

OVERVIEW

The **3483 Dipole Electromagnet** accepts a range of pole caps with face diameters up to 150mm. The model 3483 is fitted with a 90Amp coil pair with enhanced cooling and has adjustable gap from 0 to 140mm. The 3483 is recommended when high fields are required at large pole gaps or to achieve maximum field stability for spectroscopic or similar applications.

The 3483 is designed to provide magnetic fields comparable to magnets close to twice its weight.

3483 Electromagnet

Features

- Adjustable Pole Gap
- Wide Variety of Pole Caps
- Air or Water Cooled
- Any Mounting Orientation
- Customized Poles Available

Applications

- Hall Effect Studies
- Magneto-Optical Studies
- Laboratory Experiments
- Vibrating Sample Magnetometer (VSM)
- Chemical Reaction Rate Studies
- EPR/FMR

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Model 3483 General Specifications

Mechanical

	3483-90
Standard Pole Caps	25, 50, 75, 100, 150mm
Pole Gap	0 to 140mm
Dimensions (mm)	712mm W x 548mm D x 717mm H
Weight	869kg

Coils (series connected)

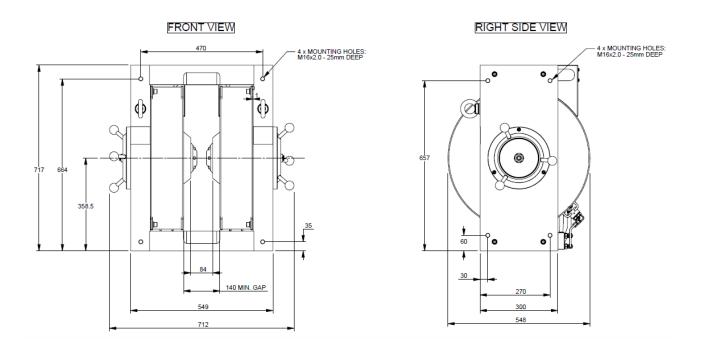
Resistance (20°C)	1.5Ω
Max Resistance	1.77Ω
Inductance	2.2H
Max Continuous Power (air)	14Amps, 24Volts (0.34kW)
Max Continuous Power (water)	90Amps, 160Volts (14.4kW)
Water Cooling	16liters/min, 4.2bar
	(4.4US GPM, 60psid)

Safety

Overtemperature Interlock	Selco 802L-065 thermostat, mounted onto each cooling plate, wired in series. Contacts below 65°C
Water Flow	Imo/Gems FS927 flow switch mounted on outlet side of water circuit. Contacts open with a flow of less than: 1.50GPM or 5.68liters/min
Maximum Absolute Pressure:	100psi
Diameter Sphere Containing 5G-surface ("fringe field")	3000mm diameter, 1500mm radius



General Assembly - 3483



Perfomance
Fields at maximum current of 70 Amps
Simulation Data

