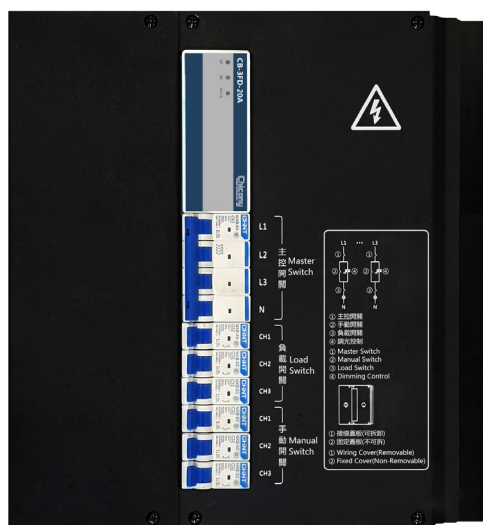


CB-3FD-20A

Dimming Control Module



CB-3FD-20A is one of the dimming control modules in the CB series which is widely used in the field of intelligent lighting. It provides the dimming output function by 3 channels of 20A front silicon controlled rectifier and can connect resistive load or incandescent lamp, halogen lamp, and forward controllable electronic transformer, etc.

Product Model Table

Model	Power	Digital input	Dimming Output of Silicon Controlled Rectifier	Pyxos	Consumption
CB-3FD-20A	P bus link power supply	-	3	1	40mA@24V

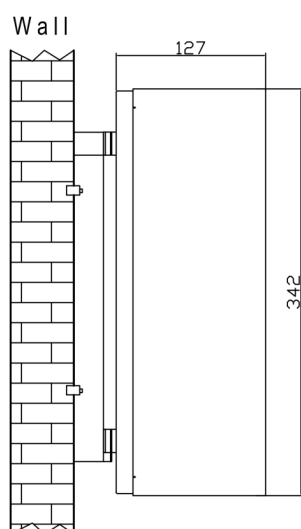
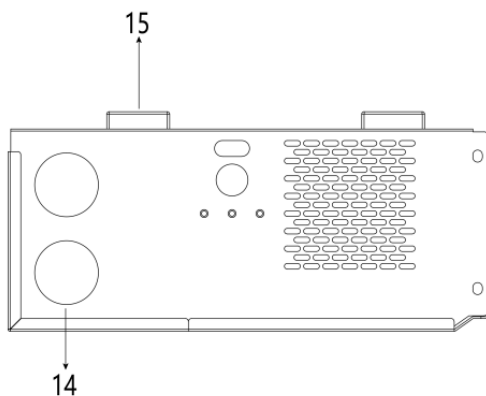
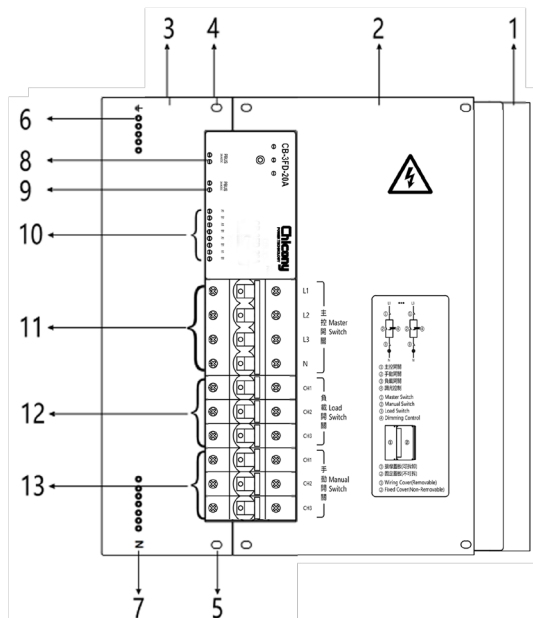
Technical Parameters

Item		Parameter
Electrical parameter	Power	P bus link power supply
	Static consumption	32mA@24V
	Dynamic consumption	40mA@24V
	Frequency	50Hz \pm 2%
Load information	Load type	Silicon controlled rectifier
	Output channels	3 channels
	Output current per channel	20A
	Output max current	60A
	Input voltage	AC220V \pm 10%

Item		Parameter
Environment	Operating temperature	-10 to 50°C
	Storage temperature and humidity	Normal temperature and 0%-95%RH without condensation
	Dimensions	342mm(W) x 320mm(H) x 127mm(D)
Specification	Material of cover	Metal Cover
	Installation method	Wall Mounted

Installation Description

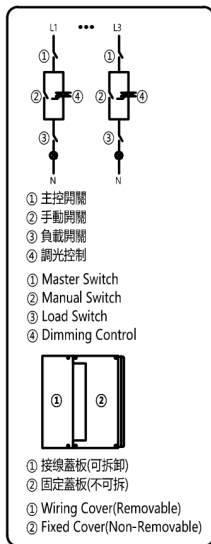
Please follow the instructions defining the terminal block pins on the equipment cover for wiring. The definition of the terminal block pins is shown in the following table. Please disconnect the circuit to prevent electric shock before wiring. Check whether the power supply is within the range of the required voltage before supplying the power for the equipment. The power supply shall not exceed this range, otherwise the module may burn. The installation and placement of the dimming control module shall avoid direct exposure of sunlight and be protected against moisture and rain.



CB-3FD-20A Wiring Pin Definition Table

No.	Description
1	Aluminum heat sink
2	Fixed cover, non-removable
3	Removable cover: Need to be removed when wiring
4/5	Screw hole: To fix the removable cover
6	Earth wire terminal: For device grounding and load grounding
7	Naught wire terminal: For load grounding
8/9	PBUS Communication interface
10	RS485 Communication interface, total four groups, support Modbus protocol Communication terminal definition: A:RS485+ / B:RS485-
11	3 Live wires naught wire channels for heavy electrical terminal L1 to L3:Live wire / N:Naught wire
12	3 Live wire output channels of loading CH1 to 3: Live wire output channels of loading
13	The corresponding air switch is manually controlled, no wiring required
14	Wiring perforation
15	Fixed bracket

Installation Description



The left picture is the working principle diagram of CB-3FD-20A, in which:

①-Master Switch

②-Manual Switch

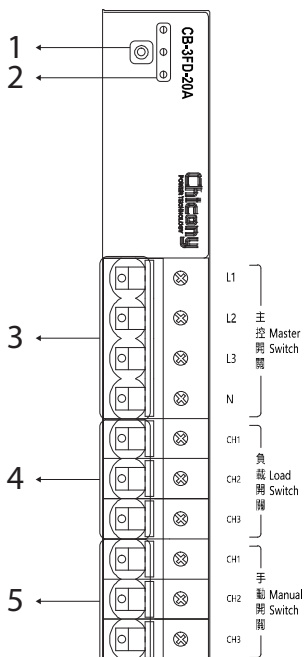
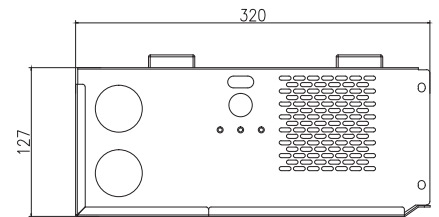
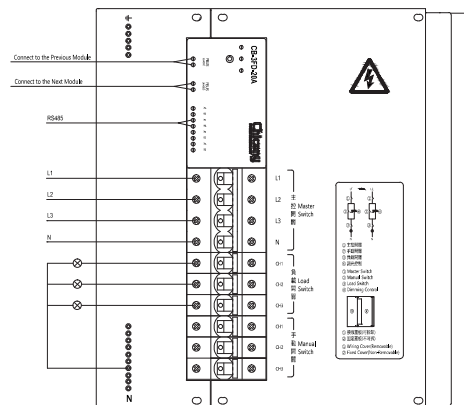
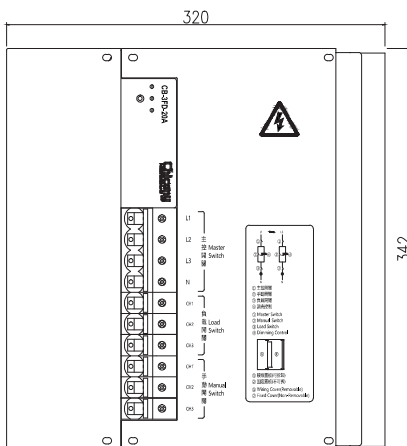
③-Load Switch

④-Dimming Control

Dimming mode: In normal use dimming mode, the ①③ switch need to be closed, and the ② switch should be open.

Emergency mod: If forced to open or dimming mode fails, the ①②③ switch need to be closed.

Dimensions and Wiring Diagram



1. SP Button: Press the button can read device ID and bring the device on line.

2. Status indicator, in order from top to bottom:

ST Indicator: Device status indicator, the light goes off when the pyxos is powered on abnormally. The red light flashes when the device is offline, and the red light remains on when the device is on-line.

SP Indicator: SP button indicator, in normal status usually goes off, and the yellow light remains on when the SP button is pressed.

CH1-3: Loading output indicator of 3 channels, one of which output remains on, otherwise it goes off.

3. Master Switch: The air switch capacity is 63A which can control the power supply on and off of the 3-channel circuits.

4. Load Switch: The air switch capacity is 32A which can control the on and off of each circuit load separately.

5. Manual Switch: The air switch capacity is 32A which can force the load of each circuit.