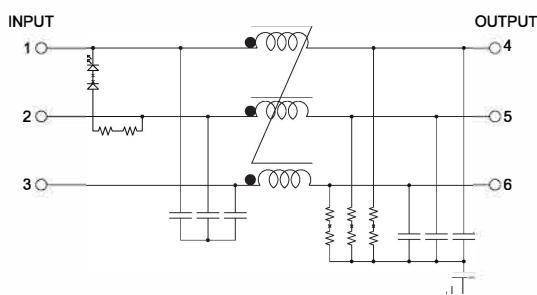
KC CE RoHS**Features**

- 2 Mounting Option
 - WYF****D : Din Rail Mounting
 - WYF**** : Screw Mounting
 - Wide Band : High Attenuation
 - Band Width : 150KHz~30MHz
 - Low Leakage
 - RoHS Compliant
 - KC(안전인증)
- Approved by HH03009-10002C

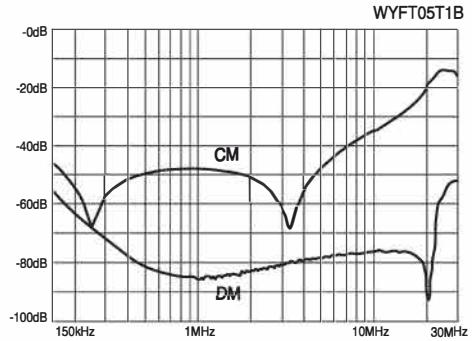
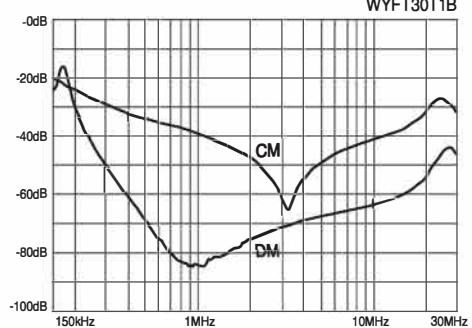
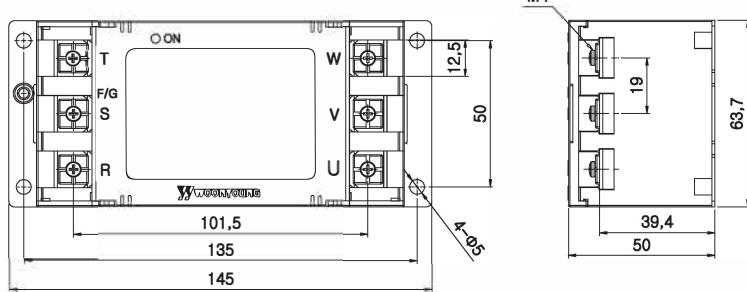
Specifications

ITEM	MODEL	SYMBOL	WYFT05T1B (D)	WYFT10T1B (D)	WYFT15T1B (D)	WYFT20T1B (D)	WYFT30T1B (D)
Rated Voltage	V		250				
Rated Current	A		5	10	15	20	30
Frequency	Hz		50/60				
Dielectric Withstand	V		1500				
Insulation Resistance	MΩ		500				
Leakage Current	mA		0.8				
Operating Temperature	°C		-25°C ~ +100°C [Refer to Derating Curve TYPE-2]				
Operating Humidity	RH		35~85%RH				
Weight	kg		0.5				

※ "D" : DIN-Rail type of page 184 / Derating Curve of page 103

Circuit Diagram**Terminal**

Max 12 , Min 4

Characteristics**Dimension**

NOISE FILTER

노이즈 필터

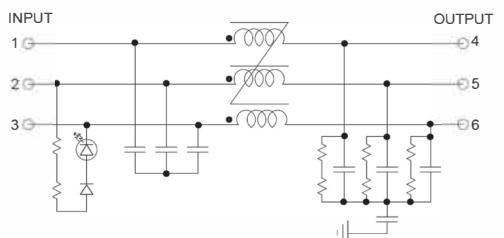
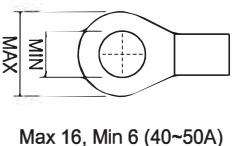
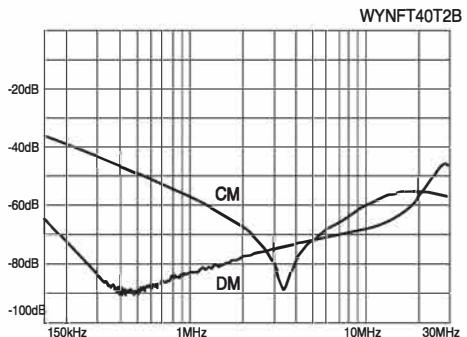
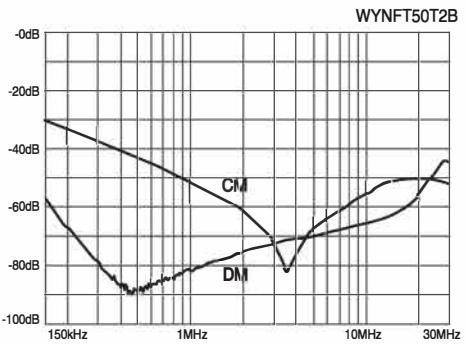
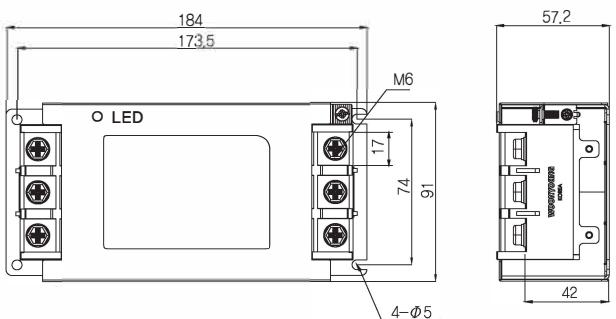
N Series 3Ø 250V 고급형 (High Quality Type)**CE RoHS****Features**

- Wide Band : High Attenuation
- Band Width : 150KHz~30MHz
- RoHS Compliant

Specifications

ITEM	MODEL	SYMBOL	WYNFT40T2B	WYNFT50T2B
Rated Voltage	V		250Vac	
Rated Current	A		40A	50A
Frequency	Hz		50/60	
Dielectric Withstand	V		1500Vac for one 1minute	
Insulation Resistance	MΩ		DC 100MΩ at the 500Vdc	
Leakage Current	mA		≤4.5mA at the 250Vac	
Operating Temperature	°C		-25°C ~ +100°C [Refer to Derating Curve TYPE-2]	
Operating Humidity	RH		35~85%RH	
Weight	kg		1.2	

※ Derating Curve of page 103

Circuit Diagram**Terminal****Characteristics****Dimension**



Features

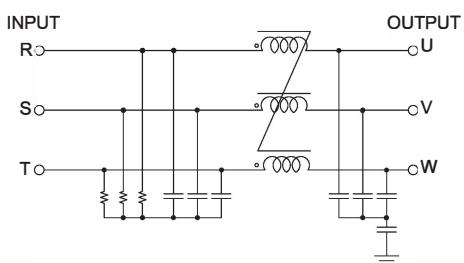
- Wide Band : High Attenuation
- Band Width : 150KHz~30MHz
- Low Leakage
- RoHS Compliant

Specifications

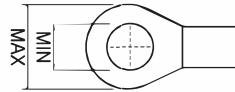
ITEM	MODEL	SYMBOL	WYFT40T2B	WYFT50T2B
Rated Voltage	V		250	
Rated Current	A		40	50
Frequency	Hz		50/60	
Dielectric Withstand	V		1500	
Insulation Resistance	MΩ		500	
Leakage Current	mA		0.8	
Operating Temperature	°C		-25°C ~ +100°C [Refer to Derating Curve TYPE-2]	
Operating Humidity	RH		35~85%RH	
Weight	kg		1.2	

※ Derating Curve of page 103

Circuit Diagram

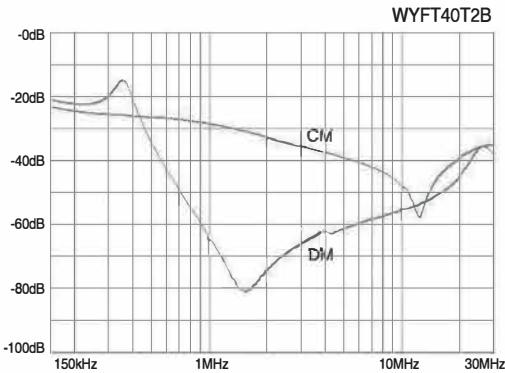


Terminal

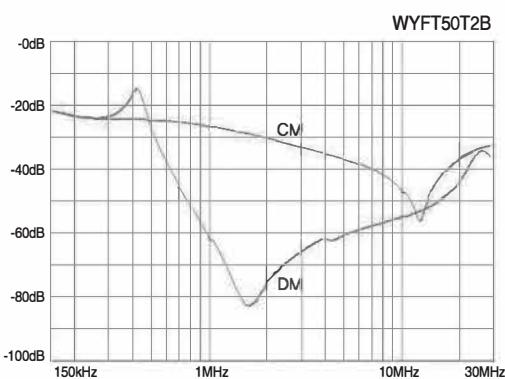
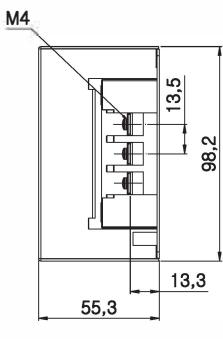
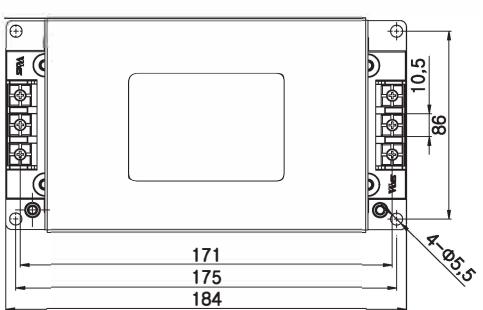


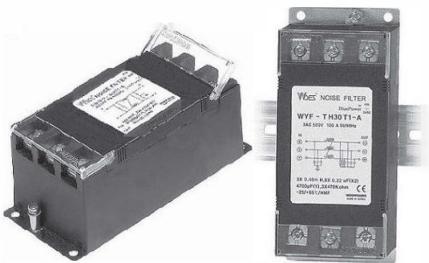
Max 10.5 , Min 4

Characteristics



Dimension



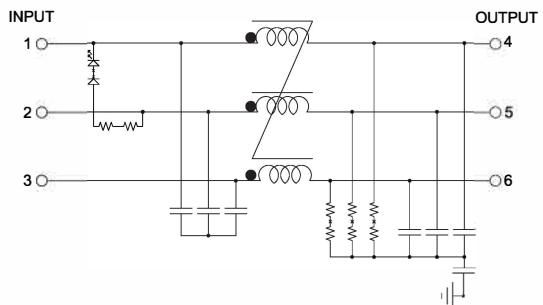
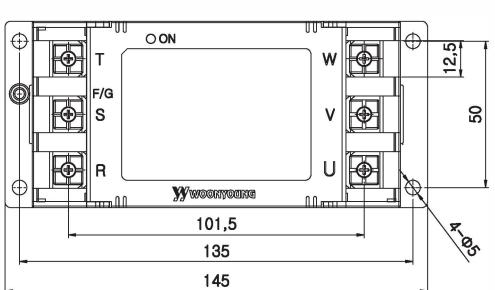
NOISE FILTER**3Ø 500V 고급형 High Quality Type****KCE RoHS****Features**

- 2 Mounting Option
-WYF****D : Din Rail Mounting
-WYF**** : Screw Mounting
- Wide Band : High Attenuation
- Band Width : 150KHz~30MHz
- Low Leakage
- RoHS Compliant
- KC(안전인증) Approved by HK03001-19008A

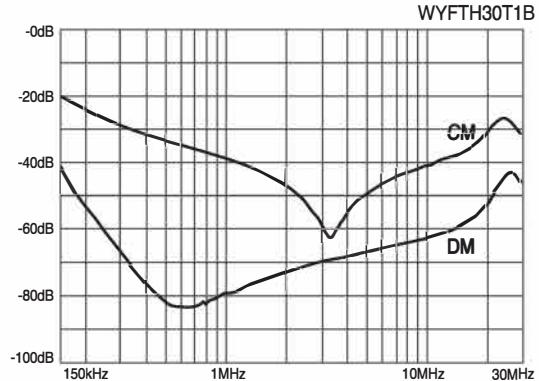
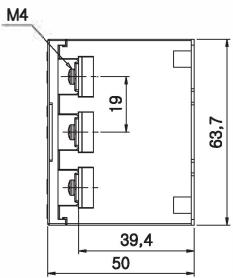
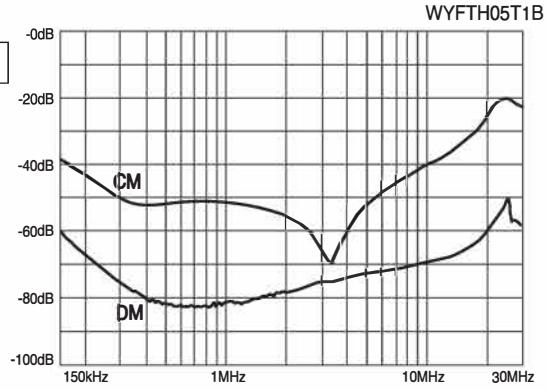
Specifications

ITEM	MODEL	SYMBOL	WYFTH05T1B (D)	WYFTH10T1B (D)	WYFTH15T1B (D)	WYFTH20T1B (D)	WYFTH30T1B (D)
Rated Voltage	V				500		
Rated Current	A		5	10	15	20	30
Frequency	Hz				50/60		
Dielectric Withstand	V				1500		
Insulation Resistance	MΩ				500		
Leakage Current	mA				1.2		
Operating Temperature	℃				-25°C ~ +100°C [Refer to Derating Curve TYPE-2]		
Operating Humidity	RH				35~85%RH		
Weight	kg				0.5		

※ "D" : DIN-Rail type of page 184 / Derating Curve of page 103

Circuit Diagram**Dimension****Terminal**

Max 12 , Min 4

Characteristics

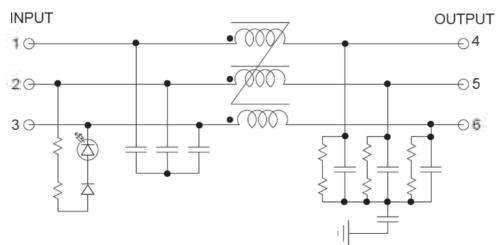
NOISE FILTER**N Series 3Ø 500V 고급형 High Quality Type****CE RoHS****Features**

- Wide Band : High Attenuation
- Band Width : 150KHz~30MHz
- RoHS Compliant

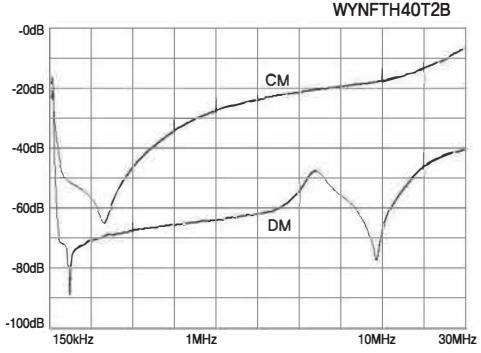
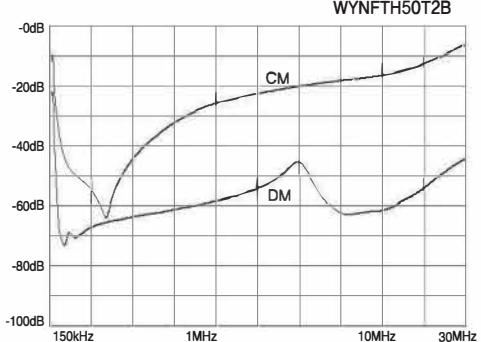
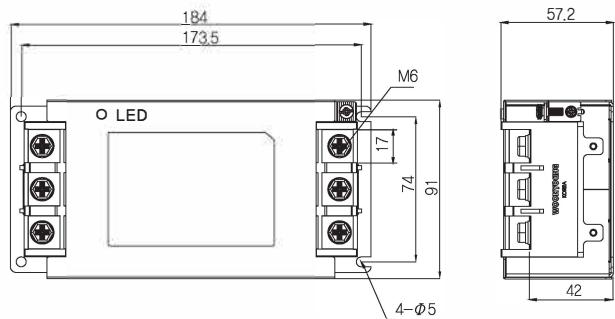
Specifications

ITEM	MODEL	SYMBOL	WYNFTH40T2B	WYNFTH50T2B
Rated Voltage	V		500Vac	
Rated Current	A		40A	50A
Frequency	Hz		50/60	
Dielectric Withstand	V		1500Vac for one 1minute	
Insulation Resistance	MΩ		DC 100MΩ at the 500Vdc	
Leakage Current	mA		≤4.5mA at the 250Vac	
Operating Temperature	℃		-25℃ ~ +100℃ [Refer to Derating Curve TYPE-2]	
Operating Humidity	RH		35~85%RH	
Weight	kg		1.2	

※ Derating Curve of page 103

Circuit Diagram**Terminal**

Max 16, Min 6 (40~50A)

Characteristics**Dimension**

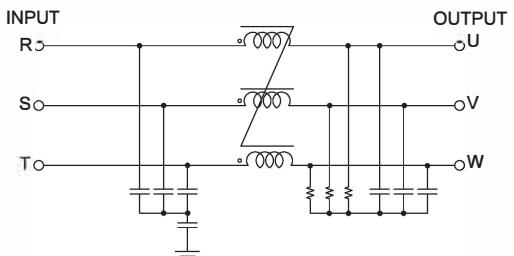
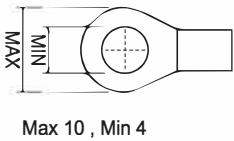
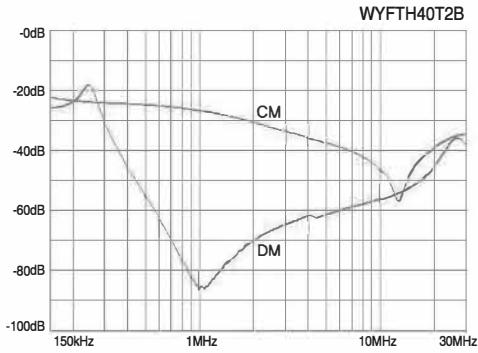
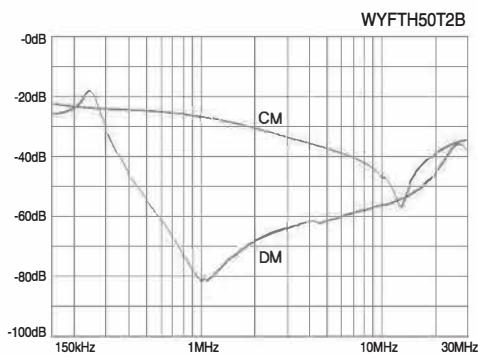
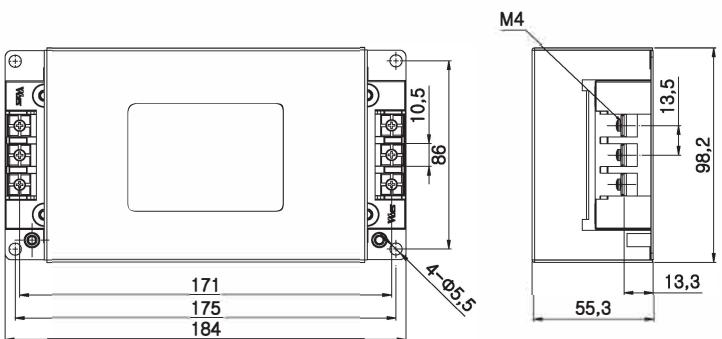
NOISE FILTER**3Ø 500V 고급형 High Quality Type****CE RoHS****Features**

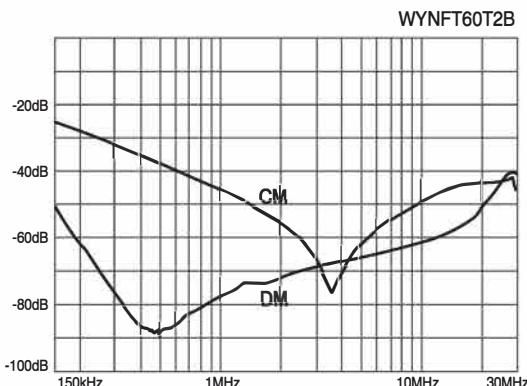
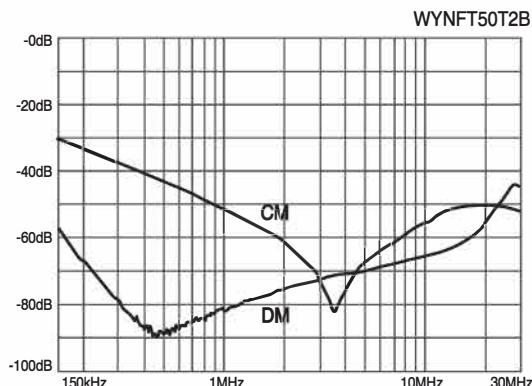
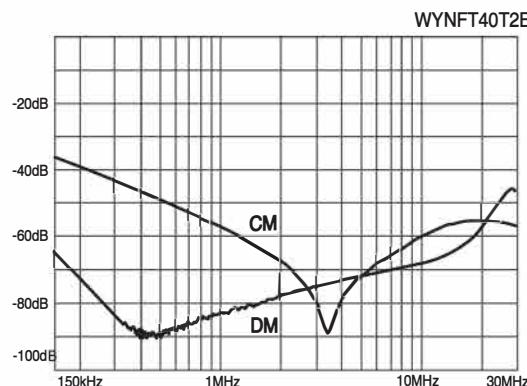
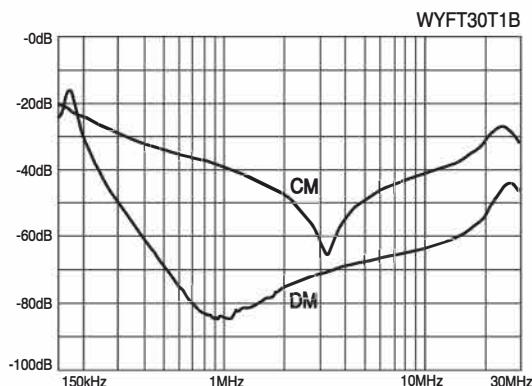
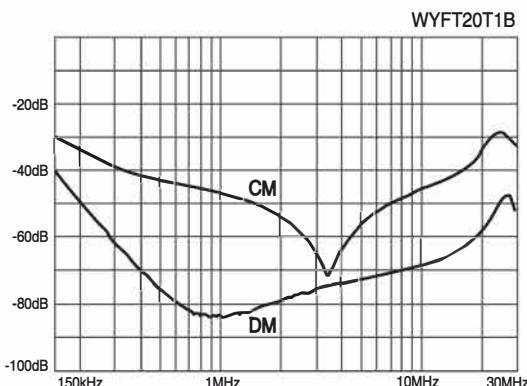
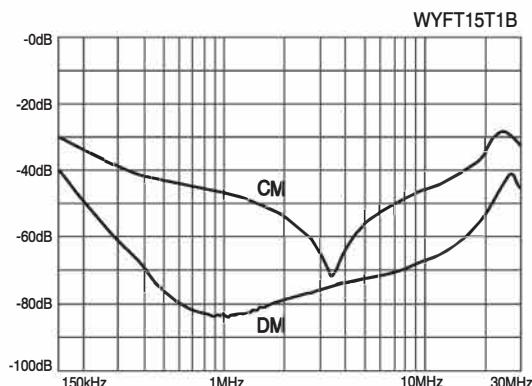
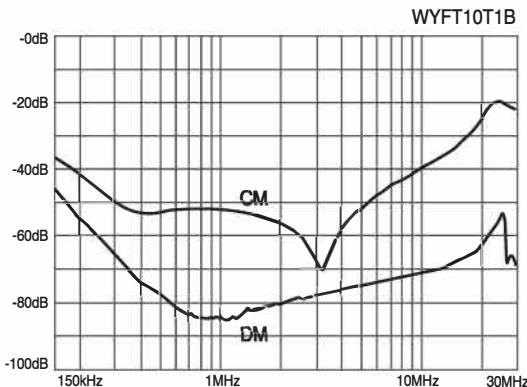
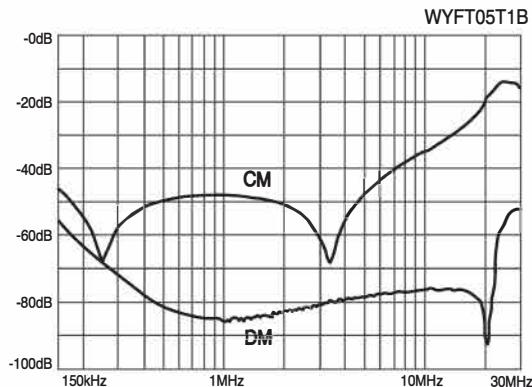
- Wide Band : High Attenuation
- Band Width : 150KHz~30MHz
- Low Leakage
- RoHS Compliant

Specifications

ITEM	MODEL	SYMBOL	WYFTH40T2B	WYFTH50T2B
Rated Voltage	V		500	
Rated Current	A		40	50
Frequency	Hz		50/60	
Dielectric Withstand	V		1500	
Insulation Resistance	MΩ		500	
Leakage Current	mA		1.2	
Operating Temperature	℃		-25°C ~ +100°C [Refer to Derating Curve TYPE-2]	
Operating Humidity	RH		35~85%RH	
Weight	kg		1.2	

※ Derating Curve of page 103

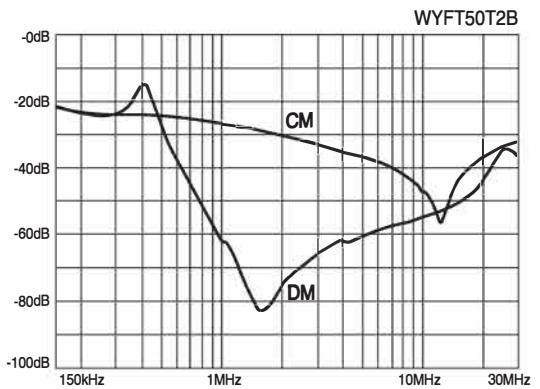
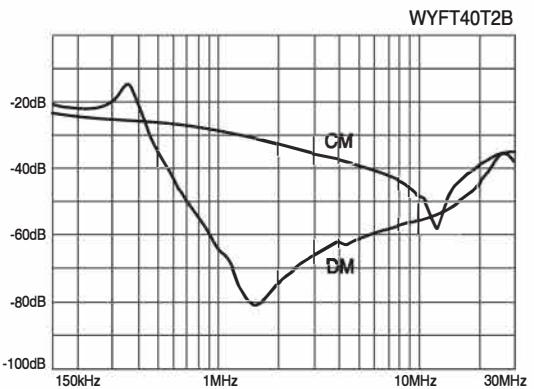
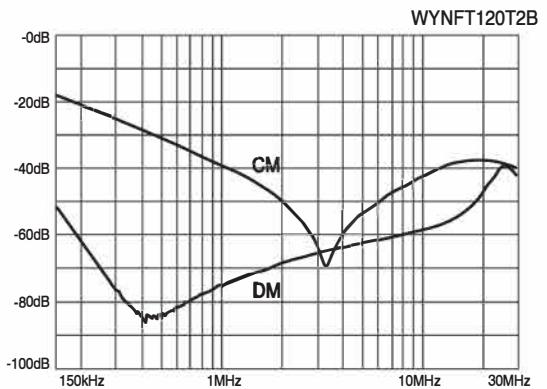
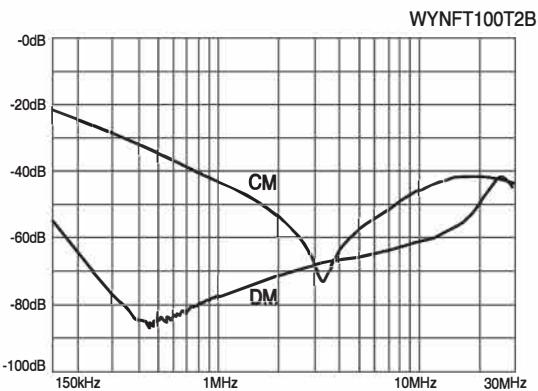
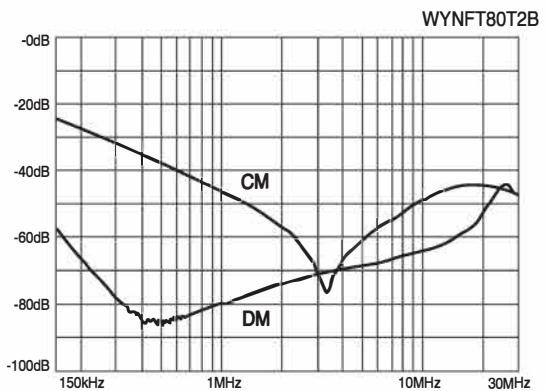
Circuit Diagram**Terminal****Characteristics****Dimension**

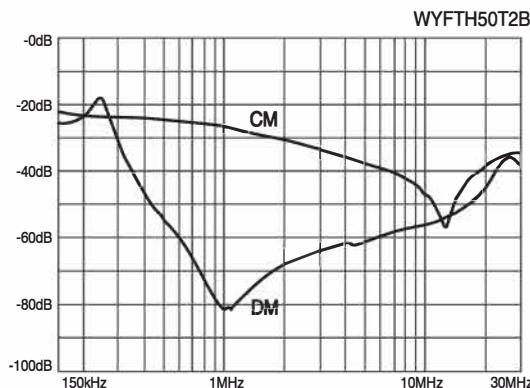
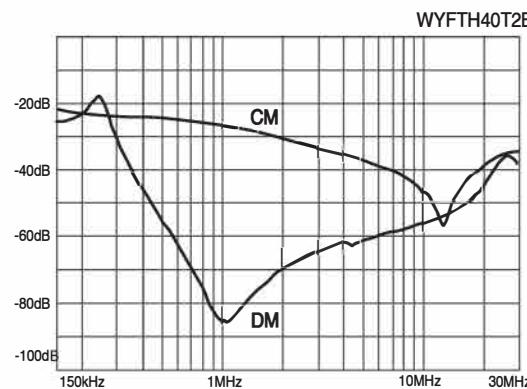
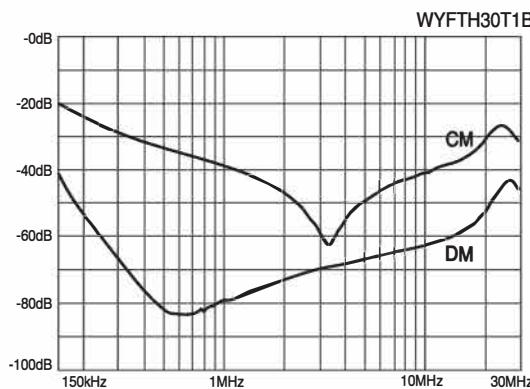
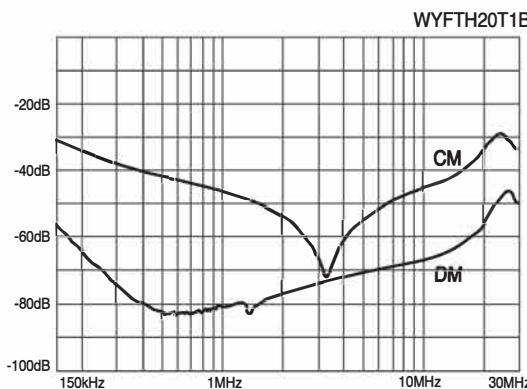
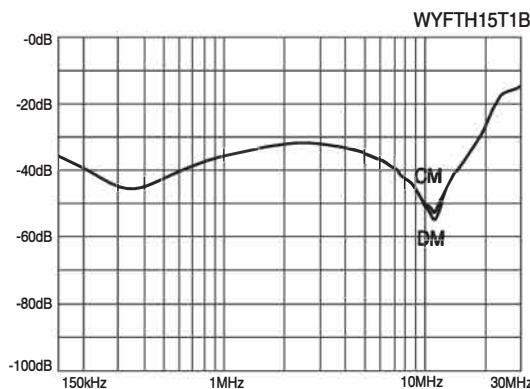
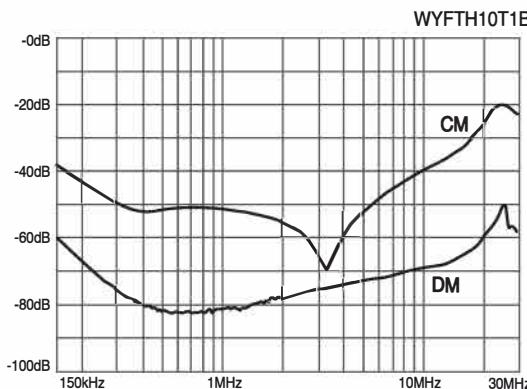
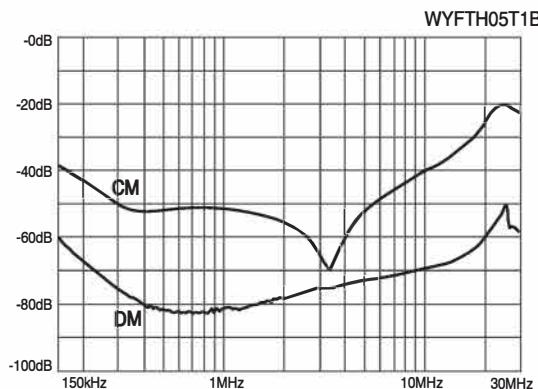
NOISE FILTER**N Series 3Ø 250V 고급형 Characteristics****CE RoHS****Characteristics**

※ CM : Common mode, DM : Differential mode

NOISE FILTER

노이즈 필터

3Ø 250V 고급형 Characteristics**CE RoHS****Characteristics**

NOISE FILTER**N Series 3Ø 500V 고급형 Characteristics****CE RoHS****Characteristics**

※ CM : Common mode, DM : Differential mode

노이즈필터

Noise Filter

1Ø 보급형(General Type)



PCB Insert Type

- 1Ø 250V 3~6A



DIN-Rail-TD Type

- 1Ø 250V 6~20A



Terminal Type

- 1Ø 250V 6~200A
- 1Ø 500V 6~20A



NOISE FILTER

1Ø 250V PCB Type

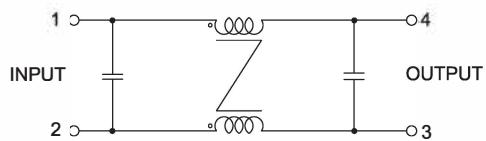
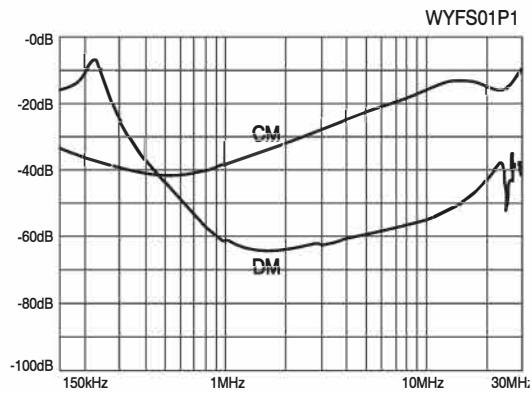
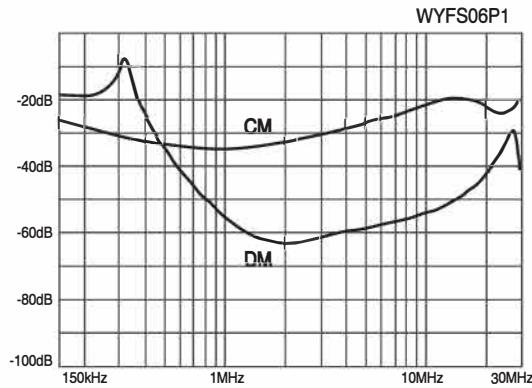
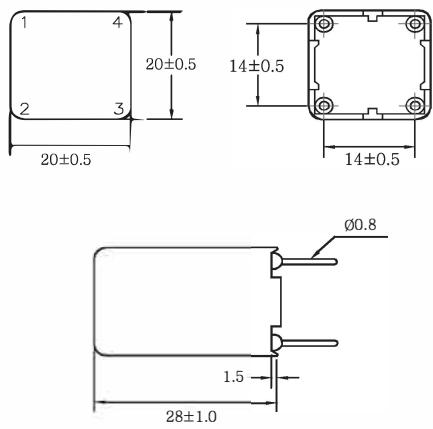
**Features**

- Wide Band : High Attenuation
- Band Width : 150KHz~30MHz
- Low Leakage

Specifications

ITEM \ MODEL	SYMBOL	WYFS01P1	WYFS02P1	WYFS03P1	WYFS06P1
Rated Voltage	V		250		
Rated Current	A	1	2	3	6
Frequency	Hz		50/60		
Dielectric Withstand	V		1500		
Insulation Resistance	MΩ		300		
Leakage Current	mA		0.5		
Operating Temperature	℃	-25°C ~ +100°C [Refer to Derating Curve TYPE-1]			
Operating Humidity	RH	35~85%RH			
Weight	g	20			

※ Derating Curve of page 103

Circuit Diagram**Characteristics****Dimension**

1Ø 250V PCB Type



Features

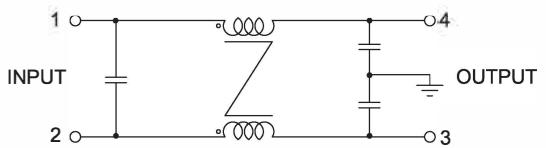
- Wide Band : High Attenuation
- Band Width : 150KHz~30MHz
- Small Size & Light Weight
- Low Leakage

Specifications

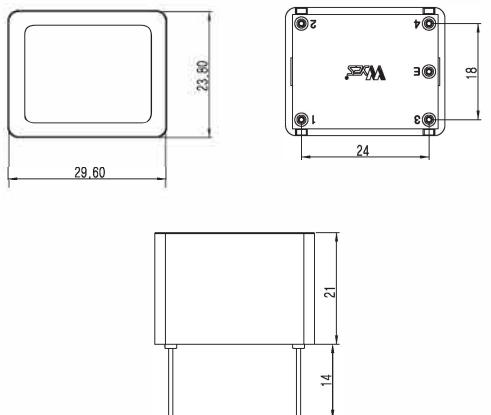
ITEM	MODEL	SYMBOL	WYFS01P3	WYFS02P3	WYFS03P3	WYFS06P3
Rated Voltage	V			250		
Rated Current	A	1	2	3	6	
Frequency	Hz			50/60		
Dielectric Withstand	V			1500		
Insulation Resistance	MΩ			300		
Leakage Current	mA			0.5		
Operating Temperature	°C		-25°C ~ +100°C [Refer to Derating Curve TYPE-1]			
Operating Humidity	RH			35~85%RH		
Weight	g		20			

※ Derating Curve of page 103

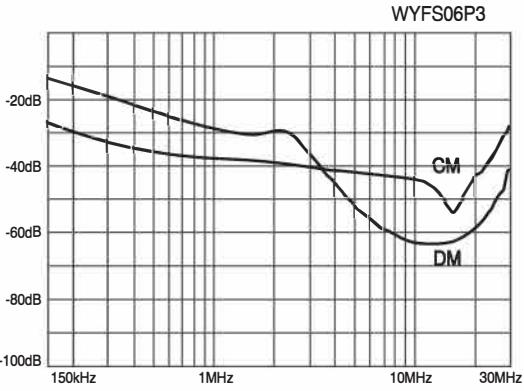
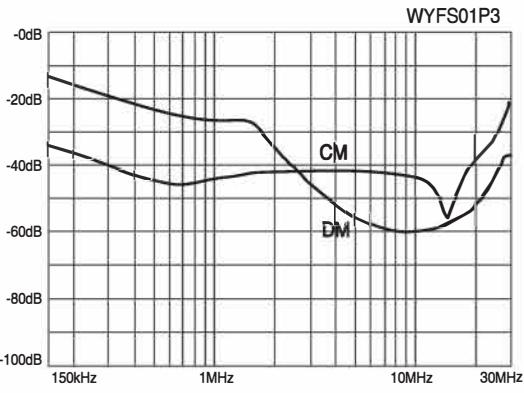
Circuit Diagram



Dimension



Characteristics



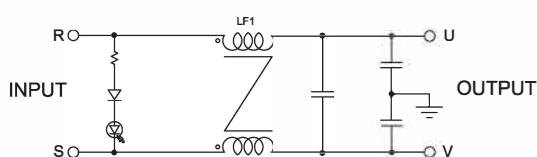
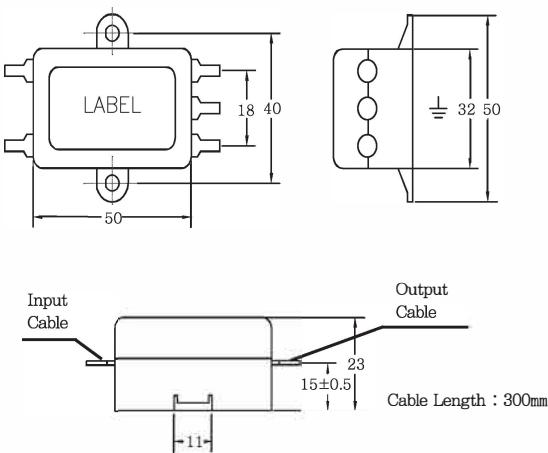
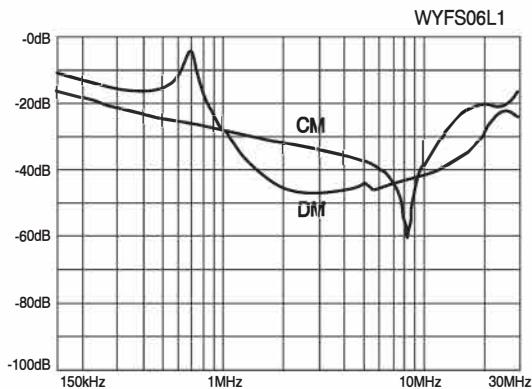
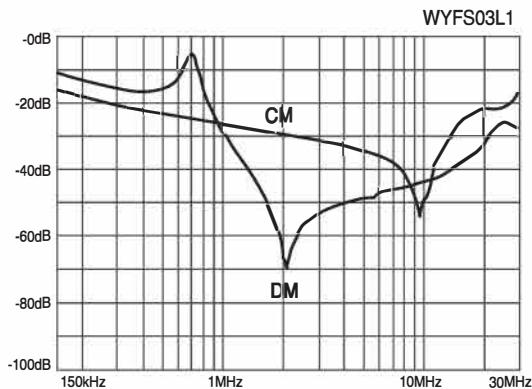
NOISE FILTER**1Ø 250V 표준형필터 Lead Wire Type****Features**

- Wide Band : High Attenuation
- Band Width : 150KHz~30MHz
- Small Size & Compact and Light Weight
- Low Leakage
- KC(안전인증) Approved by HK03001-17006A

Specifications

ITEM	MODEL	SYMBOL	WYFS03L1	WYFS06L1
Rated Voltage	V		250	
Rated Current	A		3	6
Frequency	Hz		50/60	
Dielectric Withstand	V		1500	
Insulation Resistance	MΩ		300	
Leakage Current	mA		0.5	
Operating Temperature	°C		-25°C ~ +100°C [Refer to Derating Curve TYPE-1]	
Operating Humidity	RH		35~85%RH	
Weight	g		60	

※ Derating Curve of page 103

Circuit Diagram**Dimension****Characteristics**

NOISE FILTER

1Ø 250V PIN DIN Rail 표준형 필터 PIN Type

노이즈 필터

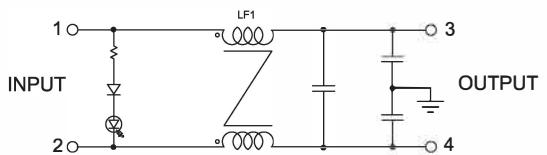
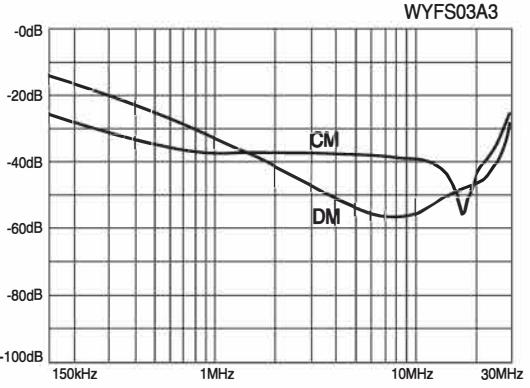
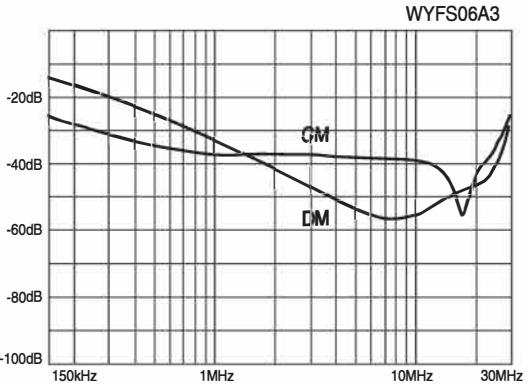
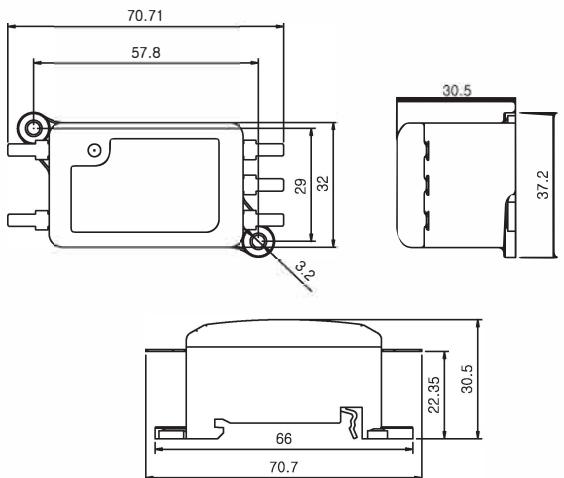
**Features**

- Wide Band : High Attenuation
- Band Width : 150KHz~30MHz
- Small Size & Compact and Light Weight
- Low Leakage
- KC(안전인증) Approved by HK03001-17006A

Specifications

ITEM	MODEL	SYMBOL	WYFS03A3	WYFS06A3
Rated Voltage	V		250	
Rated Current	A		3	6
Frequency	Hz		50/60	
Dielectric Withstand	V		1500	
Insulation Resistance	MΩ		300	
Leakage Current	mA		0.5	
Operating Temperature	°C		-25°C ~ +100°C [Refer to Derating Curve TYPE-1]	
Operating Humidity	RH		35~85%RH	
Weight	g		40	

※ Derating Curve of page 103

Circuit Diagram**Characteristics****Dimension**

NOISE FILTER

노이즈 필터

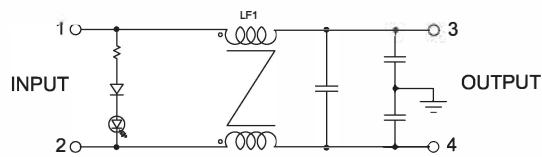
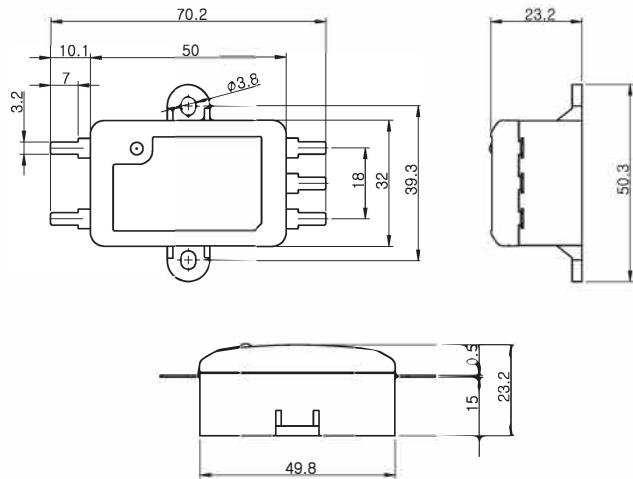
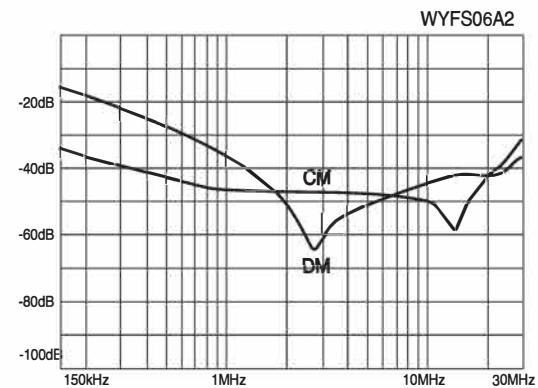
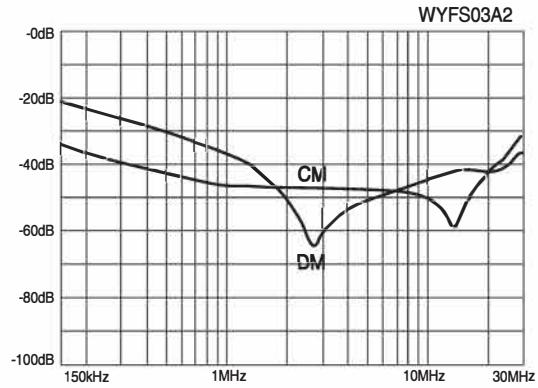
1Ø 250V PIN 표준형필터 PIN Type**CE RoHS****Features**

- Wide Band : High Attenuation
- Band Width : 150KHz~30MHz
- Small Size & Compact and Light Weight
- Low Leakage
- KC(안전인증) Approved by HK03001-17006A

Specifications

ITEM	MODEL	SYMBOL	WYFS03A2	WYFS06A2
Rated Voltage	V		250	
Rated Current	A		3	6
Frequency	Hz		50/60	
Dielectric Withstand	V		1500	
Insulation Resistance	MΩ		300	
Leakage Current	mA		0.5	
Operating Temperature	°C		-25°C ~ +100°C [Refer to Derating Curve TYPE-1]	
Operating Humidity	RH		35~85%RH	
Weight	g		40	

※ Derating Curve of page 103

Circuit Diagram**Dimension****Characteristics**

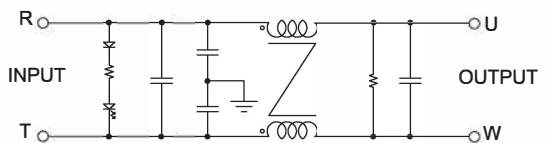
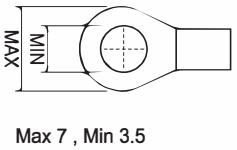
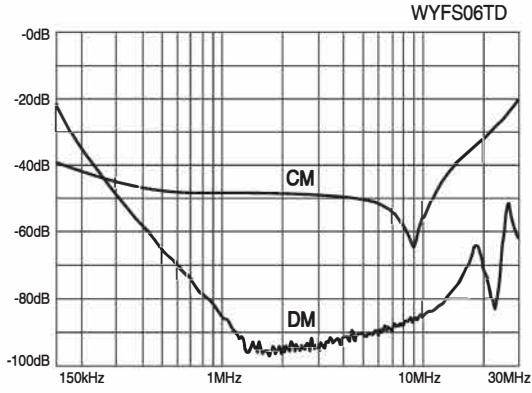
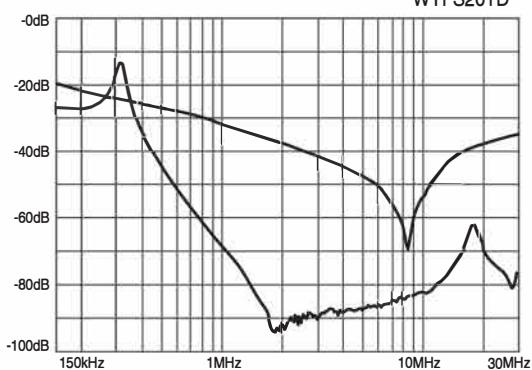
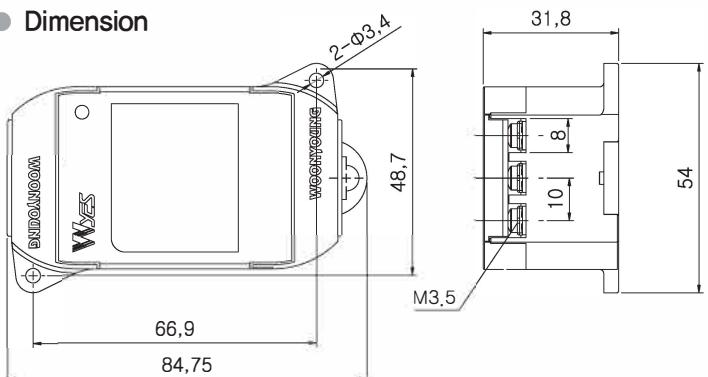
NOISE FILTER**1Ø 250V 경제형 DIN Rail & Terminal Type****노이즈 필터****Features**

- 2 Mounting : Din Rail & Screw
- Wide Band : High Attenuation
- Band Width : 150KHz~30MHz
- Low Leakage
- Low Cost
- RoHS Compliant

Specifications

ITEM	MODEL	SYMBOL	WYFS06TD	WYFS10TD	WYFS15TD	WYFS20TD
Rated Voltage	V			250		
Rated Current	A	6	10	15	20	
Frequency	Hz			50/60		
Dielectric Withstand	V			1500		
Insulation Resistance	MΩ			300		
Leakage Current	mA			0.8		
Operating Temperature	°C		-25°C ~ +100°C [Refer to Derating Curve TYPE-1]			
Operating Humidity	RH			35~85%RH		
Weight	kg			0.1		

※ Derating Curve of page 103

Circuit Diagram**Terminal****Characteristics****Dimension**

NOISE FILTER

1Ø 250V 보급형 General Type

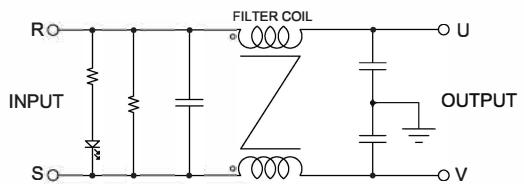
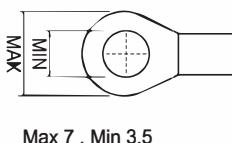
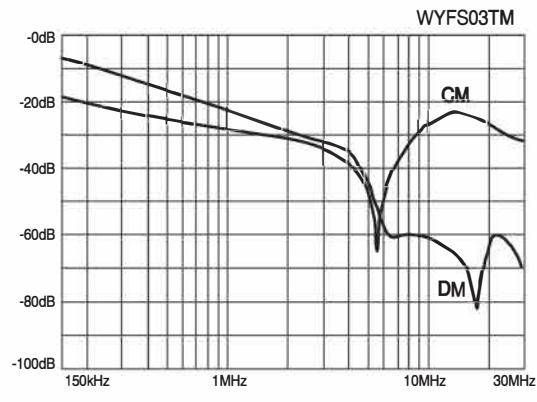
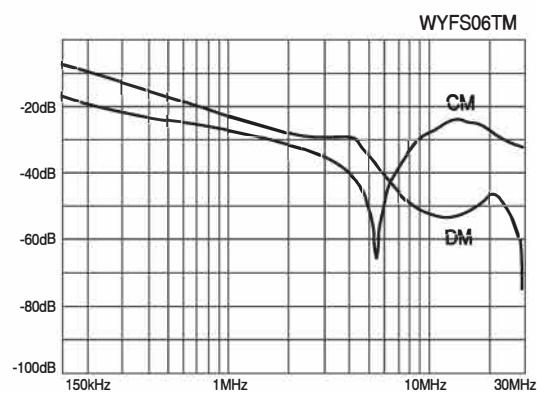
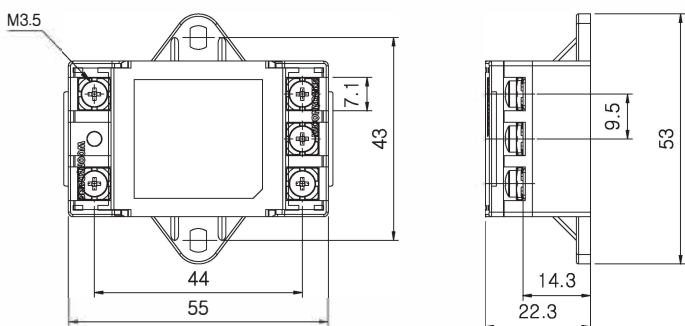
**Features**

- Wide Band : High Attenuation
- Band Width : 150KHz~30MHz
- Small Size & Light Weight
- Low Leakage
- RoHS Compliant

Specifications

ITEM	MODEL	SYMBOL	WYFS03TM	WYFS06TM
Rated Voltage	V		250	
Rated Current	A		3	6
Frequency	Hz		50/60	
Dielectric Withstand	V		1500	
Insulation Resistance	MΩ		300	
Leakage Current	mA		0.5	
Operating Temperature	°C		-25°C ~ +85°C [Refer to Derating Curve TYPE-3]	
Operating Humidity	RH		35~85%RH	
Weight	g		40	

※ Derating Curve of page 103

Circuit Diagram**Terminal****Characteristics****Dimension**

NOISE FILTER

1Ø 250V 보급형 General Type

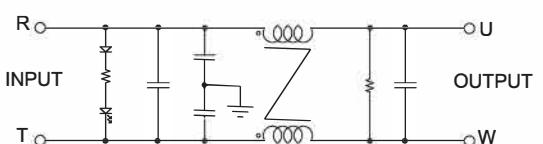
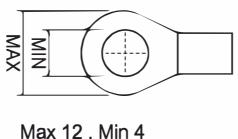
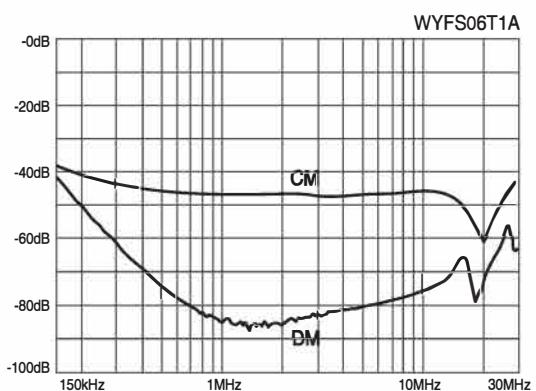
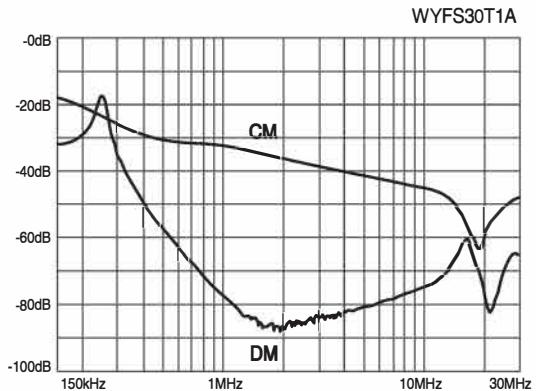
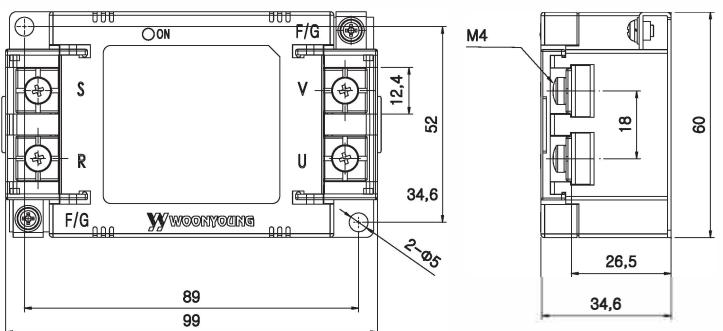
**Features**

- 2 Mounting Option
-WYF****D : Din Rail Mounting
-WYF**** : Screw Mounting
- Wide Band : High Attenuation
- Band Width : 150KHz~30MHz
- Low Leakage
- RoHS Compliant
- KC(안전인증)
Approved by HH03009-10002C
- UL(규격인증)

Specifications

ITEM	MODEL	SYMBOL	WYFS06T1A(D)	WYFS10T1A(D)	WYFS15T1A(D)	WYFS20T1A(D)	WYFS30T1A(D)
Rated Voltage	V				250		
Rated Current	A		6	10	15	20	30
Frequency	Hz				50/60		
Dielectric Withstand	V				1500		
Insulation Resistance	MΩ				300		
Leakage Current	mA				0.8		
Operating Temperature	°C			-25°C ~ +100°C [Refer to Derating Curve TYPE-1]			
Operating Humidity	RH				35~85%RH		
Weight	kg				0.3		

※ "D" : DIN-Rail type of page 184 / Derating Curve of page 103

Circuit Diagram**Terminal****Characteristics****Dimension**

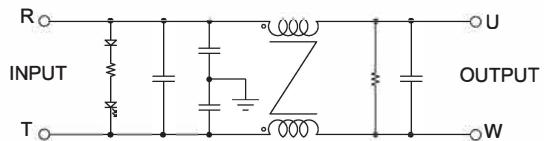
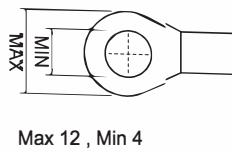
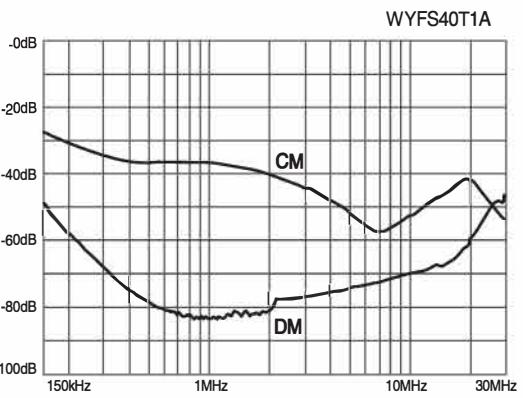
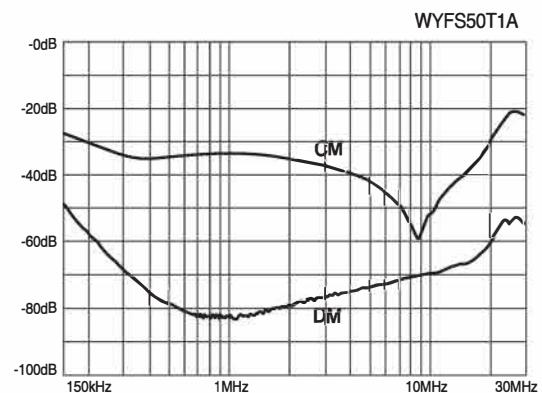
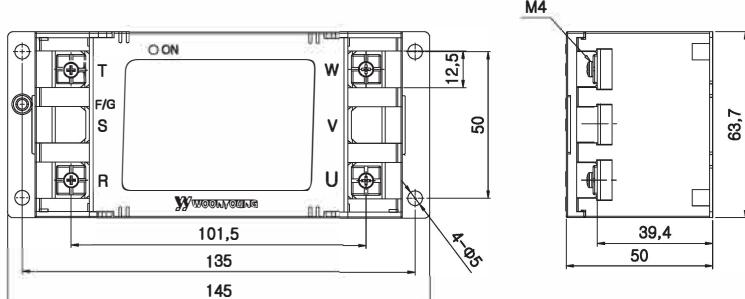
NOISE FILTER**1Ø 250V 보급형 General Type****Features**

- 2 Mounting Option
- WYF****D : Din Rail Mounting
- WYF**** : Screw Mounting
- Wide Band : High Attenuation
- Band Width : 150KHz~30MHz
- Low Leakage
- RoHS Compliant

Specifications

ITEM	MODEL	SYMBOL	WYFS40T1A(D)	WYFS50T1A(D)
Rated Voltage	V		250	
Rated Current	A		40	50
Frequency	Hz		50/60	
Dielectric Withstand	V		1500	
Insulation Resistance	MΩ		300	
Leakage Current	mA		0.8	
Operating Temperature	°C		-25°C ~ +100°C [Refer to Derating Curve TYPE-1]	
Operating Humidity	RH		35~85%RH	
Weight	kg		0.5	

※ "D" : DIN-Rail type of page 184 / Derating Curve of page 103

Circuit Diagram**Terminal****Characteristics****Dimension**

N Series 1Ø 250V 보급형 General Type

KC CE RoHS



● Features

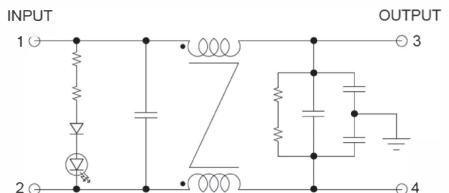
- Wide Band : High Attenuation
- Band Width : 150KHz~30MHz
- RoHS Compliant

● Specifications

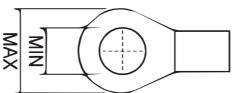
ITEM	MODEL	S YMBOL	WYNF S40T2A	WYNF S 50T 2A	WYNF S 60T 2A	WYNF S 80T 2A	WYNF S 100T 2A	WYNF S 120T 2A	WYNF S 150T 2A
Rated Voltage	V					250Vac			
Rated Current	A	40A	50A	60A	80A	100A	120A	150A	
Frequency	Hz				50/60				
Dielectric Withstand	V				1500Vac for one 1minute				
Insulation Resistance	MΩ				DC 100MΩ at the 500Vdc				
Leakage Current	mA				≤8.5mA at the 250Vac				
Operating Temperature	°C				-25°C ~ +100°C [Refer to Derating Curve TYPE-1]				
Operating Humidity	RH				35~85%RH				
Weight	kg			1.2			2.2		

※ Derating Curve of page 103

● Circuit Diagram

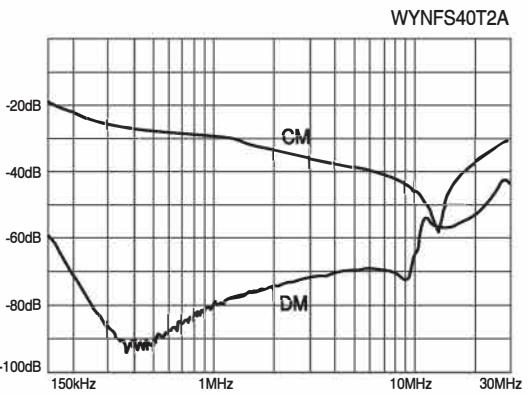


● Terminal

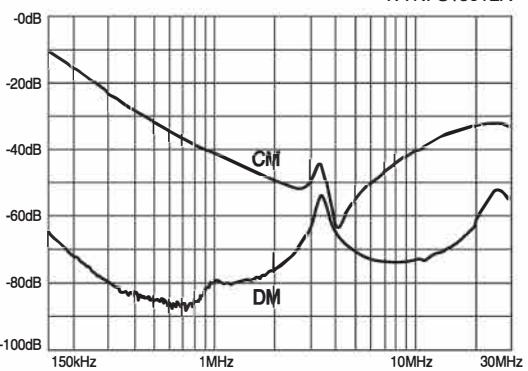


Max 16, Min 6 (40~80A)
Max 23, Min 8 (100~150A)

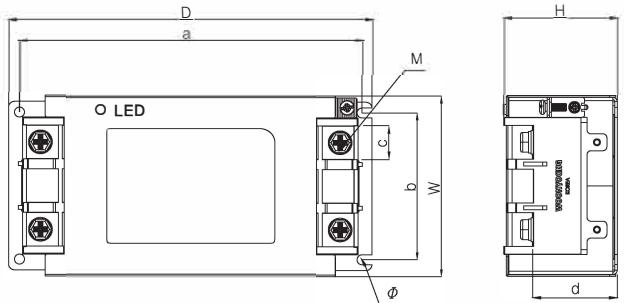
● Characteristics



WYNFS150T2A



● Dimension



MODEL	W	H	D	a	b	c	d	M	Ø
WYNFS40~80T2A	91	57.2	184	173.5	74	17	42.3	6	5
WYNFS100~150T2A	115	75	235.2	218	96	24	58	8	5

NOISE FILTER

1Ø 250V 보급형 General Type

K CE RoHS

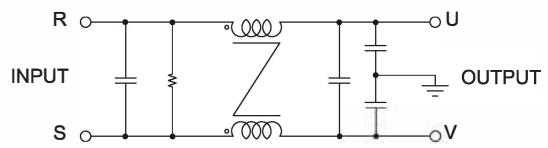
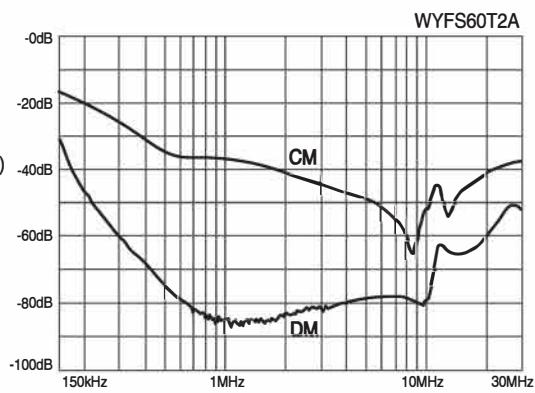
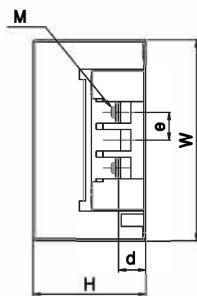
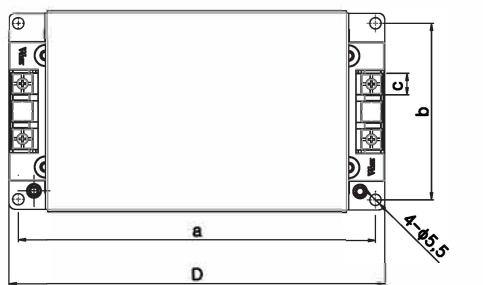
**Features**

- Wide Band : High Attenuation
- Band Width : 150KHz~30MHz
- Low Leakage
- RoHS Compliant

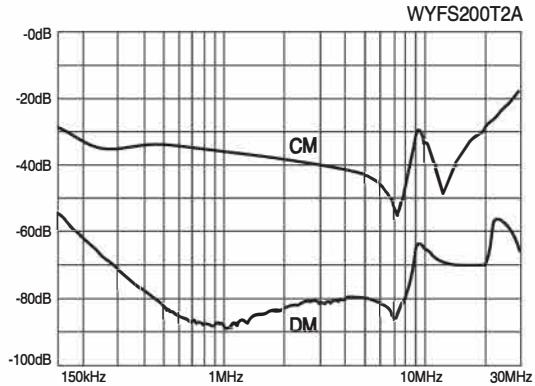
Specifications

ITEM	MODEL	SYMBOL	WYFS60T2A	WYFS80T2A	WYFS100T2A	WYFS120T2A	WYFS150T2A	WYFS200T2A
Rated Voltage	V				250			
Rated Current	A		60	80	100	120	150	200
Frequency	Hz				50/60			
Dielectric Withstand	V				1500			
Insulation Resistance	MΩ				500			
Leakage Current	mA				0.8			
Operating Temperature	°C			-25°C ~ +100°C [Refer to Derating Curve TYPE-1]				
Operating Humidity	RH				35~85%RH			
Weight	kg		1.5			2.5		

※ Derating Curve of page 103

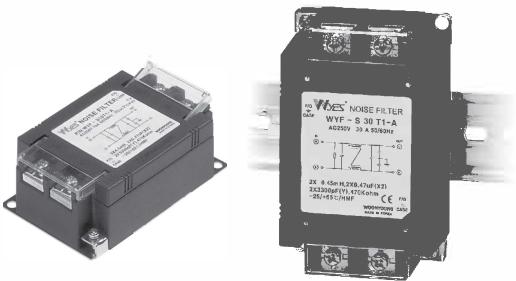
Circuit Diagram**Terminal**Max 14 , Min 6(60~100A)
Max 14 , Min 6(120~200A)**Characteristics****Dimension**

MODEL	W	H	D	a	b	c	d	M
WYFS60~100T2A	109	60	200	187	93.4	14.5	17.4	6
WYFS120~200T2A	115.6	75	234	219	98	14.5	17.8	6



1Ø 500V 보급형 General Type

KC CE RoHS



Features

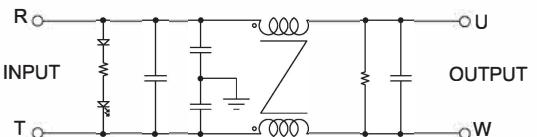
- 2 Mounting Option
-WYF****D : Din Rail Mounting
-WYF**** : Screw Mounting
- Wide Band : High Attenuation
- Band Width : 150KHz~30MHz
- Low Leakage
- RoHS Compliant

Specifications

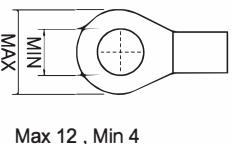
ITEM	MODEL	SYMBOL	WYFSH06T1A(D)	WYFSH10T1A(D)	WYFSH15T1A(D)	WYFSH20T1A(D)
Rated Voltage	V			500		
Rated Current	A		6	10	15	20
Frequency	Hz			50/60		
Dielectric Withstand	V			1500		
Insulation Resistance	MΩ			500		
Leakage Current	mA			1,6		
Operating Temperature	°C		-25°C ~ +100°C [Refer to Derating Curve TYPE-1]			
Operating Humidity	RH			35~85%RH		
Weight	kg			0,2		

※ "D" : DIN-Rail type of page 184 / Derating Curve of page 103

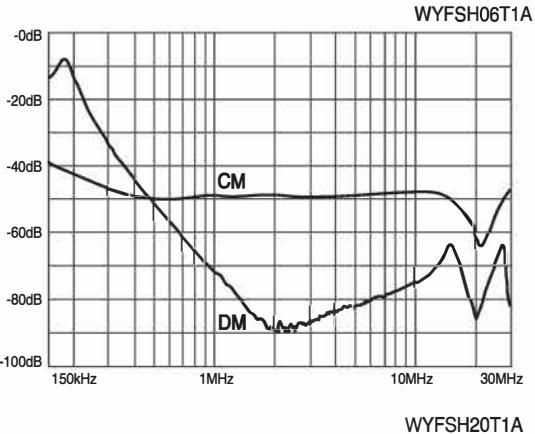
Circuit Diagram



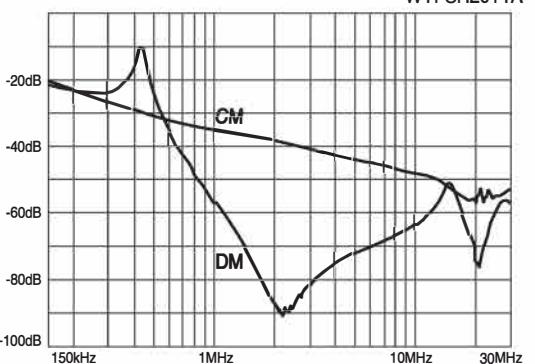
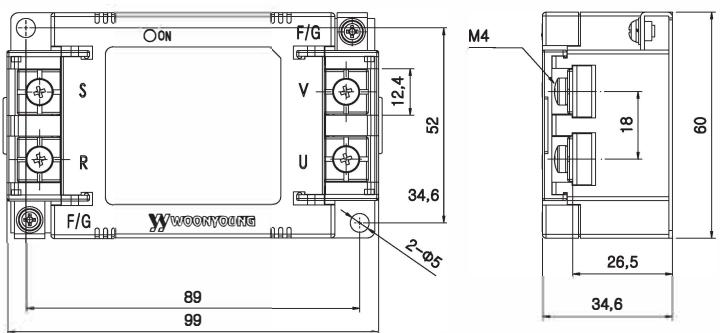
Terminal



Characteristics



Dimension



NOISE FILTER

1Ø DC 12V ~ 50V 보급형 General Type

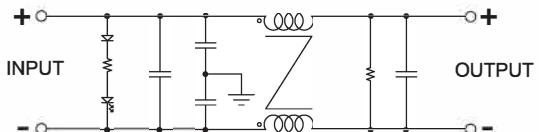
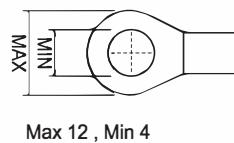
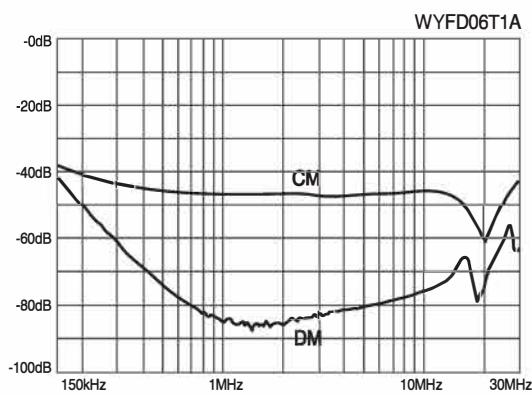
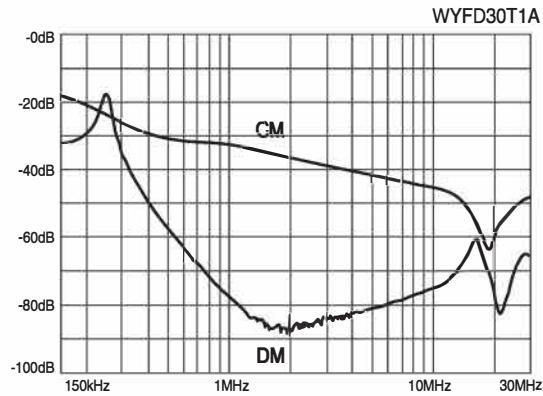
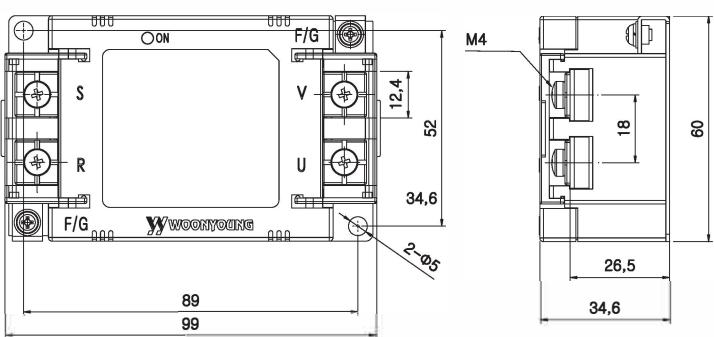
CE RoHS

**Features**

- 2 Mounting Option
 - WYF****D : Din Rail Mounting
 - WYF**** : Screw Mounting
- Wide Band : High Attenuation
- Band Width : 150KHz~30MHz
- Low Leakage
- RoHS Compliant

Specifications

ITEM	MODEL	SYMBOL	WYFD06T1A(D)	WYFD10T1A(D)	WYFD15T1A(D)	WYFD20T1A(D)	WYFD30T1A(D)
Rated Voltage	V		12VDC ~ 50VDC				
Rated Current	A	6	10	15	20	30	
Dielectric Withstand	V		1500Vac for one minute				
Insulation Resistance	MΩ		DC 100MΩ at the 500Vdc				
Leakage Current	mA		≤0.8mA at the 250Vac				
Operating Temperature	°C		-25°C ~ +100°C [Refer to Derating Curve TYPE-1]				
Operating Humidity	RH		35~85%RH				
Weight	kg		0.3				

Circuit Diagram**Terminal****Characteristics****Dimension**

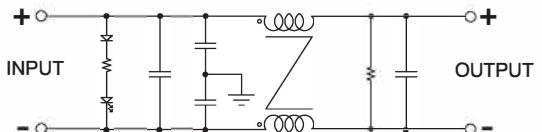
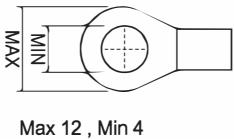
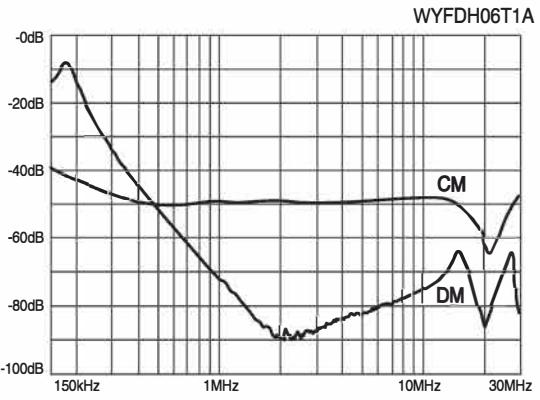
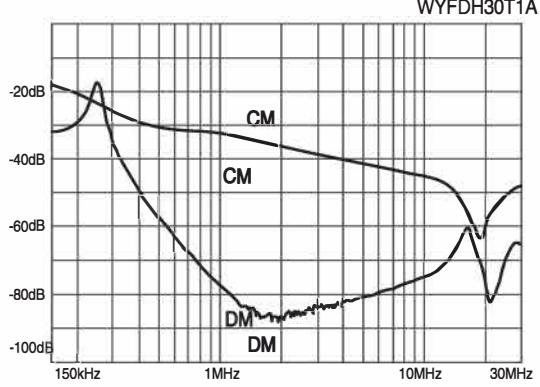
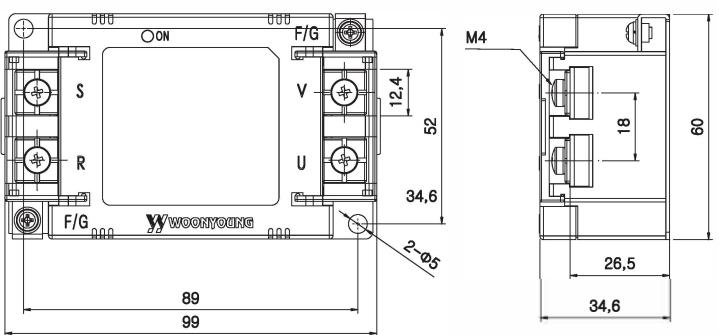
NOISE FILTER

1Ø DC 60V ~ 125V 보급형 General Type

CE RoHS

**Specifications**

ITEM	MODEL	SYMBOL	WYFDH06T1A(D)	WYFDH10T1A(D)	WYFDH15T1A(D)	WYFDH20T1A(D)	WYFDH30T1A(D)
Rated Voltage	V		60VDC ~ 125VDC				
Rated Current	A	6	10	15	20	30	
Dielectric Withstand	V		1500Vac for one minute				
Insulation Resistance	MΩ		DC 100MΩ at the 500Vdc				
Leakage Current	mA		≤0.8mA at the 250Vac				
Operating Temperature	°C		-25°C ~ +100°C [Refer to Derating Curve TYPE-1]				
Operating Humidity	RH		35~85%RH				
Weight	kg		0.3				

Circuit Diagram**Terminal****Characteristics****Dimension**

NOISE FILTER

1Ø DC 150V ~ 400V 보급형

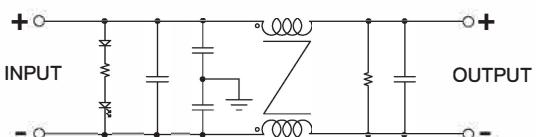
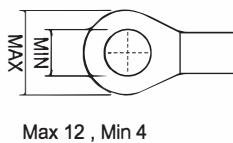
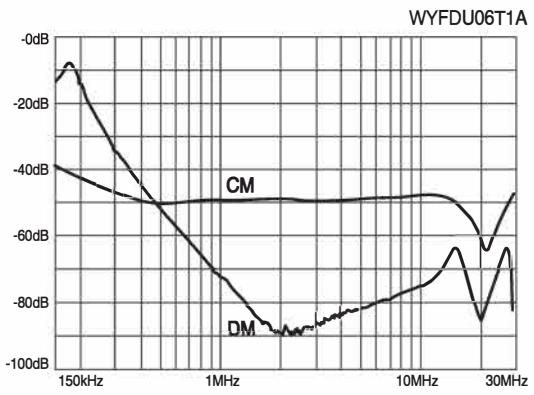
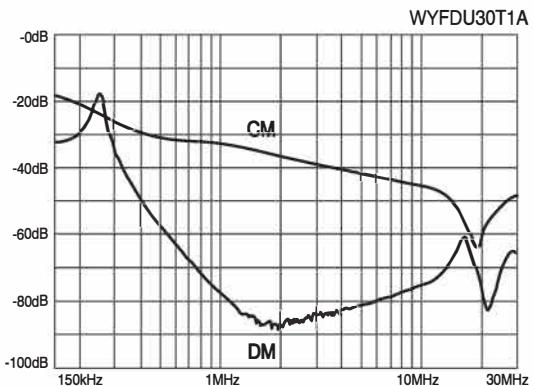
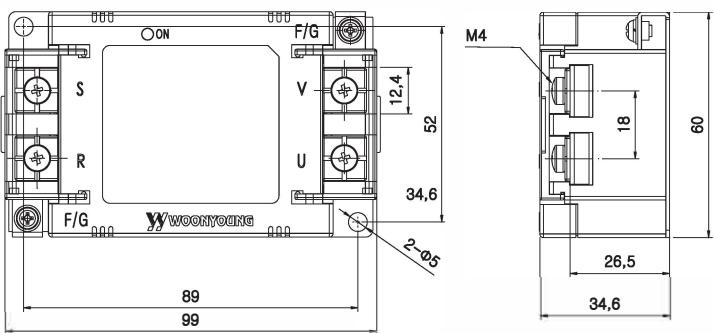
CE RoHS

**DC**NOISE
FILTER**Features**

- 2 Mounting Option
 - WYF***D : Din Rail Mounting
 - WYF*** : Screw Mounting
- Wide Band : High Attenuation
- Band Width : 150KHz~30MHz
- Low Leakage
- RoHS Compliant

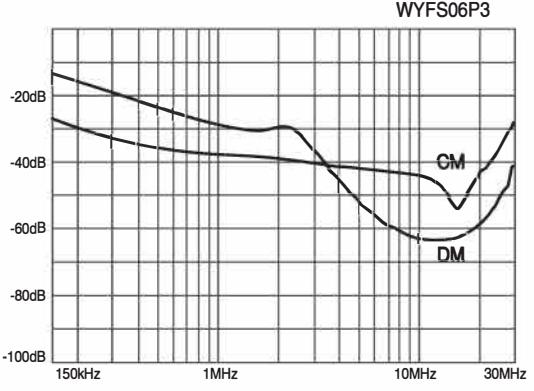
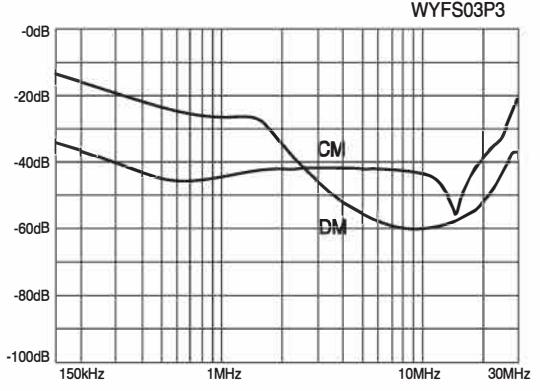
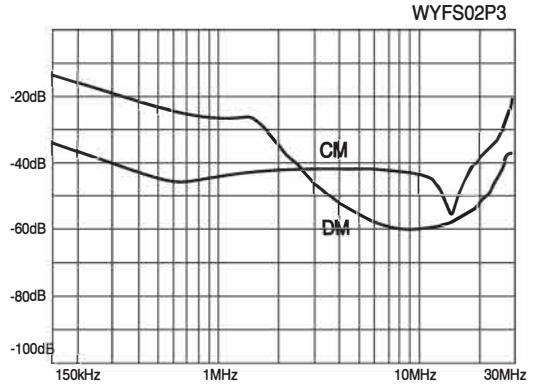
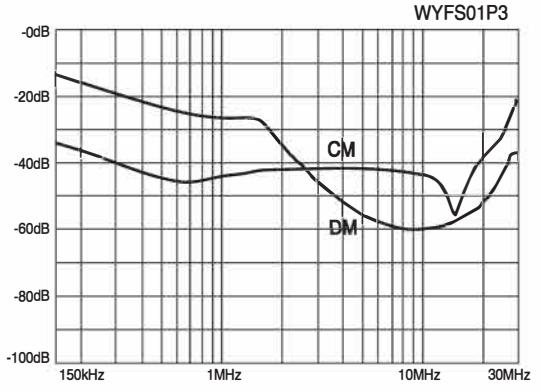
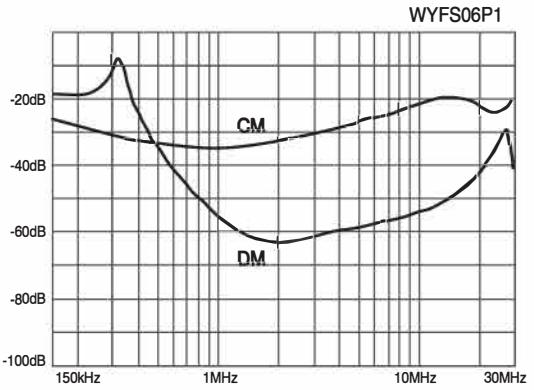
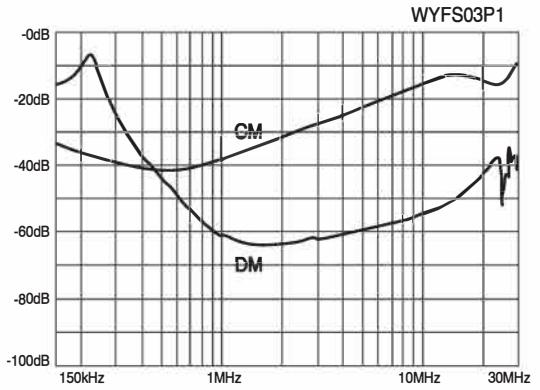
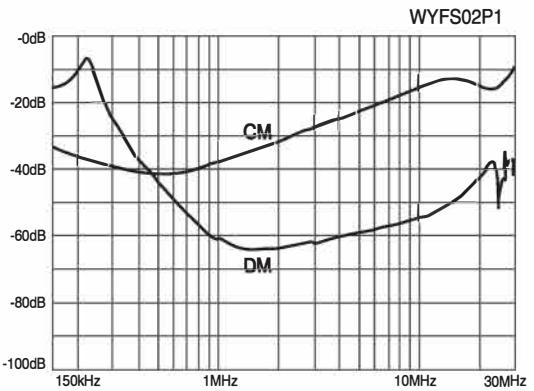
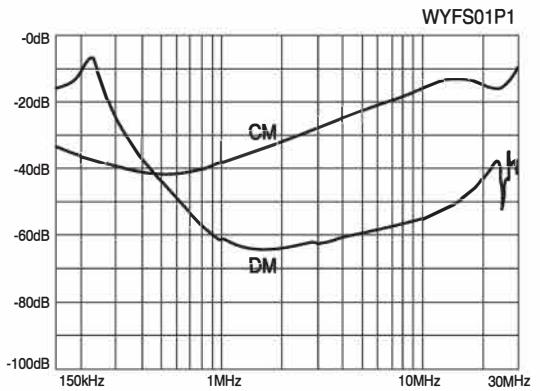
Specifications

ITEM	MODEL	SYMBOL	WYFDU06T1A(D)	WYFDU10T1A(D)	WYFDU15T1A(D)	WYFDU20T1A(D)	WYFDU30T1A(D)
Rated Voltage	V		150VDC ~ 400VDC				
Rated Current	A	6	10	15	20	30	
Dielectric Withstand	V		1500Vac for one minute				
Insulation Resistance	MΩ		DC 100MΩ at the 500Vdc				
Leakage Current	mA		≤0.8mA at the 250Vac				
Operating Temperature	°C		-25°C ~ +100°C [Refer to Derating Curve TYPE-1]				
Operating Humidity	RH		35~85%RH				
Weight	kg		0.3				

Circuit Diagram**Terminal****Characteristics****Dimension**

1Ø 250V Characteristics

CE RoHS



* CM : Common mode, DM : Differential mode

TRANSFORMER
SUSPENSION
REACTOR

MOTOR
SSR
TIP

SIMPS
NOISE FILTER

HMI
SPDT

RELAY
ELD
ZCT

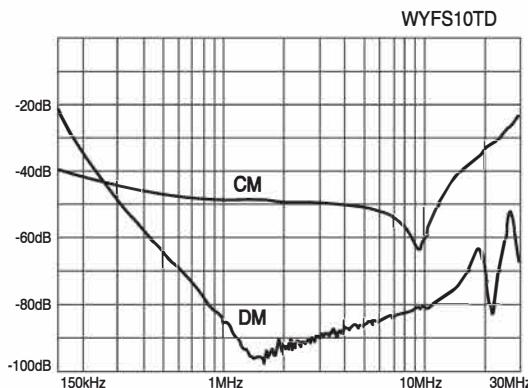
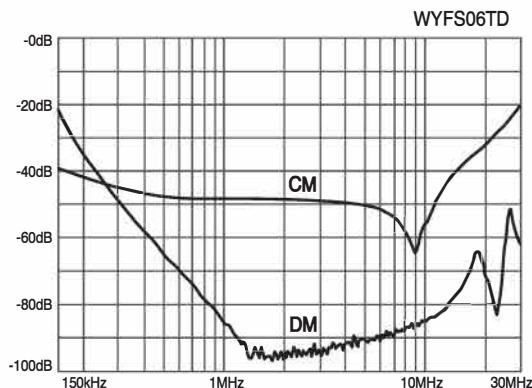
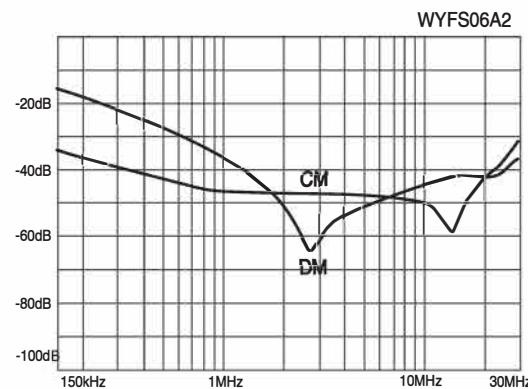
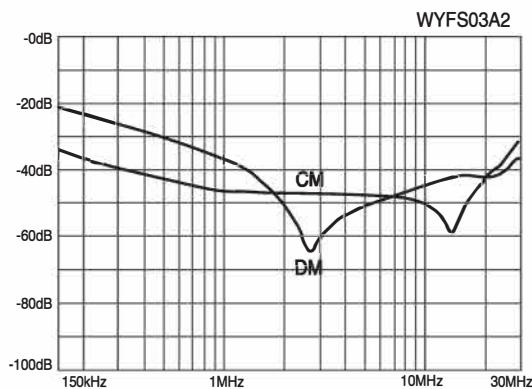
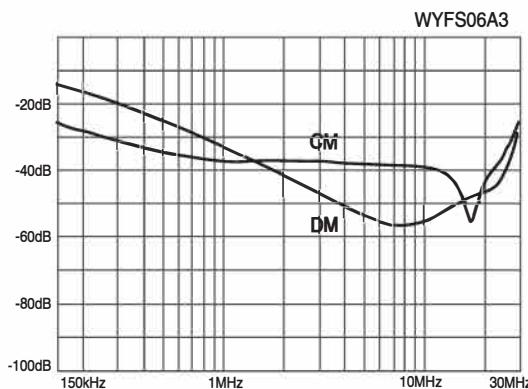
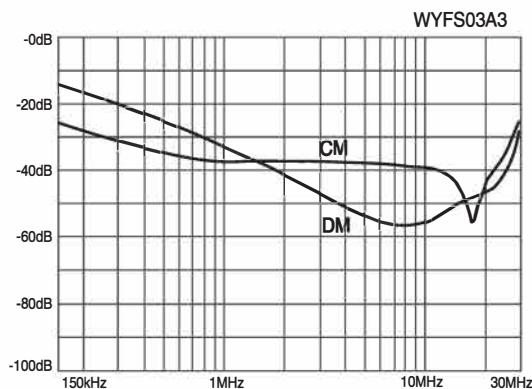
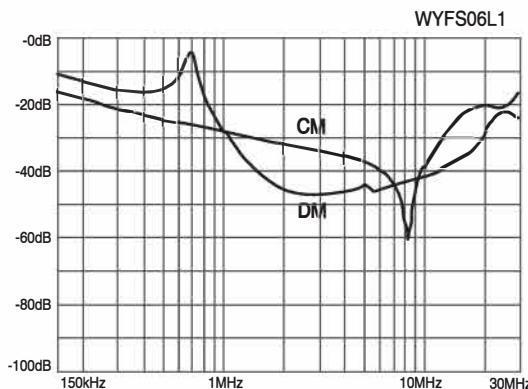
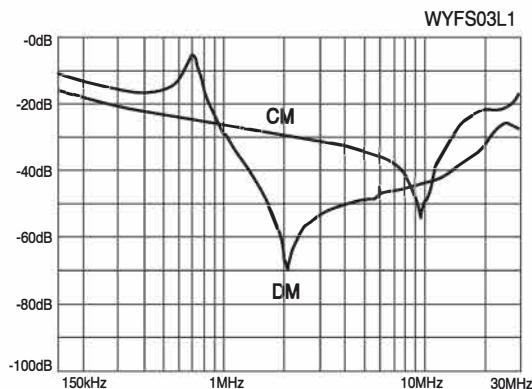
METER
SHUNT=FAN

CT=VT
SHUNT=FAN

TRANSFORMER
SUSPENSION
REACTOR

NOISE FILTER

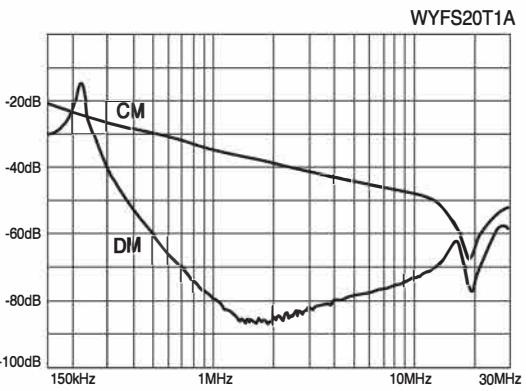
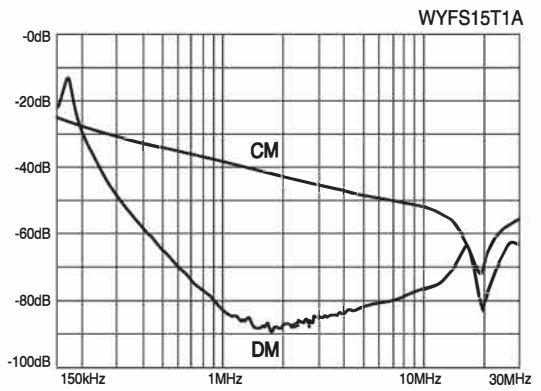
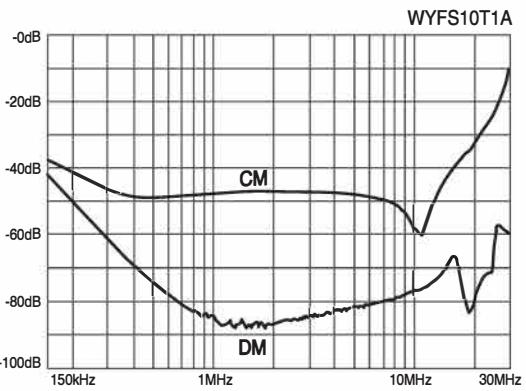
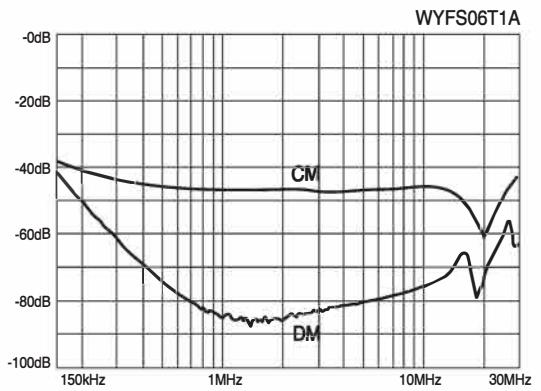
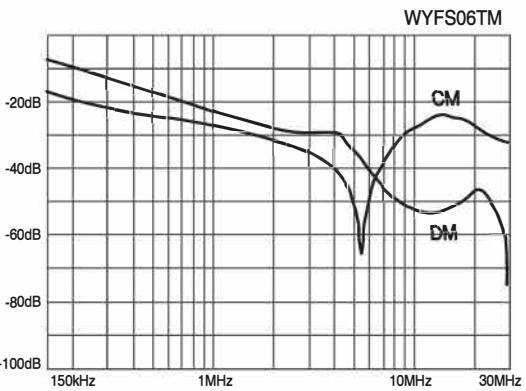
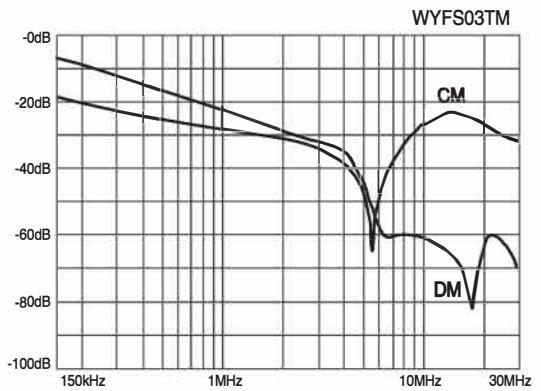
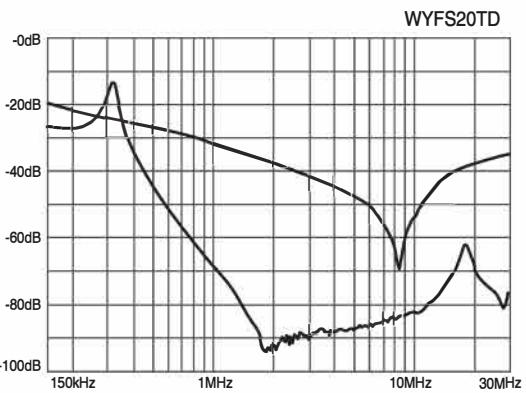
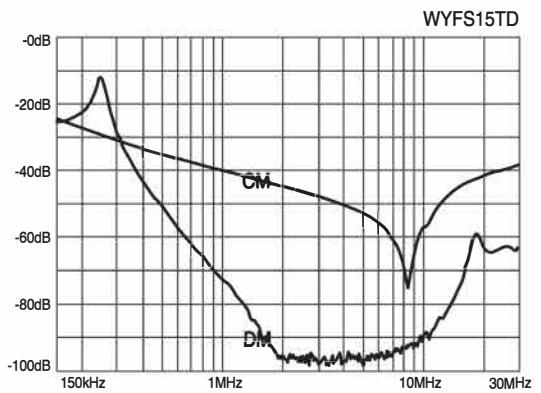
노이즈 필터

1Ø 250V Characteristics**CE RoHS****Characteristics**

※ CM : Common mode, DM : Differential mode

1Ø 250V Characteristics

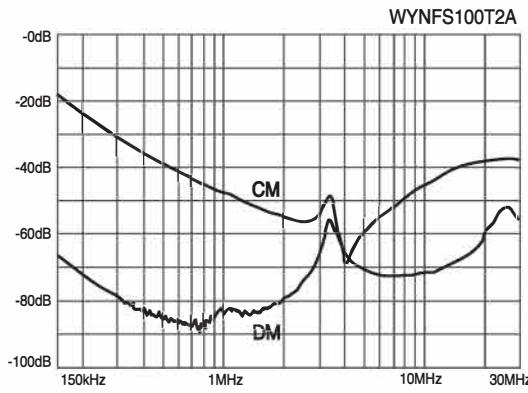
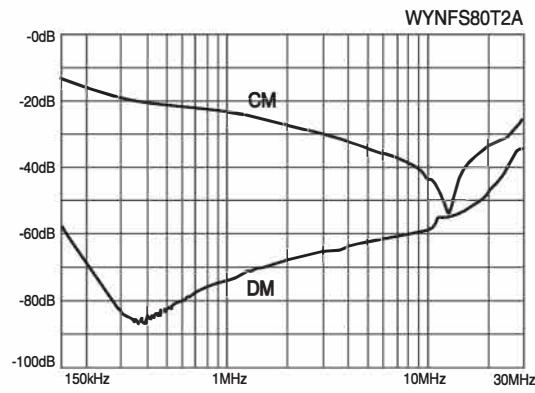
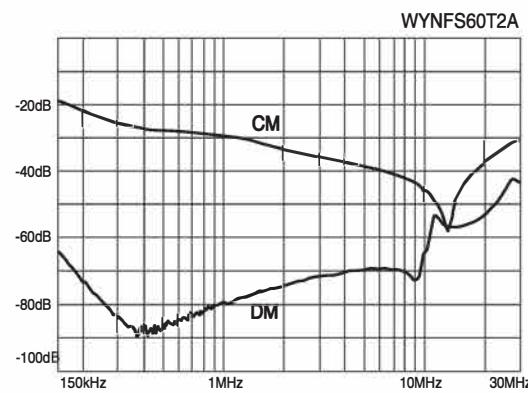
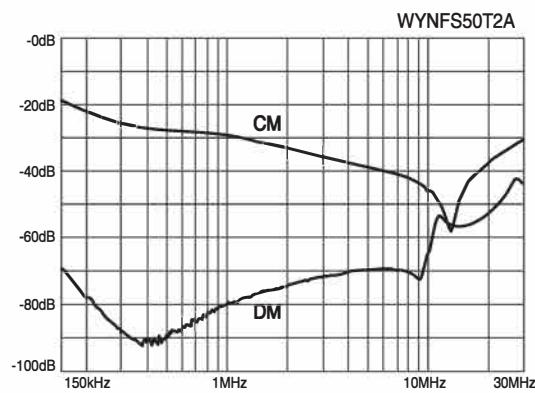
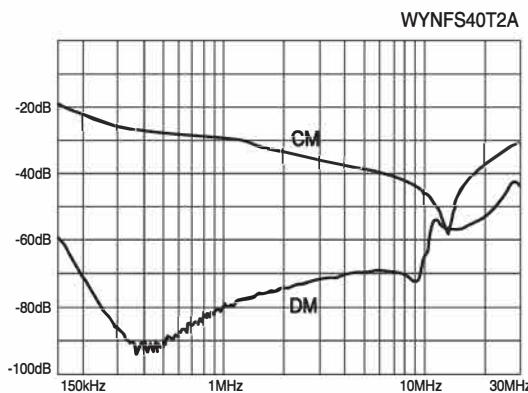
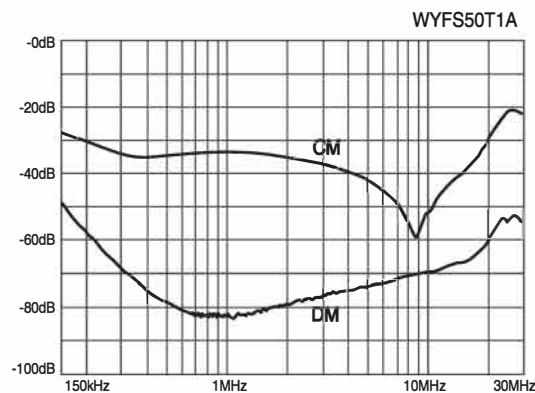
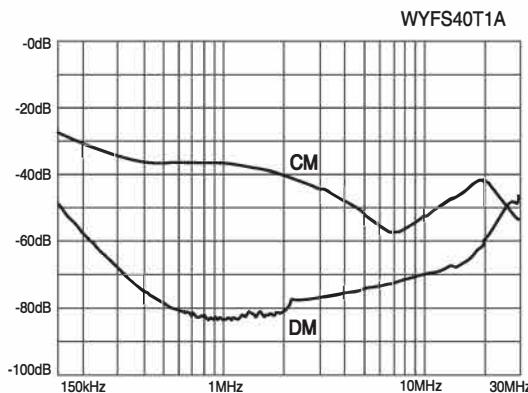
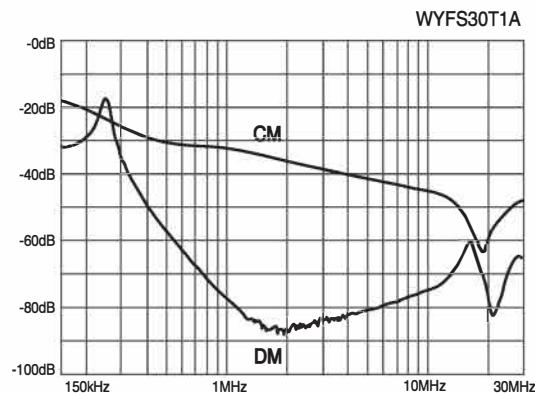
● Characteristics



※ CM : Common mode, DM : Differential mode

NOISE FILTER

노이즈 필터

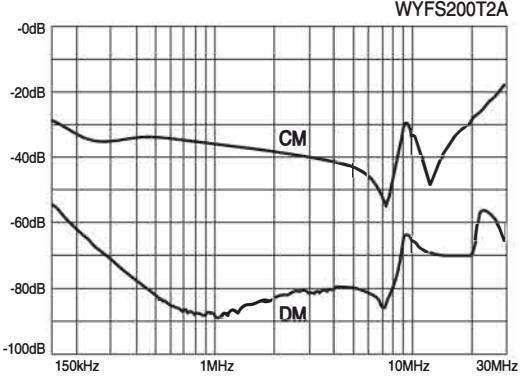
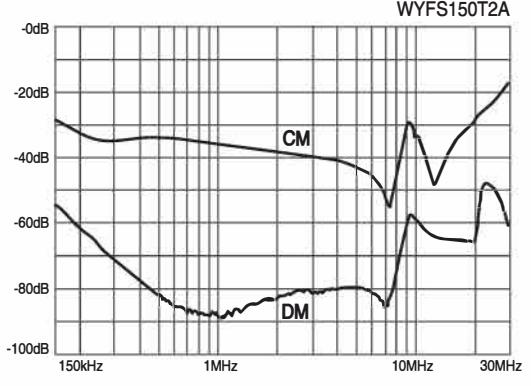
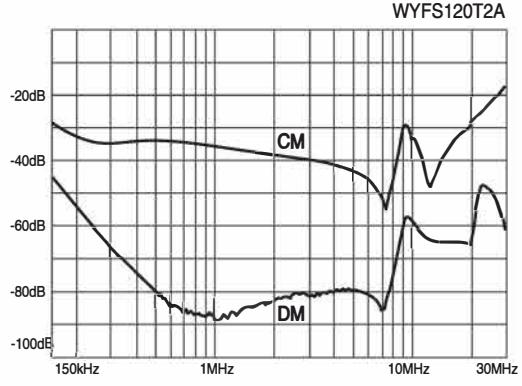
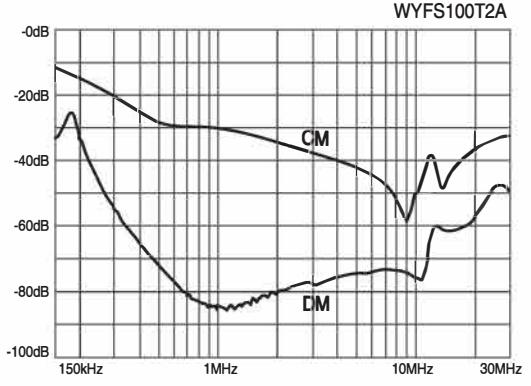
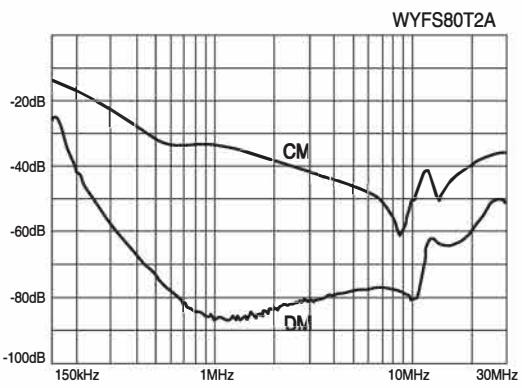
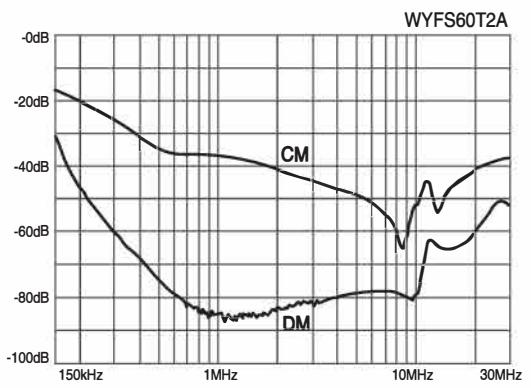
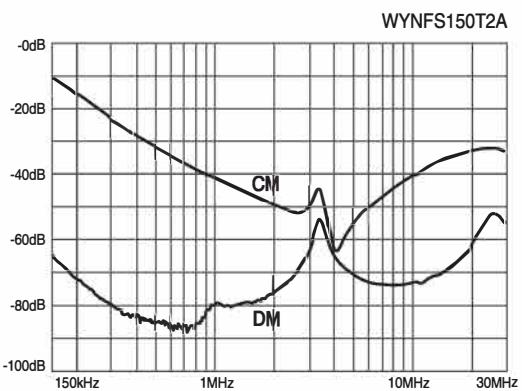
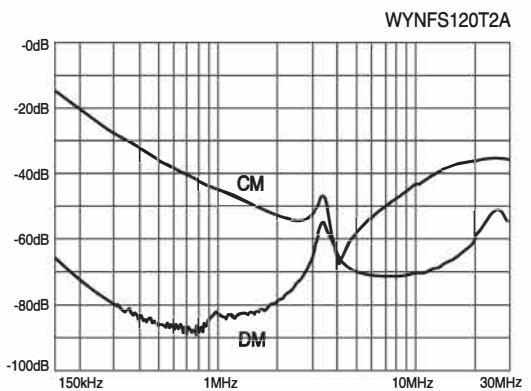
1Ø 250V Characteristics**CE RoHS****Characteristics**

※ CM : Common mode, DM : Differential mode

1Ø 250V Characteristics

CE RoHS

● Characteristics



※ CM : Common mode, DM : Differential mode

TRANS=NCT
트랜스포머

REACTOR
리액터
마진재설계리

TIP
전압조정기

SMP
스위칭파워

N / F
노이즈필터
하모그레인

SP
서지보호기

RELAY
보호계전기

ELD
누전제로보기
제지제로보기

ZCT
전증기제로보기

METER
판넬метр

CT
계기제로보기

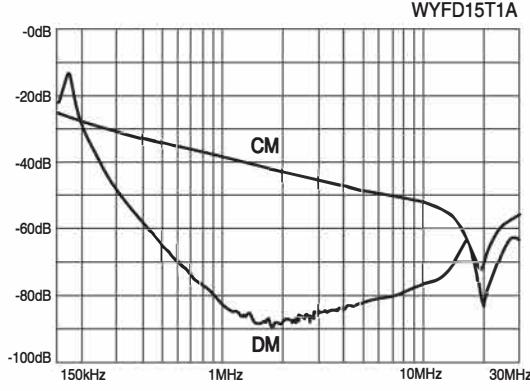
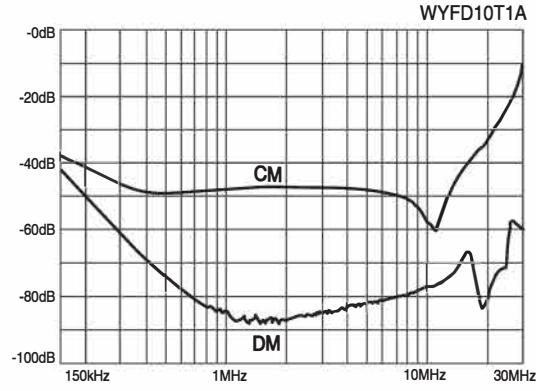
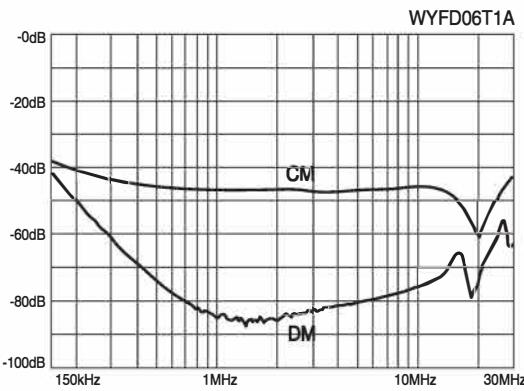
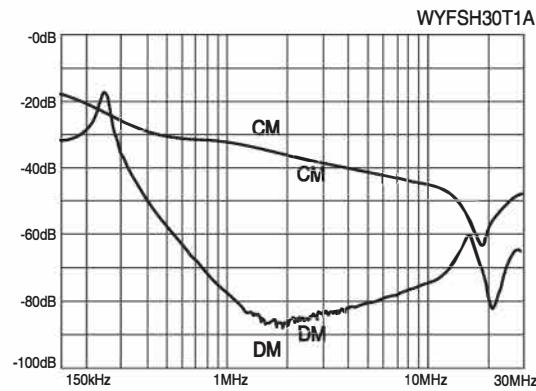
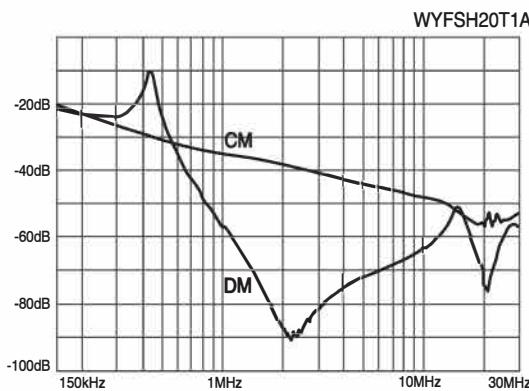
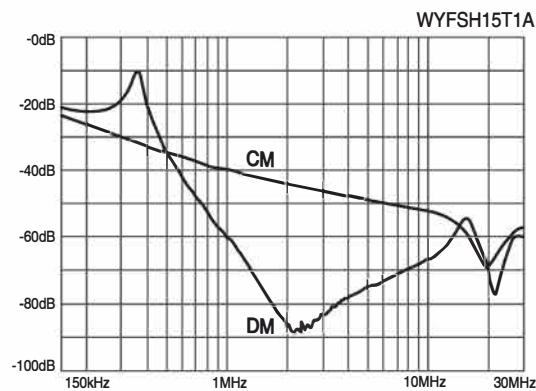
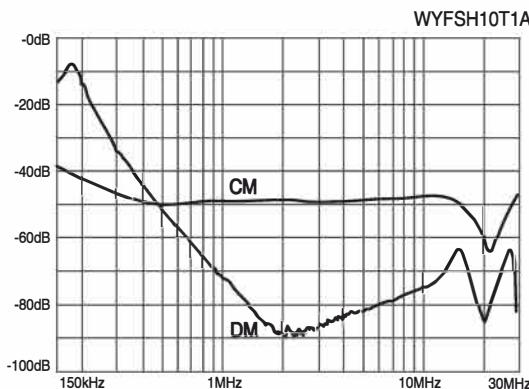
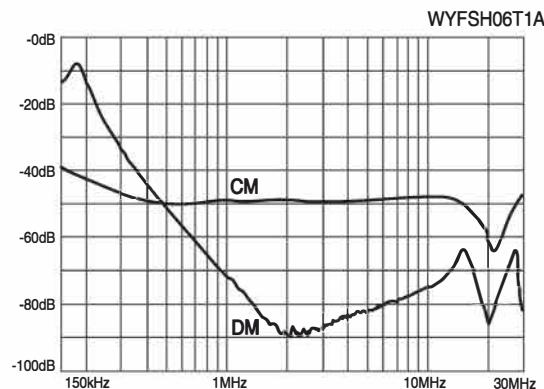
SHUNT=FAN
센트리/팬
리액터

NOISE FILTER

노이즈 필터

1Ø 250V Characteristics

CE RoHS

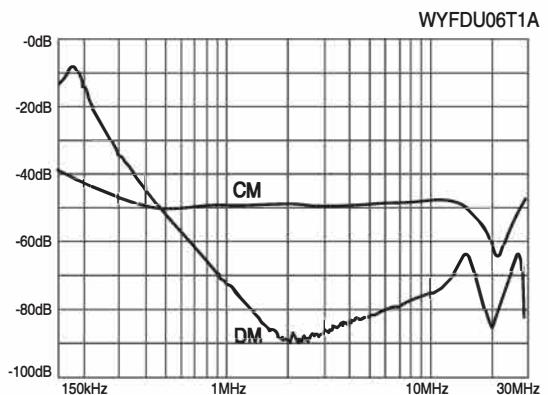
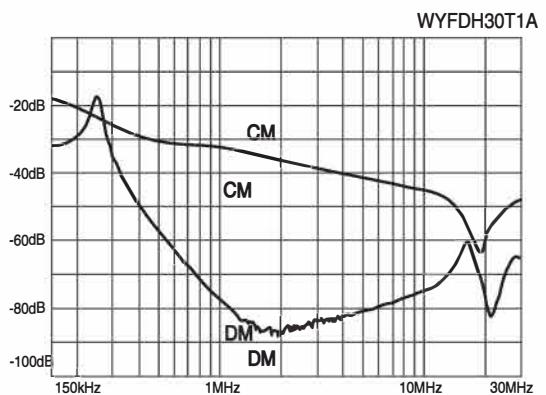
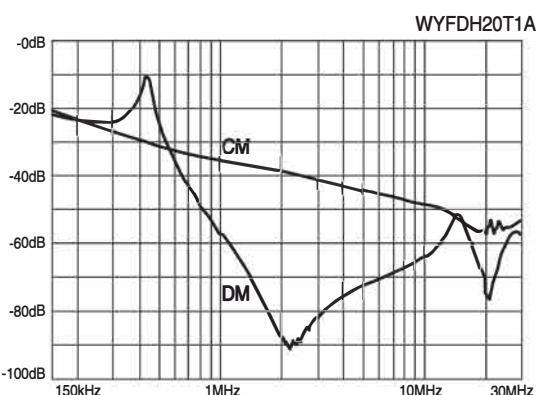
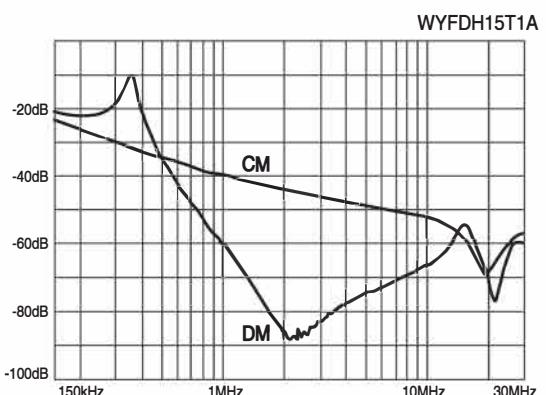
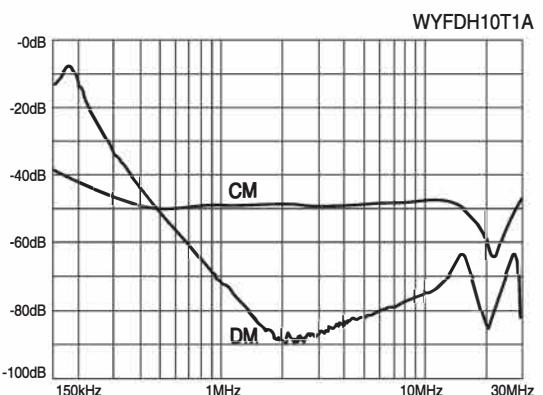
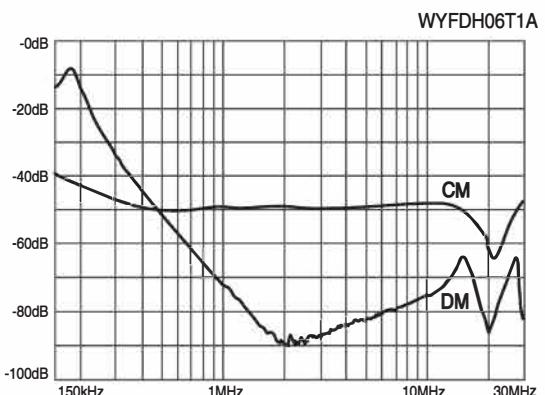
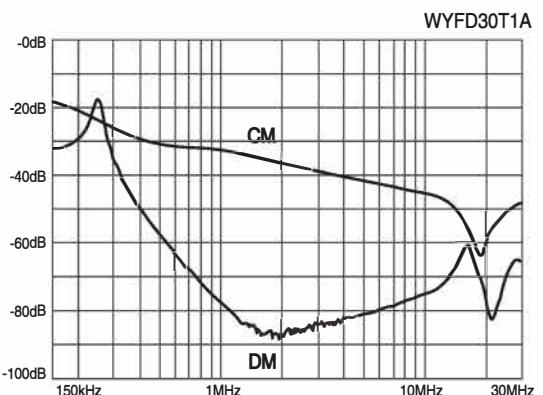
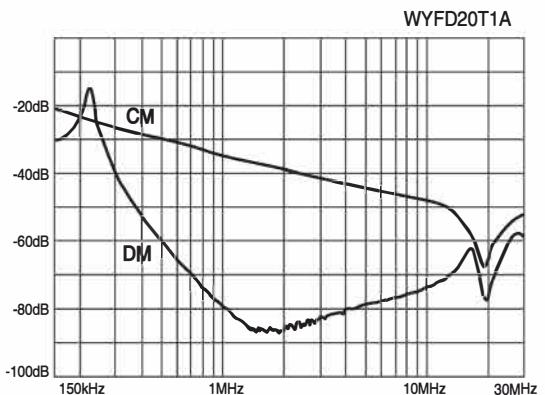
Characteristics

※ CM : Common mode, DM : Differential mode

1Ø 250V Characteristics

CE RoHS

● Characteristics



TRANSISTOR
리액터
마진제어회로
TIP
스위칭파워

노이즈필터
HIFI

서지보호기
SPD

보호계전기
RELAY

누전제로보기
ELCDIFER

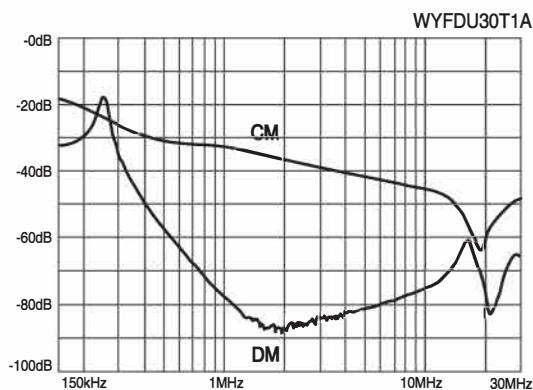
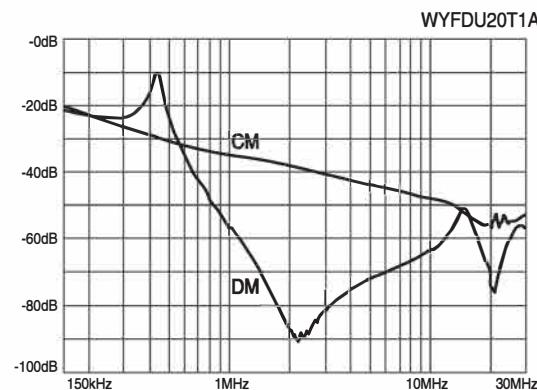
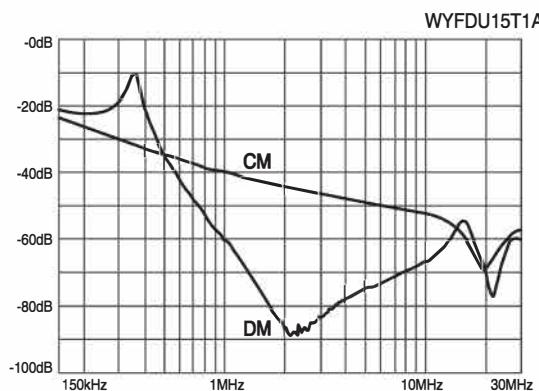
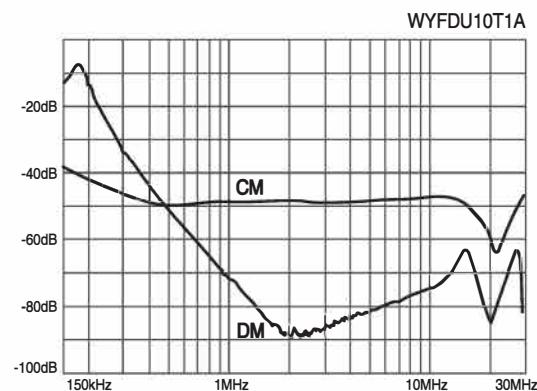
전류계류기
ZCT

판넬метр
METER

계기판제조기
CETIV

센트리얼
SHUNT=FAN

● Characteristics



※ CM : Common mode, DM : Differential mode

노이즈필터 Noise Filter

3Ø 보급형(General Type)



Terminal Type

- 3Ø 250V 5~1200A
- 3Ø 500V 5~1200A

NOISE FILTER

3Ø 250V 보급형 General Type

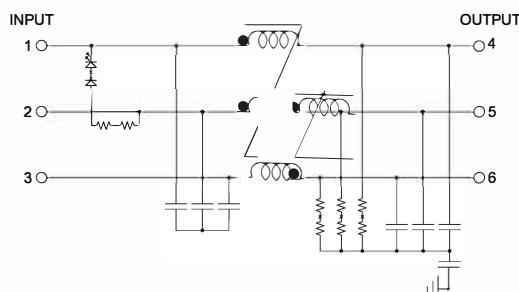
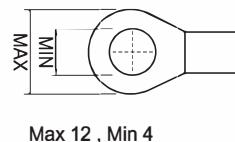
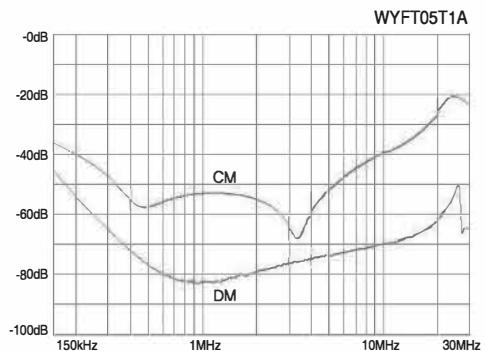
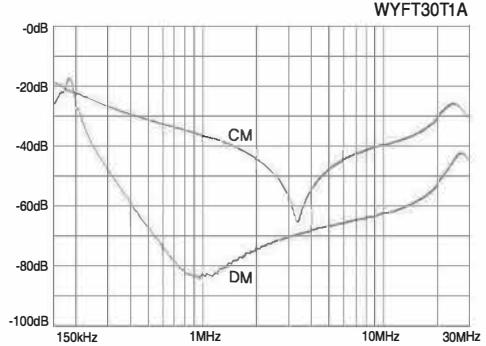
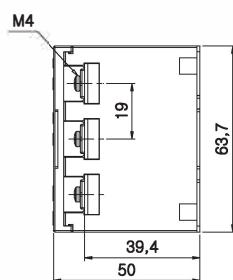
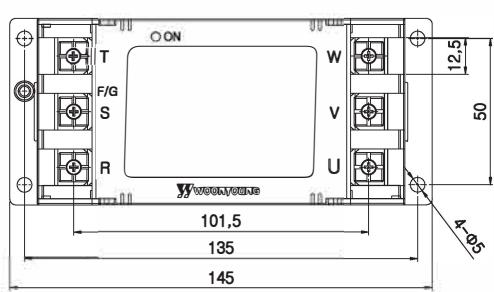
**Features**

- 2 Mounting Option
 - WYF*****D : Din Rail Mounting
 - WYF**** : Screw Mounting
- Wide Band : High Attenuation
- Band Width : 150KHz~30MHz
- Low Leakage
- RoHS Compliant
- KC(안전인증) Approved by HH03009-15004A
- Inverter Output Type : Model Type"C" (WYFT05T1C)

Specifications

ITEM	MODEL	SYMBOL	WYFT05T1A(D) WYFT05T1C(D)	WYFT10T1A(D) WYFT10T1C(D)	WYFT15T1A(D) WYFT15T1C(D)	WYFT20T1A(D) WYFT20T1C(D)	WYFT30T1A(D) WYFT30T1C(D)
Rated Voltage	V				250		
Rated Current	A		5	10	15	20	30
Frequency	Hz				50/60		
Dielectric Withstand	V				1500		
Insulation Resistance	MΩ				500		
Leakage Current	mA				1.2		
Operating Temperature	°C				-25°C ~ +100°C [Refer to Derating Curve TYPE-2]		
Operating Humidity	RH				35~85%RH		
Weight	kg				0.5		

※ "D" : DIN-Rail type of page 184, "C" : Inverter Output Type / Derating Curve of page 103

Circuit Diagram**Terminal****Characteristics****Dimension**

NOISE FILTER

노이즈 필터

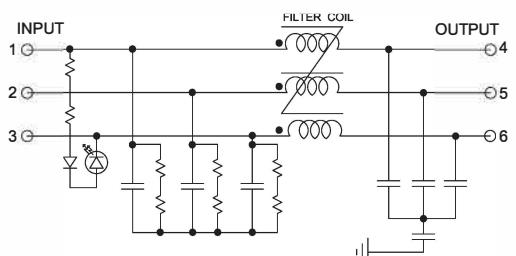
N Series 3Ø 250V 보급형 General Type**CE RoHS****Features**

- Wide Band : High Attenuation
- Band Width : 150KHz~30MHz
- RoHS Compliant
- Inverter Output Type : Model Type "C"
(WYNFT40T2C)

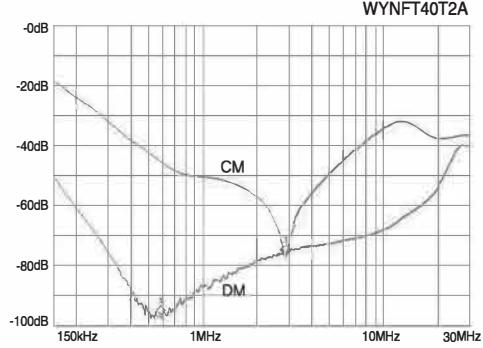
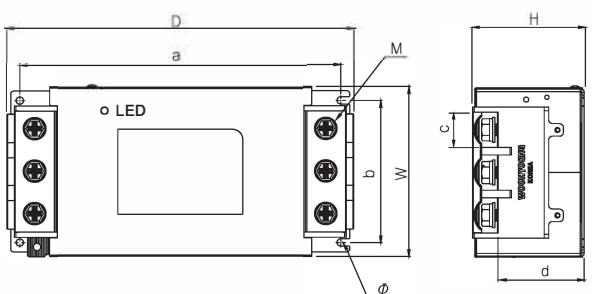
Specifications

ITEM	MODEL	SYMBOL	WYNFT40T2A WYNFT40T2C	WYNFT50T2A WYNFT50T2C	WYNFT60T2A WYNFT60T2C	WYNFT80T2A WYNFT80T2C	WYNFT100T2A WYNFT100T2C	WYNFT120T2A WYNFT120T2C	WYNFT150T2A WYNFT150T2C	WYNFT200T2A WYNFT200T2C	WYNFT250T2A WYNFT250T2C
Rated Voltage	V										250Vac
Rated Current	A		40A	50A	60A	80A	100A	120A	150A	200A	250A
Frequency	Hz										50/60
Dielectric Withstand	V										1500Vac for one 1minute
Insulation Resistance	MΩ										DC 100MΩ at the 500Vdc
Leakage Current	mA										≤5mA at the 250Vac
Operating Temperature	°C										-25°C ~ +100°C [Refer to Derating Curve TYPE-2]
Operating Humidity	RH										35~85%RH
Weight	kg		1.2			2.2					2.7

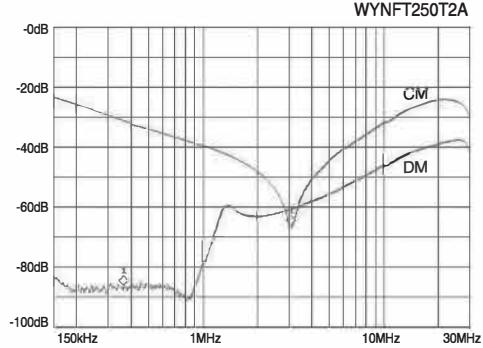
※ "C" : Inverter Output Type / Derating Curve of page 103

Circuit Diagram**Terminal**

Max 16, Min 6 (40~50A)
Max 23, Min 8 (60~100A)
Max 28, Min 8 (120~250A)

Characteristics**Dimension**

MODEL	W	H	D	a	b	c	d	M	Ø
WYNFT40~50T2A	91	57.2	184	173.5	74	17	42.3	6	5
WYNFT60~100T2A	115	75	235.2	218	96	24	58	8	5
WYNFT120~250T2A	157.2	100.1	347.5	316	130	28.5	68.6	8	6.5



TRANSISTOR

REACTOR

SSR

TIP

SMP

NOISE FILTER

HMI

SPDT

RELAY

ELD

ZCT

METER

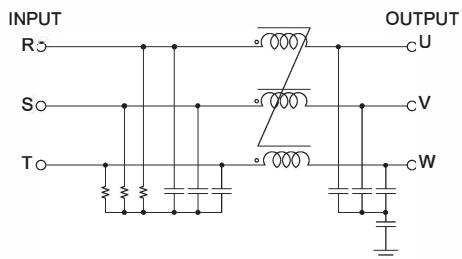
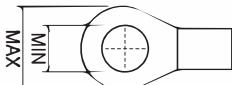
CTVT

SHUNT

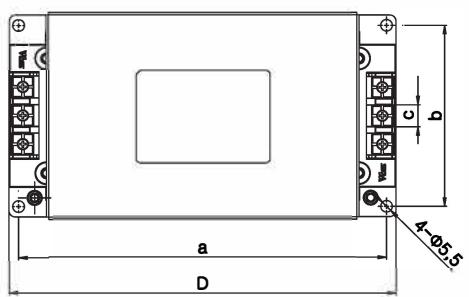
NOISE FILTER**3Ø 250V 보급형 General Type****CE RoHS****● Specifications**

ITEM	MODEL	SYMBOL	WYFT40T2A	WYFT50T2A	WYFT60T2A	WYFT80T2A	WYFT100T2A	WYFT120T2A	WYFT150T2A	WYFT200T2A	WYFT250T2A
			WYFT4 0ZC	WYFT50T2C	WYFT60T2C	WYFT80T2C	WYFT100T2C	WYFT120T2C	WYFT150T2C	WYFT200T2C	WYFT250T2C
Rated Voltage	V							250			
Rated Current	A		40	50	60	80	100	120	150	200	250
Frequency	Hz						50/60				
Dielectric Withstand	V						1500				
Insulation Resistance	MΩ						500				
Leakage Current	mA						9				
Operating Temperature	°C					-25°C ~ +100°C [Refer to Derating Curve TYPE-2]					
Operating Humidity	RH						35~85%RH				
Weight	kg		1.0			2.5			4.5		5.0

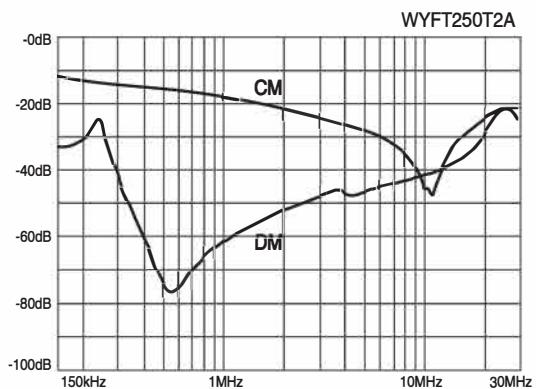
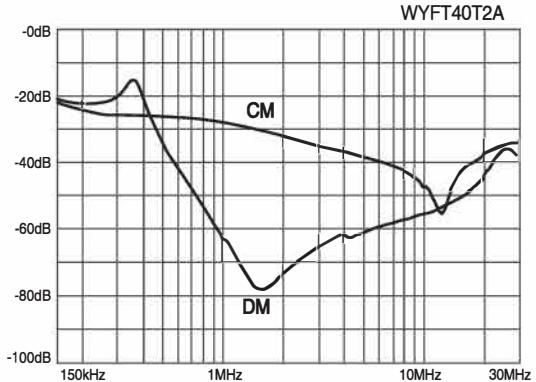
※ Derating Curve of page 103

● Circuit Diagram**● Terminal**

Max 10, Min 4(40~50A)
Max 14, Min 6(60~100A)
Max 22, Min 8(120~150A)
Max 25, Min 8(200~250A)

● Dimension

MODEL	W	H	D	a	b	c	d	e	M
WYFT40~50T2A	98	55	184	175	86	10,5	13	13,5	M4
WYFT60~100T2A	116	75	234	219	98	15	18	27,5	M6
WYFT120~150T2A	170	80	300	282	145	23	20	35	M8
WYFT200~250T2A	170	90	312	282	145	26	23	38,5	M8

● Characteristics

NOISE FILTER

3Ø 250V 보급형 Bus-bar형 General Type

CE RoHS

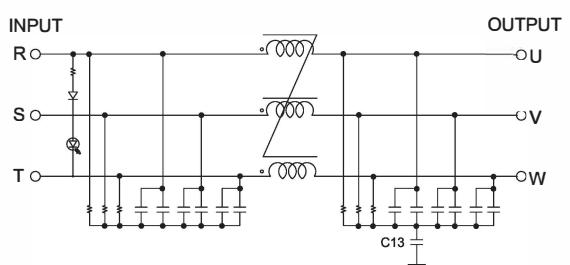
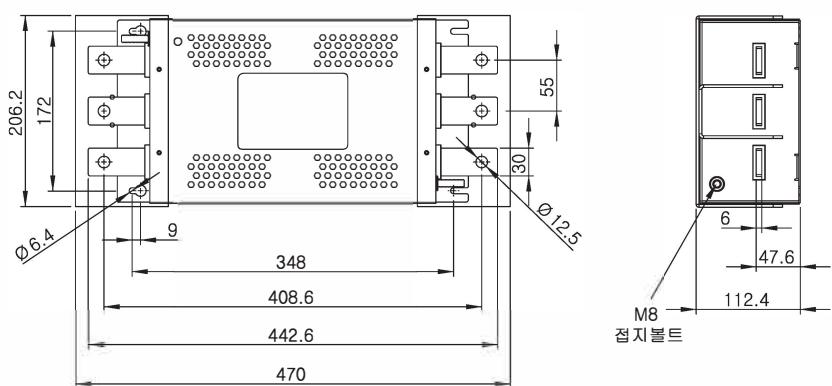
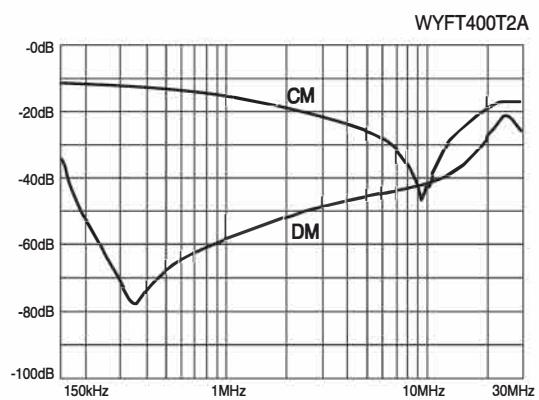
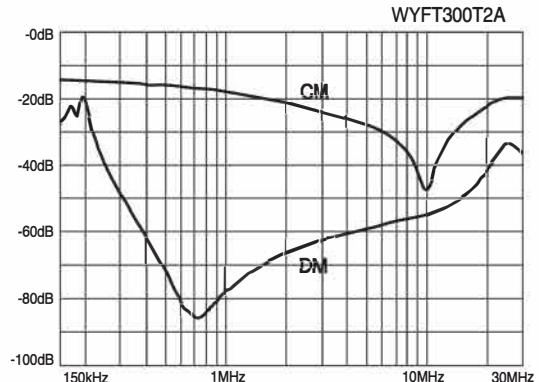
**Features**

- Wide Band : High Attenuation
- Band Width : 150KHz~30MHz
- Low Leakage
- RoHS Compliant
- Inverter Output Type : Model Type "C" (WYFT300T2C)

Specifications

ITEM	MODEL	SYMBOL	WYFT300T2A WYFT300T2C	WYFT400T2A WYFT400T2C
Rated Voltage	V		250	
Rated Current	A		300	400
Frequency	Hz		50/60	
Dielectric Withstand	V		1500	
Insulation Resistance	MΩ		500	
Leakage Current	mA		9	
Operating Temperature	℃		-25°C ~ +100°C [Refer to Derating Curve TYPE-2]	
Operating Humidity	RH		35~85%RH	
Weight	kg		9.5	

※ "C" : Inverter Output Type / Derating Curve of page 103

Circuit Diagram**Dimension****Characteristics**

NOISE FILTER

3Ø 250V 보급형 Bus-bar형 General Type

CE RoHS

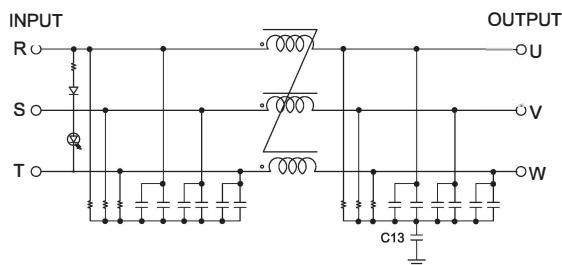
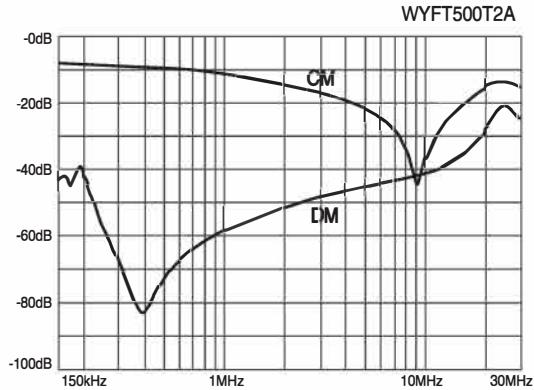
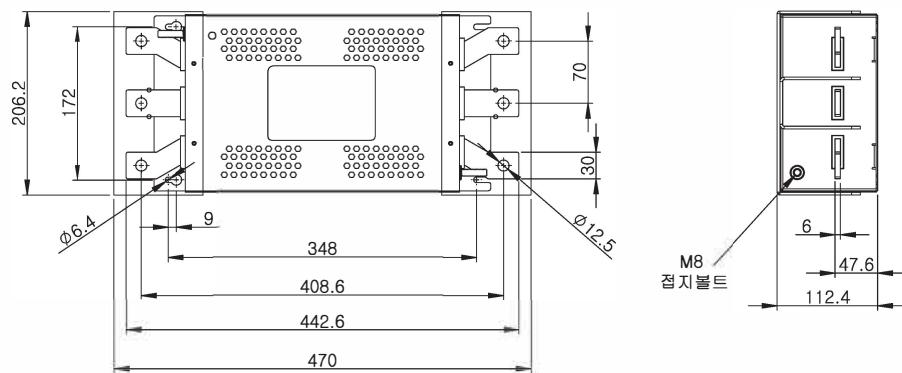
**Features**

- Wide Band : High Attenuation
- Band Width : 150KHz~30MHz
- Low Leakage
- RoHS Compliant
- Inverter Output Type : Model Type "C" (WYFT500T2C)

Specifications

ITEM	MODEL	SYMBOL	WYFT500T2A WYFT500T2C
Rated Voltage	V		250
Rated Current	A		500
Frequency	Hz		50/60
Dielectric Withstand	V		1500
Insulation Resistance	MΩ		300
Leakage Current	mA		9
Operating Temperature	°C		-25°C ~ +100°C [Refer to Derating Curve TYPE-2]
Operating Humidity	RH		35~85%RH
Weight	kg		9.5

※ "C" : Inverter Output Type / Derating Curve of page 103

Circuit Diagram**Characteristics****Dimension**

NOISE FILTER

3Ø 250V 보급형 Bus-bar형 General Type

CE RoHS

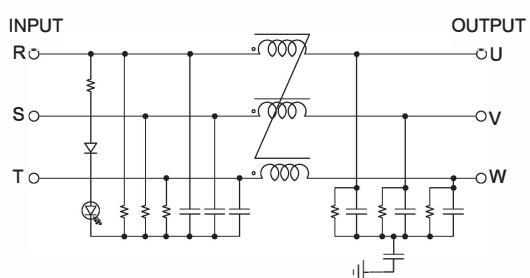
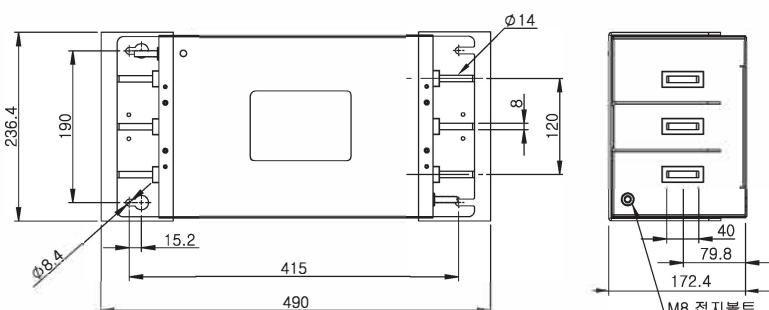
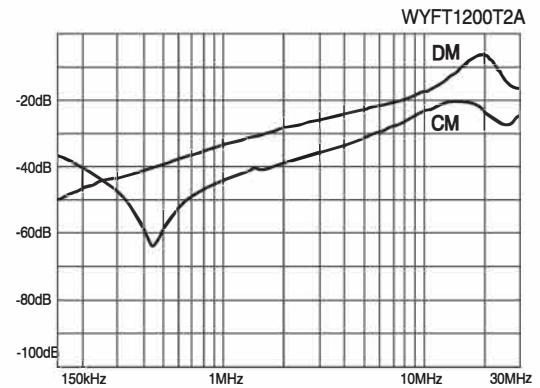
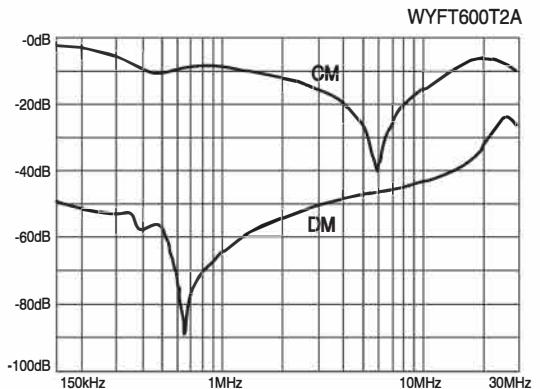
**Features**

- Wide Band : High Attenuation
- Band Width : 150KHz~30MHz
- Low Leakage
- RoHS Compliant
- Inverter Output Type : Model Type "C" (WYFT600T2C)

Specifications

ITEM	MODEL	SYMBOL	WYFT600T2A WYFT600T2C	WYFT800T2A WYFT800T2C	WYFT1000T2A WYFT1000T2C	WYFT1200T2A WYFT1200T2C
Rated Voltage	V			250		
Rated Current	A		600	800	1000	1200
Frequency	Hz			50/60		
Dielectric Withstand	V			1500		
Insulation Resistance	MΩ			500		
Leakage Current	mA			9		
Operating Temperature	°C		-25°C ~ +100°C [Refer to Derating Curve TYPE-2]			
Operating Humidity	RH			35~85%RH		
Weight	kg			12		

※ "C" : Inverter Output Type / Derating Curve of page 103

Circuit Diagram**Dimension****Characteristics**

NOISE FILTER

3Ø 500V 보급형 General Type

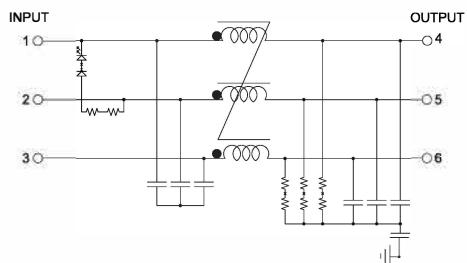
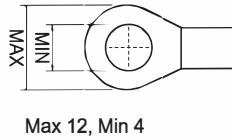
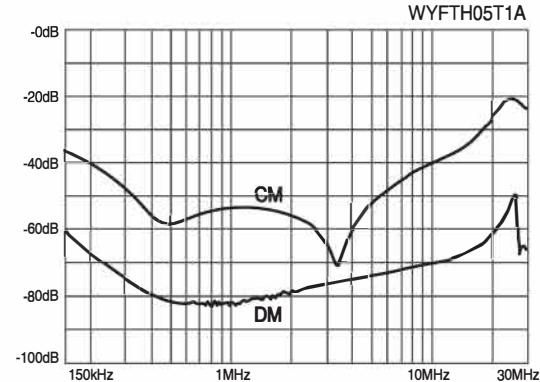
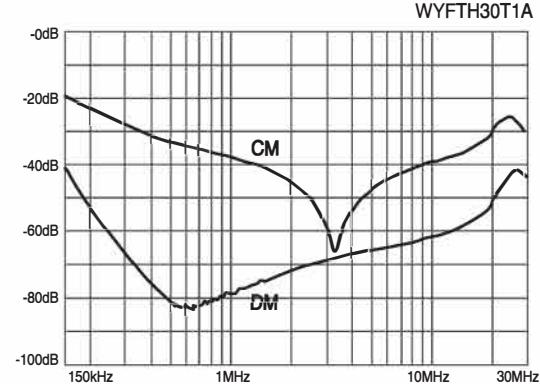
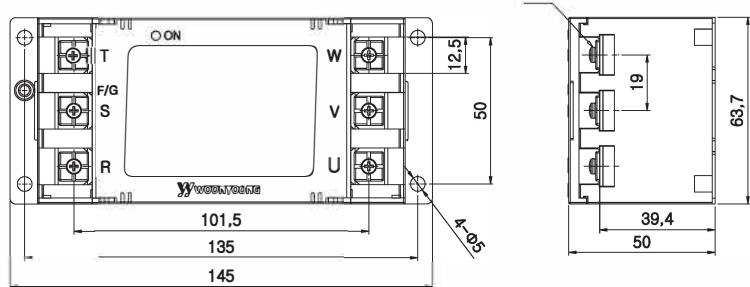
**Features**

- 2 Mounting Option
-WYF****D : Din Rail Mounting
-WYF**** : Screw Mounting
- Wide Band : High Attenuation
- Band Width : 150KHz~30MHz
- Low Leakage
- RoHS Compliant
- KC(안전인증) Approved by HK03001-19008A
(Without "C" Type)
- Inverter Output Type : Model Type"C" (WYFTH05T1C)

Specifications

ITEM	MODEL	SYMBOL	WYFTH05T1A (D) WYFTH05T1C(D)	WYFTH10T1A (D) WYFTH10T1C (D)	WYFTH15T1A (D) WYFTH15T1C (D)	WYFTH20T1A (D) WYFTH20T1C (D)	WYFTH30T1A (D) WYFTH30T1C (D)
Rated Voltage	V				500		
Rated Current	A		5	10	15	20	30
Frequency	Hz				50/60		
Dielectric Withstand	V				1500		
Insulation Resistance	MΩ				DC 100MΩ at the 500Vdc		
Leakage Current	mA				≤4.0		
Operating Temperature	℃				-25℃ ~ +100℃ [Refer to Derating Curve TYPE-2]		
Operating Humidity	RH				35~85%RH		
Weight	kg				0.5		

※ "D" : DIN-Rail type of page 184, "C" : Inverter Output Type / Derating Curve of page 103

Circuit Diagram**Terminal****Characteristics****Dimension**



Features

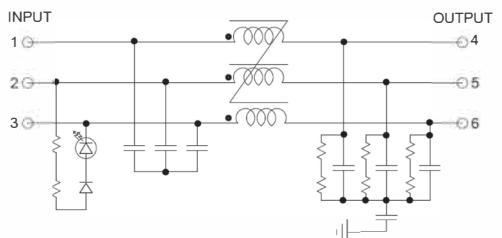
- Wide Band : High Attenuation
- Band Width : 150KHz~30MHz
- RoHS Compliant
- Inverter Output Type : Model Type "C" (WYNFTH40T2C)

Specifications

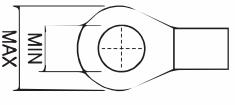
ITEM	MODEL	SYMBOL	WYNFTH40T2A	WYNFTH50T2A	WYNFTH60T2A	WYNFTH80T2A	WYNFTH100T2A	WYNFTH120T2A	WYNFTH150T2A	WYNFTH200T2A	WYNFTH250T2A
Rated Voltage	V										500Vac
Rated Current	A		40A	50A	60A	80A	100A	120A	150A	200A	250A
Frequency	Hz										50/60
Dielectric Withstand	V										1500Vac for one 1minute
Insulation Resistance	MΩ										DC 100MΩ at the 500Vdc
Leakage Current	mA										≤10mA at the 250Vac
Operating Temperature	°C										-25°C ~ +100°C [Refer to Derating Curve TYPE-2]
Operating Humidity	RH										35~85%RH
Weight	kg		1.2			2.2					2.7

※ "C" : Inverter Output Type / Derating Curve of page 103

Circuit Diagram



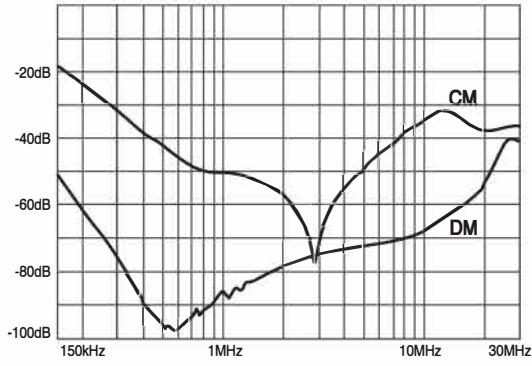
Terminal



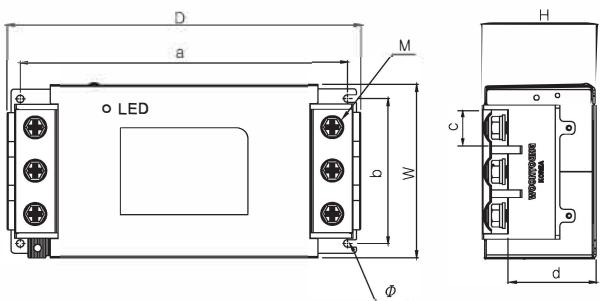
Max 16, Min 6 (40~50A)
Max 23, Min 8 (60~100A)
Max 28, Min 8 (120~250A)

Characteristics

WYNFTH40T2A

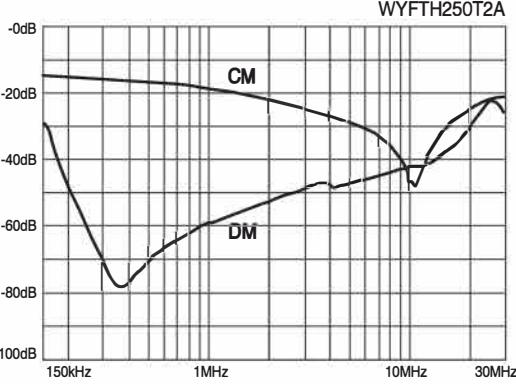


Dimension



MODEL	W	H	D	a	b	c	d	M	Ø
WYNFTH40~50T2A	91	57.2	184	173.5	74	17	42.3	6	5
WYNFTH60~100T2A	115	75	235.2	218	96	24	58	8	5
WYNFTH120~250T2A	157.2	100.1	347.5	316	130	28.5	68.6	8	6.5

WYFTH250T2A



NOISE FILTER

3Ø 500V 보급형 General Type

KCE RoHS

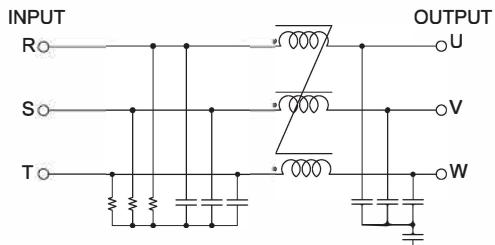
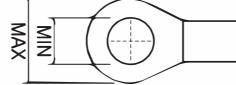
**Features**

- Wide Band : High Attenuation
- Band Width : 150KHz~30MHz
- Low Leakage
- RoHS Compliant
- Inverter Output Type : Model Type "C" (WYFTH40T2C)
- WYFTH120T2A~WYFTH250T2A : KC(HH03009-10001D) (Without "C" Type)

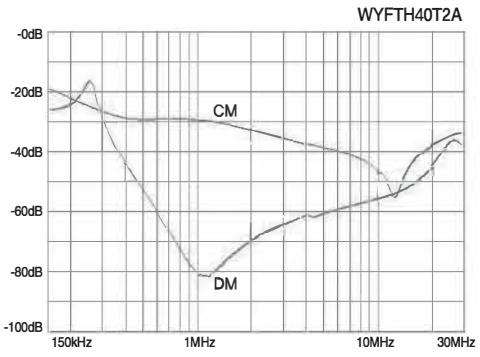
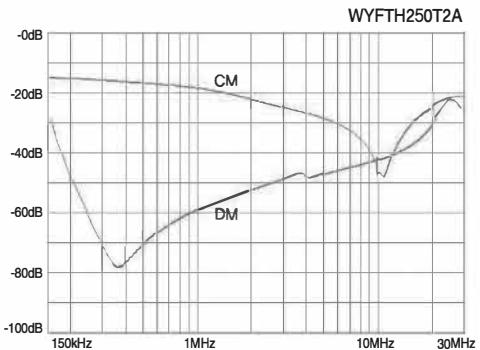
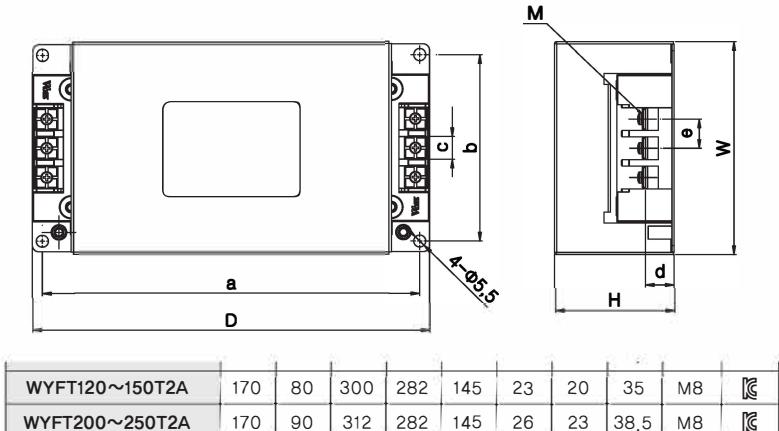
Specifications

ITEM \ MODEL	SYMBOL	WYFTH40T2A	WYFTH50T2A	WYFTH60T2A	WYFTH80T2A	WYFTH100T2A	WYFTH120T2A	WYFTH150T2A	WYFTH200T2A	WYFTH250T2A
ITEM	SYMBOL	WYFTH40T2C	WYFTH50T2C	WYFTH60T2C	WYFTH80T2C	WYFTH100T2C	WYFTH120T2C	WYFTH150T2C	WYFTH200T2C	WYFTH250T2C
Rated Voltage	V						500			
Rated Current	A	40	50	60	80	100	120	150	200	250
Frequency	Hz					50/60				
Dielectric Withstand	V					1500				
Insulation Resistance	MΩ					500				
Leakage Current	mA					18				
Operating Temperature	°C				-25°C ~ +100°C [Refer to Derating Curve TYPE-2]					
Operating Humidity	RH					35~85%RH				
Weight	kg	1.0			2.5			4.5		5.0

※ "C" : Inverter Output Type / Derating Curve of page 103

Circuit Diagram**Terminal**

Max 10, Min 4(40~50A)
Max 14, Min 6(60~100A)
Max 22, Min 8(120~150A)
Max 25, Min 8(200~250A)

Characteristics**Dimension**

3Ø 500V 보급형 Bus-bar형 General Type

KC CE RoHS



Features

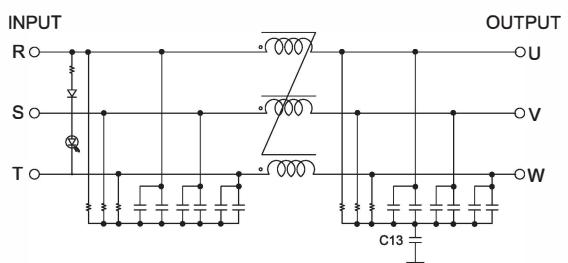
- Wide Band : High Attenuation
- Band Width : 150KHz~30MHz
- Low Leakage
- RoHS Compliant
- Inverter Output Type : Model Type "C" (WYFTH300T2C)
- WYFTH300T2A, WYFTH400T2A : KC(HH03009-10001D) (Without "C" Type)

Specifications

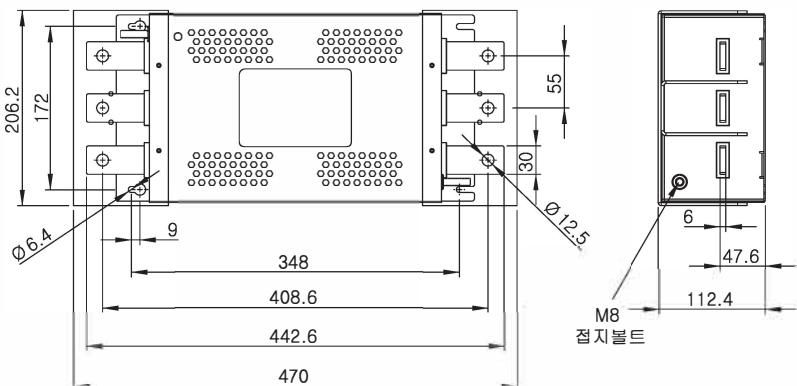
ITEM	MODEL	SYMBOL	WYFTH300T2A WYFTH300T2C	WYFTH400T2A WYFTH400T2C
Rated Voltage	V		500	
Rated Current	A		300	400
Frequency	Hz		50/60	
Dielectric Withstand	V		1500	
Insulation Resistance	MΩ		300	
Leakage Current	mA		18	
Operating Temperature	°C		-25°C ~ +100°C [Refer to Derating Curve TYPE-2]	
Operating Humidity	RH		35~85%RH	
Weight	kg		9.5	

※ "C" : Inverter Output Type / Derating Curve of page 103

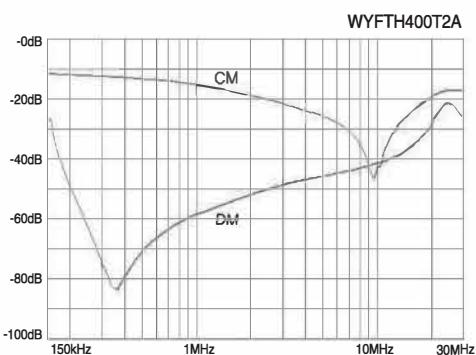
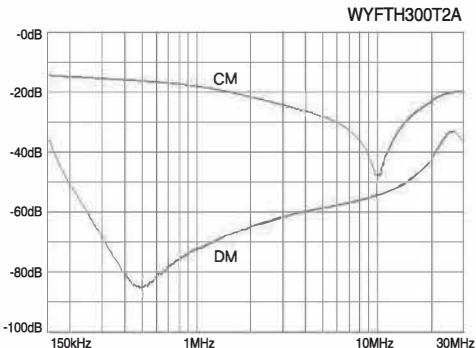
Circuit Diagram



Dimension



Characteristics



NOISE FILTER

3Ø 500V 보급형 Bus-bar형 Genera Type

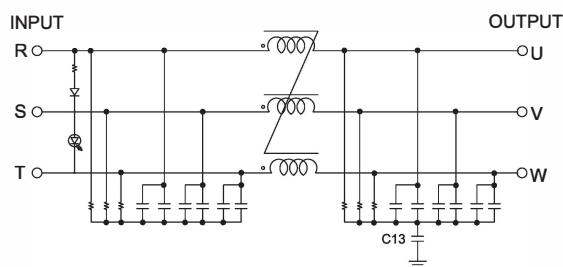
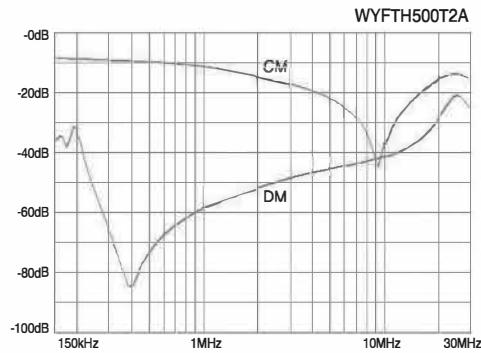
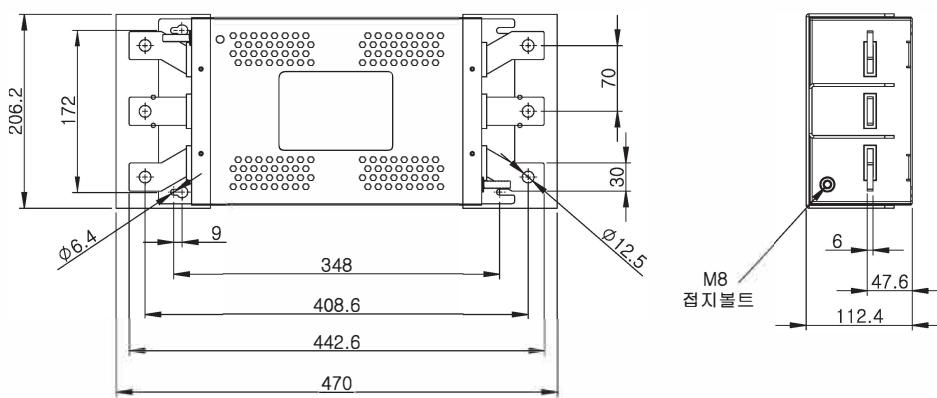
**Features**

- Wide Band : High Attenuation
- Band Width : 150KHz~30MHz
- Low Leakage
- RoHS Compliant
- Inverter Output Type : Model Type "C"
(WYFTH500T2C)
- WYFTH500T2A
: KC(HH03009-10001D) (Without "C" Type)

Specifications

ITEM	MODEL	SYMBOL	WYFTH500T2A WYFTH500T2C
Rated Voltage	V		500
Rated Current	A		500
Frequency	Hz		50/60
Dielectric Withstand	V		1500
Insulation Resistance	MΩ		500
Leakage Current	mA		18
Operating Temperature	°C		-25°C ~ +100°C [Refer to Derating Curve TYPE-2]
Operating Humidity	RH		35~85%RH
Weight	kg		9.5

※ "C" : Inverter Output Type / Derating Curve of page 103

Circuit Diagram**Characteristics****Dimension**

NOISE FILTER

3Ø 500V 보급형 Bus-bar형 General Type

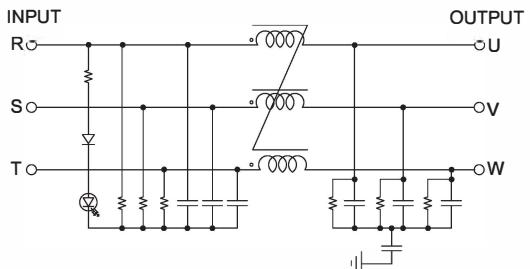
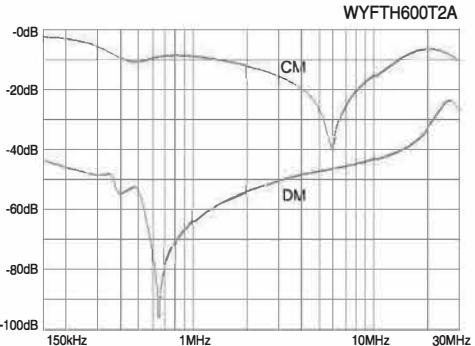
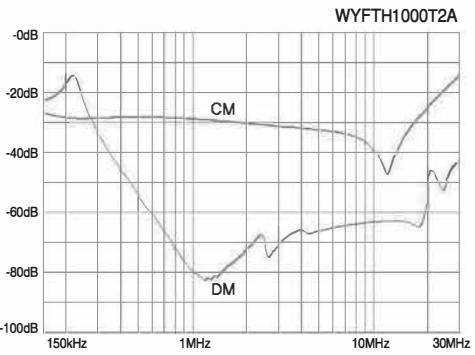
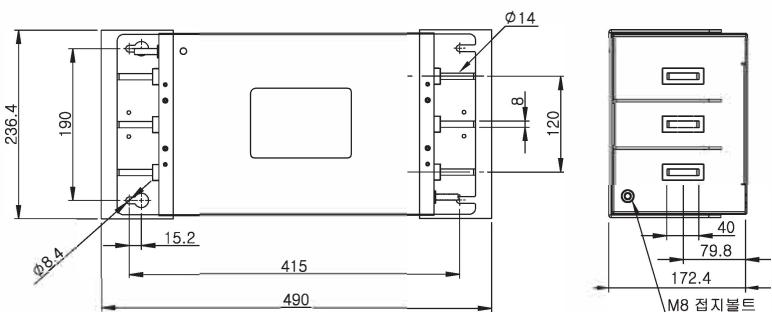
**Features**

- Wide Band : High Attenuation
- Band Width : 150KHz~30MHz
- Low Leakage
- RoHS Compliant
- Inverter Output Type : Model Type "C"
(WYFTH600T2C)
- WYFTH600T2A
: KC(HH03009-10001D) (Without "C" Type)

Specifications

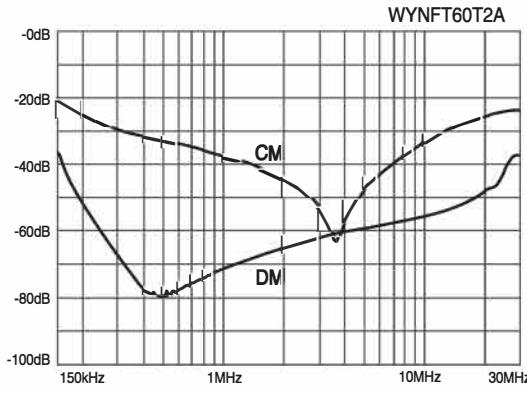
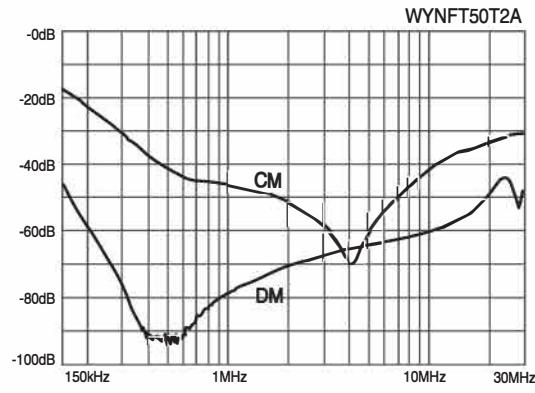
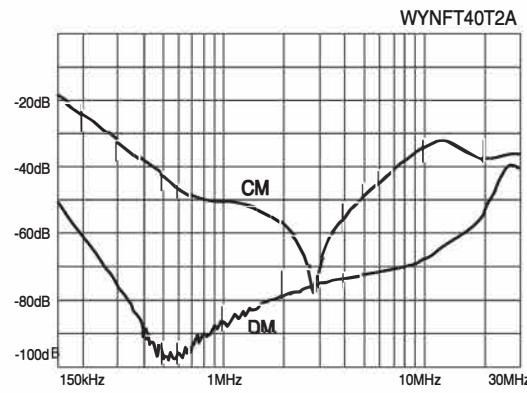
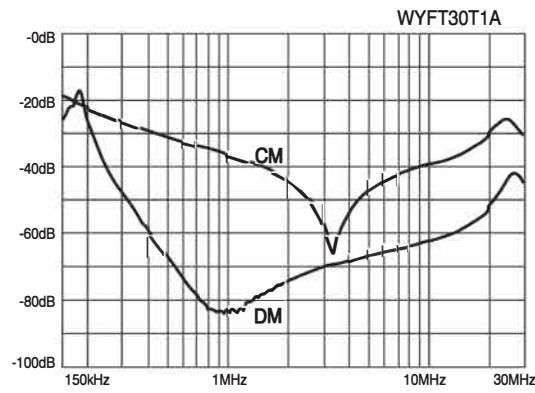
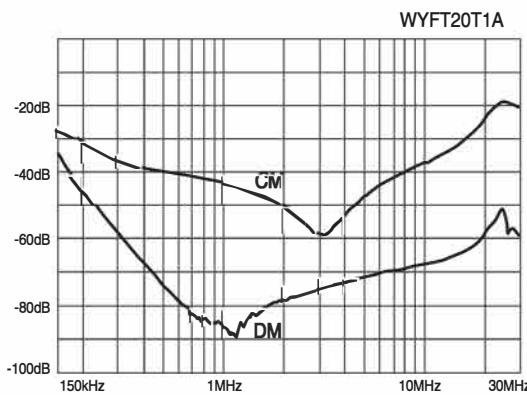
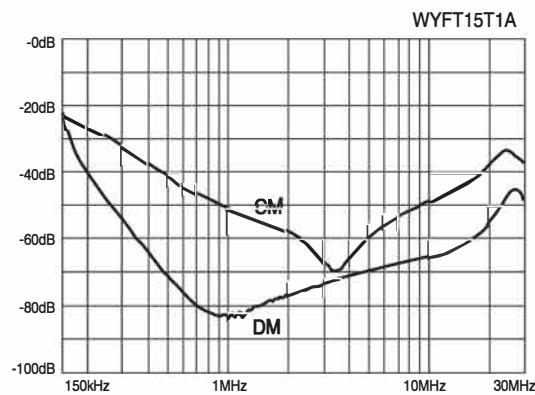
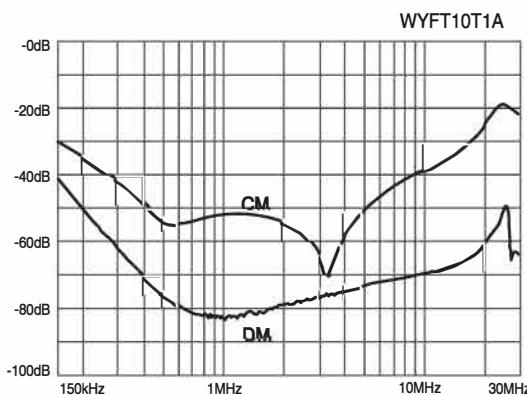
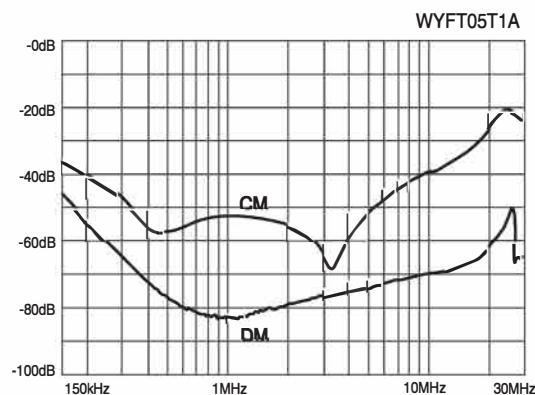
ITEM	MODEL	SYMBOL	WYFTH600T2A WYFTH600T2C	WYFTH800T2A WYFTH800T2C	WYFTH1000T2A WYFTH1000T2C	WYFTH1200T2A WYFTH1200T2C
Rated Voltage	V				500	
Rated Current	A		600	800	1000	1200
Frequency	Hz				50/60	
Dielectric Withstand	V				1500	
Insulation Resistance	MΩ				500	
Leakage Current	mA				18	
Operating Temperature	°C			-25°C ~ +100°C [Refer to Derating Curve TYPE-2]		
Operating Humidity	RH				35~85%RH	
Weight	kg				12	

※ "C" : Inverter Output Type, 600A, 800A : KC 인증품 / Derating Curve of page 103

Circuit Diagram**Characteristics****Dimension**

NOISE FILTER

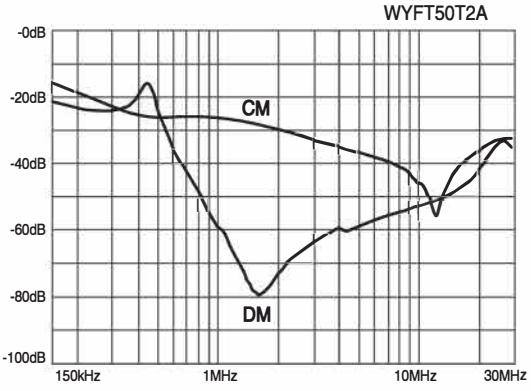
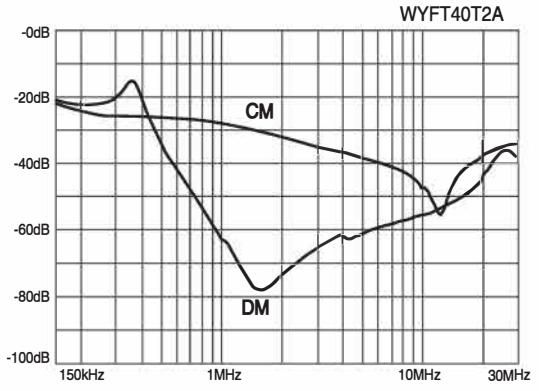
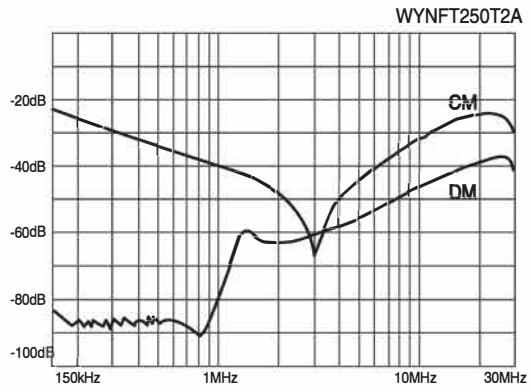
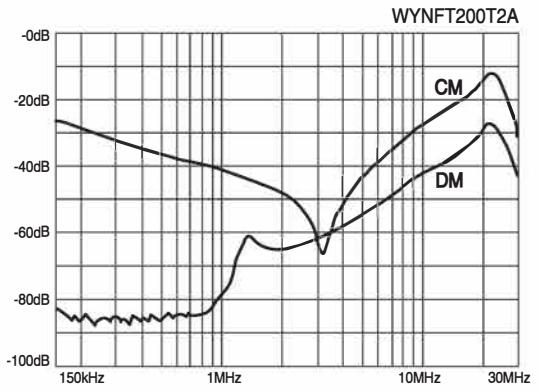
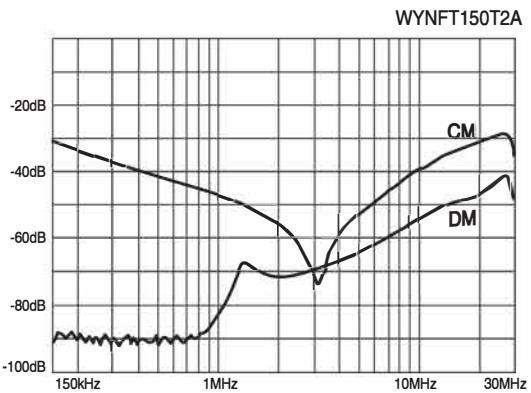
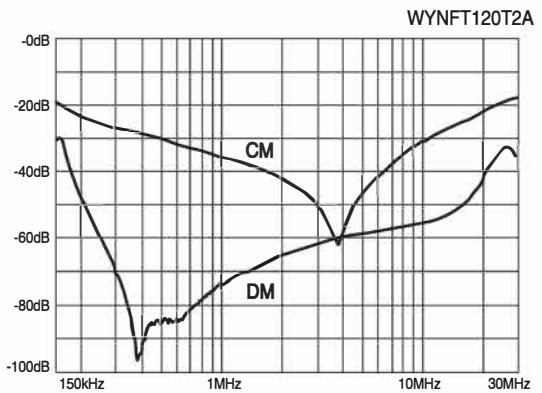
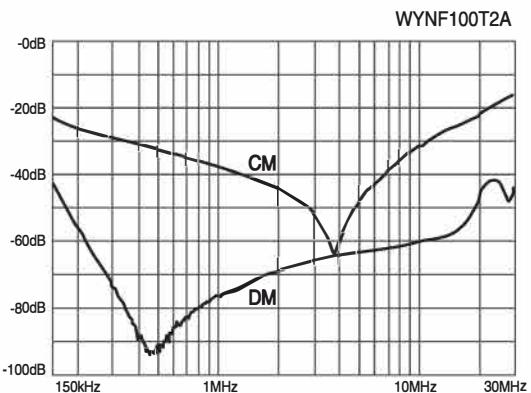
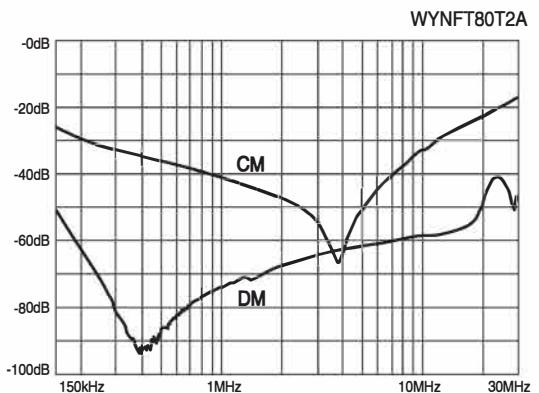
노이즈 필터

3Ø 250V Characteristics**CE RoHS****Characteristics**

※ CM : Common mode, DM : Differential mode

NOISE FILTER

노이즈 필터

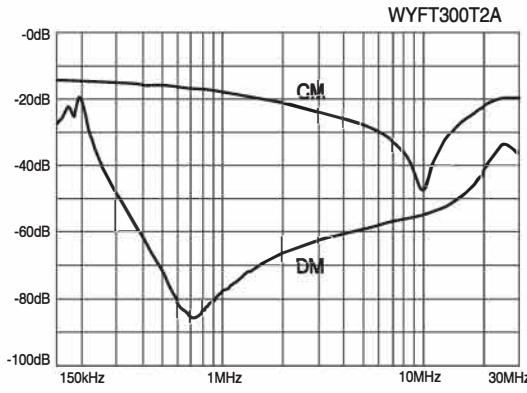
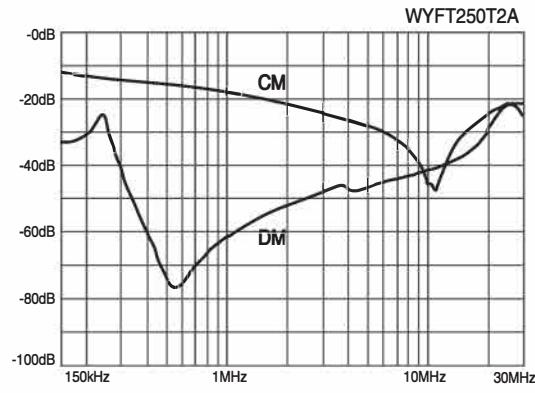
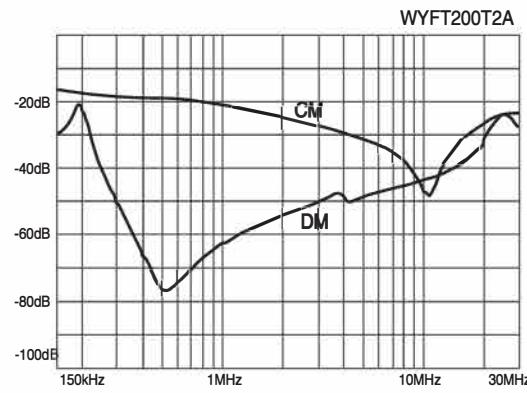
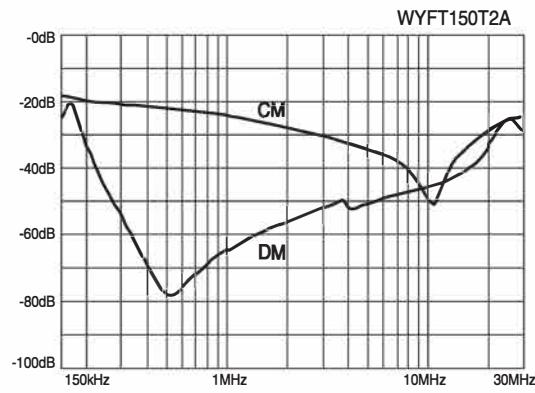
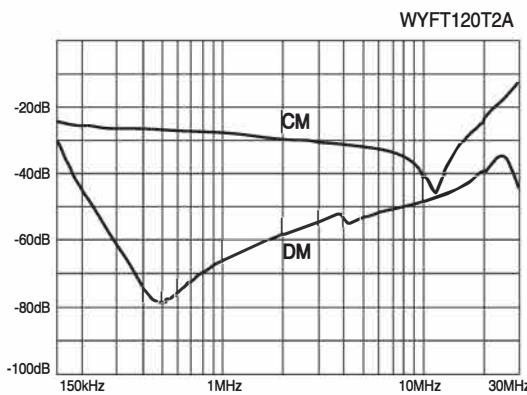
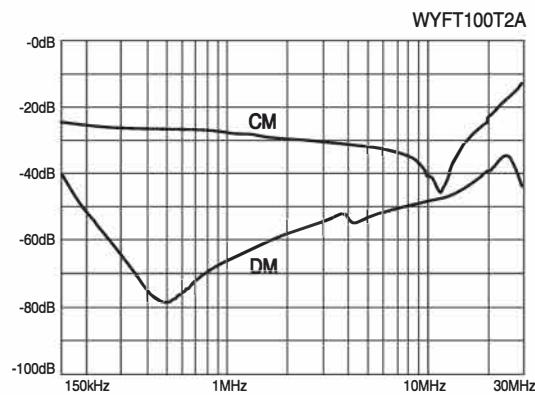
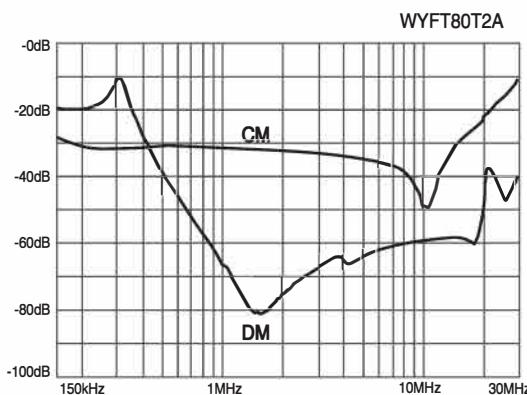
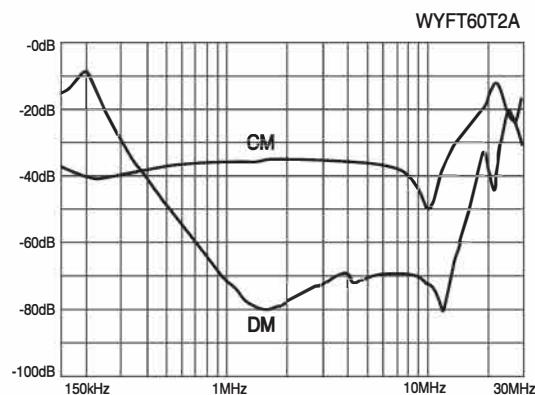
3Ø 250V Characteristics**Characteristics**

※ CM : Common mode, DM : Differential mode

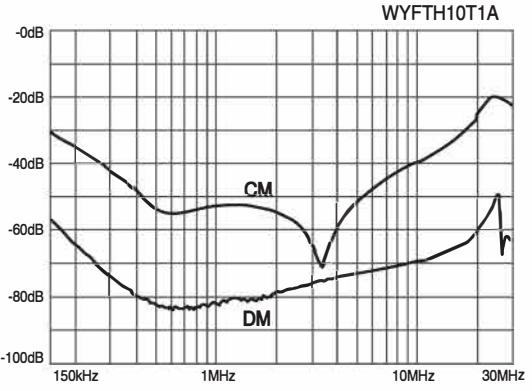
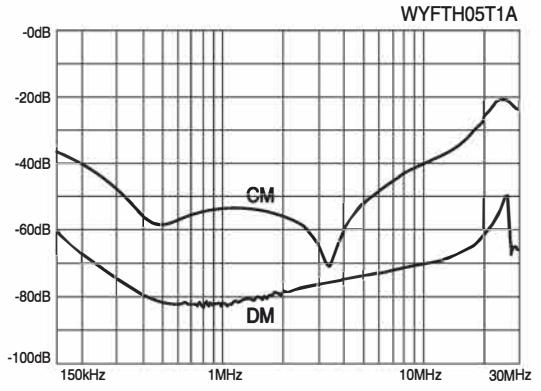
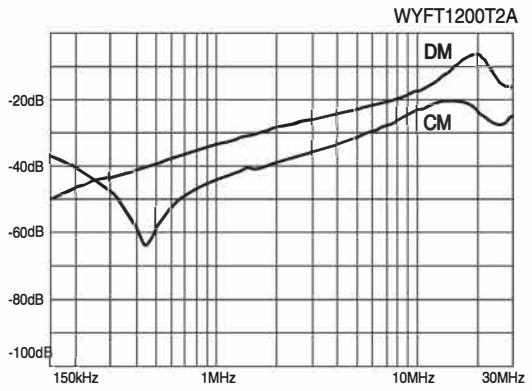
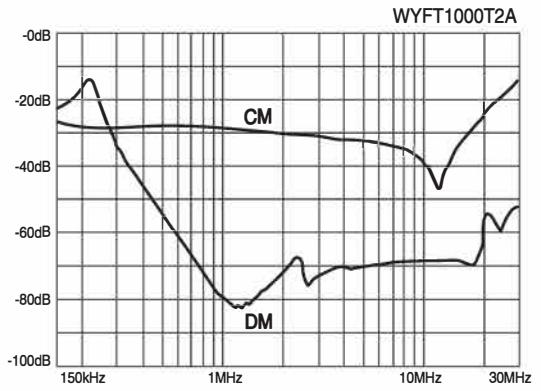
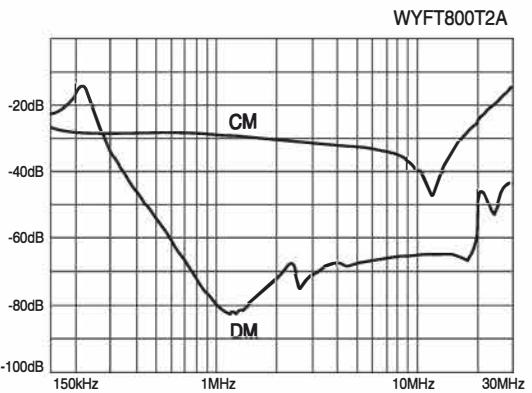
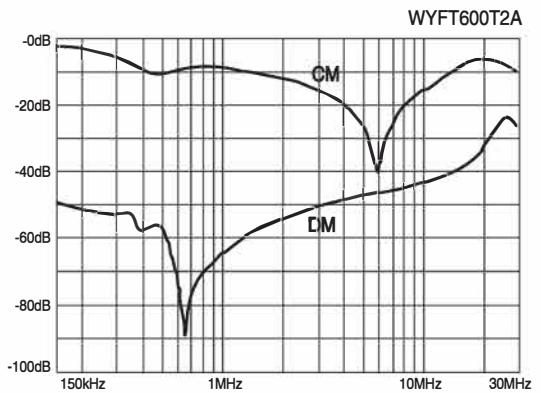
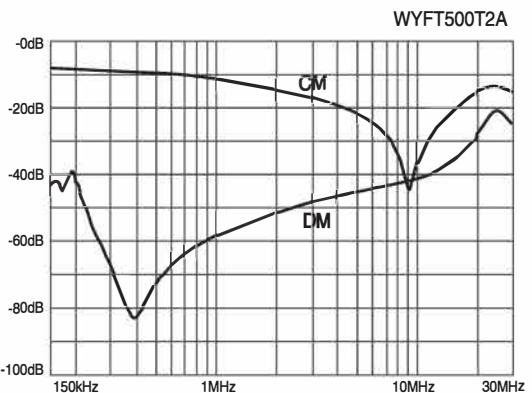
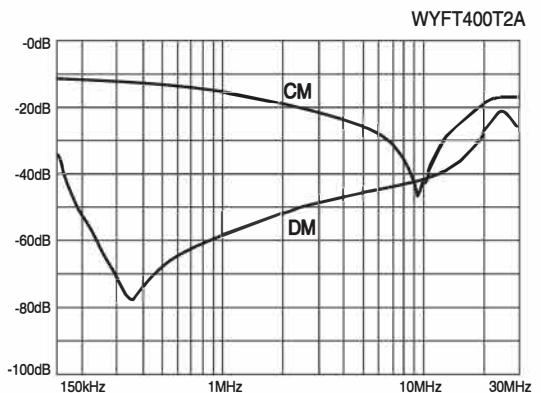
TRANS=NCT
트랜스포머REACTOR
리액터SSR
마진제어레이드TIP
전압조정기SMP
스위칭파워N / F
노이즈필터H / F
하모그레인SP
서지보호기RELAY
보호계전기ELD
누전제로보기ZCT
역전류제한기METER
판넬метрC
계기용보조장치SHUNT=FAN
센트리/팬

NOISE FILTER

노이즈 필터

3Ø 250V Characteristics**CE RoHS****Characteristics**

※ CM : Common mode, DM : Differential mode

NOISE FILTER**3Ø 250V Characteristics****Characteristics**

※ CM : Common mode, DM : Differential mode

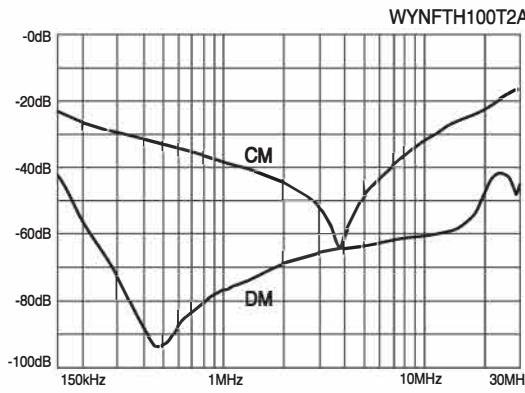
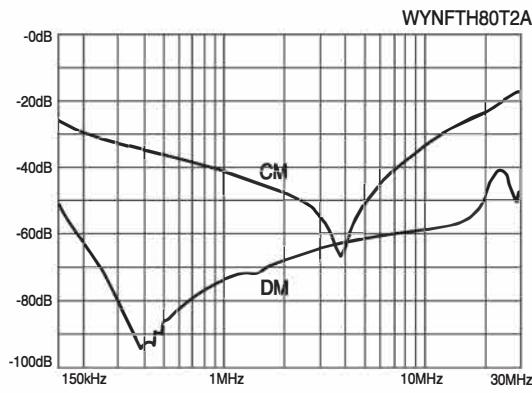
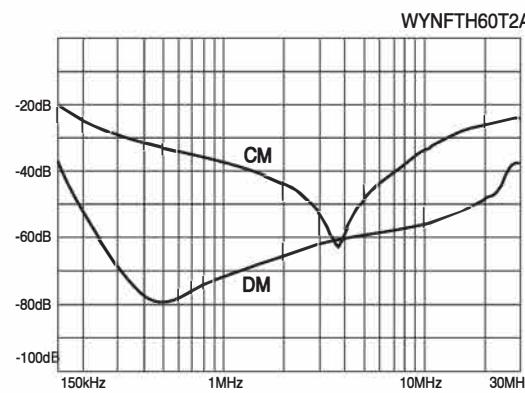
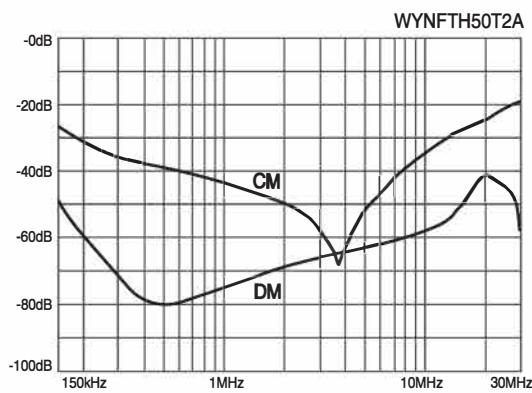
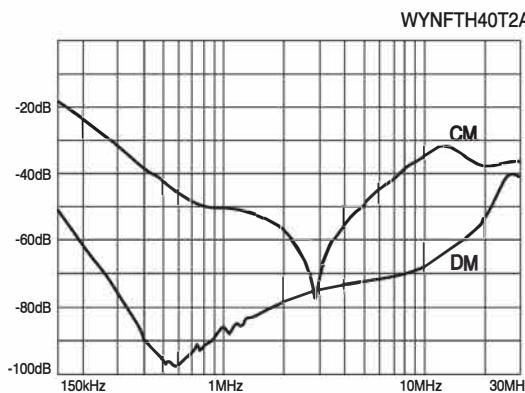
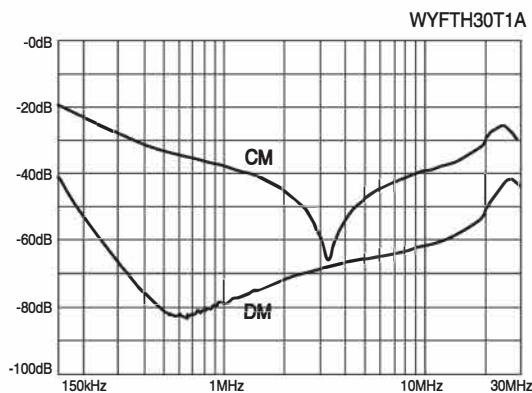
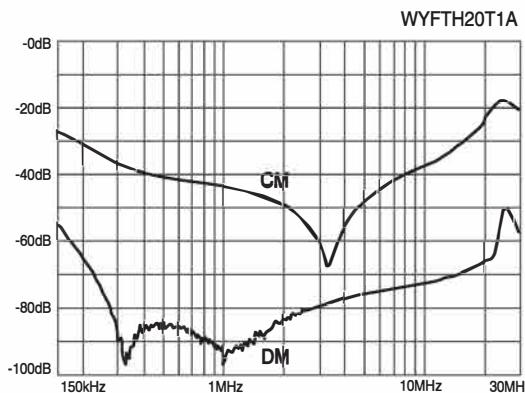
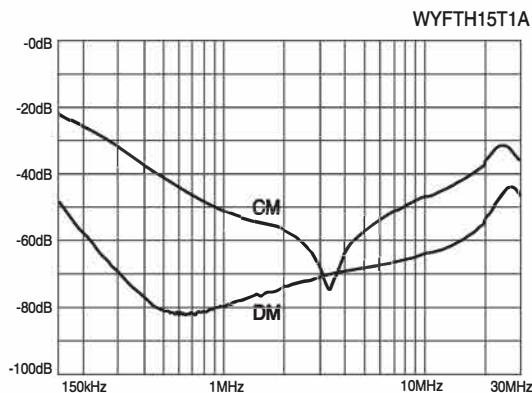
TRANSISTOR
트랜스istorREACTOR
리액터SSR
마진제어밸레이TPR
전압조정기SMP
스위칭파워N / F
노이즈필터H / F
하모그레인SP
서지보호기RELAY
보호계전기ELD
누전제로보기ZCT
주간장치METER
판넬метрC
계기판제조장치SHUNT
센트리/센트리

NOISE FILTER**3Ø 250V Characteristics**

노이즈 필터

CE RoHS

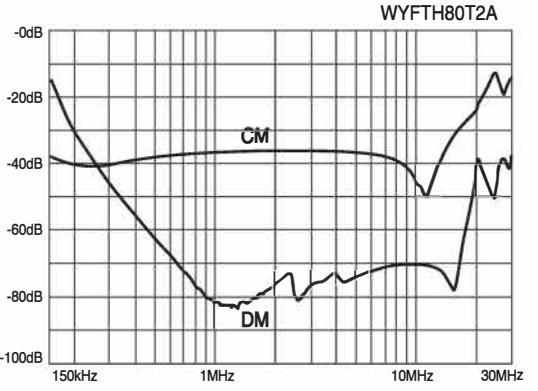
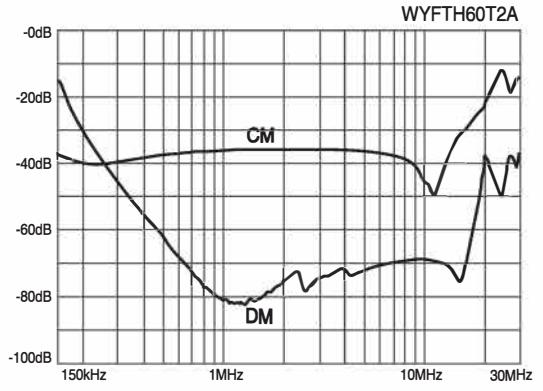
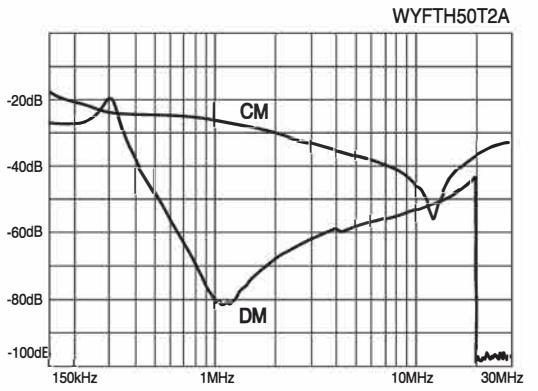
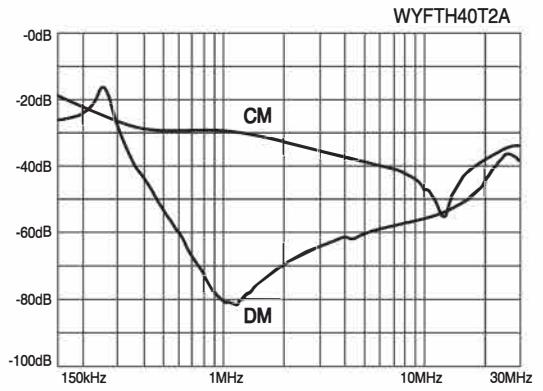
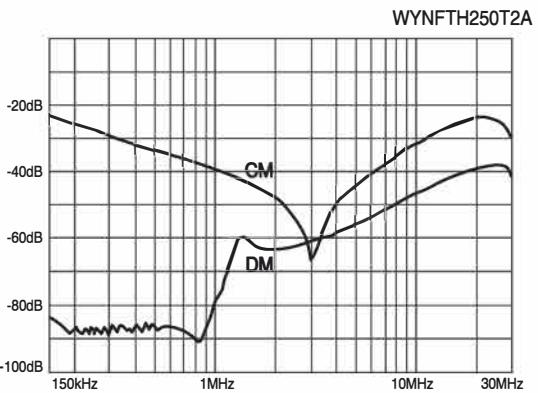
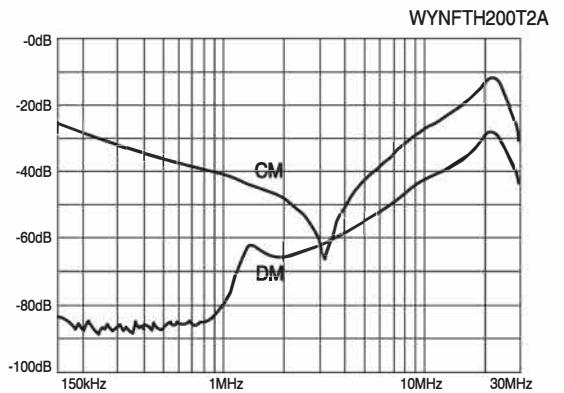
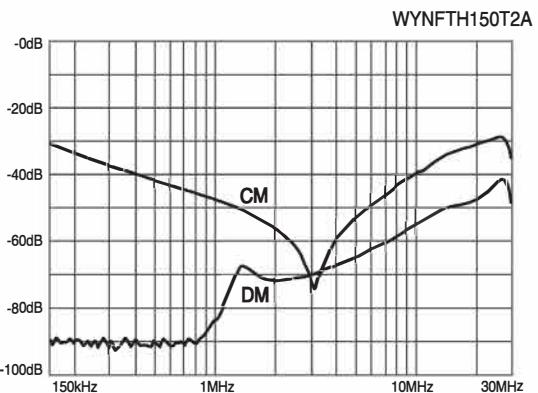
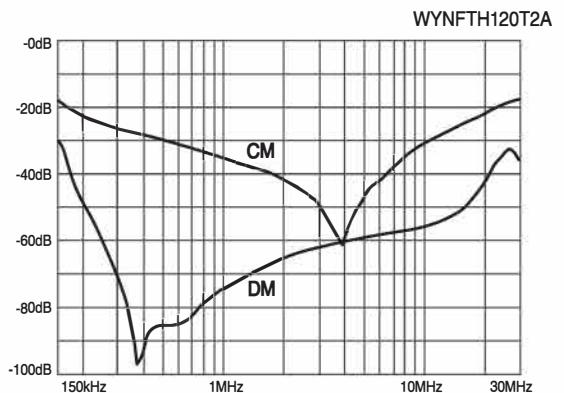
● Characteristics



※ CM : Common mode, DM : Differential mode

NOISE FILTER

노이즈 필터

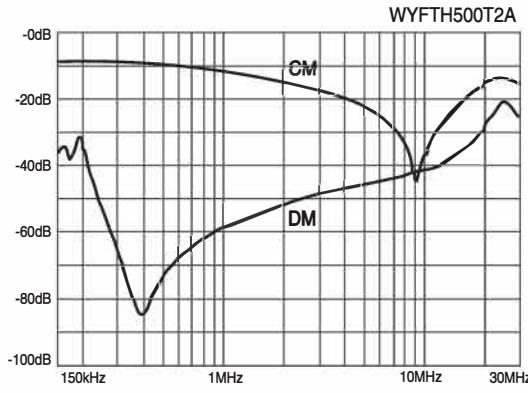
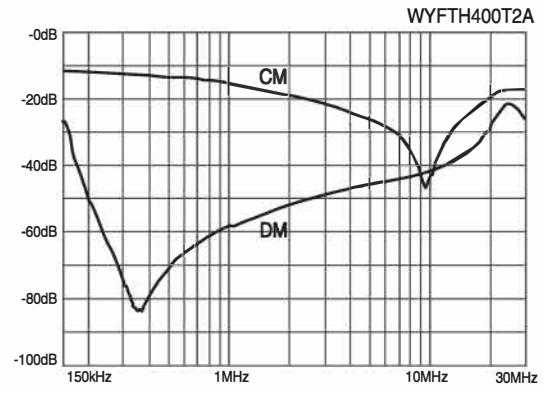
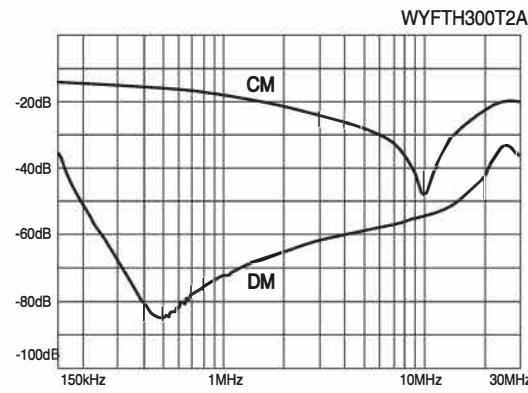
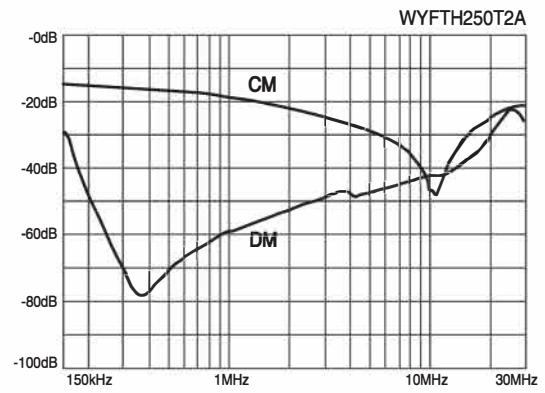
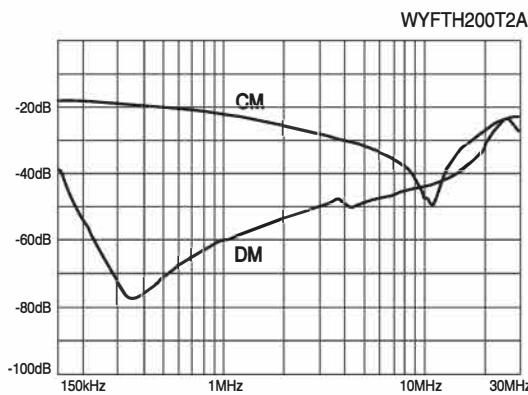
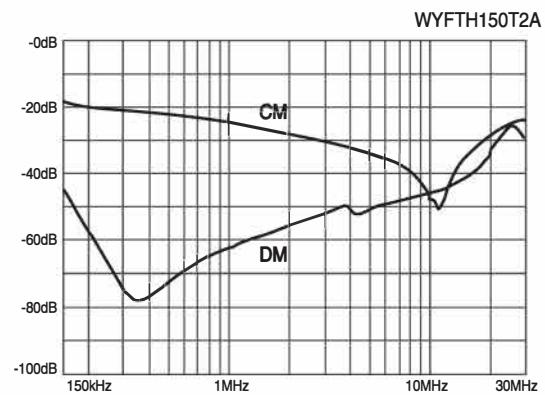
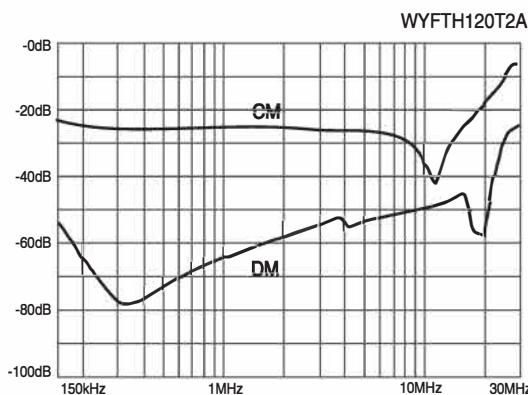
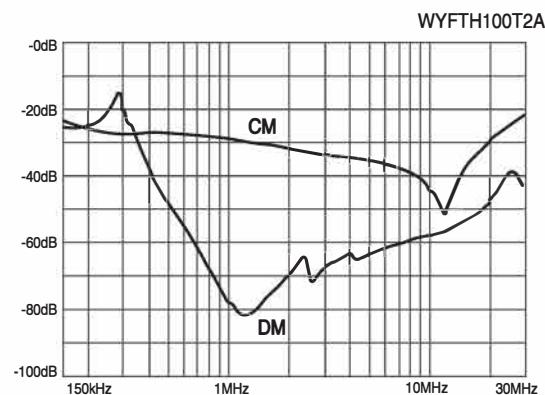
3Ø 250V Characteristics**Characteristics**

※ CM : Common mode, DM : Differential mode

TRANS=NCT
트랜스포머REACTOR
리액터SSR
마진제어레이드TIP
전압조정기SMP
스위칭파워N / F
노이즈필터H / F
하모그레인SP
서지보호기RELAY
보호계전기ELD
누전제로보기ZCT
주전자회피기METER
판넬метрCT
계기용전류기SHUNT=FAN
센트리/팬

NOISE FILTER

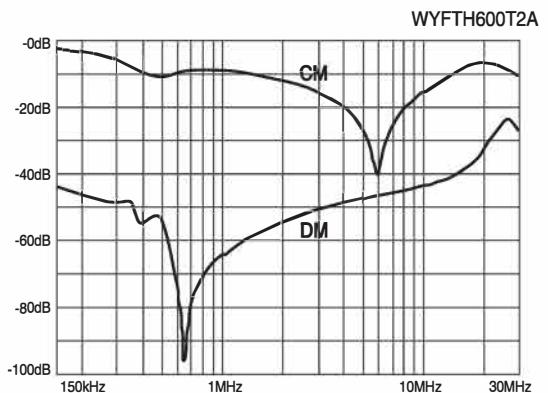
노이즈 필터

3Ø 250V Characteristics**CE RoHS****Characteristics**

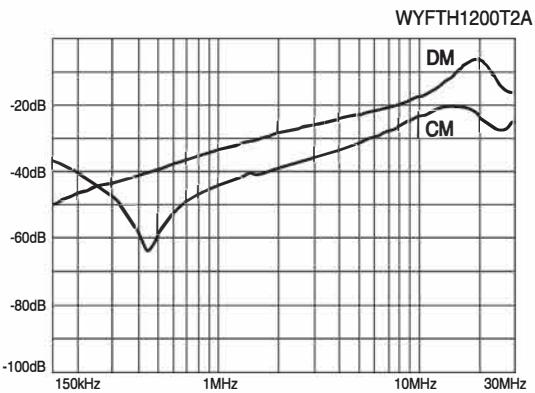
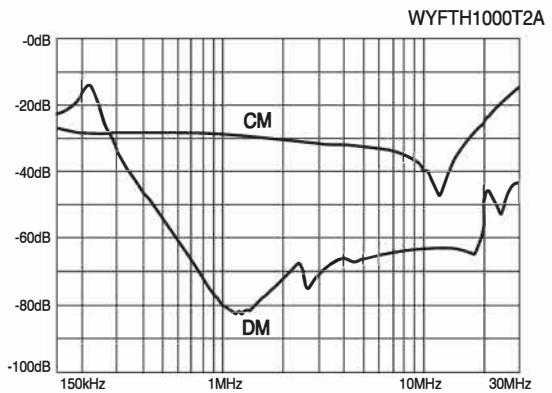
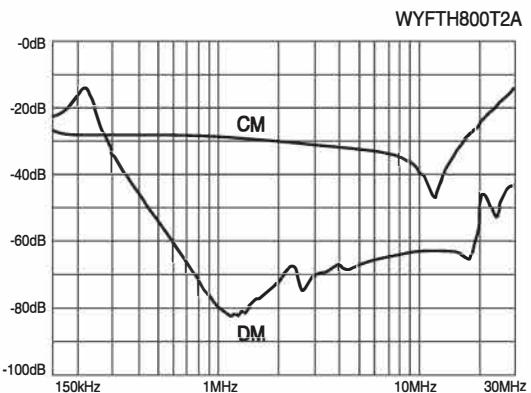
※ CM : Common mode, DM : Differential mode

NOISE FILTER

노이즈 필터

3Ø 250V Characteristics**Characteristics**

DM



노이즈필터
Noise Filter

1Ø AC Power Line EMI Filter



• AC 250V 3~30A



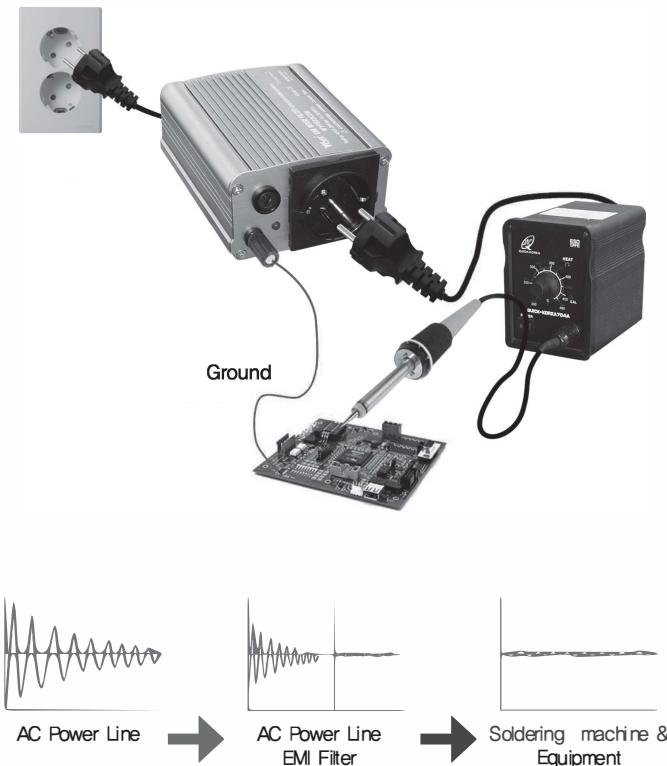
AC Power Line EMI Filter**Features**

- Wide Band : High Attenuation
- Band Width : 150KHz~30MHz
- RoHS Compliant

Specifications

ITEM	MODEL	SYMBOL	WYFS03C2M	WYFS06C2M	WYFS10C2M	WYFS15C2M	WYFS30C2M
Rated Voltage	V		110~250				
Rated Current	A		3	6	10	15	30
Frequency	Hz		50/60				
Dielectric Withstand	V		1500				
Insulation Resistance	MΩ		300				
Leakage Current	mA		0.5				
Operating Temperature	°C		-25°C ~ +100°C [Refer to Derating Curve TYPE-1]				
Operating Humidity	RH		35~85%RH				
Weight	kg		0.5				

※ 기타: 주문제작 / Derating Curve of page 103

Circuit Diagram

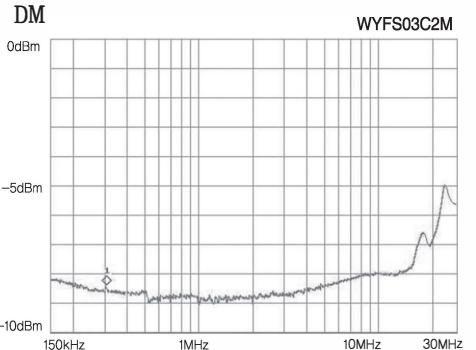
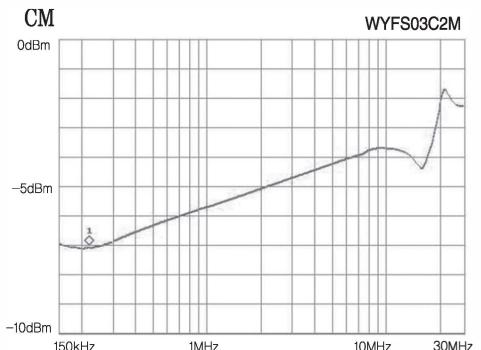
- 납땜 작업시 외부로부터의 고주파등 서지성 노이즈로인하여 반도체 소손 및 PCB Board의 불량 발생방지하기 위한 EMI 필터입니다.
- 기존의 제품보다 고신뢰성 특성과 저 대역까지 광범위하게 필터링할 수 있는 입력과 출력이 분리된 노이즈필터입니다.

- Rated Voltage, RMS 110...250VAC
- Rated Current, RMS 3A~30A(Max.)
- Transient Signal Attenuation (Typical)
Differential Mode 24dB
Common Mode 20dB
- Continuous Signal Attenuation (Typical)
0.1/100 Ohms Interface
Low Frequencies 50dB
High Frequencies 25dB
- Power Line Frequency 50/60Hz
- Power Indication LED

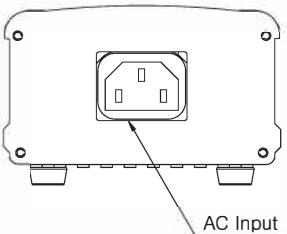
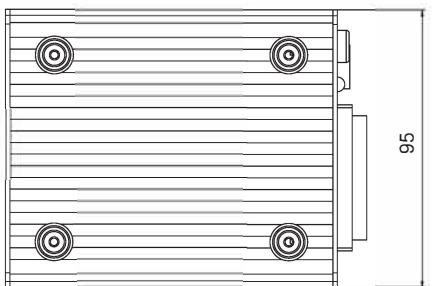
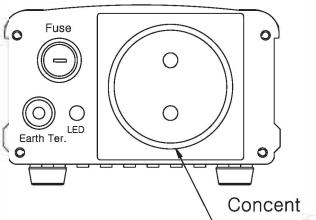
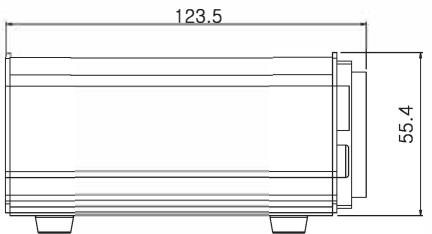
1Ø 250V EMI Filter

CE RoHS

● Characteristics



● Dimension



1Ø, 3Ø DIN Rail Type

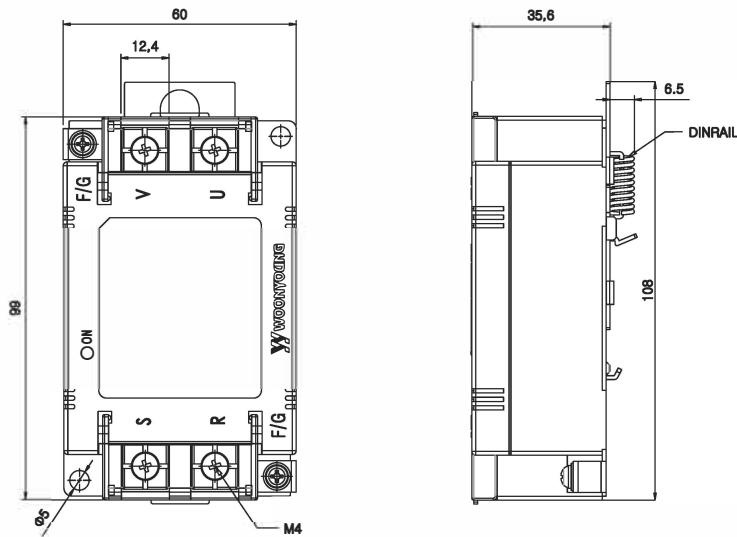
CE RoHS

● Dimension

본 제품은 PANEL에 직접 취부하지 않고 일반 범용 Dinrail을 이용하여 간편하게 직접 취부할 수 있는 방식으로 사용할 수 있는 구조입니다.

This product is of a structure which allows easy installation through the use of common-purpose DIN rails instead of attaching it directly to the panel.

– 1 Phase –



– 3 Phase –

