# EMI FILTERS


arlin
components & hardware


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# WHY FILTER . . .

EMI: Electro-magnetic interference
RFI: Radio frequency interference (same as above)

## EMC: ELECTROMAGNETIC COMPATABILITY

The increased use of electrical and electronic equipment throughout the world has resulted in significant problems with electromagnetic interference (EMI), the presence of unwanted electrical signals affecting the operation of other devices. To combat this problem, standards for Electromagnetic Compatibility for wide range of electrical and electronic equipment are now being enforced in Australia and in many other countries.

EMI can travel by conduction along power or signal cables, and also by radiation through the air. Radiation can be substantially reduced by earthed metal screening / shields with a minimum of openings. Conduction of electrical ‘noise’ via power cables can only be prevented by the use of AC mains power filters. Filters allow low frequency mains current (50Hz in Australia) to flow freely, but suppresses the higher frequency interference signals which would otherwise cause unacceptable EMI problems.

# SPECIFY A FILTER . . .

**Specifying of a power filter includes:**

- Voltage rating: Normally 250vAC 50/60Hz, covering all common AC mains voltages from 100 to 250 volt. Note that three-phase 500 volt filters are also available.

- Current Rating: This must at least equal to the load current, but *the most effective filtering is obtained by close matching of filter rating to load*. Arlin's filters cover 1A – 160A.

- Mounting Styles: select from:
    1. IEC basic inlet filter
    2. IEC combination switched, fused, etc.
    3. Chassis mount
    4. PCB mount

- Attenuation: The effectiveness of a filter is indicated by the attenuation measured in decibels (dB) as a function of frequency; greater dB means better filtering. Attenuation curves are shown for each product in this catalogue, for a 50 Ohm load and source impedance.
  Normal mode (symmetric or horizontal) attenuation is from line to line (active to neutral). Common mode (asymmetric or vertical) attenuation is from lines to earth. Both are significant in EMI rejection.

- Approvals: Where applicable, filters offered by Arlin have a wide range of approvals from authorities in Europe and North America. Approval file numbers for each product are available on application. The use of an approved filter is a significant step to obtaining international safety approval on a complete product.

**STANDARDS**

A number of standards exist for EMC of electrical equipment. Details are available from Standards Australia or from Australian Communications Authority offices. Some Australian standards are listed below:

| Equipment | AS/NZS Standard |
|---|---|
| Motor driven & thermal appliances & tools | 1044 |
| Lighting | 4051 |
| Audio & TV equipment | 1053 |
| I.T. equipment | 3548 |
| Industrial, scientific & medical equipment | 2064 1/2 |
| Generic Emission Standard | 4251.1 |

Testing to these standards is performed by a number of laboratories throughout Australia. Names of accredited test laboratories are available from the Australia Communications Authority.

## FILTER SELECTION TABLE

| STYLE | SERIES / CURRENT(A) | | FEATURES | PAGE NO |
|---|---|---|---|---|
| **1. IEC BASIC** | | | | |
| All with IEC inlet, 6.3mm tab outlet terminals, metal cased | Arlin YB-A1 | **1,3,6,10** | Screw mount | 4. |
| | Schurter C20F | 16, 20 | C20 20Amp inlet | 5. |
| **2. IEC COMBINATION** | | | | |
| Fused Screw-in | Arlin YL | 1,**3**,6,10 | M205 fused | 6. |
| Fused Screw/Snap-in | Schurter 5200 | 1,**2**,4,6,8,10 | M205 fused | 7. |
| Fused voltage selector | Schurter KFA | 1,2,**4,6**,10 | Voltage selector incl'd | 8. |
| Switched/Screw-in | Schurter KFB | 1,2,**4**,6,10 | With SP switch | 9. |
| Switched/Fused & voltage selector | Schurter CD | **1,2**,4,**6**,10 | DP switch, M205/3AG fuse & volt selector | 10. |
| **3. CHASSIS** | | | | |
| Single stage | Arlin YK | **1,3**,6,**10** | Compact metal cased | 12. |
| | Arlin YC | **5,10**,15,20 | Metal cased | 13. |
| Two stage | Arlin YC-L2 | 1,**3**,6,**10** | High attenuation | 14. |
| | Arlin YE-L2 | **15,20** | Highest attenuation | 15. |
| High current | Arlin YJ | 20,40,50,60 | M5 screw terminals | 16. |
| Three phase | Arlin YH | 10,15,20,30 | M4 screw terminals | 17. |
| High current 3 phase | Arlin YI | 40,50,60 | M5 screw terminals | 18 |
| High current 3 phase | Arlin YP | 60,80,100,150 | M6 screw terminals | 19. |
| **4. PCB MOUNT** | | | | |
| Plastic cased | Arlin YF | **1,3**,6,10 | PCB 5 pin | 20. |

Notes:

1). Current ratings in bold are preferred items normally available from stock.

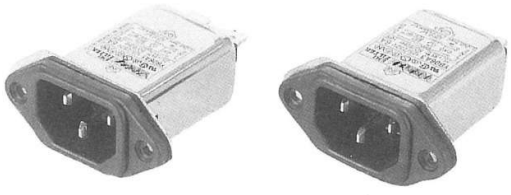
2). Non-stock items are readily available with typical leadtimes of 4-6 weeks.

3). We would be pleased to quote for any special requirements not listed in the catalogue.

# YB-A1, YB-A3, SERIES

## FEATURES

- General purpose filter with IEC Connector providing effective line-to-ground noise up to 10 amp., 250 VAC
- Low cost
- Compact design
- 250 Faston terminals(YB-A1)
- SOLDER LUG TERMINALS(YB-A3)
- All parts are approved by UL, CSA, VDE, SEMKO, NEMKO, DEMKO and FIMKO

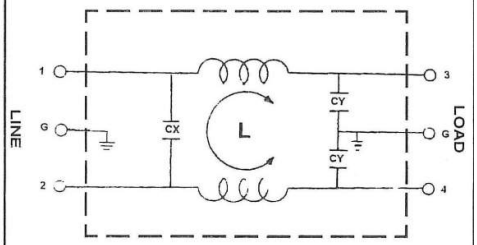


YB-A1 YB-A3

## SPECIFICATIONS

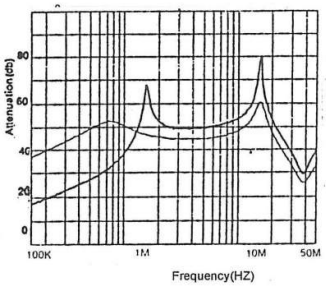
| ITEM \ MODEL | | YB01A1/YB01A3 | YB03A1/YB03A3 | YB06A1/YB06A3 | YB10A1/YB10A3 |
|---|---|---|---|---|---|
| RATED VOLTAGE | | 250V AC | 250V AC | 250V AC | 250V AC |
| RATED CURRENT | | 1A | 3A | 6A | 10A |
| LEAK CURRENT | | 0.8mA MAX 250V,50HZ | 0.8mA MAX 250V,50HZ | 0.8mA MAX 250V,50HZ | 0.8mA MAX 250V,50HZ |
| TEST VOLTAGE | LINE TO LINE | 1450V DC | 1450V DC | 1450V DC | 1450V DC |
| | LINE TO GROUND | 2250V DC | 2250V DC | 2250V DC | 2250V DC |
| INSULATION RESISTANCE | | 100MΩ MIN 250V DC | 100MΩ MIN 250V DC | 100MΩ MIN 250V DC | 100MΩ MIN 250V DC |
| DIRECT CURRENT RESISTANCE | | 0.5Ω MAX | 0.2Ω MAX | 0.15Ω MAX | 0.1ΩMAX |
| TEMPERATURE RISE | | 30°C MAX | 30°C MAX | 30°C MAX | 30°C MAX |
| OPERATING TEMPERATURE | | -25 ~ +85°C | -25 ~ +85°C | -25 ~ +85°C | -25 ~ +85°C |
| ATTENUATION | NORMAL MODE 25db MIN | 0.50 ~ 45MHZ | 0.60 ~ 50MHZ | 0.80 ~ 50MHZ | 1.20 ~ 50MHZ |
| | COMMON MODE 25dbMIN | 0.10 ~ 40MHZ | 0.15 ~ 50MHZ | 0.40 ~ 50MHZ | 1.40 ~ 50MHZ |

### CIRCUIT

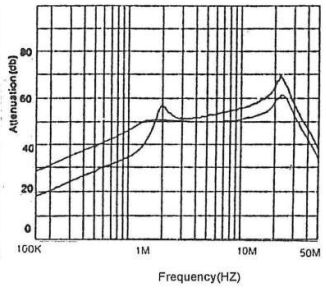



## NOISE ATTENUATION ( —— NORMAL MODE, —— COMMON MODE )

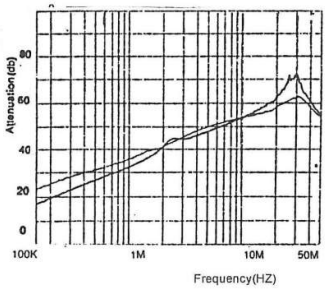
YB01A1/YB01A3



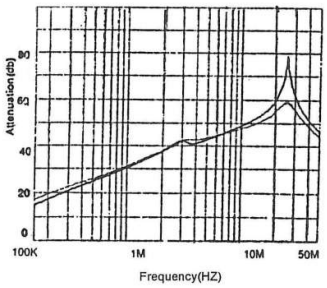

YB03A1/YB03A3



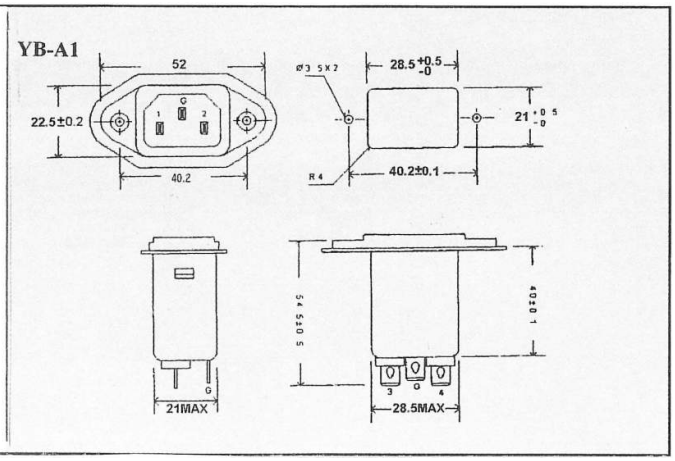

YB06A1/YB06A3




YB10A1/YB10A3

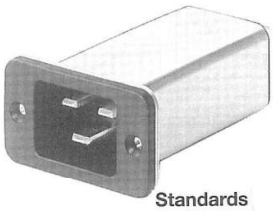


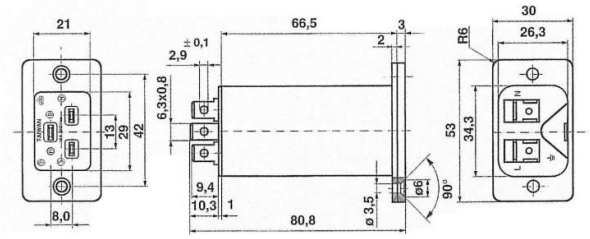

## DIMENSION(mm)



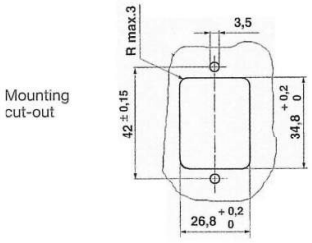
## Appliance inlet Type C20F with 20 A mains filter

for standard or medical applications






MEDICAL GRADE

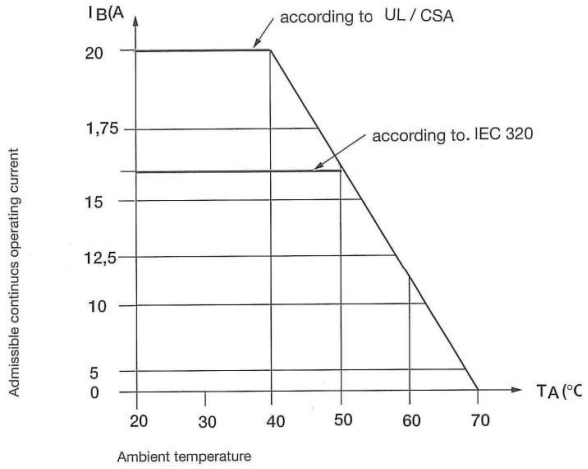



**Standards**

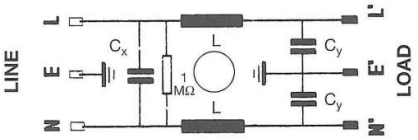
EN 60320-1, IEC 320-1, IEC 939, DIN VDE 0565 T.3,
CSA C22.2/8, UL 1283
RFI filter is tested according to EN 133200
The RFI filter is suitable for the use in equipment according to EN 60950/IEC 950 /

C 20
65 °C

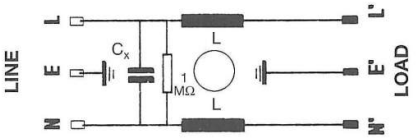
**Derating curve**




**Standardversion**



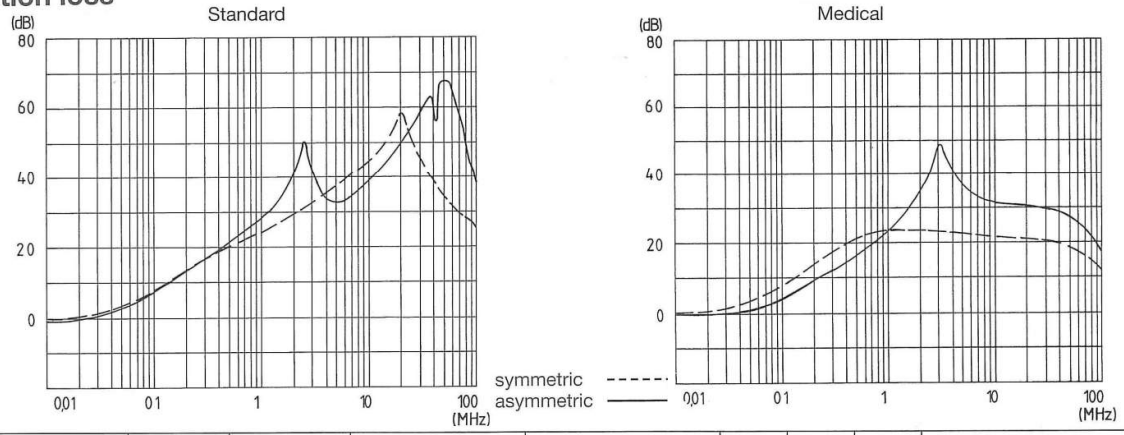

**Medicalversion**




**Approvals**

VDE (16 A/250 V AC)
UL (20 A/125 V AC)
CSA (20 A/125 V AC)

## Attenuation loss




| Order No. | Type | $I_n$ (A) $T_a$ 40 °C $T_u$ 40 °C | $U_n$ (V) | Max. leakage curr. 250 V/50 Hz | $C_x$ (nF) | $C_y$ (nF) | L (2x) (mH) | Dielectric Strength L,N→E | Dielectric Strength L→N |
|---|---|---|---|---|---|---|---|---|---|
| C20F.0001 | Standard | 20 / 16* | up to 250 V max 50/60 HZ | < 0,5 m A | 100 | 2,2 | 0,3 | > 1,5 KV (50 Hz, 1 Min.) | > 1,5 KV (50 Hz, 1 Min.) |
| C20F.0002 | Medical | 20 / 16* | up to 250 V max 50/60 HZ | < 5 µ A | 100 | – | 0,3 | > 1,5 KV (50 Hz, 1 Min.) | > 1,5 KV (50 Hz, 1 Min.) |

# YL-T1 SERIES

## ■ FEATURES:

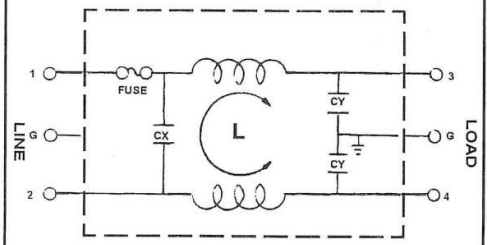
- General purpose filter with a fuse holder providing effective emi suppression of both line - to -line and line-to-ground noise.
- 250 faston terminals
- All parts are approved by UL, CSA, VDE, SEMKO, NEMKO, DEMKO and FIMKO.

YL-T1

## ■ SPECIFICATIONS

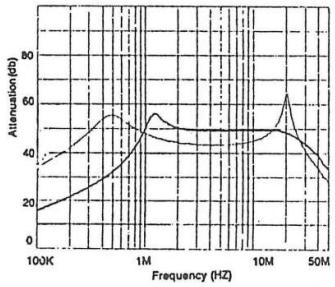
| ITEM \ MODEL | | YL01T1 | YL03T1 | YL06T1 | YL10T1 |
|---|---|---|---|---|---|
| RATED VOLTAGE | | 250V AC | 250V AC | 250V AC | 250V AC |
| RATED CURRENT | | 1A | 3A | 6A | 10A |
| LEAK CURRENT | | 0.8mA MAX 250V,50HZ | 0.8mA MAX 250V,50HZ | 0.8mA MAX 250V,50HZ | 0.8mA MAX 250V,50HZ |
| TEST VOLTAGE | LINE TO LINE | 1450V DC | 1450V DC | 1450V DC | 1450V DC |
| | LINE TO GROUND | 2250V DC | 2250V DC | 2250V DC | 2250V DC |
| INSULATION RESISTANCE | | 100MΩ MIN 250V DC | 100MΩ MIN 250V DC | 100MΩ MIN 250V DC | 100MΩ MIN 250V DC |
| DIRECT CURRENT RESISTANCE | | 0.5Ω MAX | 0.2Ω MAX | 0.15Ω MAX | 0.1ΩMAX |
| TEMPERATURE RISE | | 30°C MAX | 30°C MAX | 30°C MAX | 30°C MAX |
| OPERATING TEMPERATURE | | -25 ~ +85°C | -25 ~ +85°C | -25 ~ +85°C | -25 ~ +85°C |
| ATTENUATION | NORMAL MODE 25db MIN | 0.40 ~ 50MHZ | 0.50 ~ 50MHZ | 0.80 ~ 40MHZ | 1.20 ~ 50MHZ |
| | COMMON MODE 25dbMIN | 0.10 ~ 45MHZ | 0.13 ~ 50MHZ | 0.50 ~ 47MHZ | 1.50 ~ 50MHZ |

**CIRCUIT**

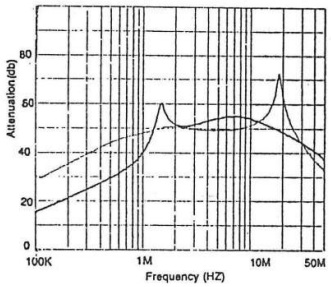



## ■ NOISE ATTENUATION ( —— NORMAL MODE, —— COMMON MODE )

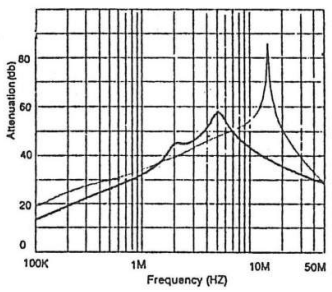
YL01T1



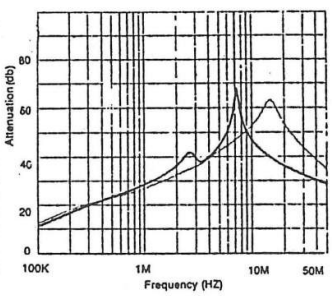

YL03T1




YL06T1

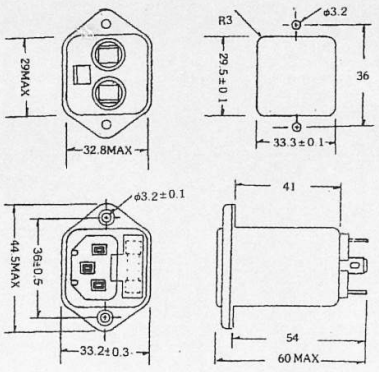



YL10T1




## ■ DIMENSION

YL-T1



# Power entry modules Type 5200

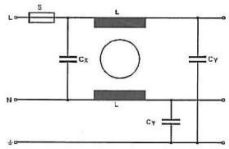
with mains filter for standard and medical applications
with fuseholder
and spare fuse-case

Screw-on mounting

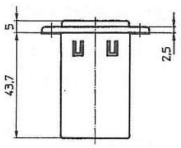
Snap-in mounting

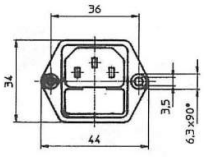
C 14
70 °C

MEDICAL GRADE

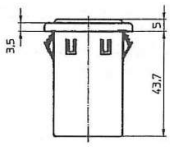


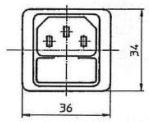
Screw-on mounting



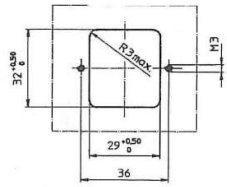


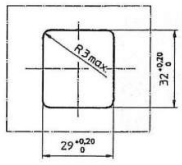
Snap-in mounting





Mounting hole

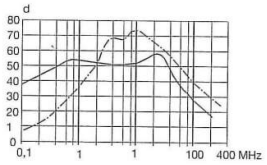




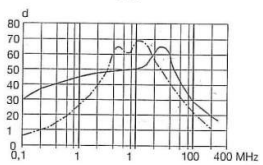
## Technical data

- Plug removal necessary for fuse-link replacement
- Short mains filter for universal use in equipment and instruments to protection class I
- Current ratings 1, 2, 4, 6, 8 or 10 A / 250 V AC
- Appliance inlet protection class I
- Shock-safe fuseholder 1-pole for fuse-links 5 x 20 mm
- Spare fuse-link case
- Nichrome steel shield
- Quick connect terminals 6,3 x 0,8 mm (brass tin-plated)
- Screw-on mounting from front or rear or snap-in mounting for panels 0,8–3 mm
- Ambient temperature $T_a$ –25 to +70 °C
- Admissible power acceptance $P_h$ in function of $T_a$
- Socket of thermoplastic UL 94V-0

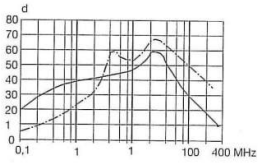
1 A



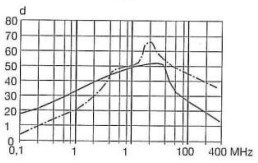
2 A



4 A



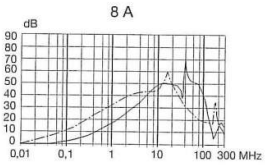
6 A



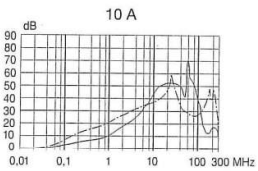
## Approvals

SEV (1–10* A/250 V AC)
VDE (1–10* A/250 V AC)
SEMKO (1–10* A/250 V AC)
UL (1–10 A/250 V AC)
CSA (1–10 A/250 V AC)
* 8 and 10 A Version pending

8 A



10 A



symmetric ----------
asymmetric ——————

## Standards

EN 60320-1, IEC 60320-1, IEC 60939, EN 133200,
CSA C22.2/8, UL 1283
The RFI filter is suitable for the use in equipment according to EN 60950/IEC 60950

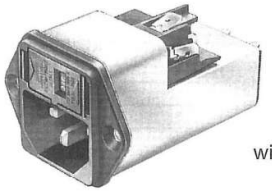
**Order No.** (for standard filter)

| Screw-on | Snap-in 0,8–3 mm | $I_n$ (A) $T_a$ 45 °C / $T_u$ 45 °C | $U_n$ (V) | Max. leakage curr. (mA) 250 V/50 Hz | $C_{x2}$ (nF) | $C_y$ (nF) | L (2x) (mH) | Test voltage L,N→E | Test voltage L→N |
|---|---|---|---|---|---|---|---|---|---|
| **5200.0123.1** (5200-1-23) | **5200.0143.1** (5200-1-43) | 1 | up to 250 V max. 50 / 60 Hz | < 0,5 | 47 | 2,2 | 11 | 2700 V DC 2 sec. / 2 Sek. | 1075 V DC 2 sec. / 2 Sek. |
| **5200.0223.1** (5200-2-23) | **5200.0243.1** (5200-2-43) | 2 | | < 0,5 | 47 | 2,2 | 4 | | |
| **5200.0423.1** (5200-4-23) | **5200.0443.1** (5200-4-43) | 4 | | < 0,5 | 47 | 2,2 | 1,6 | | |
| **5200.0623.1** (5200-6-23) | **5200.0643.1** (5200-6-43) | 6 | | < 0,5 | 47 | 2,2 | 0,7 | | |
| **5200.0823.1** (5200-8-23) | **5200.0843.1** (5200-8-43) | 8 | | < 0,5 | 47 | 2,2 | 0,6 | | |
| **5200.1023.1** (5200-10-23) | **5200.1043.1** (5200-10-43) | 10 | | < 0,5 | 47 | 2,2 | 0,4 | | |

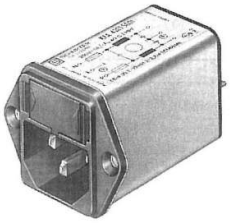
Suitable plug connectors for cable connection 4300.0602/0606
Cord retaining clamp **0888.0004**
**Power entry modules with mains filter for medical application see page 19.**

# Power entry modules Type KFA

with mains filter for standard and medical applications
with fuseholder
with or without voltage selector switch



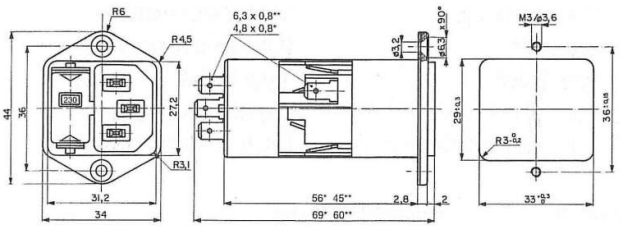
with voltage selector



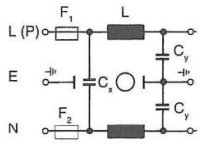
without voltage selector

70 °C

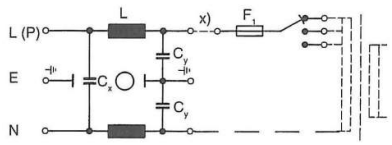
MEDICAL GRADE



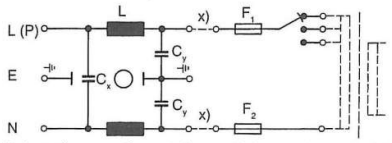

* with voltage selector
** without voltage selector




without voltage selector




1-pole with voltage selector




2-pole with voltage selector

*) External connections to be made by customer (solder terminals)

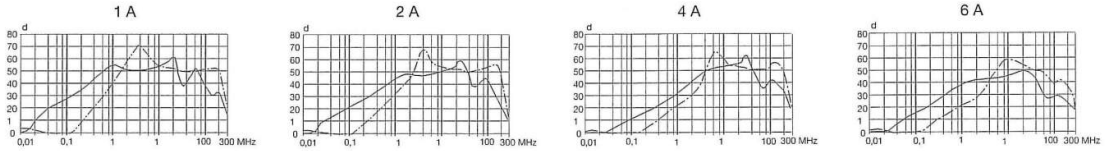
## Technical data

- Appliance inlet protection class I, pin temperature 70 °C
- Shock-safe fuseholder 1- or 2-pole for fuse-links 5 x 20 mm
- Plug removal necessary for fuse-link replacement
- With or without step switch voltage selector, 3 positions
- With an integral mains filter for 1, 2, 4, 6, or 10 A / 250 V AC
- Quick connect terminals 4,8 x 0,8 mm with voltage selector
  6,3 x 0,8 mm without voltage selector
- Ambient temperature $T_a$ –25 to +70 °C
- Admissible power acceptance $P_h$ in function of $T_a$ see page 266
- Socket of thermoplastic UL 94V-0

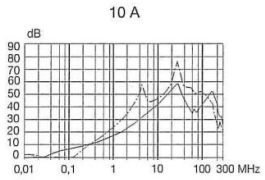
## Approvals / Approbationen

| | | | | | |
|---|---|---|---|---|---|
| SEV | (1–10* A/250 V AC) | | UL | (1–10* A/250 V AC) |
| VDE | (1–10* A/250 V AC) | | CSA | (1–10* A/250 V AC) |
| SEMKO | (1–10* A/250 V AC) | | CS | (1–4 A/250 V AC) |

* 10 A version pending




symmetric
asymmetric




## Standards

EN 60320-1, IEC 60320-1, IEC 60939, EN 133200,
DIN VDE 0565 T.3, CSA C22.2/8, UL 1283
The RFI filter is suitable for the use in equipment according to EN 60950/IEC 60950

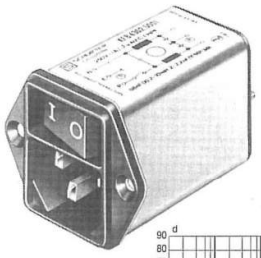
**Order No. Socket** (for standard filter) **fuse-drawer must be ordered separately**

| Fuseholder 1-pole | Fuseholder 2-pole | Voltage selector without | Voltage selector with (max. 3 pos.) | $I_n$ (A) $T_a$ 40 °C/ $T_u$ 40 °C | $U_n$ (V) | Max. leakage curr. (mA) 250 V/50 Hz | $C_{x2}$ (nF) | $C_y$ (nF) | L (2x) (mH) | Test voltage L,N→E | Test voltage L→N |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 4301.5011 | 4301.5001 | • | | 1 | up to 250 V max. 50/60 Hz | < 0,5 | 68 | 2,2 | 10 | 2 kV 50 Hz 2 sec. | 1625 V DC 2 sec. |
| 4301.5012 | 4301.5002 | • | | 2 | | < 0,5 | 68 | 2,2 | 4 | | |
| 4301.5013 | 4301.5003 | • | | 4 | | < 0,5 | 68 | 2,2 | 1,5 | | |
| 4301.5014 | 4301.5004 | • | | 6 | | < 0,5 | 68 | 2,2 | 0,8 | | |
| 4301.5015 | 4301.5005 | • | | 10 | | < 0,5 | 68 | 2,2 | 0,3 | | |
| 4301.5051 | 4301.5041 | | • | 1 | | < 0,5 | 68 | 2,2 | 10 | | |
| 4301.5052 | 4301.5042 | | • | 2 | | < 0,5 | 68 | 2,2 | 4 | | |
| 4301.5053 | 4301.5043 | | • | 4 | | < 0,5 | 68 | 2,2 | 1,5 | | |
| 4301.5054 | 4301.5044 | | • | 6 | | < 0,5 | 68 | 2,2 | 0,8 | | |
| 4301.5055 | 4301.5045 | | • | 10 | | < 0,5 | 68 | 2,2 | 0,3 | | |

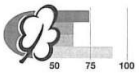
Order No. Fuse drawer see page
Suitable plug connectors for cable connection 4300.0602/0606
Cord retaining clamp 0888.0004
**Power entry modules with mains filter for medical application see page 19.**

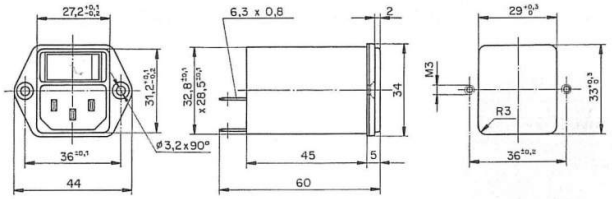
# Power entry modules Type KFB I

with mains filter
with On/Off switch 1-pole

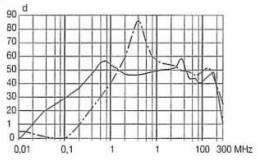


C 14
70 °C

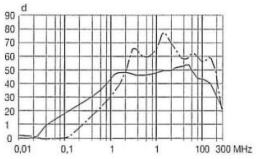


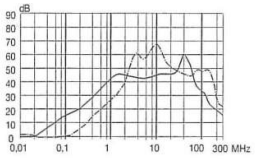

1 A



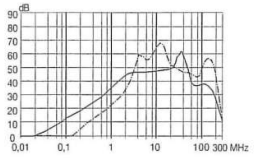

2 A



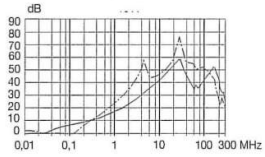

4 A



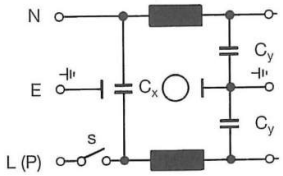

6 A




10 A




symmetric
asymmetric




## Technical data

- Appliance inlet protection class I, Pin temperature 70 °C
- On/Off switch 1-pole (SPST), non-illuminated
- With an integral mains filter for 1, 2, 4, 6 or 10A / 250 V~
- Quick connect terminals 6,3 x 0,8 mm (brass tin-plated)
- Inrush current (capacitive): 20 A < 5 ms

## Approvals

| | | | |
|---|---|---|---|
| SEV | (1, 2, 4(3), 6(3) | 10(3)** | A/250 V AC) |
| VDE | (1, 2, 4(3), 6(3) | 10(3)** | A/250 V AC) |
| SEMKO | (1, 2, 4(3), 6(3) | 10(3)** | A/250 V AC) |
| UL | (1, 2, 4, 6 | 10(3)** | A/250 V AC) |
| CSA | (1, 2, 4, 6 | 10(3)** | A/250 V AC) |
| CS | (1, 2, 4 | | A/250 V AC) |

(3) for motor

**pending

## Standards

EN 60320-1, IEC 60320-1, EN 133200, CSA C22.2/8, UL 1283
The RFI filter is suitable for the use in equipment according to EN 60950/IEC 60950

## Order No. Socket

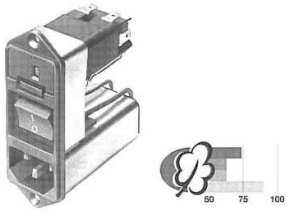
| Switch 1-pole | $I_n$ (A) $T_a$ 45°C* | $U_n$ (V) | Max. leakage curr (mA) 250V/50Hz | $C_{x2}$ (nF) | $C_y$ (nF) | L (2x) (mH) | Test voltage L,N→E | Test voltage L→N |
|---|---|---|---|---|---|---|---|---|
| 4302.5001 | 1 | up to 250 V max. 50/60 Hz | < 0,5 | 68 | 2,2 | 10 | 2 kV 50 Hz 2 sec. | 1625 V DC 2 sec. |
| 4302.5002 | 2 | | < 0,5 | 68 | 2,2 | 4 | | |
| 4302.5003 | 4 | | < 0,5 | 68 | 2,2 | 1,5 | | |
| 4302.5004 | 6 | | < 0,5 | 68 | 2,2 | 0,8 | | |
| 4302.5005 | 10 | | < 0,5 | 68 | 2,2 | 0,3 | | |

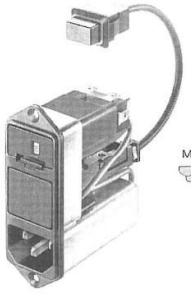
* VDE $T_a$ 40 °C

Suitable plug connectors for cable connection 4300.0602/0606
Cord retaining clamp 0888.0004
insulation cover 0859.0047

# Power entry modules with mains filter Type CD

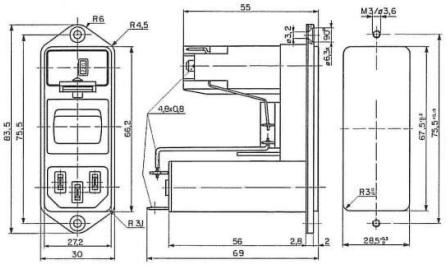
with fuseholder,
voltage selector and On/Off
switch with or without
Bowden cable actuation

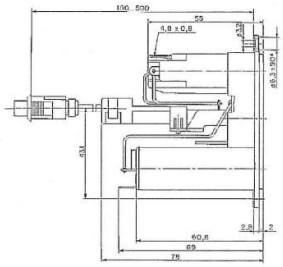


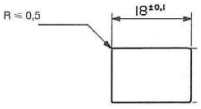


C 14
70 °C

MEDICAL GRADE



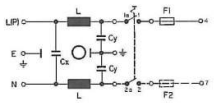




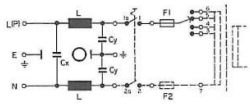

**Technical data**

- Appliance inlet protection class I, Pin temperature 70 °C
- Shock-safe fuseholder 1- or 2-pole for fuse-links 5 x 20 mm or 6,3 x 32 mm (¼" x 1¼")
- Extra safe fuseholder can only be extracted with the aid of a tool. Meets medical standards IEC 601-1, BS 5724 part 1, DIN/VDE 0750 part 1
- With or without step switch voltage selector, 4 positions
- On/Off switch 2-pole (DPST), non-illuminated with or without Bowden cable actuation
- With an integral mains filter for 1, 2, 4, 6 or 10 A / 250 V AC standard or medical
- Quick connect terminals 4,8 x 0,8 mm (brass tin-plated)
- Ambient temperature $T_a$ –25 to +70 °C
- Admissible power acceptance $P_h$ in function of $T_a$ see page 266
- Inrush current (capacitive): 70 A 3–4 ms (see page 208)

without voltage selector



with voltage selector



**Approvals**

| | | | | | |
|---|---|---|---|---|---|
| SEV | (1-10(4)* A/250 V AC) | | UL | (1-10* A/250 V AC) |
| VDE | (1-10(4)* A/250 V AC) | | CSA | (1-10* A/250 V AC) |
| SEMKO | (1-10(4)* A/250 V AC) | | CS | (1-4 A/250 V AC) |

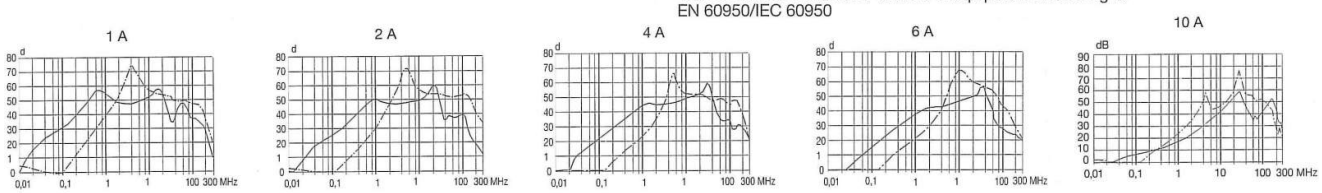
(4) for motor

* 10 A version pending

**Standards**

EN 60320-1, IEC 60320-1, IEC 60939, EN 133200,
CSA C22.2/8, UL 1283
The RFI filter is suitable for the use in equipment according to
EN 60950/IEC 60950

symmetric
asymmetric




**Order No. Socket** for standard filter **(fuse-drawer must be ordered separately)** Order No. fuse-drawer see page **11.**

| Fuseholder 1-pole | 2-pole | Voltage selector without | with | Rocker switch | Bowd. cable actuation | $I_n$ (A) $T_a$ 40 °C | $U_n$ (V) | Max. leakage current (mA) 250 V/50 Hz | $C_{x2}$ (nF) | $C_y$ (nF) | L (2x) (mH) | Test voltage L,N→E | Test voltage L→N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CD11.1501.151 | CD14.1101.151 | • | | • | | 1 | up to / bis 250 V max. 50 / 60 Hz | < 0,5 | 68 | 2,2 | 1 | 2 kV 50 Hz 2 sec. | 1625 V DC 2 sec. |
| CD21.1501.151 | CD24.1101.151 | • | | • | | 2 | | < 0,5 | 68 | 2,2 | 4 | | |
| CD31.1501.151 | CD34.1101.151 | • | | • | | 4 | | < 0,5 | 68 | 2,2 | 1,5 | | |
| CD41.1501.151 | CD44.1101.151 | • | | • | | 6 | | < 0,5 | 68 | 2,2 | 0,8 | | |
| CD61.1501.151 | CD64.1101.151 | • | | • | | 10 | | < 0,5 | 68 | 2,2 | 0,3 | | |
| CD11.4501.151 | CD14.4101.151 | | • | • | | 1 | | < 0,5 | 68 | 2,2 | 10 | | |
| CD21.4501.151 | CD24.4101.151 | | • | • | | 2 | | < 0,5 | 68 | 2,2 | 4 | | |
| CD31.4501.151 | CD34.4101.151 | | • | • | | 4 | | < 0,5 | 68 | 2,2 | 1,5 | | |
| CD41.4501.151 | CD44.4101.151 | | • | • | | 6 | | < 0,5 | 68 | 2,2 | 0,8 | | |
| CD61.4501.151 | CD64.4101.151 | | • | • | | 10 | | < 0,5 | 68 | 2,2 | 0,3 | | |
| CD11.4599.151 | CD14.4199.151 | | • | | • | 1 | | < 0,5 | 68 | 2,2 | 10 | | |
| CD21.4599.151 | CD24.4199.151 | | • | | • | 2 | | < 0,5 | 68 | 2,2 | 4 | | |
| CD31.4599.151 | CD34.4199.151 | | • | | • | 4 | | < 0,5 | 68 | 2,2 | 1,5 | | |
| CD41.4599.151 | CD44.4199.151 | | • | | • | 6 | | < 0,5 | 68 | 2,2 | 0,8 | | |

Order details and description for Bowden cable see page
Suitable plug connectors for cable connection 4300.0602/0606
Cord retaining clamp **0888.0005** cover **0859.0077**
**Power entry modules with mains filter for medical application 19.**

# Fusedrawers

## Power entry modules Type KFA

**Order No. Fuse-drawer** Fingergrip and Extra-Safe

| Voltage markings | Type | 1-pole | 2-pole | 1-pole + spare fuse case | 2-pole with shorting bar in the neutral side |
|---|---|---|---|---|---|
| «XX» see table below | Fingergrip | 4301.1214.XX | 4301.1014.XX | 4301.2814.XX | 4301.3536.XX |
| | Extra-Safe | 4301.1224.XX | 4301.1024.XX | 4301.2824.XX | 4301.3537.XX |
| without voltage selector | Fingergrip | 4301.1405 | 4301.1401 | 4301.1409 | 4301.1413 |
| | Extra-Safe | 4301.1407 | 4301.1403 | 4301.1411 | 4301.1415 |

| Index | Voltage markings / terminal markings | | | |
|---|---|---|---|---|
| XX | 1 | 2 | 3 | 4 |
| 01 | 110 | 150 | 220 | – |
| 02 | 120 | – | 240 | – |
| 03 | 110 | – | 220 | – |
| 04 | 115 | – | 220 | – |
| 05 | 110 | – | 230 | – |
| 06 | 115 | – | 230 | – |
| 07 | 100 | 110 | 220 | 240 |
| 08 | 100 | 120 | 220 | 240 |
| 09 | 110 | – | 117 | – |
| 10 | 220 | – | 240 | – |
| 11 | 120 | 220 | 240 | – |
| 12 | 110 | 220 | 240 | – |
| 13 | 115 | 220 | 240 | – |
| 14 | – | – | – | – |
| 15 | 100 | 120 | 220 | – |
| 16 | 50 Hz | – | 60 Hz | – |
| 17 | 220 | – | 110 | – |
| 18 | 110 | 240 | 220 | – |
| 19 | 117 | 220 | 240 | – |
| 20 | 100 | 110 | 127 | 230 |
| 21 | 110 | 120 | 220 | – |
| 22 | 110 | 220 | 230 | – |
| 23 | 100 | 115 | 220 | 240 |
| 24 | 115 | 230 | 240 | – |

The fuse-drawer Extra-Safe can only be removed when the mains outlet is removed

**Other voltage values on request**

## Power entry modules with mains filter Type CD

**Order No. Fuse-drawer** standard Fingergrip and Extra-Safe

| Voltage markings/ Terminal markings<br>1 2 3 4 KEC<br>3 4 5 6 KD | Type | 5 x 20 mm 1-pole | 5 x 20 mm 2-pole | 2-pole with shortingbar in the neutral side | 6,3 x 32 mm (¼" x 1¼") 1-pole | 6,3 x 32 mm (¼" x 1¼") 2-pole | 2-pole with shorting bar in the neutral side |
|---|---|---|---|---|---|---|---|
| «XX» see table below<br>«XX» siehe Tabelle unten | Fingergrip | 4303.2114.XX | 4303.2014.XX | 4303.2036.XX | 4303.2614.XX | 4303.2514.XX | 4303.2536.XX |
| | Extra-Safe | 4303.2124.XX | 4303.2024.XX | 4303.2037.XX | 4303.2624.XX | 4303.2524.XX | 4303.2537.XX |
| without voltage selector<br>ohne Spannungswähler | Fingergrip | 4303.2406 | 4303.2401 | 4303.2411 | 4303.2906 | 4303.2901 | 4303.2911 |
| | Extra-Safe | 4303.2408 | 4303.2403 | 4303.2413 | 4303.2908 | 4303.2903 | 4303.2913 |

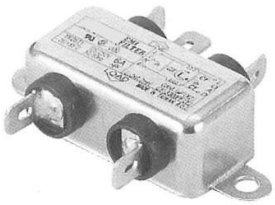
| Index | Voltage markings / terminal markings | | | | |
|---|---|---|---|---|---|
| XX | 1<br>3 | 2<br>4 | 3<br>5 | 4<br>6 | KEC<br>KD |
| 00 | – | – | – | – | |
| 01 | 100 | 120 | 220 | 240 | |
| 02 | 110 | 150 | 220 | – | |
| 03 | 110 | – | 220 | – | |
| 04 | 110 | 220 | 240 | – | |
| 05 | 115 | – | 230 | – | |
| 06 | 117 | 220 | 240 | – | |
| 07 | 100 | 117 | 220 | – | |
| 08 | 110 V | – | 220 V | – | |
| 09 | 220 | – | 240 | – | |
| 10 | 115 | 220 | 240 | – | |
| 11 | 110 | 120 | 220 | 240 | |

| Index | Voltage markings / terminal markings | | | | |
|---|---|---|---|---|---|
| XX | 1<br>3 | 2<br>4 | 3<br>5 | 4<br>6 | KEC<br>KD |
| 12 | 115 | 230 | 240 | – | |
| 13 | 100 | 110 | 220 | 240 | |
| 14 | 100 | 117 | 220 | 240 | |
| 15 | 100 | 115 | 230 | – | |
| 16 | 100 | 120 | 230 | 240 | |
| 17 | 115 | 120 | 230 | 240 | |
| 18 | 115 | – | 240 | – | |
| 19 | 220 | 120 | 240 | 230 | |
| 20 | 100 | 120 | 230 | – | |
| 21 | 100 | – | 220 | – | |
| 22 | 100 | 120 | 220 | 230 | |
| 23 | 100 | 110 | 120 | – | |

# YK-T1 SERIES

## FEATURES:

- General purpose filter providing effective emi suppression of both line - to -line and line-to-ground noise.
- Low cost
- 250 faston terminals
- All parts are approved by UL, CSA and VDE.

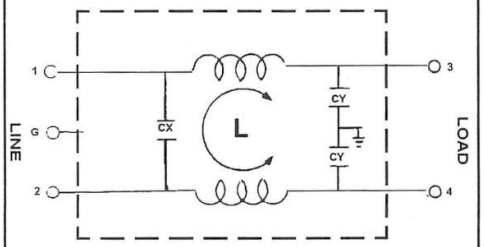


YK-T1

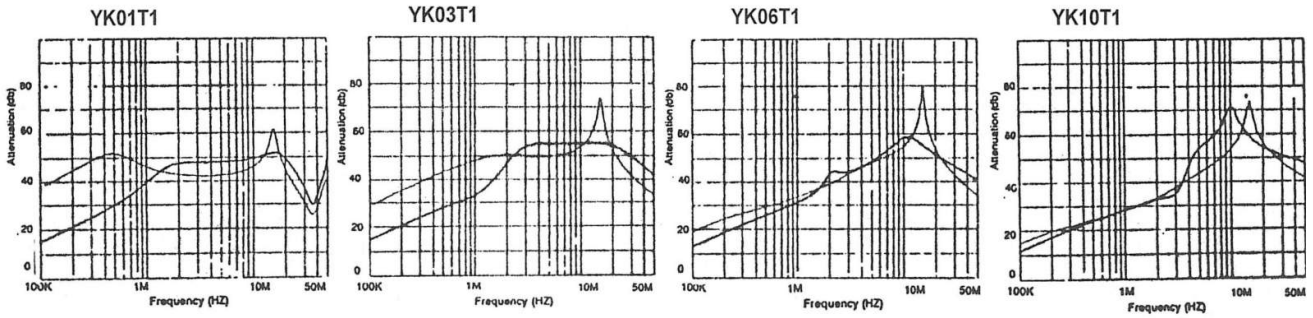
## SPECIFICATIONS

| ITEM \ MODEL | | YK01T1 | YK03T1 | YK06T1 | YK10T1 |
|---|---|---|---|---|---|
| RATED VOLTAGE | | 250V AC | 250V AC | 250V AC | 250V AC |
| RATED CURRENT | | 1A | 3A | 6A | 10A |
| LEAK CURRENT | | 0.8mA MAX 250V,50HZ | 0.8mA MAX 250V,50HZ | 0.8mA MAX 250V,50HZ | 0.8mA MAX 250V,50HZ |
| TEST VOLTAGE | LINE TO LINE | 1450V DC | 1450V DC | 1450V DC | 1450V DC |
| | LINE TO GROUND | 2250V DC | 2250V DC | 2250V DC | 2250V DC |
| INSULATION RESISTANCE | | 100MΩ MIN 250V DC | 100MΩ MIN 250V DC | 100MΩ MIN 250V DC | 100MΩ MIN 250V DC |
| DIRECT CURRENT RESISTANCE | | 0.5Ω MAX | 0.2Ω MAX | 0.15Ω MAX | 0.1MAX |
| TEMPERATURE RISE | | 30°C MAX | 30°C MAX | 30°C MAX | 30°C MAX |
| OPERATING TEMPERATURE | | -25 ~ +85°C | -25 ~ +85°C | -25 ~ +85°C | -25 ~ +85°C |
| ATTENUATION | NORMAL MODE 25db MIN | 0.50 ~ 35MHZ | 0.70 ~ 50MHZ | 0.90 ~ 50MHZ | 1.30 ~ 50MHZ |
| | COMMON MODE 25dbMIN | 0.10 ~ 30MHZ | 0.20 ~ 50MHZ | 0.60 ~ 50MHZ | 1.30 ~ 50MHZ |

### CIRCUIT



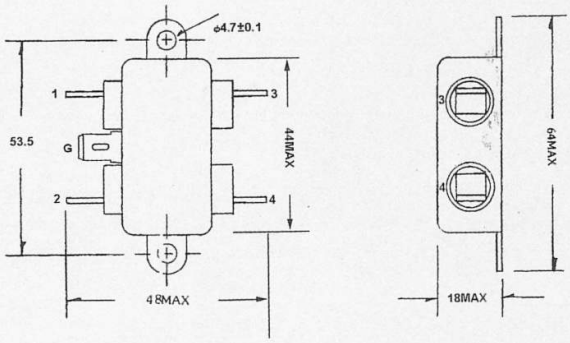

## NOISE ATTENUATION ( —— NORMAL MODE, —— COMMON MODE )




—— NORMAL MODE —— COMMON MODE

## DIMENSION

YK-T1

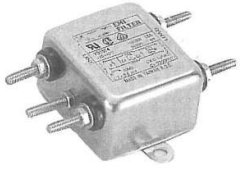


# YC-T1, YD-T4, SERIES

## FEATURES

- Superior performance controlling EMI suppression of both line-to-line and line-to-ground noise
- 250 Faston terminals(YC-T1)
- SOLDER LUG TERMINALS(YD-T4)
- All parts of YC-T1 are approved by UL and CSA
- All parts of YD-T4 are approved by UL, CSA and VDE

YC-T1

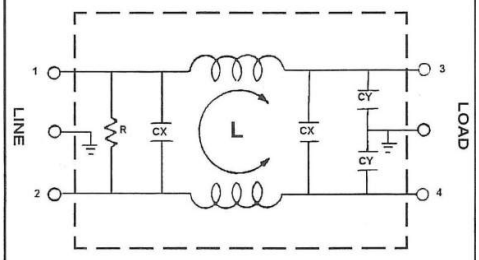


YD-T4

## SPECIFICATIONS

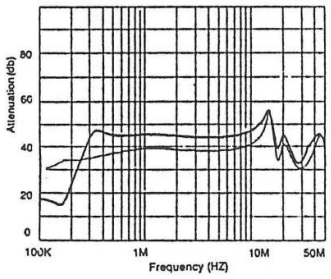
| ITEM \ MODEL | | YC05T1/YD05T4 | YC10T1/YD10T4 | YC15T1/YD15T4 | YC20T1/YD20T4 |
|---|---|---|---|---|---|
| RATED VOLTAGE | | 250V AC | 250V AC | 250V AC | 250V AC |
| RATED CURRENT | | 5A | 10A | 15A | 20A |
| LEAK CURRENT | | 0.8mA MAX 250V,50HZ | 0.8mA MAX 250V,50HZ | 0.8mA MAX 250V,50HZ | 0.8mA MAX 250V,50HZ |
| TEST VOLTAGE | LINE TO LINE | 1450V DC | 1450V DC | 1450V DC | 1450V DC |
| | LINE TO GROUND | 2250V DC | 2250V DC | 2250V DC | 2250V DC |
| INSULATION RESISTANCE | | 100MΩ MIN 250V DC | 100MΩ MIN 250V DC | 100MΩ MIN 250V DC | 100MΩ MIN 250V DC |
| DIRECT CURRENT RESISTANCE | | 0.3Ω MAX | 0.15Ω MAX | 0.1Ω MAX | 0.05ΩMAX |
| TEMPERATURE RISE | | 30°C MAX | 30°C MAX | 30°C MAX | 30°C MAX |
| OPERATING TEMPERATURE | | -25 ~ +85°C | -25 ~ +85°C | -25 ~ +85°C | -25 ~ +85°C |
| ATTENUATION | NORMAL MODE 25db MIN | 0.27 ~ 45MHZ | 0.36 ~ 50MHZ | 0.50 ~ 50MHZ | 1.60 ~ 50MHZ |
| | COMMON MODE 25dbMIN | 0.30 ~ 40MHZ | 0.67 ~ 50MHZ | 1.80 ~ 50MHZ | 1.80 ~ 50MHZ |

### CIRCUIT

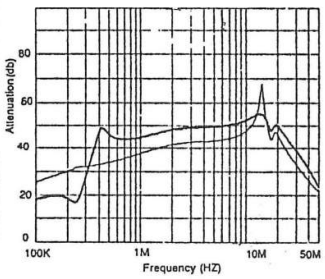



## NOISE ATTENUATION ( ——— NORMAL MODE, —— COMMON MODE )

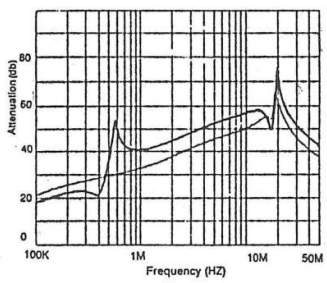
YC05T1/YD05T4



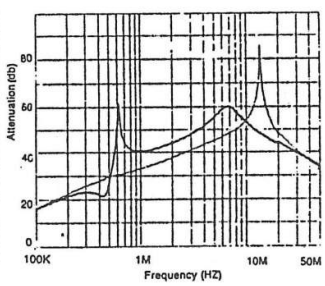

YC10T1/YD10T4




YC15T1/YD15T4

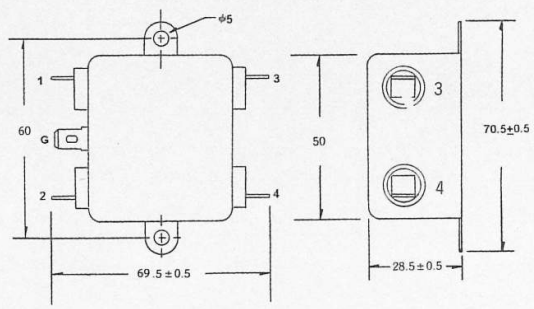



YC20T1/YD20T4

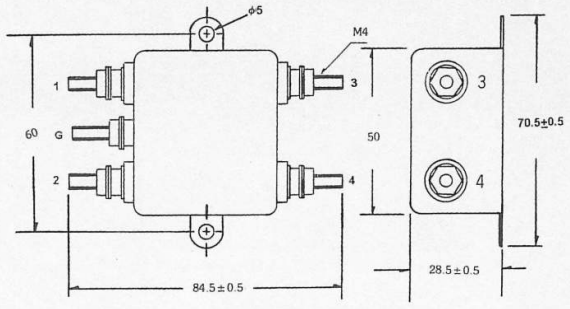



## DIMENSION

YC-T1



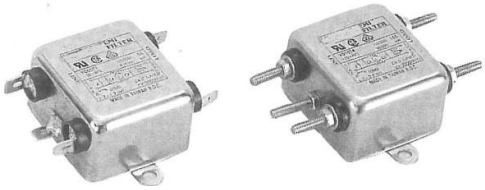

YD-T4



# YC-T1L2, YD-T4L2 SERIES

## FEATURES

- Two stage filters designed to provide high performance in suppressing both line-to-line and line-to-ground noise for most digital electronic equipment
- 250 Faston terminals(YC-T1L2)
- SOLDER LUG TERMINALS(YD-T4L2)
- All parts of YC-T1L2 are approved by UL AND CSA EXCEPT YC10T1L2
- All parts of YD-T4L2 are approved by UL , CSA AND VDE EXCEPT YD10T4L2

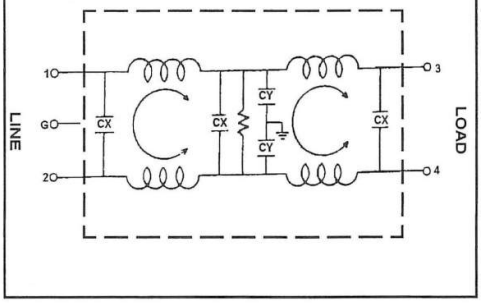


YC-T1L2 YD-T4L2

## SPECIFICATIONS

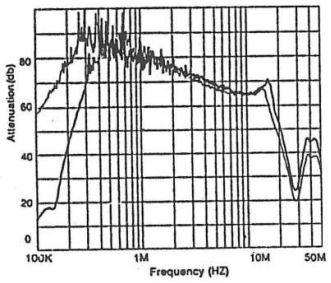
| ITEM \ MODEL | | YC01T1L2/YD01T4L2 | YC03T1L2/YD03T4L2 | YC06T1L2/YD06T4L2 | YC10T1L2/YD10T4L2 |
|---|---|---|---|---|---|
| RATED VOLTAGE | | 250V AC | 250V AC | 250V AC | 250V AC |
| RATED CURRENT | | 1A | 3A | 6A | 10A |
| LEAK CURRENT | | 0.8mA MAX 250V,50HZ | 0.8mA MAX 250V,50HZ | 0.8mA MAX 250V,50HZ | 0.8mA MAX 250V,50HZ |
| TEST VOLTAGE | LINE TO LINE | 1450V DC | 1450V DC | 1450V DC | 1450V DC |
| | LINE TO GROUND | 2250V DC | 2250V DC | 2250V DC | 2250V DC |
| INSULATION RESISTANCE | | 100MΩ MIN 250V DC | 100MΩ MIN 250V DC | 100MΩ MIN 250V DC | 100MΩ MIN 250V DC |
| DIRECT CURRENT RESISTANCE | | 0.7Ω MAX | 0.3Ω MAX | 0.15Ω MAX | 0.1ΩMAX |
| TEMPERATURE RISE | | 30°C MAX | 30°C MAX | 30°C MAX | 30°C MAX |
| OPERATING TEMPERATURE | | -25 ~ +85°C | -25 ~ +85°C | -25 ~ +85°C | -25 ~ +85°C |
| ATTENUATION | NORMAL MODE 25db MIN | 0.25 ~ 15MHZ | 0.40 ~ 28MHZ | 0.60 ~ 30MHZ | 0.85 ~ 42MHZ |
| | COMMON MODE 25dbMIN | 0.10 ~ 15MHZ | 0.18 ~ 22MHZ | 0.40 ~ 25MHZ | 1.00 ~ 30MHZ |

**CIRCUIT**

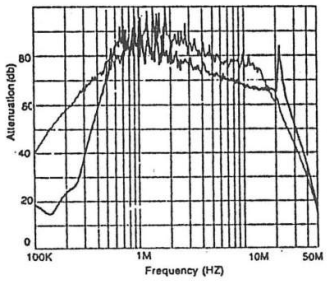



## NOISE ATTENUATION ( —— NORMAL MODE, —— COMMON MODE )

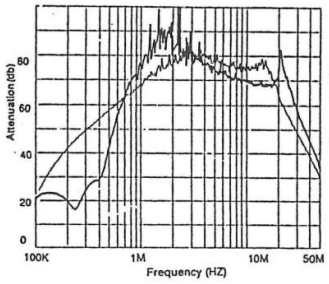
YC01T1L2/YC01T4L2



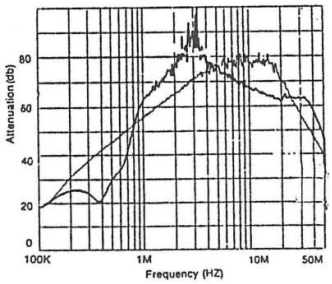

YC03T1L2/YC03T4L2




YC06T1L2/YC06T4L2

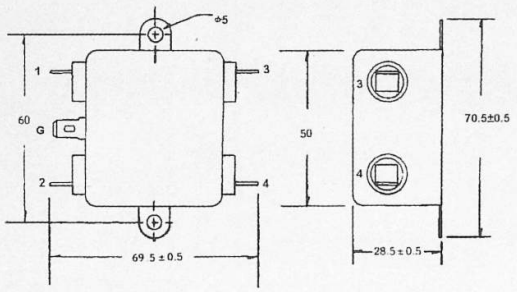



YC10T1L2/YC10T4L2

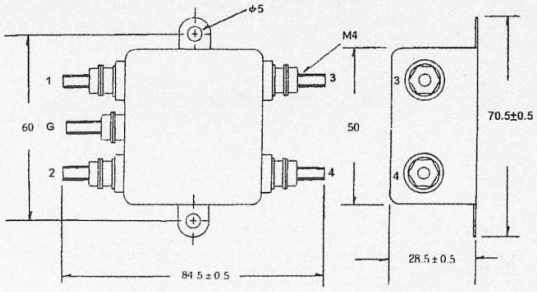



## DIMENSION

YC-T1L2




YD-T4L2



# YE-T1L2, YE-T4L2 SERIES

## FEATURES

- Two stage filters designed to provide high performance in suppressing both line-to-line and line-to-ground noise for most digital electronic equipment
- 250 Faston terminals(YE-T1L2)
- screw output terminals M-4 (YE-T4L2)
- all parts of YE-T1L2 and YE-T4L2 are approved by UL, CSA and VDE

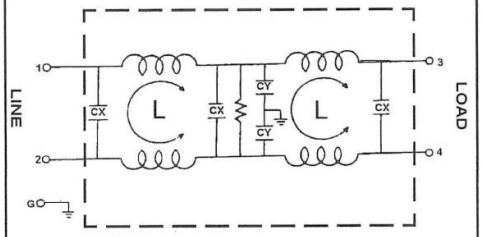
YE-T1L2

YE-T4L2

## SPECIFICATIONS

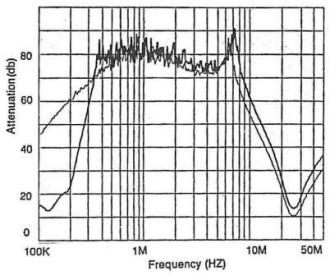
| ITEM \ MODEL | | YE05T1L2/YE05T4L2 | YE10T1L2/YE10T4L2 | YE15T1L2/YE15T4L2 | YE20T1L2/YEA20T4L2 |
|---|---|---|---|---|---|
| RATED VOLTAGE | | 250V AC | 250V AC | 250V AC | 250V AC |
| RATED CURRENT | | 5A | 10A | 15A | 20A |
| LEAK CURRENT | | 0.8mA MAX 250V,50HZ | 0.8mA MAX 250V,50HZ | 0.8mA MAX 250V,50HZ | 0.8mA MAX 250V,50HZ |
| TEST VOLTAGE | LINE TO LINE | 1450V DC | 1450V DC | 1450V DC | 1450V DC |
| | LINE TO GROUND | 2250V DC | 2250V DC | 2250V DC | 2250V DC |
| INSULATION RESISTANCE | | 100MΩ MIN 250V DC | 100MΩ MIN 250V DC | 100MΩ MIN 250V DC | 100MΩ MIN 250V DC |
| DIRECT CURRENT RESISTANCE | | 0.3Ω MAX | 0.15Ω MAX | 0.1Ω MAX | 0.05MAX |
| TEMPERATURE RISE | | 30°C MAX | 30°C MAX | 30°C MAX | 30°C MAX |
| OPERATING TEMPERATURE | | -25 ~ +85°C | -25 ~ +85°C | -25 ~ +85°C | -25 ~ +85°C |
| ATTENUATION | NORMAL MODE 25db MIN | 0.25 ~ 12MHZ | 0.33 ~ 13MHZ | 0.61 ~ 50MHZ | 0.68 ~ 50MHZ |
| | COMMON MODE 25dbMIN | 0.10 ~ 10MHZ | 0.26 ~ 11MHZ | 0.40 ~ 48MHZ | 0.40 ~ 50MHZ |

### CIRCUIT

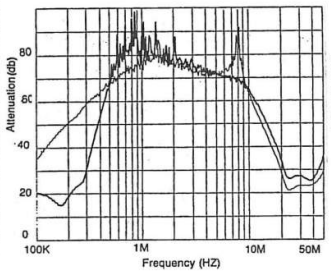



## NOISE ATTENUATION ( —— NORMAL MODE, —— COMMON MODE )

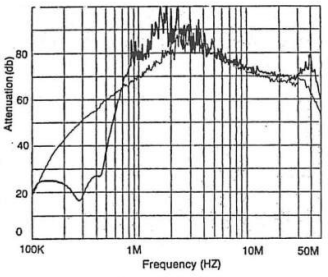
YE05T1L2/YE05T4L2



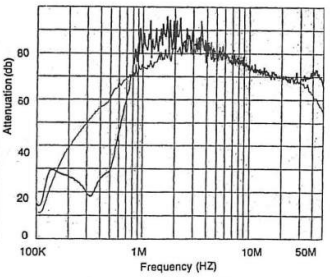

YE10T1L2/YE10T4L2




YE15T1L2/YE15T4L2

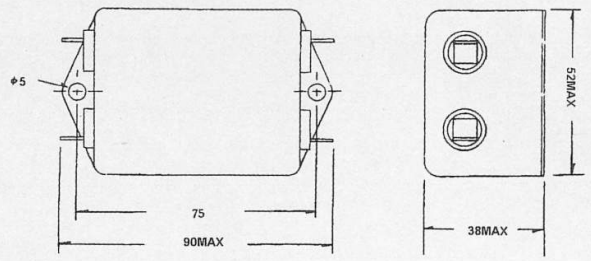



YE20T1L2/YE20T4L2

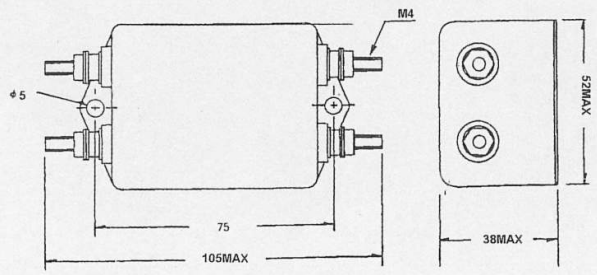



## DIMENSION

YE-T1L2



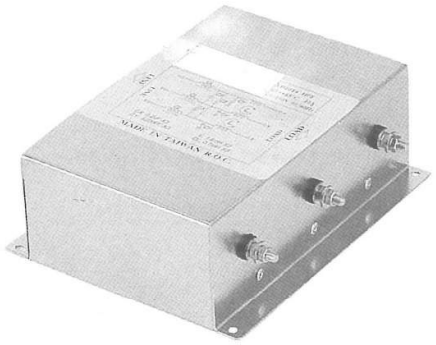

YE-T4L2



# YJ-T7 SERIES

## FEATURES:

- GOOD NOISE ATTENUATION IN BOTH FORWARD AND REVERSE DIRECTIONS FOR COMMON MODE AND NORMAL MODE.
- HIGH RELIBAILITY DESIGNED FOR INDUSTRIAL EQUIPMENT USAGE WITH ONE PHASES, 250V/500 VAC

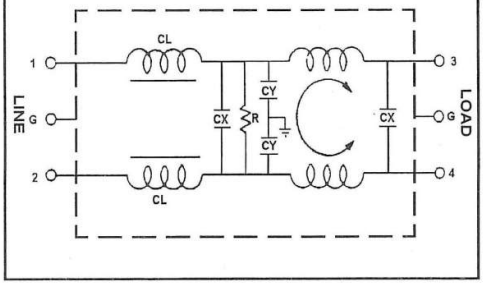


YJ-T7

## SPECIFICATIONS

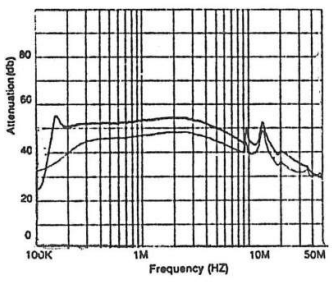
| ITEM \ MODEL | | YJ30T7 | YJ40T7 | YJ50T7 | YJ60T7 |
|---|---|---|---|---|---|
| RATED VOLTAGE | | 250V AC | 250V AC | 250V AC | 250V AC |
| RATED CURRENT | | 30A | 40A | 50A | 60A |
| LEAK CURRENT | | 0.8mA MAX 250V,50HZ | 0.8mA MAX 250V,50HZ | 0.8mA MAX 250V,50HZ | 0.8mA MAX 250V,50HZ |
| TEST VOLTAGE | LINE TO LINE | 1450V DC | 1450V DC | 1450V DC | 1450V DC |
| | LINE TO GROUND | 2250V DC | 2250V DC | 2250V DC | 2250V DC |
| INSULATION RESISTANCE | | 100MΩ MIN 250V DC | 100MΩ MIN 250V DC | 100MΩ MIN 250V DC | 100MΩ MIN 250V DC |
| DIRECT CURRENT RESISTANCE | | 0.08Ω MAX | 0.06Ω MAX | 0.04Ω MAX | 0.03MAX |
| TEMPERATURE RISE | | 30°C MAX | 30°C MAX | 30°C MAX | 30°C MAX |
| OPERATING TEMPERATURE | | -25 ~ +85°C | -25 ~ +85°C | -25 ~ +85°C | -25 ~ +85°C |
| ATTENUATION | NORMAL MODE 25db MIN | 0.60 ~ 45MHZ | 0.80 ~ 50MHZ | 0.80 ~ 50MHZ | 1.00 ~ 50MHZ |
| | COMMON MODE 25dbMIN | 0.10 ~ 40MHZ | 0.20 ~ 50MHZ | 0.40 ~ 50MHZ | 1.00 ~ 50MHZ |

### CIRCUIT

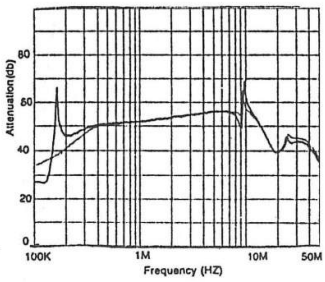



## NOISE ATTENUATION ( —— NORMAL MODE, —— COMMON MODE )

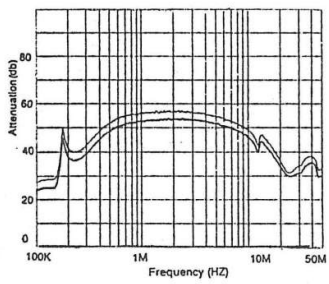
YJ30T7



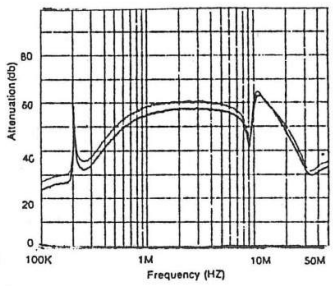

YJ40T7




YJ50T7

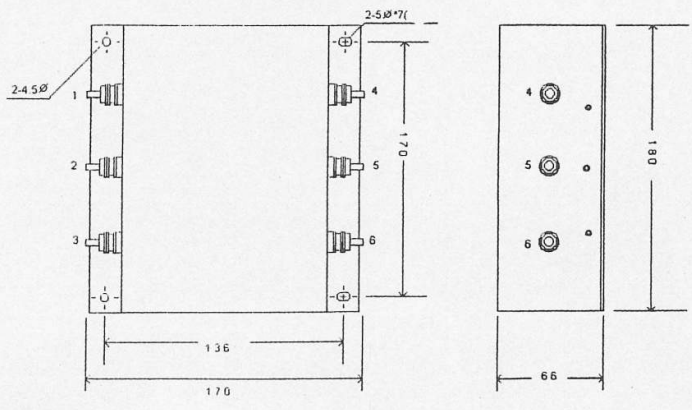



YJ60T7




## DIMENSION

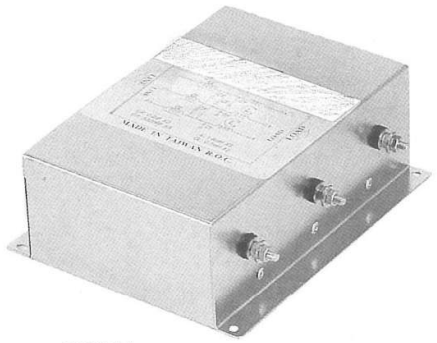
YJ-T7



# YH-T4 SERIES

## FEATURES:

- Good noise attenuation in both forward and reverse directions for common mode and normal mode.
- High relibaility designed for industrial equipment usage with 3 phases, 250v/500 vac

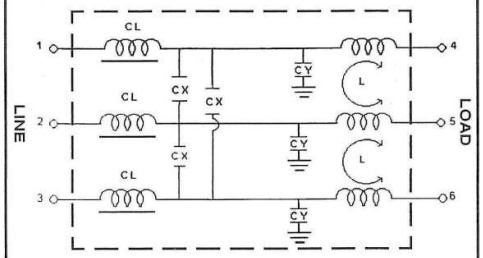


YH-T4

## SPECIFICATIONS

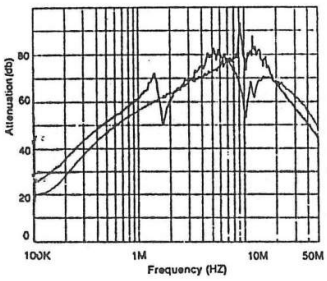
| ITEM \ MODEL | | YH10T4/YH10T4-1 | YH15T4/YH15T4-1 | YH20T4/YH20T4-1 | YH30T4/YH30T4-1 |
|---|---|---|---|---|---|
| RATED VOLTAGE | | 250V AC/500V AC | 250V AC/500V AC | 250V AC/500V AC | 250V AC/500V AC |
| RATED CURRENT | | 10A | 15A | 20A | 30A |
| LEAK CURRENT | | 1.3mA MAX 250V,50HZ<br>3.0mA MAX 500V,50HZ | 1.3mA MAX 250V,50HZ<br>3.0mA MAX 500V,50HZ | 1.3mA MAX 250V,50HZ<br>3.0mA MAX 500V,50HZ | 1.3mA MAX 250V,50HZ<br>3.0mA MAX 500V,50HZ |
| TEST VOLTAGE | LINE TO LINE | 1450V DC | 1450V DC | 1450V DC | 1450V DC |
| | LINE TO GROUND | 2250V DC | 2250V DC | 2250V DC | 2250V DC |
| INSULATION RESISTANCE | | 100MΩ MIN 250V DC<br>100MΩ MIN 500V DC | 100MΩ MIN 250V DC<br>100MΩ MIN 500V DC | 100MΩ MIN 250V DC<br>100MΩ MIN 500V DC | 100MΩ MIN 250V DC<br>100MΩ MIN 500V DC |
| DIRECT CURRENT RESISTANCE | | 0.5Ω MAX | 0.2Ω MAX | 0.15Ω MAX | 0.10ΩMAX |
| TEMPERATURE RISE | | 30°C MAX | 30°C MAX | 30°C MAX | 30°C MAX |
| OPERATING TEMPERATURE | | -25 ~ +85°C | -25 ~ +85°C | -25 ~ +85°C | -25 ~ +85°C |
| ATTENUATION | NORMAL MODE 25db MIN | 0.16 ~ 50MHZ | 0.80 ~ 50MHZ | 0.80 ~ 50MHZ | 1.38 ~ 50MHZ |
| | COMMON MODE 25dbMIN | 0.24 ~ 50MHZ | 0.20 ~ 50MHZ | 0.40 ~ 50MHZ | 0.70 ~ 50MHZ |

### CIRCUIT

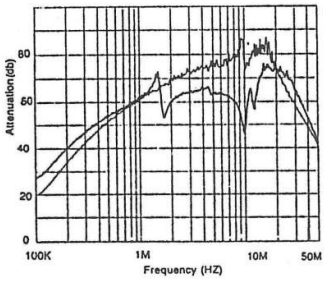



## NOISE ATTENUATION ( —— NORMAL MODE, —— COMMON MODE )

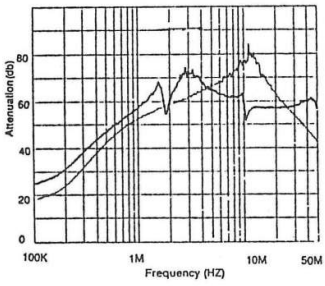
YH10T4/YH10T4-1



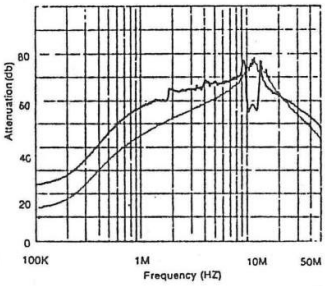

YH15T4/YH15T4-1




YH20T4/YH20T4-1

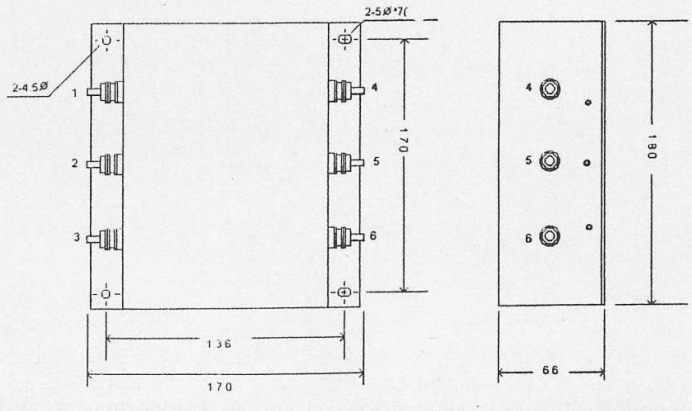



YH30T4/YH30T4-1




## DIMENSION

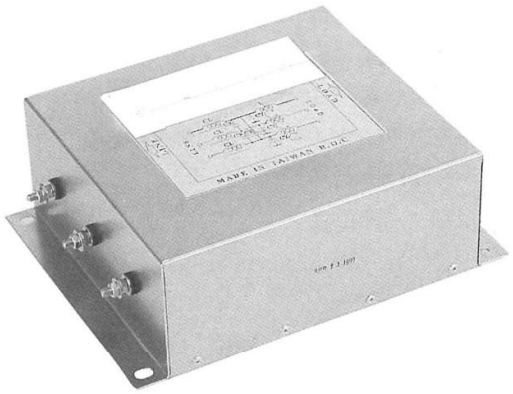
YH-T4



# YI-T7 SERIES

## FEATURES:

- Good noise attenuation in both forward and reverse directions for common mode and normal mode.
- High relibaility designed for industrial equipment usage with 3 phases, 250v/500 vac

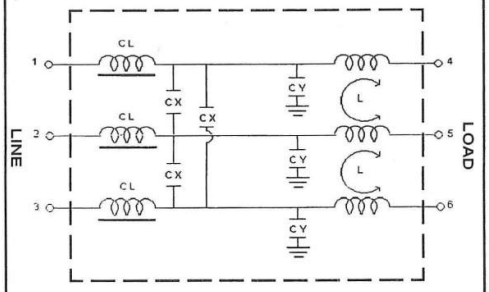


YI-T7

## SPECIFICATIONS

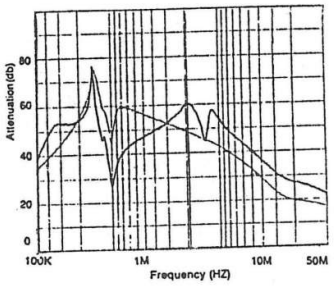
| ITEM \ MODEL | | YI40T7/YI40T7-1 | YI50T7/YI50T7-1 | YI60T7/YI60T7-1 |
|---|---|---|---|---|
| RATED VOLTAGE | | 250V AC/500V AC | 250V AC/500V AC | 250V AC/500V AC |
| RATED CURRENT | | 40A | 50A | 60A |
| LEAK CURRENT | | 1.3mA MAX250V,50HZ<br>3.0mA MAX 500V,50HZ | 1.3mA MAX250V,50HZ<br>3.0mA MAX 500V,50HZ | 1.3mA MAX250V,50HZ<br>3.0mA MAX 500V,50HZ |
| TEST VOLTAGE | LINE TO LINE | 1450V DC | 1450V DC | 1450V DC |
| | LINE TO GROUND | 2250V DC | 2250V DC | 2250V DC |
| INSULATION RESISTANCE | | 100MΩ MIN 250V DC<br>100MΩ MIN 500V DC | 100MΩ MIN 250V DC<br>100MΩ MIN 500V DC | 100MΩ MIN 250V DC<br>100MΩ MIN 500V DC |
| DIRECT CURRENT RESISTANCE | | 0.08Ω MAX | 0.06 ΩMAX | 0.04Ω MAX |
| TEMPERATURE RISE | | 30°C MAX | 30°C MAX | 30°C MAX |
| OPERATING TEMPERATURE | | -25 ~ +85°C | -25 ~ +85°C | -25 ~ +85°C |
| ATTENUATION | NORMAL MODE 25db MIN | 0.14 ~ 50MHZ | 0.17 ~ 50MHZ | 0.30 ~ 9.5MHZ |
| | COMMON MODE 25dbMIN | 0.25 ~ 50MHZ | 0.31 ~ 50MHZ | 0.42~ 50MHZ |

### CIRCUIT

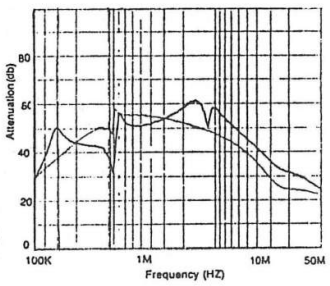



## NOISE ATTENUATION ( —— NORMAL MODE, —— COMMON MODE )

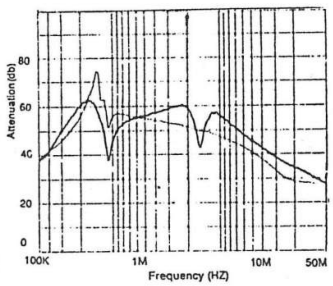
YI40T7/YI40T7-1




YI50T7/YI50T7-1

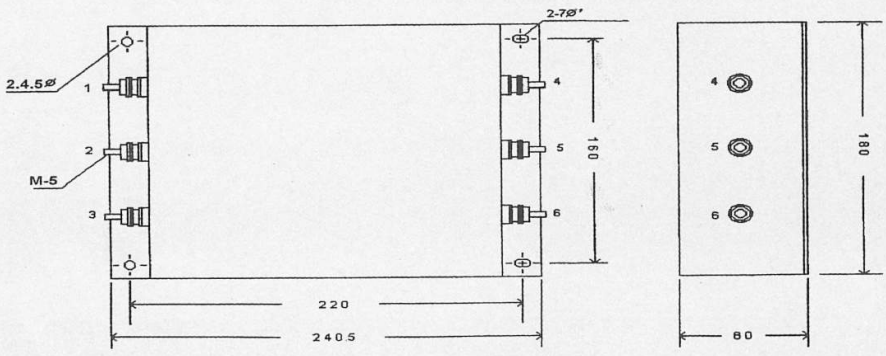



YI60T7/YI60T7-1




## DIMENSION

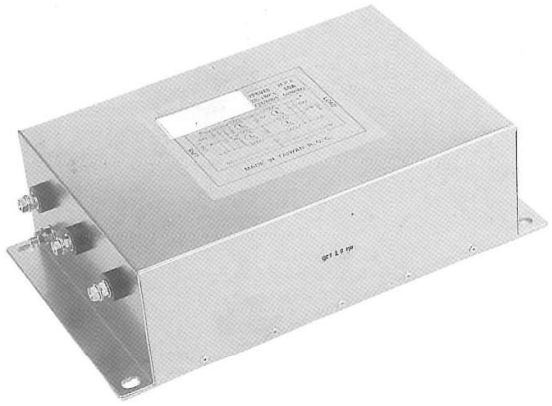
YI-T7



# YP-T8,T10,YP-T12 SERIES

## FEATURES:

- Good noise attenuation in both forward and reverse directions for common mode and normal mode.
- High relibaility designed for industrial equipment usage with 3 phases, 500 vac

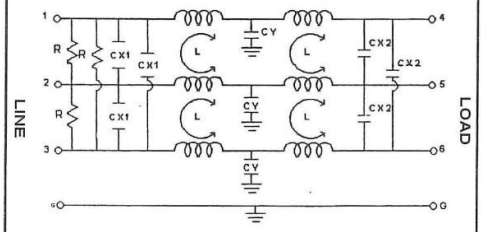


YP

## SPECIFICATIONS

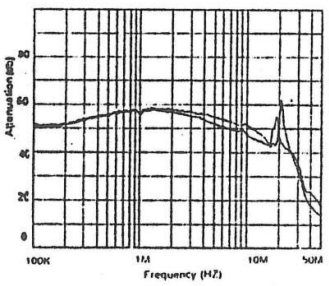
| ITEM \ MODEL | | YP60T8 | YP80T8 | YP100T8 | YP150T8 |
|---|---|---|---|---|---|
| RATED VOLTAGE | | 500V AC | 500V AC | 500V AC | 500V AC |
| RATED CURRENT | | 60A | 80A | 100A | 150A |
| LEAK CURRENT | | 82mA MAX 500V,50HZ | 82mA MAX 500V,50HZ | 82mA MAX 500V,50HZ | 82mA MAX 500V,50HZ |
| TEST VOLTAGE | LINE TO LINE | 1450V DC | 1450V DC | 1450V DC | 1450V DC |
| | LINE TO GROUND | 2250V DC | 2250V DC | 2250V DC | 2250V DC |
| INSULATION RESISTANCE | | 100MΩ MIN 500V DC | 100MΩ MIN 500V DC | 100MΩ MIN 500V DC | 100MΩ MIN 500V DC |
| DIRECT CURRENT RESISTANCE | | 0.04Ω MAX | 0.04Ω MAX | 0.04Ω MAX | 0.04MAX |
| TEMPERATURE RISE | | 30°C MAX | 30°C MAX | 30°C MAX | 30°C MAX |
| OPERATING TEMPERATURE | | -25 ~ +85°C | -25 ~ +85°C | -25 ~ +85°C | -25 ~ +85°C |

### CIRCUIT

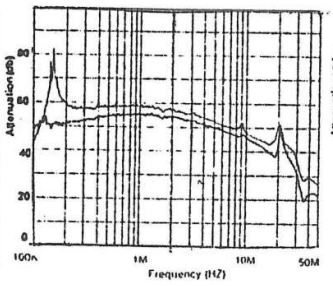



## NOISE ATTENUATION ( —— NORMAL MODE, —— COMMON MODE )

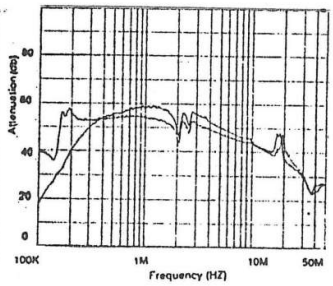
YP60T8



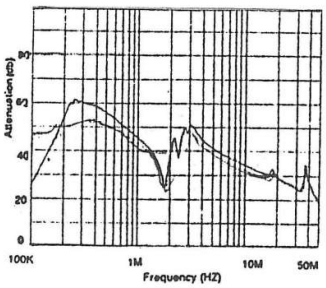

YP80T10




YP100T10

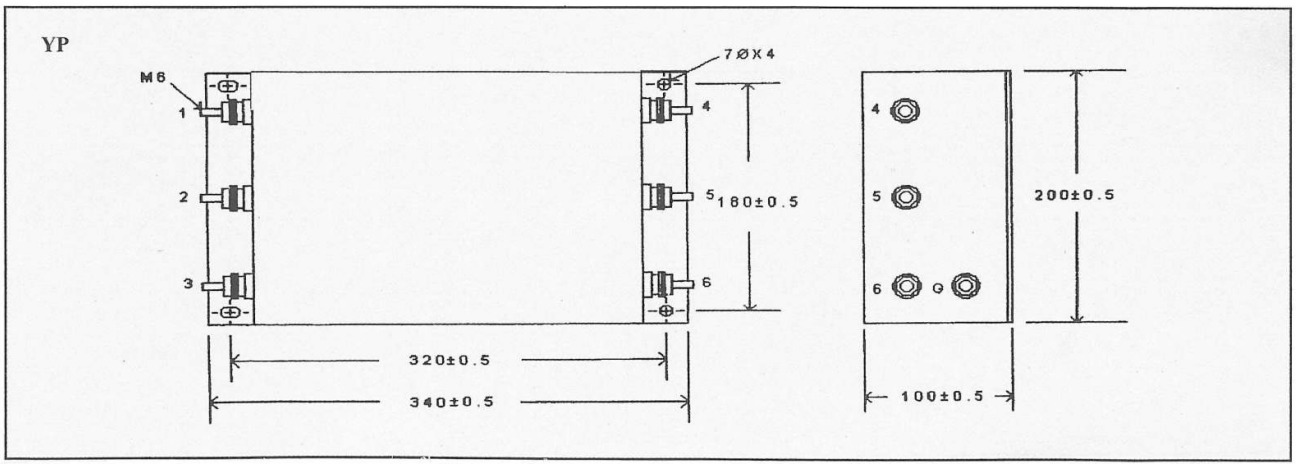



YP150T12




## DIMENSION(mm)

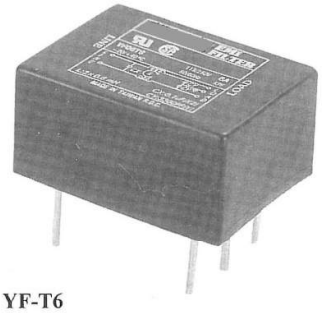
YP



# YF-T6 SERIES

## FEATURES

- Low cost type
- Printed circuit terminals
- All parts are approved by UL and CSA

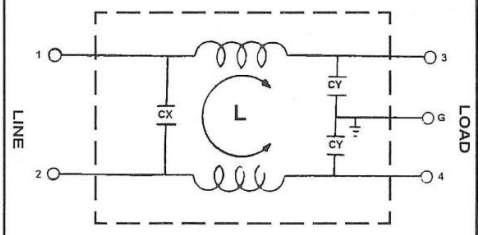


YF-T6

## SPECIFICATIONS

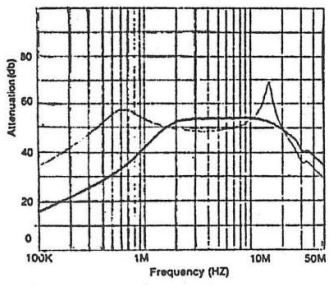
| ITEM \ MODEL | | YF01T6 | YF03T6 | YF06T6 | YF10T6 |
|---|---|---|---|---|---|
| RATED VOLTAGE | | 250V AC | 250V AC | 250V AC | 250V AC |
| RATED CURRENT | | 1A | 3A | 6A | 10A |
| LEAK CURRENT | | 0.8mA MAX 250V,50HZ | 0.8mA MAX 250V,50HZ | 0.8mA MAX 250V,50HZ | 0.8mA MAX 250V,50HZ |
| TEST VOLTAGE | LINE TO LINE | 1450V DC | 1450V DC | 1450V DC | 1450V DC |
| | LINE TO GROUND | 2250V DC | 2250V DC | 2250V DC | 2250V DC |
| INSULATION RESISTANCE | | 100MΩ MIN 250V DC | 100MΩ MIN 250V DC | 100MΩ MIN 250V DC | 100MΩ MIN 250V DC |
| DIRECT CURRENT RESISTANCE | | 0.5Ω MAX | 0.2Ω MAX | 0.15Ω MAX | 0.1MAX |
| TEMPERATURE RISE | | 30°C MAX | 30°C MAX | 30°C MAX | 30°C MAX |
| OPERATING TEMPERATURE | | -25 ~ +85°C | -25 ~ +85°C | -25 ~ +85°C | -25 ~ +85°C |
| ATTENUATION | NORMAL MODE 25db MIN | 0.50 ~ 50MHZ | 0.70 ~ 40MHZ | 1.00 ~ 50MHZ | 1.50 ~ 50MHZ |
| | COMMON MODE 25dbMIN | 0.10 ~ 50MHZ | 0.20 ~ 35MHZ | 0.70 ~ 50MHZ | 1.50 ~ 50MHZ |

### CIRCUIT

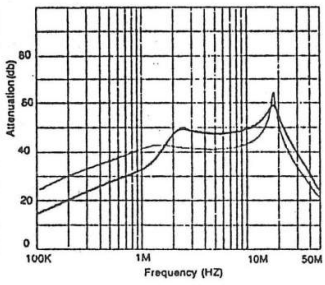



## NOISE ATTENUATION ( ——— NORMAL MODE, —— COMMON MODE )

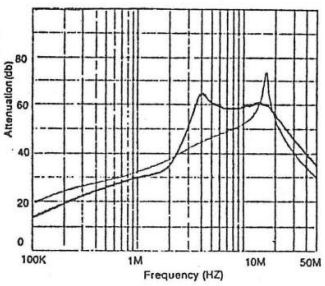
YF01T6



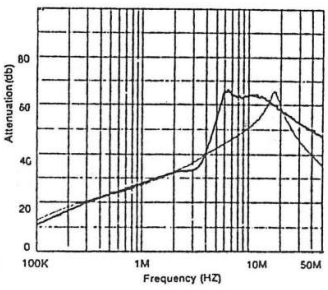

YF03T6




YF06T6

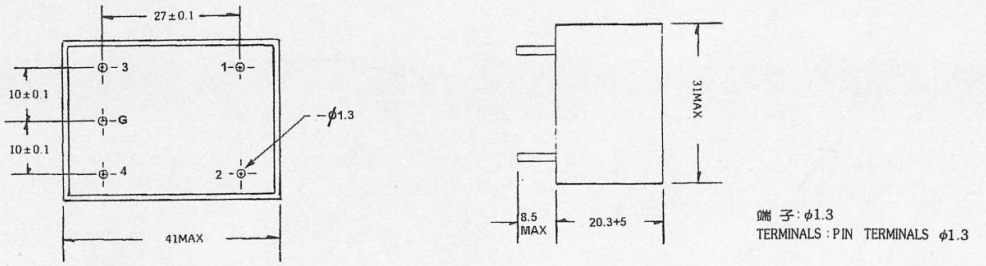



YF10T6




## DIMENSION

YF-T6



# OTHER IEC FILTER PRODUCTS

# PLEASE ENQUIRE FOR DETAILS

FOR MEDICAL EQUIPMENT

## Power entry modules with mains filter Types KPF, KFA, KFB II, KFC, CD, CE, CG

for medical applications

**Technical data**

| $I_n$ (A) $T_a$ 45 °C* | $U_n$ (V) | Max. leakage curr. (µA) @ 250 V/50 Hz | $C_{x2}$ (nF) | L (mH) | Test voltage L,N→E | Test voltage L→N |
|---|---|---|---|---|---|---|
| 1 | up to 250 V max. 50/60 Hz | < 5 | 68 | 10 | 2 kV 50 Hz 2 sec. | 1625 V DC 2 sec. |
| 2 | | < 5 | 68 | 4 | | |
| 4 | | < 5 | 68 | 1,5 | | |
| 6 | | < 5 | 68 | 0,8 | | |
| 10 | | < 5 | 68 | 0,3 | | |

* VDE $T_a$ 40 °C

- Further specifications see pages standard types
- Attenuation loss available on request

**Order No. Socket KFA** fuse-drawer "Extra-Safe" must be ordered separately

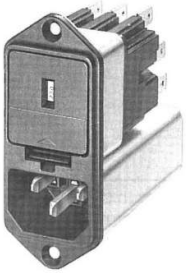
| Fuseholder 2-pole | Voltage selector max. 3 pos. | $I_n$ (A) $T_a$ 45 °C |
|---|---|---|
| 4301.5241 | • | 1 |
| 4301.5243 | • | 2 |
| 4301.5245 | • | 4 |
| 4301.5247 | • | 6 |
| 4301.5249 | • | 10 |

**Order No. Socket CD** fuse-drawer "Extra-Safe" and Bowden cable must be ordered separately

| Rocker switch non illuminated | Bowden cable actuation | Fuseholder 2-pole | Volt. selector max. 4 pos. | $I_n$ (A) $T_a$ 45 °C |
|---|---|---|---|---|
| CDG4.4101.151 | CDG4.4199.151 | • | • | 1 |
| CDA4.4101.151 | CDA4.4199.151 | • | • | 2 |
| CDC4.4101.151 | CDC4.4199.151 | • | • | 4 |
| CDE4.4101.151 | CDE4.4199.151 | • | • | 6 |
| CDL4.4101.151 | | • | • | 10 |

## Power entry modules Type CE

with mains filter for standard and medical applications with fuseholder and voltage selector with series-parallel connections

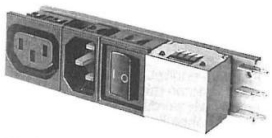


## Power entry modules with mains filter Type CG

with fuseholder, voltage selector and On/Off switch with or without Bowden cable actuation

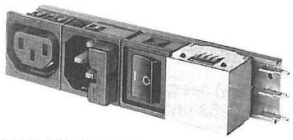
## Power entry modules Type 54 FELCOM

with mains filter Standard-Combinations



5431.X05X.XXX

5411.XX5X.XXX

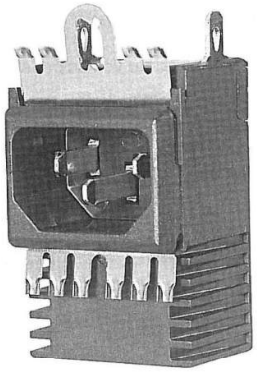


5432.XX5X.XXX

NEW

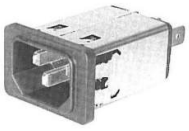
## Appliance inlet Type GRF4 with mains filter and EM-Shield

For standard or medical applications



## Appliance inlet Type 5100/5110

with mains filter for standard or medical applications

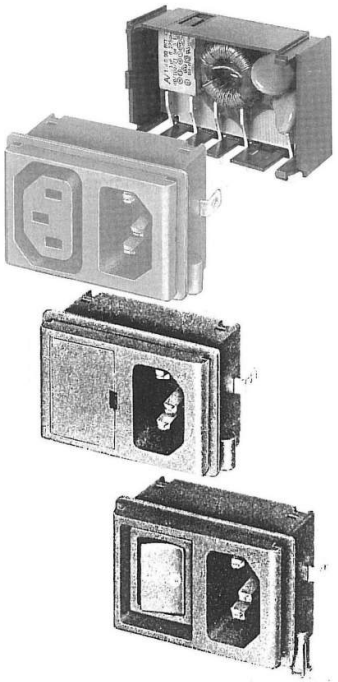


Snap-in mounting

NEW

## Power entry modules Type KPF

"Backpack" RFI filter for standard or medical applications for PCB mount



# OTHER FILTERS

This catalogue contains our regular filter product range at time of printing. If these do not meet you requirements, please enquire. Many other products are available to customer order, and new products are under development.