FFU Controller AC220V 3STEP (4STEP)

LFC2200

USER MANUAL

DOTECH
SENSING & CONTROL

DOTECH, INC
6F, Joonagang-Ilbo Bldg., 778 Wonsi-Dong, Danwon-Gu,
Ansan-Si, Gyeonggi-Do 425-852 Korea
Phone: +82-31-495-3767, Fax : +82-31-495-3917
INNOBIZ
www.dotech21.com

※ CAUTIONS

1. This product may cause an electric shock in handling. Please do not attempt to open it with power turned on.
2. This product should be installed in a place fixed secured by a rack or panel.
3. This product can be used under the following environmental condition.
   ① Indoor ②Pollution Degree 2 ③At an altitude of 2000m or below
4. Power input must be within the designated ranges.
5. To turn on or turn off power supply for this product, please the circuit breaker or switch of a standard product of IEC 60947-1 or IEC 60947-3 product and install it within a close distance allowing convenient operation by user.
6. Please be understood that if this product is dismantled or modified discretionary, after sales service will not be able to be provided.
7. In order to prevent it from an inductive noise, please maintain the high-voltage wire and power wire separated.
8. Please avoid installing the product in a place where a strong magnetism, noise, severe vibration and impact exist.
9. Please avoid using the product near a device generating strong high frequency noise (high-frequency welding machine, high-frequency sewing machine, high-frequency radiotelegraph, high capacity SCR controller)
10. Product's damages other than those described in the guarantee conditions provided by the manufacturer shall not be responsible by us.
11. If this unit is used to control machineries (Medical equipment, vehicle, train, airplane, combustion apparatus, entertainment, processing and transportation equipment, elevator and various safety device etc.) enabling to effect on human or property, it is required to install fail-safe device.

※ The Aforementioned precautions must be observed, and if you fail to do so, it may cause a product's breakdown.
※ The specifications, dimensions, and etc. are subject to change for enhancement without a prior notice.
※ Noise filter or the equivalent are recommended to use to power cable.

1. OVERVIEW

※ FEATURES

- Built-in digital motor protection function of digital types
- Can check motor current and cause of failure via data display
- Has a variety of protective elements
  (overheating, overcurrent, undercurrent, Lock protection function)
- Be easy to check the cause of failure by storing the last one

: SELECTION GUIDE

Model	Description
LFC2200	basic types of single-phase FFU CONTROLLER

: STANDARD SPECIFICATIONS

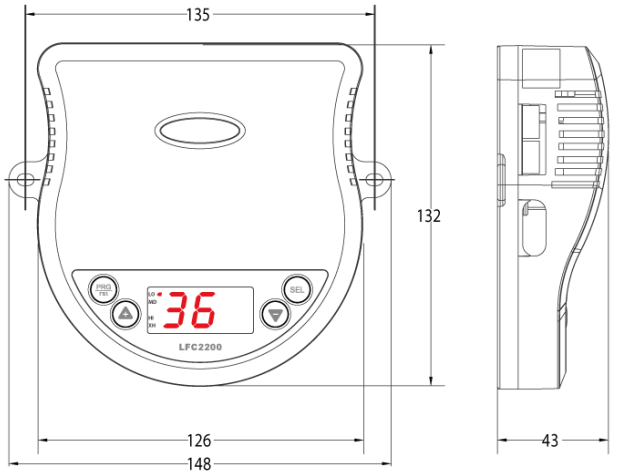
Model	Description
Dimensions	144(W)mm X 132(H)mm X 43(D)mm
Perforated Dimensions	135mm Hole 4.5 Ø
Power	100 ~ 240 Vac, 50 / 60 Hz
Rated current consumption	MAX 2 VA (MAX 1kW Motor connection possible)
Display	FND, LED
Connectors	Motor : CHD 1140-08 / M8C-LFC2200-400 Communication : RJ-11 6P4C / R4C-LFC200-3M
Operating Conditions	Temperature 10 ~ 50 ℃, Humidity 90%RH or less
Storage conditions	Temperature 20 ~ 60 ℃, Humidity 90%RH or less

: ACCESSORIES

Model	Description
PWC-LFC2200-3M	250VAC Power cable / 3meter
M8C-LFC2200-400	Motor cable 40cm, CHD 1140-08
R4C-LFC200-3M	LFC to LFC Comm. Cable 3M, UL2547 RJ11-6P4C
R4C-LFC200-5M	LFC to LFC Comm. Cable 5M, UL2547 RJ11-6P4C
R4C-LFC200-7M	LFC to LFC Comm. Cable 7M, UL2547 RJ11-6P4C
R4C-LFC200-8M	LFC to LFC Comm. Cable 8M, UL2547 RJ11-6P4C
R4C-LFC200-10M	LFC to LFC Comm. Cable 10M, UL2547 RJ11-6P4C

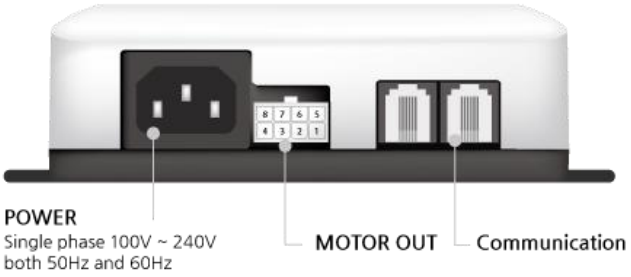
2. INSTALLATION

: DIMENSIONS

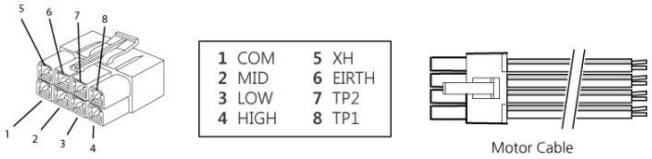


UNIT : mm

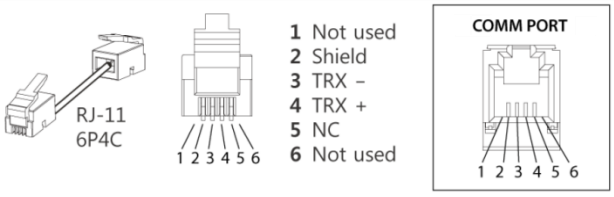
: WIRING DIAGRAM



MOTOR CONNECTOR M8C-LFC2200-400 - 4.2mm Pitch Wire to Board



COMMUNICATION CONNECTOR R4C-LFC200-3M



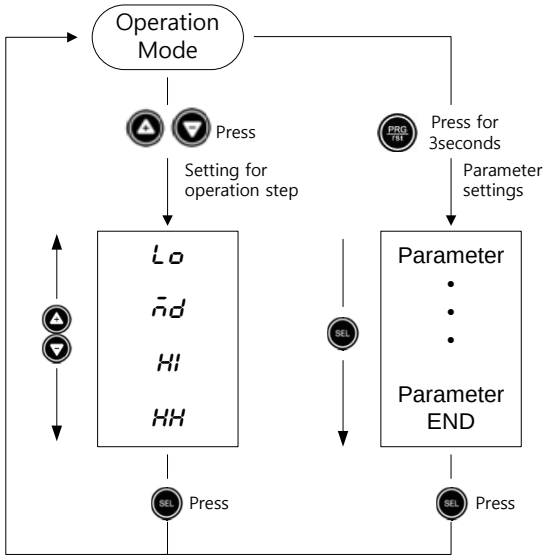
3. USER INTERFACE

: Display and keypad

Designation	Description
LED	
XH	When operating at a speed of EXTRA HIGH step
HI	When operating at a speed of HIGH step
MD	When operating at a speed of MIDDLE step
LO	When operating at a speed of LO step
Button	
PRG/rst	Use at address setup and alarm reset
SEL	Upward (Increase)
▲	Downward (Decrease)
▼	Select and save
▲ ▼	alarm reset when Pressed Simultaneously for 2 Seconds

4. PARAMETERS

: PARAMETER SETTINGS



● Press up or down button in operation mode to change operating step.
Press PRG button for 3 seconds to change parameter settings.

● SEL button performs movement to next menu and storage of set value in parameter settings

● A set value is flickering every 0.5 second and can be changed by pressing ▲ or ▼.

● Press SEL button for 3 seconds after changing set value, present electric current will be displayed.

: Setting for operation step

Address	Menu	Code	Unit	Step	Min.	Max.	Default	Custom
4 0001	operation step	–	oFF (0)	Lo (1)	nd (2)	HI (3)	HH (4)	oFF (0)	

: PARAMETER TABLE

Address	Menu	Code	Unit	Step	Min.	Max.	Default	Custom
4 0003	Setting mode for current	c3.5	A	0.01	0.00	9.99	3.0	
4 0004	Start delay time (D-TIME)	d30	second	1	0	99	60	
4 0005	Operation delay time (O-TIME)	o20	second	1	0	99	10	
	Comm. Address (ID)	001	–	1	1	255	1	

: TRIP / ALARM MESSAGE

NO	Menu	Code	Description		Response at Detection
1	Overheating Protection	trP	Always continuous detection		Immediate Stop
2	Over Current Protection	ocP	If continuously detect for O-TIME, after the passage of D-TIME after motor start (But, O-TIME is 3 sec for lock)	Operating current 〉Set current	Immediate Stop
3	Undercurrent protection	ucP		Operating current 〈 2% of set current	Immediate Stop
4	Lock protection function	loP		Operating current 〉200% of set current	Immediate Stop

※ D-TIME: Delay time, O-TIME: Operation time

※ When alarm code is displayed ; Press SEL key one time : Display current when trip occurs (Flickering)

※ If user press UP +DN key or PRG / RST key for 2 sec, trip will be cleared and will return to normal operation status.