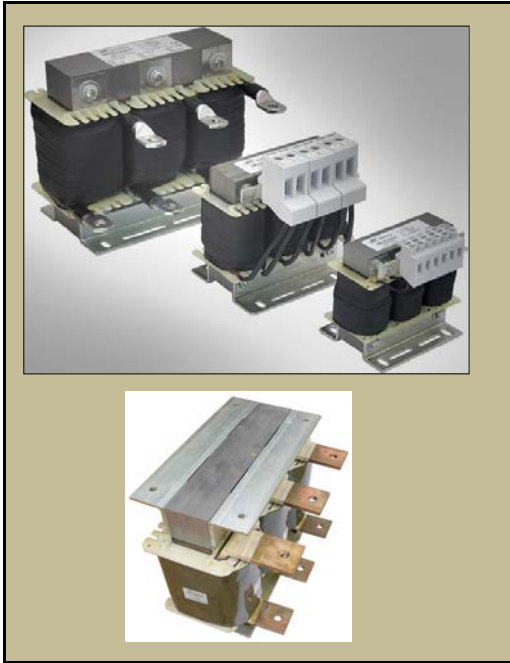


Three-phase motor 2% chokes for currents to 800A

Description:

As well as the 4% choke is this choke consisted of a conductor which is wound on the core. The conductor is formed by magnetic material and air gap. A 2% choke means that voltage drop on the choke is 2% from nominal voltage. So for nominal voltage 3x230/400 is 1%= 2,3V , 2% = 2,3x2=4,6V

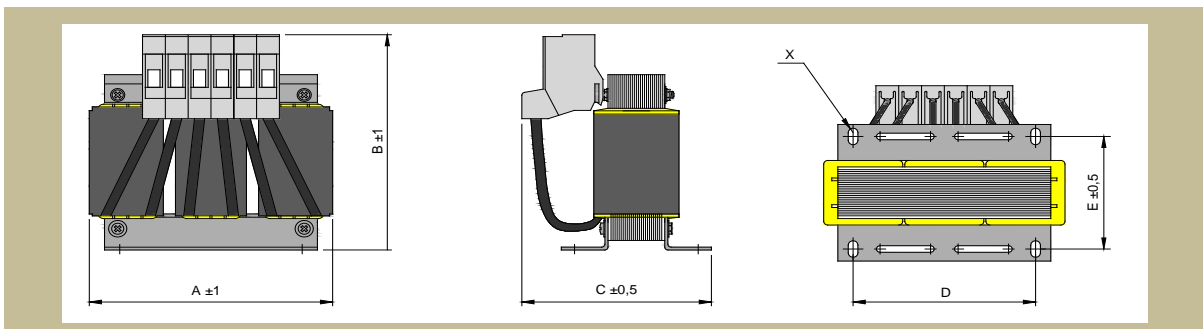


TECHNICAL PARAMETERS:

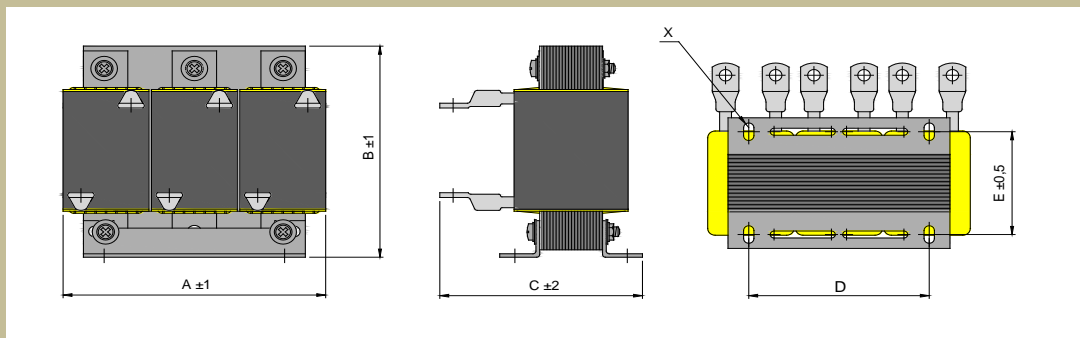
Nominal operating voltage	Un: 500 Vac
Extent of operating frequencies f_n (for In)	Fn: 50-60 Hz
Extent of operating currents	In: 3-1200A
Switching frequency of the inverter	SFr : to 3kHz
Short-term overcurrent capacity : 50% In	
Thermal class : B	
Protection class : IP00	
Extent of operating temperature : -10°C + 40°C	

Type	Nominal current [A]	Inductance $\pm 20\%$ [mH]	Power loss [W]	Weight [kg]	Conductor cross section [mm ²]	basic dimensions [mm]					
						A length	B height	C width	D pitch	E pitch	X mounting
SKY3TLT3-5	3x3	5	28	0,8	terminal 4mm ²	79	87	60	50	38	4,8x9
SKY3TLT6-2,5	3x6	2,5	28	1,2	terminal 4mm ²	95	100	72	63	50	5,8x11
SKY3TLT10-1,5	3x10	1,5	29,7	1,3	terminal 4mm ²	95	101	72	63	50	5,8x11
SKY3TLT16-0,9	3x16	0,9	48,9	1,7	terminal 4mm ²	119	120	73	73	55	5,8x11
SKY3TLT25-0,6	3x25	0,6	45	2,7	terminal 4mm ²	120	120	81	73	64	5,8x11
SKY3TLT32-0,5	3x32	0,5	45	2,7	terminal 16mm ²	120	133	102	73	64	5,8x11
SKY3TLT40-0,4	3x40	0,4	62	3,6	terminal 16mm ²	149	149	96	90	54	5,8x11
SKY3TLT60-0,25	3x60	0,25	65	5,0	lug 8-25	149	131	125	90	70	5,8x11
SKY3TLT100-0,15	3x100	0,15	93	7,7	lug 8-35	180	156	137	122	76	7x13
SKY3TLT150-0,1	3x150	0,1	100	13,1	lug 10 - 50	210	179	160	175	97,5	9x15
SKY3TLT200-0,08	3x200	0,08	123	20	lug 10 - 95	240	212	167	185	84	10x18
SKY3TLT200-0,08s	3x200	0,08	123	20	lug 10 - 95	240	212	167	185	84	10x18
SKY3TLT300-0,05	3x300	0,05	129	28,6	lug 13-185	262	232	226	180	104	Ø10
SKY3TLT400-0,04	3x400	0,04	168	42,2	lug 13-185	296	273	252	224	119	Ø11
SKY3TLT600-0,025	3x600	0,025	273	41,5	lug 13-185	296	273	252	224	119	Ø11
SKY3TLT800-0,014	3x800	0,014	183	56	8x50-13	360	305	220	250	124	10x15

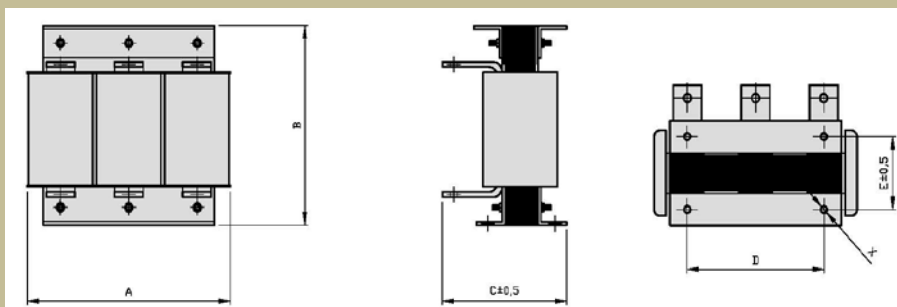
Dimensional drawing : SKY3TLT3-5 to SKY3TLT40-0,4



Dimensional drawing : SKY3TLT60-0,25 to SKY3TLT200-0,08s



Dimensional drawing : SKY3TLT300-0,05 to SKY3TLT800-0,014



Use :

The choke is supposed to be wired between the frequency converter and motor.

Functions of the choke :

The motor choke restricts size of rate of voltage rise between the choke and motor and it has got even more functions:

- reducing of overvoltage in the motor
- reducing of radiated electromagnetic field by a motor cable
- reducing of total leakage current of the converter
- reducing of terminal radio-frequency interference to LV line

Dimensioning:

Output current of the converter flowing through the choke must not exceed the label value. Through the chokes besides the nominal current there also flows radio-frequency additional current which has the same frequency as set pulse-width modulation of the converter. The higher is the frequency value, the bigger are additional radio-frequency losses in the choke.

If we want to decrease warming of the choke, we must decrease the modulation frequency of the converter so that the value is as low as possible. The chokes are used for shielded cable of max. length 100m and unshielded cable of max. length 150m. As well as line 4% chokes, when installing into switchboards there is necessary to count with power loss of the chokes and provide for sufficient heat removal. Maximum operating temperature is to 120°C, class B. It is important to realise that with increasing temperature the dielectric strenght of individual parts of the choke is being decreased.