3 Installation & Wiring

3.1 Dimension & Installation

Unit Dimension: (L × W × H) :145 × 40 × 135mm

Installation: Standard Clip Track TS35 × 7.5

3.2 Unit Wiring

The terminal is indicated in Fig.2:

Terminal 37 is the common point of the analog signal connection. Terminal 38 is for protection earthing. Terminals 1-16 and 21-36 are the input terminals of the analog signals; all analog signals must be input in a manner consistent with applicable requirements.

Terminals 19 and 20 are for RS485 connection. Terminals 17 and 18 are the ones for shield of communication wire.

Terminals 39 and 40 are for power supply connection. The voltage of the power supply is 24V DC.

The four indicators are defined as follows:

TX: Communication Transmission Indicator. When the unit transmits data to the connected computer, this light blinks.

RX: Communication Reception Indicator. When the unit receives commands from the connected computer, this light blinks.

RUN: Running Indicator. When the unit is running normally, this light blinks per a second.

POWER: Power Indicator. When the power supply is normal, this light remains on.

The terminal connection is shown in Fig.3.

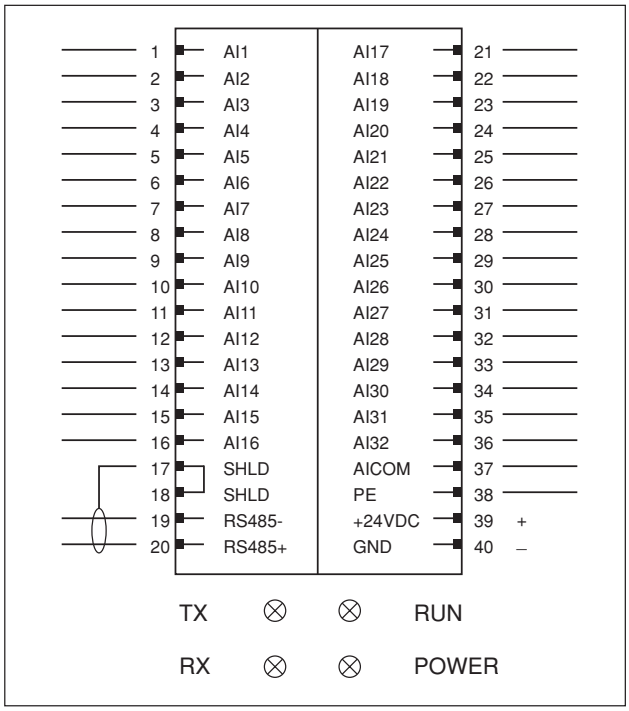

Fig.2 The Definition of RCM32 Terminals

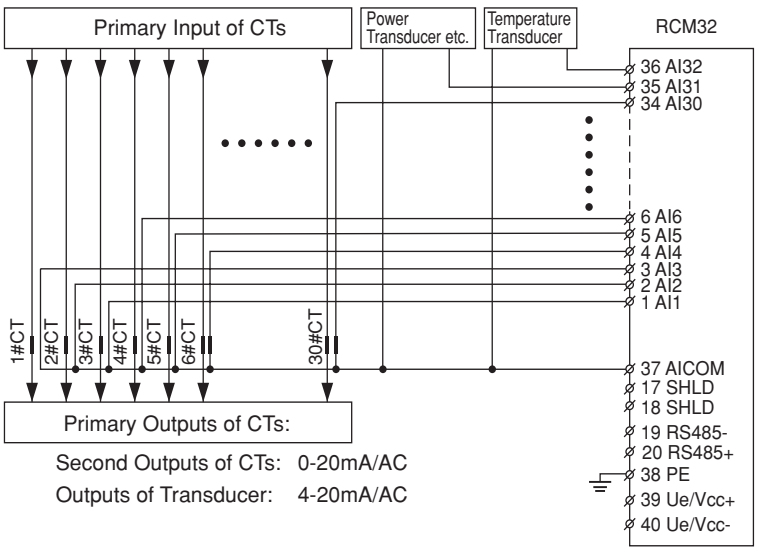

Fig.3 The Terminals Connection

3.3 Communication Connection

The communication connection of RCM32 is shown in Fig.4.

A terminal resistance should be connected to the RS485+ and RS485− communication parts of the last RCM32 Module of the communication loop in order to assure communicational matching. The resistance is about 120 Ω(RJ−1/8−120I).

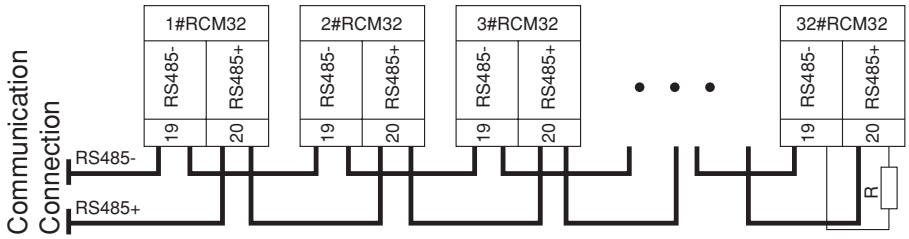

Fig.4 The Communication Connection of RCM32

3.4 Address, Communication mode and Communication Rate

The diagram Fig.5 shows the definition of the 10−digit dial−up of the RCM32 Unit.

The first five digits are the address bits of the address dial−up switches. The "6" and "7" digits are the setting bits for the communication mode. The last two digits "9" and "10" are the setting bits for the communication rate. "0" is for OFF and "1" is for ON.

Switches

1	2	3	4	5	6	7	8	9	10
Address Setting					Com. Data Format Setting			Baud Rate Setting	

Address Setting

1	2	3	4	5	Address	Remark
1	0	0	0	0	1	OFF: 0 ON: 1
0	1	0	0	0	2	
-	-	-	-	-	-	
1	1	1	1	1	31	
0	0	0	0	0	32	

Fig.5 The Definition of 10-digit Dial-up of The RCM32 Unit

No.s 1−5 of dial−up (SW) is for setting station numbers (1−32).

SW1	SW2	SW3	SW4	SW5	Address
1	0	0	0	0	1
0	1	0	0	0	2
-	-	-	-	-	-
0	1	1	1	1	30
1	1	1	1	1	31
0	0	0	0	0	32

No.s 6 and 7 of dial−up (SW) are for setting communication mode.

SW6	SW7	Communication Mode
0	0	10 bits: 1 start bit, 8 data bits, 1 stop bit
1	0	11 bits: 1 start bit, 8 data bits, even, 1 stop bit
0	1	11 bits: 1 start bit, 8 data bits, odd, 1 stop bit
1	1	11 bits: 1 start bit, 8 data bits, 2 stop bits

The last two digits "9" and "10" are the setting bits for the communication rate.

SW9	SW10	Baud Rate(bit/s)
0	0	9600
1	0	4800
0	1	1200
1	1	600