

## Three-phase interference suppression filters (unsymmetric consumption) - series C : for currents 60-400 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 :

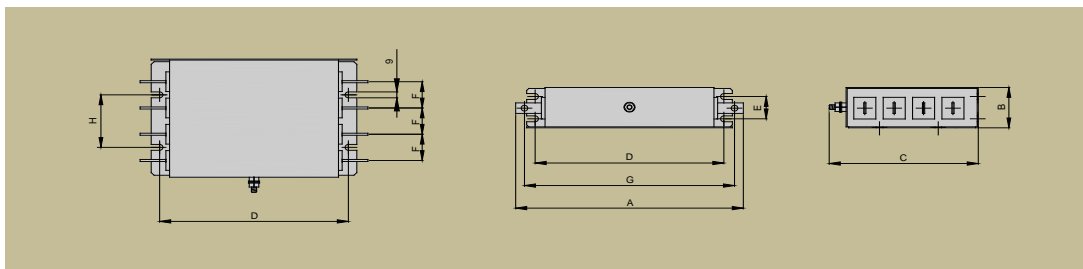
**Nominal operating voltage** Un: 3x230/400 Vac  
**Extent of operating frequencies  $f_n$  (for  $I_n$ )** Fn: 50-60 Hz  
**Extent of operating currents** In: 60-400A  
**Short-term overcurrent capacity** : 50%  $I_n$   
**Thermal class** : B  
**Protection class** : IP00  
**Extent of operating temperature** : -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
					width	height	depth	pitch	pitch	pitch	pitch	pitch
SKY4FL60CP	60	< 28	3	20x3 Ø9	310	61,5	203	257	34	40	286	80
SKY4FL80CP	80	< 28	3	20x3 Ø9	310	61,5	203	257	34	40	286	80
SKY4FL100CP	100	< 28	3,7	20x3 Ø9	385	61,5	262	332	34	60	361	120
SKY4FL150CP	150	< 28	3,7	20x3 Ø9	385	61,5	262	332	34	60	361	120
SKY4FL200CP	200	< 28	3,9	20x3 Ø9	395	61,5	262	332	34	60	366	120
SKY4FL250CP	250	< 28	3,9	20x3 Ø9	395	61,5	262	332	34	60	366	120
SKY4FL320CP	320	< 28	5,9	25x5 Ø11	395	61,5	262	332	34	60	366	120
SKY4FL400CP	400	< 28	9	25x5 Ø11	395	61,5	262	332	34	60	366	120

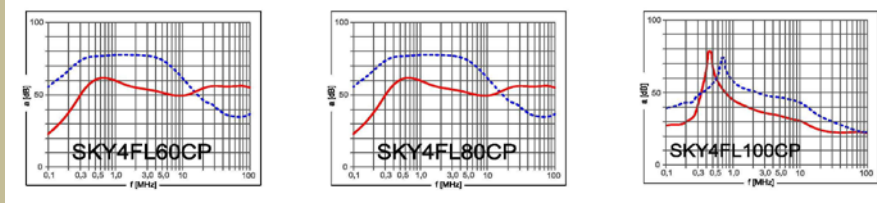
\* After a deal there is a possibility of modification of the filter construction according to the customer's request.

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

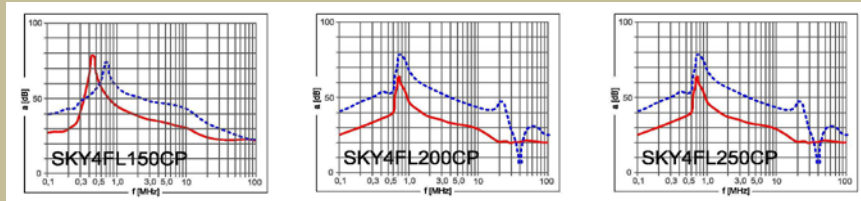
### Dimensional drawing for : SKY4FL60CP - SKY4FL400CP



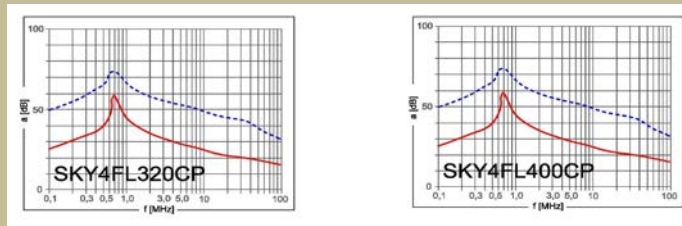
**Attenuation characteristic:**



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

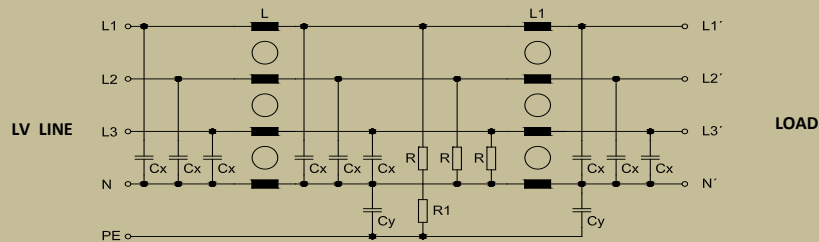


--- asymetric — symmetrical (measurements in the system 50/50 Ohm)



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**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.