



## **OVERVIEW**

The **3470 Electromagnet** is the smallest and lightest standard dipole electromagnet available from GMW. It is used in a wide range of teaching, research and industrial applications where a relatively small volume of field is required. The light weight allows it to be used on optical tables and the simple poles enable axial entry & exit holes to be matched to the optical geometry.

## 3470 Electromagnet

### **Features**

- Small Size
- Reversible Plane or Tapered Poles
- Adjustable Pole Gap
- Air or Water Cooled
- Adjustable Coil Spacing
- Bench or Wall Mounting
- Optional 50mm Square Poles

## **Applications**

- Hall Effect Studies
- Magneto-Optical Studies
- Laboratory Experiments
- Magnetic Separation Experiments
- Magnetic Alignment of Small Components
- Chemical Reaction Rate Studies

# **GMW** Associates



<u>₩ww</u>.gmw.com



✓ sales@gmw.com



+1-650-802-8292



## **Model 3470 General Specifications**

#### **Mechanical**

Pole Diameter 45mm. Reversible, with pole face diameters of

5mm, 20mm and 40mm

Pole Gap 0 to 75mm

Coil Spacing 35 to 75mm

Dimensions 377mm W x 233mm D x 217mm H

Weight 31.29kg

#### Coils (series connected)

Resistance (20°C) 7.3 $\Omega$ 

Max Resistance  $8.8\Omega$ 

Max Continuous Power (air) 3.5A, 31V (0.11kW)

Max Peak Power (air) 6A, 44V (0.221kW), cycled 2min max on, 4min off

Max Continuous Power (water) 6.0A, 44V (0.22kW)

Max Peak Power (water) 7A, 62V (0.43kW), cycled 1min max on, 2min off

Low Current Inductance 1.52H

High Current Inductance 0.87H

Water Cooling 1liters/min, 0.3bar (0.26US GPM, 5psid)

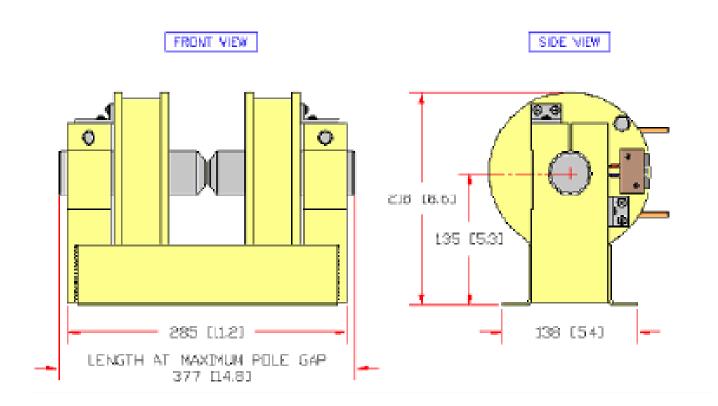
#### Safety

Overtemperature Interlock Selco 802L-065 thermostat, mounted onto each

cooling plate, wired in series. Contacts below 65°C



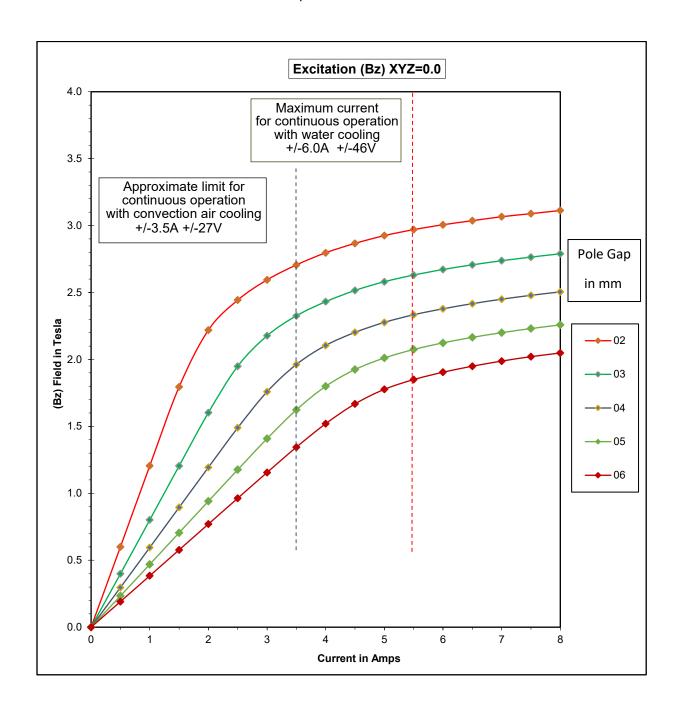
#### **General Assembly**





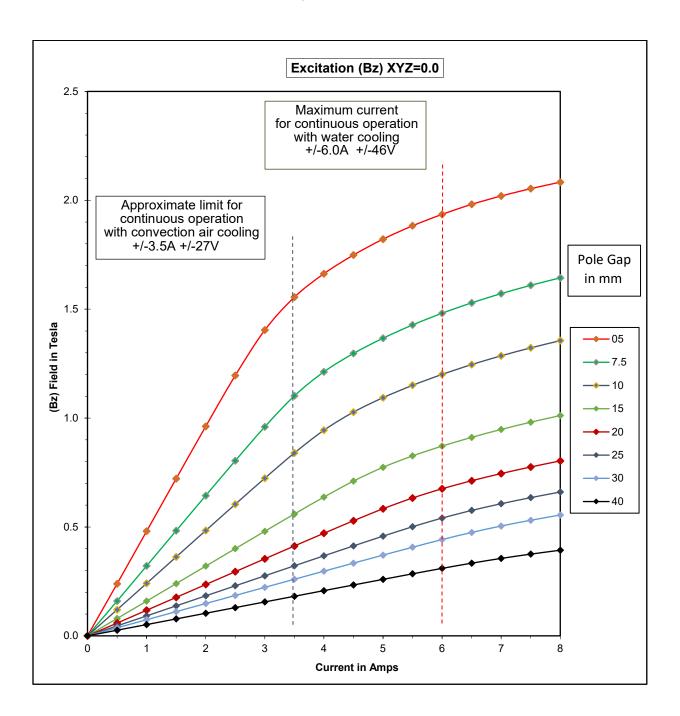
#### **Perfomance**

5mm pole face diameter





#### 20mm pole face diameter





#### 40mm pole face diameter

