

Three-phase distribution filters

series: RF

Description and function:

It is low frequency and also radio frequency interference suppression LC filter which is connected symmetrically. It is produced for asymmetrical load in TNC network. Low pass filter is created by combination of inductance L and condensers C. The low pass filter restricts radio frequency interference and harmonic components which are spread back to a feed array. The filter is mainly intended for switchboards where is mostly mounted as close as possible behind a power supply terminal block of low voltage. The EMC requirements of standards can be met by the assembly of the filter, above all, of the standard ČSN EN 61000-6-3 and ČSN EN 61000-6-4 in cases when in the switchboards are single interference-suppressed or non-interference-suppressed appliances (frequency converters, servo controls, switch-mode power supplies, regulators with power semi-conductors which operate in pulse regime, appliances with non-linear input circuits), but the switchboard as a whole does not meet the EMC requirements.



TECHNICAL PARAMETERS:

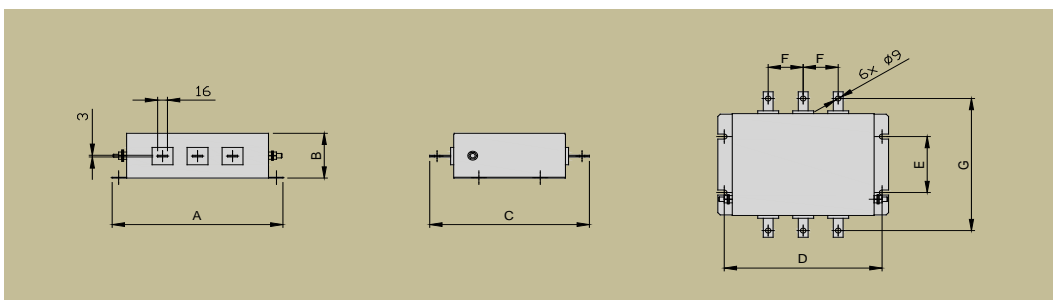
Nominal operating voltage	Un: 3x230/400 Vac
Extent of operating currents	In: 60-400A
Nominal current:	60-400A @ 40°C
Testing voltage (L1+L2+L3) - PEN:	2200Vdc - 60s
Extent of operating temperature:	-25°C + 60°C

Type	Nominal current [A]	Power loss [W]	Weight [kg]	Leakage current 1*) [A]	basic dimensions [mm]						
					A	B	C	D	E	F	G
					length	height	width	pitch	pitch	pitch	pitch
SKY3RF60	60	70	10	< 0,15	278	80	260	257	100	57	236
SKY3RF80	80	70	10	< 0,15	278	80	260	257	100	57	236
SKY3RF100	100	70	10	< 0,15	278	80	260	257	100	57	236
SKY3RF150	150	130	22	< 0,3	363	100	346	342	170	79	317
SKY3RF200	200	130	23	< 0,3	363	100	346	342	170	79	317
SKY3RF300	300	130	24	< 0,3	363	100	346	342	170	79	317
SKY3RF400	400	130	25	< 0,3	363	100	346	342	170	79	317
SKY3RF500	500	130	25	< 0,3	363	100	346	342	170	79	317

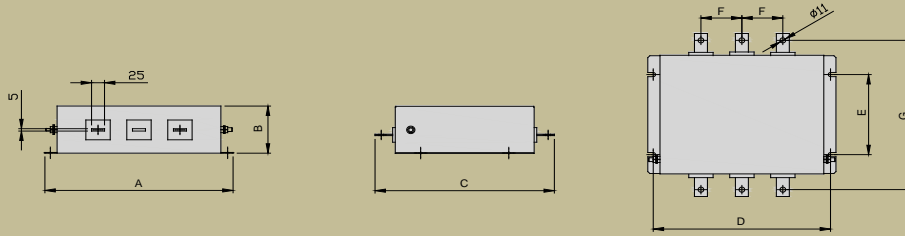
* After a deal there is a possibility of modification of the filter construction according to the customer's request.

1*) Leakage current measurement was performed according to the standard ČSN EN 60950.

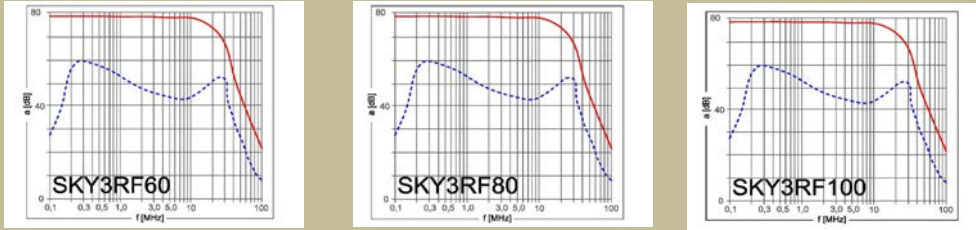
Dimensional drawing for : SKY3RF60 - 100



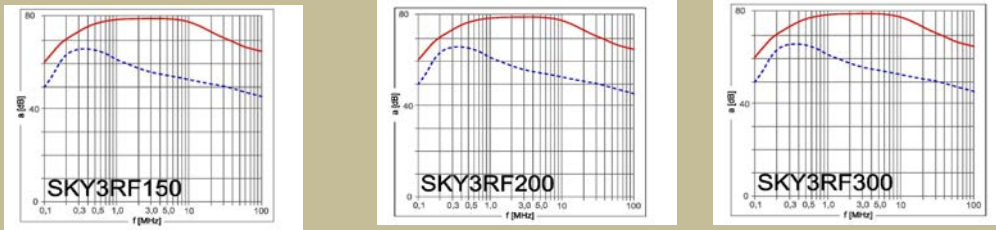
Dimensional drawing for : SKY3RF150 - 500



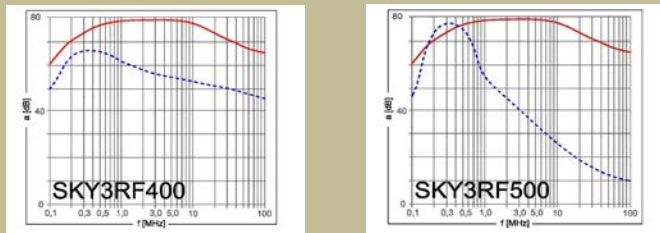
Attenuation characteristic:



--- asymmetric — symmetrical (measurements in the system 50/50 Ohm)

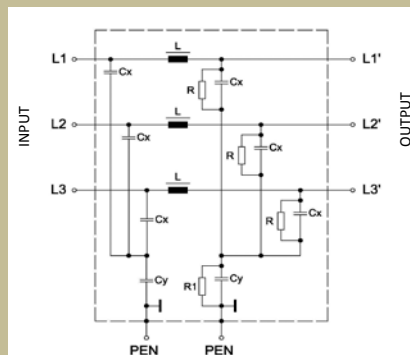


--- asymmetric — symmetrical (measurements in the system 50/50 Ohm)



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Wiring diagram:



Dimensioning, wiring:

They are dimensioned according to indicated label nominal voltage and current values. Short-circuit protection must not exceed nominal current value. When installing into switchboards it is necessary to count with power loss and it is necessary to provide for sufficient removal of heat. When connecting it is necessary to meet the EMC requirements. There must not be any paralleling of interference-suppressed and non-interference-suppressed circuits. The grounding connections must be as short as possible and it is necessary to avoid any ground loops.
