

Characteristics of Magnet Coil

The magnet coil characteristics 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

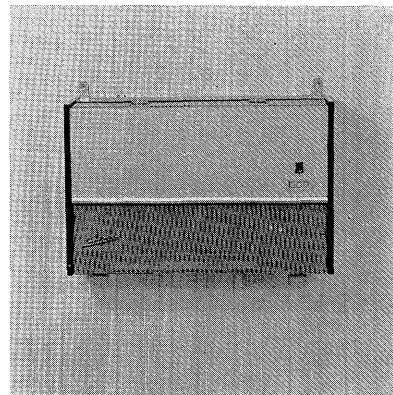
Main Points of Difference between New Model 6 and Present Model 6

	Construction	Max. Applicable Cage Motor	Current	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

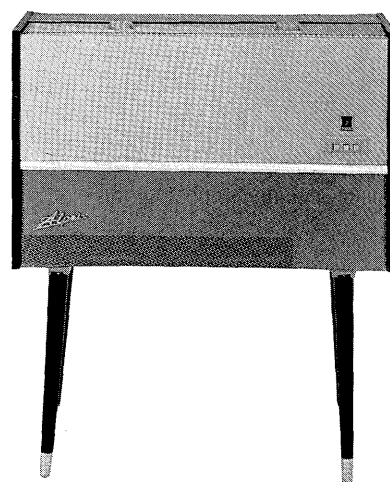
(By K. Morita, General Use Electric Machine Dept.)

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 air-purifier desirable? Dust, invisible to the eye, (1/1,000~1/10,000 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, bronchitis, 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.

Special Features

1) 0.1 micron, 1/10,000 mm particles captured

The air-purifier removes all minute suspended matter of 0.1 micron or larger. Using the principles of static electricity, it easily overcomes the limitations of conventional filters. After charging the dust particles with electricity, the electrical system filter attracts them to dust collecting electrodes, just the same as a magnet attracts things, by making use of the fact that negative and positive charges attract each other. This dust-collecting power is doubled in efficiency by the dust-collecting mat where dust particles that escaped from the dust-collecting electrodes are throughly filtered.

2) Provides negative ions (vitamins in the air)

The ionizer puts nutrition, negative ions, in the purified air—ready to refresh you and give you a sense of well-being. The quantity of air-vitamins generated by the ionizer equals that of Alpine air. You can eat well, sleep well, and feel well, as if you were staying at the foot of the Alps, far from the hustling and bustling city.

3) Complete sterilizing effect

A powerful sterilizing ray, 64 times more powerful than sunlight, quickly reduces the amount of bacteria in the air. Thus, the dust-removed-air with added nutrition, negative ions, and finally receiving a baptism of sterilizing light becomes completely purified.

4) Keeps room temperature uniform

The cross-flow fan gives uniformity to the room temperature. Ordinarily the upper air is apt to become warm and the lower air cool. This temperature difference causes unpleasantness. The cross-flow fan solves this problem by circulating the air in the room to complete uniformity.

5) Easy to use

Just plug into your household electrical outlet to operate the air-purifier. Operation is just the same as when you use ordinary electrical home appliances such as irons, TV sets, or toasters. Air flow adjustment is simply done by pushbutton switches. Maintenance is also simple, just wash the dust-collecting mat under a tap once a month.

6) Quiet operation, low power consumption (30W)

The dust collecting power is most effective, as displayed by the low electric power consumption.

Operation is so quiet it will not interfere with your conversation or rest. You can fall asleep without being aware that the unit is on. The ALPEA is truly the first air-purifier suitable for home use in all respects.

Specifications

Model :	LFH 301
Outside dimensions :	570 (W) × 169 (D) × 360 (H) mm 22 $\frac{3}{4}$ " (W) × 6 $\frac{3}{4}$ " (D) 14 $\frac{3}{8}$ " (H)
Power source :	Operation on any voltage available on application, 50/60 cps, single phase ac
Air quantity :	2.5-3.0 cu. m/min (2-step change)
Applicable floor area :	7~16 sq. m.
Power consumption :	under 30 w
Minimum size of dust particle collected :	0.1 micron ($\frac{1}{10,000}$ mm) = particle of tobacco smoke
Purifying effect :	99%
Auxiliary mechanisms :	2-negative ion generators 1-sterilizing lamp
Net weight :	12 kg (26.4 lbs.)
Standard accessories :	1-dust collecting mat 1-cleaning brush 2-0.5 amp fuses
Special accessories sold separately :	4-legs 4-liners
Effect of air-purifier :	Air purification Air circulation Uniformity of room temperature Air sterilization Negative ion generation
Applications : Homes :	Bedroom, guest room, study room
Shops :	Beauty parlors, restaurants, coffee shops, bars
Others :	Hospitals, waiting rooms, laboratories, watch shops, precision instrument rooms, dispensaries, hotels, inns, and recreation halls.

(By K. Uekuri, Foregin Trade Dept.)

Outline of Our Products

(I) Power Station

- a) Generators :
Synchronous generators up to 150,000 kva
Direct current generators up to 10,000 kw
Other generators of all kinds
- b) Water Turbines & Pump Turbines :
Francis type, Pelton type, Kaplan type turbines
and pump turbines up to 150,000 kw
- c) Steam Turbines up to 150,000 kw
- d) Gas Turbines :
Closed-cycle type up to 50,000 kw

(II) Nuclear Reactor

Power Reactors, Experimental Reactors, Sub-critical Assemblies

(III) Transmission & Distribution

- a) Transformers :
Power transformers up to 300 Mva, 480 kv
Furnace transformers up to 60 Mva, 154 ka
Measuring transformers up to 287 kv
Other transformers of all kinds
- b) Standard Transformers (for general use), Single-phase & Three-phase Distribution Transformers from 3 kva to 1000 kva
- c) Rotary Condensers up to 75,000 kva
- d) Static Condensers
- e) Circuit Breakers :
Expansion circuit breakers up to 287 kv
Oil circuit breakers up to 154 kv
- f) Switchboards :
Sheet iron made switchboards for all kinds of service
- g) Switch Equipment :
Disconnecting switches up to 480 kv
- h) Induction Voltage Regulators up to 1000 kva
- i) Lightning Arresters up to 161 kv

(IV) Rectifier

- a) Mercury-arc Rectifiers :
Single-anode or multi-anode type, air-cooled pumpless up to 6000 amp
- b) Selenium Rectifiers
- c) Silicon Rectifiers
- d) Rotary Converters up to 3000 kw, 1500 v

(V) Motor & Application

- a) Motors :
Three-phase synchronous motors up to 150,000 kw
Three-phase induction motors up to 10,000 kw
Three-phase commutator motors up to 300 kw
Direct current motors up to 10,000 kw
Other motors of all kinds
- b) Standard Motors (for general use):
Three-phase squirrel cage motors from 0.4 kw to 75 kw
Three-phase wound motors from 20 kw to 75 kw
Single-phase split-phase start induction motors, 100 & 200 w
Single-phase repulsion start induction motors from 200 to 750 w
Single-phase condenser start induction motors from 200 to 750 w
- c) Ventilating Fans for radial & axial types

- d) Mine Winder Set for vertical shaft & inclined shaft
- e) All kinds of Winches for cargo boat use
- f) Steering Engines for boat use
- g) Fuji-Voith Schneider Propellers
- h) Torque Converters
- i) Steam Converting Valves

(VI) Control

- a) Regulating Apparatus :
Motor starters, controllers, speed regulators, voltage regulators & other regulating apparatus for all kinds of service
- b) Circuit Breakers :
Air circuit breakers up to 500 v, 3000 amp
High speed air circuit breakers up to 1500 v 6000amp
- c) Switch Equipment :
Knife switches, magnetic switches & other kinds of switch equipment

(VII) Instrument

- a) Watt-hour Meters :
Single-phase WhM for low tension circuit use
Three-phase WhM for low & high tension circuit use
- b) Relays :
All kinds of relays for power & industry use
- c) Electric Measuring Instruments :
Switchboard meters, portable type meters, precision meters, recording meters, telemetering & telecontrolling equipment
- d) Industrial Measuring Instruments :
Thermometers, pyrometers, gas analysers, hydrometers, salinometers, pH meters, pressure gauges, flow meters (for water, steam, gas & air), level meters, indicators and recorders
- e) Automatic Controlling Equipment :
Electro-pneumatic controllers for temperature, pressure, flow, liquid level etc.; ratio controllers for gas & liquid mixing
Magnetic controllers, electrical indicating controllers with on-off contacts

(VIII) Radiation Equipment

Linear accelerators, synchrotron, Cockcroft-Walton type d-c high voltage generators

(IX) Household Appliances

- a) Electric Washing Machines & Spin Dryers
- b) Vacuum Cleaners
- c) Electric Refrigerators
- d) Electric Fans
- e) Air Conditioners
- f) Transistor Radios
- g) Tape Recorders
- h) Television Sets
- i) Stereo Players
- j) Electric Juicers
- k) Toasters, Hot Plates & Irons
- l) Heating Apparatus :
Electric foot warmers, bed warmers, body warmers, electric stoves, etc.
- m) Electric Home Pumps for deep or shallow well
- n) Dry Batteries
- o) Flashlights & Gas Lighters
- p) Electric Illuminating Apparatus