



## High frequency differential choke with excellent attenuation to reduce dV/dt

Datasheet 3/2019

**APPROVALS:**

 UL508  
CSA C22.2

**FIN5983.(012 - 060).M**
**FEATURES**

- Rated current from 12 to 60A
- Increases motor life
- Protects against voltage spikes on the motor

**BENEFITS**

- Safety terminal block connectors
- Low power loss up to 1 kHz frequency output

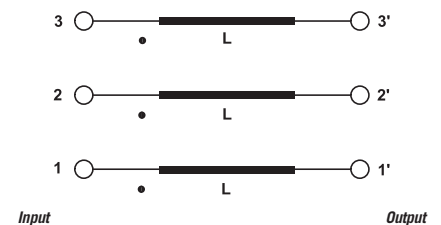
**MARKETS**

- Motors controlled by drives
- Woodworking machinery
- Closed loop motor applications

**ORDERING CODE**

FIN 5983	.030	.M
Model	Current (A)	Connection
		M = Terminal block

**ATTENUATION INDICATOR**

**ELECTRIC DIAGRAM**

**TECHNICAL SPECIFICATIONS**

Nominal voltage	0 / 600 Vac
Output frequency	0 – 1000 Hz
Rated current	12 to 60A
Carrier frequency (PWM)	0 - 16 kHz
Potential test voltage phase to phase	2400 Vdc (2 sec.)
Potential test voltage phase to ground	3200 Vdc (2 sec.)
IP Protection	IP20
Saturation current	4 x Rated current (Switch ON) 2 x In 10 seconds 1.5 In for 10 minutes 1.5 x Nominal current
Climatic class	-40 / +85° C
MTBF at 40°C	250.000 Hrs.

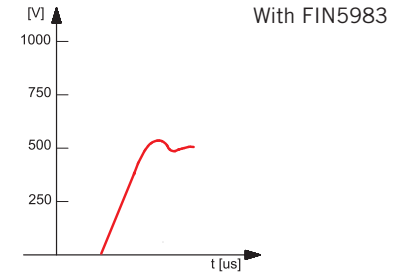
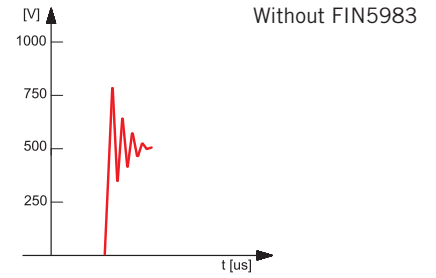
### ELECTRICAL CHARACTERISTICS

FIN5983	Rated Current 40°C	Rated Current 50°C	Power Loss (W)
.012.M	12	10	1.2 (2.7)
.030.M	30	25	1.8 (4.7)
.040.M	45	37	3 (7)
.060.M	60	50	8 (16.8)

### CONNECTIONS

Solid Cable (mm <sup>2</sup> )	LINE		Terminal Torque (Nm)	PE
	Stranded Cable (mm <sup>2</sup> )			Torque (Nm)
0.5 - 16	0.5 - 10		1.8	1.8
0.5 - 16	0.5 - 10		1.8	1.8
0.5 - 16	0.5 - 10		1.8	1.8
4 - 25	6 - 35		4.5	4.5

### TYPICAL MEASUREMENT

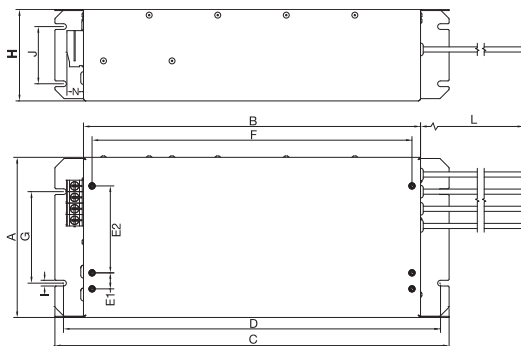


Example of measurement in a typical application using a servo drive

### MECHANICAL DIMENSIONS mm

FIN5983	A	B	C	D	E1	E2	F	G	H	J	L	I	N	Weight Kg.	Case
.012.M	140	295	345	330	14	76	280	80	80	50	300	5	33	2.2	1
.030.M	140	295	345	330	14	76	280	80	80	50	300	5	33	2.5	1
.040.M	200	295	345	330	-	160	280	120	80	50	300	5	38	3.2	1
.060.M	200	295	345	330	-	160	280	120	80	50	300	5	38	4	1

### CASE 1



### ASSEMBLY CONNECTION "M"

