

Accessories

Electronic filters

EFS 5004 / 3004

		EFS 5004 S	EFS 3004 S	
Power supply	U_P	0 ... 50	0 ... 30	V
Continuous output current	I_{cont}	4		A
Max. peak current ¹⁾	I_{max}	12		A
Operating temperature range		-25 ... + 65		°C
Storage temperature range		-25 ... + 85		°C
Dimensions (L x W x H)		65 x 58 x 18		mm
Mass		67		g

¹⁾ S2 operation for max. 3s

General information

These filters are special for applications that either cannot use the motor filter (e.g., integrated controllers) or in which the filtering by the ferrite-based motor filters is not sufficient.

Functional principle:

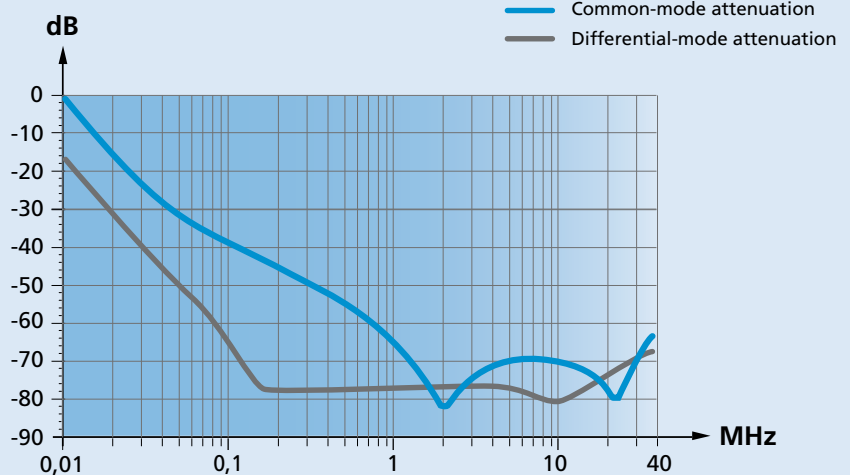
Discharge of common-mode interferences with a common-mode choke, a low-pass filter and capacitors between functional earth and DC power supply.

Typical attenuation

Common-mode attenuation describes the attenuation of the filter for compensation of high-frequency interference at the semiconductor output stage.

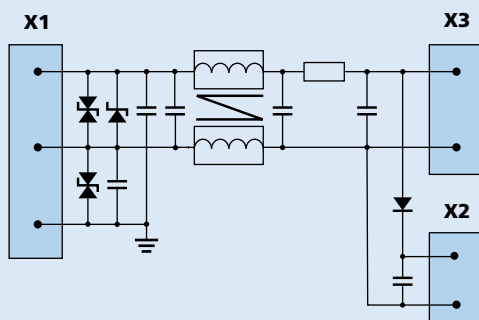
Differential-mode attenuation indicates how much current, caused by low motor PWM or high currents, can be attenuated.

Details on use of the filter are given in the respective technical manual.

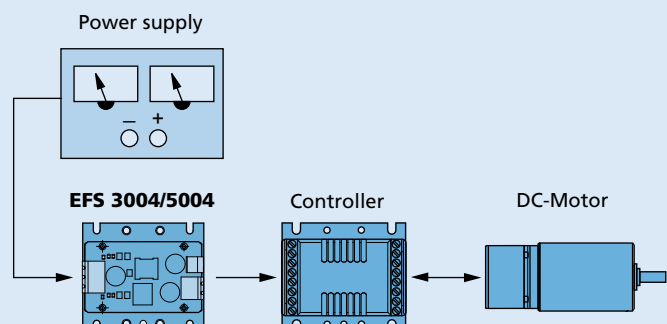


Circuit diagram / Connection diagram

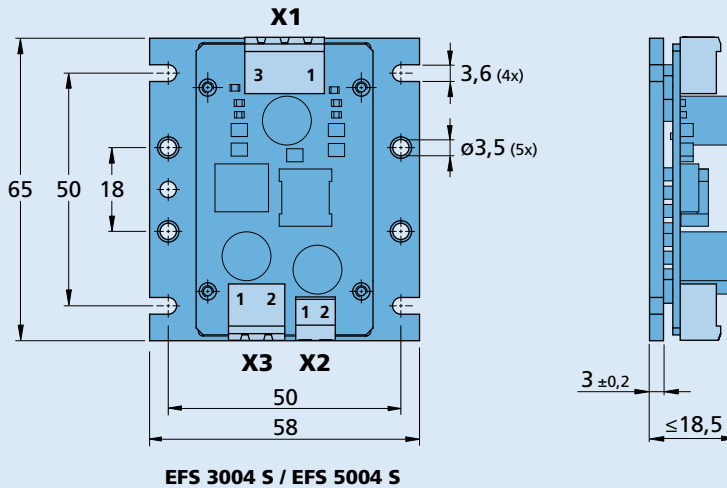
Circuit diagram




Connection diagram



Dimensional drawing and connection information



Scale reduced 

Connection information

No. X1 Input power supply

- 1 GND
- 2 Up
- 3 PE / FE Housing GND

No. X2 Electronic power supply

- 1 GND
- 2 Up

No. X3 Motor power supply

- 1 GND
- 2 Umot

Product combination

Electronic Filters	Speed Controller	Motion Controller	Motion Control Systems
EFS 3004 S	SC 1801 P SC 1801 F SC 1801 S SC 2402 P SC 2804 S		3242 ... BX4 3268 ... BX4 MCS 3242 ... BX4 MCS 3268 ... BX4 MCS 3274 ... BP4
EFS 5004 S	SC 5004 P SC 5008 S	MC 5004 P MC 5005 S MC 5010 S	MCS 3242 ... BX4 MCS 3268 ... BX4 MCS 3274 ... BP4