

FUSS-EMV 3-phase sinusoidal filter 4 A ac 400V + 25% from: 3kHz to: up to 120Hz
In housing

RS-part number:

Brand: FUSS-EMV

Manufacturer part number: 3AFS400-004 IG



Product details

Sinusoidal filter of the type 3AFS400 are changing the PWM-Output voltage of a frequency inverter and are modulating a sine curve.

Sinusoidal filter are used to reduce motor noise or to protect damageable motor systems.

Sinusoidal filter will allow a use of shielded cable with a length of 300m, if the switching frequency is known a customized sinusoidal filter, to reach a bigger length, could be created.

Qualified for motor speed of 120 Hz.

Permission

EN 60939; CE-conformity; UL 508 conformity; RoHS-conformity

Industrial standard – Three phase

Characteristics

Operating voltage	400 V + 25%	max. 500 V
Rated current	4 A ac	
Switching frequency	from 3 kHz	max. 18 kHz
Type	3AFS400-004 IG	

Types:

	<u>Rated current</u>	<u>Switching frequency</u>		<u>Motor speed</u>
3AFS400-004(IG)	4	3 kHz	18 kHz	up to 120 Hz
3AFS400-010(IG)	10	3 kHz	18 kHz	up to 120 Hz
3AFS400-016(IG)	16	3 kHz	18 kHz	up to 120 Hz
3AFS400-035(IG)	35	3 kHz	16 kHz	up to 120 Hz

FUSS-EMV 3-phase sinusoidal filter 63 A ac 400V + 25% from 3kHz up to 120Hz

RS-part number:

Brand: FUSS-EMV

Manufacturer part number: 3AFS400-063



Product details

Sinusoidal filter of the type 3AFS400 are changing the PWM-Output voltage of a frequency inverter and are modulating a sine curve.

Sinusoidal filter are used to reduce motor noise or to protect damageable motor systems.

Sinusoidal filter will allow a use of shielded cable with a length of 300m, if the switching frequency is known a customized sinusoidal filter, to reach a bigger length, could be created.

Qualified for a motor speed of 120 Hz.

Permission

EN 60939; CE-conformity; UL 508 conformity; RoHS-conformity

Industrial standard – Three phase

Characteristics

Operating voltage	400 V + 25%	max. 500 V
Rated current	63 A ac	
Switching frequency	from 3 kHz	max. 10 kHz
Type	3AFS400-063	

Types:

	<u>Rated current</u>	<u>Switching frequency</u>	<u>Motor speed</u>
3AFS400-063	63	3 kHz 10 kHz	50 up to 120 Hz
3AFS400-080	80	3 kHz 10 kHz	50 up to 120 Hz
3AFS400-125	125	3 kHz 10 kHz	50 up to 120 Hz
3AFS400-150	150	3 kHz 8 kHz	50 up to 120 Hz

FUSS-EMV 3- phase common mode filter 63 A ac 400V + 25% min. 6 kHz

RS-Part number:
 Brand: FUSS-EMV
 Manufacturer part number: 3ACMF400-063



Product details

Common mode filter of the type 3ACMF400 are changing the PWM-Output voltage of a frequency inverter and are modulating a sine curve.

Common mode filter are used to reduce motor noise or to protect damageable motor systems.

In **combination with a sinusoidal filter 3AFS400**, to control the differential mode voltage, an allpole sinusoidal filter is created. which characteristic allows frequencies up to 1000 Hz only and is damping switching and higher frequency remaining ripple to a very low percentage. This combination will allow a use of shielded cable with a length of 300m, if the switching frequency is known a customized sinusoidal filter, to reach a bigger length, could be created.

Qualified for a motor speed of 120 Hz.

- **Unshielded** cable any length are possible to use !!!
- Unshielded drive system respecting EN61800-3 Table. 16
- No bearing current
- Noise reduction up to 10dB

Permission

EN 60939; CE-conformity; UL 508 conformity; RoHS-conformity

Industrial standard – Three phase

Characteristics

Operating voltage	400 V + 25%	max. 500 V
Rated current	63 A ac	
Direct current link voltage	650 V dc	
Switching frequency	min. 6 kHz	
Motor speed	up to 120 Hz	
Type	3ACMF400-063	

Type:

	<u>Rated current</u>	<u>Switching frequency</u>	<u>Motor speed</u>	<u>Direct current link voltage</u>
3ACMF400-063	63	min. 6 kHz	up to 120 Hz	650 V dc
3ACMF400-080	80	min. 6 kHz	up to 120 Hz	650 V dc
3ACMF400-125	125	min. 6 kHz	up to 120 Hz	650 V dc
3ACMF400-150	150	min. 6 kHz	up to 120 Hz	650 V dc

FUSS-EMV 3 – phase allpole sinusoidal filter

2,5 A ac 400V + 25% min. 6 kHz

RS-Part number:

Brand: FUSS-EMV

Manufacturer part number: 3ASFAP400-002,5



Caution! The switching frequency of the inverter has to be fixed at 6 kHz!!!

Product details

The use of all pole sine filters achieves excellent EMC properties, since both conducted and radiated disturbances are minimized. Thus, the usage is particularly recommended for filtering the drives of e.g. elevators, fans, pumps and compressors, which are located in sensitive environments such as medical facilities, measuring laboratories, IT or residential areas.

Another field of application is found in spatially extended drive systems such as tunnels, wind power plants, mines, etc. In this case, often very long screened cable must be installed. On one hand these cable are expensive and on the other they are difficult to install. For example since the cable screen has to be grounded at regular intervals. In this case, the usage of an all-pole sine filter obtains already for motor cable lengths of $\geq 100\text{m}$ system cost advantages.

- **Unshielded** cable in any length are possible to use !!!
- Unshielded drive system respecting EN61800-3 Table. 16
- No bearing current
- Noise reduction up to 10dB

Permission

EN 60939; CE-conformity; UL 508 conformity; RoHS-conformity

Industrial standard – Three phase

Characteristics

Operating voltage	400 V + 25%	max. 500 V
Rated current	2,5 A ac	
Direct current link voltage	650 V dc	
Switching frequency	min. 6 kHz	
Motor speed	up to 120 Hz	
Type	3AFSAP400-002,5	

Type:

	<u>Rated current</u>	<u>Switching frequency</u>	<u>Motor speed</u>	<u>Direct current link voltage</u>
3AFSAP400-007	7	min. 6 kHz	up to 120 Hz	650 V dc
3AFSAP400-010	10	min. 6 kHz	up to 120 Hz	650 V dc
3AFSAP400-016	16	min. 6 kHz	up to 120 Hz	650 V dc
3AFSAP400-035	35	min. 6 kHz	up to 120 Hz	650 V dc
3AFSAP400-040	40	min. 6 kHz	up to 120 Hz	650 V dc

FUSS-EMV dU/dt-Filter 6 A ac 400V + 25% from 3kHz up to 120Hz

RS-Part number:

Brand: FUSS-EMV

Manufacturer part number: 3AFU400-006



Product details

dU/dt-filter are simple and cheap devices to optimize in a very simple way a drive system. dU/dt filter are damping the rate of change of approx. 10.000 V/ μ sec down to a rate of This results a more smooth running drive system with less noise and increases the long life period of a motor. The cheapest and simple solution in combination of in drive system used frequency inverter.

Permission

EN 60939; CE-conformity; UL 508 conformity; RoHS-conformity

Industrial standard – Three phase

Characteristics

Operating voltage	400 V + 25%	max. 500 V
Rated current	6 A ac	
Direct current link voltage	650 V dc	
Switching frequency	max. 8 kHz	
Motor speed	up to 60 Hz	
Motor cable length	up to 75 m shielded	
Type	3AFU400-006	

Type:

	<u>Rated current</u>
3AFU400-006	6
3AFU400-010	10
3AFU400-016	16
3AFU400-035	35
3AFU400-080	80
3AFU400-125	125