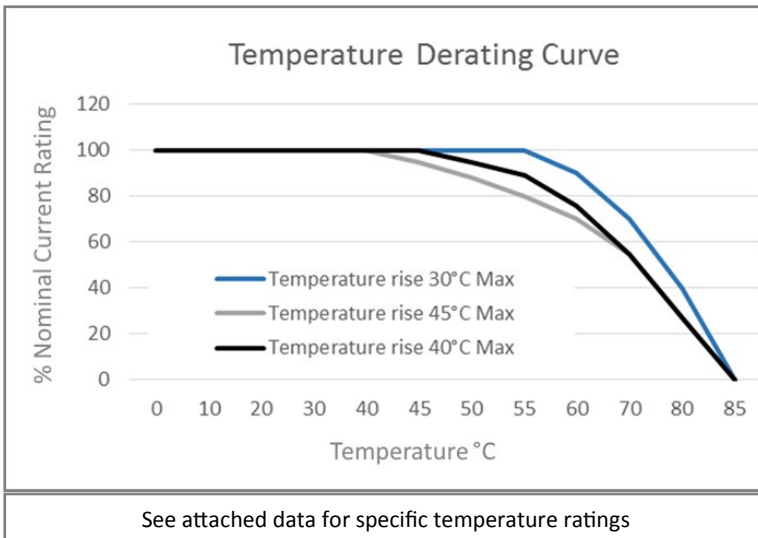


IEC Inlet Filters Switched and Fused - Snap In

The RIQ series of general purpose IEC inlet filters offers good performance for both common mode and differential mode interface, in a standard compact size.

A standard IEC inlet filter available from Roxburgh EMC with quick and easy mounting.

- Current ratings, 2A, 4A and 6A.
- Rated at 250V.
- Also available with increased x and y caps for optimum performance.
- Customisation services available
- Available from UK stock



Meets overvoltage category II of IEC60664
Complies with BS EN 60950

UL Standard: UL1283
IEC Standard: IEC 60939-2:2005
CSA Standard: C22.2

Features:

- UL Approved
- General Purpose
- 2 to 6 Amp Current Ratings
- IEC Inlet with fast-on termination

Application Examples:

- Digital Equipment
- Point-of-sale equipment
- Printers
- Inverters
- Vending and Gaming machines

Benefits:

- Quick and easy mounting
- Safety approvals held
- UK stock

Contact us on:

Tel: +44 (0) 1724 273228

Email: roxburghemc@dem-uk.com

DEM Manufacturing
Deltron Emcon House
Hargreaves Way
Sawcliffe Industrial Park
Scunthorpe
DN15 8RF



Tel: 44 (0) 1724 273200
Fax: 44 (0) 1724 280353
Email: sales@dem-uk.com
Web: www.dem-uk.com/roxburgh

Item : EMI Filter
Model No : RIQ-Series

Rev 3

3 - 2

A. General Specifications

Model	Rated Voltage AC,DC[V]	Rated Current [A]	Leakage Current Max. [mA]	Temperature Rise Max. [°C]
RIQ-02*2-H*	250	2	0.35	40
RIQ-04*2-H*	250	4	0.35	45
RIQ-04*D-H*	250	4	0.10	45
RIQ-06*2-H*	250	6	0.35	45

*Leakage current measuring method

UL 1283(3rd Edition): -26 and Fig 26.1

*Temperature rise measuring method

VDE 0565-3 : - 2.3.3 and - 4.5

B. Operating Temperature Range

-25°C to +85°C including temperature rise.

C. Withstand Voltage

1500V AC for 1 minute between line and ground.

1800V DC for 1 minute between line and line. (Without bleeder resistor)

D. Insulation Resistance

300M Ω minimum at 500V DC between line and ground.

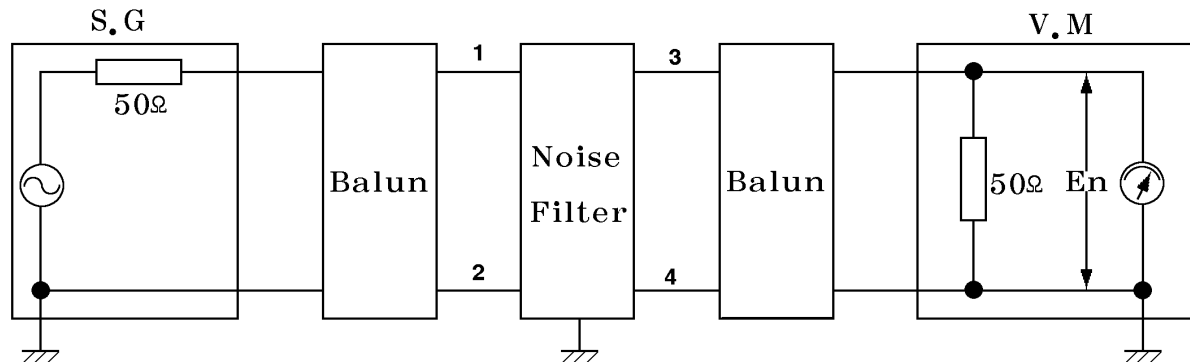
E. Voltage Drop

1 volt maximum at rated current.

F. Circuit Diagram and Component Value

-Refer to attached Appendix page A1

G. Attenuation Measuring Method



OSC Level : 0dB

Insertion loss = $-20\log(E1/E2)$ [dB]

E1 : Level with the Noise Filter in the circuit.

E2 : Level without the Noise Filter in the circuit

H. Guaranteed Minimum Attenuation In [dB]

-Refer to attached Appendix page A2

I. Mechanical Dimension

-Refer to attached Appendix page A3

J. Marking

1. Trademark.
2. Model No.
3. Rated voltage and current.
4. Operating temperature range.
5. Circuit diagram and component value.
6. Lot No.
7. UL, CSA, marks

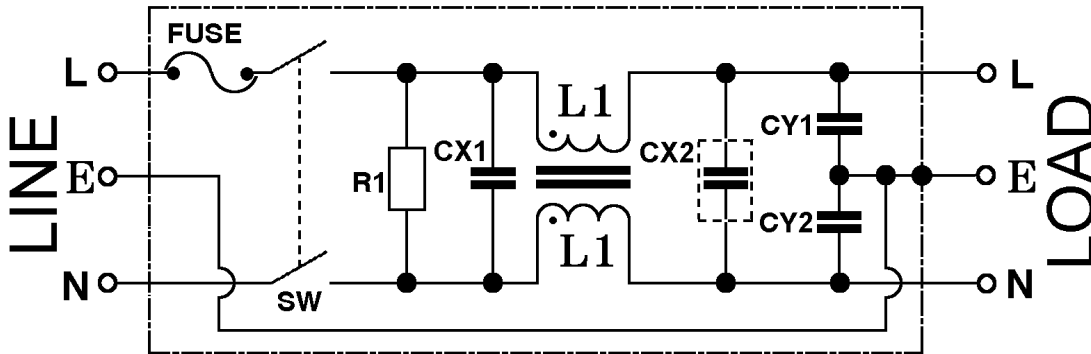
K. Material List

-Refer to attached Appendix page A4

L. Packing

-Refer to attached Appendix page A5

※ . Circuit Diagram and Component Value



※ CX2 capacitor - Provided on RIQ-****H2 suffixed models only

Model No.	Fuse-Rated Current [A]	Inductance L1[mH], +50, -30%	X-Capacitor CX1[μ F] \pm 20%	X-Capacitor CX2[μ F] \pm 20%	Resistor R1[Ω] \pm 10%	Y-Capacitor CY1,2[pF] \pm 20%	
RIQ-0212-H0	2	10.5	0.1	NONE	1M, 1/2W	2200	
RIQ-0212-H2	2	10.5	0.1	0.22	510K, 1/2W		
RIQ-0222-H0	2	10.5	0.22	NONE	1M, 1/2W		
RIQ-0222-H2	2	10.5	0.22	0.22	510K, 1/2W		
RIQ-0242-H0	2	10.5	0.47	NONE	510K, 1/2W		
RIQ-0242-H2	2	10.5	0.47	0.22	510K, 1/2W		
RIQ-0412-H0	4	4.2	0.1	NONE	1M, 1/2W		
RIQ-0412-H2	4	4.2	0.1	0.22	510K, 1/2W		
RIQ-0422-H0	4	4.2	0.22	NONE	1M, 1/2W		
RIQ-0422-H2	4	4.2	0.22	0.22	510K, 1/2W		
RIQ-0442-H0	4	4.2	0.47	NONE	510K, 1/2W		
RIQ-0442-H2	4	4.2	0.47	0.22	510K, 1/2W		
RIQ-0612-H0	6.3	1.6	0.1	NONE	1M, 1/2W		
RIQ-0612-H2	6.3	1.6	0.1	0.22	510K, 1/2W		
RIQ-0622-H0	6.3	1.6	0.22	NONE	1M, 1/2W		
RIQ-0622-H2	6.3	1.6	0.22	0.22	510K, 1/2W		
RIQ-0642-H0	6.3	1.6	0.47	NONE	510K, 1/2W		
RIQ-0642-H2	6.3	1.6	0.47	0.22	510K, 1/2W		
RIQ-041D-H0	4	4.2	0.1	NONE	1M, 1/2W		470

※ Construction of Model No.

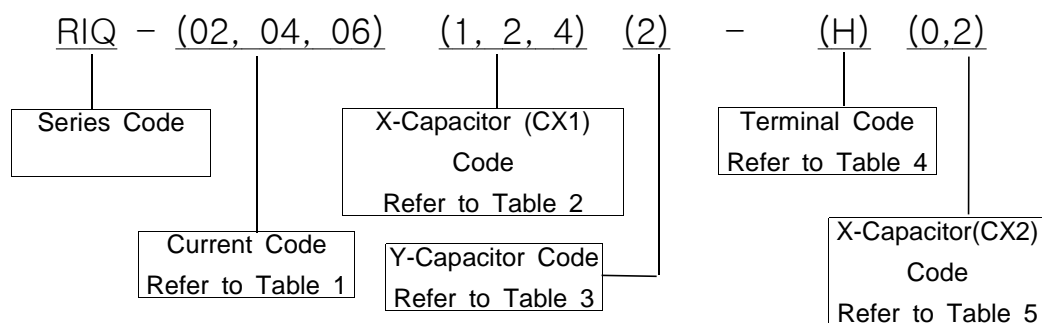


Table 1 ; Current Code

Suffix	02	04	06
Current	2A	4A	6A

Table 2 ; X-Capacitor (CX1) Code

Suffix	1	2	4
X-Capacitor	0.1 μ F	0.22 μ F	0.47 μ F

Table 3 ; Y-Capacitor (CY1,2) Code

Suffix	2
Y-Capacitor	2200pF

Table 4 ; Terminal Code

Suffix	H
Terminal	Faston tab #250

Table 5 ; X-Capacitor (CX2) Code

Suffix	0	2
X-Capacitor	None	0.22 μ F

Item : EMI Filter

Rev 3

Model : RIQ-Series(Appendix)

A 2

※ . Guaranteed Minimum Attenuation In [dB]

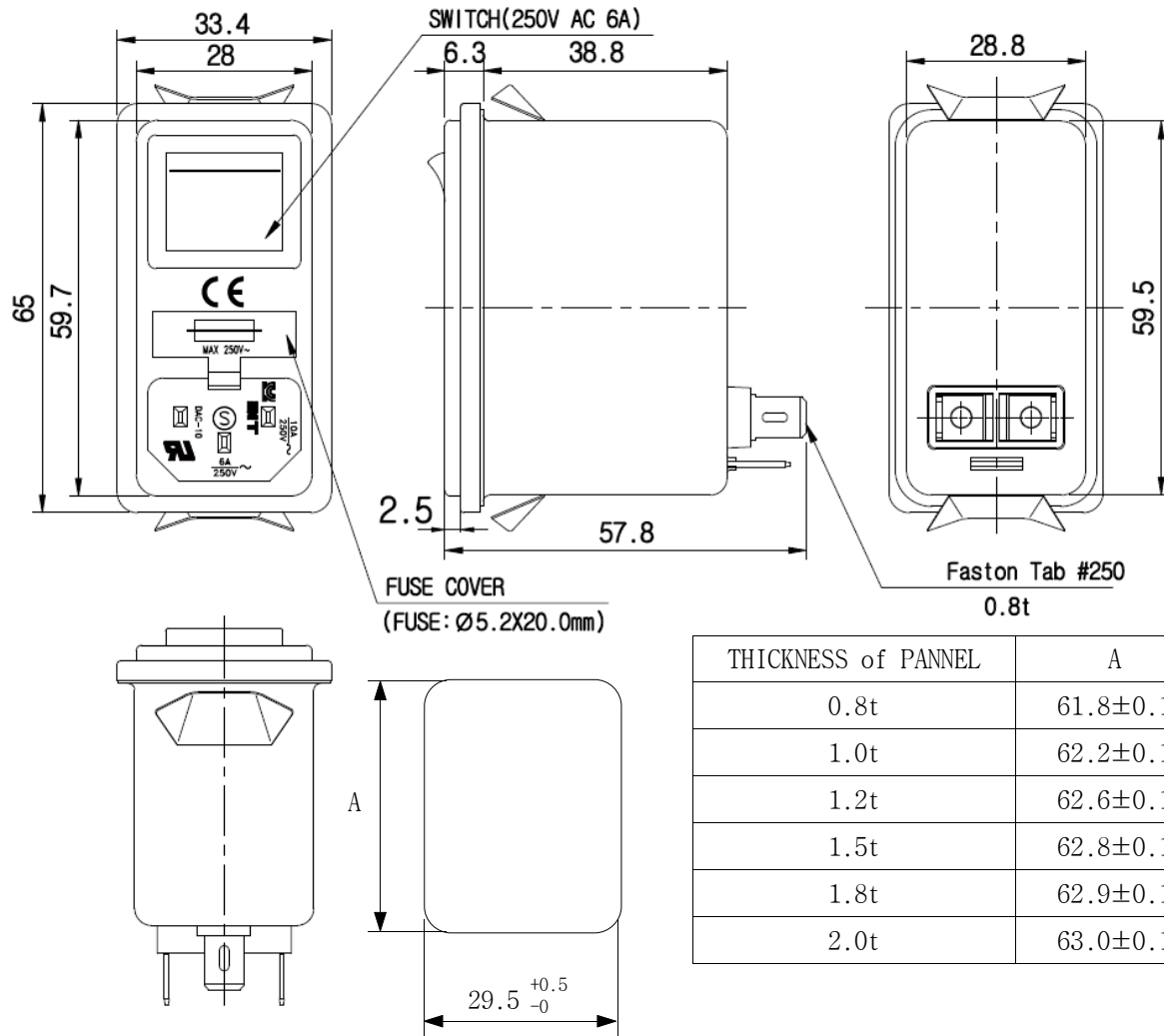
Model	Common mode [MHz]							Normal mode [MHz]						
	0.15	0.45	1	2	5	10	30	0.15	0.45	1	2	5	10	30
RIQ-0212-H0	39	50	45	40	40	40	43	13	22	36	50	65	65	58
RIQ-0212-H2	37	48	46	41	40	41	45	26	60	70	72	72	69	51
RIQ-0222-H0	37	50	45	41	41	41	45	20	30	40	55	64	65	60
RIQ-0222-H2	38	50	48	45	44	44	40	37	65	71	73	70	70	52
RIQ-0242-H0	39	48	44	42	41	41	45	28	38	48	60	65	65	60
RIQ-0242-H2	36	50	47	42	41	41	45	44	70	75	75	70	70	55
RIQ-0412-H0	27	40	49	47	46	47	51	15	25	30	42	60	65	60
RIQ-0412-H2	28	41	50	49	47	48	51	13	55	75	77	72	70	52
RIQ-041D-H0														
RIQ-0422-H0	28	42	49	50	49	50	51	22	32	38	50	63	63	60
RIQ-0422-H2	29	42	51	47	47	47	50	26	58	72	74	74	72	50
RIQ-0442-H0	28	41	51	51	50	51	51	29	39	44	55	65	65	61
RIQ-0442-H2	28	41	48	45	45	45	53	35	65	78	78	70	70	55
RIQ-0612-H0	21	32	40	47	49	50	50	16	26	30	33	60	60	55
RIQ-0612-H2	21	32	40	47	48	50	50	20	42	65	77	73	71	55
RIQ-0622-H0	21	32	40	47	49	52	50	21	31	38	42	59	61	60
RIQ-0622-H2	19	30	39	45	48	50	50	18	51	70	75	70	70	55
RIQ-0642-H0	20	32	39	46	47	48	49	28	39	45	49	55	62	60
RIQ-0642-H2	20	30	39	46	48	49	50	20	52	72	73	73	71	55

Item : EMI Filter
 Model No : RIQ-Series(Appendix)

Rev 3

A 3

※ . Mechanical Dimension Unit: mm



General tolerance:±1.0

※ . Packing

1. Quantity & Weight

Packing Case	Q'ty/ 1 Box	Gross Weight(kg)
CARTON BOX	100	17
INNER BOX	50	7.5

2. Packing Case

Packing Case	Q'ty	Material	Dimension(W×L×Hmm)
CARTON BOX	1/100	SK3SA	346×360×281
INNER BOX	1/50	SKSA B Type	328×170×215
PACKING CASE	1/10	P.E.T	318×163×43.7
TOP PAD	1/50	STYROFOAM (PS)	310×155×8
POLY BAG	1/50	PE SHEET	360×550

3. Marking

- 1) Model No.
- 2) Q'ty of products
- 3) Lot No.

