# EMI FILTERS



# ARLIN

# ARLIN

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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.



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## 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.
- 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 mount4. 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 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.

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### 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 Schurter C20F	1,3,6,10 16, 20	Screw mount C20 20Amp inlet	4. 5.
2. IEC COMBINATION Fused Screw-in Fused Screw/Snap-in Fused voltage selector Switched/Screw-in Switched/Fused & voltage selector	Arlin YL Schurter 5200 Schurter KFA Schurter KFB Schurter CD	1,3,6,10 1,2,4,6,8,10 1,2,4,6,10 1,2,4,6,10 1,2,4,6,10	M205 fused M205 fused Voltage selector incl'd With SP switch DP switch, M205/3AG fuse & volt selector	6. 7. 8. 9.
3. CHASSIS Single stage Two stage High current Three phase High current 3 phase High current 3 phase	Arlin YK Arlin YC Arlin YC-L2 Arlin YE-L2 Arlin YJ Arlin YH Arlin YI Arlin YP	1,3,6,10 5,10,15,20 1,3,6,10 15,20 20,40,50,60 10,15,20,30 40,50,60 60,80,100,150	Compact metal cased Metal cased High attenuation Highest attenuation M5 screw terminals M4 screw terminals M5 screw terminals M6 screw terminals	12. 13. 14. 15. 16. 17. 18
4. PCB MOUNT Plastic cased	Arlin YF	<b>1,3,</b> 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.



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## 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





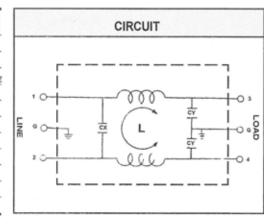


YB-A1

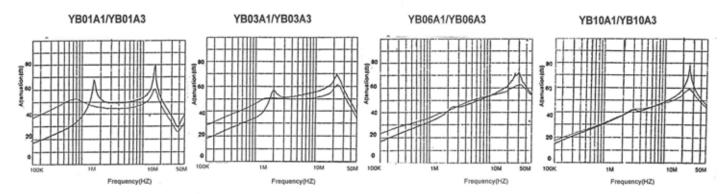
YB-A3

#### ■ SPECIFICATIONS

ITEM	MODEL	YB01A1/YB01A3	YB03A1/YB03A3	YB06A1/YB06A3	YB10A1/YB10A3
RATE	ED VOLTAGE	250V AC	250V AC	250V AC	250V AC
RATE	ED 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
	LINE TO LINE	1450V DC	1450V DC	1450V DC	1450V DC
TEST VOLTAGE	LINE TO GROUND	2250V DC	2250V DC	2250V DC	2250V DC
INSL	JLATION RESISTANCE	100MΩ MIN 250V DC			
DIRE	CT CURRENT RESISTANCE	0.5Q MAX	. 0.2Ω MAX	0.15Ω MAX	0.1ΩMAX
TEM	PERATURE RISE	30°C MAX	30°C MAX	30°C MAX	30°C MAX
OPE	RATING TEMPERATURE	-25 ~ +85°C	-25 ~ +85°C	-25 ~ +85°C	-25 ~ +85°C
	NORMAL MODE 25db MIN	0.50 ~ 45MHZ	0.60 ~ 50MHZ	0.80 ~ 50MHZ	1.20 ~ 50MHZ
ATTENUATION	COMMON MODE 25dbMIN	0.10 ~ 40MHZ	0.15 ~ 50MHZ	0.40 ~ 50MHZ	1.40 ~ 50MHZ

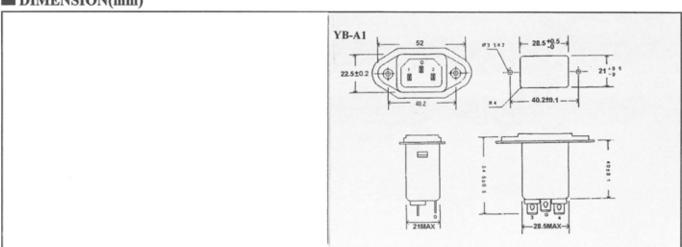


## NOISE ATTENUATION ( NORMAL MODE, — COMMON MODE)

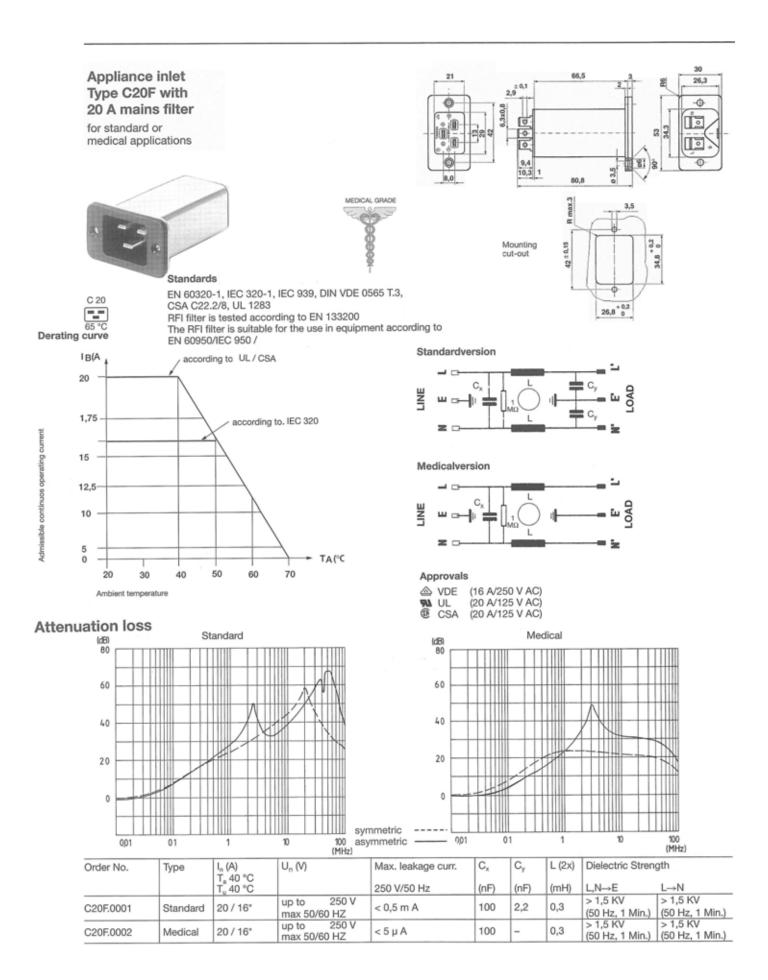


## ■ DIMENSION(mm)

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## **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.

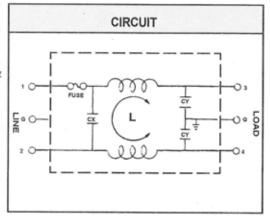




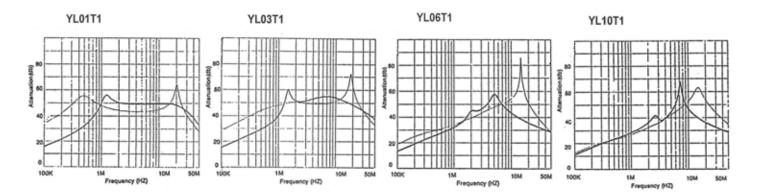
YL-T1

## ■ SPECIFICATIONS

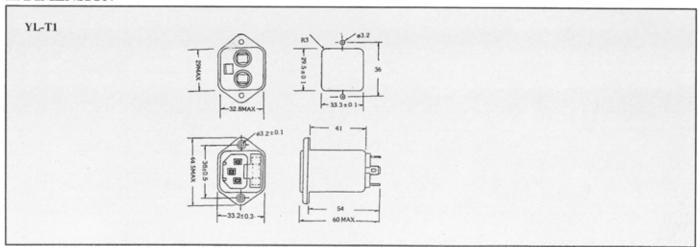
ITEM	MODEL	YL01T1	YL03T1	YL06T1	YL10T1
RATE	VOLTAGE	250V AC	250V AC	250V AC	250V AC
RATE	CURRENT	1A	3A	6A	10A
LEAK	CURRENT	0.8mA MAX 250V,50HZ	0.8mA MAX 250V,50HZ	0.8mA MAX 250V,50HZ	0.8mA MAX 250V,50HZ
TEST VOLTAGE	LINE TO LINE	1450V DC	1450V DC	1450V DC	1450V DC
TEST VOLIMOE	LINE TO GROUND	2250V DC	2250V DC	2250V DC	2250V DC
INSUL	ATION RESISTANCE	100MΩ MIN 250V DC			
DIREC	T CURRENT RESISTANCE	0.5Ω MAX	0.2Ω MAX	0.15Ω MAX	0.1ΩMAX
TEMP	ERATURE RISE	30°C MAX	30°C MAX	30°C MAX	30°C MAX
OPER/	ATING TEMPERATURE	-25 ~ +85°C	-25 ~ +85°C	-25 ~ +85°C	-25 ~ +85°C
	NORMAL MODE 25db MIN	0.40 ~ 50MHZ	0.50 ~ 50MHZ	0.80 ~ 40MHZ	1.20 ~ 50MHZ
ATTENUATION	COMMON MODE 25dbMIN	0.10 ~ 45MHZ	0.13 ~ 50MHZ	0.50 ~ 47MHZ	1.50 ~ 50MHZ



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



## DIMENSION



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## Power entry modules Type 5200

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



Screw-on mounting





Ц

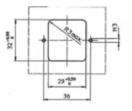
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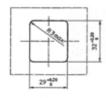
Snap-in mounting

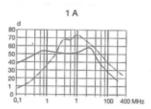


Mounting hole

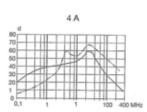
Screw-on mounting

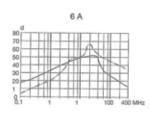






2 A







Snap-in mounting

#### 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<sub>a</sub> –25 to +70 °C
- Admissible power acceptance P<sub>h</sub> in function of T<sub>a</sub>
- Socket of thermoplastic UL 94V-0

#### Approvals

SEV (1-10\* A/250 V AC) VDE (1-10\* A/250 V AC) S SEMKO (1-10\* A/250 V AC)

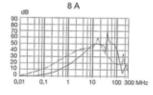
\* 8 and 10 A Version pending

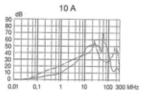
90 UL CSA (1-10 A/250 V AC)

(1-10 A/250 V AC)



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. (for standard filter)

Screw-on	Snap-in 0,8-3 mm	In (A)	U <sub>n</sub> (V)	Max. leakage curr.				Test voltage	
		T <sub>a</sub> 45 °C/ T <sub>u</sub> 45 °C		(mA) 250 V/50 Hz	C <sub>x2</sub> (nF)	C <sub>y</sub> (nF)	L (2x) (mH)		
								L,N→E	L→N
5200.0123.1 (5200-1-23)	<b>5200.0143.1</b> (5200-1-43)	1	un to	< 0,5	47	2,2	11		
5200.0223.1 (5200-2-23)	<b>5200.0243.1</b> (5200-2-43)	2	up to	< 0,5	47	2,2	4	0700 1/ 00	1075 1/ 00
5200.0423.1 (5200-4-23)	<b>5200.0443.1</b> (5200-4-43)	4	250 V	< 0,5	47	2,2	1,6	2700 V DC	1075 V DC
5200.0623.1 (5200-6-23)	<b>5200.0643.1</b> (5200-6-43)	6	max.	< 0,5	47		0,7	2 sec. /	2 sec. /
<b>5200.0823.1</b> (5200-8-23)	<b>5200.0843.1</b> (5200-8-43)	8	50/60 Hz	< 0,5	47	2,2	0,6	2 Sek.	2 Sek.
5200.1023.1 (5200-10-23)	5200.1043.1 (5200-10-43)	10	307 00 HZ	< 0,5	47	2,2	0,4		

Suitable plug connectors for cable connection 4300.0602/0606

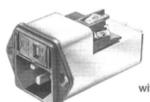
Cord retaining clamp 0888.0004

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

MEDICAL GRADE

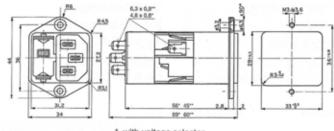




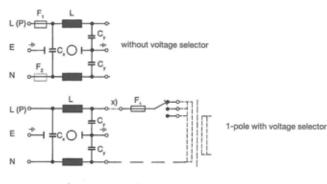
#### Technical data

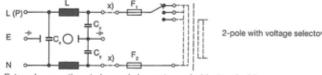
- Appliance inlet protection class I, pin temperature 70 °C Shock-safe fuseholder 1- or 2-pole for fuse-links 5 x 20 mm
- Plug removal necessary for fuse-link replacement

- 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



with voltage selector without voltage selector





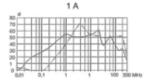
") External connections to be made by customer (solder terminals)

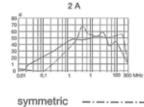
#### Approvals / Approbationen

(3) SEV (1-10\* A/250 V AC) VDE (1-10\* A/250 V AC) SEMKO (1-10\* A/250 V AC)

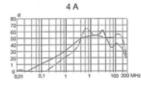
(1-10\* A/250 V AC) CSA (1-10\* A/250 V AC) CS (1-4 A/250 V AC).

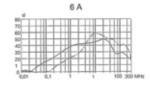
10 A version pending





asymmetric





# 10 A

### 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

01001110100	ronde (non ottanio	and micely rade drawer made be	o ordered a	oparatory						
Fuseholder 1-pole	2-pole	Voltage selector without with (max. 3 pos.)	I <sub>n</sub> (A) T <sub>a</sub> 40 °C/		Max. leakage curr.				Test volta	ge
		, and the second	T <sub>u</sub> 40 °C	U <sub>n</sub> (V)		C <sub>x2</sub>	C <sub>y</sub>	L (2x)		
					(mA) 250 V/50 Hz	(nF)	(nF)	(mH)	L,N→E	L→N
4301.5011	4301.5001	•	1		< 0,5	68	2,2	10		
4301.5012	4301.5002	0	2	1	< 0,5	68	2,2	4	1	
4301.5013	4301.5003	•	4	up to	< 0,5	68	2,2	1,5	1	
4301.5014	4301.5004	•	6	up to	< 0,5	68	2,2	0,8	2 kV	
4301.5015	4301.5005	•	10	250 V	< 0,5	68	2,2	0,3	50 Hz	1625 V DC
4301.5051	4301.5041		1		< 0,5	68	2,2	10	2 sec.	2 sec.
4301.5052	4301.5042	0	2	max. 50/60 Hz	< 0,5	68	2,2	4	1	
4301.5053	4301.5043	•	4	30760 HZ	< 0,5	68	2,2	1,5	1	
4301.5054	4301.5044		6	1	< 0,5	68	2,2	0,8	1	
4301.5055	4301.5045		10	1	< 0,5	68	2,2	0,3	1	

Order No. Fuse drawer see page

Suitable plug connectors for cable connection 4300.0602/0606

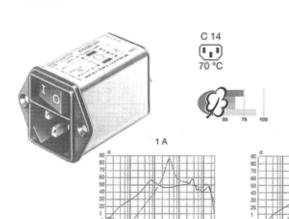
Cord retaining clamp 0888.0004

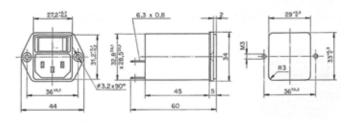
Power entry modules with mains filter for medical application see page 19.

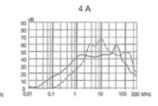


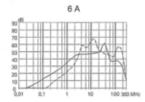
## Power entry modules Type KFB I

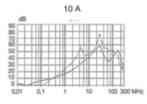
with mains filter with On/Off switch 1-pole





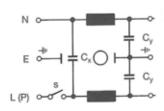






symmetric asymmetric

2 A



#### 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</li>

#### 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
911 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	In (A)		Max. leakage curr				Test voltage	
		T <sub>a</sub> 45°C*	U <sub>n</sub> (V)		C <sub>x2</sub>	C <sub>v</sub>	L (2x)		
1-pole	•			(mA) 250V/50Hz	(nF)	(nF)	(mH)	L,N→E	L→N
4302.5	5001	1	up to	< 0,5	68	2,2	10		
4302.5	5002	2	250 V	< 0,5	68	2,2	4	2 kV	1625 V DC
4302.5	5003	4	max.	< 0,5	68	2,2	1,5	50 Hz	2 sec.
4302.5	5004	66	50/60 Hz	< 0,5	68	2,2	0,8	2 sec.	2 360.
4302.5	5005	10	307 00 HZ	< 0.5	68	2,2	0,3		

<sup>\*</sup> VDE T<sub>a</sub> 40 °C

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

0888.0004

0859.0047



## Power entry modules with mains filter

Type CD

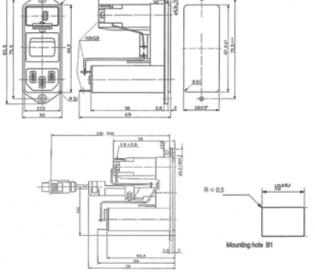
with fuseholder, voltage selector and On/Off switch with or without Bowden cable actuation



#### 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 ('/4" x 1'/4")
  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
- 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<sub>a</sub> –25 to +70 °C
  Admissible power acceptance P<sub>i</sub> nuction of T<sub>a</sub> see page 266
  Inrush current (capacitive): 70 A 3–4 ms (see page 208)

symmetric asymmetric



without voltage selector

O+

#### Approvals

SEV (1-10(4)\* A/250 V AC) VDE (1-10(4)\* A/250 V AC) SEMKO (1-10(4)\* A/250 V AC)

(4) for motor

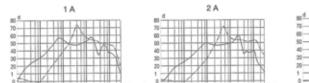
94 UL (1-10\* A/250 V AC) **(B** CSA (1-10\* A/250 V AC) CS (1-4 A/250 V AC)

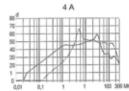
with voltage selector

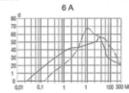
\* 10 A version pending

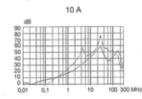
#### Standards

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









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 <sub>n</sub> (A) T <sub>a</sub> 40 °C		Max. léakage current				Test vo	ltage
						U <sub>n</sub> (V)	(mA) 250 V/50 Hz	C <sub>x2</sub> (nF)	C <sub>y</sub> (nF)	L (2x)	L,N→E	II→N
CD11.1501.151	CD14.1101.151	•	•		1		< 0,5	68	2,2	1	Light - L	
CD21.1501.151	CD24.1101.151	•			2	1	< 0,5	68	2,2	4	1	
CD31.1501.151	CD34.1101.151	•			4	1	< 0,5	68	2,2	1,5	1	
CD41.1501.151	CD44.1101.151	•			6	1	< 0,5	68	2,2	0,8	1	
CD61.1501.151	CD64.1101.151	•	•		10	up to/	< 0,5	68	2,2	0,3		
CD11.4501.151	CD14.4101.151	•	•		1	bis	< 0,5	68	2,2	10	2 kV	1625
CD21.4501.151	CD24.4101.151	•	•		2	250 V	< 0,5	68	2,2	4	50 Hz	V DC
CD31.4501.151	CD34.4101.151	•	•		4	max.	< 0,5	68	2,2	1,5	2 sec.	2 sec.
CD41.4501.151	CD44.4101.151	•	•		6	50/	< 0,5	68	2,2	0,8	1	
CD61.4501.151	CD64.4101.151	•	•		10	60 Hz	< 0,5	68	2,2	0,3	]	
CD11.4599.151	CD14.4199.151	•		•	1		< 0,5	68	2,2	10	1	
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	Туре			1-pole + spare fuse case	2-pole with shorting bar in the neutral side
		1-pole	2-pole		
"XX" see table below	Fingergrip	4301.1214.XX	4301.1014.XX	4301.2814.XX	4301.3536.XX
«VV»	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 mark	kings / termin	al 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	Туре	5 x 20 mm		2-pole with shortingbar in the neutral side	6,3 x 32 mm (1/4	4" x 11/4")	2-pole with shorting bar in the neutral side
1 2 3 4 KEC 3 4 5 6 KD		1-pole	2-pole		1-pole	2-pole	
see table below	Fingergrip	4303.2114.XX	4303.2014.XX	4303.2036.XX	4303.2614.XX	4303.2514.XX	4303.2536.XX
«XX» see table below siehe Tabelle unten	Extra-Safe	4303.2124.XX	4303.2024.XX	4303.2037.XX	4303.2624.XX	4303.2524.XX	4303.2537.XX
without voltage selector	Fingergrip	4303.2406	4303.2401	4303.2411	4303.2906	4303.2901	4303.2911
ohne Spannungswähler	Extra-Safe	4303.2408	4303.2403	4303.2413	4303.2908	4303.2903	4303.2913

Index	Voltage ma	rkings / term	ninal marking	IS	
	1	2	3	4	KEC
XX	3	4	5	6	KD
00	-	-	-	-	
01 02 03	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					
	1	2	3	4	KEC	
XX	3	4	5	6	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.

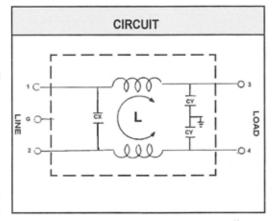




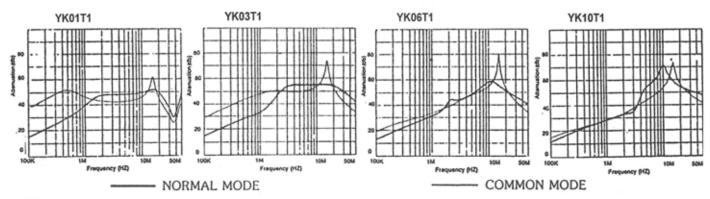
YK-T1

### **■ SPECIFICATIONS**

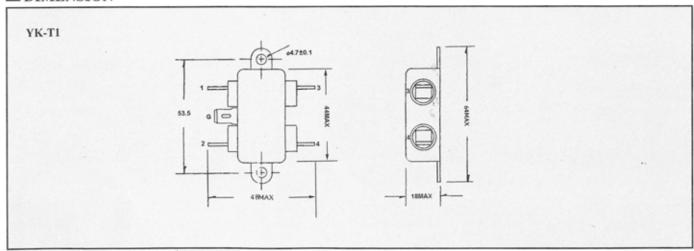
ITEM	MODEL	YK01T1	YK03T1	YK06T1	YK10T1
RATED	VOLTAGE	250V AC	250V AC	250V AC	250V AC
RATED	CURRENT	1A	3A	6A	10A
LEAK	CURRENT	0.8mA MAX 250V,50HZ	0.8mA MAX 250V,50HZ	0.8mA MAX 250V,50HZ	0.8mA MAX 250V,50HZ
	LINE TO LINE	1450V DC	1450V DC	1450V DC	1450V DC
TEST VOLTAGE	LINE TO GROUND	2250V DC	2250V DC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



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



### DIMENSION





# 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



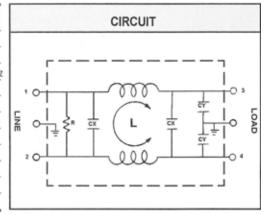


YC-T1

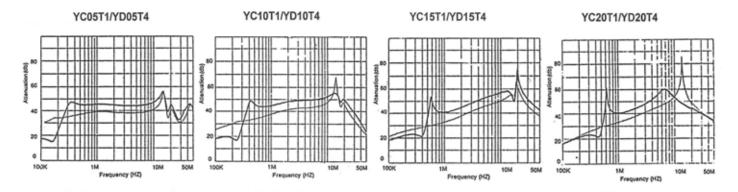
YD-T4

## **■** SPECIFICATIONS

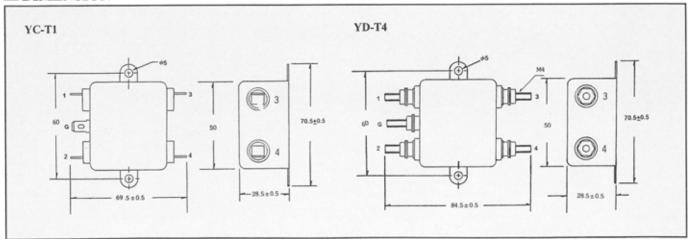
ITEM	MODEL	YC05T1/YD05T4	YC10T1/YD10T4	YC15T1/YD15T4	YC20T1/YD20T4
RAT	ED VOLTAGE	250V AC	250V AC	250V AC	250V AC
RAT	ED CURRENT	5A	10A	15A	20A
LEA	K CURRENT	0.8mA MAX 250V,50HZ	0.8mA MAX 250V,50HZ	0.8mA MAX 250V,50H2	0.8mA MAX 250V,50H2
TEST HOUTISE	LINE TO LINE	1450V DC	1450V DC	1450V DC	1450V DC
TEST VOLTAGE	LINE TO GROUND	2250V DC	2250V DC	2250V DC	2250V DC
INSU	ULATION RESISTANCE	100MΩ MIN 250V DC			
DIRE	CT CURRENT RESISTANCE	0.3Ω MAX	0.15Ω MAX	0.1Ω MAX	0.05ΩMAX
TEM	IPERATURE RISE	30°C MAX	30°C MAX	30°C MAX	30°C MAX
OPE	RATING TEMPERATURE	-25 ~ +85°C	-25 ~ +85°C	-25 ~ +85°C	-25 ~ +85°C
*************	NORMAL MODE 25db MIN	0.27 ~ 45MHZ	0.36 ~ 50MHZ	0.50 ~ 50MHZ	1.60 ~ 50MHZ
ATTENUATION	COMMON MODE 25dbMIN	0.30 ~ 40MHZ	0.67 ~ 50MHZ	1.80 ~ 50MHZ	1.80 ~ 50MHZ



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



## DIMENSION



EMI Filters | 13

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# 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







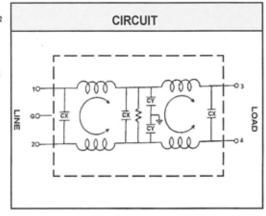
YC-T1L2

YC06T1L2/YC06T4L2

YD-T4L2

## ■ SPECIFICATIONS

ITEM	MODEL	YC01T1L2/YD01T4L2	YC03T1L2/YD03T4L2	YC06T1L2/YD06T4L2	YC10T1L2/YD10T4L2
RATED	VOLTAGE	250V AC	250V AC	250V AC	250V AC
RATEC	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
***********	LINE TO LINE	1450V DC	1450V DC	1450V DC	1450V DC
TEST VOLTAGE	LINE TO GROUND	2250V DC	2250V DC	2250V DC	2250V DC
INSUL	ATION RESISTANCE	100MΩ MIN 250V DC			
DIREC	T CURRENT RESISTANCE	0.7Ω MAX	0.3Ω MAX	0.15Ω MAX	0.1ΩMAX
TEMP	ERATURE RISE	30°C MAX	30°C MAX	30°C MAX	30°C MAX
OPERA	ITING TEMPERATURE	-25 ~ +85°C	-25 ~ +85°C	-25 ~ +85°C	-25 ~ +85°C
	NORMAL MODE 25db MIN	0.25 ~ 15MHZ	0.40 ~ 28MHZ	0.60 ~ 30MHZ	0.85 ~ 42MHZ
ATTENUATION	COMMON MODE 25dbMIN	0.10 ~ 15MHZ	0.18 ~ 22MHZ	0.40 ~ 25MHZ	1.00 ~ 30MHZ



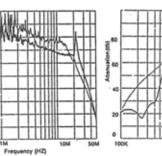
### NOISE ATTENUATION ( — NORMAL MODE, — COMMON MODE

# Material (1999)

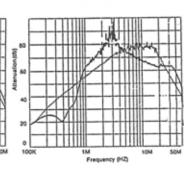
TEL: 03 9465 0011

YC01T1L2/YC01T4L2

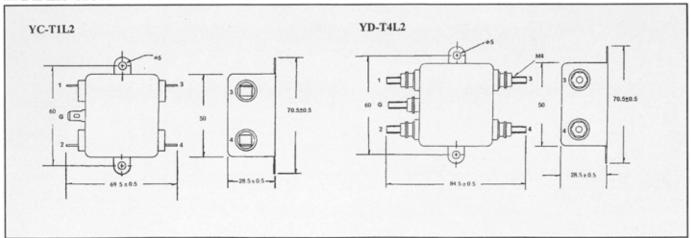




## YC10T1L2/YC10T4L2



## DIMENSION





# 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





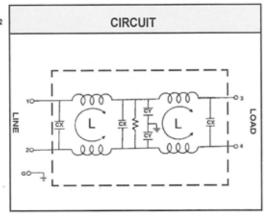


YE-T1L2

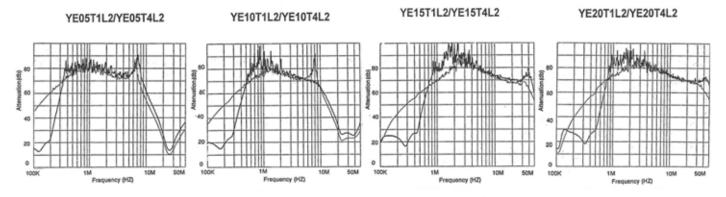
YE-T4L2

### ■ SPECIFICATIONS

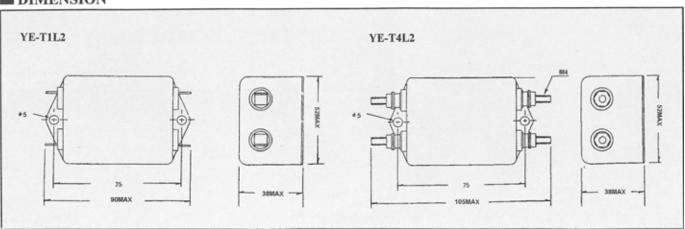
ITEM	MODEL	YE05T1L2/YE05T4L2	YE10T1L2/YE10T4L2	YE15T1L2/YE16T4L2	YE20T1L2/YEA20T4L2
RATE	D VOLTAGE	250V AC	250V AC	250V AC	250V AC
RATE	D CURRENT	5A	10A	15A	20A
LEAK	CURRENT	0.8mA MAX 250V,50HZ	0.8mA MAX 250V,50HZ	0.8mA MAX 250V,50HZ	0.8mA MAX 250V,50HZ
	LINE TO LINE	1450V DC	1450V DC	1450V DC	1450V DC
TEST VOLTAGE	LINE TO GROUND	2250V DC	2250V DC	2250V DC	2250V DC
INSU	LATION RESISTANCE	100MΩ MIN 250V DC			
DIREC	CT CURRENT RESISTANCE	0.3Ω MAX	0.15Ω MAX	0.1Ω MAX	0.05MAX
TEMP	PERATURE RISE	30°C MAX	30°C MAX	30°C MAX	30°C MAX
OPER	ATING TEMPERATURE	-25 ~ +85°C	-25 ~ +85°C	-25 ~ +85°C	-25 ~ +85°C
	NORMAL MODE 25db MIN	0.25 ~ 12MHZ	0.33 ~ 13MHZ	0.61 ~ 50MHZ	0.68 ~ 50MHZ
ATTENUATION	COMMON MODE 25dbMIN	0.10 ~ 10MHZ	0.26 ~ 11MHZ	0.40 ~ 48MHZ	0.40 ~ 50MHZ



## NOISE ATTENUATION ( NORMAL MODE, — COMMON MODE



## DIMENSION



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# **YJ-T7 SERIES**

## **FEATURES:**

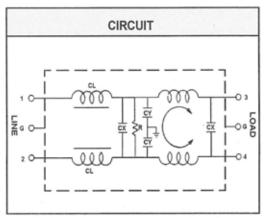
- · GOOD NOISE ATTENUATION IN BOTH FORWARD AND REVERSE DIRECTIONS FOR COMMON MODE AND NORMAL MODE.
- · HIGH RELIBAILITY DESIGNED FOR INDUSTRIAL EQUIPMENT USAGE WITH ONE PHASES, 250V/500 VAC



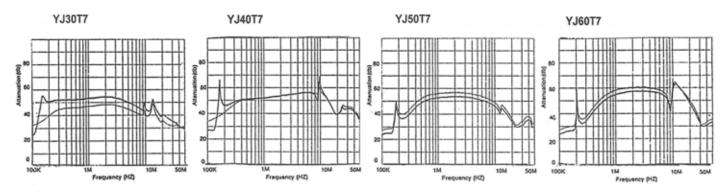
YJ-T7

## **■** SPECIFICATIONS

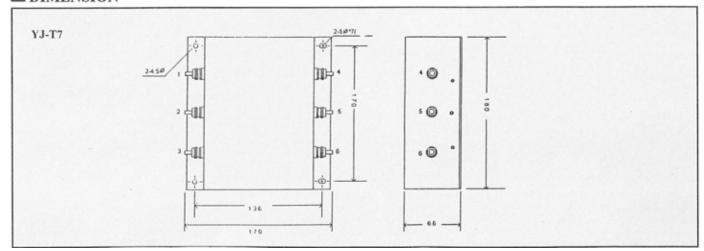
ITEM	MODEL	YJ30T7	YJ40T7	YJ50T7	YJ60T7
RATED	VOLTAGE	250V AC	250V AC	250V AC	250V AC
RATEC	CURRENT	30A	40A	50A	60A
LEAK	CURRENT	0.8mA MAX 250V,50HZ	0.8mA MAX 250V,50HZ	0.8mA MAX 250V,50HZ	0.8mA MAX 250V,50H
COT HOUTAGE	LINE TO LINE	1450V DC	1450V DC	1450V DC	1450V DC
EST VOLTAGE	LINE TO GROUND	2250V DC	2250V DC	2250V DC	2250V DC
INSUL	ATION RESISTANCE	100MΩ MIN 250V DC	100MΩ MIN 250V DC	100MΩ MIN 250V DC	100MΩ MIN 250V DC
DIREC	T CURRENT RESISTANCE	0.08Ω MAX	0.06Ω MAX	0.04Ω MAX	0.03MAX
TEMPI	ERATURE RISE	30°C MAX	30°C MAX	30°C MAX	30°C MAX
OPER/	ATING TEMPERATURE	-25 ~ +85°C	-25 ~ +85°C	-25 ~ +85°C	-25 ~ +85°C
	NORMAL MODE 25db MIN	0.60 ~ 45MHZ	0.80 ~ 50MHZ	0.80 ~ 50MHZ	1.00 ~ 50MHZ
ATTENUATION	COMMON MODE 25dbMIN	0.10 ~ 40MHZ	0.20 ~ 50MHZ	0.40 ~ 50MHZ	1.00 ~ 50MHZ



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



## DIMENSION



EMI Filters | 16

# **YH-T4 SERIES**

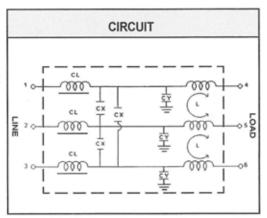
## **FEATURES:**

- 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



## **■** 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 3.0mA MAX 500V,50HZ	1.3mA MAX 250V 50HZ 3.0mA MAX 500V 50HZ	1.3mA MAX 250V 50HZ 3.0mA MAX 500V 50HZ	1.3mA MAX 250V,50H2 3.0mA MAX 500V,50H2
	LINE TO LINE	1450V DC	1450V DC	1450V DC	1450V DC
TEST VOLTAGE	LINE TO GROUND	2250V DC	2250V DC	2250V DC	2250V DC
INSUL	ATION RESISTANCE	100MΩ MIN 250V DC 100MΩ MIN 500V DC			
DIREC	T CURRENT RESISTANCE	0.5Ω MAX	0.2Ω MAX	0.15Ω MAX	0.10ΩMAX
TEMP	ERATURE RISE	30°C MAX	30°C MAX	30°C MAX	30°C MAX
OPERA	ITING 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



NOISE ATTENUATION ( — NORMAL MODE, — COMMON MODE)

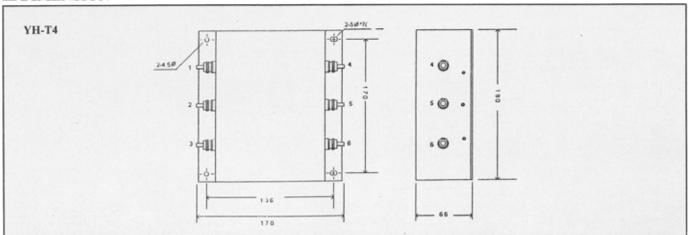
YH10T4/YH10T4-1

YH15T4/YH15T4-1

YH20T4/YH20T4-1

YH30T4/YH30T4-1

### DIMENSION



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# **YI-T7 SERIES**

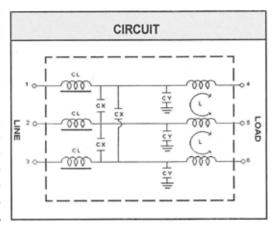
## **FEATURES:**

- 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

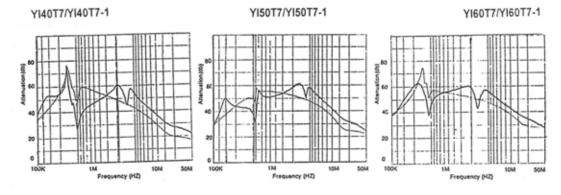


## **SPECIFICATIONS**

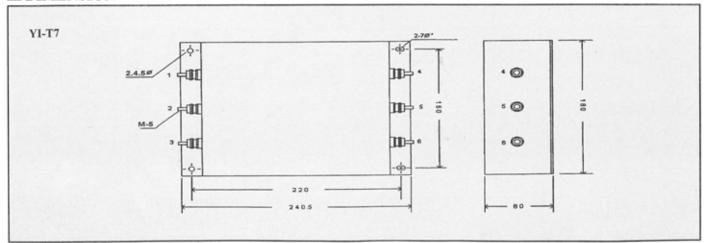
ITEM	MODEL	YI40T7/YI40T7-1	YI50T7/YI50T7-1	Y160T7/Y160T7-1
RATE	VOLTAGE	250V AC/500V AC	250V AC/500V AC	250V AC/500V AC
RATE	D CURRENT	40A	50A	60A
	CURRENT	1.3mA MAX250V,50HZ 3.0mA MAX 500V,50HZ	1.3mA MAX250V,50HZ 3.0mA MAX 500V,50HZ	1.3mA MAX250V,50HZ 3.0mA MAX 500V,50HZ
	LINE TO LINE	1450V DC	1450V DC	1450V DC
EST VOLTAGE	LINE TO GROUND	2250V DC	2250V DC	2250V DC
INSUL	ATION RESISTANCE	100MΩ MIN 250V DC 100MΩ MIN 500V DC	100MΩ MIN 250V DC 100MΩ MIN 500V DC	100MΩ MIN 250V DC 100MΩ MIN 500V DC
DIREC	T CURRENT RESISTANCE	0.08Q MAX	0.06 ΩMAX	0.04Ω MAX
TEMP	ERATURE RISE	30°C MAX	30°C MAX	30°C MAX
OPER	ATING TEMPERATURE	-25 ~ +85°C	-25 ~ +85°C	-25 ~ +85°C
************	NORMAL MODE 25db MIN	0.14 ~ 50MHZ	0.17 ~ 50MHZ	0.30 ~ 9.5MHZ
ATTENUATION	COMMON MODE 25dbMIN	0.25 ~ 50MHZ	0.31 ~ 50MHZ	0.42~ 50MHZ



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



## DIMENSION



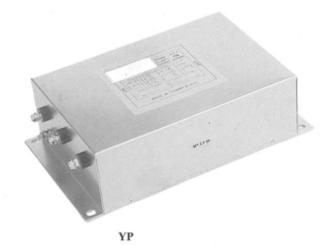
TEL: 03 9465 0011

ARLIN EMI Filters | 18

# YP-T8,T10,YP-T12 SERIES

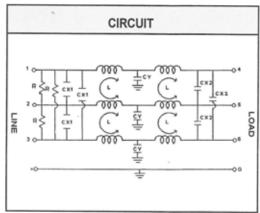
## **FEATURES:**

- 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

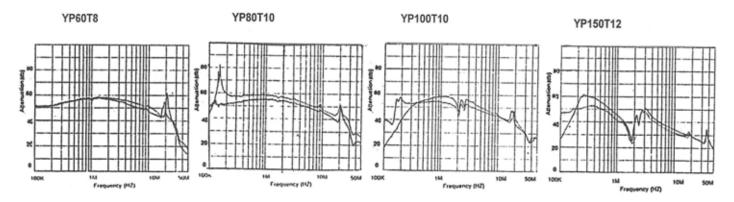


### ■ SPECIFICATIONS

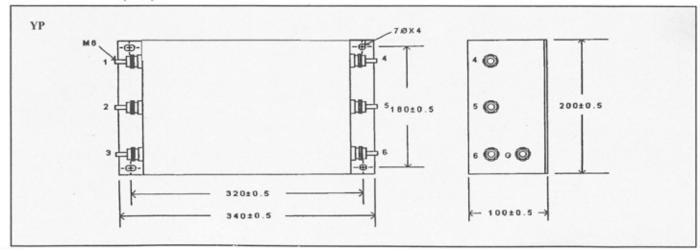
ITEM	MODEL	YP60T8	YP80T8	YP100T8	YP150T8
RATI	ED VOLTAGE	500V AC	500V AC	500V AC	500V AC
RAT	ED CURRENT	60A	80A	100A	150A
LEA	K CURRENT	82mA MAX 500V,50HZ	82mA MAX 500V,50HZ	82mA MAX 500V,50HZ	82mA MAX 500V,50HZ
	LINE TO LINE	1450V DC	1450V DC	1450V DC	1450V DC
EST VOLTAGE	LINE TO GROUND	2250V DC	2250V DC	2250V DC	2250V DC
INSL	JLATION RESISTANÇE	100MΩ MIN 500V DC			
DIRE	CT CURRENT RESISTANCE	0.04Ω MAX	0.04Ω MAX	0.04Ω MAX	0.04MAX
TEM	PERATURE RISE	30°C MAX	30°C MAX	30°C MAX	30°C MAX
OPER	RATING TEMPERATURE	-25 ~ +85°C	-25 ~ +85°C	-25 ~ +85°C	-25 ~ +85°C



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



## ■ DIMENSION(mm)



# **YF-T6 SERIES**

## **■ FEATURES**

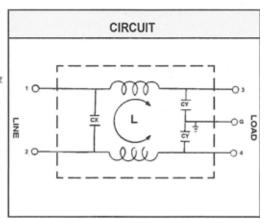
- · Low cost type
- · Printed circuit terminals
- · All parts are approved by UL and CSA



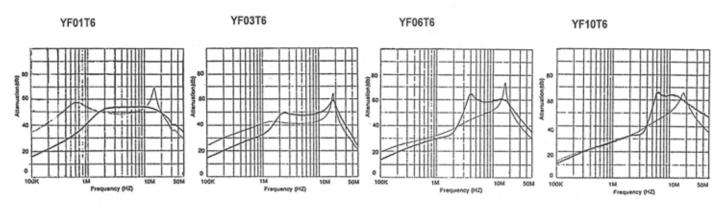


## ■ SPECIFICATIONS

ITE	EM	MODEL	YF01T6	YF03T6	YF06T6	YF10T6
	RATE	D VOLTAGE	250V AC	250V AC	250V AC	250V AC
	RATE	D CURRENT	1A	3A	6A	10A
	LEAK	CURRENT	0.8mA MAX 250V,50HZ	0.8mA MAX 250V,50HZ	0.8mA MAX 250V,50H2	0.8mA MAX 250V,50H
TEST NO	TACE	LINE TO LINE	1450V DC	1450V DC	1450V DC	1450V DC
TEST VO	LIAGE	LINE TO GROUND	2250V DC	2250V DC	2250V DC	2250V DC
	INSU	LATION RESISTANCE	100MΩ MIN 250V DC	100MΩ MIN 250V DC	100MΩ MIN 250V DC	100MΩ MIN 250V DC
	DIRE	CT CURRENT RESISTANCE	0.5Ω MAX	0.2Ω MAX	0.15Ω MAX	0.1MAX
	TEM	PERATURE RISE	30°C MAX	30°C MAX	30°C MAX	30°C MAX
	OPER	RATING TEMPERATURE	-25 ~ +85°C	-25 ~ +85°C	-25 ~ +85°C	-25 ~ +85°C
		NORMAL MODE 25db MIN	0.50 ~ 50MHZ	0.70 ~ 40MHZ	1.00 ~ 50MHZ	1.50 ~ 50MHZ
ALIENUA	COMMON MODE 25dbMIN		0.10 ~ 50MHZ	0.20 ~ 35MHZ	0.70 ~ 50MHZ	1.50 ~ 50MHZ

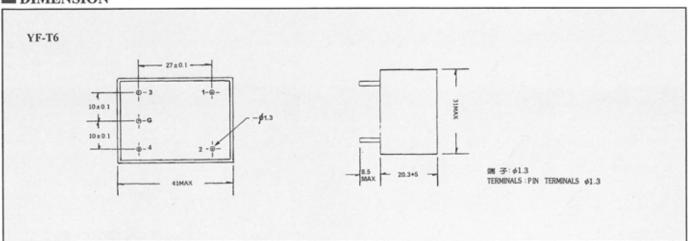


NOISE ATTENUATION ( ---- NORMAL MODE, ---- COMMON MODE )



## DIMENSION

TEL: 03 9465 0011



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## OTHER IEC FILTER PRODUCTS

## PLEASE ENQUIRE FOR DETAILS



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

for medical applications

Technica	l data					
I <sub>n</sub> (A) T <sub>a</sub> 45 °C*		Max. leakage curr. (μA)			Test v	oltage
	U <sub>n</sub> (V)	@ 250 V/50 Hz	C <sub>x2</sub> (nF)	L (mH)	L,N→E	L→N
1	up to	< 5	68	10	0111	1005 1/
2	250 V	< 5	68	4	2 kV	1625 V
4	max.	< 5	68	1,5	50 Hz	DC
6	50/60 Hz	< 5	68	0,8	2 sec.	2 sec.
10	307 00 112	< 5	68	0,3		

- \* VDE T<sub>a</sub> 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	Voltage selector	I <sub>n</sub> (A) T <sub>a</sub> 45 °C	
2-pole	max. 3 pos.		
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 <sub>n</sub> (A) T <sub>a</sub> 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

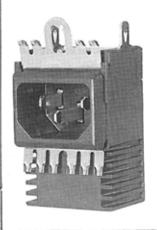


5431.X05X.XXX

5432.XX5X.XXX

## 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



## Power entry modules Type 54 FELCOM

with mains filter Standard-Combinations



5411.XX5%.XXX



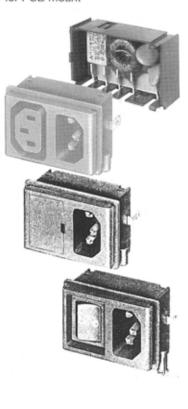
NEW

## Power entry modules Type KPF

NEW

"Backpack" RFI filter for standard or medical applications

for PCB mount



TEL: 03 9465 0011

## **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.

All specifications in this catalogue are subject to change without notice. Technical data is provided to assist the customer, but no responsibility is accepted for the end use of any product. Any offers made or orders accepted are subject to Arlin's standard Terms and Conditions.

