

FILTERS N242X Series Low Earth Leakage High Performance RFI/EMI Power Filters

ETS-Lindgren's Model N242X Power Filters are low leakage RFI/EMI high-performance power filters, designed for use where low earth leakage is a requirement.



ETS-Lindgren's Model N242X Power Filters are low leakage RFI/EMI high performance power filters, designed for use where low earth leakage is a requirement. The performance is maintained up to full load in both symmetric and asymmetric modes. The leakage current is directly proportional to the potential difference between the neutral and earth leads at the filter input terminals. Solid and permanent earthing of the case is essential for safety and to ensure optimum performance.

Key Features

- Suitable for Mobile Installations
- Over 100 dB Insertion Loss from 150 kHz to 10 GHz
- Fully Accessible End Chambers
- RoHS Compliant and CE Marked for Compliance with the Low Voltage Directive
- Amp Range: 6 Amps to 100 Amps
- Frequency Range: 2 Line Filters, 250V-DC/50/60Hz
- 4 Line Filters, 440/250V-DC/50/60H

Features

Maximum Protection

N242X filters have an extremely low current leakage. They are fully tested for attenuation performance, voltage withstanding to 1 kV for thirty seconds, and insulation resistance.

Insertion Loss

The N242X series of filters provide 100 dB insertion loss from 150 kHz to 40 GHz in both symmetric and asymmetric modes up to full load.

Mobile Installations

These filters are suitable for mobile installation applications.

End Chamber Accessibility

For termination of input and output cabling, these filters have fully accessible end chambers.

RoHS Compliant, CE Marked

N242X filters are RoHS compliant and are also CE marked for compliance with the low voltage directive.

Applications

- Military Field Installations
- Commercial Installations Using Motor Generator Sets
- Filtering of Mains Supplies Where Maximum Safety is Required N242X Series Power Filters Series
- Under certain circumstances, the N242X Filters may be used with Earth leakage safety cut-outs. Please contact ETS-Lindgren for further information.

Specifications

Electrical Specifications

Part #	Current (Max)	Leakage Current Per Volt (N-E)	Voltage Max	# of Lines	Voltage Drop on Full Load in 250V 50/60/Hz System/Line	DC Resistance Per Line	Series Inductance Per Line	Shunt Capac. Per Line	Case Temp Rise On Full Load	Max. Recom. Case Temp on Full Load	Full Load Dissipation
N2420	6 A	2 mA	250 V	2	1 V	0.1 Ω	1,680 μ F	4.5 μ H	+10 $^{\circ}$ C	+70 $^{\circ}$ C	20 W
N2421	6 A	2 mA	440/250 V	4	1 V	0.1 Ω	1,680 μ F	4.5 μ H	+10 $^{\circ}$ C	+70 $^{\circ}$ C	40 W
N2422	32 A	8 mA	250 V	2	0.4 V	0.015 Ω	177 μ F	24.5 μ H	+12 $^{\circ}$ C	+70 $^{\circ}$ C	100 W
N2423	32 A	8 mA	440/250 V	4	0.4 V	0.015 Ω	177 μ F	24.5 μ H	+12 $^{\circ}$ C	+70 $^{\circ}$ C	200 W
N2424	63 A	8 mA	250 V	2	0.3 V	0.03 Ω	25.5 μ F	24.5 μ H	+12 $^{\circ}$ C	+70 $^{\circ}$ C	60 W
N2425	63 A	8 mA	440/250 V	4	0.3 V	0.03 Ω	25.5 μ F	24.5 μ H	+12 $^{\circ}$ C	+70 $^{\circ}$ C	120 W
N2426	100 A	10 mA	250 V	2	0.5 V	0.02 Ω	37 μ F	28.5 μ H	+25 $^{\circ}$ C	+70 $^{\circ}$ C	120 W
N2427	100 A	10 mA	440/250 V	4	0.5 V	0.02 Ω	37 μ F	28.5 μ H	+25 $^{\circ}$ C	+70 $^{\circ}$ C	240 W

Physical Specifications

Part #	A	B	C	D	E	F	G	H	J	K	L	M	N	Weight
N24205	75	110	212	50	63.5	46.3	54.6	24.1	12	12	20	7	M6	5.9
	mm	mm	mm	mm	(2.5 in)	mm	mm	(1.8 in)	mm	mm	mm	mm	mm	kg
	(12 in)	(6.9 in)	(4.3 in)	(8.3 in)		(2.5 in)	(1.8 in)		(.9 in)	(5 in)	(.8 in)	(.3 in)		(13 lb)
N24205345	110	212	50	108	46.3	54.6	24.1	12	12	20	7	M6	11.8	
	mm	mm	mm	mm	(4.3 in)	mm	mm	(1.8 in)	mm	mm	mm	mm	mm	kg
	(12 in)	(13.5 in)				(4.3 in)	(1.8 in)		(.9 in)	(5 in)	(.8 in)	(.4 in)		(26 lb)
N24250210	110	487.5	mm	1296	50	143	46.3	25	163.8	32.4	2	9	M6	12.7
	mm	mm	mm	mm	(2 in)	mm	mm	(1.8 in)	mm	mm	mm	mm	mm	kg
	(22 in)	(8.3 in)				(2 in)	(1.8 in)		(2.5 in)	(3.2 in)	(1.3 in)			(28 lb)
N24250415	110	487.5	mm	1434	50	143	46.3	25	163.8	32.4	2	9	M6	24.9
	mm	mm	mm	mm	(2 in)	mm	mm	(1.8 in)	mm	mm	mm	mm	mm	kg
	(22 in)	(16.3 in)				(2 in)	(1.8 in)		(2.5 in)	(11.3 in)	(1.3 in)			(54.9 lb)
N24250210	110	487.5	mm	1434	50	143	46.3	25	163.8	32.4	2	9	M6	12.7 kg
	mm	mm	mm	mm	(2 in)	mm	mm	(1.8 in)	mm	mm	mm	mm	mm	kg
	(22 in)	(8.3 in)				(2 in)	(1.8 in)		(2.5 in)	(3.2 in)	(1.3 in)			(28 lb)
N24250415	110	487.5	mm	1434	50	143	46.3	25	163.8	32.4	2	9	M6	24.9 kg
	mm	mm	mm	mm	(2 in)	mm	mm	(1.8 in)	mm	mm	mm	mm	mm	kg
	(22 in)	(16.3 in)				(2 in)	(1.8 in)		(2.5 in)	(11.3 in)	(1.3 in)			(54.9 lb)
N24250210	110	487.5	mm	1434	50	143	46.3	25	163.8	32.4	2	9	M6	17.7
	mm	mm	mm	mm	(2 in)	mm	mm	(1.8 in)	mm	mm	mm	mm	mm	kg
	(22 in)					(2 in)	(1.8 in)		(2.5 in)	(3.2 in)	(1.3 in)			(39.0 lb)
N24250415	110	487.5	mm	1434	50	143	46.3	25	163.8	32.4	2	9	M6	34
	mm	mm	mm	mm	(2 in)	mm	mm	(1.8 in)	mm	mm	mm	mm	mm	kg
	(22 in)					(2 in)	(1.8 in)		(2.5 in)	(3.2 in)	(1.3 in)			(75 lb)

Other Specifications

- Filter Networks are RF Sealed in High Quality Electroplated Steel Cases
- Available with a Variety of Cable Entry Options
- Fixing Kit

Product Charts

