

# A2X



## Process indicator - controller - 5 digit - DIN 96x48

### SPECIFICATIONS

- ✓ **Analog input: current and voltage**
- ✓ **Calibration points self acquisition**
- ✓ **Versions: 2 or 4 relays 5A/250Vac**
- ✓ **Relays actions: minimum, maximum, active-window, hysteresis**
- ✓ **Double analog outputs 4..20mA & 0..10Vdc**
- ✓ **Serial communication: Field bus type MODBUS RTU (RS485) or double RS232 ports**

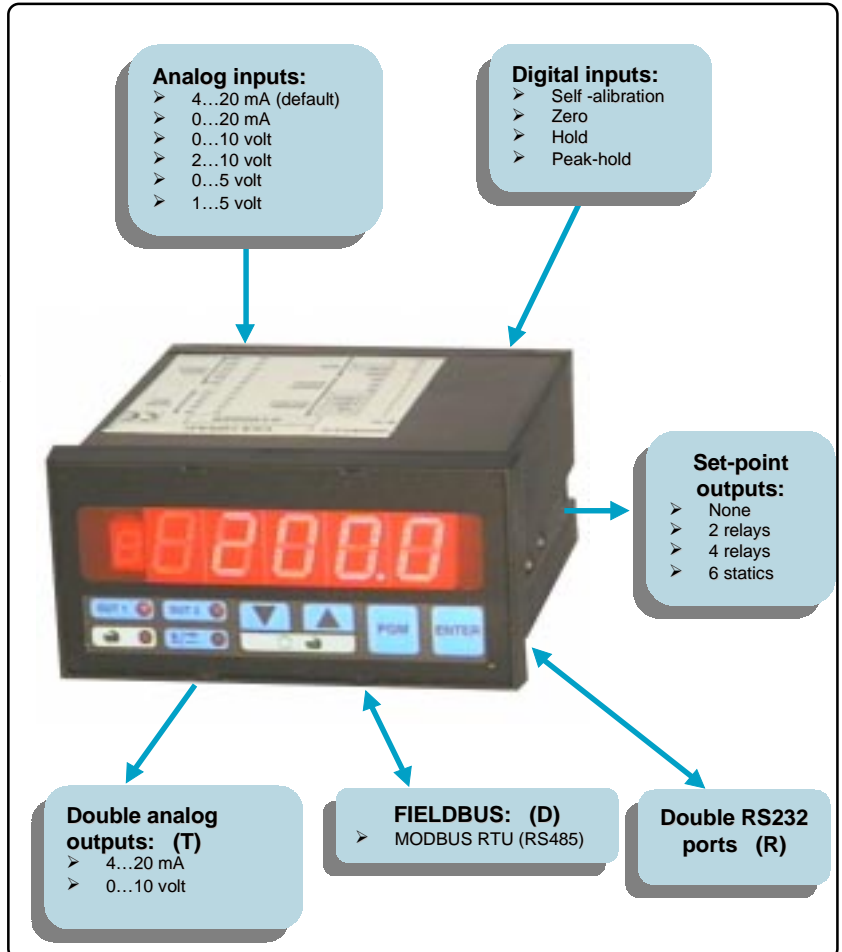
### APPLICATION & PERFORMANCE

A2X indicators are completely dedicated to the monitoring and control of process analog signals coming from 4...20mA and 0...10 Vdc transmitters for measurement and control of pressure, level, temperature, flow rate and more.

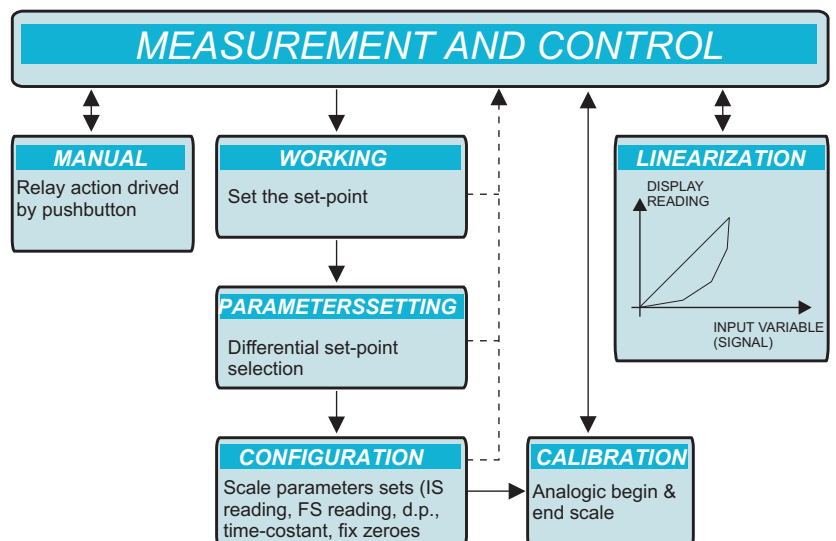
They have a wide field of application in the sector of plastic materials, in food, chemical, pharmaceutical industries, etc. A simple programming by a 4-key touch-panel keyboard and an efficient LED display make the device easy to use. The peculiar self-learning setting and the possibility to align the reading scale allow to use this product even in situations where the matching between the input signal and the visual display is not linear, in critical situations (difficult access to calibration) or variable conditions (change in sensors response depending on different products).

### VERSIONS

- The following versions are available:
- Indicator (6 alarm thresholds max): A2X\_ \_
  - Indicator with double analog output (4 alarm thresholds max): A2X\_ \_T
  - Indicator with MODBUS RTU port (4 alarm thresholds max): A2X\_ \_D
  - Indicator with RS232 double serial port (4 alarm thresholds max): A2X\_ \_R.



### CUSTOMER SET-UP STRUCTURE



# A2X

## Process indicator - controller - 5 digit - DIN 96x48

### TECHNICAL DATA

#### PACKAGE

Case: panel mount 96x48 mm frontal IP54  
 Cutout dimension: 92x45 mm; depth: 100 mm  
 Case material: Noryl  
 Keyboard: 4 membrane pushbuttons  
 Connections: by extractable terminal block

#### ANALOG INPUTS

Measuring inputs:  $\pm 0,1...40$  mA impedance 100 ohm  
 $\pm 0,1...4$  V impedance 10 Kohm  
 $\pm 4...40$  V impedance 110 Kohm

Maximum overload: 100% constant  
 Transmitter supply: 24Vdc - 45mA max  
 Safety: circuit to cut off connection 4...20 mA

#### DIGITAL INPUTS (IN1, IN2)

Signal: unpowered or static NPN contact max 24V / 6mA

#### A/D CONVERTER AND INDICATOR

Display (red led): 5+1 digit (polarity), max displayed value  $\pm 99999$

Character height: 12,5 mm  
 Reading scale and d.p.: programmable  
 A/D resolution: 20000 points; average conversion time 250mS  
 Linearity: 0,0025%

#### POWER SUPPLY

Power supply: 24,115,230Vac, 24Vdc [1], 24VDCI [2]  
 Consumption: max 3,3 VA (3,3 W)  
 Tolerance:  $\pm 10$  %; frequency (AC): 50/60 Hz  
 Data storage memory: EEPROM static memory

#### AMBIENTAL CONDITIONS

Operating temperature:  $-10 \div 50$  °C  
 Relative humidity: 0...95% not condensing  
 Storage temperature:  $-25 \div 70$  °C

[1] 24Vdc power supply not galvanically insulated version: negative input signal short-circuit to negative power supply.  
 [2] 24Vdc power supply galvanically insulated version.

#### ALARM THRESHOLDS AND OUTPUTS

Alarms: 2, 4 relays; 6 NPN static outputs  
 Relays: 5A 250V  
 NPN output: 30mA 5...30V  
 Possible manual operation

#### DOUBLE ANALOG OUTPUT (T option) [3]

Proportional to display value; start of scale and end of scale position programmable  
 Signals: 0-10Vdc (minimum load 1Kohm)  
 4-20mA (maximum load 250 ohm)  
 Resolution: 2000 points  
 Accuracy: 0,01 %  
 Linearity: 0,0025 %

#### RS485 SERIAL PORT - MODBUS (D option) [3]

Communications protocol: MODBUS RTU  
 Profile: all parameters  
 Baud rate: 300...19200 baud  
 Address: range 1... 247 (0 – broadcast)  
 Configuration: 8 bit data; parity none; 1 stop bit

#### DOUBLE RS232 SERIAL PORT (R option) [3]

Protocol: read only measured value  
 Baud rate: 150...9600 baud  
 Address: range 1... 254  
 Configuration: 8 bit data; parity none; 1 stop bit

#### LINEARIZATION (L option) [3]

number segment for linear programming: 20  
 resolution: 0,1%

#### CONFORMITY TO CEE GUIDELINES

Directive: CEE 93/68  
 CEE 89/336 (EMC)  
 CEE 73/23 (BT)

[3] the above mentioned technical references are related to the A2X versions chosen.

