



# DATEXEL

TEMPERATURE & SIGNAL  
TRANSMITTERS - CONDITIONERS  
ISOLATORS  
DIGITAL INDICATORS  
DISTRIBUTED I/O MODULES



**DATEXEL**, present since 1990 on the National and International market offers, with own products different solutions in the industrial automation and process control.

The twenty-year experience matured in the electronic instrumentation design and production enables to **DATEXEL** to develop and to produce high quality products and reliability in the time, with competitive prices.

For this matter all products realized from **DATEXEL** are fully in accordance with the rules defined from the Standards on the electromagnetic compatibility currently in force, and are manufactured in accordance with the International standards, in the full respect of the RAEE and RoHS Directives.

The wide range of **DATEXEL** products, includes also of devices suitable for the use in plants with atmospheres potentially explosive, and they are certified in accordance with the ATEX 94/9/EC Directive.

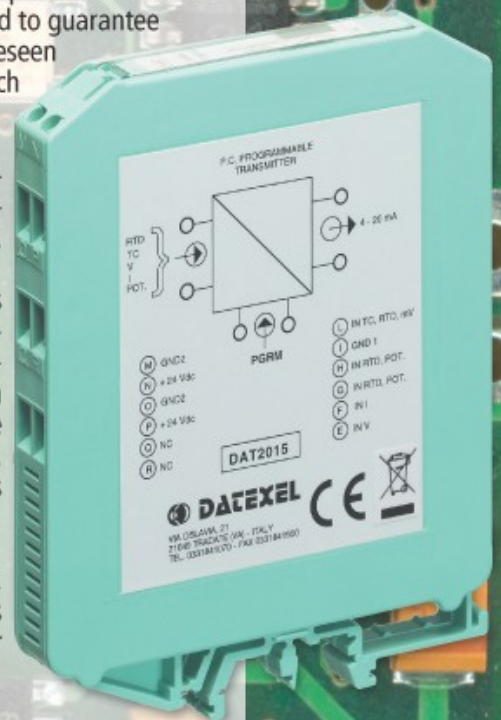
**DATEXEL** main objective is the full satisfaction of own customers. For this matter all activities performed daily (from the control of the material entrance, to the circuits assembly up to the test at 100% by computer based systems and to the successive packing phase and delivery of the same) are performed in the full respect of managerial procedures which control every process (from the design up to the pre - post sale assistance) is taken under control and systematically monitored to guarantee the continue improvement of every activities, as foreseen from the UNI EN ISO 9001:2000 Standard to which **DATEXEL** keeps scrupulously.

A further quality guarantee is given from the production Notification obtained in 2002 on the products certified in accordance with the ATEX 94/9/EC Directive.

Currently **DATEXEL**, through own sales network, offers own products either to the final users or to the manufacturers in any industrial sector; from the energy producers up to the medical laboratories, present either on the National market or on the International one of the CE countries and extra CE, in Nations as North America, Argentina, Brazil, South Africa, Australia, etc.... and its objective is to extend wherever it is possible.

Our sale trading organization, so as the technical staff, is at disposal in every moment to discuss your needs and to find and propose the solution suitable for your problems.

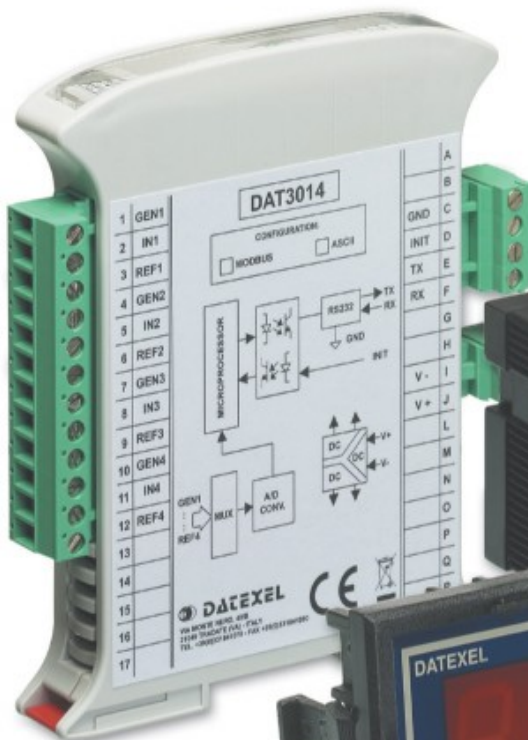
You don't hesitate to contact us. All product technical data sheet, the user manual and the operative software described in the present brochure, are available and unloaderable from our web site: <http://www.datexel.it>



**B**  
**SM-LP-5001**



# DATEXEL



# PRODUCTS RANGE...

DATEXEL activity is mainly dedicated to the design, production and to the sale of **Converters, Signal Transmitters and Data acquisition modules and signals control**, either analogical or digital, near or remote, which are advantageously used from several industries for measure applications, acquisition and process control.

DATEXEL products have been subdivided, on the basis of the function performed, in the following categories:



## Temperature Transmitters:

The signal coming from a sensor of Thermocouple or Thermoresistance type amplified and linearized, is transmitted from them through a current loop of 4-20mA with two wires technical, from which they take also the Power supply for their functioning. Models with galvanic insulation between input and output are available. They are suitable for mounting on DIN RAIL or in DIN B Head. Is also available a version of transmitters for use in potentially explosive atmospheres, certified in accordance with the ATEX 94/9/EC Directive, for mounting on DIN RAIL or in DIN B Head with or without galvanic isolation.



## Temperature and Signal converters:

They are able to acquire a signal coming from sensors with output in voltage, current, resistance or potentiometer or from temperature sensors like Thermocouple or Thermoresistance. The input signal can be converted in output in a wide range of normalized signals (for ex. 0-10V, 0-20mA, 4-20mA, etc...). The output can be insulated either from the input or from the power supply. Through the signal insulation, provide an high immunity to the disturbances and guarantee the maximum functioning safety also in more critic plants and in more severe conditions. They are suited to the assembly on DIN RAIL.

The transmitters and the converters can be subdivided in more products lines, in accordance with their configurability:

- **"Fixed Range"**: the devices are configured directly in inspection phase in accordance with the Customer requirements.
- **"DIP-Switch Programmable"**: the devices (set P.D.S.) can be reprogrammed on the field through dip switch to select the input and Output and through potentiometers for the regulations of ZERO and SPAN.
- **"SMART"**: the devices are programmable by Personal Computer through the Prosoft Software use which, by a simple and intuitive graphic interface, allows to the Customer to reconfigure all main functions (from input scale, to the Output)



## Galvanic Insulator:

Through the signal insulation, they provide an high immunity to the noises and guarantee the maximum functioning safety also in more critic plants and in more severe conditions. They are suited to the mounting on DIN RAIL.



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The DATEXEL production includes also:



## Data Acquisition and Control Modules "DAT 3000 series":

These modules constitute a complete solution for the signals treatment of I/O both analog and digital. The family is composed of modules if for analogical I/O, digital I/O and RS232-RS485/RS422 converters and repeaters. They use the MODBUS protocol and are able to communicate on RS485, with the use of only two wires, with the control host computer on a multidrop line. Thanks to their reduced thickness, they can be mounted on DIN RAIL in vertical position to a pitch of only 17.5 mm or 22.5 mm. They can be removed from the system without cause any functioning break.



## A/D Interface Modules for PLC "DAT 6000 series"

They are an evolution in the connection techniques of analog signals to PLC. The modules of this set amplify, linearize, filter and insulate the analogical signals coming from more sensors and convert them in a high resolution digital signal. It is transferred to PLC through a line connected to any input of the controller and it is constituted from a set of "words" of 16 bit containing the analogical inputs value. The transfer is checked from the PLC generating a clock signal on one of own output doors; at every clock impulse a data bit is transmitted. With little and simple instructions the PLC is so able to acquire more analogical signals on a single digital input. The modules are equipped with an Enable signal which, managed from the controller, allows to multiplexing more modules to the same digital input and to the same clock signal.



## Trip Amplifier:

Through them it is possible to set up one or more thresholds on the input analog signal to be checked. When the input signal value goes over the threshold level the device, by the relays switching in output, intervenes on the system and allows to control it. The devices can be interfaced directly to temperature sensors like Thermocouple or Thermoresistance.



## Power supplies, insulators for current loop:

As integration of transmitters and signal converters and to support the use of DATEXEL devices.



## Panel digital indicators:

Available in two sizes in accordance with DIN Standards (36 x 72 mm and 48 x 96 mm). This line of instruments is dedicated to the measure of temperature and to process control; it includes models either with programmable or fixed input scale and visualization.



# DATEXEL

## **TEMPERATURE TRANSMITTERS FOR DIN B IN-HEAD MOUNTING**

**LOW COST SET DAT 1000  
FIXED RANGE  
AND DIP SWITCH CONFIGURABLE  
WITHOUT GALVANIC INSULATION**

**MODULES FOR THERMORESISTANCE SENSORS:  
DAT1040, DAT1110, DAT1111F, DAT1111**

















**MODULES FOR THERMOCOUPLE SENSORS:  
DAT1030, DAT1120, DAT1112F, DAT1112**



**TEMPERATURE TRANSMITTERS**

# TEMPERATURE TRANSMITTERS FOR DIN B IN-HEAD MOUNTING

LOW COST SET DAT 1000, FIXED RANGE AND DIP SWITCH CONFIGURABLE WITHOUT GALVANIC INSULATION

	MODULES FOR THERMORESISTANCE SENSORS				MODULES FOR THERMOCOUPLE SENSORS			
	DAT 1040	DAT 1110	DAT 1111F	DAT 1111	DAT 1030	DAT 1120	DAT 1112F	DAT 1112
GENERAL DESCRIPTION								
	Not insulated fixed range transmitter for thermoresistance, 4-20mA current loop powered	Not insulated transmitter for thermoresistance, dip switch configurable, 4-20mA current loop powered	Not insulated low profile fixed range transmitter for thermoresistance, 4-20mA current loop powered	Not insulated low profile transmitter for thermoresistance, dip switch configurable, 4-20mA current loop powered	Not insulated fixed range transmitter for thermocouple, 4-20mA current loop powered	Not insulated transmitter for thermocouple, dip switch configurable, 4-20mA current loop powered	Not insulated low profile fixed range transmitter for thermocouple, 4-20mA current loop powered	Not insulated low profile transmitter for thermocouple, dip switch configurable, 4-20mA current loop powered
INPUT	Pt100 2 and 3 wires	Pt100 2 and 3 wires	Pt100 2 and 3 wires	Pt100 2 and 3 wires	Thermocouples type: E, J, K, N, R, S, and T	Thermocouples type: E, J, K, N, R, S, and T	Thermocouples type: J, K, N, R, S and T	Thermocouples type: J, K, N, R, S and T
OUTPUT	4-20 mA current loop powered	4-20 mA current loop powered	4-20 mA current loop powered	4-20 mA current loop powered	4-20 mA current loop powered "voltage linear"	4-20 mA current loop powered "voltage linear"	4-20 mA current loop powered "voltage linear"	4-20 mA current loop powered "voltage linear"
POWER SUPPLY	10...32 Vdc from current loop	10...32 Vdc from current loop	10...32 Vdc from current loop	10...32 Vdc from current loop	12...32 Vdc from current loop	12...32 Vdc from current loop	12...32 Vdc from current loop	12...32 Vdc from current loop
ACCURACY	± 0.15% f.s	± 0.15% f.s	± 0.15% f.s	± 0.15% f.s	± 0.1% f.s	± 0.1% f.s	± 0.1% f.s	± 0.1% f.s
THERMAL DRIFT	0.03 % f.s/°C	0.03 % f.s/°C	0.03 % f.s/°C	0.03 % f.s/°C	0.02 % f.s/°C	0.02 % f.s/°C	0.02 % f.s/°C	0.02 % f.s/°C
OPERATIVE TEMPERATURE	-20...+70°C	-20...+70°C	-20...+70°	-20...+70°	-20...+70°C	-20...+70°C	-20...+70°C	-20...+70°C
REFERENCE STANDARDS	EMC: in conformance with EN 61000-6-4 and EN 61000-6-2	EMC: in conformance with EN 61000-6-4 and EN 61000-6-2	EMC: in conformance with EN 61000-6-4 and EN 61000-6-2	EMC: in conformance with EN 61000-6-4 and EN 61000-6-2	EMC: in conformance with EN 61000-6-4 and EN 61000-6-2	EMC: in conformance with EN 61000-6-4 and EN 61000-6-2	EMC: in conformance with EN 61000-6-4 and EN 61000-6-2	EMC: in conformance with EN 61000-6-4 and EN 61000-6-2
MECHANICAL SIZES (mm)								
HOUSING	ABS V0 auto extinguished	ABS V0 auto extinguished	ABS V0 auto extinguished	ABS V0 auto extinguished	ABS V0 auto extinguished	ABS V0 auto extinguished	ABS V0 auto extinguished	ABS V0 auto extinguished



# DATEXEL

## **TEMPERATURE TRANSMITTERS FOR DIN B IN-HEAD MOUNTING**

**Set "SMART" DAT1000  
UNIVERSAL INPUT PROGRAMMABLE  
BY PERSONAL COMPUTER  
WITH OR WITHOUT GALVANIC INSULATION.**

**MODULES WITHOUT GALVANIC INSULATION:  
DAT1010, DAT1015, DAT1070, DAT1075**

**MODULES WITH GALVANIC INSULATION:  
DAT1060, DAT1065**







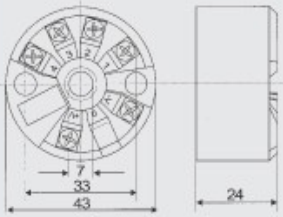
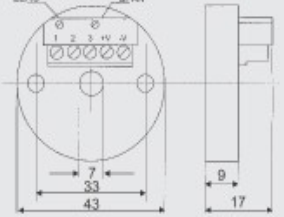
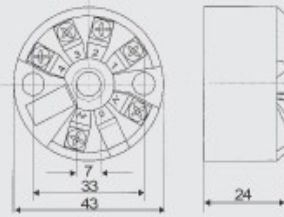
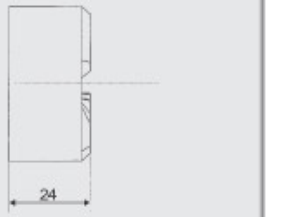


**TEMPERATURE TRANSMITTERS**



# TEMPERATURE TRANSMITTERS FOR DIN B IN-HEAD MOUNTING

SET "SMART" DAT1000 UNIVERSAL INPUT PROGRAMMABLE BY PERSONAL COMPUTER WITH OR WITHOUT GALVANIC INSULATION.

	MODULES WITHOUT GALVANIC INSULATION				MODULES WITH GALVANIC INSULATION	
	DAT 1010	DAT 1015	DAT 1070	DAT 1075	DAT 1060	DAT 1065
GENERAL DESCRIPTION						
INPUT	Transmitter for RTD, Resistance, mV and Potentiometer, not insulated, PC programmable, 4-20 mA current loop powered	Transmitter for universal input, not insulated, PC programmable, 4-20 mA current loop powered	Low profile transmitter for RTD, Resistance, mV and Potentiometer, not insulated, PC programmable, 4-20 mA current loop powered	Low profile transmitter for universal input, not insulated, PC programmable, 4-20 mA current loop powered	Transmitter for RTD, Resistance, mV and Potentiometer, 2000 Vac galvanic insulated, PC programmable, 4-20 mA current loop powered.	Transmitter for universal input, 2000 Vac galvanic insulated, PC Programmable, 4-20 mA current loop powered.
OUTPUT	RTD and Resistance 2,3 and 4 wires, Potentiometer and mV.	Thermocouple type J,K,R,S,B,E,T,N,RTD and Resistance 2,3 and 4 wires,Potentiometer and mV.	RTD and Resistance 2, 3 wires, Potentiometer and mV.	Thermocouple type J,K,R,S,B,E,T,N,RTD and Resistance 2,3 wires, Potentiometer and mV.	RTD and Resistance 2,3 and 4 wires, Potentiometer and mV	Thermocouple type J,K,R,S,B,E,T,N,RTD and Resistance 2,3 and 4 wires, Potentiometer and mV.
POWER SUPPLY	4-20 mA current loop powered	4-20 mA current loop powered	4-20 mA current loop powered	4-20 mA current loop powered	4-20 mA current loop powered	4-20 mA current loop powered
ACCURACY	10...32 Vdc from current loop	10...32 Vdc from current loop	10...32 Vdc from current loop	10...32 Vdc from current loop	10...32 Vdc from current loop	10...32 Vdc from current loop
THERMAL DRIFT	$\pm 0.1\%$ f.s	$\pm 0.1\%$ f.s Thermocouple: $\pm 0.2\%$ f.s	$\pm 0.1\%$ f.s	$\pm 0.1\%$ f.s Thermocouple: $\pm 0.2\%$ f.s	$\pm 0.1\%$ f.s	$\pm 0.1\%$ f.s Thermocouple: $\pm 0.2\%$ f.s
OPERATIVE TEMPERATURE	0.01 % f.s/°C	0.01 % f.s/°C	0.01 % f.s/°C	0.01 % f.s/°C	0.01 % f.s/°C	0.01 % f.s/°C
REFERENCE STANDARDS	-20...+70°C	-20...+70°C	-20...+70°C	-20...+70°C	-20...+70°C	-20...+70°C
MECHANICAL SIZES (mm)	EMC: in conformance with EN 61000-6-4 and EN 61000-6-2	EMC: in conformance with EN 61000-6-4 and EN 61000-6-2	EMC: in conformance with EN 61000-6-4 and EN 61000-6-2	EMC: in conformance with EN 61000-6-4 and EN 61000-6-2	EMC: in conformance with EN 61000-6-4 and EN 61000-6-2	EMC: in conformance with EN 61000-6-4 and EN 61000-6-2
HOUSING						
	ABS V0 auto extinguished	ABS V0 auto extinguished	ABS V0 auto extinguished	ABS V0 auto extinguished	ABS V0 auto extinguished	

## DIN RAIL TEMPERATURE TRANSMITTERS AND CONVERTERS

**SET DAT2000, DIP SWITCH CONFIGURABLE, WITHOUT GALVANIC INSULATION.**

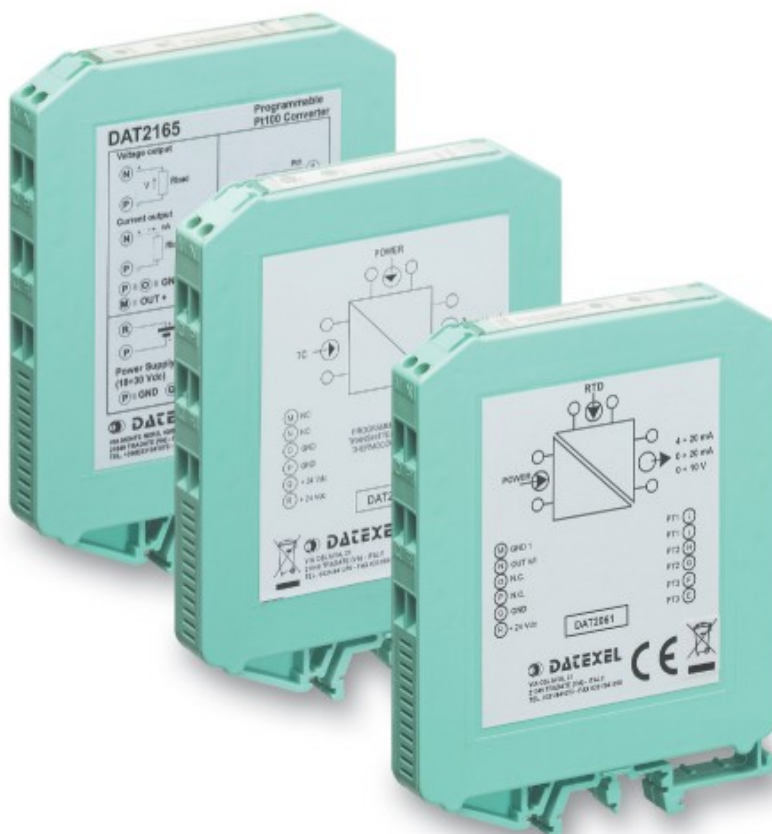
MODULES FOR THERMORESISTANCE SENSORS: DAT2065, DAT2165



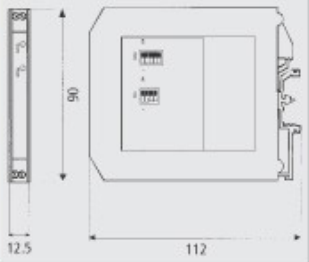
MODULES FOR THERMOCOUPLE SENSORS: DAT2045, DAT2055, DAT2145, DAT2155

**SET DAT2000, DIP SWITCH CONFIGURABLE, WITH GALVANIC INSULATION.**








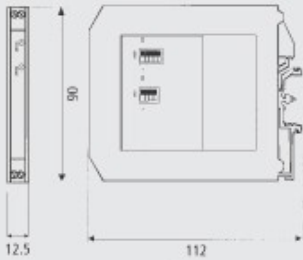
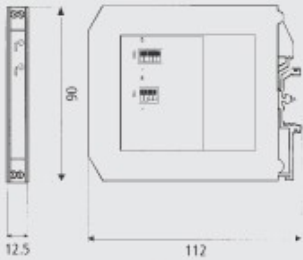
MODULES FOR THERMORESISTANCE SENSORS: DAT2060, DAT2061,

MODULES FOR THERMOCOUPLE SENSORS: DAT2050,



SET DAT2000, DIP SWITCH CONFIGURABLE, WITHOUT GALVANIC INSULATION	
MODULES FOR THERMORESISTANCE SENSORS	
DAT 2065	DAT 2165
	
Transmitter not insulated for thermoresistance, dip switch configurable, 4-20 mA current loop powered.	Converter not insulated for thermoresistance, dip-switch configurable.
<b>GENERAL DESCRIPTION</b>	
<b>INPUT</b>	
Pt100 2 and 3 wires	Pt100 2 and 3 wires
<b>OUTPUT</b>	
4-20 mA current loop powered	Voltage 0-10 V, Current 4-20mA and 0-20 mA
<b>POWER SUPPLY</b>	
10...30 Vdc from current loop	18...30 Vdc
<b>ACCURACY</b>	
± 0.15% f.s	± 0.15% f.s
<b>THERMAL DRIFT</b>	
0.02 % f.s/°C	0.02 % f.s/°C
<b>OPERATIVE TEMPERATURE</b>	
-20...+70°C	-20...+70°C
<b>REFERENCE STANDARDS</b>	
EMC: in conformance with EN 61000-6-4 and EN 61000-6-2.	EMC: in conformance with EN 61000-6-4 and EN 61000-6-2.
<b>MECHANICAL SIZES (mm)</b>	
<b>HOUSING</b>	PA6.6 (UL94-V0) auto extinguished

# DIN RAIL TEMPERATURE TRANSMITTERS AND CONVERTERS

SET DAT2000, DIP SWITCH CONFIGURABLE, WITHOUT GALVANIC INSULATION				SET DAT2000, DIP-SWITCH CONFIGURABLE, WITH GALVANIC INSULATION			
GENERAL DESCRIPTION	THERMOCOUPLE SENSORS MODULES				MODULES FOR THERMORESISTANCE SENSORS		MODULES FOR THERMOCOUPLE SENSORS
	DAT 2045	DAT 2055	DAT 2145	DAT 2155	DAT 2060	DAT 2061	DAT 2050
							
Transmitter not insulated for thermocouple, dip switch configurable, 4-20 mA current loop powered.	Transmitter not insulated for thermocouple, dip switch configurable, 4-20 mA current loop powered.	Converter not insulated for thermocouple, dip-switch configurable.	Converter not insulated for thermocouple, dip-switch configurable.	Converter for thermo resistance, 2000 Vac galvanic insulated on the 3 ways, dip-switch configurable.	Converter for thermo resistance, 2000 Vac galvanic insulated, dip-switch configurable.	Converter for thermocouple, 2000 Vac galvanic insulated, dip-switch configurable.	
INPUT	Thermocouples type K, J, R, S, and T	Thermocouples type K and J	Thermocouples type K, J, R, S, and T	Thermocouples type K and J	Pt100 2 and 3 wires	Pt100 2 and 3 wires	Thermocouples type K, J, R, S, and T
OUTPUT	4-20 mA current loop powered "voltage linear"	4-20 mA current loop powered	Voltage 0-10 V "voltage linear" Current 4-20mA and 0-20mA "voltage linear"	Voltage 0-10 V Current 4-20mA and 0-20mA	Voltage 0-10 V, 0-2 V, $\pm 10$ V, $\pm 5$ V and $\pm 1$ V, Current 4-20mA and 0-20 mA	Voltage 0-10 V, Current 4-20mA and 0-20 mA	Voltage 0-10 V, 0-2 V, $\pm 10$ V, $\pm 5$ V and $\pm 1$ V "voltage linear", Current 4-20mA and 0-20 mA "voltage linear"
POWER SUPPLY	10...30 Vdc from current loop	10...30 Vdc from current loop	18...30 Vdc	18...30 Vdc	18...32 Vdc	18...30 Vdc	18...30 Vdc
ACCURACY	$\pm 0.05\%$ f.s	In function of the thermocouple type	$\pm 0.05\%$ f.s	In function of the thermocouple type	$\pm 0.15\%$ f.s	$\pm 0.15\%$ f.s	$\pm 0.05\%$ f.s
THERMAL DRIFT	0.02 % f.s/ $^{\circ}$ C	0.02 % f.s/ $^{\circ}$ C	0.02 % f.s/ $^{\circ}$ C	0.02 % f.s/ $^{\circ}$ C	0.02 % f.s/ $^{\circ}$ C	0.02 % f.s/ $^{\circ}$ C	0.02 % f.s/ $^{\circ}$ C
OPERATIVE TEMPERATURE	-20...+70 $^{\circ}$ C	-20...+70 $^{\circ}$ C	-20...+70 $^{\circ}$ C	-20...+70 $^{\circ}$ C	-20...+60 $^{\circ}$ C	-20...+70 $^{\circ}$ C	-20...+70 $^{\circ}$ C
REFERENCE STANDARDS	EMC: in conformance with EN 61000-6-4 and EN 61000-6-2.	EMC: in conformance with EN 61000-6-4 and EN 61000-6-2.	EMC: in conformance with EN 61000-6-4 and EN 61000-6-2.	EMC: in conformance with EN 61000-6-4 and EN 61000-6-2.	EMC: in conformance with EN 61000-6-4 and EN 61000-6-2.	EMC: in conformance with EN 61000-6-4 and EN 61000-6-2.	EMC: in conformance with EN 61000-6-4 and EN 61000-6-2.
MECHANICAL SIZES (mm)							
HOUSING	PA6.6 (UL94-V0) auto extinguished		PA6.6 (UL94-V0) auto extinguished		PA6.6 (UL94-V0) auto extinguished		PA6.6 (UL94-V0) auto extinguished



# DATEXEL

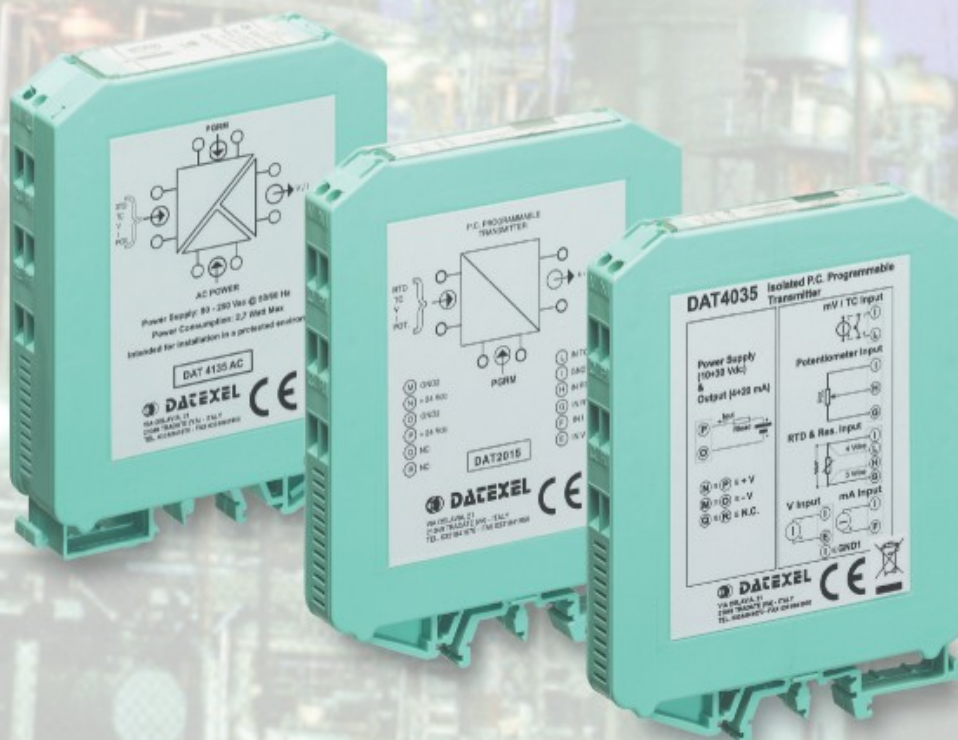
## **DIN RAIL MOUNTING TRANSMITTERS AND CONVERTERS, UNIVERSAL INPUT, TEMPERATURE AND SIGNAL, PROGRAMMABLE BY PC, WITH OR WITHOUT GALVANIC INSULATION**

**SET DAT2000, PROGRAMMABLE BY PC,  
WITHOUT GALVANIC INSULATION.**









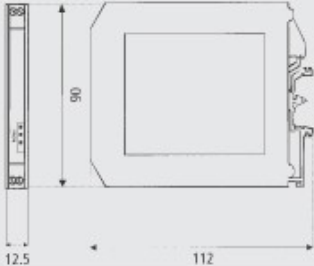
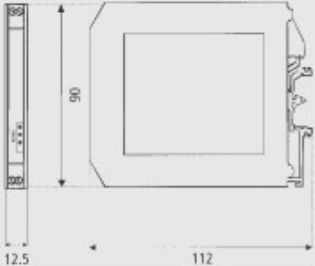

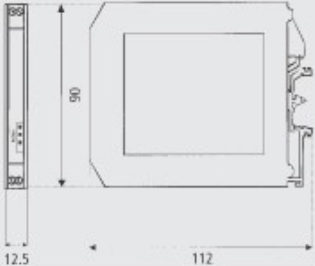
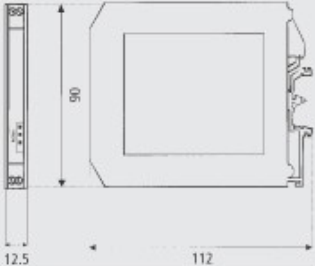
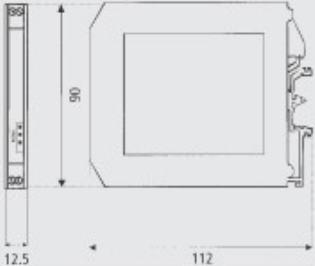
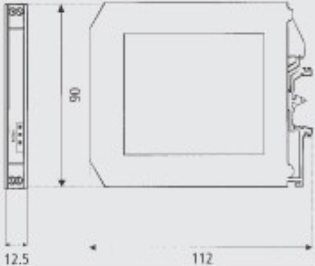
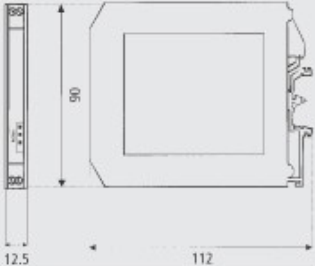
MODULES: DAT2015, DAT2115, 2115/SEL

**SET DAT4000, PROGRAMMABLE BY PC,  
WITH GALVANIC INSULATION.**

MODULES: DAT4035, DAT4135, DAT4135/SEL,  
DAT4135 AC, DAT4235



# DIN RAIL MOUNTING TRANSMITTERS AND CONVERTERS, UNIVERSAL INPUT, TEMPERATURE AND SIGNAL, PROGRAMMABLE BY PC, WITH OR WITHOUT GALVANIC INSULATION

SET DAT2000, PROGRAMMABLE BY PC, WITHOUT GALVANIC INSULATION				SET DAT4000, PROGRAMMABLE BY PC, WITH GALVANIC INSULATION					
	MODULES			MODULES					
	DAT 2015	DAT 2115	DAT 2115/SEL	DAT 4035	DAT 4135	DAT 4135/SEL	DAT 4235	DAT 4135/AC	
GENERAL DESCRIPTION									
INPUT	Transmitter for universal input, not insulated, PC Programmable, 4-20 mA current loop powered.	Converter for universal input, not insulated, PC Programmable.	Converter for universal input, not insulated, PC Programmable with output enable and disconnection control.	Transmitter for universal input, 2000 Vac galvanic insulated, PC Programmable, 4-20 mA current loop powered.	Converter for universal input, 2000 Vac galvanic insulated, PC Programmable.	Converter for universal input, 2000 Vac galvanic insulated, PC Programmable, with enable and disconnection control for output.	Converter for universal input, 2000 Vac galvanic insulated on the 3 ways, PC Programmable.	Converter for universal input, galvanic insulated, PC Programmable, AC power supply.	
OUTPUT	Thermocouples type K, J, R, S, B, E, T, N, RTD and Resistance 2,3 and 4 wires, Potentiometer mV, V, mA.	Thermocouples type K, J, R, S, B, E, T, N, RTD and Resistance 2,3 and 4 wires, Potentiometer mV, V, mA.	Thermocouples type K, J, R, S, B, E, T, N, RTD and Resistance 2,3 and 4 wires, Potentiometer mV, V, mA.	Thermocouples type K, J, R, S, B, E, T, N, RTD and Resistance 2,3 and 4 wires, Potentiometer mV, V, mA.	Thermocouples type K, J, R, S, B, E, T, N, RTD and Resistance 2,3 and 4 wires, Potentiometer mV, V, mA.	Thermocouples type K, J, R, S, B, E, T, N, RTD and Resistance 2,3 and 4 wires, Potentiometer mV, V, mA.	Thermocouples type K, J, R, S, B, E, T, N, RTD and Resistance 2,3 and 4 wires, Potentiometer mV, V, mA.	Thermocouples type K, J, R, S, B, E, T, N, RTD and Resistance 2,3 and 4 wires, Potentiometer mV, V, mA.	Thermocouples type K, J, R, S, B, E, T, N, RTD and Resistance 2,3 and 4 wires, Potentiometer mV, V, mA.
POWER SUPPLY	4-20 mA current loop powered	Voltage: configurable ranges 0-10 V and 10-0 V, Current: configurable ranges 0-20 mA and 20-0 mA	Voltage: configurable ranges 0-10 V and 10-0 V, Current: configurable ranges 0-20 mA and 20-0 mA	4-20 mA current loop powered	Voltage: configurable ranges 0-10 V and 10-0 V, Current: configurable ranges 0-20 mA and 20-0 mA	Voltage: configurable ranges 0-10 V and 10-0 V, Current: configurable ranges 0-20 mA and 20-0 mA	Voltage: configurable ranges $\pm 10$ V, Current: configurable ranges $\pm 20$ mA	Voltage: configurable ranges 0-10 V and 10-0 V, Current: configurable ranges 0-20 mA and 20-0 mA	
ACCURACY	10...32 Vdc from current loop	18...30 Vdc	18...30 Vdc	10...32 Vdc from current loop	18...30 Vdc	18...30 Vdc	18...30 Vdc	90...250 Vac	
THERMAL DRIFT	$\pm 0.1\%$ f.s, Thermocouple: $\pm 0.2\%$ f.s	$\pm 0.1\%$ f.s, Thermocouple: $\pm 0.2\%$ f.s	$\pm 0.1\%$ f.s, Thermocouple: $\pm 0.2\%$ f.s	$\pm 0.1\%$ f.s, Thermocouple: $\pm 0.2\%$ f.s	$\pm 0.1\%$ f.s, Thermocouple: $\pm 0.2\%$ f.s	$\pm 0.1\%$ f.s, Thermocouple: $\pm 0.2\%$ f.s	$\pm 0.1\%$ f.s, Thermocouple: $\pm 0.2\%$ f.s	$\pm 0.1\%$ f.s, Thermocouple: $\pm 0.2\%$ f.s	
OPERATIVE TEMPERATURE	0.01 % f.s/ $^{\circ}$ C	0.01 % f.s/ $^{\circ}$ C	0.01 % f.s/ $^{\circ}$ C	0.01 % f.s/ $^{\circ}$ C	0.01 % f.s/ $^{\circ}$ C	0.01 % f.s/ $^{\circ}$ C	0.01 % f.s/ $^{\circ}$ C	0.01 % f.s/ $^{\circ}$ C	
REFERENCE STANDARDS	-20...+70 $^{\circ}$ C	-20...+70 $^{\circ}$ C	-20...+70 $^{\circ}$ C	-20...+70 $^{\circ}$ C	-20...+70 $^{\circ}$ C	-20...+70 $^{\circ}$ C	-20...+70 $^{\circ}$ C	-20...+70 $^{\circ}$ C	
MECHANICAL SIZES (mm)	EMC: in conformance with EN 61000-6-4 and EN 61000-6-2.	EMC: in conformance with EN 61000-6-4 and EN 61000-6-2.	EMC: in conformance with EN 61000-6-4 and EN 61000-6-2.	EMC: in conformance with EN 61000-6-4 and EN 61000-6-2.	EMC: in conformance with EN 61000-6-4 and EN 61000-6-2.	EMC: in conformance with EN 61000-6-4 and EN 61000-6-2.	EMC: in conformance with EN 61000-6-4 and EN 61000-6-2.	EMC: in conformance with EN 61000-6-4 and EN 61000-6-2.	
HOUSING									
	PA6.6 (UL94-V0) auto extinguished			PA6.6 (UL94-V0) auto extinguished			PA6.6 (UL94-V0) auto extinguished		



# DATEXEL

1944 © K&H W



**TRANSMITTERS  
SUITABLE TO THE USE  
IN ZONES WITH POTENTIALLY  
EXPLOSIVE ATMOSPHERE  
CERTIFIED ATEX 94/9/EC**

**TRANSMITTERS FOR DIN B IN-HEAD MOUNTING,  
WITH OR WITHOUT GALVANIC INSULATION**

**MODULES WITHOUT GALVANIC INSULATION:  
DAT1010IS, DAT1010IS/HT, DAT1015IS, DAT1015IS/HT**







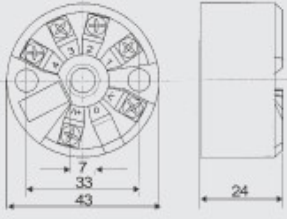
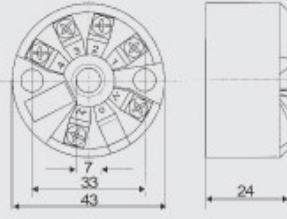
**MODULES WITH GALVANIC INSULATION:  
DAT1065IS, DAT1065IS/HT**



**TRANSMITTERS AND CONVERTERS**

# TRANSMITTERS SUITABLE TO THE USE IN ZONES WITH POTENTIALLY EXPLOSIVE ATMOSPHERE CERTIFIED ATEX 94/9/EC

## TRANSMITTERS FOR DIN B IN-HEAD MOUNTING, WITH OR WITHOUT GALVANIC INSULATION

	MODULES WITHOUT GALVANIC INSULATION				MODULES WITH GALVANIC INSULATION	
	DAT 1010IS	DAT 1010IS/HT	DAT 1015IS	DAT 1015IS/HT	DAT 1065IS	DAT 1065IS/HT
<b>GENERAL DESCRIPTION</b>						
	Intrinsically safe transmitter for RTD, Resistance, mV and Potentiometer, not insulated, PC Programmable, 4-20 mA current loop powered.	Intrinsically safe transmitter (version for high temperatures) for RTD, Resistance, mV and Potentiometer, not insulated, PC Programmable, 4-20 mA current loop powered.	Intrinsically safe transmitter for universal input, not insulated, PC Programmable, 4-20 mA current loop powered.	Intrinsically safe transmitter (version for high temperature) for universal input, not insulated, PC Programmable, 4-20 mA current loop powered.	Intrinsically safe transmitter for universal input, 2000 Vac galvanic insulated, PC Programmable, 4-20 mA current loop powered.	Intrinsically safe transmitter (version for high temperature) for universal input, 2000 Vac galvanic insulated, PC Programmable, 4-20 mA current loop powered.
<b>INPUT</b>	RTD and Resistance 2,3 and 4 wires, Potentiometer and mV	RTD and Resistance 2,3 and 4 wires, Potentiometer and mV	Thermocouple type J,K,R,S,B,E,T,N,RTD and Resistance 2,3 and 4 wires, Potentiometer, mV	Thermocouple type J,K,R,S,B,E,T,N,RTD and Resistance 2,3 and 4 wires, Potentiometer, mV	Thermocouple type J,K,R,S,B,E,T,N,RTD and Resistance 2,3 and 4 wires, Potentiometer, mV	Thermocouple type J,K,R,S,B,E,T,N,RTD and Resistance 2,3 and 4 wires, Potentiometer, mV
<b>OUTPUT</b>	4-20 mA current loop powered	4-20 mA current loop powered	4-20 mA current loop powered	4-20 mA current loop powered	4-20 mA current loop powered	4-20 mA current loop powered
<b>POWER SUPPLY</b>	11...30 Vdc from current loop	11...30 Vdc from current loop	11...30 Vdc from current loop	11...30 Vdc from current loop	11...30 Vdc from current loop	11...30 Vdc from current loop
<b>ACCURACY</b>	± 0.1% f.s	± 0.1% f.s	± 0.1% f.s, Thermocouple: ± 0.2% f.s	± 0.1% f.s, Thermocouple: ± 0.2% f.s	± 0.1% f.s, Thermocouple: ± 0.2% f.s	± 0.1% f.s, Thermocouple: ± 0.2% f.s
<b>THERMAL DRIFT</b>	0.01 % f.s/°C	0.01 % f.s/°C	0.01 % f.s/°C	0.01 % f.s/°C	0.01 % f.s/°C	0.01 % f.s/°C
<b>OPERATIVE TEMPERATURE</b>	-20...+70°C (T5)	-20...+85°C (T4)	-20...+70°C (T5)	-20...+85°C (T4)	-20...+70°C (T5)	-20...+85°C (T4)
<b>REFERENCE STANDARDS</b>	ATEX 94/9/EC, EN 50014:1997 + A1, A2, EN 50020:2002, EN 50284:1999, EMC: in conformance with EN 61000-6-4 and EN 61000-6-2	ATEX 94/9/EC, EN 50014:1997 + A1, A2, EN 50020:2002, EN 50284:1999, EMC: in conformance with EN 61000-6-4 and EN 61000-6-2	ATEX 94/9/EC, EN 50014:1997 + A1, A2, EN 50020:2002, EN 50284:1999, EMC: in conformance with EN 61000-6-4 and EN 61000-6-2	ATEX 94/9/EC, EN 50014:1997 + A1, A2, EN 50020:2002, EN 50284:1999, EMC: in conformance with EN 61000-6-4 and EN 61000-6-2	ATEX 94/9/EC, EN 50014:1997 + A1, A2, EN 50020:2002, EN 50284:1999, EMC: in conformance with EN 61000-6-4 and EN 61000-6-2	ATEX 94/9/EC, EN 50014:1997 + A1, A2, EN 50020:2002, EN 50284:1999, EMC: in conformance with EN 61000-6-4 and EN 61000-6-2
<b>MECHANICAL SIZES (mm)</b>						
<b>HOUSING</b>	ABS V0 auto extinguished				ABS V0 auto extinguished	ABS V0 auto extinguished



# DATEXEL



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Iscrizione CCIAA 00793580150

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Sezione Ordinaria  
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P.I. 00793580150

## TRANSMITTERS AND CONVERTERS SUITABLE TO THE USE IN ZONES WITH POTENTIALLY EXPLOSIVE ATMOSPHERE CERTIFIED ATEX 94/9/EC

**DIN RAIL MOUNTING TRANSMITTERS,  
WITH OR WITHOUT GALVANIC INSULATION.**

**MODULES WITHOUT GALVANIC INSULATION:  
DAT2015IS, DAT2015IS/HT**

**MODULES WITH GALVANIC INSULATION:  
DAT4035IS, DTA4035IS/HT**

**DIN RAIL MOUNTING CONVERTERS  
AND ACTIVE BARRIERS, WITH GALVANIC INSULATION.**

**UNIVERSAL INPUT CONVERTER PROGRAMMABLE BY PC,  
WITH TRIP AMPLIFIER: DAT4235IS**

**ISOLATOR/REPEATER FOR INTRINSICALLY SAFE AREA: DAT5030IS**

Schema di certificazione







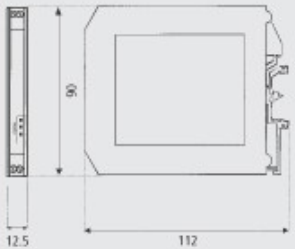
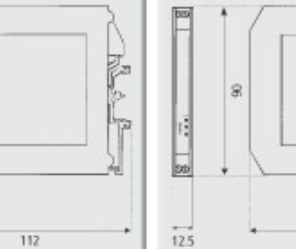
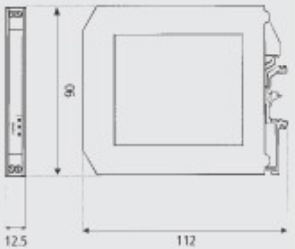
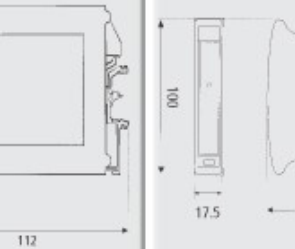
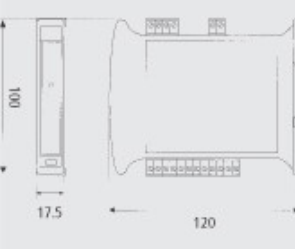
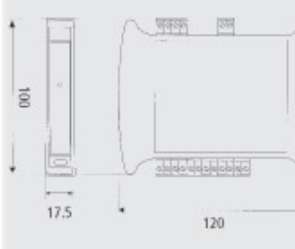
Il CESI è stato autorizzato dal governo italiano ad operare quale organismo di certificazione di apparecchi e sistemi destinati a essere utilizzati in atmosfere potenzialmente esplosive con D.M. 4/31/1982, D.M. 13/4/1992, D.M. 20/7/1994 e D.M. 27/6/2000



# TRANSMITTERS AND CONVERTERS



# TRANSMITTERS AND CONVERTERS SUITABLE TO THE USE IN ZONES WITH POTENTIALLY EXPLOSIVE ATMOSPHERE CERTIFIED ATEX 94/9/EC

		DIN RAIL MOUNTING TRANSMITTERS, WITH OR WITHOUT GALVANIC INSULATION.				DIN RAIL MOUNTING CONVERTERS AND ISOLATORS, WITH GALVANIC INSULATION.	
GENERAL DESCRIPTION	MODULES WITHOUT GALVANIC INSULATION		MODULES WITH GALVANIC INSULATION		UNIVERSAL INPUT CONVERTER, PC PROGRAMMABLE, WITH TRIP AMPLIFIERS	ISOLATOR/REPEATER FOR INTRINSICALLY SAFE AREA	
	DAT 2015IS	DAT 2015IS/HT	DAT 4035IS	DAT 4035IS/HT	DAT 4235IS	DAT 5030IS	
							
	Intrinsically safe transmitter for universal input, not insulated, PC Programmable, 4-20 mA current loop powered.	Intrinsically safe transmitter (version for high temperatures) for universal input, not insulated, PC Programmable, 4-20 mA current loop powered.	Intrinsically safe transmitter for universal input, 2000 Vac galvanic insulated, PC Programmable, 4-20 mA current loop powered.	Intrinsically safe transmitter (version for high temperatures) for universal input, 2000 Vac galvanic insulated, PC Programmable, 4-20 mA current loop powered.	Intrinsically safe signal converter with trip amplifier for sensors in zone with explosive atmosphere, galvanic insulated, programmable by PC. The module is available in 3 versions: - DAT 4235 IS/A: analogical signal converter - DAT 4235 IS/B: Trip amplifier - DAT 4235 IS/C: analogical signal converter + Trip amplifier	Intrinsically safe isolator with 2000 Vac galvanic separation dip-switch configurable. The module is available in 4 versions: - DAT 5030 IS/A: single channel isolator - DAT 5030 IS/B: double channel isolator - DAT 5030 IS/AH: single channel isolator, Hart compatible - DAT 5030 IS/BIH: double channel isolator, Hart compatible	
INPUT	Thermocouple type J,K,R,S,B,E,T,N,RTD and Resistance 2,3 and 4 wires, Potentiometer, mV	Thermocouple type J,K,R,S,B,E,T,N,RTD and Resistance 2,3 and 4 wires, Potentiometer, mV	Thermocouple type J,K,R,S,B,E,T,N,RTD and Resistance 2,3 and 4 wires, Potentiometer, mV	Thermocouple type J,K,R,S,B,E,T,N,RTD and Resistance 2,3 and 4 wires, Potentiometer, mV	Thermocouple type J,K,R,S,B,E,T,N,RTD and Resistance 2,3 and 4 wires, Potentiometer, mV, V, mA.	0-20 mA or 4-20 mA	
OUTPUT	4-20 mA current loop powered	4-20 mA current loop powered	4-20 mA current loop powered	4-20 mA current loop powered	Voltage: configurable in the range 0-10 V, Current: configurable in the range 0-20 mA	Voltage: 0-10 V or 2-10 V, Current: 0-20 mA or 4-20 mA	
POWER SUPPLY	11...30 Vdc from current loop	11...30 Vdc from current loop	11...30 Vdc from current loop	11...30 Vdc from current loop	20...30 Vdc	20...30 Vdc	
ACCURACY	± 0.1% f.s, Thermocouple: ± 0.2% f.s.	± 0.1% f.s, Thermocouple: ± 0.2% f.s.	± 0.1% f.s, Thermocouple: ± 0.2% f.s.	± 0.1% f.s, Thermocouple: ± 0.2% f.s.	± 0.1% f.s, Thermocouple: ± 0.2% f.s.	± 0.2% f.s	
THERMAL DRIFT	0.01 % f.s/°C	0.01 % f.s/°C	0.01 % f.s/°C	0.01 % f.s/°C	0.02 % f.s/°C	0.02 % f.s/°C	
OPERATIVE TEMPERATURE	-20...+70°C (T5)	-20...+85°C (T4)	-20...+70°C (T5)	-20...+85°C (T4)	-20...+60°C	-20...+60°C	
REFERENCE STANDARDS	ATEX 94/9/EC, EN 50014:1997 + A1..A2, EN 50020:2002, EN 50284:1999, EMC: in conformance with EN 61000-6-4 and EN 61000-6-2	ATEX 94/9/EC, EN 50014:1997 + A1..A2, EN 50020:2002, EN 50284:1999, EMC: in conformance with EN 61000-6-4 and EN 61000-6-2	ATEX 94/9/EC, EN 50014:1997 + A1..A2, EN 50020:2002, EN 50284:1999, EMC: in conformance with EN 61000-6-4 and EN 61000-6-2	ATEX 94/9/EC, EN 50014:1997 + A1..A2, EN 50020:2002, EN 50284:1999, EMC: in conformance with EN 61000-6-4 and EN 61000-6-2	ATEX 94/9/EC, EN 50014:1997 + A1..A2, EN 50020:2002, EN 50284:1999, EMC: in conformance with EN 61000-6-4 and EN 61000-6-2	ATEX 94/9/EC, EN 50014:1997 + A1..A2, EN 50020:2002, EN 50284:1999, EMC: in conformance with EN 61000-6-4 and EN 61000-6-2	
MECHANICAL SIZES (mm)							
HOUSING	PA6.6 (UL94-V0) auto extinguished		PA6.6 (UL94-V0) auto extinguished		PC/AB (UL94-V0) auto extinguished	PC/AB (UL94-V0) auto extinguished	



## TRANSMITTERS, ISOLATED - NOT ISOLATED SIGNAL CONVERTERS AND GALVANIC ISOLATORS FOR DIN RAIL MOUNTING





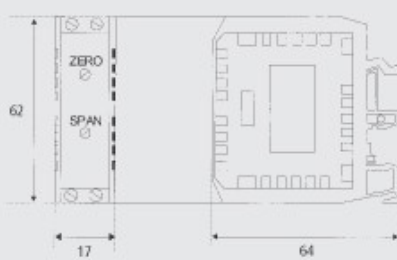
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AND NOT ISOLATED CONVERTERS:**  
DAT205 2W, DAT205 3W,  
DAT207 2W, DAT207 3W

**ISOLATED CONVERTERS:**  
DAT5020, DAT5021, DAT5022,  
DAT5023/I, DAT5023/V, DAT5025

**GALVANIC ISOLATORS:**  
DAT511, DAT511/H









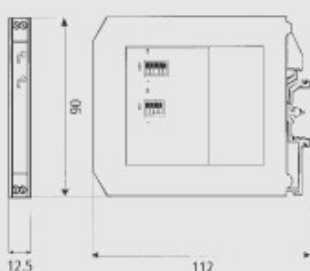
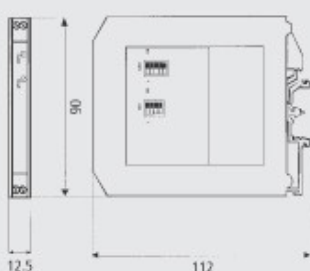
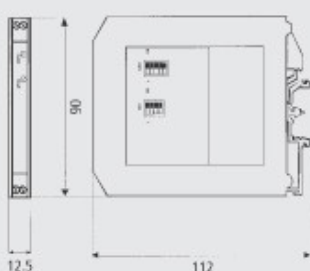
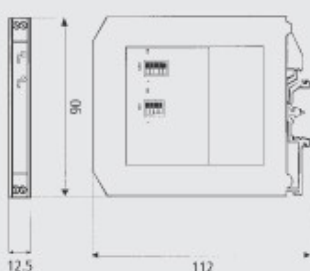
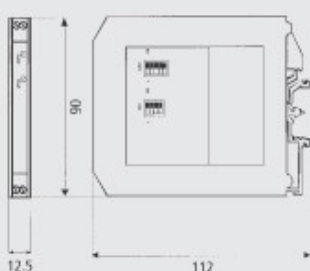
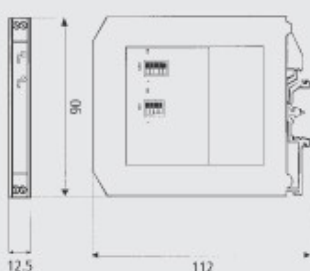
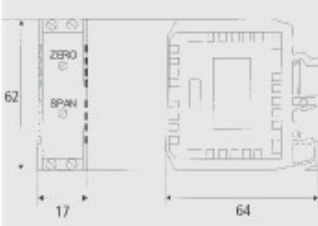
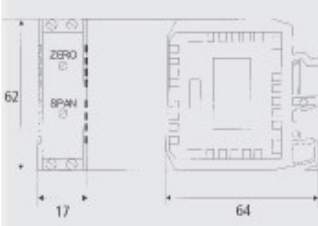


### TRANSMITTERS AND CONVERTERS WITHOUT GALVANIC INSULATION

	DAT205 2W	DAT205 3W	DAT207 2W	DAT207 3W
<b>GENERAL DESCRIPTION</b>				
	Not insulated transmitter for fixed range input for potentiometer, 4-20 mA current loop powered.	Not insulated converter for fixed range input for potentiometer.	Not insulated transmitter for fixed range mV, V, mA, 4-20 mA current loop powered.	Not insulated converter for fixed range mV, V, mA.
<b>INPUT</b>	Potentiometer from 1 K $\Omega$ to 10 K $\Omega$	Potentiometer from 1 K $\Omega$ to 10 K $\Omega$	Voltage: from 0-5 mV to 0-200 mV (DAT207A), Voltage: from 0-200 mV to 0-20 V (DAT207B), Current: from 0-5 mA to 0-50 mA (DAT207B)	Voltage: from 0-5 mV to 0-200 mV (DAT207A), Voltage: from 0-200 mV to 0-20 V (DAT207B), Current: from 0-5 mA to 0-50 mA (DAT207B)
<b>OUTPUT</b>	4-20 mA current loop powered	Voltage: 0-10 V, Current: 0-20 mA, 4-20 mA	4-20 mA current loop powered	Voltage: 0-10 V, Current: 0-20 mA, 4-20 mA
<b>POWER SUPPLY</b>	10...32 Vdc from current loop	18...30 Vdc	10...32 Vdc from current loop	18...30 Vdc
<b>ACCURACY</b>	$\pm 0.1\%$ f.s	$\pm 0.1\%$ f.s	$\pm 0.1\%$ f.s	$\pm 0.1\%$ f.s
<b>THERMAL DRIFT</b>	0.02 % f.s/ $^{\circ}$ C	0.02 % f.s/ $^{\circ}$ C	0.02 % f.s/ $^{\circ}$ C	0.02 % f.s/ $^{\circ}$ C
<b>OPERATIVE TEMPERATURE</b>	-20...+70 $^{\circ}$ C	-20...+70 $^{\circ}$ C	-20...+70 $^{\circ}$	-20...+70 $^{\circ}$
<b>REFERENCE STANDARDS</b>	EMC: in conformance with EN 61000-6-4 and EN 61000-6-2	EMC: in conformance with EN 61000-6-4 and EN 61000-6-2	EMC: in conformance with EN 61000-6-4 and EN 61000-6-2	EMC: in conformance with EN 61000-6-4 and EN 61000-6-2
<b>MECHANICAL SIZES (mm)</b>				
<b>HOUSING</b>	Polyamide (UL94-V2) auto extinguished			

# TRANSMITTERS, SIGNAL CONVERTERS WITH OR WITHOUT GALVANIC INSULATION AND GALVANIC INSULATORS FOR DIN RAIL MOUNTING

## SERIES

	CONVERTERS WITH GALVANIC INSULATION						GALVANIC ISOLATORS	
	DAT 5020	DAT 5021	DAT 5022	DAT 5023/I	DAT 5023/V	DAT 5025	DAT 511	DAT 511/H
<b>GENERAL DESCRIPTION</b>								
<b>INPUT</b>	Signal converter, galvanic insulated at 2000 Vac on three ways, dip-switch configurable.	Signal converter / supplier for current loop galvanic insulated at 2000 Vac on three ways, dip-switch configurable.	Doubler / signal converter, galvanic insulated at 2000 Vac on four ways, dip-switch configurable.	Converter for AC/DC current signal, galvanic insulated at 2000 Vac, dip-switch configurable.	Converter for AC/DC voltage signal galvanic insulated at 2000 Vac on three ways, dip-switch configurable.	Converter for Strain Gauge, galvanic insulated at 2000 Vac, dip-switch configurable.	Converter, galvanic insulated at 2000 Vac self-powered, for current loop.	Converter, galvanic insulated at 2000 Vac self-powered, HART compatible.
<b>OUTPUT</b>	Potentiometer, voltage: 0-10 V, 0-1 V, 0-100 mV, $\pm 10$ V, $\pm 5$ V, Current: 4-20 mA and 0-20 mA	Voltage: 0-10 V, 2-10 V, 0-5 V, 1-5 V, Current: 4-20 mA and 0-20 mA	Voltage: 0-10 V, 2-10 V, 0-5 V, 1-5 V, Current: 4-20 mA and 0-20 mA	DC Version (DAT5023/lc): current from 0-5 A to 0-60 A; AC Version (DAT5023/lac): current from 0-5 A to 0-60 A	DC Voltage: from 0-36 V to 0-550 V, AC Voltage: from 0-36 V to 0-550 V	from 0-10 mV to 0-200 mV, from $\pm 5$ mV to $\pm 200$ mV	0-20 mA	0-20 mA
<b>POWER SUPPLY</b>	Voltage: 0-10 V, 0-2 V, $\pm 10$ V, $\pm 5$ V and $\pm 1$ V, Current: 4-20 mA and 0-20 mA	Voltage: 0-10 V, 2-10 V, 0-5 V, 1-5 V, Current: 4-20 mA and 0-20 mA	Voltage: 0-10 V, 2-10 V, 0-5 V, 1-5 V, Current: 4-20 mA and 0-20 mA	Voltage: 0-10 V, 2-10 V, 0-5 V, 1-5 V, Current: 4-20 mA and 0-20 mA	Voltage: 0-10 V, 2-10 V, 0-5 V, 1-5 V, Current: 4-20 mA and 0-20 mA	Voltage: 0-10 V, 0-5 V, 1-5 V, Current: 4-20 mA and 0-20 mA	0-20 mA	0-20 mA
<b>ACCURACY</b>	18...30 Vdc	18...30 Vdc	18...30 Vdc	18...30 Vdc	18...30 Vdc	18...30 Vdc	-	-
<b>THERMAL DRIFT</b>	$\pm 0.1\%$ f.s	$\pm 0.05\%$ f.s	$\pm 0.05\%$ f.s	$\pm 1\%$ f.s	AC: $\pm 1\%$ f.s, DC $\pm 0.1\%$ f.s.	$\pm 0.1\%$ f.s.	$\pm 0.25\%$ f.s.	$\pm 0.25\%$ f.s.
<b>OPERATIVE TEMPERATURE</b>	0.02 % f.s/°C	0.02 % f.s/°C	0.02 % f.s/°C	0.02 % f.s/°C	0.02 % f.s/°C	0.01 % f.s/°C	0.02 % f.s/°C	0.02 % f.s/°C
<b>REFERENCE STANDARDS</b>	-20...+60°C	-20...+60°C	-20...+60°C	-20...+60°C	-20...+60°C	-20...+60°C	0...+ 55 °C	0...+ 55 °C
<b>MECHANICAL SIZES (mm)</b>	EMC: in conformance with EN 61000-6-4 and EN 61000-6-2	EMC: in conformance with EN 61000-6-4 and EN 61000-6-2	EMC: in conformance with EN 61000-6-4 and EN 61000-6-2	EMC: in conformance with EN 61000-6-4 and EN 61000-6-2	EMC: in conformance with EN 61000-6-4 and EN 61000-6-2	EMC: in conformance with EN 61000-6-4 and EN 61000-6-2	EMC: in conformance with EN 61000-6-4 and EN 61000-6-2	EMC: in conformance with EN 61000-6-4 and EN 61000-6-2
<b>HOUSING</b>								
	PA6.6 (UL94-V0) auto extinguished	PA6.6 (UL94-V0) auto extinguished	PA6.6 (UL94-V0) auto extinguished	PA6.6 (UL94-V0) auto extinguished	PA6.6 (UL94-V0) auto extinguished	PA6.6 (UL94-V0) auto extinguished	Polyamide (UL94-V2) auto extinguished	Polyamide (UL94-V2) auto extinguished



# DATEXEL

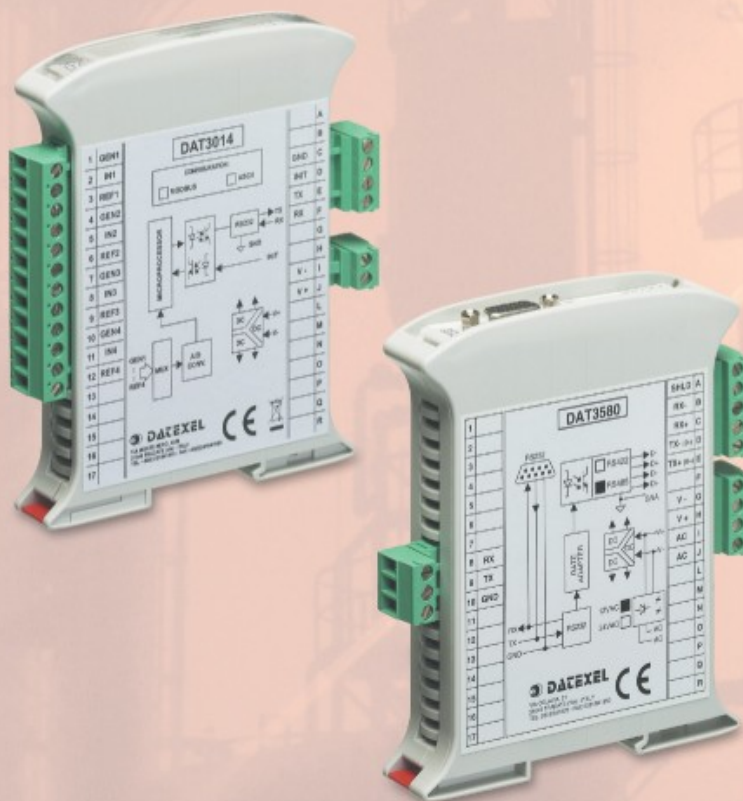
## ACQUISITION AND CONTROL MODULES SET DAT3000, FOR DIN RAIL MOUNTING

ANALOG INPUTS MODULES:  
DAT3010, DAT3014, DAT3015, DAT3016, DAT3017, DAT3018,

ANALOG OUTPUT MODULES:  
DAT3022, DAT3024, DAT3028

DIGITAL I/O MODULES:  
DAT3130, DAT3140, DAT3148, DAT3188/4, DAT3188/8









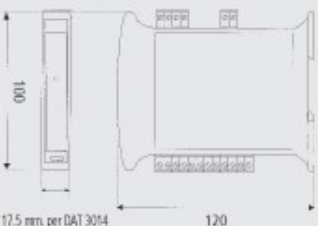
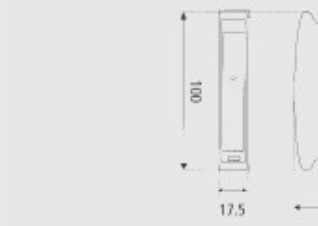
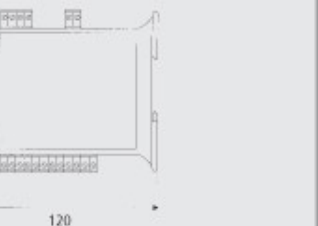
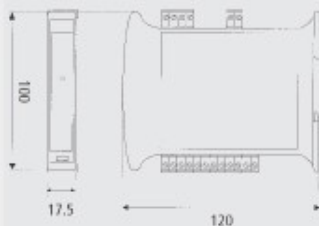

CONVERTERS/REPEATERS RS232, RS422, RS485:  
DAT3580, DAT3590



ACQUISITION AND CONTROL MODULES









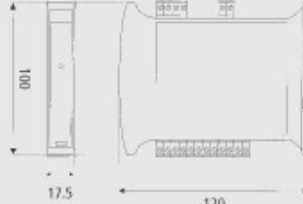

# ACQUISITION AND CONTROL MODULES SET DAT3000, FOR DIN RAIL MOUNTING

## SERIES

	ANALOG INPUT MODULES						ANALOG OUTPUT MODULES	
	DAT 3010	DAT 3014	DAT 3015	DAT 3016	DAT 3017	DAT 3018	DAT 3022-DAT 3024	DAT 3028
<b>GENERAL DESCRIPTION</b>								
<b>INPUT</b>	Distributed I/O module communicating on RS-485 up to 115200 bps with MODBUS RTU/ASCII protocol for universal analog input galvanic insulated at 2000 Vac on three ways.	Distributed I/O module communicating on RS-485 up to 115200 bps with MODBUS RTU/ASCII protocol for 4 RTD input channels, galvanic insulated at 2000 Vac on three ways.	Distributed I/O module communicating on RS-485 up to 115200 bps with MODBUS RTU/ASCII protocol for 4 voltage or current input channels, galvanic insulated at 2000 Vac on three ways.	Distributed I/O module communicating on RS-485 up to 115200 bps with MODBUS RTU/ASCII protocol for 4 voltage and thermocouple input channels, galvanic insulated at 2000 Vac on three ways.	Distributed I/O module communicating on RS-485 up to 115200 bps with MODBUS RTU/ASCII protocol for 8 voltage or current input channels, galvanic insulated at 2000 Vac on three ways.	Distributed I/O module communicating on RS-485 up to 115200 bps with MODBUS RTU/ASCII protocol for 8 voltage and thermocouple input channels, galvanic insulated at 2000 Vac on three ways.	Distributed I/O module communicating on RS-485 up to 115200 bps with MODBUS RTU/ASCII protocol with 2 (DAT3022) or 4 (DAT3024) analog output channels in voltage or current, galvanic insulated at 2000 Vac on three ways.	Distributed I/O module communicating on RS-485 up to 115200 bps with MODBUS RTU/ASCII protocol with 8 analog output channels in voltage, galvanic insulated at 2000 Vac on three ways.
<b>OUTPUT</b>	Thermocouple type J, K, R, S, E, B, T, N, RTD and Resistance 2, 3 and 4 wires, mV, V, mA 1 digital input	RTD and Resistance 2, 3 wires, Potentiometer not insulated	Voltage: (DAT3015-V): $\pm 10$ V, Current: (DAT3015-I): $\pm 20$ mA Input channels not insulated	Voltage: up to $\pm 1$ V, thermocouples type J, K, R, S, B, E, T, N Input channels not insulated	Voltage: (DAT3017-V): $\pm 10$ V, Current: (DAT3017-I): $\pm 20$ mA Input channels not insulated	Voltage: up to $\pm 1$ V, Thermocouples type J, K, R, S, B, E, T, N, mA Input channels not insulated	-	-
<b>POWER SUPPLY</b>	2 NPN Digital Outputs	-	-	-	-	-	Voltage: 0-10 V, Current: 0-20 mA	Voltage: 0-10 V,
<b>ACCURACY</b>	10...30 Vdc	10...30 Vdc	10...30 Vdc	10...30 Vdc	10...30 Vdc	10...30 Vdc	18...30 Vdc	18...30 Vdc
<b>THERMAL DRIFT</b>	$\pm 0.1\%$ f.s, Thermocouple: $\pm 0.2\%$ f.s	$\pm 0.1\%$ f.s	$\pm 0.1\%$ f.s	$\pm 0.1\%$ f.s	$\pm 0.1\%$ f.s	$\pm 0.1\%$ f.s	$\pm 0.1\%$ f.s	$\pm 0.1\%$ f.s
<b>OPERATIVE TEMPERATURE</b>	0.01 % f.s/°C	0.01 % f.s/°C	0.005 % f.s/°C	0.02 % f.s/°C	0.005 % f.s/°C	0.02 % f.s/°C	0.005 % f.s/°C	0.005 % f.s/°C
<b>REFERENCE STANDARDS</b>	-10...+60°C	-10...+60°C	-10...+60°C	-10...+60°C	-10...+60°C	-10...+60°C	-10...+60°C	-10...+60°C
<b>MECHANICAL SIZES (mm)</b>	EMC: in conformance with EN 61000-6-4 and EN 61000-6-2	EMC: in conformance with EN 61000-6-4 and EN 61000-6-2	EMC: in conformance with EN 61000-6-4 and EN 61000-6-2	EMC: in conformance with EN 61000-6-4 and EN 61000-6-2	EMC: in conformance with EN 61000-6-4 and EN 61000-6-2	EMC: in conformance with EN 61000-6-4 and EN 61000-6-2	EMC: in conformance with EN 61000-6-4 and EN 61000-6-2	EMC: in conformance with EN 61000-6-4 and EN 61000-6-2
<b>HOUSING</b>	 17.5 mm, per DAT 3014							
	PC/AB (UL94-V0) auto extinguished	PC/AB (UL94-V0) auto extinguished	PC/AB (UL94-V0) auto extinguished	PC/AB (UL94-V0) auto extinguished	PC/AB (UL94-V0) auto extinguished	PC/AB (UL94-V0) auto extinguished	PC/AB (UL94-V0) auto extinguished	PC/AB (UL94-V0) auto extinguished

# ACQUISITION AND CONTROL MODULES SET DAT3000, FOR DIN RAIL MOUNTING

## SERIES

	DIGITAL INPUT MODULES					CONVERTERS/REPEATERS RS232, RS422, RS485:	
	DAT 3130	DAT 3140	DAT 3148	DAT 3188/4	DAT 3188/8	DAT 3580	DAT 3590
GENERAL DESCRIPTION							
INPUT	4 digital channels 0-30 Vdc	4 digital channels 0-30 Vdc	8 digital channels 0-30 Vdc (DAT 3148/8), 12 digital channels 0-30 Vdc (DAT 3148/12)	4 digital channels 0-30 Vdc	8 digital channels 0-30 Vdc	RS232= DAT3580 2W/4W USB= DAT3580 USB	-
OUTPUT	4 relay channels	8 digital channels NPN	-	8 digital channels PNP	8 digital channels PNP	-	-
POWER SUPPLY	10...30 Vdc	10...30 Vdc	10...30 Vdc	10...30 Vdc	10...30 Vdc	10...30 Vdc; 9-18 Vac	10...30 Vdc; 9-18 Vac
ACCURACY	-	-	-	-	-	-	-
THERMAL DRIFT	-	-	-	-	-	-	-
OPERATIVE TEMPERATURE	-10...+60°C	-10...+60°C	-10...+60°C	-10...+60°C	-10...+60°C	-20...+60°C	-20...+60°C
REFERENCE STANDARDS	EMC: in conformance with EN 61000-6-4 and EN 61000-6-2	EMC: in conformance with EN 61000-6-4 and EN 61000-6-2	EMC: in conformance with EN 61000-6-4 and EN 61000-6-2	EMC: in conformance with EN 61000-6-4 and EN 61000-6-2	EMC: in conformance with EN 61000-6-4 and EN 61000-6-2	EMC: in conformance with EN 61000-6-4 and EN 61000-6-2	EMC: in conformance with EN 61000-6-4 and EN 61000-6-2
MECHANICAL SIZES (mm)	 <p>22.5 mm, per DAT 3130 17.5 mm, per DAT 3140, DAT 3148</p>			 <p>17.5      120</p>		 <p>100      225      120</p>	
HOUSING	PC/AB (UL94-V0) auto extinguished			PC/AB (UL94-V0) auto extinguished		PC/AB (UL94-V0) auto extinguished	

# A/D INTERFACE MODULES

## A/D INTERFACE MODULES FOR PLC SET DAT6000, FOR DIN RAIL MOUNTING






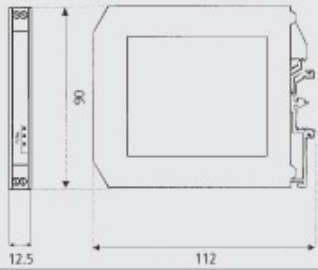
MODULES:  
DAT6011, DAT6012,  
DAT6013, DAT6021,  
DAT6023



### A/D INTERFACE MODULES FOR PLC SET DAT6000, FOR DIN RAIL MOUNTING

#### SERIES

#### MODULES

GENERAL DESCRIPTION	MODULES				
	DAT 6011	DAT 6012	DAT 6013	DAT 6021	DAT 6023
					
A/D Interface for PLC for 2 analog input channels for voltage or thermocouples, galvanic insulated at 2000 Vac.	A/D Interface for PLC for 2 analog input channels for RTD, Resistance and Potentiometer, galvanic insulated at 2000 Vac.	A/D Interface for PLC for 2 analog input channels for voltage or current, galvanic insulated at 2000 Vac.	A/D Interface for PLC for 4 analog input channels for voltage or thermocouples, galvanic insulated at 2000 Vac.	A/D Interface for PLC for 4 analog input channels for voltage or current, galvanic insulated at 2000 Vac.	
INPUT	Voltage: up to $\pm 1$ V, Thermocouples type J, K, R, S, B, E, T, N	RTD and Resistance 2 and 3 wires, Potentiometer	Voltage: up to $\pm 10$ V, Current: up to $\pm 20$ mA	Voltage: up to $\pm 1$ V, Thermocouples type J, K, R, S, B, E, T, N	Voltage (DAT 6023-V): up to $\pm 10$ V, Current (DAT 6023-I): up to $\pm 20$ mA
OUTPUT	-	-	-	-	-
POWER SUPPLY	18...30 Vdc	18...30 Vdc	18...30 Vdc	18...30 Vdc	18...30 Vdc
ACCURACY	$\pm 0.1\%$ f.s	$\pm 0.1\%$ f.s; RTD $\pm 0.2\%$ f.s.	$\pm 0.1\%$ f.s	$\pm 0.1\%$ f.s	$\pm 0.1\%$ f.s
THERMAL DRIFT	0.005 % f.s/ $^{\circ}$ C	0.005 % f.s/ $^{\circ}$ C	0.005 % f.s/ $^{\circ}$ C	0.005 % f.s/ $^{\circ}$ C	0.005 % f.s/ $^{\circ}$ C
OPERATIVE TEMPERATURE	-10...+60 $^{\circ}$ C	-10...+60 $^{\circ}$ C	-10...+60 $^{\circ}$ C	-10...+60 $^{\circ}$ C	-10...+60 $^{\circ}$ C
REFERENCE STANDARDS	EMC: in conformance with EN 61000-6-4 and EN 61000-6-2	EMC: in conformance with EN 61000-6-4 and EN 61000-6-2	EMC: in conformance with EN 61000-6-4 and EN 61000-6-2	EMC: in conformance with EN 61000-6-4 and EN 61000-6-2	EMC: in conformance with EN 61000-6-4 and EN 61000-6-2
MECHANICAL SIZES (mm)					
HOUSING	PA6.6 (UL94-V0) auto extinguished				

## DIN RAIL MOUNTING TRIP AMPLIFIER





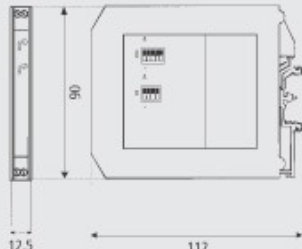
MODULES:  
DAT5024, DAT5024E, DAT5024L, DAT5024D



## DIN RAIL MOUNTING TRIP AMPLIFIER

### SERIES

### MODULES

	DAT 5024	DAT 5024E	DAT 5024L	DAT 5024D
<b>GENERAL DESCRIPTION</b>	 Trip amplifier with 2 independent outputs, dip-switch configurable, galvanic insulated.	 Economical Trip amplifier with 2 independent outputs, dip-switch configurable, galvanic insulated.	 12.5 mm thickness Trip Amplifier with 2 independent outputs, dip-switch configurable, galvanic insulated.	 Trip Amplifier with trip values visualization on display, 2 independent outputs, with dip-switch configuration, galvanic insulated.
<b>INPUT</b>	Thermocouples type J, K, R, S, B, E, T, N, RTD and Resistance 2 and 3 wires, mV, V, mA	Voltage: 0-10 V, 0-5 V, 1-5 V. Current: 4-20 mA and 0-20 mA	Thermocouples type J, K, R, S, B, E, T, N, RTD and Resistance 2 and 3 wires, mV, V, mA	Thermocouples type J, K, R, S, B, E, T, N, RTD and Resistance 2 and 3 wires, mV, V, mA
<b>OUTPUT</b>	N° 2 relays SPDT (Form C) 250 Vac @ 2 A	N° 2 relays SPDT (Form C) 125 Vac @ 0.5 A	N° 2 relays SPDT (Form C) 125 Vac @ 0.5 A	N° 2 relays SPDT (Form C) 250 Vac @ 2 A
<b>POWER SUPPLY</b>	18...32 Vdc	18...32 Vdc	18...32 Vdc	18...32 Vdc
<b>ACCURACY</b>	± 0.1% f.s	± 0.1% f.s	± 0.1% f.s	± 0.1% f.s
<b>THERMAL DRIFT</b>	0.02 % f.s/°C	0.02 % f.s/°C	0.02 % f.s/°C	0.02 % f.s/°C
<b>OPERATIVE TEMPERATURE</b>	-20...+60°C	-20...+60°C	-20...+60°C	-20...+60°C
<b>REFERENCE STANDARDS</b>	EMC: in conformance with EN 61000-6-4 and EN 61000-6-2	EMC: in conformance with EN 61000-6-4 and EN 61000-6-2	EMC: in conformance with EN 61000-6-4 and EN 61000-6-2	EMC: in conformance with EN 61000-6-4 and EN 61000-6-2
<b>MECHANICAL SIZES (mm)</b>				
<b>HOUSING</b>	PA6.6 (UL94-V0) auto extinguished	PA6.6 (UL94-V0) auto extinguished	PA6.6 (UL94-V0) auto extinguished	PA6.6 (UL94-V0) auto extinguished








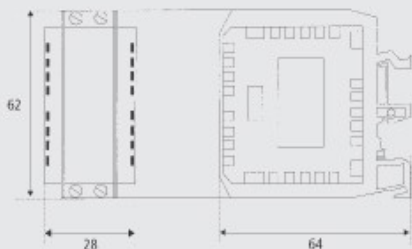
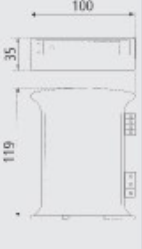
# POWER SUPPLIES

## POWER SUPPLIES FOR DIN RAIL MOUNTING

MODULES:  
DAT410, DAT411,  
DAT411R, DAT411SR,  
DAT420



## POWER SUPPLIES FOR DIN RAIL MOUNTING

		SERIES				
		MODULES				
		DAT 410	DAT 411	DAT 411R	DAT 411SR	DAT 420
GENERAL DESCRIPTION						
		Power supply for transmitters and converters with not regulated double output .	Power supply for transmitters and converters with not regulated double output .	Power supply for transmitters and converters with regulated double output .	Power supply for transmitters and converters with regulated SINGLE output .	Switching power supply.
INPUT		24 Vac, 120 Vac or 230 Vac $\pm$ 10% 50-60 Hz	24 Vac, 120 Vac or 230 Vac $\pm$ 10% 50-60 Hz	24 Vac, 120 Vac or 230 Vac $\pm$ 10% 50-60 Hz	24 Vac, 120 Vac or 230 Vac $\pm$ 10% 50-60 Hz	100...250 Vac $\pm$ 10% 48-65 Hz
OUTPUT		Output 1: 10 Vdc @ 10 mA not regulated. Output 2: 20 Vdc @ 30 mA not regulated.	Output 1: 20 Vdc @ 30 mA not regulated. Output 2: 20 Vdc @ 30 mA not regulated.	Output 1: 20 Vdc @ 30 mA regulated. Output 2: 20 Vdc @ 30 mA regulated.	Output: 20 Vdc @ 55 mA regulated.	Output: 24 Vdc adjustable $\pm$ 10 % @ 1 A regulated.
POWER SUPPLY		-	-	-	-	-
ACCURACY		-	-	-	-	-
THERMAL DRIFT		-	-	-	-	-
OPERATIVE TEMPERATURE		-20...+60 °C	-20...+60 °C	-20...+60 °C	-20...+60 °C	-10...+50 °C
REFERENCE STANDARDS		EMC: in conformance with EN 61000-6-4 and EN 61000-6-2. Safety: EN 61010-1	EMC: in conformance with EN 61000-6-4 and EN 61000-6-2. Safety: EN 61010-1	EMC: in conformance with EN 61000-6-4 and EN 61000-6-2. Safety: EN 61010-1	EMC: in conformance with EN 61000-6-4 and EN 61000-6-2. Safety: EN 61010-1	EMC: in conformance with EN 61000-6-4 and EN 61000-6-2. Safety: EN 60950
MECHANICAL SIZES (mm)						
HOUSING		Polyamide (UL94-V2) auto extinguished				PC/AB (UL94-V0) auto extinguished



# DATEXEL

## **DIGITAL INDICATORS PLACED IN ENCLOSURE 36x72, 48x96**

MODULES PLACED IN ENCLOSURE 36x72:  
DAT701, DAT702, DAT733, DAT734, DAT735








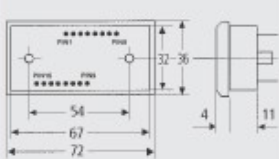
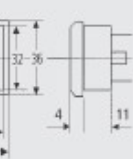


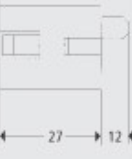
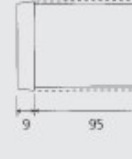

MODULES PLACED IN ENCLOSURE 48x96:  
DAT8050, DAT802, DAT803, DAT804



**DIGITAL INDICATORS**

# DIGITAL INDICATORS PLACED IN ENCLOSURE 36x72, 48x96

## SERIES

	MODULES PLACED IN ENCLOSURE 36x72					MODULES PLACED IN ENCLOSURE 48x96			
	DAT 701	DAT 702	DAT 733	DAT 734	DAT 735	DAT 8050	DAT 802D	DAT 803D	DAT 804D
<b>GENERAL DESCRIPTION</b>									
	Digital indicator with 3.5 LED digits, for voltage and current input.	Digital indicator with 3.5 LCD digits, for voltage and current input.	Digital indicator self powered from current loop 4-20 mA to 3.5 LCD digits, dip-switch configurable.	Digital indicator with 3.5 LED digits for thermoresistance input.	Digital indicator with 3.5 LED digits for thermocouple input.	Digital indicator programmable current loop powered with 4 LED digits.	Digital indicator programmable with 3.5 LED digits for voltage and current inputs, dip-switch configurable.	Digital indicator with 3.5 LED digits for thermoresistance input.	Digital indicator with 3.5 LED digits for thermocouple input.
<b>INPUT</b>	Voltage: up to 200 V, Current: up to 200 mA	Voltage: up to 200 V, Current: up to 200 mA	4-20 mA	Pt100 2 and 3 wires	Thermocouple type K, J, S, E, N or T	4-20 mA	Voltage: 0-10 V, 0-5 V, $\pm 5$ V, $\pm 10$ V. Current: 4-20 mA, 0-20 mA	Pt100 2 and 3 wires	Thermocouple type K, J, S, E, N
<b>OUTPUT</b>	-	-	-	-	-	-	-	-	-
<b>POWER SUPPLY</b>	5 Vdc	5 Vdc 9 Vdc Opt	-	5 Vdc	5 Vdc	-	In function of the chosen option (5 Vdc, 24 Vdc, 120 Vac or 230 Vac)	In function of the chosen option (5 Vdc, 24 Vdc, 120 Vac or 230 Vac)	In function of the chosen option (5 Vdc, 24 Vdc, 120 Vac or 230 Vac)
<b>ACCURACY</b>	$\pm 0.1\%$ f.s	$\pm 0.1\%$ f.s	$\pm 0.1\%$ f.s	$\pm 0.1\%$ f.s	$\pm 0.25\%$ f.s	$\pm 0.05\%$ f.s	$\pm 0.1\%$ f.s	$\pm 0.25\%$ f.s	$\pm 0.25\%$ f.s
<b>THERMAL DRIFT</b>	0.005 % f.s/ $^{\circ}$ C	0.005 % f.s/ $^{\circ}$ C	0.005 % f.s/ $^{\circ}$ C	0.005 % f.s/ $^{\circ}$ C	0.02 % f.s/ $^{\circ}$ C	0.01 % f.s/ $^{\circ}$ C	0.005 % f.s/ $^{\circ}$ C	0.02 % f.s/ $^{\circ}$ C	0.02 % f.s/ $^{\circ}$ C
<b>OPERATIVE TEMPERATURE</b>	-10...+60 $^{\circ}$ C	-10...+60 $^{\circ}$ C	-10...+60 $^{\circ}$ C	-10...+60 $^{\circ}$ C	-10...+60 $^{\circ}$ C	-20...+60 $^{\circ}$ C	-10...+60 $^{\circ}$ C	-10...+60 $^{\circ}$ C	-10...+60 $^{\circ}$ C
<b>REFERENCE STANDARDS</b>	EMC: in conformance with EN 61000-6-4 and EN 61000-6-2	EMC: in conformance with EN 61000-6-4 and EN 61000-6-2	EMC: in conformance with EN 61000-6-4 and EN 61000-6-2	EMC: in conformance with EN 61000-6-4 and EN 61000-6-2	EMC: in conformance with EN 61000-6-4 and EN 61000-6-2	EMC: in conformance with EN 61000-6-4 and EN 61000-6-2	EMC: in conformance with EN 61000-6-4 and EN 61000-6-2	EMC: in conformance with EN 61000-6-4 and EN 61000-6-2	EMC: in conformance with EN 61000-6-4 and EN 61000-6-2
<b>MECHANICAL SIZES (mm)</b>									
<b>HOUSING</b>	Nylon 66 V2 auto extinguished		Nylon 66 V2 auto extinguished			NORYL UL94 V0 auto extinguished	NORYL UL94 V0 auto extinguished		



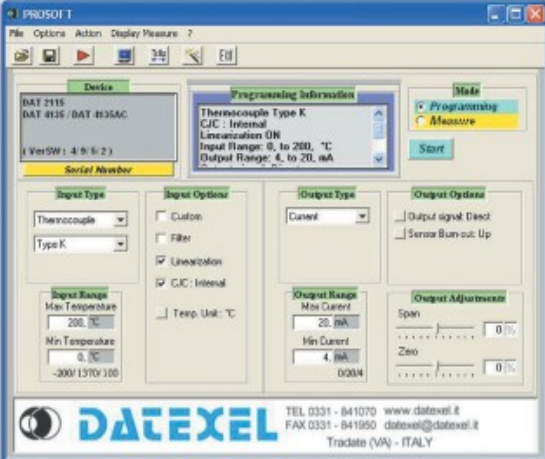
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SOFTWARE AND ACCESSORIES

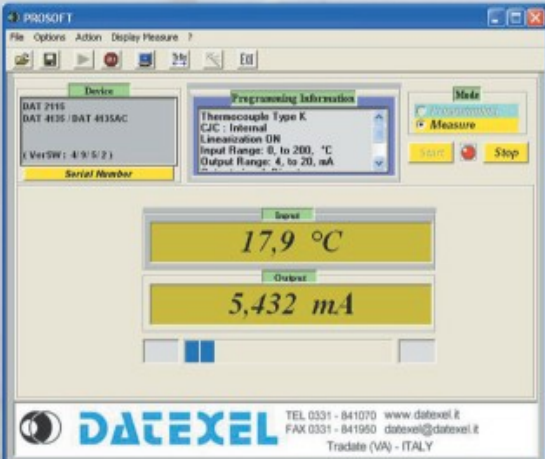
**ProSoft**  
*Version 3.01*  
*Configuration Software*

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## **SOFTWARE AND ACCESSORIES**

**PROSOFT:** PROGRAM SOFTWARE FOR TRANSMITTERS AND CONVERTERS PROGRAMMABLE BY PERSONAL COMPUTER

**PRODAT-04:** PROGRAM INTERFACE FOR TRANSMITTERS AND CONVERTERS PROGRAMMABLE BY PERSONAL COMPUTER

**PRODAT-04 + CVPR03:** PROGRAM INTERFACE FOR TRANSMITTERS AND CONVERTERS PROGRAMMABLE BY PERSONAL COMPUTER SET SMART DATXXX IS SUITABLE TO THE USE IN ZONES WITH ATMOSPHERE POTENTIALLY EXPLOSIVE

**PRODAT IS:** PROGRAM INTERFACE FOR DAT4235IS

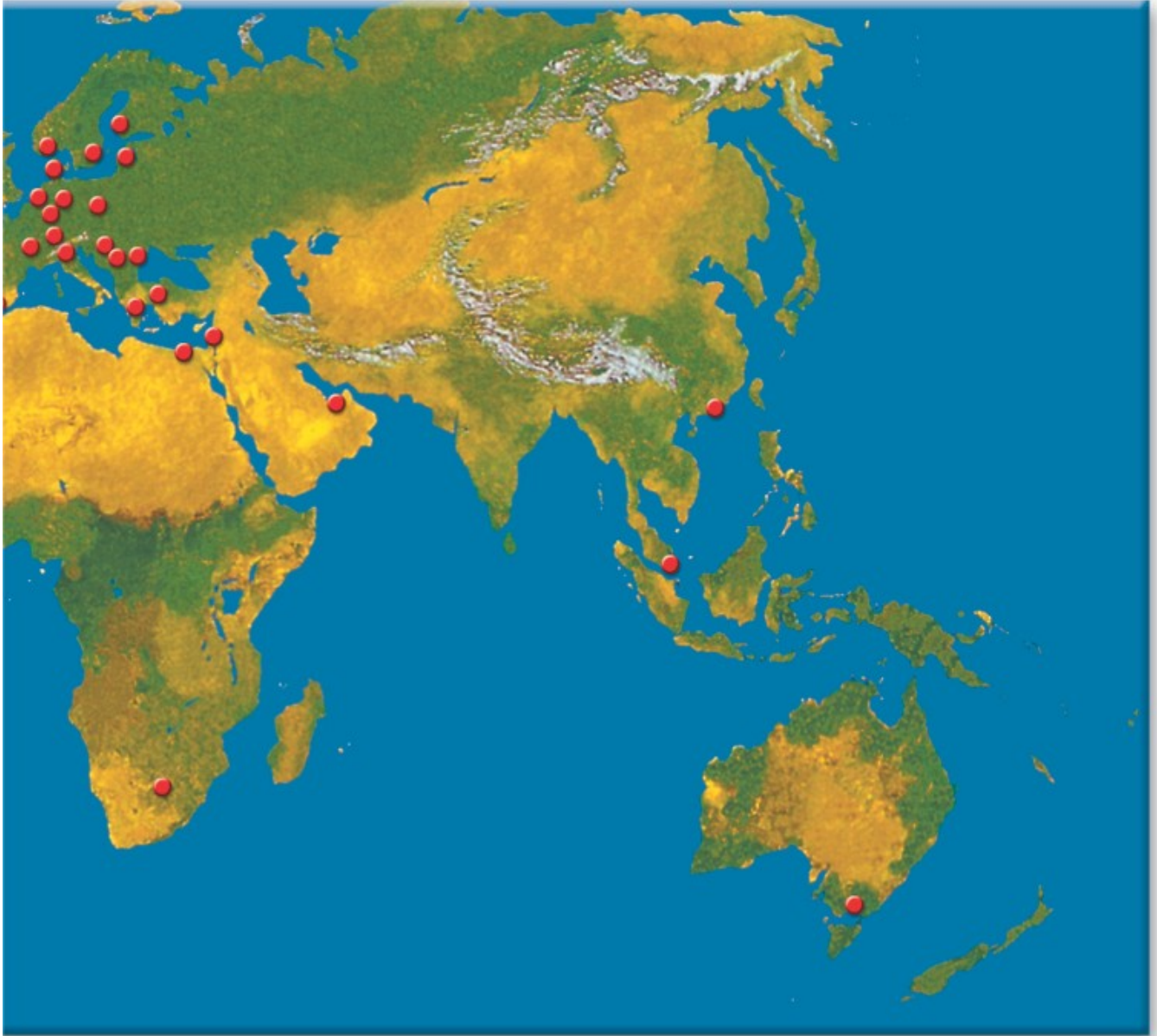


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