



## Description

The used of current source inverters and converters is increasing continuously, causing harmonics that results in additional losses, particularly in capacitor for power factor correction systems.

Filtering with MH harmonic circuit filter reactor provides the following advantages :

- reduce losses ; hence no capacitor overload
- impedance behaviour of the mains is improved

Rated Mains Voltage :

**380V 50Hz**

Series Resonance Frequency :

**204Hz or p = 6%**

(other frequencies available upon request)

Application :

To be used with 415V capacitor only

Insulation Class :

155°C or Class F

Load Carrying Capacity :

Thermo-protection :

Fitted with 135°C thermostat

$I_N$  = Current from  $Q_{LC}$  without harmonic load

Design :

According to VDE 0550/0532 & IEC 76

$I_{250}$  =  $0.31 \times I_N$

Testing :

Insulation strength tested at 2.5kV

$I_{350}$  =  $0.13 \times I_N$

Induction Tolerance :

$\pm 3\%$

$I_{TH} = 1.22 \times I_N$  = Max. permissible effective value of

Ambient Temperature :

60°C , maximum ambient temperature

the current considering 10% over

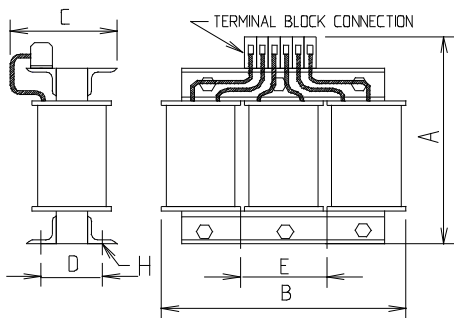
Linearity Characteristics :

1.50 x  $I_N$  at no change of inductivity

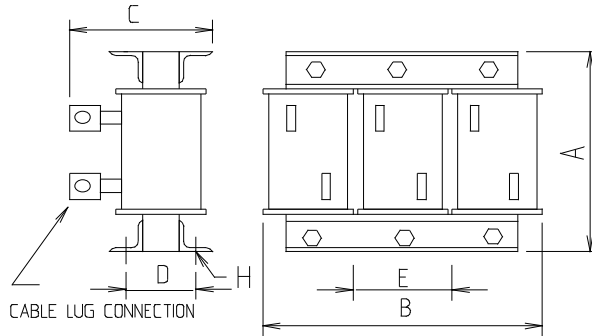
voltage and the permissible harmonic

1.75 x  $I_N$  at reduction of the inductivity

currents



TYPE - VER. MNT-1



TYPE - VERT. MNT-2

Rated $Q_N$ kVAr	Model	Current	Reactance	Design	Dimensions (mm)						Weight kgs
		Amp	mH	Type	A	B	C	D	E	H	
10	MH-GH-10-415-50	13.90	3.289	1	180	180	140	75	150	8	8.0
20	MH-GH-20-415-50	27.80	1.645	2	210	210	140	85	175	8	11.5
30	MH-GH-30-415-50	41.70	1.096	2	210	210	140	95	175	8	14.7
40	MH-GH-40-415-50	55.60	0.822	2	230	240	140	92	200	8	17.5
50	MH-GH-50-415-50	69.60	0.658	2	230	240	140	92	200	8	18.0
60	MH-GH-60-415-50	83.50	0.548	2	230	240	160	100	200	8	21.0
70	MH-GH-70-415-50	97.40	0.470	2	255	270	155	103	225	10	23.4
80	MH-GH-80-415-50	111.30	0.411	2	255	270	170	95	225	10	26.5
90	MH-GH-90-415-50	125.20	0.365	2	255	270	170	95	225	10	27.0
100	MH-GH-100-415-50	139.10	0.329	2	255	270	180	110	225	10	28.5

\*\*\* Dimension are a close approximation only, may change without notice.

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# MH HARMONIC FILTER REACTOR

## Description

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Filtering with MH harmonic circuit filter reactor provides the following advantages :

- reduce losses ; hence no capacitor overload
- impedance behaviour of the mains is improved

Rated Mains Voltage :  
Series Resonance Frequency :  
(other frequencies available upon request)

**380V 50Hz**  
**189Hz or p = 7%**

Application :

To be used with 415V capacitor only

Insulation Class :

155°C or Class F

Load Carrying Capacity :

Thermo-protection :

Fitted with 135°C thermostat

$I_N$  = Current from  $Q_{LC}$  without harmonic load

Design :

According to VDE 0550/0532 & IEC 76

$I_{250}$  =  $0.31 \times I_N$

Testing :

Insulation strength tested at 2.5kV

$I_{350}$  =  $0.11 \times I_N$

Induction Tolerance :

$\pm 3\%$

$I_{TH} = 1.22 \times I_N$  = Max. permissible effective value of

Ambient Temperature :

60°C , maximum ambient temperature

the current considering 10% over

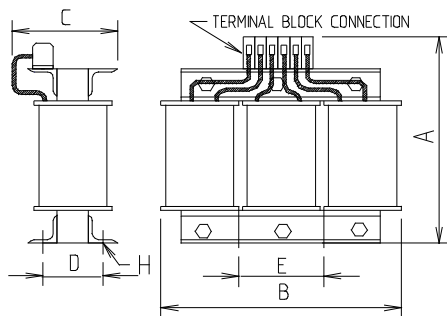
Linearity Characteristics :

1.50 x  $I_N$  at no change of inductivity

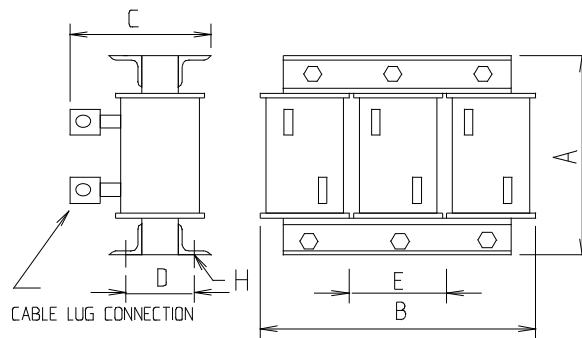
voltage and the permissible harmonic

1.75 x  $I_N$  at reduction of the inductivity

currents



TYPE - VER. MNT-1



TYPE - VERT. MNT-2

Rated $Q_N$ kVAr	Model	Current Amp	Reactance mH	Design Type	Dimensions (mm)						Weight kgs
					A	B	C	D	E	H	
10	MH-GH-10-415-50	13.90	3.837	1	180	180	140	73	150	8	9.0
20	MH-GH-20-415-50	27.80	1.919	2	210	210	145	85	175	8	14.5
30	MH-GH-30-415-50	41.70	1.279	2	210	210	155	100	175	8	16.3
40	MH-GH-40-415-50	55.60	0.959	2	230	240	155	92	200	8	18.0
50	MH-GH-50-415-50	69.60	0.767	2	230	240	150	105	200	8	20.2
60	MH-GH-60-415-50	83.50	0.640	2	230	240	150	105	200	8	21.0
70	MH-GH-70-415-50	97.40	0.548	2	255	270	160	100	225	10	25.0
80	MH-GH-80-415-50	111.30	0.480	2	255	270	165	100	225	10	26.5
90	MH-GH-90-415-50	125.20	0.426	2	255	270	165	102	225	10	28.5
100	MH-GH-100-415-50	139.10	0.384	2	255	270	170	105	225	10	30.0

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## HARMONIC FILTER REACTOR



### Description

The used of current source inverters and converters is increasing continuously, causing harmonics that results in additional losses, particularly in capacitor for power factor correction systems.

Filtering with Holly harmonic circuit filter reactor provides the following advantages :

- reduce losses ; hence no capacitor overload
- impedance behaviour of the mains is improved

Rated Mains Voltage :

**400V 50Hz**

Series Resonance Frequency :

**204Hz or p = 6%**

*(other frequencies available upon request)*

Application :

To be used with 440V capacitor only

Insulation Class :

155°C or Class F

Thermo-protection :

Fitted with 135°C thermostat

Design :

According VDE 0550/0532 & IEC 76

Testing :

Insulation strength tested at 2.5kV

Induction Tolerance :

± 3%

Ambient Temperature :

60°C , maximum ambient temperature

Linearity Characteristics :

1.50 x I<sub>N</sub> at no change of inductivity

1.75 x I<sub>N</sub> at reduction of the inductivity

Load Carrying Capacity :

I<sub>N</sub> = Current from Q<sub>LC</sub> without harmonic load

I<sub>250</sub> = 0.31 x I<sub>N</sub>

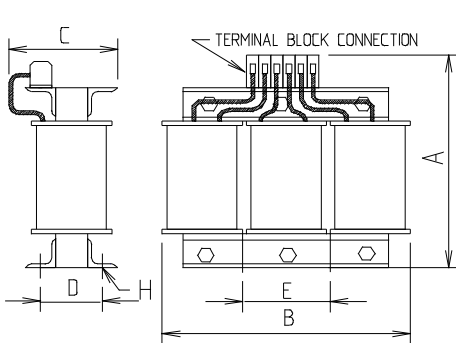
I<sub>350</sub> = 0.11 x I<sub>N</sub>

I<sub>TH</sub> = 1.22 x I<sub>N</sub> = Max. permissible effective value of

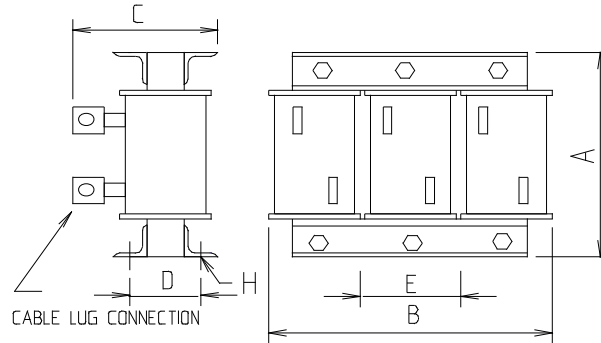
the current considering 10% over

voltage and the permissible harmonic

currents



TYPE - VER. MNT-1



TYPE - VERT. MNT-2

Rated Q <sub>N</sub> kVAr	Model	Current Amp	Reactance mH	Design Type	Dimensions (mm)						Weight kgs
					A	B	C	D	E	H	
10	MH-GH-10-440-50	13.10	3.697	1	240	210	120	70	175	8	10.0
20	MH-GH-20-440-50	26.20	1.849	1	240	210	125	80	175	8	11.0
30	MH-GH-30-440-50	39.40	1.232	2	210	210	135	90	175	8	13.5
40	MH-GH-40-440-50	52.50	0.924	2	230	240	140	95	200	8	17.5
50	MH-GH-50-440-50	65.60	0.739	2	230	240	150	100	225	8	21.0
60	MH-GH-60-440-50	78.70	0.616	2	255	270	160	105	225	10	24.8
70	MH-GH-70-440-50	91.90	0.528	2	255	270	170	120	225	10	28.6
80	MH-GH-80-440-50	105.00	0.462	2	255	270	180	115	225	10	30.0
90	MH-GH-90-440-50	118.10	0.411	2	255	270	180	115	225	10	31.0
100	MH-GH-100-440-50	131.20	0.370	2	255	270	190	120	225	10	32.5

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## HARMONIC FILTER REACTOR



### Description

The used of current source inverters and converters is increasing continuously, causing harmonics that results in additional losses, particularly in capacitor for power factor correction systems.

Filtering with Holly harmonic circuit filter reactor provides the following advantages :

- reduce losses ; hence no capacitor overload
- impedance behaviour of the mains is improved

Rated Mains Voltage :

**400V 50Hz**

Series Resonance Frequency :

**189Hz or  $p = 7\%$**

(other frequencies available upon request)

Application :

To be used with 440V capacitor only

Insulation Class :

155°C or Class F

Thermo-protection :

Fitted with 135°C thermostat

Design :

According VDE 0550/0532 & IEC 76

Testing :

Insulation strength tested at 2.5kV

Induction Tolerance :

$\pm 3\%$

Ambient Temperature :

60°C , maximum ambient temperature

Linearity Characteristics :

1.50 x  $I_N$  at no change of inductivity

1.75 x  $I_N$  at reduction of the inductivity

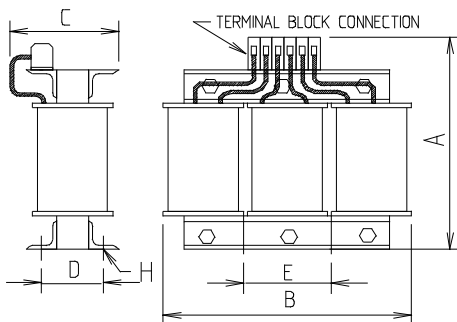
Load Carrying Capacity :

$I_N$  = Current from  $Q_{LC}$  without harmonic load

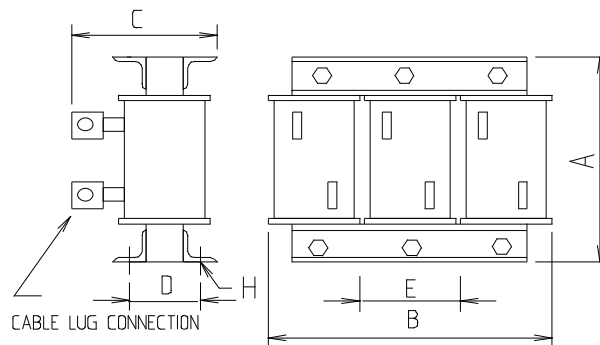
$I_{250}$  = 0.31 x  $I_N$

$I_{350}$  = 0.11 x  $I_N$

$I_{TH} = 1.22 \times I_N$  = Max. permissible effective value of the current considering 10% over voltage and the permissible harmonic currents



TYPE - VER. MNT-1



TYPE - VERT. MNT-2

Rated $Q_N$ kVAr	Model	Current Amp	Reactance mH	Design Type	Dimensions (mm)						Weight kgs
					A	B	C	D	E	H	
10	MH-GH-10-440-50	13.10	4.314	1	240	210	120	70	175	8	10.2
20	MH-GH-20-440-50	26.20	2.157	1	240	210	125	80	175	8	11.5
30	MH-GH-30-440-50	39.40	1.438	2	210	210	135	90	175	8	14.0
40	MH-GH-40-440-50	52.50	1.078	2	230	240	140	95	200	8	18.0
50	MH-GH-50-440-50	65.60	0.863	2	255	270	160	110	225	8	26.0
60	MH-GH-60-440-50	78.70	0.719	2	255	270	170	110	225	10	27.0
70	MH-GH-70-440-50	91.90	0.616	2	255	270	180	115	225	10	29.0
80	MH-GH-80-440-50	105.00	0.539	2	255	270	185	120	225	10	31.0
90	MH-GH-90-440-50	118.10	0.479	2	255	270	185	120	225	10	32.5
100	MH-GH-100-440-50	131.20	0.431	2	255	270	200	130	225	10	33.8

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# MH HARMONIC FILTER REACTOR



## Description

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Filtering with MH harmonic circuit filter reactor provides the following advantages :

- reduce losses ; hence no capacitor overload
- impedance behaviour of the mains is improved

Rated Mains Voltage :

**415V 50Hz**

Series Resonance Frequency :

**204Hz or p = 6%**

(other frequencies available upon request)

Application :

To be used with 525V capacitor only

Rated Voltage :

600V

Load Carrying Capacity :

Insulation Class :

155°C or Class F

$I_N$  = Current from  $Q_{LC}$  without harmonic load

Thermo-protection :

Fitted with 135°C thermostat

$I_{250}$  =  $0.31 \times I_N$

Design :

According to VDE 0550/0532 & IEC 76

$I_{350}$  =  $0.11 \times I_N$

Ambient Temperature :

60°C , maximum ambient temperature

$I_{TH} = 1.22 \times I_N$  = Max. permissible effective value of

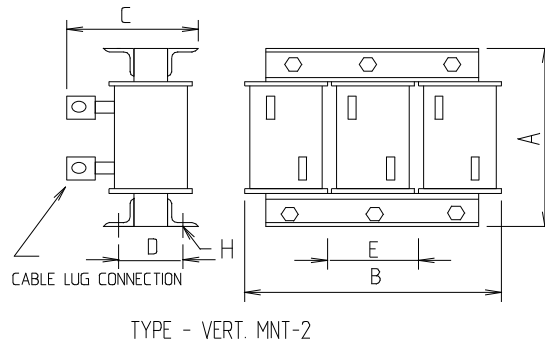
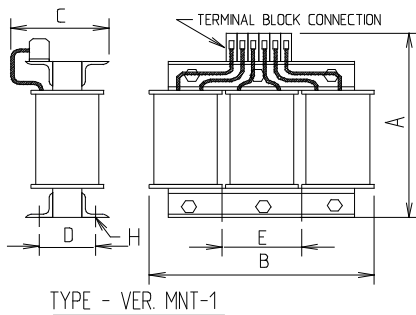
Linearity Characteristics :

$1.50 \times I_N$  at no change of inductivity

the current considering 10% over

$1.75 \times I_N$  at reduction of the inductivity

voltage and the permissible harmonic currents



Rated $Q_N$ kVAr	Model	Current Amp	Reactance mH	Design Type	Dimensions (mm)						Weight kgs
					A	B	C	D	E	H	
10	MH-GH-10-525-50	11.00	5.264	1	240	210	130	70	175	8	10.0
20	MH-GH-20-525-50	22.00	2.632	1	240	210	135	80	175	8	11.5
30	MH-GH-30-525-50	33.00	1.755	2	210	210	150	93	175	8	14.0
40	MH-GH-40-525-50	44.00	1.316	2	230	240	155	95	200	8	17.3
50	MH-GH-50-525-50	55.00	1.053	2	230	240	160	100	200	8	20.0
60	MH-GH-60-525-50	66.00	0.877	2	255	270	155	95	225	10	23.0
70	MH-GH-70-525-50	77.00	0.752	2	255	270	175	100	225	10	26.0
80	MH-GH-80-525-50	88.00	0.658	2	255	270	180	115	225	10	28.8
90	MH-GH-90-525-50	99.00	0.585	2	255	270	180	115	225	10	29.5
100	MH-GH-100-525-50	110.00	0.526	2	255	270	185	115	225	10	32.0

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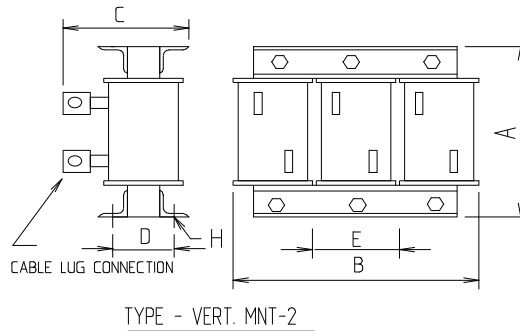
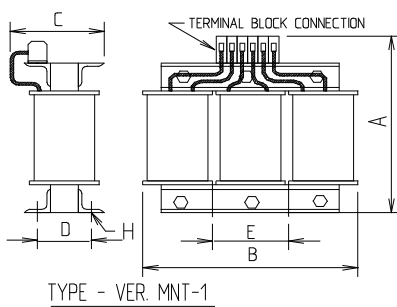
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 Series Resonance Frequency :  
 (other frequencies available upon request)  
 Application :

**415V 50Hz**  
**189Hz or p = 7%**

To be used with 525V capacitor only

Rated Voltage : 600V  
 Insulation Class : 155°C or Class F  
 Thermo-protection : Fitted with 135°C thermostat  
 Design : According to VDE 0550/0532 & IEC 76  
 Ambient Temperature : 60°C , maximum ambient temperature  
 Linearity Characteristics : 1.50 x I<sub>N</sub> at no change of inductivity  
 1.75 x I<sub>N</sub> at reduction of the inductivity

Load Carrying Capacity :  
 I<sub>N</sub> = Current from Q<sub>LC</sub> without harmonic load  
 I<sub>250</sub> = 0.31 x I<sub>N</sub>  
 I<sub>350</sub> = 0.11 x I<sub>N</sub>  
 I<sub>TH</sub> = 1.22 x I<sub>N</sub> = Max. permissible effective value of the current considering 10% over voltage and the permissible harmonic currents



Rated Q <sub>N</sub> kVAr	Model	Current Amp	Reactance mH	Design Type	Dimensions (mm)						Weight kgs
					A	B	C	D	E	H	
10	MH-GH-10-525-50	11.00	6.141	1	240	210	130	70	175	8	10.2
20	MH-GH-20-525-50	22.00	3.071	1	240	210	135	80	175	8	12.3
30	MH-GH-30-525-50	33.00	2.047	2	230	240	140	80	200	8	14.5
40	MH-GH-40-525-50	44.00	1.535	2	230	240	155	92	200	8	18.0
50	MH-GH-50-525-50	55.00	1.228	2	230	240	175	100	200	8	25.7
60	MH-GH-60-525-50	66.00	1.024	2	255	270	180	110	225	10	26.0
70	MH-GH-70-525-50	77.00	0.877	2	255	270	200	120	225	10	30.2
80	MH-GH-80-525-50	88.00	0.768	2	255	270	200	120	225	10	31.2
90	MH-GH-90-525-50	99.00	0.682	2	255	270	200	120	225	10	32.5
100	MH-GH-100-525-50	110.00	0.614	2	255	270	215	130	225	10	34.5

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