

Three phase AC Grid choke - CH4242

Special Features:

- Nominal inductance: 1300 μ H
- Nominal current, RMS: 33 A
- Modulation frequency: 50/60 Hz
- Compliance:
 - RoHS and REACH
 - EN 61558-1:2019
 - EN 61558-2-16:2021
- Low profile
- Operating ambient temperature: -25°C to 85°C

Typical Applications:

- DC/AC converter
- Grid connected converters

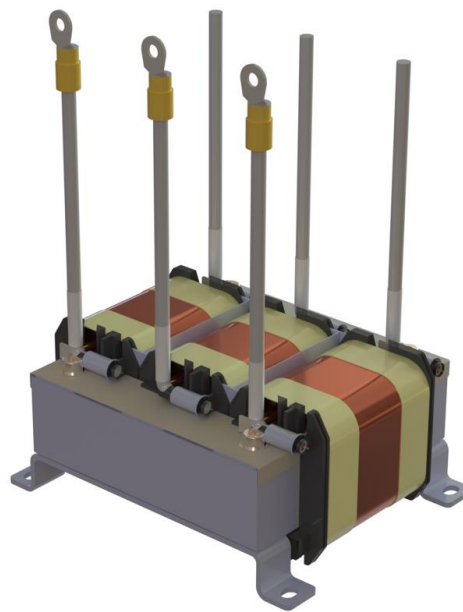


Figure 1. General view

For samples or custom solutions please contact directly:

inquiry@sma-magnetics.com

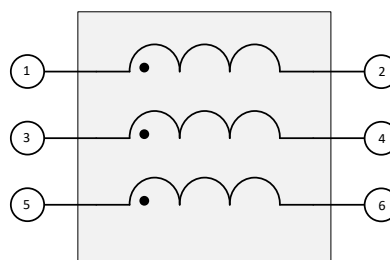


Figure 2. Electrical circuit



Parameter description	Parameter	Comment
Circuits	Circuit terminals are shown in Figure 2	-
Initial inductance	$L_{P1-2,3-4,5-6} \geq 1300 \mu H$	Routine test @0.2 A, 50 Hz, sine wave
Incremental inductance at current	$L_{1-2,3-4,5-6} \geq 1300 \mu H @ 16 A$ $L_{1-2,3-4,5-6} \geq 1120 \mu H @ 33 A$	Type test @+100°C ±3°C Impulse method by Power Choke Tester (e.g. ed-k DPG 10)
Winding dc resistance	$R_{1-2,3-4,5-6} \leq 35 m\Omega (@20^{\circ}C)$	Routine test, given values are valid for 20°C (resistance temperature coefficient 0.00393 1/K)
Rated frequency	$f_{GRID} = 50...60 Hz$	-
Rated ambient temperature	$T_a = + 40^{\circ}C$	-
Insulation class	B (130 °C)	System should provide power de-rating to prevent exceeding of 110 °C on windings surface
Dielectric strength	Between winding and core 3200 V _{ACRMS} @50 Hz, 60 sec.	Type test
Dielectric strength	Between winding and core 3200 V _{ACRMS} @50 Hz, 10 sec	Routine test
Cooling	Forced cooling 0.3 m/s	-

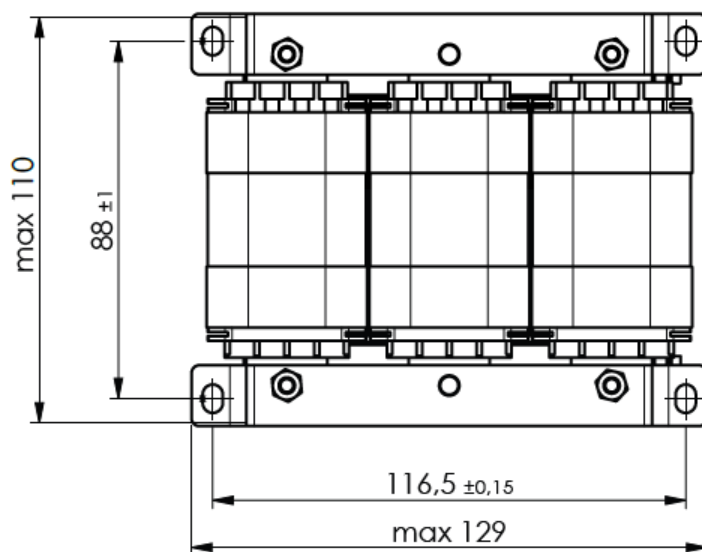


Figure 3. Mounting holes position dimensions in mm

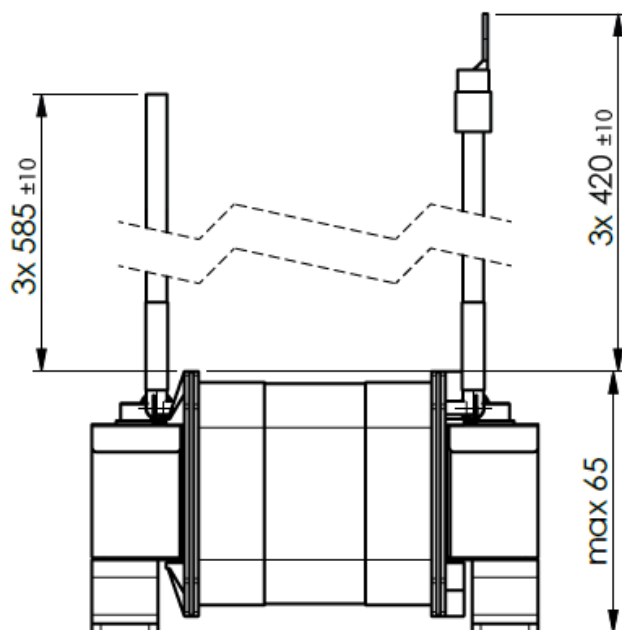


Figure 4. Choke dimensions in mm

Table 1. Terminals description.

Ref. circuit terminal	Cable type	Cable length	Cable color	Terminal end
1,3,5	Copper wire 6.0 mm ²	420 mm ± 10 mm	GY	Cable Lug M4/6mm2
2,4,6	Copper wire 6.0 mm ²	585 mm ± 10 mm	GY	No termination