



3 PHASE FILTER

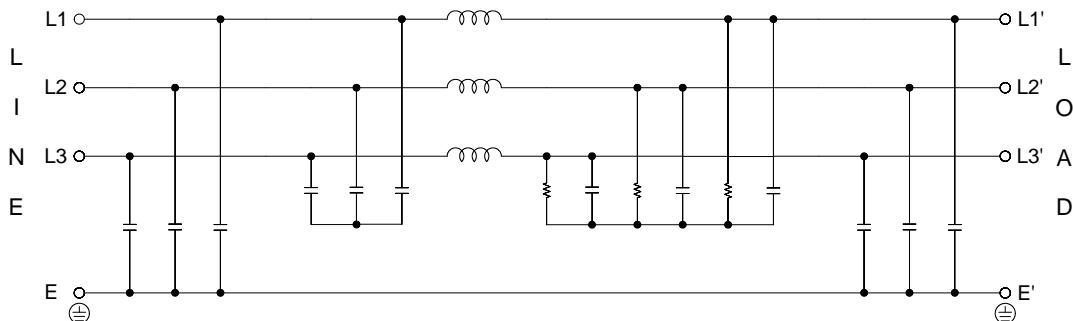
SC51

Technical data and measuring conditions

- Rated current: 8~280A@50°C
- Max. continuous operating voltage: 3x600 / 347VAC
- Operating frequency: dc to 60Hz
- Operating temp.: -25°~ + 100° (25/100/21)
- Hi-pot. test voltage (for 2 sec.):
 - P to E: 2750 VDC
 - P to P: 2250 VDC
- Protection category: IP20
- Flammability corresponding to: UL 94V-2 or better
- MTBF@50°C/400V(Mill-HB-217F): 135,000 hours
- Design corresponding to: UL1283, UL60939, CSA 22.2 No.8-13, IEC/EN60939
- Overload capability: 4 x rated current at switch on; 1.5 x rated current for 1 min., once per hour



Electrical schematic



Features

- Superior conducted attenuation performance
- Current rating 8~280A
- Significant noise reduction in both common mode and differential mode
- Compact metal-shielded design
- Touch-safe connections with hinged safety covers
- Widely used in industrial inverter

Marketing applications

- Industrial DC/AC inverters
- CNC
- Transformers
- Travelator
- Converters

Filter selection table

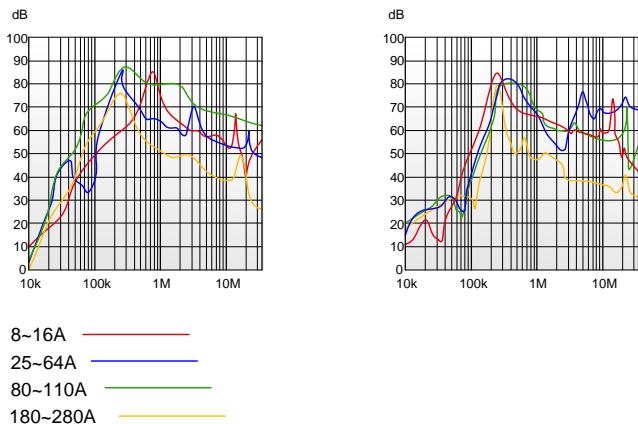
Filter PRJ No.	Rated Current @50°C [A]	Typical Drive* Power Rating [kW]	Leakage Current** @600VAC/50Hz [mA]	Power Loss @25°C/50Hz [W]
08SC51	8	3	0.3	7
16SC51	16	5.5	0.3	8
25SC51	25	11	3.2	8
36SC51	36	15	3.2	9
50SC51	50	22	3.5	11
64SC51	64	30	3.5	15
80SC51	80	37	3.7	23
110SC51	110	55	3.7	25
180SC51	180	90	3.7	49
280SC51	280	132	4.3	70

*Calculated at rated current, 480 VAC and cos phi = 0.8. The exact value depends upon the efficiency of the drive, the motor and the entire application.

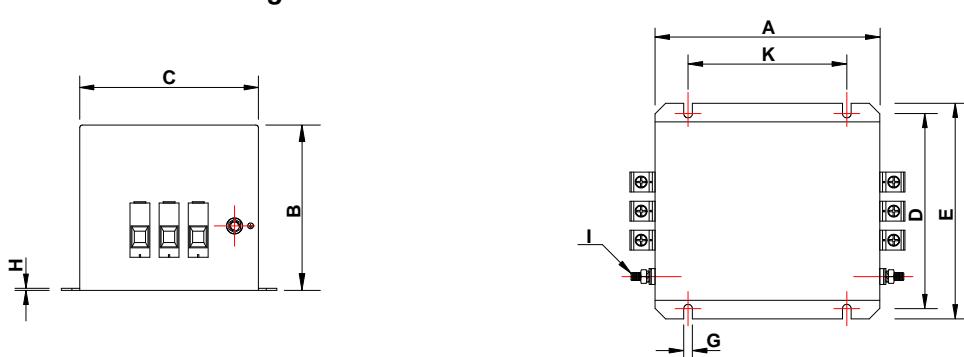
**Standardized calculated leakage current acc. IEC60939 under normal operating conditions.

Filter attenuation Insertion loss (dB) in 50Ω system CISPR 17

Common mode / Asymmetrical (P-E) Differential mode / Symmetrical (P-P)



Mechanical drawing



Dimensions (unit: mm) Tolerances according to ISO 2768-m / EN 22768-m

Code	8~64A	80~110A	180A	280A
A	200	400	510	700
B	65	90	133	155
C	120	350	360	530
D	136	130	156	220
E	150	170	180	260
G	6.5	15x6.5	16x9	16x9
H	1	1	2	2
I	M6	M10	M10	M10
K	115	373	470	660

Input / Output connectors cross sections

Input / Output connectors	8~16A	25~36A	50~64A	80~110A	180A	280A
Solid wire	6mm ²	16mm ²	35mm ²	50mm ²	95mm ²	150mm ²
Flex wire	4mm ²	10mm ²	25mm ²	50mm ²	95mm ²	150mm ²
AWG type wire	AWG 10	AWG 6	AWG 2	AWG 1/0	AWG 4/0	AWG 6/0
Recom. torque	0.6~0.8Nm	1~1.2Nm	1.8~2Nm	2.3~2.5Nm	17~20Nm	27~30Nm