

Three-phase interference suppression filters (unsymmetric consumption) - series C : for currents 600-2500 A

Description:

It is a double LC circuit consisting of chokes and condensers. In three-phase filters of series SKY4FLxxC a composed choke has 4 windings on a common core. The filter is used for five-conductor network. The used safety condensers of type X are being wired among phases for filtration of symmetrical component. The condensers of type Y are being wired towards the ground for filtration of asymmetric component. They are delivered with terminals in a metal case.

Functions of the interference suppression filters:

The LC filter is formed by low-pass filter 0 – 9kHz. It reduces a level of radio frequency interference in conductors from the side of appliance and also increases its resistance to interference from the surroundings. The filters function either way. The most effective they are from 150kHz to 30MHz.



TECHNICAL PARAMETERS :

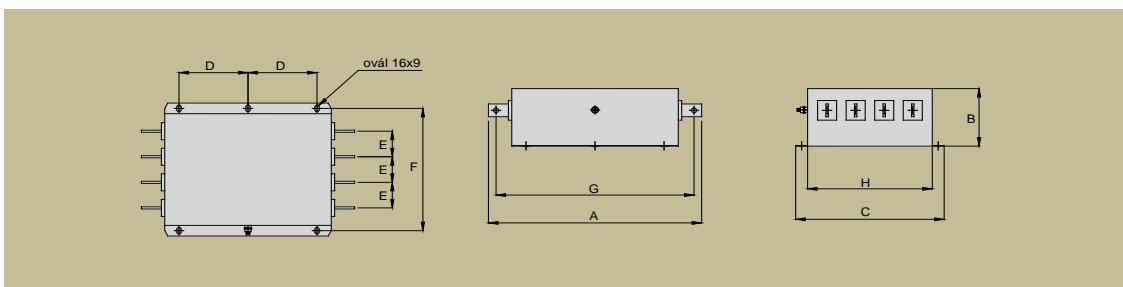
Nominal operating voltage Un: 3x230/400 Vac
Extent of operating frequencies fn (for In) Fn: 50-60 Hz
Extent of operating currents In: 600-2500A
Short-term overcurrent capacity : 50% In
Thermal class : B
Protection class : IP00
Extent of operating temperature : -10°C + 40°C

Type	Nominal current [A]	Leakage current 1*) [mA]	Weight [kg]	Conductor cross section [mm]	basic dimensions [mm]							
					A	B	C	D	E	F	G	H
					length	height	width	pitch	pitch	pitch	pitch	other
SKY4FL600C	600	< 140	14	30x5 Ø11	448	135	312	145	60	287	416	262
SKY4FL1000C	1000	< 140	15	30x10 Ø11	442	135	312	145	60	287	410	262
SKY4FL1600C	1600	< 140	32	50x10 2xØ13	580	160	410,5	165	80	370	460/540	343
SKY4FL2500C	2500	< 140	33	100x10 4xØ13	580	160	490,5	165	80	450	380/460	423

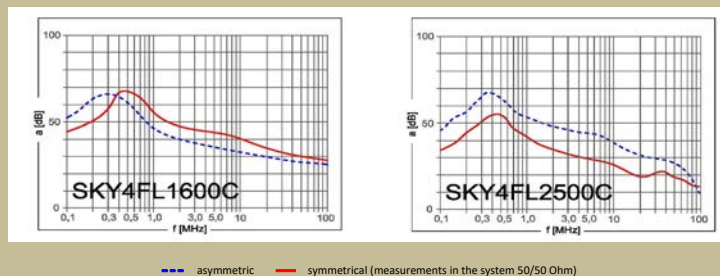
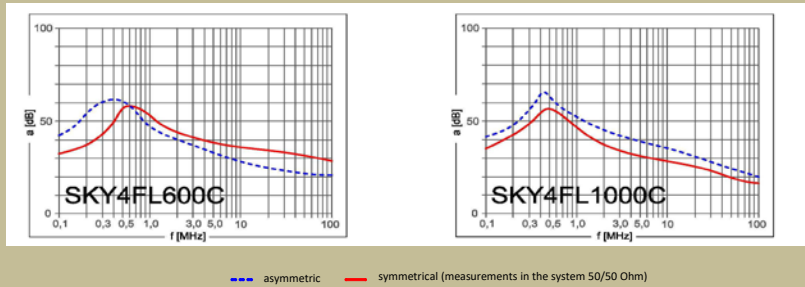
* After a deal there is a possibility of modification of the filter construction according to the customer's request.

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

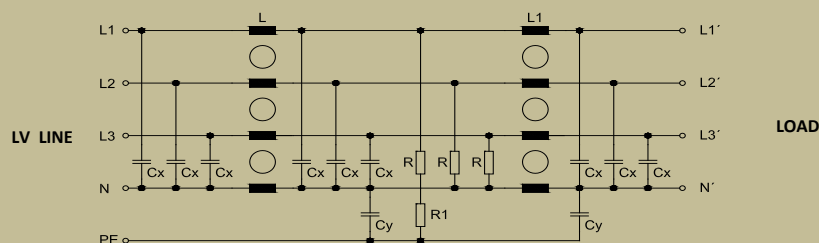
Dimensional drawing for : SKY4FL600C - SKY4FL2500C



Attenuation characteristic:



Wiring diagram:



Use:

It is used to frequency converters and appliances which need supplemental interference suppression. For example: soft starters, pulse resources, thyristor controls, electronic units and whole switchboards.

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 of the filters although it is not as large as the power loss in chokes or in sinusoidal filters. But also it is necessary to provide for sufficient heat removal. 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.