

Compact three-phase EMC/RFI-filter for industrial motor drive applications

FN 3270

- Very compact and light weight design requiring minimum space
- Easy, time-saving installation and contacting
- NEW: protective covers as optional accessory available
- Attenuation performance according to EN61800-3/A11
- Sehr kompakte und leichte Bauform mit minimaler Standfläche
- Einfache, zeitsparende Montage und Kontaktierung
- NEU: optional Abdeckhauben als Berührungsschutz erhältlich
- Erfüllt die Anforderungen der PDS Norm EN61800-3/A11
- Très compact et d'une design léger
- Facile à implanter et apporte un gain de temps au montage
- NOUVEAU: couvercle de protection disponible en option
- Atténuation en conformité avec la EN61800-3/A11



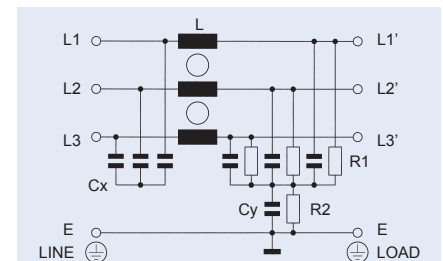
Technical specifications

Maximum operating voltage:	3 x 520VAC (480VAC +10% possible)
Operating frequency:	dc to 60Hz
Current ratings:	10 to 1000A @ 50°C
High potential test voltage:	P --> E 2750VDC for 2 sec P --> P 2250VDC for 2 sec
Overload:	4 times rated current at switch on, 1.5 times rated current for 1 minute, once per hour
Temperature range:	-25°C to +100°C (25/100/21)
Flammability corresponding to:	UL94V2
Design corresponding to:	UL 1283, CSA 22.2 No. 8 1986, EN 133'200

Approvals



Typical electrical schematic



Filter	Current rating @ 50°C (40°C) [A]	Typical drive power rating* [kVA]	Leakage current** 480VAC/50Hz [mA]	Power Loss [W]	I/O connections	Weight [kg]	Protective covers*** Order code
FN 3270H-10-29	10 (11)	5.5	26.4	2.1	29	0.4	-
FN 3270H-20-29	20 (22)	11	26.4	3.6	29	0.5	-
FN 3270H-35-33	35 (38)	22	29.4	5.9	33	0.7	-
FN 3270H-50-34	50 (55)	30	29.4	11.2	34	1.2	-
FN 3270H-65-34	65 (71)	37	29.4	11.8	34	1.3	-
FN 3270H-80-35	80 (88)	45	29.4	11.8	35	2.2	-
FN 3270H-100-35	100 (110)	55	29.4	15.0	35	2.6	-
FN 3270H-150-99	150 (164)	75	59.5	8.1	99	6.4	1151-047
FN 3270H-200-99	200 (219)	110	59.5	14.4	99	6.4	1151-047
FN 3270H-250-99	250 (274)	132	59.5	22.5	99	6.4	1151-047
FN 3270H-320-99	320 (350)	160	59.5	12.2	99	7.2	1151-047
FN 3270H-400-99	400 (438)	220	59.5	19.2	99	7.2	1151-047
FN 3270H-600-99	600 (657)	315	59.5	35.6	99	7.2	1151-047
FN 3270H-1000-99	in preparation	in preparation	in preparation	in prep.	in preparation	in prep.	in prep.

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

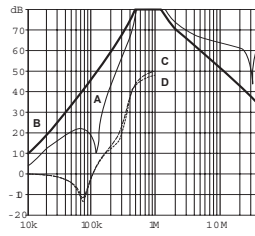
** Maximum Leakage under normal operating conditions. Note: if two phases are interrupted, worst case leakage could reach 5.2 times higher levels.

*** Please contact your local Schaffner partner to order the optional protective covers with the order code in the table above.

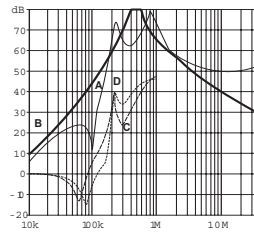
FN 3270 insertion loss

Per CISPR 17; A=50Ω/50Ω sym; B = 50Ω/50Ω asym; C = 0.1Ω/100Ω sym; D = 100Ω/0.1Ω sym.

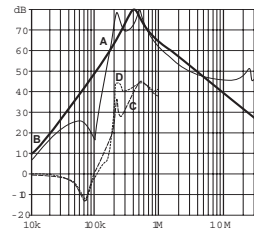
10 and 20A types



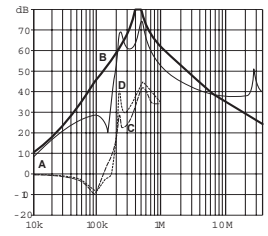
35A types



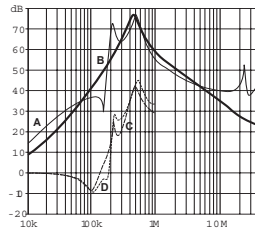
50 and 65A types



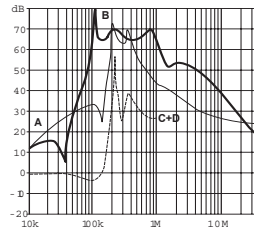
80A types



100A types



150 to 1000A types



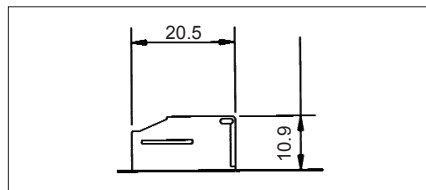
Features and advantages

- An extremely compact and light-weight filter design requiring minimum mounting space in installations and cabinets.
- Simple and time saving installation with good accessibility for automatic- and hand-tools.
- Solid, touch-safe terminal blocks, for all filters from 10 to 100A, offering sufficient contacting cross section according to the EN60204-1 installation standard.
- Optionally available transparent protective covers for all filters with busbars from 150 to 1000A, to protect the installer, operator or inspector from undeliberate touching of live conductors. They can easily be retrofitted even if the filter is already installed and connected.
- These EMC-filters provide the attenuation performance needed to fulfil EN61800-3/A11.
- Guaranteed filter performance under full-load operating conditions.
- 14 different filter models allow the specific choice and deployment for most industrial applications.

Typical applications

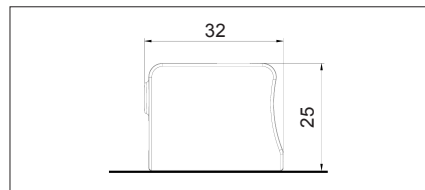
- Variable speed electrical power drive systems / motor drives for mainly industrial purpose.
- Various industrial applications comprising frequency inverters / motor drives / servo drives.

Filter input/output connections



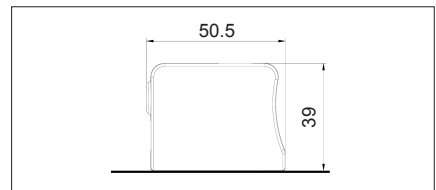
Type /29

Safety terminal block for solid wire 6mm², flex wire 4mm² or AWG 10.
Max. torque: 0.8Nm



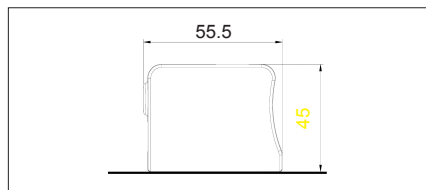
Type /33

Safety terminal block for solid wire 16mm², flex wire 10mm² or AWG 6.
Max. torque: 1.8Nm



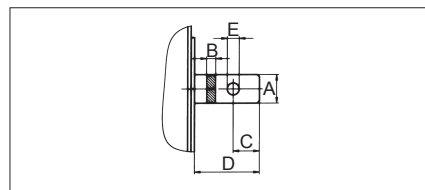
Type /34

Safety terminal block for solid wire 35mm², flex wire 25mm² or AWG 2.
Max. torque: 4.5Nm



Type /35

Safety terminal block for solid and flex wire 50mm² or AWG 1/0.
Max. torque: 8Nm



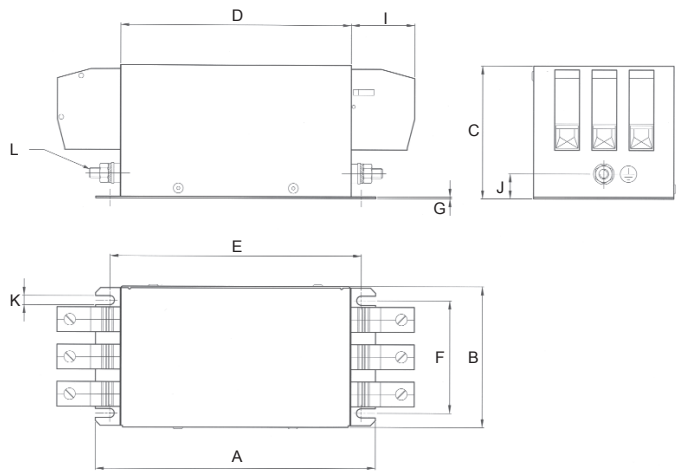
Type /99

Dimensions of busbar connections can be found in the table beside.

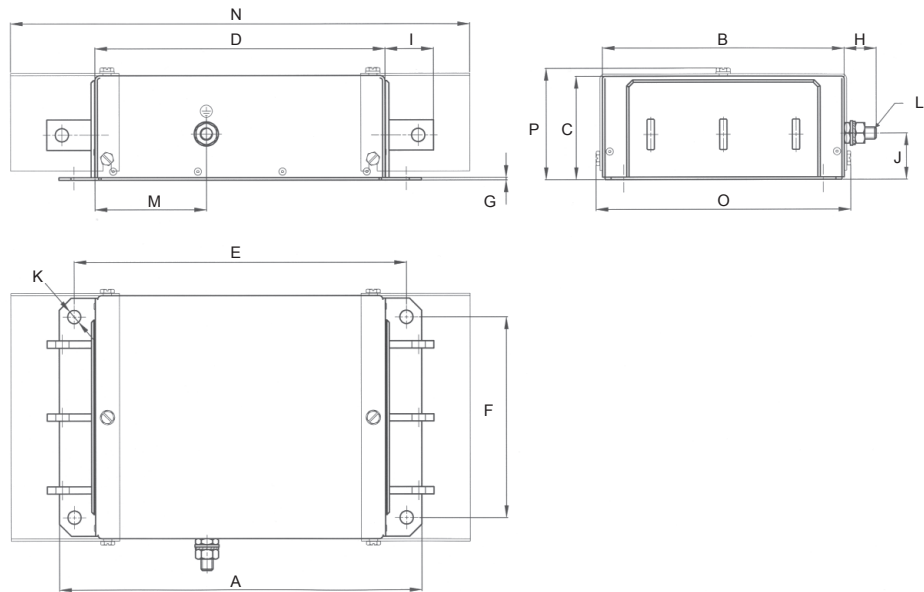
	150A	200A	250A	320A	400A	600A	1000A
A	20			25			...
B	3			6		8	
C	10			12.5			...
D				37			...
E	9			11			...

FN 3270 mechanical data

10A to 100A types



150A to 1000A types



Dimensions

	10A	20A	35A	50A	65A	80A	100A	150A	200A	250A	320A	400A	600A	1000A
A	150		160	170		200	230	300					...	
B	58		70	85		95		200					...	
C	58		68	80		90		86					...	
D	120		130	140		170	200	240					...	
E	132.5		142.5	152.5		182.5	212.5	275					...	
F	28		50	65		75		165					...	
G	1					1.5		2					...	
H								26.5					...	
I	11.5		25	39		45		40					...	
J	20.5		20	15		16		37					...	
K	4.5		5.5					11					...	
L	M4		M5	M6		M8		M10					...	
M								92					...	
N								380					...	
O								211					...	
P								93					...	

All dimensions in mm; 1 inch = 25.4 mm

Tolerances according: ISO2768-m / EN22768-m

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