

Electro Compensation Device

COMPASS BINNACLE / EC



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Degaussing Devices, EC-Coils

Degaussing arrangements (for mine protection on frigates, corvettes and mine hunting boats) are to reduce the ship's own magnetic field. For this large electric coils are installed in the ship's hull. The deflection of the magnetic compass indication must be electronically compensated by coordinated coils near to the compass. These so-called EC (electro compensation) coils generate correcting magnetic fields to NE (45°), NW (315°) and vertical direction corresponding to ship's ahead. According to the actual applied degaussing coil configuration the relevant EC coil configuration can be applied.

EC-Design

EC-coils are usually orientated to NE and NW (45° and 315°) to ship's ahead. and vertically. These intercardinal directions are different to conventional (magnetic) correctors that are longitudinal, cross and vertical.

For each direction are four groups of coils. Each group consists of 2 coils bracketing the compass. Three of these groups have coils with same number of windings, one is with double windings. The cables of each group will be lead out separately and can be connected to the driving circuit individually according to the requirement of the different degaussing coils.

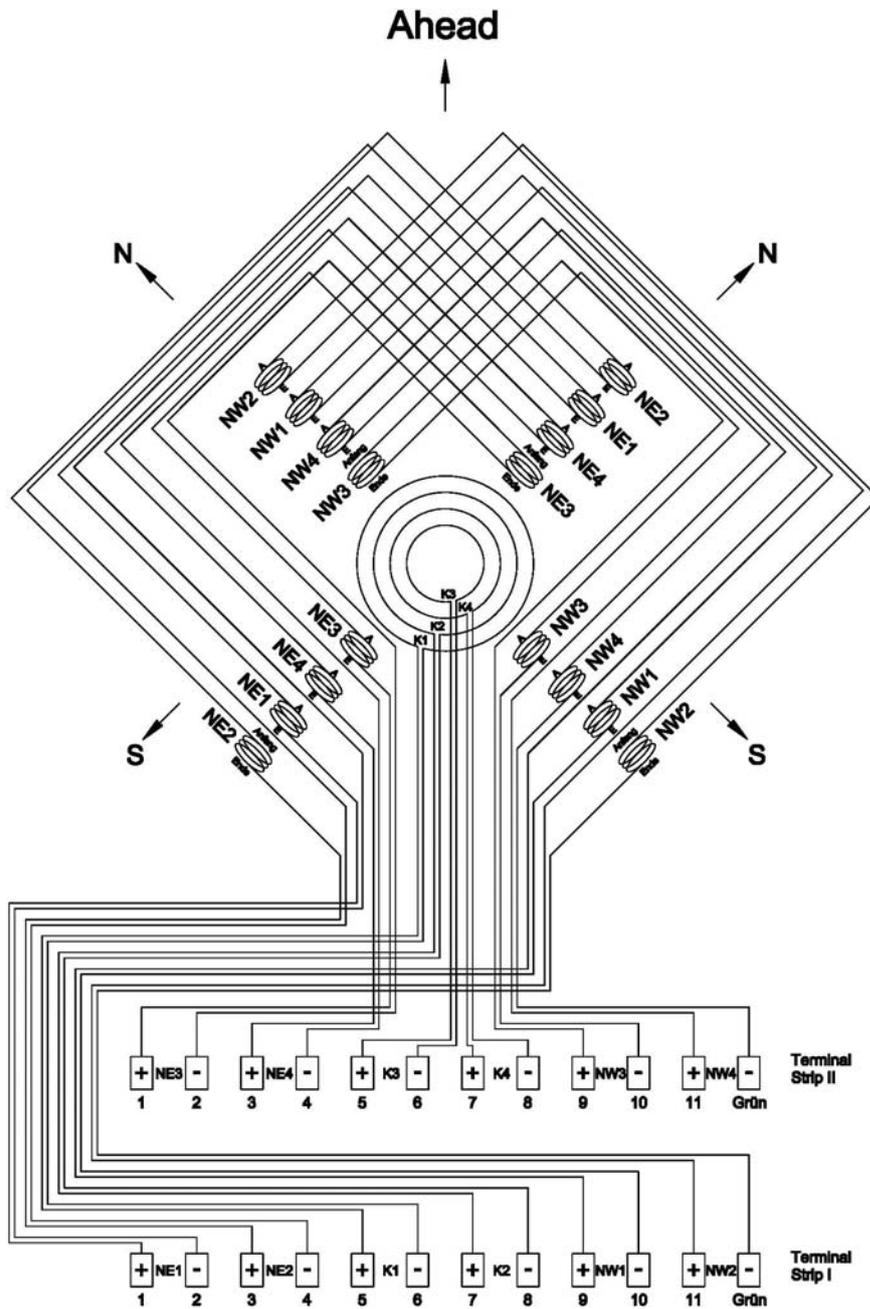
EC coil connection & specification

These are typically for NE1, ...3, ...4 and NW1, ...3, ...4: 525 Ohms, for NE2 and NW2: 1100 Ohms and heeling1 to ...4: 600 Ohms. All +/- 20%.

Next page you will find a circuit diagram with terminal nomenclature.

The driving electronics is not included in the delivery range of the electro compensation device.

Wiring Diagram



Connection of Electro Compensation Coils