

Radio interference suppression filter, three-phase, low leakage current
HLD 710



General Data

Rated voltage 3 x 520 Vac
Voltage range 0 - 3 x 520 Vac
Rated current 3 x 8 - 3 x 250 A
Leakage current 6.00 - 7.00 mA
Ambient temperature max. 50 °C
Degree of protection IP 20

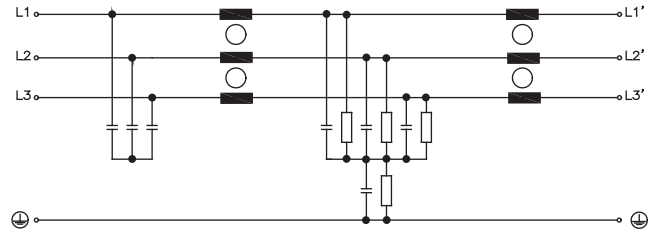
Advantages

For enhanced requirements
Reduced leakage current
Single-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 complying with
DIN EN 60939-2, UL 1283, CSA C22.2 No.8

Approvals



UL 1283 5th edition, CSA 22.2 No 8



Radio interference suppression filter, three-phase, low leakage current

HLD 710

Typ	HLD 710-500/8	HLD 710-500/12	HLD 710-500/16	HLD 710-500/30	HLD 710-500/42	HLD 710-500/55
Electrical data						
Operating data						
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 - 520 Vac	0 - 520 Vac	0 - 520 Vac	0 - 520 Vac	0 - 520 Vac	0 - 520 Vac
Rated current	3 x 8 A	3 x 12 A	3 x 16 A	3 x 30 A	3 x 42 A	3 x 55 A
Leakage current (50 Hz)*	6.00 mA	6.00 mA	6.00 mA	6.50 mA	6.50 mA	6.50 mA
Leakage current (50 Hz)**	60.00 mA	60.00 mA	60.00 mA	63.00 mA	63.00 mA	63.00 mA
Rated frequency	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz
Power loss	6.0 W	9.0 W	12.0 W	15.0 W	22.0 W	30.0 W
Overtopping Capacity	150 %, shortly	150 %, shortly	150 %, shortly	150 %, shortly	150 %, shortly	150 %, shortly
Approvals						
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
Environment						
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
Safety and protection						
SCCR***	100 kA	100 kA	100 kA	100 kA	100 kA	100 kA
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
Notes						
*	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
***	with corresponding preliminary fuse	with corresponding preliminary fuse	with corresponding preliminary fuse	with corresponding preliminary fuse	with corresponding preliminary fuse	with corresponding preliminary fuse
Order numbers						
Order Number	HLD 710-500/8	HLD 710-500/12	HLD 710-500/16	HLD 710-500/30	HLD 710-500/42	HLD 710-500/55



Radio interference suppression filter, three-phase, low leakage current

HLD 710

Typ	HLD 710-500/75	HLD 710-500/100	HLD 710-500/130	HLD 710-500/180	HLD 710-500/250
Electrical data					
Operating data					
Rated voltage	3 x 520 Vac	3 x 520 Vac	3 x 520 Vac	3 x 520 Vac	3 x 520 Vac
Voltage range	0 - 520 Vac	0 - 520 Vac	0 - 520 Vac	0 - 520 Vac	0 - 520 Vac
Rated current	3 x 75 A	3 x 100 A	3 x 130 A	3 x 180 A	3 x 250 A
Leakage current (50 Hz)*	6.50 mA	6.50 mA	6.50 mA	7.00 mA	7.00 mA
Leakage current (50 Hz)**	63.00 mA	63.00 mA	63.00 mA	65.00 mA	65.00 mA
Rated frequency	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz
Power loss	35.0 W	60.0 W	90.0 W	150.0 W	180.0 W
Overrating Capacity	150 %, shortly	150 %, shortly	150 %, shortly	150 %, shortly	150 %, shortly
Approvals					
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
Environment					
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]
Ambient temperature max.	50 °C	50 °C	50 °C	50 °C	50 °C
Safety and protection					
SCCR***	100 kA	100 kA	100 kA	100 kA	100 kA
Type	Metal enclosure	Metal enclosure	Metal enclosure	Metal enclosure	Metal enclosure
Protection index	IP 20	IP 20	IP 20	IP 20	IP 20
Safety class (prepared)	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
Notes					
*	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
***	with corresponding preliminary fuse	with corresponding preliminary fuse	with corresponding preliminary fuse	with corresponding preliminary fuse	with corresponding preliminary fuse
Order numbers					
Order Number	HLD 710-500/75	HLD 710-500/100	HLD 710-500/130	HLD 710-500/180	HLD 710-500/250



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Mechanical data	Typ	Terminals phase	Terminals PE	Fixing method	Fixing screws	Weight	Dimension picture (in mm)						
							1	A	B	C	D	E	F
	HLD 710-500/8	Screw clamp, 4 mm ²	Bolt, M5	Mounting lugs	M5	0.78 kg	1	190	45	75	20	180	166
	HLD 710-500/12	Screw clamp, 4 mm ²	Bolt, M5	Mounting lugs	M5	1.00 kg	1	220	45	75	20	210	190
	HLD 710-500/16	Screw clamp, 4 mm ²	Bolt, M5	Mounting lugs	M5	1.20 kg	1	250	45	75	20	240	220
	HLD 710-500/30	Screw clamp, 10 mm ²	Bolt, M5	Mounting lugs	M5	1.80 kg	1	270	55	95	30	255	240
	HLD 710-500/42	Screw clamp, 10 mm ²	Bolt, M6	Mounting lugs	M5	2.10 kg	1	310	55	95	30	295	280
	HLD 710-500/55	Screw clamp, 16 mm ²	Bolt, M6	Mounting lugs	M5	2.50 kg	2	250	85	95	60	235	255
	HLD 710-500/75	Screw clamp, 35 mm ²	Bolt, M8	Mounting lugs	M6	4.50 kg	2	270	85	135	60	255	310
	HLD 710-500/100	Screw clamp, 50 mm ²	Bolt, M10	Mounting lugs	M6	5.20 kg	2	270	95	150	65	255	325
	HLD 710-500/130	Screw clamp, 50 mm ²	Bolt, M10	Mounting lugs	M6	5.60 kg	2	270	95	150	65	255	325
	HLD 710-500/180	Screw clamp, 95 mm ²	Bolt, M10	Mounting lugs	M6	9.20 kg	2	380	130	181	102	365	440
	HLD 710-500/250	Screw clamp, 150 mm ²	Bolt, M12	Mounting lugs	M6	12.20 kg	2	450	155	220	125	435	525

Dimension pictures

