

### **"DAT6000 SERIES": A/D interface modules for PLC**

*The DAT6000 series devices are an evolution in the connection techniques of the analog signals to the PLC.*

*Each device amplify, linearise, filter and isolate the analog signal coming from the sensors on field and convert it in an high resolution 16 bits length "word" digital signal that is transferred to the PLC by the data line of the controller.*

*The data transfer is controlled by the PLC trough a clock signal generated on its digital port; at each pulse of clock is transferred a bit of the data.*

*By few and simple instructions the PLC is able to acquire more analog signals on a single digital input. Moreover each module has an Enable signal, that allows the controller to multiplexing more devices to one data line and one clock signal.*

## **INDEX**

- 74 • DAT 6011**  
A/D interface for PLC 2 input channels for mV or Tc
- DAT 6012**  
A/D interface for PLC 2 input channels for RTD, Res
- 75 • DAT 6013**  
A/D interface for PLC 2 input channels for V, mA
- DAT 6021**  
A/D interface for PLC 4 input channels for mV, Tc
- 76 • DAT 6023-I**  
A/D interface for PLC 4 input channels for +/- 20 mA
- DAT 6023-V**  
A/D interface for PLC 4 input channels for +/- 10V



**DAT6000** A/D interface modules  
**SERIES** for PLC

**DAT 6011**



**GENERAL DESCRIPTION**

The devices of the DAT6000 series are an evolution in the techniques of connection of analog signals to PLC. The devices of this series amplify, linearise, isolate, filter and convert the analog signals coming from various sensors in a high resolution. The digital signal can be connected to any input of the PLC.

**FEATURES**

- Acquisition of analogue signals on PLC's digital I/O
- Analogue input to any PLC or micro PLC
- Up to 16-bit resolution with Full Scale high accuracy
- 2 input channels
- Configurable input for voltage up to  $\pm 1V$  or Tc type J,K, R,S,B,E,T,N
- Configurable by DIP-switch
- Galvanic isolation at 2000 Vac on three ways
- EMC compliant – CE mark
- Suitable for DIN rail mounting in compliance with EN-50022 and EN-50035



**Application areas**



**POWER SUPPLY**

|                            |                |
|----------------------------|----------------|
| Power supply voltage       | 18 .. 30 Vdc   |
| Current consumption        | 30 mA @ 24 Vdc |
| Rever. polarity protection | 60 Vdc max     |

**ISOLATION VOLTAGE**

|                     |                           |
|---------------------|---------------------------|
| INPUT – PLC         | 2000 Vac<br>50 Hz, 1 min. |
| Power supply– INPUT |                           |
| Power supply– PLC   |                           |

**TEMPERATURE AND HUMIDITY**

|                       |                |
|-----------------------|----------------|
| Operative temperature | -10°C .. +60°C |
| Storage temperature   | -40°C .. +85°C |
| Humidity (not cond)   | 0 .. 90 %      |

**EMC (for industrial environments)**

**DIRECTIVE 2004/108/EC**

|          |              |
|----------|--------------|
| Immunity | EN 61000-6-2 |
| Emission | EN 61000-6-4 |

**HOUSING**

|           |                             |
|-----------|-----------------------------|
| Material  | Self-extinguishing plastic  |
| Dim. (mm) | W x L x H : 90 x 112 x 12.5 |
| Weight    | about 90 g.                 |

**INPUT**

| Input type          | Min      | Max      |
|---------------------|----------|----------|
| <b>Voltage</b>      |          |          |
| 50 mV               | -50 mV   | +50 mV   |
| 100 mV              | -100 mV  | +100 mV  |
| 500 mV              | -500 mV  | +500 mV  |
| 1000 mV             | -1000 mV | +1000 mV |
| <b>Thermocouple</b> |          |          |
| J                   | -210 °C  | +1200 °C |
| K                   | -210 °C  | +1372 °C |
| R                   | -50 °C   | +1767 °C |
| S                   | -50 °C   | +1767 °C |
| B                   | +400 °C  | +1825 °C |
| E                   | -210 °C  | +1000 °C |
| T                   | -210 °C  | +400 °C  |
| N                   | -210 °C  | +1300 °C |

**INPUT CHANNELS**

|                       |   |
|-----------------------|---|
| Input calibration (1) | 2 |
|-----------------------|---|

**Linearity (1)**

|    |                  |
|----|------------------|
| mV | $\pm 0.1$ % f.s. |
| Tc | $\pm 0.2$ % f.s. |

**Cold junction compensation**

|  |              |
|--|--------------|
|  | $\pm 0.5$ °C |
|--|--------------|

**Input impedance**

|        |                     |
|--------|---------------------|
| mV, Tc | $\geq 1$ M $\Omega$ |
|--------|---------------------|

**Thermal drift (1)**

|            |                    |
|------------|--------------------|
| Full Scale | $\pm 0.005$ % / °C |
|------------|--------------------|

**Thermal drift CJC**

|            |                   |
|------------|-------------------|
| Full Scale | $\pm 0.02$ % / °C |
|------------|-------------------|

**Line resistance influence**

|        |                |
|--------|----------------|
| mV, Tc | $< 0.8$ uV/Ohm |
|--------|----------------|

**DIGITAL INTERFACE**

|                             |                              |
|-----------------------------|------------------------------|
| <b>Voltage on terminals</b> | typical 24 Vdc (30 Vdc max.) |
|-----------------------------|------------------------------|

|                 |          |
|-----------------|----------|
| <b>ON state</b> | $>9$ Vdc |
|-----------------|----------|

**Input impedance**

|               |          |
|---------------|----------|
| (ENABLE, CLK) | 4.7 KOhm |
|---------------|----------|

**Minimum output load**

|        |             |
|--------|-------------|
| (DATA) | 560 Ohm (2) |
|--------|-------------|

**Max. frequency**

|              |        |
|--------------|--------|
| Clock signal | 500 Hz |
|--------------|--------|

**Rise / Fall time**

|  |                 |
|--|-----------------|
|  | (Tr) $< 0.2$ ms |
|--|-----------------|

(1) referred to input Span (difference between max. and min. values)

(2) The load on the output DATA is controlled with the current taken from the ENABLE signal.

DAT 6000 SERIES

74

**A/D INTERFACE FOR PLC 2 INPUT CHANNELS FOR RTD, Res**

**DAT 6012**



**GENERAL DESCRIPTION**

The devices of the DAT6000 series are an evolution in the techniques of connection of analog signals to PLC. The devices of this series amplify, linearise, isolate, filter and convert the analog signals coming from various sensors in a high resolution. The digital signal can be connected to any input of the PLC.

**FEATURES**

- Acquisition of analog signals on PLC's digital I/O
- Analog input to any PLC or micro PLC
- Up to 16-bit resolution with Full Scale high accuracy
- 2 input channels
- Configurable input for Pt100, Pt1000, Ni100, Ni1000, Resistance and Potentiometers up to 2 Kohm
- Configurable by DIP-switch
- Galvanic isolation at 2000 Vac on three ways
- EMC compliant – CE mark
- Suitable for DIN rail mounting in compliance with EN-50022 and EN-50035



**Application areas**



**POWER SUPPLY**

|                            |                |
|----------------------------|----------------|
| Power supply voltage       | 18 .. 30 Vdc   |
| Current consumption        | 30 mA @ 24 Vdc |
| Rever. polarity protection | 60 Vdc max     |

**ISOLATION VOLTAGE**

|                     |                           |
|---------------------|---------------------------|
| INPUT – PLC         | 2000 Vac<br>50 Hz, 1 min. |
| Power supply– INPUT |                           |
| Power supply– PLC   |                           |

**TEMPERATURE AND HUMIDITY**

|                       |                |
|-----------------------|----------------|
| Operative temperature | -10°C .. +60°C |
| Storage temperature   | -40°C .. +85°C |
| Humidity (not cond)   | 0 .. 90 %      |

**EMC (for industrial environments)**

**DIRECTIVE 2004/108/EC**

|          |              |
|----------|--------------|
| Immunity | EN 61000-6-2 |
| Emission | EN 61000-6-4 |

**HOUSING**

|           |                             |
|-----------|-----------------------------|
| Material  | Self-extinguishing plastic  |
| Dim. (mm) | W x L x H : 90 x 112 x 12.5 |
| Weight    | about 90 g.                 |

**INPUT**

| Input type           | Min        | Max           |
|----------------------|------------|---------------|
| <b>RTD</b>           |            |               |
| Pt100                | -200 °C    | +850 °C       |
| Pt1000               | -200 °C    | +200 °C       |
| Ni100                | -80 °C     | +180 °C       |
| Ni1000               | -60 °C     | +150 °C       |
| <b>Resistance</b>    |            |               |
| 500 $\Omega$         | 0 $\Omega$ | 500 $\Omega$  |
| 2 K $\Omega$         | 0 $\Omega$ | 2000 $\Omega$ |
| <b>Potentiometer</b> |            |               |
| $< 500 \Omega^*$     | 0 %        | 100 %         |
| $< 2 K\Omega^*$      | 0 %        | 100 %         |

**Input channels**

|  |   |
|--|---|
|  | 2 |
|--|---|

**Input calibration (1)**

|  |                  |
|--|------------------|
|  | $\pm 0.1$ % f.s. |
|--|------------------|

**Linearity (1)**

|           |                  |
|-----------|------------------|
| Res, Pot. | $\pm 0.1$ % f.s. |
| RDT       | $\pm 0.2$ % f.s. |

**RTD / Res. excitation current**

|  |               |
|--|---------------|
|  | 0.350 mA typ. |
|--|---------------|

**Thermal drift (1)**

|            |                    |
|------------|--------------------|
| Full Scale | $\pm 0.005$ % / °C |
|------------|--------------------|

**Line resistance influence**

|          |                |
|----------|----------------|
| RTD, Res | $< 0.05$ %/Ohm |
|----------|----------------|

(50  $\Omega$  max , 3 wires connection)

**DIGITAL INTERFACE**

|                             |                              |
|-----------------------------|------------------------------|
| <b>Voltage on terminals</b> | typical 24 Vdc (30 Vdc max.) |
|-----------------------------|------------------------------|

|                 |          |
|-----------------|----------|
| <b>ON state</b> | $>9$ Vdc |
|-----------------|----------|

**Input impedance**

|               |          |
|---------------|----------|
| (ENABLE, CLK) | 4.7 KOhm |
|---------------|----------|

**Minimum output load**

|        |             |
|--------|-------------|
| (DATA) | 560 Ohm (2) |
|--------|-------------|

**Max. frequency**

|              |        |
|--------------|--------|
| Clock signal | 500 Hz |
|--------------|--------|

**Rise / Fall time**

|  |                 |
|--|-----------------|
|  | (Tr) $< 0.2$ ms |
|--|-----------------|

(1) referred to input Span (difference between max. and min. values)

(2) The load on the output DATA is controlled with the current taken from the ENABLE signal

\* nominal value

## A/D INTERFACE FOR PLC 2 INPUT CHANNELS FOR V, mA

DAT 6013



### GENERAL DESCRIPTION

The devices of the DAT6000 series are an evolution in the techniques of connection of analog signals to PLC. The devices of this series amplify, linearise, isolate, filter and convert the analog signals coming from various sensors in a high resolution. The digital signal can be connected to any input of the PLC.

### FEATURES

- Acquisition of analog signals on PLC's digital I/O
- Analog input to any PLC or micro PLC
- Up to 16-bit resolution with Full Scale high accuracy
- 2 input channels
- Configurable input for  $\pm 10$  V and  $\pm 20$  mA

- Configurable by DIP-switch
- Galvanic isolation at 2000 Vac on three ways
- EMC compliant – CE mark
- Suitable for DIN rail mounting in compliance with EN-50022 and EN-50035



### Application areas



### POWER SUPPLY

|                            |                |
|----------------------------|----------------|
| Power supply voltage       | 18 .. 30 Vdc   |
| Current consumption        | 30 mA @ 24 Vdc |
| Rever. polarity protection | 60 Vdc max     |

### ISOLATION VOLTAGE

|                     |                           |
|---------------------|---------------------------|
| INPUT – PLC         |                           |
| Power supply– INPUT | 2000 Vac<br>50 Hz, 1 min. |
| Power supply– PLC   |                           |

### TEMPERATURE AND HUMIDITY

|                       |                |
|-----------------------|----------------|
| Operative temperature | -10°C .. +60°C |
| Storage temperature   | -40°C .. +85°C |
| Humidity (not cond)   | 0 .. 90 %      |

### EMC (for industrial environments)

#### DIRECTIVE 2004/108/EC

|          |              |
|----------|--------------|
| Immunity | EN 61000-6-2 |
| Emission | EN 61000-6-4 |

### HOUSING

|           |                             |
|-----------|-----------------------------|
| Material  | Self-extinguishing plastic  |
| Dim. (mm) | W x L x H : 90 x 112 x 12.5 |
| Weight    | about 90 g.                 |

### INPUT

| Input type                   | Min                   | Max              |
|------------------------------|-----------------------|------------------|
| <b>Voltage</b>               |                       |                  |
| 10 V                         | -10 V                 | +10 V            |
| <b>Current</b>               |                       |                  |
| 20 mA                        | -20 mA                | +20 mA           |
| <b>Input channels</b>        |                       |                  |
|                              |                       | 2                |
| <b>Input calibration (1)</b> |                       |                  |
|                              |                       | $\pm 0.1$ % f.s. |
| <b>Linearity (1)</b>         |                       |                  |
|                              |                       | $\pm 0.1$ % f.s. |
| <b>Input impedance</b>       |                       |                  |
| V                            | $\geq 100$ K $\Omega$ |                  |
| mA                           | $\leq 50$ $\Omega$    |                  |
| <b>Thermal drift (1)</b>     |                       |                  |
| Full Scale                   | $\pm 0.005$ % / °C    |                  |

### DIGITAL INTERFACE

|                             |                              |
|-----------------------------|------------------------------|
| <b>Voltage on terminals</b> | typical 24 Vdc (30 Vdc max.) |
| <b>ON state</b>             | $>9$ Vdc                     |
| <b>Input impedance</b>      |                              |
| (ENABLE, CLK)               | 4.7 KOhm                     |
| <b>Minimum output load</b>  |                              |
| (DATA)                      | 560 Ohm (2)                  |
| <b>Max. frequency</b>       |                              |
| Clock signal                | 500 Hz                       |
| <b>Rise / Fall time</b>     |                              |
| (Tr) $< 0.2$ ms             |                              |

(1) referred to input Span (difference between max. and min. values)

(2) The load on the output DATA is controlled with the current taken from the ENABLE signal

## A/D INTERFACE FOR PLC 4 INPUT CHANNELS FOR mV, TC

DAT 6021



### GENERAL DESCRIPTION

The devices of the DAT6000 series are an evolution in the techniques of connection of analog signals to PLC. The devices of this series amplify, linearise, isolate, filter and convert the analog signals coming from various sensors in a high resolution. The digital signal can be connected to any input of the PLC.

### FEATURES

- Acquisition of analogue signals on PLC's digital I/O
- Analogue input to any PLC or micro PLC
- Up to 16-bit resolution with Full Scale high accuracy
- 4 input channels
- Configurable input for  $\pm 1$  V or Tc type J,K, R,S,B,E,T,N
- Configurable by DIP-switch

- Galvanic isolation at 2000 Vac on three ways
- EMC compliant – CE mark
- Suitable for DIN rail mounting in compliance with EN-50022 and EN-50035



### Application areas



### POWER SUPPLY

|                            |                |
|----------------------------|----------------|
| Power supply voltage       | 18 .. 30 Vdc   |
| Current consumption        | 30 mA @ 24 Vdc |
| Rever. polarity protection | 60 Vdc max     |

### ISOLATION VOLTAGE

|                     |                           |
|---------------------|---------------------------|
| INPUT – PLC         |                           |
| Power supply– INPUT | 2000 Vac<br>50 Hz, 1 min. |
| Power supply– PLC   |                           |

### TEMPERATURE AND HUMIDITY

|                       |                |
|-----------------------|----------------|
| Operative temperature | -10°C .. +60°C |
| Storage temperature   | -40°C .. +85°C |
| Humidity (not cond)   | 0 .. 90 %      |

### EMC (for industrial environments)

#### DIRECTIVE 2004/108/EC

|          |              |
|----------|--------------|
| Immunity | EN 61000-6-2 |
| Emission | EN 61000-6-4 |

### HOUSING

|           |                             |
|-----------|-----------------------------|
| Material  | Self-extinguishing plastic  |
| Dim. (mm) | W x L x H : 90 x 112 x 12.5 |
| Weight    | about 90 g.                 |

### INPUT

| Input type                        | Min              | Max               |
|-----------------------------------|------------------|-------------------|
| <b>Voltage</b>                    |                  |                   |
| 50 mV                             | -50 mV           | +50 mV            |
| 100 mV                            | -100 mV          | +100 mV           |
| 500 mV                            | -500 mV          | +500 mV           |
| 1000 mV                           | -1000 mV         | +1000 mV          |
| <b>Thermocouple</b>               |                  |                   |
| J                                 | -210 °C          | +1200 °C          |
| K                                 | -210 °C          | +1372 °C          |
| R                                 | -50 °C           | +1767 °C          |
| S                                 | -50 °C           | +1767 °C          |
| B                                 | +400 °C          | +1825 °C          |
| E                                 | -210 °C          | +1000 °C          |
| T                                 | -210 °C          | +400 °C           |
| N                                 | -210 °C          | +1300 °C          |
| <b>Input channels</b>             |                  |                   |
|                                   |                  | 4                 |
| <b>Input calibration (1)</b>      |                  |                   |
|                                   |                  | $\pm 0.05$ % f.s. |
| <b>Linearity (1)</b>              |                  |                   |
| mV                                | $\pm 0.1$ % f.s. |                   |
| Tc                                | $\pm 0.2$ % f.s. |                   |
| <b>Cold junction compensation</b> |                  |                   |
|                                   |                  | $\pm 0.5$ °C      |

### Input impedance

|                                  |                     |
|----------------------------------|---------------------|
| mV, Tc                           | $\geq 1$ M $\Omega$ |
| <b>Thermal drift (1)</b>         |                     |
| Full Scale                       | $\pm 0.005$ % / °C  |
| <b>Thermal drift CJC</b>         |                     |
| Full Scale                       | $\pm 0.02$ % / °C   |
| <b>Line resistance influence</b> |                     |
| mV, Tc                           | $< 0.8$ uV/Ohm      |

### DIGITAL INTERFACE

|                             |                              |
|-----------------------------|------------------------------|
| <b>Voltage on terminals</b> | typical 24 Vdc (30 Vdc max.) |
| <b>ON state</b>             | $>9$ Vdc                     |
| <b>Input impedance</b>      |                              |
| (ENABLE, CLK)               | 4.7 KOhm                     |
| <b>Minimum output load</b>  |                              |
| (DATA)                      | 560 Ohm (2)                  |
| <b>Max. frequency</b>       |                              |
| Clock signal                | 500 Hz                       |
| <b>Rise / Fall time</b>     |                              |
| (Tr) $< 0.2$ ms             |                              |

(1) referred to input Span (difference between max. and min. values)

(2) The load on the output DATA is controlled with the current taken from the ENABLE signal

**DAT 6023-I**



**GENERAL DESCRIPTION**

The devices of the DAT6000 series are an evolution in the techniques of connection of analog signals to PLC. The devices of this series amplify, linearise, isolate, filter and convert the analog signals coming from various sensors in a high resolution. The digital signal can be connected to any input of the PLC.

**FEATURES**

- Acquisition of analog signals on PLC's digital I/O
- Analog input to any PLC or micro PLC
- Up to 16-bit resolution with Full Scale high accuracy
- 4 input channels
- Configurable input for  $\pm 20$  mA
- Configurable by DIP-switch
- Galvanic isolation at 2000 Vac on three ways
- EMC compliant – CE mark
- Suitable for DIN rail mounting in compliance with EN-50022 and EN-50035



**Application areas**



**POWER SUPPLY**

|                            |                |
|----------------------------|----------------|
| Power supply voltage       | 18 .. 30 Vdc   |
| Current consumption        | 30 mA @ 24 Vdc |
| Rever. polarity protection | 60 Vdc max     |

**ISOLATION VOLTAGE**

|                     |                           |
|---------------------|---------------------------|
| INPUT – PLC         |                           |
| Power supply– INPUT | 2000 Vac<br>50 Hz, 1 min. |
| Power supply– PLC   |                           |

**TEMPERATURE AND HUMIDITY**

|                       |                |
|-----------------------|----------------|
| Operative temperature | -10°C .. +60°C |
| Storage temperature   | -40°C .. +85°C |
| Humidity (not cond)   | 0 .. 90 %      |

**EMC (for industrial environments)**

**DIRECTIVE 2004/108/EC**

|          |              |
|----------|--------------|
| Immunity | EN 61000-6-2 |
| Emission | EN 61000-6-4 |

**HOUSING**

|           |                             |
|-----------|-----------------------------|
| Material  | Self-extinguishing plastic  |
| Dim. (mm) | W x L x H : 90 x 112 x 12.5 |
| Weight    | about 90 g.                 |

**INPUT**

| Input type                   | Min              | Max    |
|------------------------------|------------------|--------|
| <b>Current</b>               |                  |        |
| 20 mA                        | -20 mA           | +20 mA |
| <b>Input channels</b>        | 4                |        |
| <b>Input calibration (1)</b> | $\pm 0.1$ % f.s. |        |
| <b>Linearity (1)</b>         | $\pm 0.1$ % f.s. |        |

**Input impedance**

|    |                  |
|----|------------------|
| mA | $\leq 50 \Omega$ |
|----|------------------|

**Thermal drift (1)**

|            |                    |
|------------|--------------------|
| Full Scale | $\pm 0.005$ % / °C |
|------------|--------------------|

**DIGITAL INTERFACE**

|                             |                              |
|-----------------------------|------------------------------|
| <b>Voltage on terminals</b> | typical 24 Vdc (30 Vdc max.) |
| <b>ON state</b>             | $>9$ Vdc                     |
| <b>Input impedance</b>      |                              |
| (ENABLE, CLK)               | 4.7 KOhm                     |
| <b>Minimum output load</b>  |                              |
| (DATA)                      | 560 Ohm (2)                  |
| <b>Max. frequency</b>       |                              |
| Clock signal                | 500 Hz                       |
| <b>Rise / Fall time</b>     | (Tr) $< 0.2$ ms              |

(1) referred to input Span (difference between max. and min. values)  
 (2) The load on the output DATA is controlled with the current taken from the ENABLE signal

DAT 6000 SERIES

76

**DAT 6023-V**



**GENERAL DESCRIPTION**

The devices of the DAT6000 series are an evolution in the techniques of connection of analog signals to PLC. The devices of this series amplify, linearise, isolate, filter and convert the analog signals coming from various sensors in a high resolution. The digital signal can be connected to any input of the PLC.

**FEATURES**

- Acquisition of analog signals on PLC's digital I/O
- Analog input to any PLC or micro PLC
- Up to 16-bit resolution with Full Scale high accuracy
- 4 input channels
- Configurable input for  $\pm 10$  V
- Configurable by DIP-switch
- Galvanic isolation at 2000 Vac on three ways
- EMC compliant – CE mark
- Suitable for DIN rail mounting in compliance with EN-50022 and EN-50035



**Application areas**



**POWER SUPPLY**

|                            |                |
|----------------------------|----------------|
| Power supply voltage       | 18 .. 30 Vdc   |
| Current consumption        | 30 mA @ 24 Vdc |
| Rever. polarity protection | 60 Vdc max     |

**ISOLATION VOLTAGE**

|                     |                           |
|---------------------|---------------------------|
| INPUT – PLC         |                           |
| Power supply– INPUT | 2000 Vac<br>50 Hz, 1 min. |
| Power supply– PLC   |                           |

**TEMPERATURE AND HUMIDITY**

|                       |                |
|-----------------------|----------------|
| Operative temperature | -10°C .. +60°C |
| Storage temperature   | -40°C .. +85°C |
| Humidity (not cond)   | 0 .. 90 %      |

**EMC (for industrial environments)**

**DIRECTIVE 2004/108/EC**

|          |              |
|----------|--------------|
| Immunity | EN 61000-6-2 |
| Emission | EN 61000-6-4 |

**HOUSING**

|           |                             |
|-----------|-----------------------------|
| Material  | Self-extinguishing plastic  |
| Dim. (mm) | W x L x H : 90 x 112 x 12.5 |
| Weight    | about 90 g.                 |

**INPUT**

| Input type                   | Min              | Max   |
|------------------------------|------------------|-------|
| <b>Voltage</b>               |                  |       |
| 10V                          | -10 V            | +10 V |
| <b>Input channels</b>        | 4                |       |
| <b>Input calibration (1)</b> | $\pm 0.1$ % f.s. |       |
| <b>Linearity (1)</b>         | $\pm 0.1$ % f.s. |       |

**Input impedance**

|      |                       |
|------|-----------------------|
| Volt | $\geq 100$ K $\Omega$ |
|------|-----------------------|

**Thermal drift (1)**

|            |                    |
|------------|--------------------|
| Full Scale | $\pm 0.005$ % / °C |
|------------|--------------------|

**DIGITAL INTERFACE**

|                             |                              |
|-----------------------------|------------------------------|
| <b>Voltage on terminals</b> | typical 24 Vdc (30 Vdc max.) |
| <b>ON state</b>             | $>9$ Vdc                     |
| <b>Input impedance</b>      |                              |
| (ENABLE, CLK)               | 4.7 KOhm                     |
| <b>Minimum output load</b>  |                              |
| (DATA)                      | 560 Ohm (2)                  |
| <b>Max. frequency</b>       |                              |
| Clock signal                | 500 Hz                       |
| <b>Rise / Fall time</b>     | (Tr) $< 0.2$ ms              |

(1) referred to input Span (difference between max. and min. values)  
 (2) The load on the output DATA is controlled with the current taken from the ENABLE signal

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## “DAT6000 SERIES” A/D interface modules for PLC

**Application areas**

- Industries** (Icon: Factory)
- Board machine** (Icon: Gears)
- Energy** (Icon: Lightbulb)
- Food business** (Icon: Fork and knife)
- Water treatment** (Icon: Water drop)

DAT 6000 SERIES

77