Coils for high field Intensity

These coils are specially designed to test the immunity of watches to DC magnetic fields, for instance according to ISO 764 or to NIHS 90-10. Other small devices can be tested like electronic printed boards and magnetic field sensors. The model SC65 is suitable for short test durations while the SC100 has an efficient fan which allows continuous testing at high intensity. The coil SC100 is protected by a thermostatic switch.





SC65

SC100 test setup

SPECIFICATIONS		
Coil type	SC65	SC100
Internal diameter	6.5 cm	10 cm
Frequency range	DC - 40 kHz	DC
Max. field in the centre	290 kA/m (@ 60 A) (or 362 mT or 3'620 G)	275 kA/m (@ 60 A) (or 344 mT or 3'440 G)
Maximum current	60 A (1.5 min)	60 A (2.5 min) 30 A (continuous)
Temperature elevation	30 oC after 3 min @ 35 A	35 oC after 20 min @ 35 A 1)
Homogeneity	\pm 5 % in a volume Ø 5 x 5 cm	\pm 10 % in a volume of Ø 8 x 8 cm
Linearity	< ± 1 %	< ± 1 %
Coil factor	4.8 kA/m / A	4.6 kA/m / A
Connectors	4 mm banana	4 mm banana
Power supply (fan)	-	230 V _{ac} / 230 W
Thermostat	-	60 °C
Dimensions (L x W x H)	19 x 10 x 19 cm	42 x 40 x 42 cm
Weight	20 kg	58 kg

1) Coil axis in vertical position, cooling fan ON.