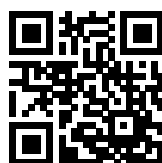


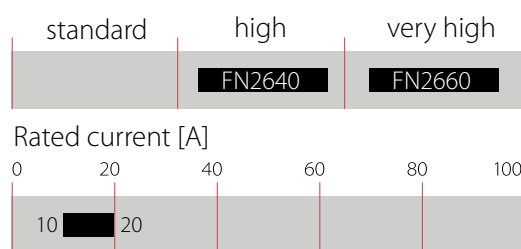
# Low Profile - High performance, EMC/EMI IEC inlet filter



- Excellent IEC inlet for robotics, datacenters and other applications
- Terminals available on load side: Fast-on, wire leads, bolt, and clamps
- Voltage rating up to 250 VAC
- Fits within 1 height unit (HU) of a 19" rack application
- 40 °C operating temperature



### Performance indicators



### Approvals & Compliances



Certifications FN2660 pending

### Features and Benefits

- FN2640 series fits perfectly within 1HU height for rack mount
- The filters are built to fit perfectly to datacenter and audio video equipment
- The shape allows convenient and space-saving installation
- Fulfills the requirements in IEC/EN 62040-1 - Uninterruptible power systems (UPS)
- Fulfills the requirements in IEC 62368-1 - Audio/Video, Information and Communication Technology Equipment
- Fulfills the requirements in IEC/EN 60335-1 - Household and similar appliances

### Typical Applications

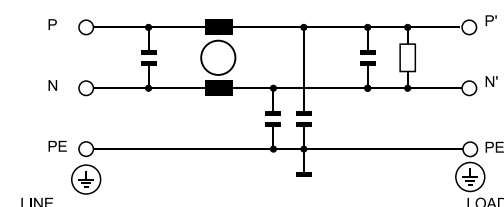
- Robotics, collaborative robots, autonomous machines
- Audio and video equipment
- UPS - Uninterruptible power supplies

## Technical Specifications









<b>Rated operating voltage</b>	250 VAC
<b>Operating frequency</b>	DC to 60 Hz
<b>Overvoltage category</b>	II acc. IEC 60664-1
<b>Overload capability</b>	1.5 x rated current for 1 minute once per hour
<b>Cooling</b>	Natural cooling AN
<b>Climatic category</b>	40/100/21 acc. IEC60068-1 FN2660: 40/085/21 acc. IEC60068-1 FN2660: 40/085/21 acc. IEC60068-1 FN2660: 40/085/21 acc. IEC60068-1
<b>Flammability according to</b>	Plastic Material: UL 94 V0 Laces for -07 version: UL 94 VW1
<b>Surge withstand</b>	2 kV Ph-Ph / 4 kV Ph-PE (Level 4)
<b>High potential test voltage</b>	P → N 1500 VDC for 2 sec* P/N → PE 2500 VDC for 2 sec*
<b>Altitude</b>	Derating above 2000 m
<b>Certified to</b>	UL 60939-3, IEC/EN 60939, GB/T 15287
<b>MTBF</b>	> 300,000 h
<b>Protection category</b>	IP00 / IP20 for -103 terminal
<b>Pollution degree</b>	2 acc. IEC 60664-1
<b>Vibration and shock</b>	3M12 acc. IEC 60721-3-3
<b>Temperature range (operation and storage)</b>	-40°C to +100°C (with derating >40°C) FN2660: -40°C to +85°C (with derating >40°C)
<b>Rated currents</b>	10 to 20 A @ 40°C

\* High potential test voltage: Repetition with max. 80% of specified values

### Typical electrical schematic



### Filter Selection Table

Filter	Rated current	Leakage current*	Power loss	Inductance**	Capacitance**			Resistance**	Connections				Weight max****	
	@ 40°C	@ 250 VAC/ 50 Hz	@ 25°C	L1	Cx1	Cx2	Cy1	R	line side	load side				
	[A]	[mA]	[W]	[mH]	[μF]	[μF]	[nF]	[kΩ]	C14 C20					[kg]
<b>Single-stage</b>														
<b>FN2640-10-yy-C11</b>	10	0.37 (0.21)	5.2	8.3	1	0.47	4.7	680		-05	-07	-08	-103	0.3
<b>FN2640-15-yy-C11</b>	15	0.37 (0.21)	6.8	4.0	1	0.47	4.7	680		-05	-07	-08	-103	0.3
<b>FN2640-16-yy-C11</b>	16	0.37 (0.21)	7.6	4.0	1	0.47	4.7	680		-05	-07	-08	-103	0.3
<b>FN2640-20-yy-C11</b>	20	0.37 (0.21)	7.2	2.4	1	0.47	4.7	680		-05	-07	-08	-103	0.3

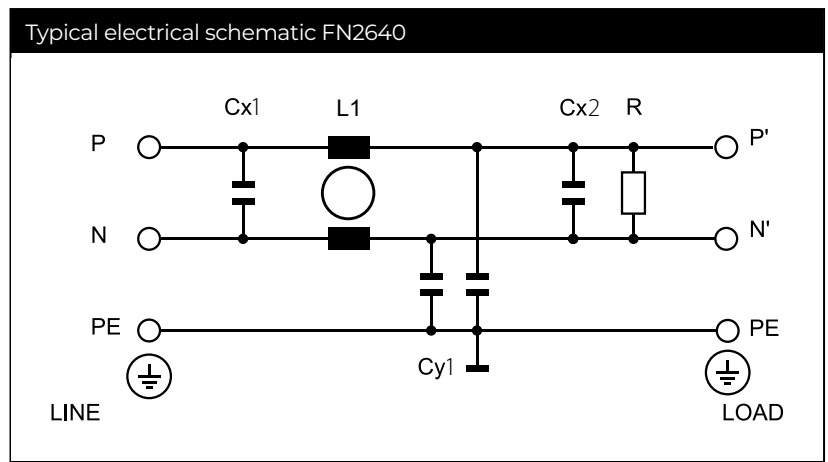
\* Maximum leakage current under normal operating conditions. Note: if the neutral line is interrupted, worst case leakage current could reach twice this level.  
 \*\* Tolerances apply: Inductance: -30/+50%, Capacitance: ±20%, Resistance: ±10%.  
 \*\*\*Weight depending on choice of connectors.

**Product selector**

**FN2640-xx-yy-C11**

**yy – Load terminal type**  
 05: fast-on 6.3 x 0.8 mm  
 07: wire leads  
 08: M4 screw  
 103: push-in terminal

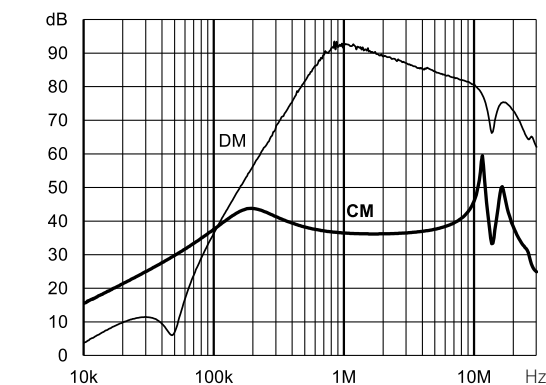
**xx – Rated current**  
 10-20: 10 A – 20 A



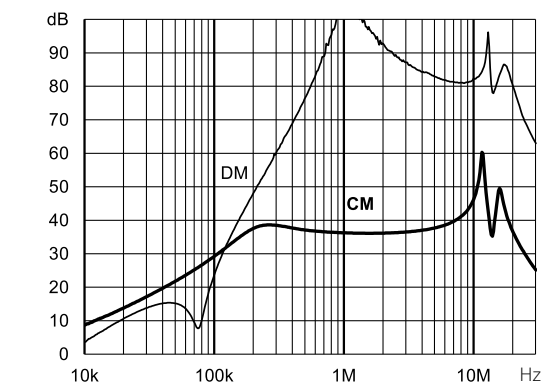
### Typical Filter Attenuation

Per CISPR 17: symmetrical 50 Ω/50 Ω -> Differential Mode (DM); asymmetrical 50 Ω/50 Ω -> Common Mode (CM)

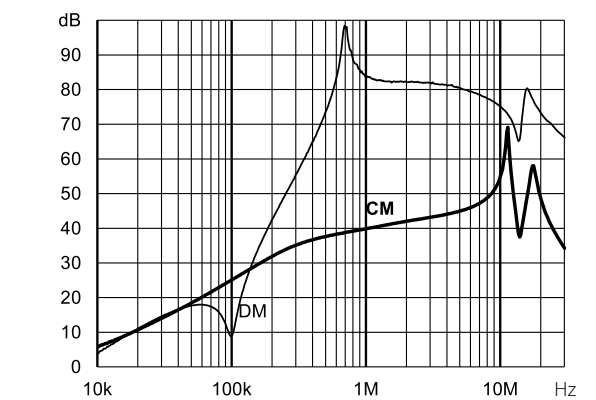
FN2640 - Single-stage filter



FN2640-10-yy-C11



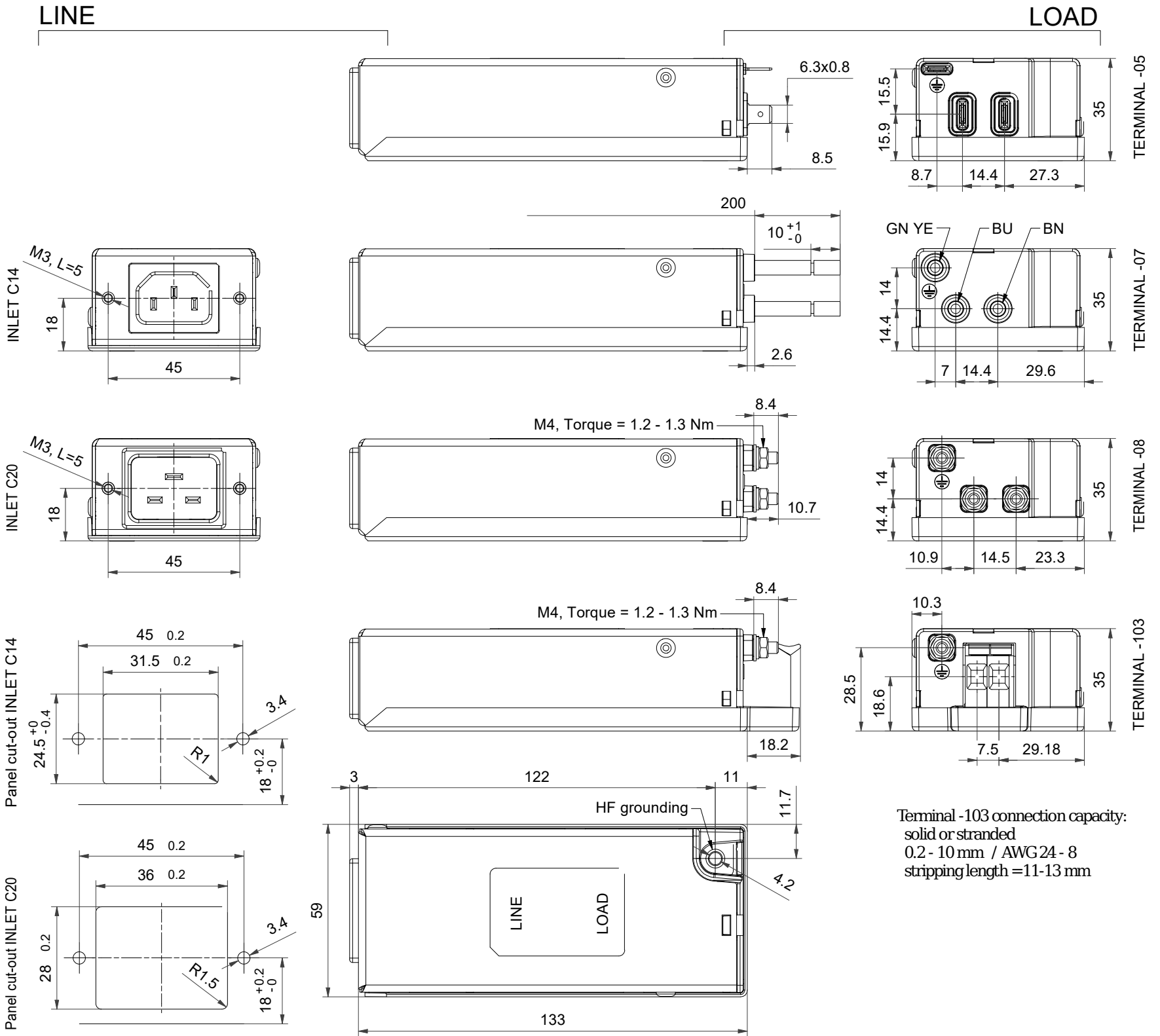
FN2640-15-yy-C11 & FN2640-16-yy-C11



FN2640-20-yy-C11

### Dimensions FN2640 - Single-stage Filter

For dimensions [mm] without tolerances: ISO2768-cL/EN22768-cL applies



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