

Radio interference filter, three-phase  
**HFD 210**



**General Data**

Rated voltage	3 x 480 - 3 x 520 Vac
Voltage range	0 - 3 x 480 - 520 Vac
Rated current	3 x 7 - 3 x 180 A
Leakage current	12.00 - 18.00 mA
Protection index	IP 20

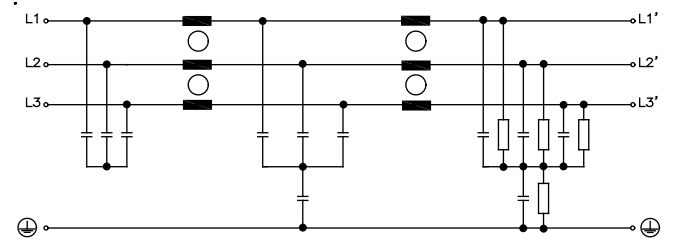
**Advantages**

For enhanced requirements
Two-stage filter concept
Efficient filter effect against line-bound interference emissions
Increase in the interference immunity of the connected consumer

**Applications**

Radio interference suppression filter for line-side interference suppression of single devices, frequency converters or as group interference suppression.

**Sample application**



**Standards**

Radio interference suppression filter to DIN EN 60939-2

**Approvals**



UL 1283 5th edition, CSA 22.2 No 8

1.1

1.2

1.3

2.1

2.2

3.1

3.2

3.3

4.0

5.1

5.2

# 3 Reactors / EMI filters

## Three-phase radio interference suppression filters



## Radio interference filter, three-phase HFD 210



Typ	HFD 210-500/7	HFD 210-500/16	HFD 210-500/30	HFD 210-500/42	HFD 210-500/55	HFD 210-500/75
<b>Electrical data</b>						
<b>Operating data</b>						
Rated voltage	3 x 520 Vac	3 x 520 Vac	3 x 520 Vac	3 x 520 Vac	3 x 520 Vac	3 x 520 Vac
Voltage range	0 - 3 x 520 Vac	0 - 3 x 520 Vac	0 - 3 x 520 Vac	0 - 3 x 520 Vac	0 - 3 x 520 Vac	0 - 3 x 520 Vac
Rated current	3 x 7 A	3 x 16 A	3 x 30 A	3 x 42 A	3 x 55 A	3 x 75 A
Leakage current (50 Hz)*	13.00 mA	14.00 mA	16.00 mA	16.00 mA	16.00 mA	16.00 mA
Leakage current (50 Hz)**	130.00 mA	133.00 mA	154.00 mA	154.00 mA	154.00 mA	154.00 mA
Rated frequency	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz
Overrating Capacity	150 %, shortly	150 %, shortly	150 %, shortly	150 %, shortly	150 %, shortly	150 %, shortly
<b>Approvals</b>						
Approvals	cURus, UL 1283 5th edition, CSA 22.2 No.8	cURus, UL 1283 5th edition, CSA 22.2 No.8	cURus, UL 1283 5th edition, CSA 22.2 No.8	cURus, UL 1283 5th edition, CSA 22.2 No.8	cURus, UL 1283 5th edition, CSA 22.2 No.8	cURus, UL 1283 5th edition, CSA 22.2 No.8
<b>Environment</b>						
Climatic category	25/085/21 [in accordance with EN 60068-1]	25/085/21 [in accordance with EN 60068-1]	25/085/21 [in accordance with EN 60068-1]	25/085/21 [in accordance with EN 60068-1]	25/085/21 [in accordance with EN 60068-1]	25/085/21 [in accordance with EN 60068-1]
Ambient temperature max.	50 °C	50 °C	50 °C	50 °C	50 °C	50 °C
<b>Safety and protection</b>						
Type	Metal enclosure	Metal enclosure	Metal enclosure	Metal enclosure	Metal enclosure	Metal enclosure
Protection index	IP 20	IP 20	IP 20	IP 20	IP 20	IP 20
Safety class (prepared)	I	I	I	I	I	I
Test voltage	2150 Vdc Phase/Phase, 2700 Vdc Phase/PE	2150 Vdc Phase/Phase, 2700 Vdc Phase/PE	2150 Vdc Phase/Phase, 2700 Vdc Phase/PE	2150 Vdc Phase/Phase, 2700 Vdc Phase/PE	2150 Vdc Phase/Phase, 2700 Vdc Phase/PE	2150 Vdc Phase/Phase, 2700 Vdc Phase/PE
<b>Notes</b>						
*	Leakage current measured against the maximum permissible input voltage fluctuation in accordance with IEC 38 ±10 %	Leakage current measured against the maximum permissible input voltage fluctuation in accordance with IEC 38 ±10 %	Leakage current measured against the maximum permissible input voltage fluctuation in accordance with IEC 38 ±10 %	Leakage current measured against the maximum permissible input voltage fluctuation in accordance with IEC 38 ±10 %	Leakage current measured against the maximum permissible input voltage fluctuation in accordance with IEC 38 ±10 %	Leakage current measured against the maximum permissible input voltage fluctuation in accordance with IEC 38 ±10 %
**	Leakage current by loss of two phases	Leakage current by loss of two phases	Leakage current by loss of two phases	Leakage current by loss of two phases	Leakage current by loss of two phases	Leakage current by loss of two phases
<b>Order numbers</b>						
Order Number	HFD 210-500/7	HFD 210-500/16	HFD 210-500/30	HFD 210-500/42	HFD 210-500/55	HFD 210-500/75



## Radio interference filter, three-phase HFD 210



Typ	HFD 210-500/100	HFD 210-500/130	HFD 210-500/180
<b>Electrical data</b>			
<b>Operating data</b>			
Rated voltage	3 x 520 Vac	3 x 520 Vac	3 x 520 Vac
Voltage range	0 - 3 x 520 Vac	0 - 3 x 520 Vac	0 - 3 x 520 Vac
Rated current	3 x 100 A	3 x 130 A	3 x 180 A
Leakage current (50 Hz)*	16.00 mA	18.00 mA	18.00 mA
Leakage current (50 Hz)**	154.00 mA	173.00 mA	173.00 mA
Rated frequency	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz
Oversrating Capacity	150 %, shortly	150 %, shortly	150 %, shortly
<b>Approvals</b>			
Approvals	cURus, UL 1283 5th edition, CSA 22.2 No.8	cURus, UL 1283 5th edition, CSA 22.2 No.8	cURus, UL 1283 5th edition, CSA 22.2 No.8
<b>Environment</b>			
Climatic category	25/085/21 [in accordance with EN 60068-1]	25/085/21 [in accordance with EN 60068-1]	25/085/21 [in accordance with EN 60068-1]
Ambient temperature max.	50 °C	50 °C	50 °C
<b>Safety and protection</b>			
Type	Metal enclosure	Metal enclosure	Metal enclosure
Protection index	IP 20	IP 20	IP 20
Safety class (prepared)	I	I	I
Test voltage	2150 Vdc Phase/Phase, 2700 Vdc Phase/PE	2150 Vdc Phase/Phase, 2700 Vdc Phase/PE	2150 Vdc Phase/Phase, 2700 Vdc Phase/PE
<b>Notes</b>			
*	Leakage current measured against the maximum permissible input voltage fluctuation in accordance with IEC 38 ±10 %	Leakage current measured against the maximum permissible input voltage fluctuation in accordance with IEC 38 ±10 %	Leakage current measured against the maximum permissible input voltage fluctuation in accordance with IEC 38 ±10 %
**	Leakage current by loss of two phases	Leakage current by loss of two phases	Leakage current by loss of two phases
<b>Order numbers</b>			
<b>Order Number</b>	<b>HFD 210-500/100</b>	<b>HFD 210-500/130</b>	<b>HFD 210-500/180</b>

1.1

1.2

1.3

2.1

2.2

3.1

3.2

3.3

4.0

5.1

5.2

# 3 Reactors / EMI filters

## Three-phase radio interference suppression filters



### Radio interference filter, three-phase HFD 210



Mechanical data	Typ	Connections phase	Connections PE	Fixing method	Weight	Dimension picture (in mm)	A	B	C	D	E	F	G
	HFD 210-500/7	Screw clamp, 4 mm <sup>2</sup>	Bolt, M5	Mounting lugs	1.10 kg		255	126	50	225	240	25	6.5
	HFD 210-500/16	Screw clamp, 4 mm <sup>2</sup>	Bolt, M5	Mounting lugs	1.70 kg		305	142	55	275	289	30	6.5
	HFD 210-500/30	Screw clamp, 10 mm <sup>2</sup>	Bolt, M5	Mounting lugs	1.80 kg		335	150	60	305	320	35	6.5
	HFD 210-500/42	Screw clamp, 10 mm <sup>2</sup>	Bolt, M5	Mounting lugs	2.70 kg		329	185	70	300	314	45	6.5
	HFD 210-500/55	Screw clamp, 16 mm <sup>2</sup>	Bolt, M6	Mounting lugs	3.50 kg		329	185	80	300	314	55	6.5
	HFD 210-500/75	Screw clamp, 25 mm <sup>2</sup>	Bolt, M6	Mounting lugs	4.40 kg		329	220	80	300	314	55	6.5
	HFD 210-500/100	Screw clamp, 50 mm <sup>2</sup>	Bolt, M10	Mounting lugs	5.60 kg		379	220	90	350	364	65	6.5
	HFD 210-500/130	Screw clamp, 50 mm <sup>2</sup>	Bolt, M10	Mounting lugs	6.80 kg		429	240	110	400	414	80	6.5
	HFD 210-500/180	Screw clamp, 95 mm <sup>2</sup>	Bolt, M10	Mounting lugs	10.00 kg		438	240	110	400	414	80	6.5

### Dimension pictures

