

## Chapter 88

### SWITCH MAGNETIC, ROTAX, TYPE D 6106/1

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#### LEADING PARTICULARS

|                          |  |
|--------------------------|--|
| Operating voltage ... .. | 29-V. max.                                       |
| Contact rating... ..     | 650 amperes (peak)                               |
| Rating ... ..            | 90 seconds                                       |
| Coil resistance ... ..   | 5.1 ohm $\pm$ 10 per cent                        |
| Electrical connections   |  |
| Contacts ... ..          | Two $\frac{1}{4}$ in. B.S.F. terminals           |
| Coil ... ..              | Two 3 B.A. terminals                             |
| Mounting ... ..          | Two holes 0.234 in. dia. spaced 3 in. at centres |
| Weight ... ..            | 3 lb.  |

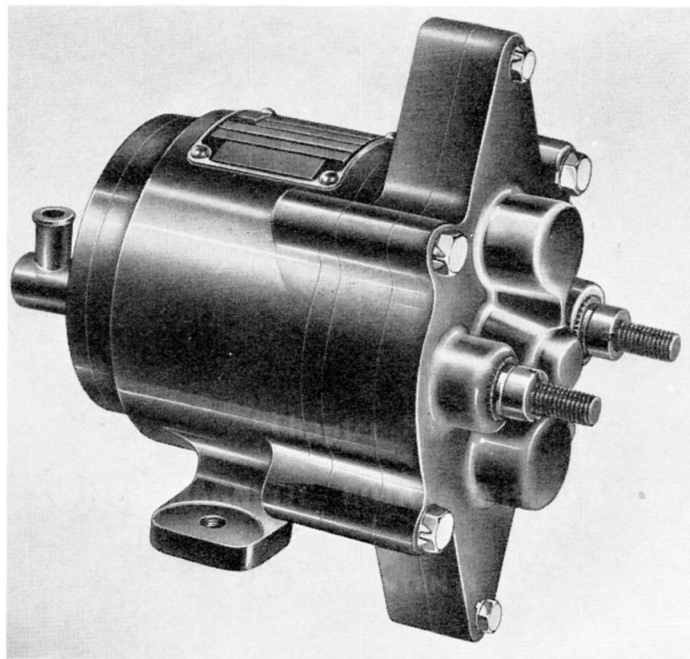


Fig. 1. D 6106/1 magnetic switch

## Introduction

1. The Rotax, Type D 6106/1 magnetic switch is a single pole relay intended for intermittent use on circuits at voltages up to 120-V. d.c. and carrying peak currents up to 650 amperes. The operating coil requires a supply of 16-V. to 29-V. d.c. If the switch is to be connected to the main busbar of 112-V. d.c. systems, it must be insulated from the airframe.

## DESCRIPTION

2. This unit is similar to others in the D 6100 series, which is described in A.P.4343, Vol. 1, Sect. 11, Chap. 5, and consists of a basic relay without economy coil. The contacts are fitted with spring-loaded carbon arcing tips to protect the main contact surfaces. The moulded contact housings are displaced 90 deg. from the position shown for the D 6100 series, so that the arc chutes are situated at top and bottom, and the contact terminals are in line horizontally.

## SERVICING

3. Servicing for this unit is as detailed for the D 6100 series (*para. 2*). The values for the operational check are given below.

(i) The minimum current necessary to fully close the switch must be be-

tween 2.1 and 3.5 amperes. The product of the closing current and the actual resistance of the coil (*A.P.4343, Vol. 1, Sect. 11, Chap. 5, Para. 10*) at 20 deg. C. should not exceed 16-V.

(ii) The switch must hold on until the current is reduced to between 1.5 amperes and 0.3 ampere.

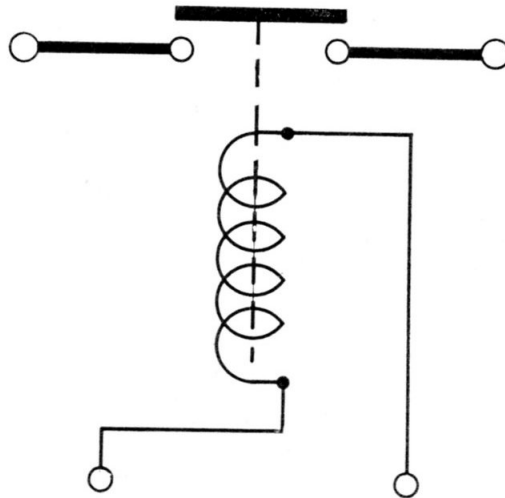


Fig. 2. Diagram of internal connections

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