



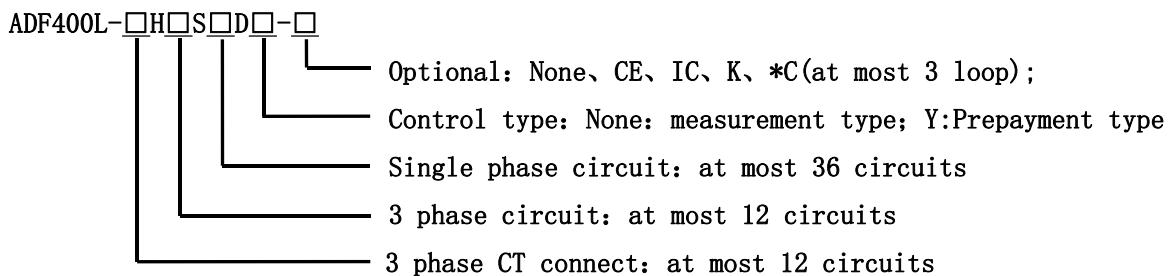
ADF400L multi-circuits energy
meter

1 overview

ADF400L series multi-channel energy meter, through the way of combination module can realize largest 36 circuits single-phase or 12 circuits three-phase, CT connect or direct connect. this series of energy meter with high accuracy, high concentration, centralized management, installation flexibility, the advantages of each other noninterference by the community, schools, enterprises of all areas. The series of meters support prepaid power function.

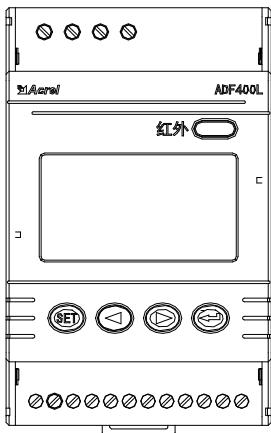
2 Product specification

2.1 Product name



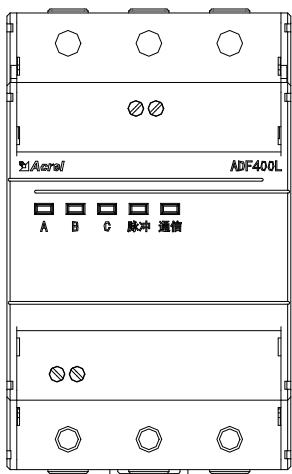
Note: 1、this product is combined with main module , direct connect and CT connect module;
2、This product can be max 12 circuits 3 phase (36 circuits single phase)

2.2 Product module description



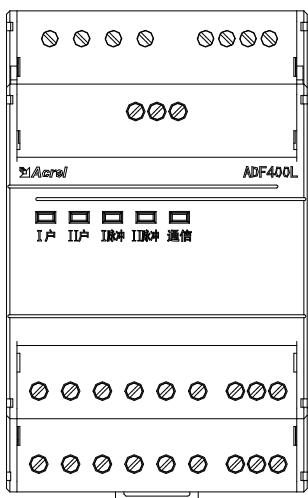
Main module

- 1、3 phase 3 * 220 / 380V power supply, providing power for later measurement module;
- 2、HMI: LCD and button
- 3、Infrared;
- 4、RF (IC card) ;
- 5、2 channel RS485 modbus-rtu (*C function) ;
- 6、3rd wireless module RS485communication (RJ45 connection) ;
- 7、Max 2DI/2DO (K function) ;
- 8、Max 1circuits ethernet (CE function) ;



Direct connect

- 1、 1 channel 3 phase 3*10 (80) or 3 circuits single phase 10 (80) A;
- 2、 1 channel pulse output;
- 3、 3 phase working condition、pulse and communication LED;



CT connect

- 1、 2 channel 3 phase 3*1 (6) A;
- 2、 2 channel pulse output;
- 3、 2 channel working condition、pulse and communication LED;
- 4、 Max 4DI/4DO (K function) ;

3 main function

3.1 prepayment

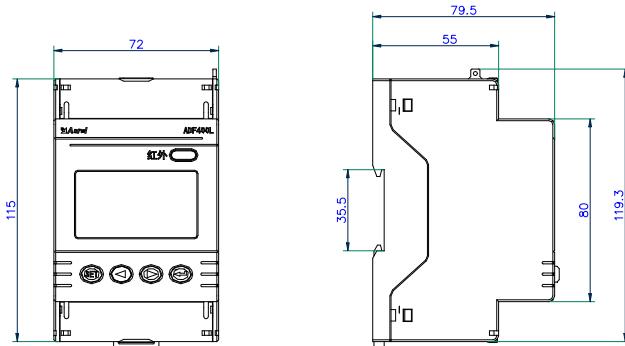
3.2 measurement type

function	function
display	LCD
Energy monitoring	Active energy (positive、negative) , Reactive energy (positive、negative) ,
Power measurement	Voltage、current、power factor、frequency、active power、reactive power、apparent power
Harmonic function	Total harmonic、sub harmonic (2~31)
3 phase unbalance	Voltage , current unbalance
DI/DO	Main module 2DI2DO
	CT connect 2DI4DO (direct connect)
LED	Pulse
communication	infrared
	RS485 MODBUS-RTU and DL/T645
History energy	12 month energy record

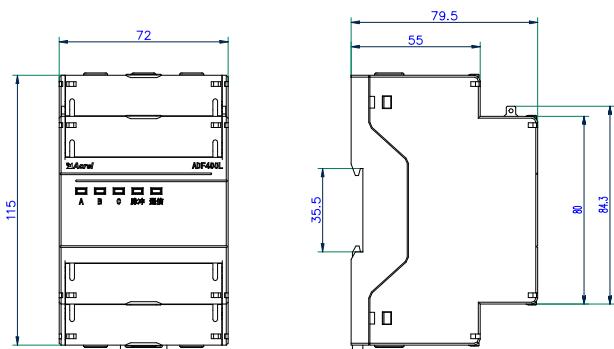
5 Size(mm)

Din rail 35mm.

5.1 外形尺寸



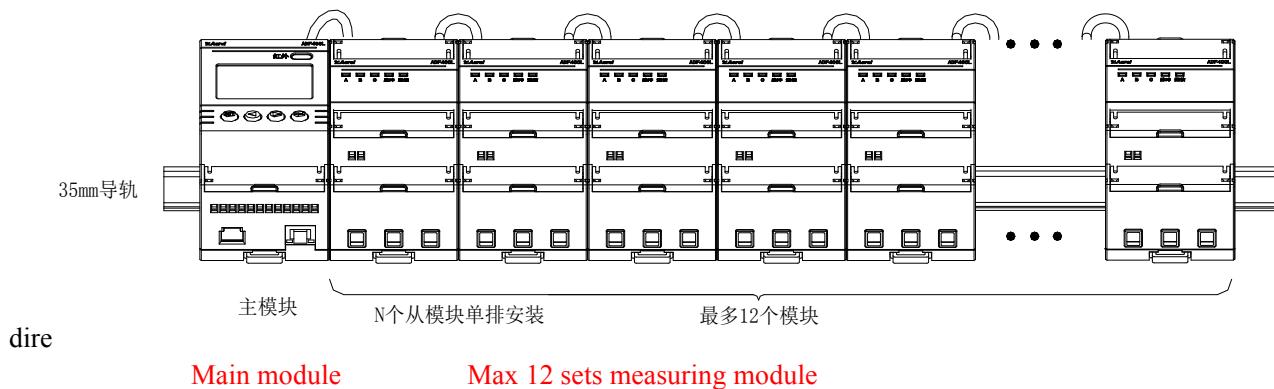
Main module size

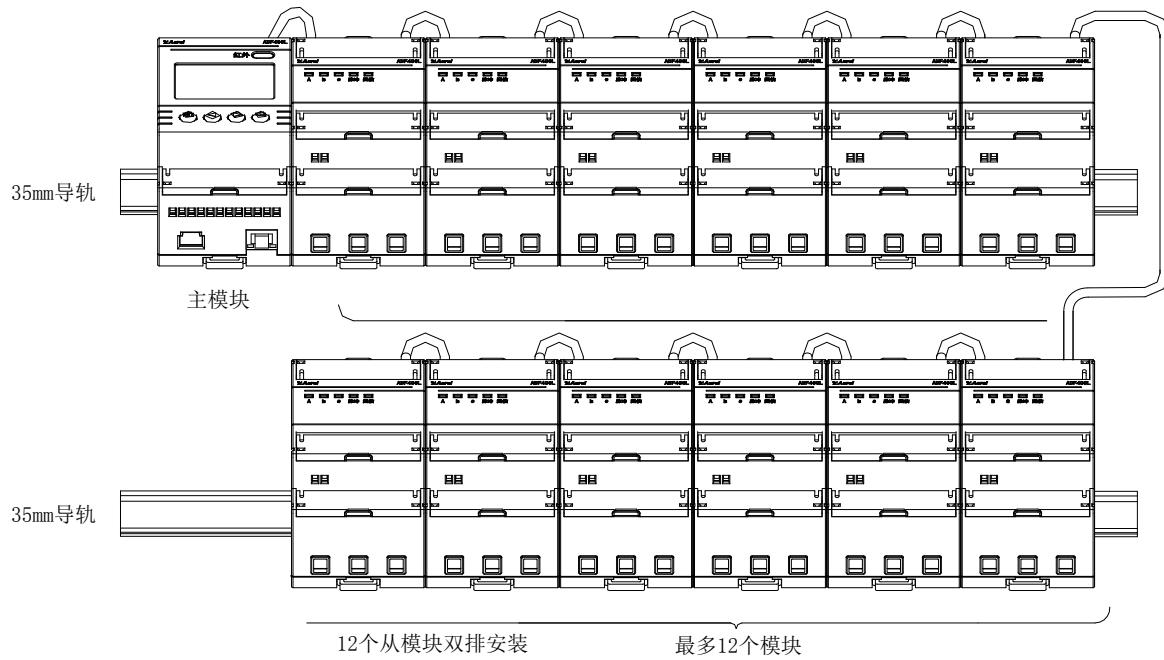


CT connect or direct connect module

5.2 module combination

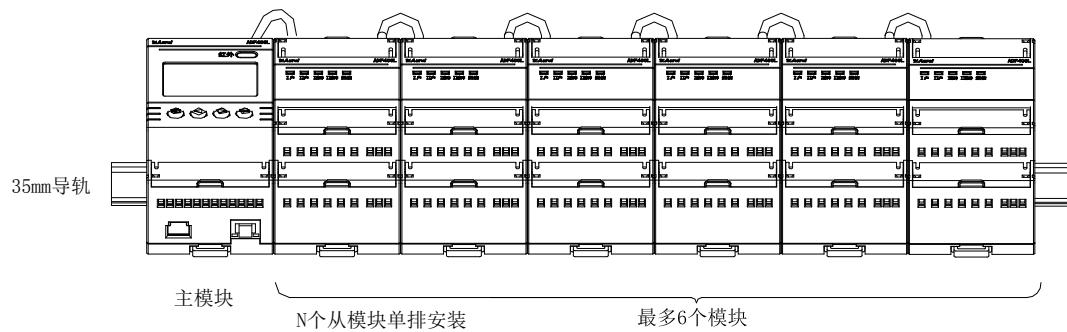
5.2.1 direct connect





2 Din rail installation ,Max 12 sets measuring module

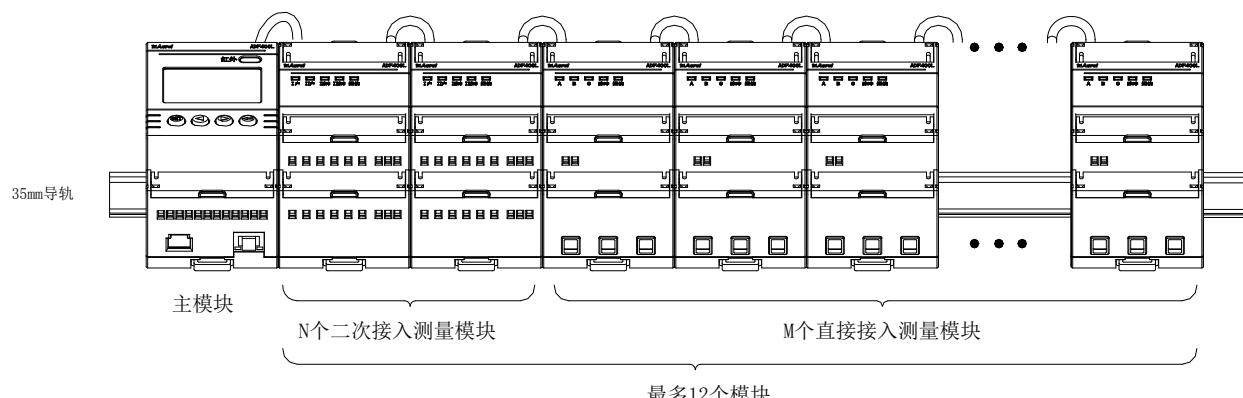
5.2.2 CT connect



Main module

Max 6 sets of measuring module

5.2.3 CT connect and direct connect



Main module

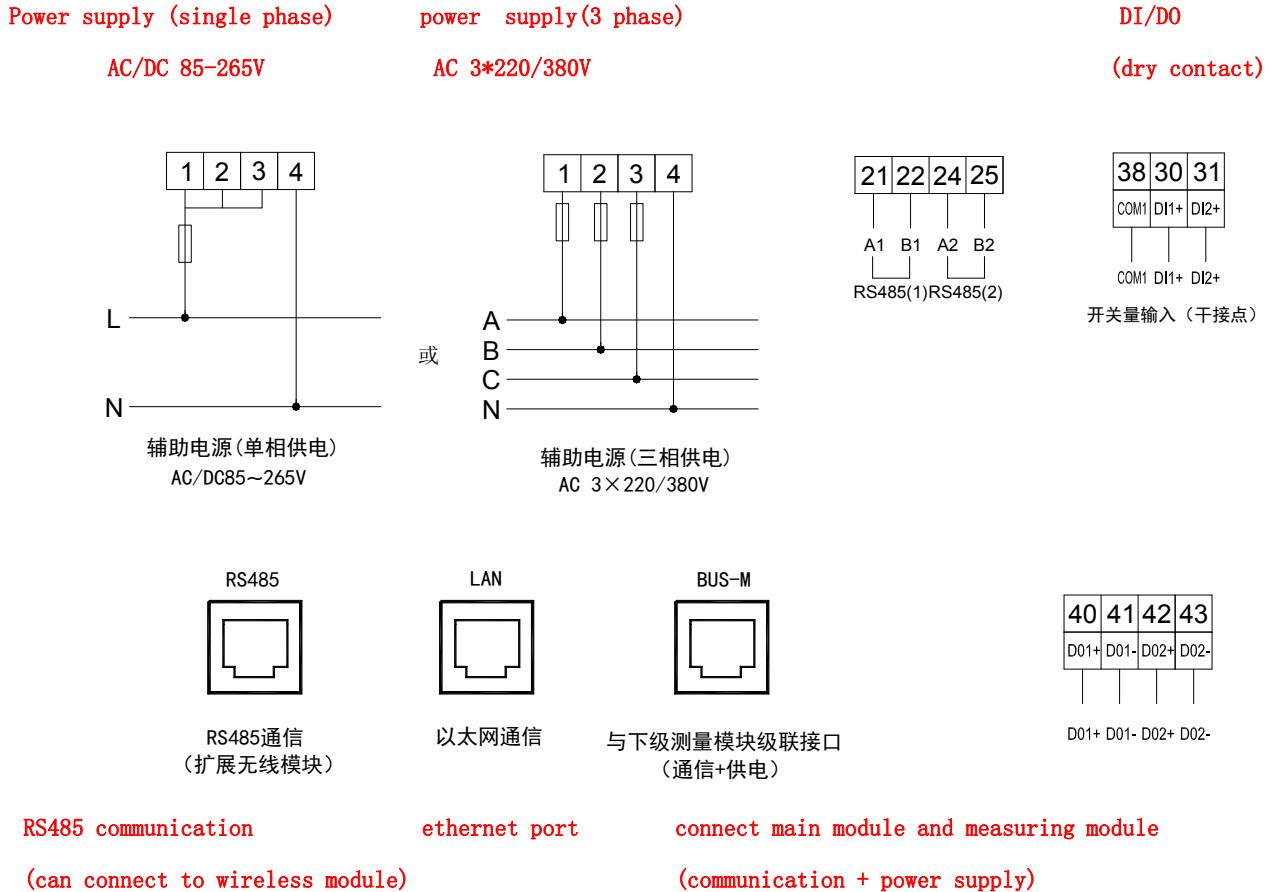
CT connect measuring module

+ direct connect module

Max 12 sets measuring module

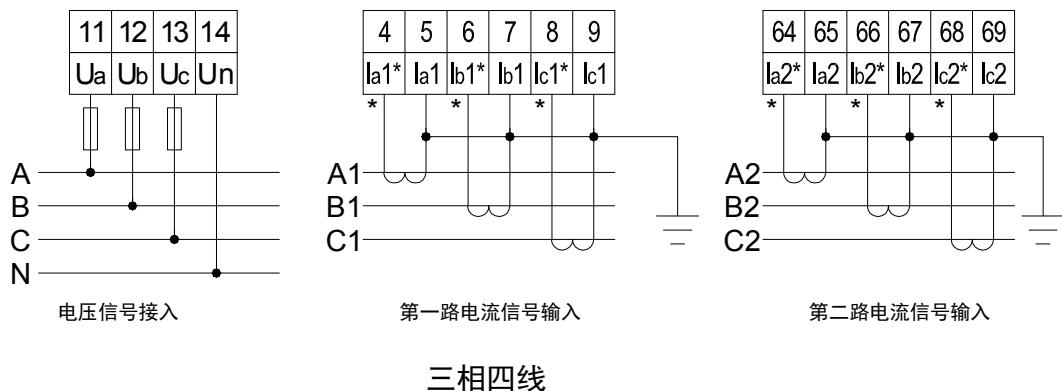
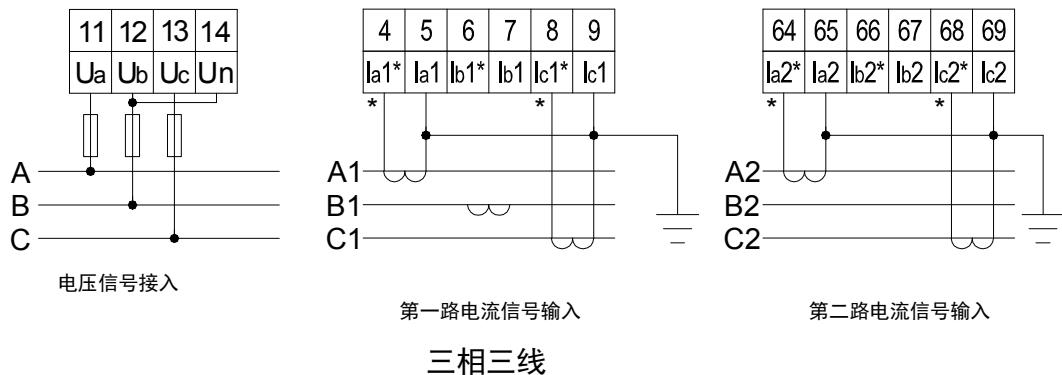
6 wiring and installation

6.1 main module

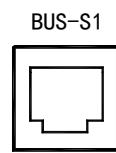


6.2 CT connect module

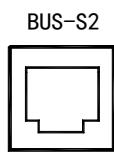
Voltage signal 1st current input 2nd current input



<table border="1"> <tr><td>16</td><td>17</td><td>18</td></tr> <tr><td>EP1+</td><td>EP2+</td><td>EP-</td></tr> </table>	16	17	18	EP1+	EP2+	EP-	<table border="1"> <tr><td>44</td><td>45</td><td>46</td></tr> <tr><td>COM3</td><td>D01+</td><td>D02+</td></tr> </table>	44	45	46	COM3	D01+	D02+	<table border="1"> <tr><td>47</td><td>48</td><td>49</td></tr> <tr><td>COM4</td><td>D03+</td><td>D04+</td></tr> </table>	47	48	49	COM4	D03+	D04+	<table border="1"> <tr><td>32</td><td>33</td><td>34</td><td>35</td></tr> <tr><td>DI1+</td><td>DI1-</td><td>DI2+</td><td>DI2-</td></tr> </table>	32	33	34	35	DI1+	DI1-	DI2+	DI2-
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COM4	D03+	D04+																											
32	33	34	35																										
DI1+	DI1-	DI2+	DI2-																										
电能脉冲输出	第1组继电器输出 (对应第1路三相回路)	第2组继电器输出 (对应第2路三相回路)	开关量输入 (AC/DC220有源输入)																										



与上级或下级模块级联接口
(通信+供电)



与上级或下级模块级联接口
(通信+供电)

Pulse output

1st relay output

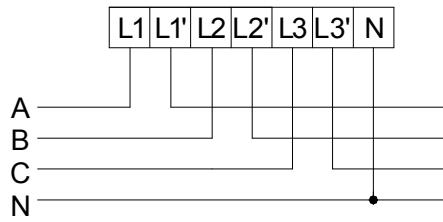
2nd relay output

DI/DO

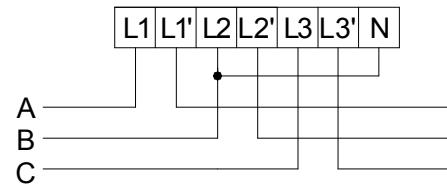
6.3 direct connect module

3 phase 4 wire

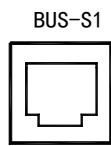
3 phase 3 wire



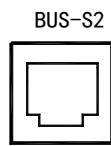
三相四线接线



三相三线接线
(只限计量型)



与上级或下级模块级联接口
(通信+供电)

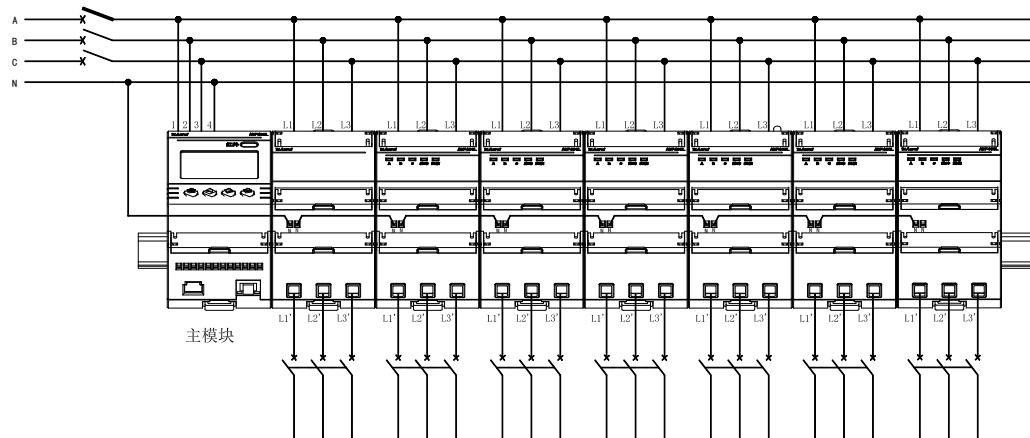


与上级或下级模块级联接口
(通信+供电)

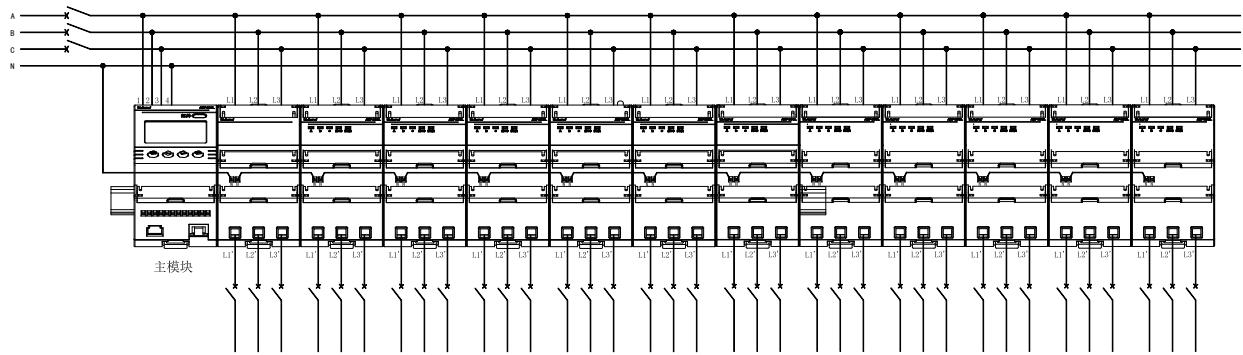


有功电能脉冲输出

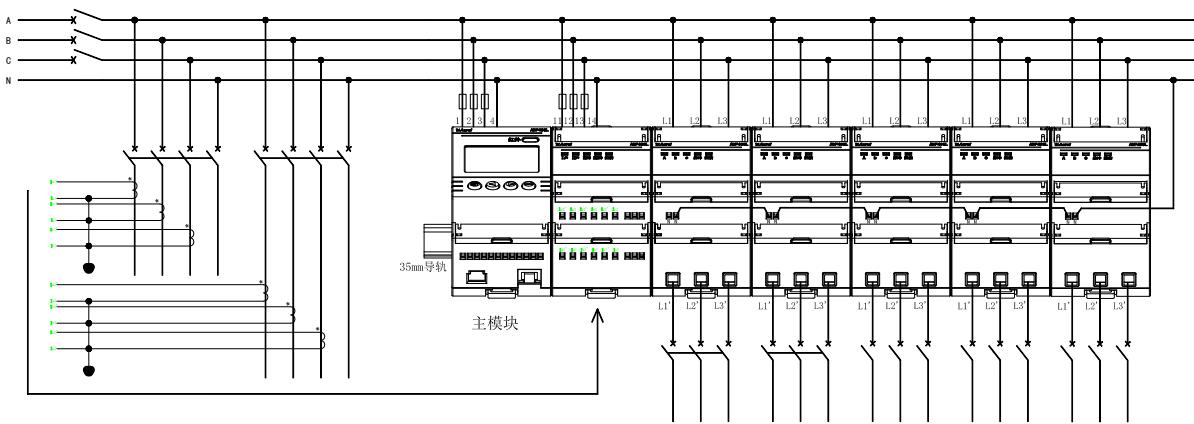
6.4 接线示意图



ADF400L-7SY-□ (7路三相直接接入) 接线示意图



ADF400L-36DY-□ (36路单相直接接入) 接线示意图



ADF400L-2H2S9DY-□ (2路三相互感接入+2路三相直接接入+6路单相直接接入混合使用方式) 接线示意图