

## FUJI DC-OPERATED AC MAGNETIC CONTACTOR, TYPE RC 3631-5-1/G, 2/G & 4/G

Fuji AC-operated mangentic contactors RC 3631 series are available in a complete range of capacities and they are recognized as the most dependable contactors by all our customers. However to develop RC 3631 series further, our Company continued research tirelessly and completed DC-operated AC contactors type RC 3631-5-1/G, 2/G and 4/G, so we would like to introduce these new products here. Regarding RC 3631-5-8/G and 10/G, they are now under research but will be introduced here in near future.

DC-operated magnetic contactors can be applied to the stable electric source such as battery source, so they are suitable to control the very important circuit to keep sequence of circuit even in case of current interruption.

### 1. Features

#### 1) Ultra small size and light weight

In every type, molded parts are mostly used in construction and compact but elegant styling is adapted in its design, which saves space for installation.

#### 2) Highest operation features

Our contactors fully guarantee Class A, Number 1, Grade 1 which stipulates the highest performance in Japan Industrial Standards (JIS) and what's more it has been actually proven as the result of severe tests that they have superior operating features that far surpasses these Standards.

#### 3) Long life

Contactors can safely withstand more than 10 million times mechanically and 1 million times electrically.

#### 4) Easy maintenance and inspection

Changing of parts, assembling and disassembling of contactor can be easily done with only a screw driver.

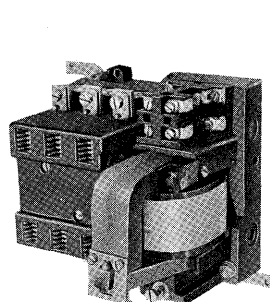


Fig. 1  
Type RC 3631-4/G

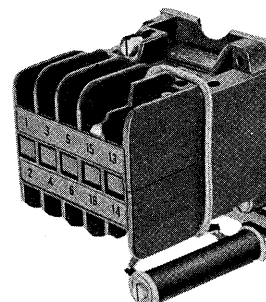


Fig. 2  
Type RC 3631-5-1/G

### 2. Characteristics

Our magnetic contrctors have higher abilities than the highest class of JIS Class A, Number 1, Grade 1.

1) Rated capacity of DC-operated contactors and auxiliary contact rating.

Both rated capacity and auxiliary contact rating of DC-operated contactors are the same as that of AC-operated contactors. So, for details please refer to the specifications of corresponding type of RC 3631 series AC-operated contactors. For your reference we show below the typical specifications of DC-operated contactors.

Type	Rated capacity (kW) AC 220 V, 3 phase squirrel-cage motor	Rated current (A)	Standard of auxiliary contact	Auxiliary contact rating
RC 3631-5-1/G	3.7	16	1 a	(1) Maximum continuous current: 10 A (2) Breaking capacity: AC 220 V, 50/60 c/s 800 VA, $\cos\phi=0.3$ DC 220 V, 200 W (Non-inductive) 60 W (Inductive)
RC 3631-2/G	5.5	25	1 a-1 b	
RC 3631-4/G	15	60	2 a-2 b	

## 2) Magnet capacity

Type	When closing (W)	After closing (W)	Series resistance
RC 3631-5-1/G	76	9.5	has
RC 3631-2/G	84	9.7	has
RC 3631-4/G	20		has not

## 3. Construction

For magnet of both RC 3631-5-1/G and 2/G, AC magnet is used but a part of which is converted to have such system that the magnet is excited strongly at the moment of closing and after closing series resistance is inserted.

In type RC 3631-4/G, magnet itself is for DC excitation, so it is not necessary to insert series

resistance. Main circuit of every type of DC-operated contactors is the same as that of corresponding type of RC 3631 AC-operated contactors.

## 4. Outer dimensions (depth × width × height) (mm)

RC 3631-5-1/G (with base)  $100 \times 68 \times 83$   
RC 3631-2/G (with base)  $130 \times 125.5 \times 113$   
RC 3631-4/G  $149 \times 160 \times 155$

## 5. Instructions

When your inquiring, please inform us following points.

- (1) Type of contactor
- (2) Load applied (motor, heater, etc.)
- (3) Voltage, frequency and operation circuit voltage

(By K. Harigaya, Fukiage Factory)