

# **SINGLE PHASE FILTER**

## **100 A**

**CE**



**EUROTHERM**

**Installation  
Instructions**

## TECHNICAL DATA

Filter destination	This filter is required to obtain Electromagnetic Compatibility compliance to EN 55011 standard (conducted emission, A class, industrial environment) for following thyristor unit series : 425A (75 A and 100 A); 462 (75 A); 463 (100 A); 470 (75 A); 471 (100 A) when working in Phase Angle.
Current rating	<b>100 A</b>
Nominal voltage	<b>500 Vac</b> line to line (+10% -15%)
Frequency	<b>47 to 63 Hz</b>
Voltage drop across filter	<b>≤ 0.5 Vrms</b> (for 100 A, 50 Hz)
Leakage current to earth	<b>≤ 10 mA</b> (for 500 Vac ±10%, 50 Hz) (measured on purely resistive load) This value may be much higher in some cases : <ul style="list-style-type: none"><li>• if the protective earth potential is not referenced to the neutral</li><li>• if the load has a high stray capacitance value with respect to the protective earth.</li></ul>
Cooling	Convection cooling
Operating temperature	<b>0 to 45°C</b> in vertical position
Storage temperature	<b>- 10°C to 70°C</b>
Operating altitude	<b>2000 m</b> maximum
Operating atmosphere	Non explosive, non corrosive and non conductive.
Pollution	<b>Degree 2 (IEC 664)</b>
Humidity	<b>RH 5% to 95%</b> non condensing.
Dimensions	<b>432 mm x 180 mm x 150 mm</b>
Weight	<b>24 kg</b>
Filter Part N°	<b>LA 174936U100</b>
Coding	<b>FILTER / MON / 100A / 00</b>



### **Danger !**

Wiring must be performed by qualified personnel to work with low voltage electrical equipment.

Before any connection or disconnection, make sure that the cables and wires are insulated from the voltage sources.

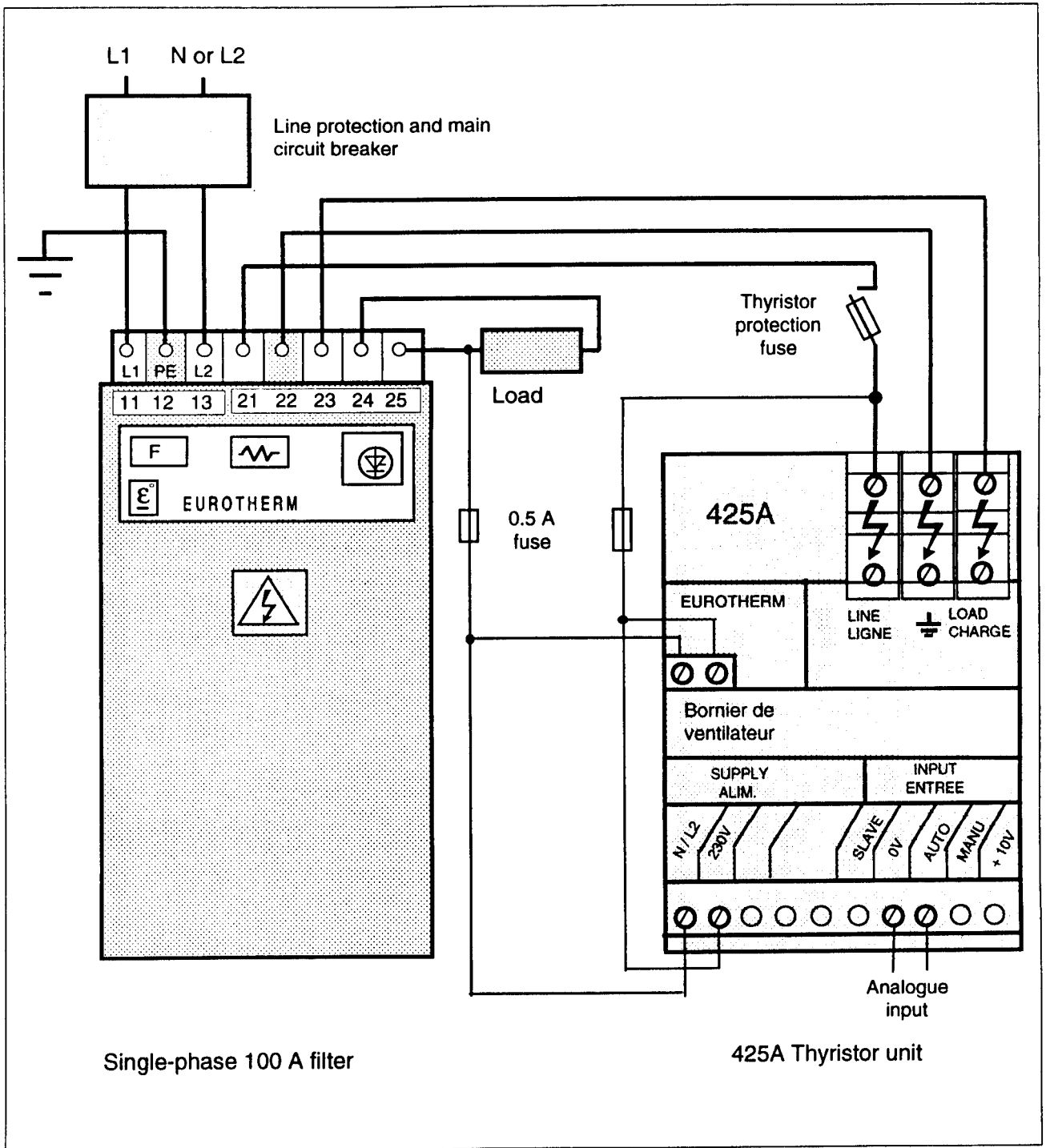
For safety reasons, the safety earth cable must be connected before any other connection during wiring and the last cable to be disconnected.

For the installation and wiring safety report to :

- 425A User Manual (Part N° HA 174779)
  - 460 User Manual (Part N° HA 174913 ENG)
  - 470 User Manual (Part N° HA 175076)
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# CONNECTION

- Supply / filter cable : **35 mm<sup>2</sup>**
- Thyristor unit wiring : (see user manual)



Single-phase 100 A filter

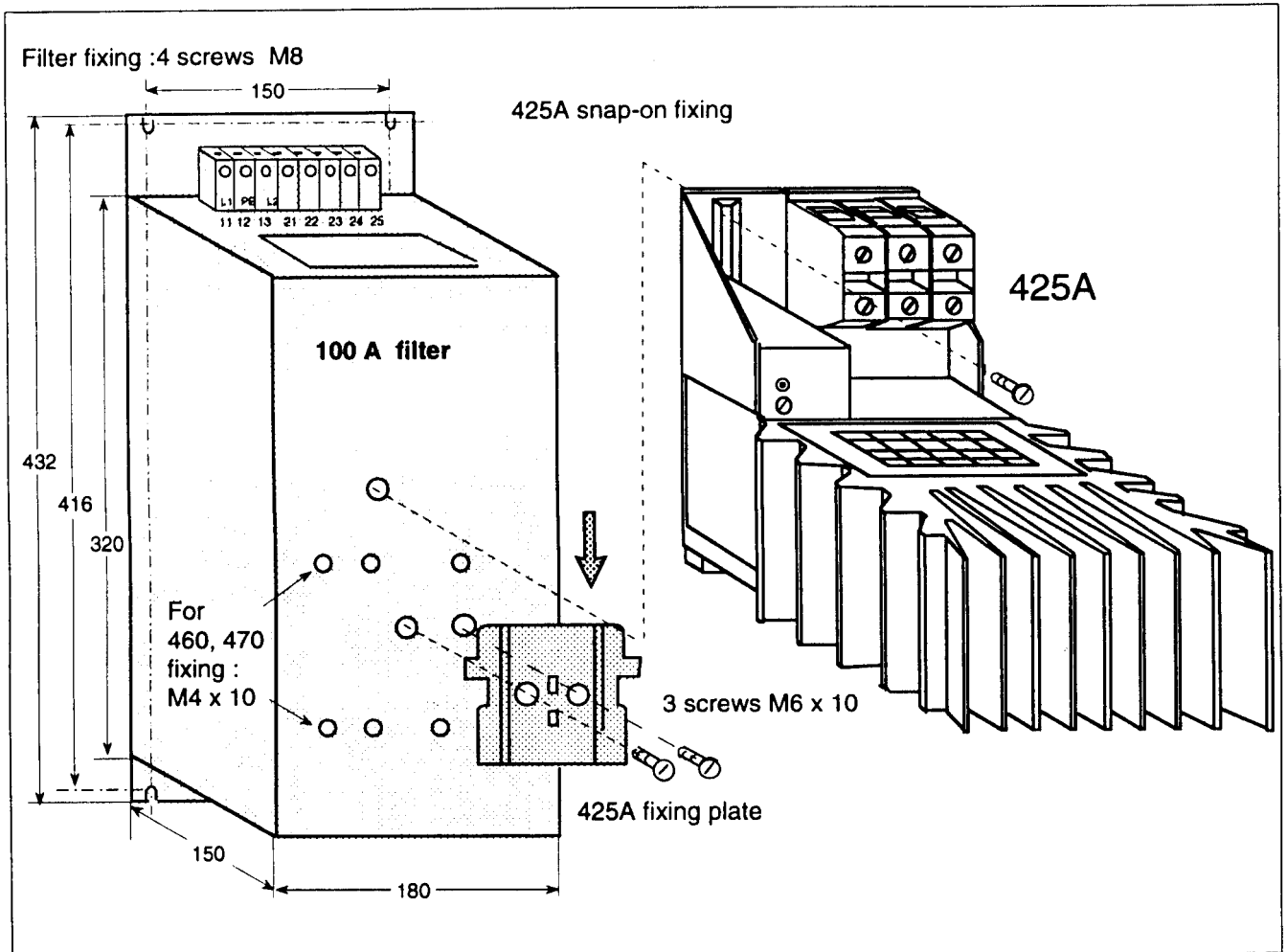
425A Thyristor unit

Example of the 100 A Filter and 425A Thyristor Unit (100 A nominal) configuration  
230 V supply.

# MOUNTING

Filter mounting in fan-cooled electric cabinet.

The filter and thyristor unit can be installed separately or 425A (461/470) thyristor unit can be mounted in the filter (see mounting example).



Example of filter bulkhead mounting. 425A thyristor unit mounted on the filter (Piggy back mounting).  
For 461 and 470 mounting turn the filter (terminals at the bottom of the filter)

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100A Single phase Filter  
Part N° HA 175307 ENG

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Installation Instructions  
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