

CONTROL RELAY, MODEL HH22P (S)

Preface

Our company is manufacturing a RC 3631, RC 50 series for auxiliary relay and a HH 17 series for small size auxiliary relay for control for the wide range of usage in industrial fields.

The recent trend in the construction of productive equipment and machine tools has been to minimize their bulk and, more than ever before, high efficiency and small size are required of their components.

On the other hand, in the field of control apparatus and protective equipment, electronization and transistorization are being carried out.

High sensitivity, large current capacity and high dielectric strength are demanded of the electromagnetic relay.

Easy-maintenance and competitive price are also required.

The small-sized plug-in type electromagnetic relay, model HH22P(S) introduced here is developed to meet the above mentioned industrial requirement.

Features

1) Small-size, light weight

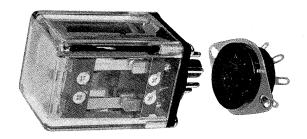
Compared with conventional auxiliary relays the relay's fixing-space and weight are minimal, permitting the advantages of small-size and light-weight.

2) Outstanding capability, long life

The relay, despite its minimum power consumption possesses enough switching capacity for heavy current and satisfies the requirements of the A class 1 type No. 1 of the JIS Code for electromagnetic relays, the most rigid code here.

More than 1 million switch actions are permitted for electrical use and for mechanical use more than 0.5 million are possible.

To meet a wide range of use relays for both alter-



nating current use and direct current use are available.

3) High dielectric strength

In spite of extreme compactness the relay may be used in a power circuit because of its high dielectric strength of a-c 2000 v for one minute.

4) Withstand high switching frequency

The relay's switching capabiliy and life are guaranteed for as highly frequent an operation as 1800 times in one hour.

5) Easy-maintenance and easy-inspection

The plug-in mechanism with the octal base of JIS code assures easy maintenance.

The attractive dust-proof transparent cover gives protection against dust which causes contact failure and permits easy inspection from the outside of the relay.

As our octal sockets are manufactured on the Japanese Industrial Standard they are a standard item on the market and may be easily obtained.

Specification

1) Model HH22P

HH22PS (with octal socket)

2) Rating A-c 200 v 50 c/s, 200-220 v 60 c/s A-c 100 v 50 c/s, 100-110 v 60 c/s D-c 100 v D-c 24 v

3) Contact arrangement

With 2 C contact (having two switching contact point)

4) Switching capacity

Charging capacity ac, dc 8 amp

Switch on capacity, switch off capacity

Voltage	Switch-on	Switch-off	Life time
A- c	1.25 amp	0.25 amp cos $\varphi = 0.4$	1 million
200 v	2	0.4 "	0.5 "
	4	0.8	0.2 "

5) Dielectric strength

A-c 2000 v for 1 min.

6) Outer dimensions

 $36 \times 36 \times 55 \,(\text{mm})$

7) Weight Relay:

approx. 125 g

Socket:

approx. 12 g

(By O. Tsuchiya, Tokyo Factory)

SILICON RECTIFIER ELEMENTS FOR COMPONENT PARTS, MODEL FR 1 & DS 1

The Fuji Silicon Rectifier Element has been exceptionally well received and is being used extensively in every field of industry. We, Fuji Electric Co., Ltd., manufacturers of high efficiency silicon rectifier elements, have produced more than 1/3 of all the silicon rectifiers used in Japan. Here we take pride in introducing the new silicon rectifier elements FR1M and DS1M, suitable for use in electronic equipment such as communication apparatus, sound instruments, etc. Fuji Electric's proven techniques and years of high standing as an integrated electrical equipment manufacturer, guarantee the high efficiency, excellent quality and reliability of both FR1M and DS1M with their double advantage of small size and low cost. DS1M is constructed of hermetic seal made of metal case, whereas that of FR1 is of resin seal made of special synthetic resin. Both are designed for maximum durability and to withstand moisture, vibration and shock.

Applications

- Acoustic products...TV set, radio, hi-fi device, tape recorder, etc.
- Communication apparatus
- Measuring instruments

Features

1) Large current capacity

Because of an excellent forward directional characteristic, forward watt loss is very small and current capacity is large.

2) Small size

Large current capacity and high inverse voltage allow the rectifier to be small but high in efficiency.

3) High inverse voltage

Because of the high purity single silicon crystal used, the rectifier can withstand high inverse voltage.

4) High application temperature

The silicon itself has a high fusion point, thus the maximum permissible temperature for the junction is 120°C for the FR type and 140°C for the DS type.

5) Long life

Service life is indefinite if used correctly.

6) Perfect air-tightness

The rectifier is perfectly sealed to prevent exterior defective effects.

7) Uniformity

The Fuji silicon rectifier element is manufactured under strict process control, its characteristics tested by many rigid testing processes to ensure uniformity and high dependability.

