

U Mototechny 107 251 62 Tehovec Czech Republic Tel.: +420 323605511 +420 323660013 Fax: +420 323607922 http://www.skybergtech.com

E-mail: info@skybergtech.com

Sinusoidal filters for frequency inverters, type TZS single-phase

Function and description:

Low pass filter is created by combination of inductance L and condensers C. The low pass filters switching frequency of the frequency changer. As result is sinusoidal phase to phase voltage on the filter output.



TECHNICAL PARAMETERS:

Extent of operating currents In : 180A
Switching frequency of the inverter SFr : 4kHz

TECHNICAL PARAMETERS:

Extent of operating currents In : 10A
Switching frequency of the inverter SFr : 12-20kHz

TECHNICAL PARAMETERS:

Extent of operating currents In : 20A
Switching frequency of the inverter SFr : 12-20kHz

TECHNICAL PARAMETERS:

Extent of operating currents In : 6A Switching frequency of the inverter SFr : 11-16kHz

TECHNICAL PARAMETERS:

Extent of operating currents In : 8A
Switching frequency of the inverter SFr : 5-16kHz

TECHNICAL PARAMETERS:

Extent of operating currents In : 6A
Switching frequency of the inverter r : 3-16kHz

TECHNICAL PARAMETERS:

Extent of operating currents In : 6A
Switching frequency of the inverter r : 3-16kHz

SKY2FSM11-160kHz SKY2FSM15-16kHz SKY2FSMF15-16kHz_a SKY1FSM10-230 SKY2FSM6,5-16kHz SKY2FSM10-230-32kHz SKY2FSM25-400-60Hz SKY2FSM11-160kHz_a

SKY2FSM4-230-8kHz

TECHNICAL PARAMETERS: Extent of operating currents Switching frequency of the inverter In : 11A SFr : 60-160kHz TECHNICAL PARAMETERS: Extent of operating currents In: 15A Switching frequency of the inverter Fr:16kHz TECHNICAL PARAMETERS: Extent of operating currents In : 15A Switching frequency of the inverter SFr: 16kHz TECHNICAL PARAMETERS: Extent of operating currents Switching frequency of the inverter In : 10 A SFr : 4-16 kHz TECHNICAL PARAMETERS: Extent of operating currents In : 6,5 A SFr : 16 kHz Switching frequency of the inverter TECHNICAL PARAMETERS: Extent of operating currents In : 10 A Switching frequency of the inverter TECHNICAL PARAMETERS: **Extent of operating currents** In : 25 A Switching frequency of the inverter SFr : 5-16 kHz

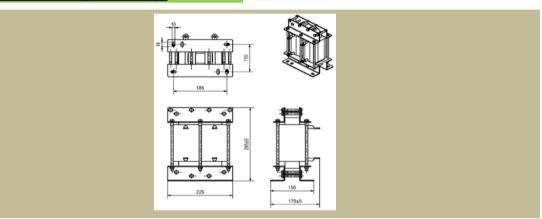
SFr: 32 kHz

TECHNICAL PARAMETERS: In : 11 A SFr : 60-160 kHz Extent of operating currents Switching frequency of the inverter

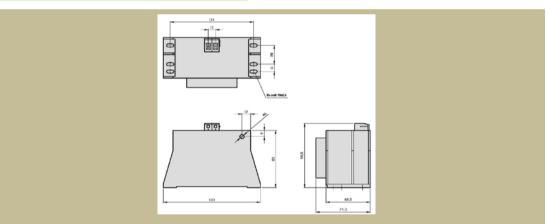
TECHNICAL PARAMETERS: Extent of operating currents Switching frequency of the inverter In:4A SFr:8kHz

Туре	Nominal current	Voltage drop	Weight	Conductor cross section	basic dimensions [mm]				
	[A]	[%]	[kg]	[mm 2]	Α	В	C	D	E
					length	height	width	pitch	pitch
SKYTLS180-0,37	180	4	20	oko 35 x M8	225	295	170	185	110
SKYTSF10-12kHz	10	12.20	1,8	4 - 6	133	85	74,5	114	39
SKYTSF20-12kHz	20	12.20	4,5	6 - 10	172	123	108,5	150	65
SKYSEF6-230	6	11.16	1,52	6	133	85	85,5	115	40
SKYFS8-400-5kHz	8	5.16	3,7	1,5	132	85	74,5	117	40,5
SKY1FSM6-400-3kHz	6	5.16	1,8	svorky	133	88	74	-	-
SKY1FSM16-230	6	3.16	1,8	svorky	133	88	74	•	-
SKY2FSM11-160kHz	11	60-160	1,7	2,5 / 6	133	89	74,5	115	40
SKY2FSMF15-16kHz	15	16	3,7	radox 2,5	172	109	109	150	64
SKY2FSMF15-16kHz_a	15	16	3,7	4	172	109	109	150	64
SKY1FSM10-230	10	4.16	1,2	2,5	133	101	75	115	40
SKY2FSM6,5-16kHz	6,5	16	1,6	CSA 2,5	133	87	75	115	40
SKY2FSM10-230-32kHz	10	32	1,6	radox 1,5	133	87	75	115	40
SKY2FSM25-400-60kHz	25	5.16	11	4,6	360	175	110	340	90
SKY2FSM11-160kHz_a	11	60-160	1,7	2,5 / 6	133	87	75	115	40
SKY2FSM4-230-8kHz	4	8	1,8	radox 1,5	133	87	75	115	40

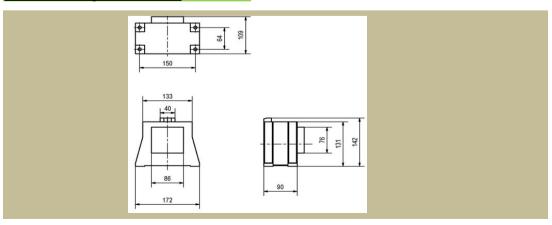
Dimensional drawing: SKYTLS180-0,37



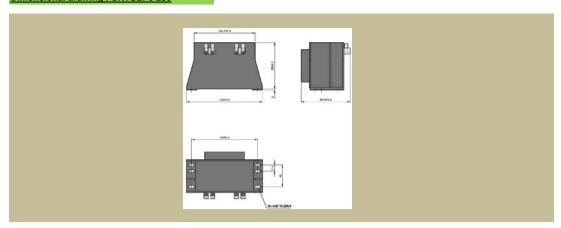
<u>Dimensional drawing: SKYTSF10-12kHz</u>



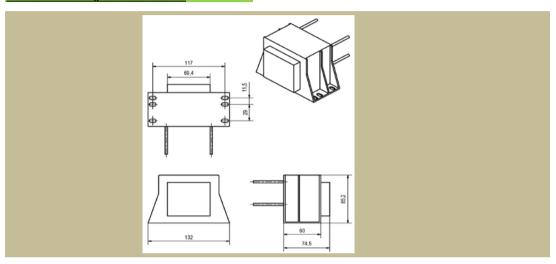
<u>Dimensional drawing : SKYTSF20-12kHz</u>



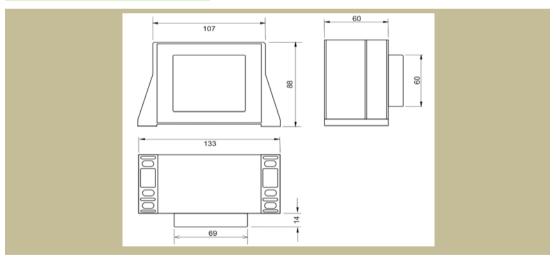
<u>Dimensional drawing : SKYSEF6-230</u>



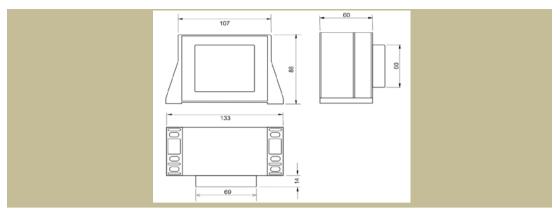
<u>Dimensional drawing : SKYFS8-400-5kHz</u>



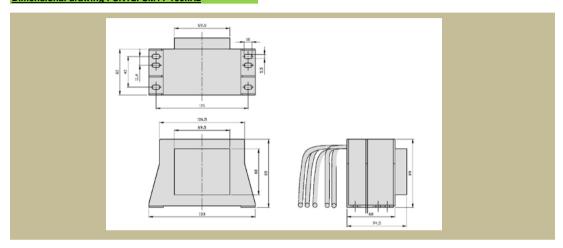
Dimensional drawing: SKY1FSM6-400-3kHz



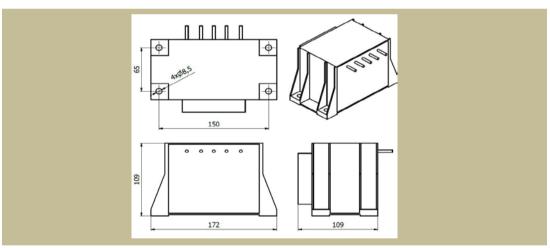
Dimensional drawing : SKY1FSM16-230



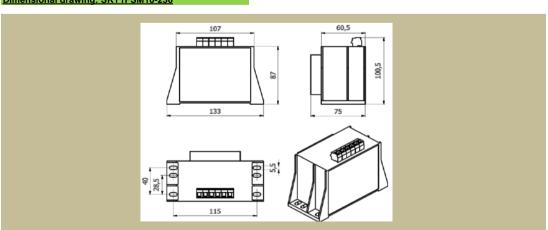
<u>Dimensional drawing: SKY2FSM11-160kHz</u>



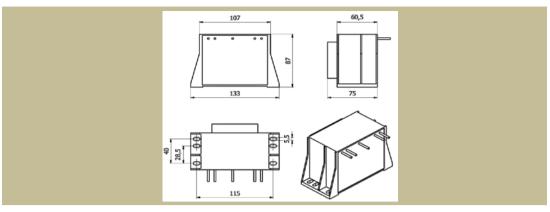
Dimensional drawing: SKY2FSMF15-16kHz, SKY2FSMF15-16kHz a



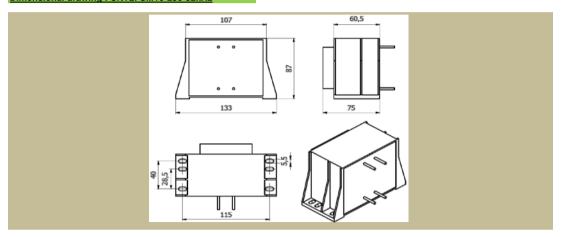
<u>Dimensional drawing: SKY1FSM10-230</u>



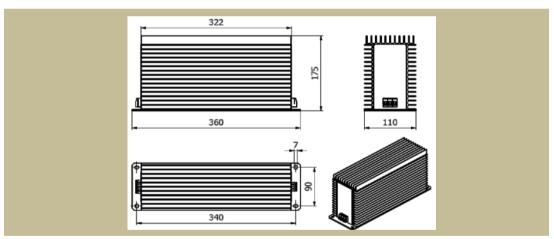
Dimensional drawing: SKY2FSM6,5-16kHz



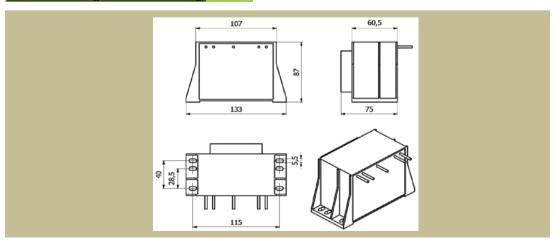
<u>Dimensional drawing : SKY2FSM10-230-32kHz</u>



<u>Dimensional drawing: SKY2FSM25-400-60Hz</u>



Dimensional drawing: SKY2FSM11-160kHz_a



Dimensional drawing: SKY2FSM4-230-8kHz

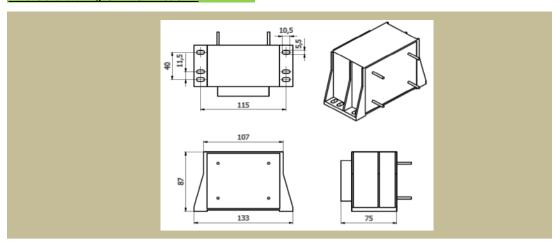
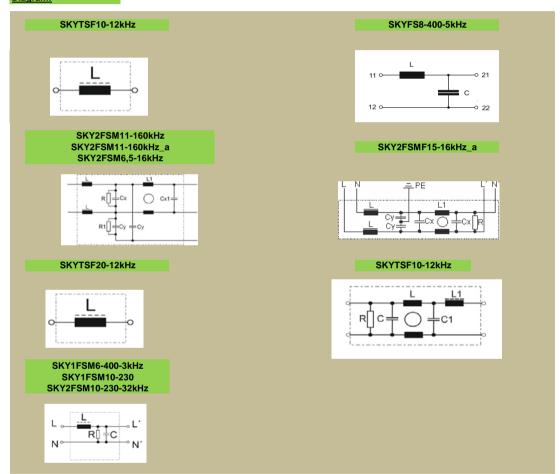
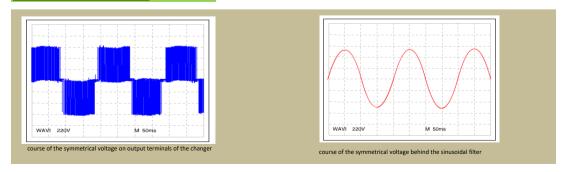


Diagram:



Course of symmetrical voltage:



Use:

It is used where we have big distance between the changer and motor. Also it is used where we need to decrease the size of electromagnetic emission and where must be kept low rate of voltage rise du/dt on the motor. By using the sinusoidal filter it is provided against early ageing of motor winding insulation.

Dimensioning, wiring:

It is dimensioned according to the indicated label values. When installing into switchboards it is necessary to count with power loss of the filter and provide for removal of heat loss by the help of a suitably placed ventilator. It is also necessary to beware of setting of the switching frequency of the changer. The higher is the switching frequency, the lower are radio-frequency losses. Therefore it is important to keep to the minimal size of the switching frequency that is indicated on the sinusoidal filter label.

SKYBERGTECH s.r.o. reserves the right without prior notice, to discontinue any product or to make design changes which are necessary