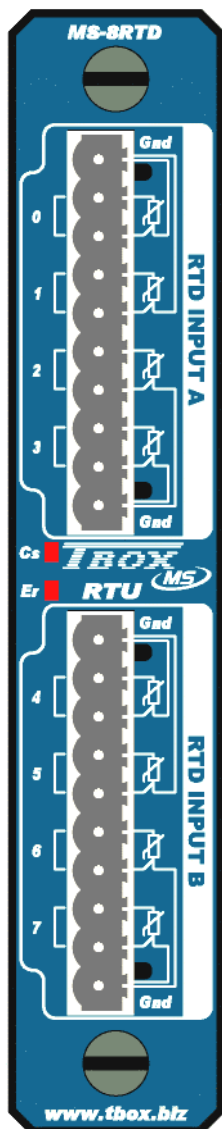


4 x Analog Outputs

MS-4AOVC

- 4 analog output isolated one by one
- each output: 4..20 ma or -10V..+10V



Technical Specifications

General

Quantity	4 analog outputs
Signals	Choice between 4..20ma OR -10V..+10V The selection of the signal is done by the cabling used. No hardware or software configuration is required
ADC converter	12 bits, bipolar
Mode	Active mode. Supplies a nominal voltage of 24 VDC .
Full Range	- Current: 0 to 20mA - Voltage: -10V to +10V
Resolution	- Current: 12 bits - Voltage: 11 bits + sign
Precision	- Current: 5 μ A - Voltage: 5 mV
Reactivity	- Current: 25 msec - Voltage: 1 msec
Load impedance limit	Resistance of the actuator: ≤ 1000 Ω : gives a drop of 20 V, maximum allowed. > 3000 Ω : gives a current of 3.33 mA, maximum allowed.
Replacement	Hot insertable/removable. There is no risk to damage hardware, but a reset is required.
Test	Automatic test of the access of the card by the CPU (See LED 'CS' below)

Digital Input

Validity input associated to each analog output 4..20mA	Returns '0' when signal < 2.4mA and > 21.6mA Returns '1' when the signal is valid.
--	---

LED

CS	Card Selection: the card corresponds to a card declared in TWinSoft.
ER	Error: The type of the card does not correspond to the one declared in TWinSoft.

Isolation

4 channels isolated	Isolation one by one
From the Ground	Isolation from the CPU ground and the earth
Level of isolation	500 Vrms between each output 1500 Vrms between each output and earth

Temperature

Storage	-20°C to 70°C
Working (ambient)	Standard: -5°C to 50°C Ruggedized: -20°C to 70°C
Hygrometry	15 to 95 % without condensation

Dimensions

Without connector	Height x length x Depth: 150 x 83 x 29 mm (5.906 x 3.27 x 1.142 inches)
Weight	300 gr

Cabling – output 4..20ma OR -10V..+10V actuators

Connector: **Screw connector**

Pin Out:

Group A

1	
2	
3	
4	
5	
6	
7	
8	
9	
10	

- 1 No connection
- 2 Output 0 : 4..20mA (+)
- 3 Output 0 : 4..20mA (-)
- 4 Output 0 : -10V..+10V (+)
- 5 Output 0 : -10V..+10V (-)
- 6 Output 1 : 4..20mA (+)
- 7 Output 1 : 4..20mA (-)
- 8 Output 1 : -10V..+10V (+)
- 9 Output 1 : -10V..+10V (-)
- 10 No connection

Cabling – output 4..20ma OR -10V..+10V actuators

Connector: **Screw connector**

Pin Out:

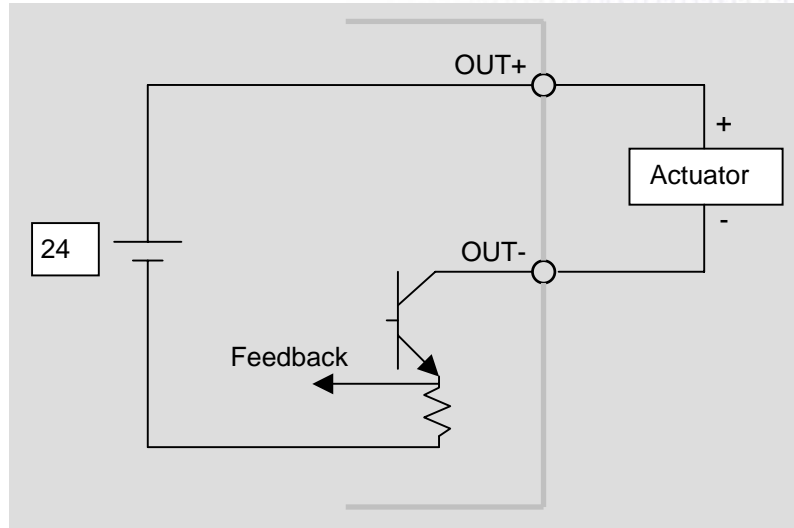
Group B

1	
2	
3	
4	
5	
6	
7	
8	
9	
10	

- 1 No connection
- 2 Output 2 : 4..20mA (+)
- 3 Output 2 : 4..20mA (-)
- 4 Output 2 : -10V..+10V (+)
- 5 Output 2 : -10V..+10V (-)
- 6 Output 3 : 4..20mA (+)
- 7 Output 3 : 4..20mA (-)
- 8 Output 3 : -10V..+10V (+)
- 9 Output 3 : -10V..+10V (-)
- 10 No connection

Each channel can be used with two different signals: 4..20mA **OR** -10V..+10V;
not with both signals at the same channel.

Cabling to 'Current' actuator



Cabling to 'Voltage' actuator

