ATEC402, the Din-Rail version

Apr, 2018

	Default ID = 255 (ATEC302 default ID = 1) H/W version = 0xF100 Controller Model: 0xF1 Firmware ver. = 0x00
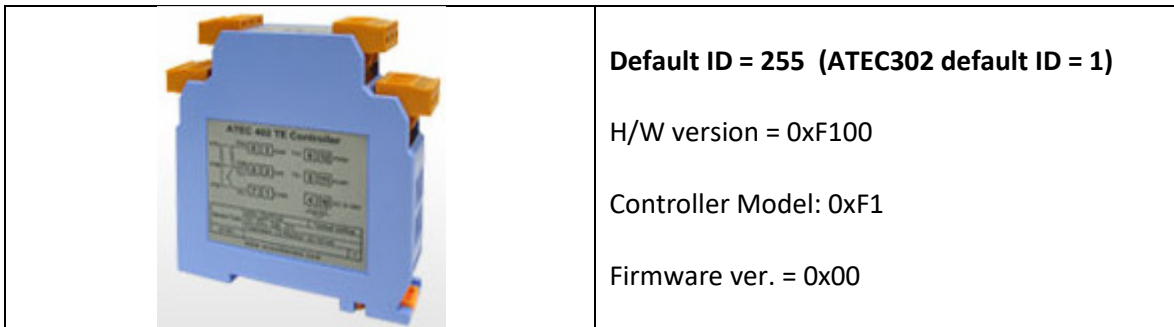
Layout & Dimension: (Unit: mm)
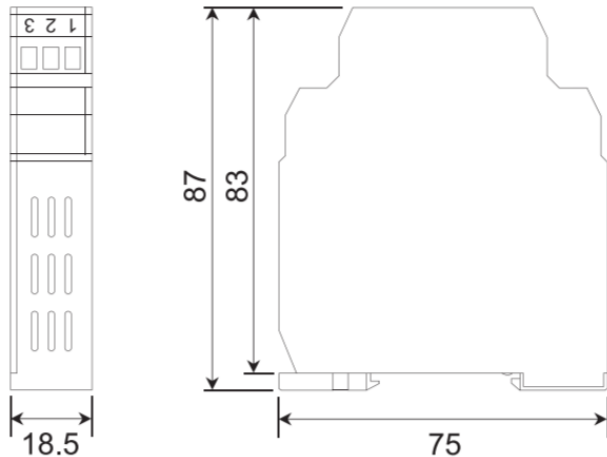
Q: I should be able to plug in the USB cable to the ATEC402 and run with ATEC302 software, right?
A: YES, with new updated software SB V.1.1.9. No external power is needed when USB is plugged in.
Q: How to do a factory reset on the ATEC402?
A: Use software -> [Protocol] to reset to factory default. (use broadcast ID = 0x00)
Command value for reset = **x00 x06 x20 x00 x00 x00 x83 xDB**
We still need 2 CRC bytes(x83 xDB), but there is no return byte. It is because ID=0 for broadcasting.
Controller ID Address number Setting command: (ID range 1~255)
Changing from ID Address to NewAddr number:
<div align="center">

Address 0x06 0x00 0x33, 0x00 0xNewAddr CRC1 CRC2
</div>
If original ID Address number is unknow, use broadcasting to set each controller's ID address number:
<div align="center">

x00 x06 x00 x33 x00 xNewAddr CRC1 CRC2
</div>

Sensor type selecting:

Controller default setting is the thermistor sensor. For selecting sensor type (T/C or PT-100), there is hardware DIP switch setting needed. Then software setting (TYPE) is also required. Open the cover of the ATEC402 and make the proper switch adjustment.
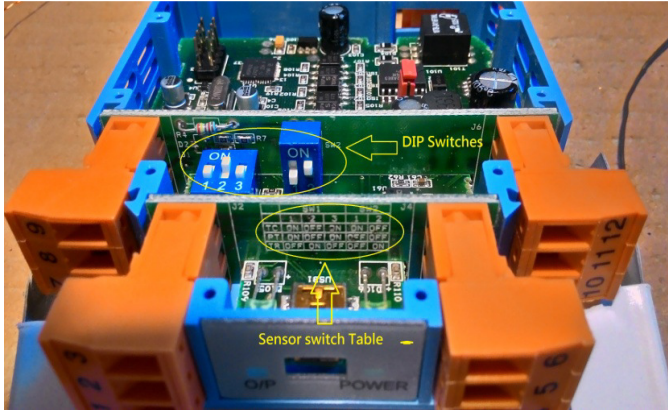
	SW1			SW2	
	1	2	3	1	2
TC	ON	OFF	ON	ON	OFF
RT	ON	OFF	ON	OFF	OFF
TR	OFF	ON	OFF	OFF	ON
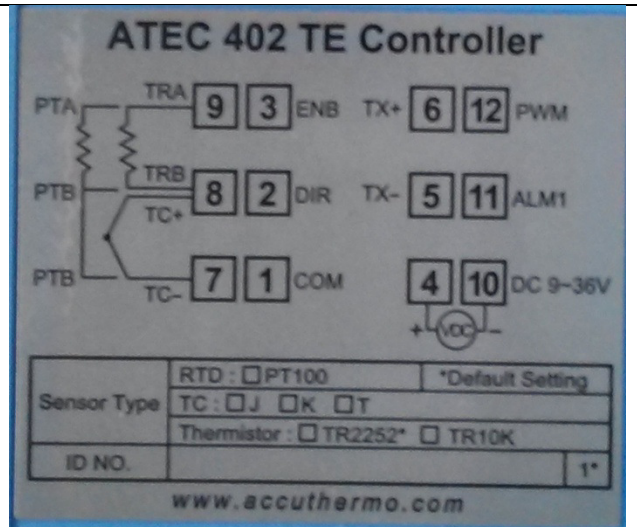
|	
The new ATEC402 has 4-plugable connector with number mark on it. This make wiring connection much easier.	ATEC402 Wiring Diagram also labeled on the controller.
	Left: The USB connector is mini-USB size. User can purchase the communication cable from our website. [P/N: URC-1020] Note: ATEC402 has RS485 build-in and USB communication option. It does not have the RS232

	option. (ATEC302 has RS232/RS485/USB three communication options.)

Alarm Output Signal

The ATEC302 and ATEC402 Alarm output is a 0 or 5V output signal. The max output current is ~0.5mA. It is suggested to trigger a transistor first to control a load. The example circuit is listed below:
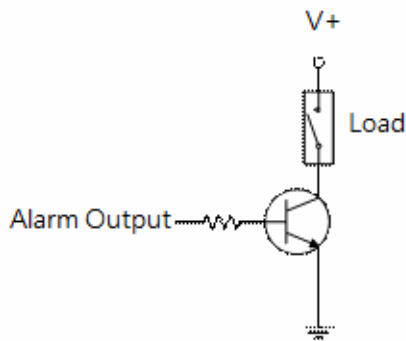
Modify Supply Voltage to 5V (default 9~36V)

In order to supply 5V to ATEC402, there are couple steps you need to do.
1. Short SW101 pin1 & Pin2
2. Remove D101, short the two soldering pads.
3. Remove R111, short the two soldering pads.
4. Set RED jumper to 5V

After these steps, the control can be supplied with 5V and function as usual. But it won't have the reverse supply power protection. So be careful when connect to 5V ± 5% (4.75V ~ 5.25V) power.

I would suggest to make a note on the ATEC402 case. So later on, other engineer won't connect the wrong voltage by mistake.