

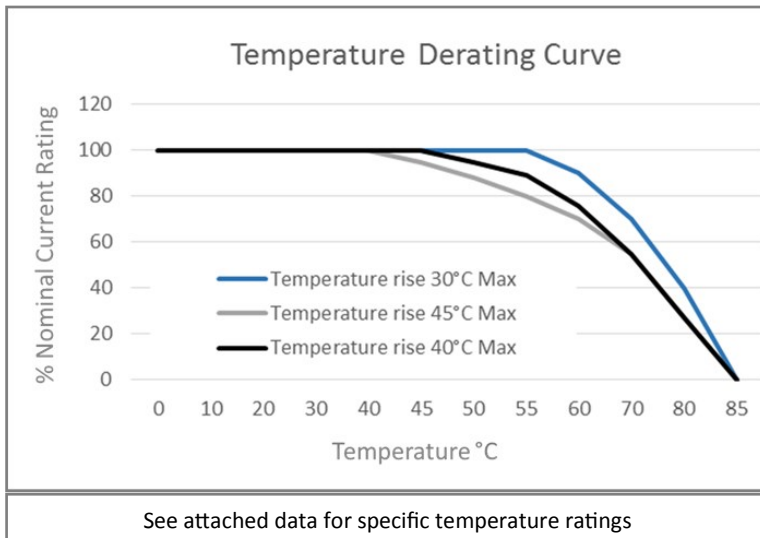
RIR2 Series IEC Inlet Filters

Twin Fused - Screw Fix

The RIR2 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 IEC664
Complies with BS EN 60950

UL Standard: UL1283

UL File No. E191581

CSA Standard: C22.2

Contact us on:

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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

Technical specification attached includes:

part numbers
mechanical data
electrical values

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



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A. General Specifications

MODEL	Rated Voltage AC[V]	Rated Current [A]	Fuse-Rated Current [A]	Leakage Current Max. [mA] at 250VAC	Temperature Rise Max. [°C]
RIR2-02*D(S/H)	250	2	2	0.1	45
RIR2-02*E(S/H)				0.2	
RIR2-02*2(S/H)				0.35	
RIR2-02*3(S/H)				0.5	
RIR2-04*D(S/H)	250	4	4	0.1	
RIR2-04*E(S/H)				0.2	
RIR2-04*2(S/H)				0.35	
RIR2-04*3(S/H)				0.5	
RIR2-06*D(S/H)	250	6	6.3	0.1	
RIR2-06*E(S/H)				0.2	
RIR2-06*2(S/H)				0.35	
RIR2-06*3(S/H)				0.5	

*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 +100°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.)

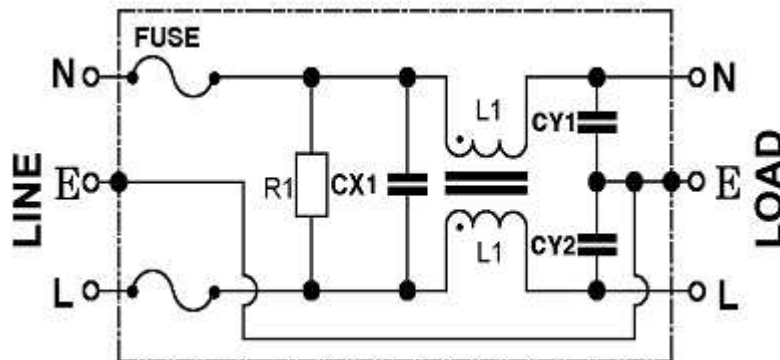
D. Insulation Resistance

300MΩ minimum at 500V DC between line and ground.

E. Voltage Drop

1 volt maximum at rated current.

F. Circuit Diagram and Component Value

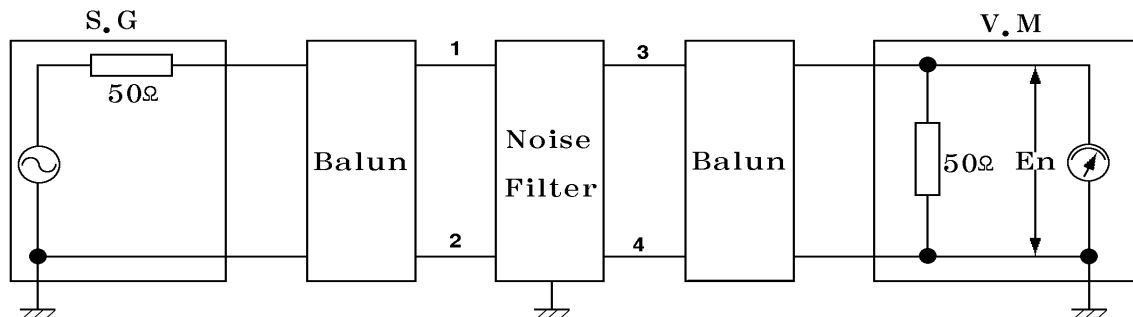


Model No.	Fuse-Rated Current [A]	Inductance L1[mH], +50, -30%	X-Capacitor CX1[μ F] \pm 20%	Y-Capacitor CY1,2[pF] \pm 20%
RIR2-02**(S/H)	2	6.5	*	*
RIR2-04**(S/H)	4	2.4	*	*
RIR2-06**(S/H)	6.3	1.1	*	*
RIR2-**2*(S/H)	*	*	0.022	*
RIR2-**3*(S/H)	*	*	0.033	*
RIR2-**4*(S/H)	*	*	0.047	*
RIR2-**6*(S/H)	*	*	0.068	*
RIR2-**A*(S/H)	*	*	0.1	*
RIR2-**C*(S/H)	*	*	0.22	*
RIR2-**D*(S/H)	*	*	0.33	*
RIR2-***D(S/H)	*	*	*	470
RIR2-***E(S/H)	*	*	*	1000
RIR2-***2(S/H)	*	*	*	2200
RIR2-***3(S/H)	*	*	*	3300

Resistor R1[M Ω] \pm 10% : 1, 1/2Watt (OPTIONAL)
 * NOTE : IR2-**(2,3,4,6,A)*-(S/H) Type (Without Resistor)

※ " * " in the suffix of model number means 'Regardless'.

G. Attenuation Measuring Method



OSC Level : 0dB

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

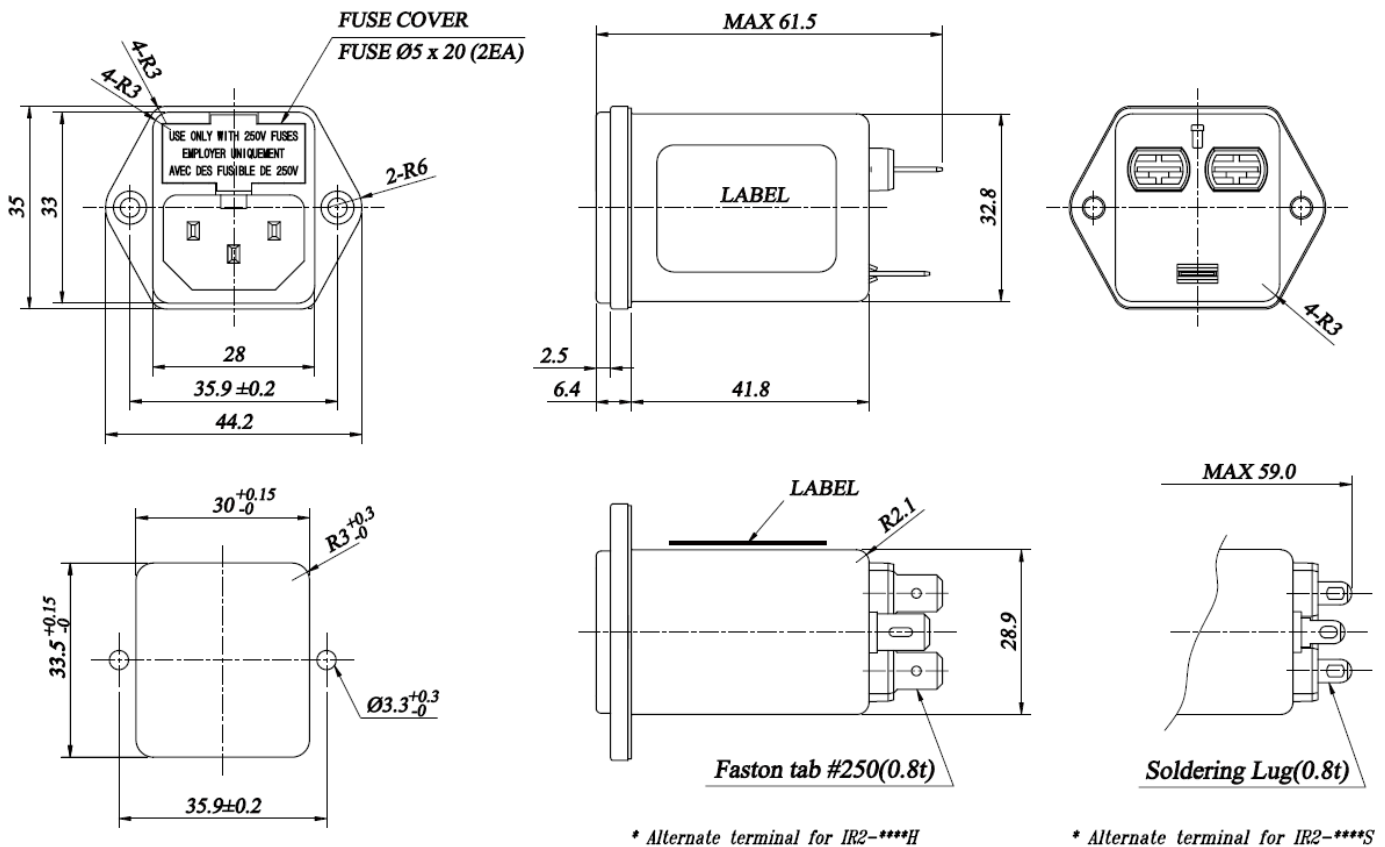
E1 : Level with the Noise Filter in the circuit.

E2 : Level without the Noise Filter in the circuit

H. Guaranteed Minimum Attenuation In [dB]

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
RIR2-0642-*	10	21	29	33	38	40	25	3	12	20	25	40	49	50
RIR2-02C2-*	28	41	44	42	42	42	37	19	29	42	40	46	52	45
RIR2-04C2-*	20	29	39	43	42	42	35	19	27	38	34	42	49	45
RIR2-06C2-*	12	20	25	33	35	38	26	18	25	33	28	35	46	34

I. Mechanical Dimension Unit : mm



Panel Cutout dimension mount from front side.

* Alternate terminal for IR2-****H

* Alternate terminal for IR2-****S

※ General Tolerance : ± 0.5 mm

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. cULus mark.

L. Packing Specification

1. Quantity & Weight

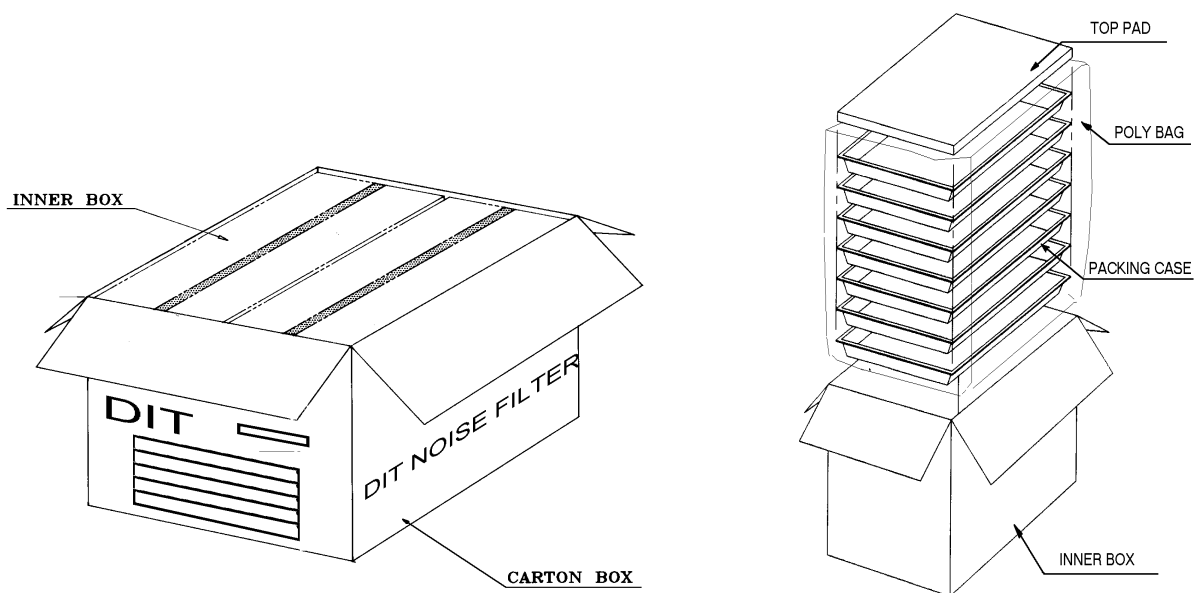
Packing Case	Q'ty/ 1 Box	Gross Weight(kg)
CARTON BOX	200	16
INNER BOX	100	8

2. Packing Case

Packing Case	Q'ty	Material	Dimension(W×L×H)mm
CARTON BOX	1/200	SK3SA	425×363×243(outside)
INNER BOX	1/100	SKSA B Type	208×335×215(inside)
PACKING CASE	1/20	P.E.T	325.3×201×0.5
TOP PAD	1/100	STYROFOAM(PS)	193×317×8.0
POLY BAG	1/100	PE SHEET	450×550

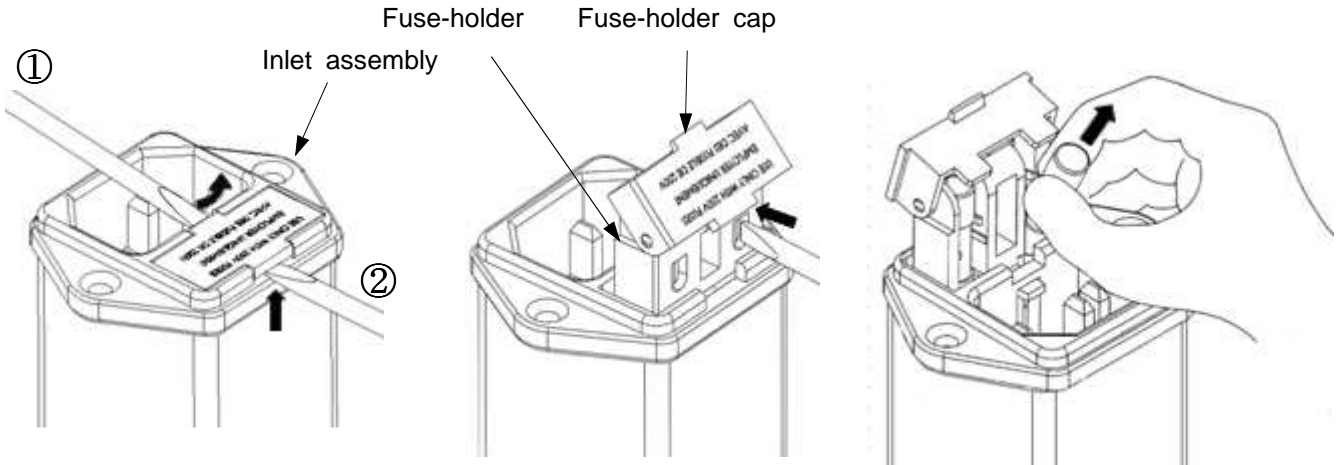
3. Marking

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



M. Instructions for fuse extraction & insertion

1) Extraction method

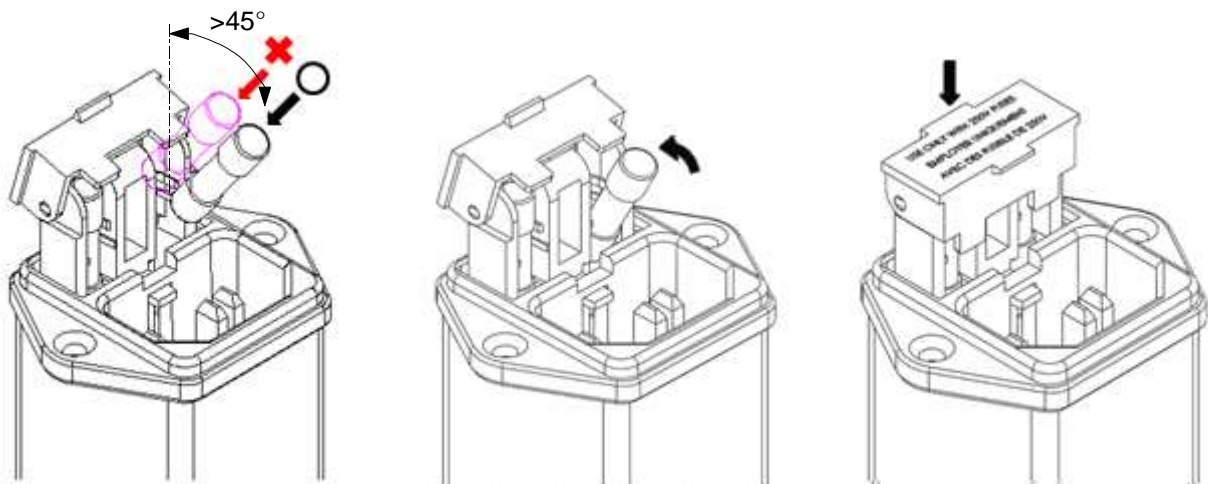


Lift fuse-holder cap with "-" screw driver. Location of "-" screw driver, ① or ② is available.

Push fuse out through hole of fuse-holder with "-" screw driver.

Take fuse out from fuse-holder by hand.

2) Insertion method



Put a side cap of fuse into fuse-holder at an angle of minimum 45 degree on axis of fuse holder extracted fully.

Push the other side cap of fuse to the wall of fuse-holder.

Insert fuse-holder to inlet assembly.