

NEW TYPE MAGNETIC SWITCH, MODEL RC 3931-6

Introduction

We have recently achieved another design of magnetic switch, to join our RC 3931 series, which was re-designed from the Siemens Model K 915 series.

An introduction to our new Model 6 follows.

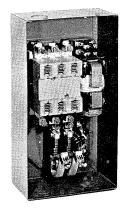
The Model 6 is designed to have a capacity between that of our present Model RC 3931-4T and the RC 3931-8. It is redesigned from the Siemens Model K 915 III -6 in order to conform to JIS (Japan Industrial Standard) No. C 8325.

The construction adopted for the Model 6, differing from our present X 6 type, uses a link system for the contacting part (as is done on the Models 4, 4T, 8, and 10) to eliminate shock hazard. Also adopted was an operating magnet coil with taps for both 50 & 60 cps use.

The new Model 6 can be applied for remote operation of motors up to 60 kw (80 hp) 550 v ac and control of all kinds of circuits up to 100 amp, 550 v ac.

Special Features

- 1) As the Model 6 is constructed of specially molded parts, the installation space required is small.
- 2) The Model 6 completely merits the first class of of JIS, namely JIS C 8325 class A, number 1, grade 1.
- 3) The switches will withstand continuous operations of more than one million times electrically and



ten million times mechanically.

- 4) Reliable overload protection
 - A precision thermal relay which has a wide adjustment range and an ambient temperature compensation device provides complete protection against motor burn-out.
- 5) A screwdriver is the only tool needed for assembly, disassembly, and part changing.

Rating

Model	Rated Capacity for Cage Motor, kw (hp)				Rating Current	Aux. Contact	
	110 v	220 v	440 v	550 v	(amp)	(standard)	
RC 3931-6						2 A 2B	
RC 3938-6R	11	25	50	60	100	$2\times(2 A 2 B)$	
RC 3631-6	(15)	(33)	(67)	(80)		2 A 2 B	

Auxiliary Contact Rating

		50/60 cps Ac $\cos \phi = 0.3 \sim 1$		DC			
Max.				Input	Breaking		
Rating	Voltage				Capacity (va)		
0		Making Breaking		Capa-	Non-	Induc-	
Current	t	Capa- city	Capacity	city	indu c- tive	tive	
(amp)	(v)	(va)	(va)	(va)	Load	Load	
	24	350	150	150	150	50	
	110	1600	460	500	200	50	
10	220	3400	600	500	200	60	
	440	5200	1300	500	150	70	
	550	8500	1600	500	130	80	

Rating of Operating Magnet Coil (Standard)

The standard voltage and frequency of the operating magnet coil (control circuit) are shown in the following.

	Mag. Coil (Ma		Line		
Model	Upon After Switch On Switch On		Voltage and	Remarks	
	(va)	(va)	Frequency		
RC 3931-6			100 v 50 cps	Coil with	
RC 3938-6R	1,520	60	100~110v 60cps 200 v 50 cps	taps for	
RC 3631-6			200~220v 60cps	either use	

Characteristics of Magnet Coil

The magnet coil charactristics for 200 v at 50 cps are shown below. If a different voltage and frequency are used, the values shown in the table will not be correct and hence care should be taken.

Model	Operating Voltage (v)	Release Voltage (v)	Exciting Current _(amp)	Loss (w)	
	(Average)	(Average)	(Max.)	(Max.)	
RC 3931-6					
RC 3938-6R RC 3631	163	126	0.2	20	

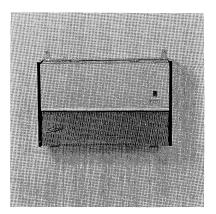
Main Points of Difference between New Model 6 and Present Model 6

	Construction	Max. Appli- cable Cage Motor	Cur- rent	Operation Coil
New Model	Magnet part and contacting part are assembled separately—operation can be done through lever system	220 v 25 kw (33 hp)	100 amp	Tapped for 50 cps or 60 cps use
Present Model	Moving contact and moving magnet core are directly combined.	220 v 20 kw (25 hp)	75 amp	50 cps, and 60 cps uses separate coils

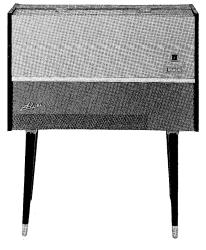
(By K. Morita, General Use Electric Machine Dept.)

FUJI AIR-PURIFIER, MODEL LFH 301

The furniture-styled Fuji air-purifier has made its debut under the trade name of "ALPEA". It is named after the comfortable and refreshing Alpine air. ALPEA model LFH 301 is an air cleaner that removes dust, kills germs, provides negative ions (vitamins of the air), and keeps the room temperature uniform. A single ALPEA has all these functions, yet beauty of the room is not sacrificed since the unit is gracefully styled, tastefully finished. It can be placed on the floor (accessory legs are available), put directly on the table, or attached to the wall. Why is an airpurifier desirable? Dust, invisible to the eye, (1/ $1,000 \sim 1/10,000 \text{ mm}$) is ever-present in the air, a constant threat to your health. Even a vacuum cleaner can not catch these minute particles of dust that are always drifting about. The contamination of air can not be tolerated as being only an unpleasantness. Contamination of the air in modern big cities far exceeds the allowable limit from the viewpoint of public health. When this utmost limit for preservation of human health is exceeded, the causes of maladies such as silicosis, bronchities, allergies, infectious diseases, bad cancers, deterioration of food freshness, etc., are induced. The electrically charged molecules and micro-particles floating in the air are called ions. The negative ion, vitamin of the air, is a vital ion for human life. Doctors will testify to the fact that negative ions in the air give a calming, soothing effect—often recommended to lower blood pressure, induce sleep and general relaxation. But the negative ion is easily destroyed by contamination of the air. With the decrease of negative ions, we humans are subject to nervous diseases, allergic troubles, and insomnia. From these points of view, the Fuji air-purifier ALPEA, which incorporates the features of dust collector, sterilizer, and ionizer



Mounted on wall



With supporting legs

in a single unit, is indispensable to living in a clean and healthy environment.