



Pixsys
ELECTRONICS

2013

Product Catalogue



A manufacturing company & a registered trademark

Pixsys stands for twenty years of experience in designing and manufacturing of instrumentation for process control and industrial automation. Starting with hardware and software design, up to product assembly, we complete the entire manufacturing cycle at our factory in Italy.

Product concept relies on extremely flexible hardware and software structures allowing reduced order codes, and on user-friendly interfaces and programming tools which simplify start-up and after-sales service.

Browse the web site www.pixsys.net for detailed information.

Sharing and interconnecting, just a few clicks away



DOWNLOAD

Manuals, Software tools and Application Notes available for download within each product page.

VIDEO-MANUALS

Short video-manuals provide descriptions and examples about programming options by keyboard or by Memory Cards, as well as demos of software tools.

FORUM & FAQ

A dedicated area for all your questions related to set-up, configuration and operating modes for Pixsys devices, including FAQ area for round-the-clock answers to the most frequent questions.

TRAINING SESSIONS

Special attention is reserved to technical training about the programmable systems (PLCs, HMIs) and also parametric devices if required. Arranged upon request, they can be focused on a specific project, as an opportunity to combine theory and practice. Contact our Sales dept for details.



EXTENSIVE SALES NETWORK

Become a PIXSYS partner!

Are you a Systems Integrator with a background in PLCs and HMIs programming?

Or a distributor/reseller of industrial electronic devices with a focus on solutions rather than on single components? Contact our Export dept to discuss cooperation and become a partner of our expanding sales network.

NEWSLETTER

Sign-up on our website to receive regular updates about products, special promotions, events and tradeshow.

BLOG

An interactive space to communicate and to share case-histories, ideas, hints and suggestions about Pixsys devices and upcoming projects. Open to your contribution.

Controllers / Indicators



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MAIN FEATURES	ATR121 / ATR141	ATR142	ATR171	ATR236	ATR243
DIMENSIONS (mm)	32 x 74 (front) x 53	32 x 74 (front) x 53	72 x 72 (front) x 99	48 x 48 (front) x 107	48 x 48 (front) x 125
POWER SUPPLY	24 - 230 - 115 Vac 12..24 Vac/dc	24..230 Vac/dc	24..230 Vac/dc	24..230 Vac/dc	24..230 Vac/dc
PROGRAMMABLE ANALOGUE INPUTS	1	1	1 / 2 (23 ABC-T)	1 (Only temperature)	1
DIGITAL INPUT	○	●	●	○	●
CURRENT TRANSFORMER INPUT	○	○	○	○	● (Optional)
RELAY OUTPUTS	2	2	1..4	1	2 / 3
SSR CONTROL OUTPUT	●	●	●	●	●
ANALOGUE OUTPUTS (mA/Volt)	○	○	● (Optional)	○	●
RS 485 / MODBUS	● (Optional)	● (Optional)	● (Optional)	○	● (Optional)

SOFTWARE FEATURES

PID / AUTOTUNING	●	●	●	●	●
PROG. HEATING / COOLING ACTION	●	●	●	●	●
OPEN / CLOSE LOGIC (valves)	●	●	●	○	●
RETRANSMISSION PV/SPV	○	○	●	○	●
REMOTE SETPOINT	○	○	●	○	○
RAMP / SOFT START	○	●	●	●	●
PRE-PROGRAMMED CYCLE (3 steps)	○	●	●	○	●
DUAL PID HEATING / COOLING	●	●	●	○	●
LIMIT CONTROLLER (manual reset)	○	●	●	○	●
DEFROST FUNCTION	○	○	○	○	○
EASY-UP CODES	○	●	●	○	●
MEMORY CARD	●	●	●	●	●
LABSOFTVIEW (programming software)	●	●	●	●	●

PRODUCTS COMPARISON

RATIO PRICE / PERFORMANCE	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★
STOCK TURNOVER	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★

APPLICATIONS

FOOD INDUSTRY	●	●	●	●	●
COLD CHAIN EQUIPMENTS	○	○	○	○	○
HVAC	●	○	●	○	○
PACKAGING	○	●	○	●	●
PLASTICS / RUBBER INDUSTRY	○	●	●	○	●
FOOTWEAR / LEATHER MACHINERY	●	●	○	●	●
TEXTILE INDUSTRY	○	●	○	●	●
LABORATORY EQUIPMENTS	○	●	○	○	●
Ovens / FURNACES	●	●	●	○	●
BURNERS / BOILERS	●	●	○	○	○



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ATR401

48 x 96 (front) x 123

24..230 Vac/dc

2

●

●

2..4

●

● (Optional)

● (Optional)



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DRR245

DIN 43880 (EN50022)

24..230 Vac/dc

1

●

●

2

●

●

●



p. 25

DRR450

(EN50022)

24 V dc

1 (TC K, J, T, E)

○

●

○

○

●



p. 26

STR550

96 x 48 (front) x 48

24..230 Vac/dc

1

2

○

2

2

2

●



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ATR131

32 x 74 (front) x 53

24 - 230 - 115 Vac

1 / 2 (NTC only)

●

○

1 / 3

○

○

○



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DDR132

DIN 43880 (EN50022)

230 Vac

3 (NTC / PTC)

2

○

4 (1 x 30A)

●

○

●

●	●	●	○	○	○
●	●	●	○	●	○
●	●	○	○	○	○
●	●	○	●	○	○
●	○	○	○	○	○
●	●	●	○	○	○
○	●	○	○	○	○
●	●	●	○	○	○
●	●	○	●	○	○
○	○	○	○	●	●
●	●	○	○	○	○
●	●	○	●	●	●
●	●	●	●	●	○

★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★
★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★

○	○	○	●	●	○
○	○	○	○	●	●
○	●	○	●	●	●
●	●	●	●	○	○
●	●	●	●	○	○
○	○	●	○	○	○
○	●	●	●	○	○
●	○	○	●	○	○
●	○	●	●	○	○
●	●	○	○	○	○

Process Controllers / Programmers



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MAIN FEATURES

	ATR 421	ATR 620	ATR 621	ATR 902
DIMENSIONS (mm)	48 x 96 (front) x 123	72 x 72 (front) x 99	72 x 72 (front) x 99	120 x 65 (front) x 65
POWER SUPPLY	24..230 Vac / dc	24 / 110 / 230 Vac	24..230 Vac / dc	230 Vac
PROGRAMMABLE ANALOG INPUTS	1	2	1	1
DIGITAL INPUT	1	2	1	○
RELAY OUTPUTS	2..4	2..3	2..4	2
SSR CONTROL OUTPUT	●	●	●	○
ANALOGUE OUTPUTS (mA/Volt)	●	○	●	○
RS 485 / MODBUS	● (Optional)	●	● (Optional)	○
POTENTIOMETER IMP. / FEEDBACK SIGNAL	●	○	●	○

SOFTWARE FEATURES

PID / AUTOTUNING	●	●	●	●
OPEN / CLOSE LOGIC (Valves)	●	●	●	○
RETRANSMISSION PV/SPV	●	○	●	○
REMOTE SETPOINT	○	●	○	○
CYCLE RECOVERY	●	●	●	●
WAITING FUNCTION	●	●	●	●
DELAYED START	●	●	●	●
GAS KILN OPTIONS	●	○	○	○
MULTILOOP APPLICATIONS	○	○	○	○
CYCLES / PROGRAMS	15	15	15	15
STEPS / SEGMENTS	45	20	45	18
MEMORY CARD	●	●	●	○
LABSOFTVIEW (programming software)	●	○	●	○

PRODUCTS COMPARISON

RATIO PRICE / PERFORMANCE	★★★★★	★★★★★	★★★★★	★★★★★
STOCK TURNOVER	★★★★★	★★★★★	★★★★★	★★★★★

APPLICATIONS

GLASS / CERAMICS KILNS	●	●	●	●
ENVIRONMENTAL CHAMBERS	●	●	●	○
DRYERS	●	●	●	○
HEAT TREATMENT PLANTS	●	●	●	○
LABORATORY EQUIPMENT	●	○	○	○
INDUSTRIAL FURNACES	●	●	●	●
HOBBY KILNS (pottery, metal clay, glassware)	○	○	●	●
METAL WORKING	●	○	●	○
FOOD INDUSTRY	●	○	●	○

Timers / Counters



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ATR 313

251 x 146 (front) x 66

12..24 Vac / dc

See PL300

See PL300

See PL300

See PL300

●

●

● (module PL250)

●

●

●

○

●

●

○

●

●

20

30

●

○

★★★★★

★★★★★

●

●

○

●

●

●

○

●

○

Click on page no. for product details

MAIN FEATURES

	TCT101	TCT201
DIMENSIONS (mm)	32 x 74 (front) x 53	48 x 48 (front) x 107
POWER SUPPLY	24..230 Vac / dc	24..230 Vac / dc
DIGITAL INPUTS (NPN / PNP / TTL)	3	3
RELAY OUTPUTS	2 / 1 (4ABC-T)	2
ANALOGUE INPUT (potentiometer)	●	●
RS485 / MODBUS	● (4ABC-T)	○

SOFTWARE FEATURES

TIMER (on-off / pause-work / oscillator / pwm)	● (1ABC)	● (1ABC)
PROGRAMMABLE TIME BASIS	● (1ABC)	● (1ABC)
COUNTER MODE (up / down / lock / hold)	● (2ABC)	● (2ABC)
COUNTING FREQUENCY (up to 100 khz)	● (2ABC)	● (2ABC)
TACHOMETER (up to 100 khz)	● (3ABC)	● (3ABC)
START / STOP / HOLD BY DIGITAL INPUT	●	●
BACK-UP BATTERY	●	●
MEMORY CARD	●	●
LABSOFTVIEW (programming software)	●	●

PRODUCTS COMPARISON

RATIO PRICE / PERFORMANCE	★★★★★	★★★★★
STOCK TURNOVER	★★★★★	★★★★★

APPLICATIONS

CONTROL PANELS	●	●
PRODUCTION QUANTITY MANAGEMENT	●	●
PRE-SET COUNTINGS	●	●
FOOD INDUSTRY	●	●
WATER TREATMENT	●	●
ENCODER READING	●	●
FLOWMETER OPTION	●	○



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TCT101

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TCT201

PLCs - I/O Modules



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MAIN FEATURES	EPL101 - PLC	PL110 - PLC	PL250 - PLC	PL260 - PLC	PL300 - I/O MOD.
DIMENSIONS (mm)	151 x 80 x max 33	108 x 890 x 64	160 x 90 x 58	160 x 90 x 58	160 x 90 x 58
POWER SUPPLY	24 / 230 Vac	24 Vac / Vdc	12..24 Vac / Vdc	12..24 Vdc	12..24 Vac / Vdc
DIGITAL INPUTS	6 PNP + 1 NPN	8 PNP	16 PNP	16	6
DIGITAL OUTPUTS (PNP)	○	○	○	16 (700 mA each)	○
DIGITAL OUTPUTS (relay)	5 Relay 5A + 1 16A	8 Relay 2A	12 Relay 5A	○	12 Relay 5A
ANALOGUE INPUTS	4 (16 bit)	4 (10 bit)	4 (10 / 16 bit)	4 (16 bit)	4 (16 bit)
ANALOGUE OUTPUTS	1 (0..5V - 8bit)	1 (0..10V - 8bit)	2 (0..10V - 8bit)	4 (0..10V 2 8bit, 2 12bit)	2 (V / mA)
SERIAL PORTS	1 RS232 - 1 RS485	1 USB - 2 RS485	2 RS232 - 1 RS485	1 RS232 - 1 RS485 1 CAN or RS232	1 RS232 - 1 RS485
PROTOCOLS	Modbus - RTU Free port	Modbus - RTU Free port	Modbus - RTU Free port	Modbus - RTU Free port - CAN Master (MCM260 only)	Modbus - RTU
MODBUS MASTER	●	●	●	●	○
MODBUS SLAVE	●	●	●	●	●

SOFTWARE FEATURES

FLASH MEMORY	64 kbyte	64 kbyte	64 kbyte	64 kbyte	○
RAM (variables area)	200 words	350 words (Back-up)	200 words (Back-up)	350 words (Back-up)	○
EEPROM AREA	1000 words	1000 words	127 words	1000 words	○
MEMORY AREA	32000 words (Optional)	13000 words	32000 words (Optional)	13000 words	○
REAL-TIME CLOCK	(Optional)	●	●	●	○
FIRMWARE UPDATE BY MEMORY CARD	●	●	●	●	●
CONTROL ALGORITHMS	P - PI - PID - PD	P - PI - PID - PD	P - PI - PID - PD	P - PI - PID - PD	P - PI - PID - PD
SCANNING CYCLE	Min. 2 ms	Min. 2 ms	Min. 2 ms	Min. 2 ms	○

PROGRAMMING OPTIONS

PIXSYS PLPROG (logic)	●	●	●	●	○
EDS FILES	○	○	○	○	○

PRODUCTS COMPARISON

RATIO PRICE / PERFORMANCE	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★
STOCK TURNOVER	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★

APPLICATIONS

FOOD INDUSTRY	●	○	○	○	○
AIR CONDITIONING	○	●	●	●	●
WOODWORKING	●	○	○	●	○
PACKAGING	○	●	●	●	○
PLASTICS INDUSTRY	●	○	●	●	○
TEXTILE / FOOTWEAR MACHINERY	○	●	○	●	○
DOMOTICS	○	●	●	○	○
KILNS / FURNACES	○	○	○	○	●

Serial converters



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MCM260 - I/O MOD.	ETD884 EXP.MOD.
90 x 71 x 58	92 x 87 x 17
12..24 Vac / Vdc	bus - powered
8 / 16	8
8..16 (700 mA MCM260-1/3)	8
8 Relay 5A (MCM260-4)	0
4 (16 bit)	4 (24 bit)
2 (V / mA)	2 (V/mA)
1 RS485 - 1 CAN	○
Modbus - RTU Free port - CAN Open/Slave	○
○	○
●	○

○	○
○	○
○	○
○	○
○	○
○	○
○	○
○	○

○	○
●	○

★★★★★	★★★★★
★★★★★	★★★★★

●	●
○	○
○	●
○	●
○	●
○	●
○	○
○	○



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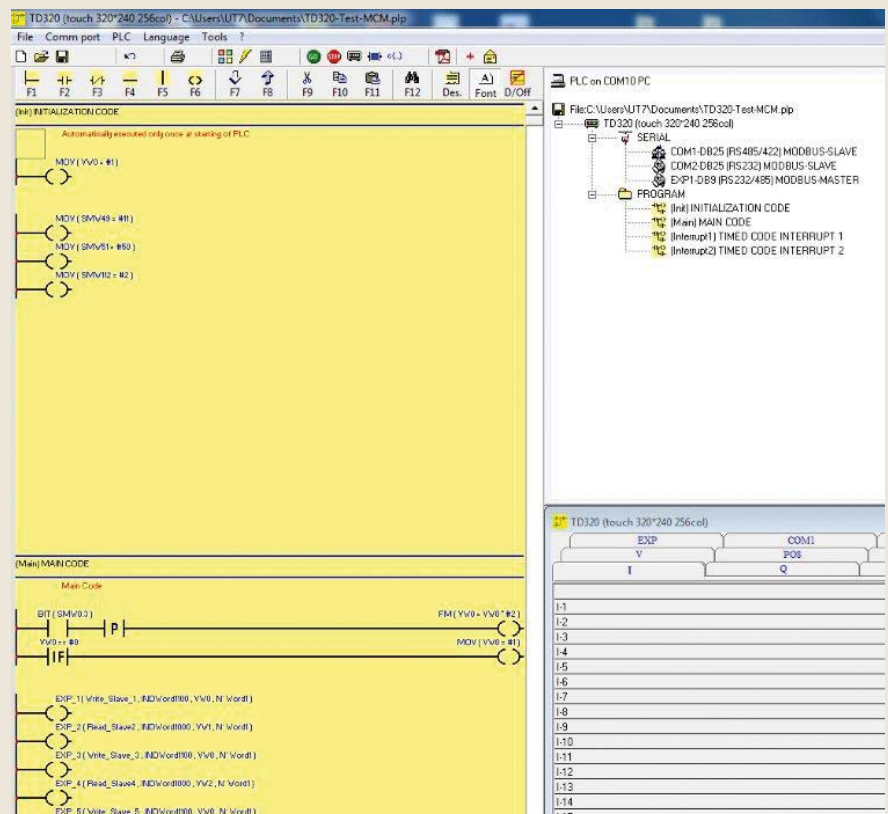
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MAIN FEATURES

	NET 200 SERIAL CONVERTER	NET 250 WIRELESS TRANSMITTER RECEIVER
DIMENSIONS (mm)	101 x 71 x 28	101 x 71 x 28
MOUNTING	DIN Rail	DIN Rail
POWER SUPPLY	12..24 Vac / Vdc - USB	12..24 Vac / Vdc - USB
CONFIGURATION / SET-UP	Automatic	Hyper terminal
CONNECTION (pc-side)	RS232 - USB	USB
CONNECTION (device-side)	RS232 - RS422 - RS485	RS232 - RS485
CHANNELS	○	7
WORKING DISTANCE (standard antenna)	○	Max 100 m free space
WORKING DISTANCE (special antenna)	○	Max 300 m free space

Programming tools



PLProg

Pixsys development environment for PLC and SOFT-PLC programming. It supports Ladder Diagram (LD) language for a straight-forward, simple approach to programming.

HMI - Operator panels



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MAIN FEATURES

	TD240	TD320	TD430	TD570 / TD700
DISPLAY	3.5" TFT	5.7" TFT	4.3" TFT 480 x 272	5.7" TFT 640 x 480 7" TFT 800 x 480
TOUCH-SCREEN	Resistive	Resistive	Resistive	Resistive
DIMENSIONS (mm)	140 x 100 x 40 (AD) or 65 (11AD)	204 x 170 (front) x 48	140 x 100 (front) x 38	204 x 170 (front) x 48
PANEL CUT-OUT	132 x 90	181 x 144	132 x 90	181 x 144
POWER SUPPLY	12..24 Vac / Vdc	12..24 Vac / Vdc	12..24 Vac / Vdc	12..24 Vac / Vdc
SERIAL PORT	(11AD solo Vdc) 2 RS232 / RS485	1 RS232 1 RS485 / 1 RS232	RS485 - CAN - 2 USB	RS232 - RS485 CAN - 2 USB
ETHERNET	○	○	10 / 100 Mbit/s	10 / 100 Mbit/s
DIGITAL I/O	16 Integrated (mod. 11AD)	8 NPN on conn. DB25 2 Relay 2A	See ETD884 (max 1)	See ETD884 (max 2)
ANALOGUE I/O	4 In + 4 Out (0..10V) Integrated (mod. 11AD)	○	See ETD884 (max 1)	See ETD884 (max 2)
SOFT-PLC	●	●	●	●

SOFTWARE FEATURES

OPERATING SYSTEM	Proprietary	Proprietary	Win CE 6.0	Win CE 6.0
PROTOCOLS	Modbus - RTU	Modbus - RTU	Modbus - RTU - Modbus TCP/IP - CAN	Modbus - RTU - Modbus TCP/IP - CAN
CPU	○	○	ARM V4i	ARM V4i
RAM	Back-up 10000 words	Back-up 10000 words	128Mb	128Mb
HARD DISK	○	○	○	○
FANLESS (0-45°C op. temperature)	●	●	●	●
UPS (assisted shut down)	○	○	○	○

PRODUCTS COMPARISON

RATIO PRICE / PERFORMANCE	★★★★★	★★★★★	★★★★★	★★★★★
STOCK TURNOVER	★★★★★	★★★★★	★★★★★	★★★★★

PROGRAMMING TOOLS

MOVICON X86 (logic - graphics)	○	○	○	○
PLPROG (logic)	●	●	○	○
TD-DESIGNER (graphics)	●	●	○	○
MOVICON CE (logic - graphics)	○	○	●	●
POWER HMI X86 (logic - graphics)	○	○	○	○
POWER HMI CE (logic - graphics)	○	○	●	●
LOGIC LAB (logic)	○	○	●	●
PAGE LAB (graphics)	○	○	●	●

Panel PC



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TD750



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TD850



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TD900

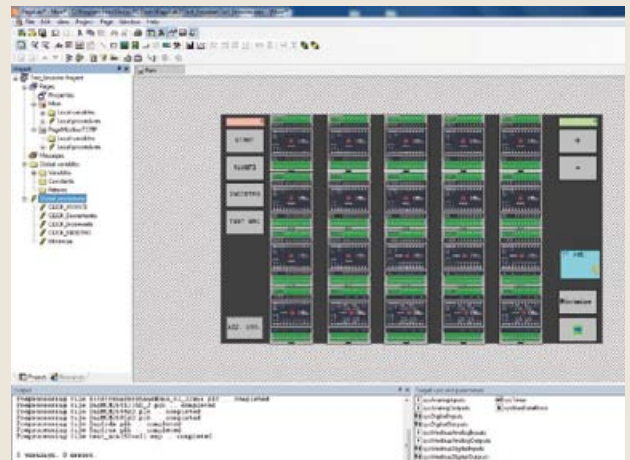
7" TFT 800 x 600	10.4" TFT 800 x 600	15" TFT 1024 x 768
Resistive	Resistive	Resistive
204 x 160 (front) x 34	325 x 260 (front) x 34	435 x 330 (front) x 38
181 x 144	302 x 242	416 x 313
24 Vdc	24 Vdc	24 Vdc
RS232 - RS485 CAN - 3 USB	RS232 - RS485 CAN - 3 USB	RS232 - RS485 CAN - 3 USB
10 / 100 Mbit/s	10 / 100 Mbit/s	10 / 100 Mbit/s
See ETD884 (max 1)	See ETD884 (max 1)	See ETD884 (max 1)
See ETD884 (max 1)	See ETD884 (max 1)	See ETD884 (max 1)
○	○	○

Windows x86	Windows x86	Windows x86
Modbus - RTU - Modbus TCP/IP - CAN	Modbus - RTU - Modbus TCP/IP - CAN	Modbus - RTU - Modbus TCP/IP - CAN
Intel® ATOM™ up to 1,6Ghz	Intel® ATOM™ up to 1,6Ghz	Intel® ATOM™ up to 1,6Ghz
Up to 1GB	Up to 1GB	Up to 1GB
SSD 16GB Sata SSD 64GB Sata	SSD 16GB Sata SSD 64GB Sata	SSD 16GB Sata SSD 64GB Sata
●	●	●
●	●	●

★★★★★	★★★★★	★★★★★
★★★★★	★★★★★	★★★★★

●	●	●
○	○	○
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○	○	○
●	●	●
○	○	○
●	●	●
●	●	●

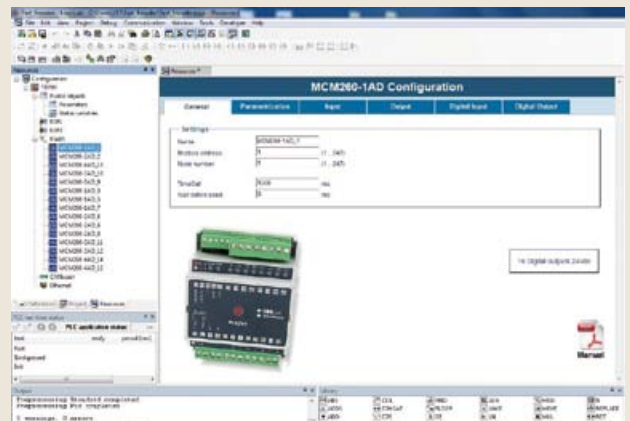
Programming tools



PageLab

Graphic development environment for HMIs. It interfaces directly to PLC compiler LogicLab and thus interacts easily with SoftPLC variables defined in PLC applications. It also allows to implement small sections of logics in ST (structured text).

YouTube



LogicLab

Soft-PLC development environment. Supporting all 5 programming languages of the standard IEC 61131-3: Instruction List (IL), Structure Text (ST), Ladder Diagram (LD), Function Block Diagram (FBD), Sequential Function Chart (SFC). Pixsys devices and controllers may be easily integrated into networks thanks to "Drag and drop" function.

YouTube



Movicon 11

All-in-one development environment for graphics and logic on Windows CE and Windows x86/x64. Inbuilt extensive library of symbols and graphical objects for powerful synoptics. It is also possible to create custom logics using editable scripts in VBA language, VB.Net and Instructions list (AWL).

YouTube

Sensors and complementary fittings

ADAPTERS/COVER PLATES



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PANEL-MOUNTING
ADAPTERS

p. 71

DIN RAIL MOUNTING
ADAPTERS

INFRARED SENSORS

Non-contact temperature measurement



p. 60

PC21-151-301

Fixed emissivity
-20 to 500°C

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PC21-151-301-WJ

Including air / water
cooled housing

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PU151

Configurable
emissivity USB cable
for PC connection

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PYROMINI

Miniature sensing
head - optional
touchscreen
datalogging

TEMPERATURE SENSORS

EASY-UP password for quick set-up



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PT100

Class B
3 wires
GSC / TTS cable

p. 55

PT100

Air probes
Class B
3 wires

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PT100 (OPTIONAL
TRANSMITTER
4..20mA)Class B
DIN-B head

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PT1000

GSC / TTS cable
PVC Thermoplastic
sealing IP65 / IP67

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PTC1K

KTY82-121
GSC / PVC cable

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NTC10K

β3435
Thermoplastic sealing
IP65 / IP67

HUMIDITY TRANSMITTERS



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RH96

Hum. / Temp.
OEM applications

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EE06

Compact transmitters
OEM applications

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EE21

High precision
Hum. / Temp.
HVAC

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EE23

Hum. / Temp.
Industrial
applications

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EE375

Dew point
Temp. transmitters
OEM applications

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OKPAC

Zero-crossing
Resistive loads
25A..125A / 1ph

PRESSURE TRANSMITTERS

				
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ECT	ECT / NAT	ATM.ECO	FL-ME	PTx Echo MDx SPX Vertex
Low range up to 600mBar	Range 1..1000Bar	Submersible transmitters	Flush membrane transmitters	Dynisco Melt pressure transmitters

			
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TCJ	TCJ	TCK	2000.35.010 SIGNAL CONVERTER
GSC / TTS cable	Washer TCJ GSC / TTS cable	GSC / TTS cable	RTD to 4..20mA

THERMOCOUPLES high temperature


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TC-K
DIN-B head Alumina sheath up 1280°C

SSR - SOLID STATE RELAYS

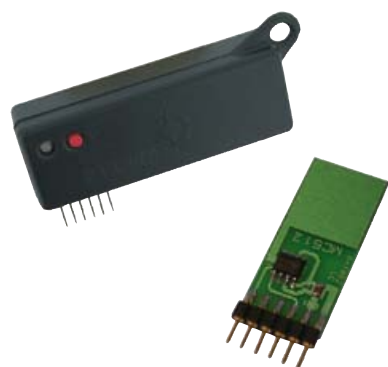
			
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SAL / SU / SUL	SWTA	SIT	SGT
Zero-crossing Resistive loads 30..75A / 1ph	Phase-angle Resistive / inductive Ctrl 4..20mA, 32A / 3ph	Zero-crossing Ctrl 90-240 Vac 50A / 3ph	Zero-crossing Ctrl 8-32 Vdc 50A / 3ph

POWER SUPPLIES

	
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MDR	DR
1ph Out 24Vdc	1ph / 3ph Out 24Vdc



PARAMETRIC DEVICES



MEMORY CARDS You Tube

Memory cards with / without battery

Memory Cards are conceived to support the installer/operator, allowing simplified and time-saving setting of parameters on Pixsys controllers/programmers/timers, particularly if involving serial production or repetitive applications.

The version with internal battery (1000 programmings, replaceable) allows quick and error-saving duplication of parameters, not requiring connection to power supply for the controller. USB port ensures connection to PC and software tool Pixsys LABSOFTVIEW.

Ordering codes

2100.30.002	M.c.Par Series ATR171 -ATR236-ATR243-ATR401-DRR245
2100.30.003	M.c.Par/Upgrade-Batt. Series ATR121 - ATR141 - ATR142 - ATR171 - ATR236 - ATR243 ATR401 - DRR132 - DRR245
2100.30.005	M.c.Par Series ATR121-ATR141-ATR142-TCT101
2100.30.006	M.c.Par Series ATR421-ATR621
2100.30.007	M.c.Par/Upgrade-Batt. Series ATR421-ATR621
2100.30.008	M.c.Par Series ATR620
2100.30.009	M.c.Upgrade Series ATR500-ATR620

LABSOFTVIEW You Tube

SW- HW Kit for configuration / setting of Pixsys ATR/DRR/TCT devices

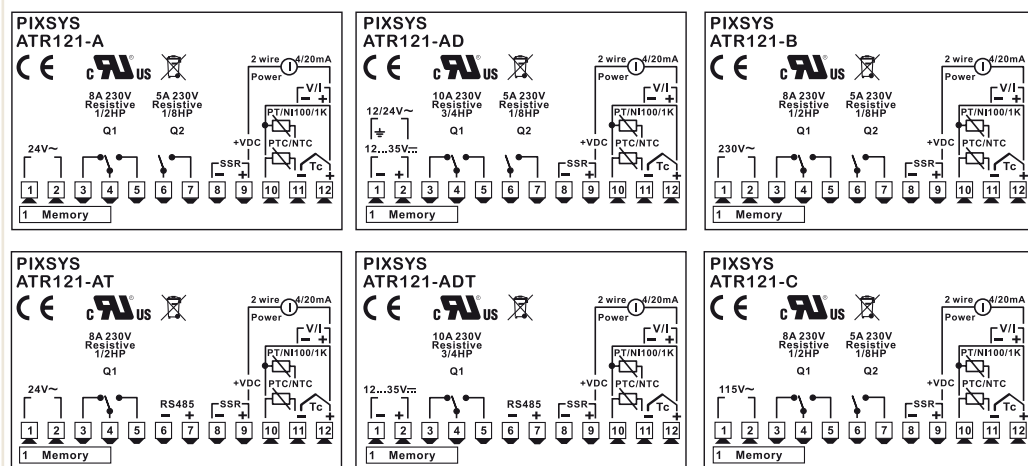
Conceived for the configuration and monitoring of Pixsys devices ATR/DRR/TCT, the software LabSoftView for Windows is easy to install and to operate. Labsoftview allows to set the parameters and setpoint values. Settings can be saved on file and recalled for further use. Process and setpoint trends can be monitored and graphically visualized to support eventual adjustments of control algorithm and PID settings. The kit includes software on CD, Memory Card with battery and USB cable.

Ordering codes

2100.10.020	KIT Labsoftview software + hardware (memory card + USB cable)
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WIRING PLAN



ATR121

Controller double setpoint

[YouTube](#)

Main features

Box	32x74 (front panel) x 53 mm
Power supply	12..24 Vac/Vdc or 24Vac/115Vac/230Vac $\pm 15\%$ 50/60 Hz
Consumption	2 W
Display	3 digits, 0,56" red + 3 signaling leds
Operating conditions	Temperature 0-45 °C, humidity 35..95 RH%
Material	Box: Noryl UL94V1 self-extinguishing; front panel: ABS UL94V0 self-extinguishing
Weight	Approx. 100 g
Sealing	Front panel IP65 (with gasket) , Box IP30, Terminal blocks IP20
Quick set-up options	Memory Card with/without battery, software LABSOFTVIEW

Inputs

1 configurable	Selection TC, K, J, S, R, PT100,PT500, PT1000, Ni100, PTC1K, NTC10K (B 3435K), 0/4..20 mA, 0..10 V, Potentiometer 1..6/160 Kohm
Sampling frequency	66ms (frequency 15 Hz)

Outputs

2 Relays	1 Relay 10A/8A - 250 Vac resistive charge + 1 Relay 5A - 250 Vac resistive charge
1 SSR	8 Vdc - 20 mA (codes A/B/C) - 15 Vdc - 30 mA (code AD)
Serial communication	RS485 Modbus RTU - Slave

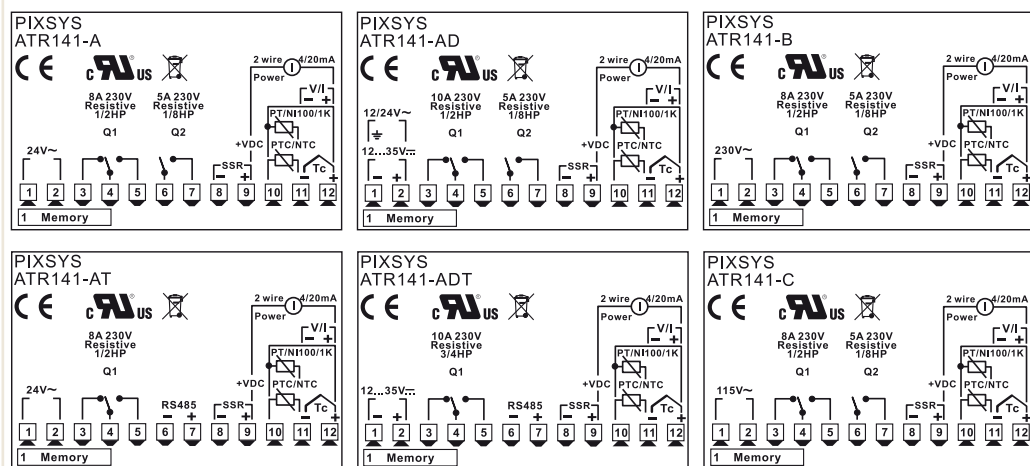
Software features

Control algorithms	ON - OFF with hysteresis, P., P.I., P.I.D., P.D. time proportioned, Dead band
Tuning	manual or automatic
Operating modes	Visualizer, Single setpoint, Double setpoint (selection by parameter)
Data protection	Lock of control / alarm setpoint - Access to parameters by password
Alarm modes	Absolute / Threshold, band, High / Low deviation. Alarm with optional manual reset
Double P.I.D.	Heating / Cooling P.I.D.
Open / Close logic	Open / Close logic for motorized valves

Ordering codes

ATR121-AD	1 Analogue Input + 2 Relays 8 A + 1 SSR 12Vdc / Supp. 12..24Vac/Vdc
ATR121-A	1 Analogue Input + 2 Relays 8 A + 1 SSR 12Vdc / Supp. 24Vac
ATR121-B	1 Analogue Input + 2 Relays 8 A + 1 SSR 12Vdc / Supp. 230Vac
ATR121-C	1 Analogue Input + 2 Relays 8 A + 1 SSR 12Vdc / Supp. 115Vac
ATR121-AD-T	1 Analogue Input + 1 Relay 8 A + 1 SSR 12Vdc + RS485 Modbus RTU Slave / Supp. 12..24Vac/Vdc

WIRING PLAN



ATR141

Controller double setpoint

Main features

Box	32x74 (front panel) x 53 mm
Power supply	12..24 Vac/Vdc or 24Vac/115Vac/230Vac $\pm 15\%$ 50/60 Hz
Consumption	2 W
Display	4 digits, 0.4"red + 3 signaling leds
Operating conditions	Temperature 0-45 °C, humidity 35..95 RH%
Material	Box: Noryl UL94V1 self-extinguishing; front panel: PC ABS UL94V0 self-extinguishing
Weight	Approx. 100 g
Sealing	Front panel IP65 (with gasket) , Box IP30, Terminal blocks IP20
Quick set-up options	Memory Card with / without battery, software LABSOFTVIEW

Inputs

1 configurable	Selection TC, K, J, S, R, PT100,PT500, PT1000, Ni100, PTC1K, NTC10K (B 3435K), 0/4..20 mA, 0..10 V, Potentiometer 1..6/160 Kohm
Sampling frequency	66ms (frequency 15 Hz)

Outputs

2 Relays	1 Relay 10A/8A - 250 Vac resistive charge + 1 Relay 5A - 250 Vac resistive charge
1 SSR	8 Vdc - 20 mA (codes A/B/C) - 15 Vdc - 30 mA (code AD)
Serial communication	RS485 Modbus RTU - Slave

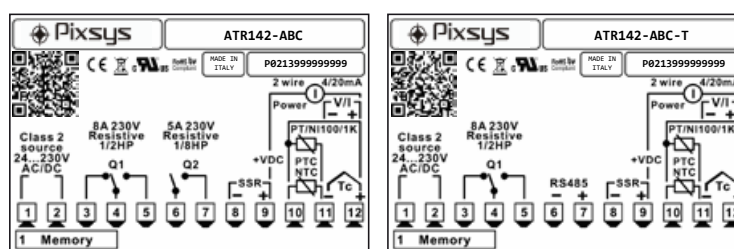
Software features

Control algorithms	ON - OFF with hysteresis, P., P.I., P.I.D., P.D. time proportioned, Dead band
Tuning	manual or automatic
Operating modes	Visualizer, Single setpoint, Double setpoint (selection by parameter)
Data protection	Lock of control / alarm setpoint - Access to parameters by password
Alarm modes	Absolute / Threshold, band, High / Low deviation. Alarm with optional manual reset
Double P.I.D.	Heating / Cooling P.I.D.
Open / Close logic	Open / Close logic for motorized valves

Ordering codes

ATR141-AD	1 Analogue Input + 2 Relays 8 A + 1 SSR 12Vdc / Supp. 12..24Vac/Vdc
ATR141-A	1 Analogue Input + 2 Relays 8 A + 1 SSR 12Vdc / Supp. 24Vac
ATR141-B	1 Analogue Input + 2 Relays 8 A + 1 SSR 12Vdc / Supp. 230Vac
ATR141-C	1 Analogue Input + 2 Relays 8 A + 1 SSR 12Vdc / Supp. 115Vac
ATR141-AD-T	1 Analogue Input + 1 Relay 8 A + 1 SSR 12Vdc + RS485 Modbus RTU Slave / Supp. 12..24Vac/Vdc

WIRING PLAN



ATR142

Three setpoint controller



Main features

Box	32x74 (front panel) x 53 mm
Power supply	24..230Vac/dc $\pm 15\%$ 50/60 Hz
Consumption	2 W
Display	4 digits 0,4" green + 4 digits 0,3" red + 6 signaling leds
Operating conditions	Temperature 0-45 °C, humidity 35..95 RH%
Material	Box: Noryl UL94V1 self-extinguishing; front panel: PC ABS UL94V0 self-extinguishing
Weight	Approx. 112 g
Sealing	Front panel IP65 (with gasket) , Box IP30, Terminal bloks IP20
Quick set-up options	Memory Card with / without battery, software LABSOFTVIEW, EASY-UP codes

Inputs

1 configurable	Selection TC, K, J, S, R, PT100, PT500, PT1000, Ni100, PTC1K, NTC10K (B 3435K), 0/4..20 mA, 0..10 V, 0..40mV, Potentiometer 1..6/160 Kohm.
Sampling time	Up to 4,1 ms (Frequency 242 Hz)
1 digital input	1/2 setpoint selection, Hold, Run (only if TC, 0..10V, 0/4..20mA, 0..40mV)

Outputs

2 Relays	1 Relay 8A - 250 Vac resistive charge + 1 Relay 5A - 250 Vac resistive charge
1 SSR	12 Vdc - 30 mA
Serial communication	RS485 Modbus RTU - Master/Slave

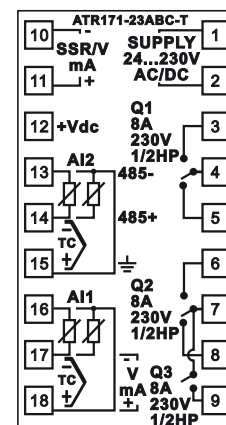
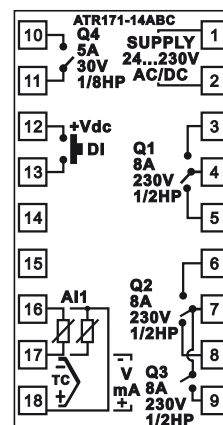
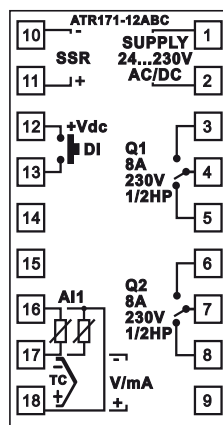
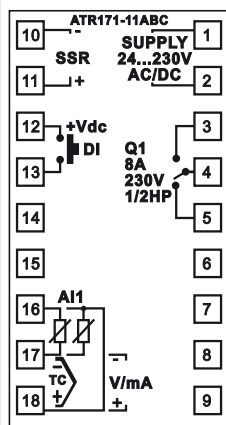
Software features

Control algorithms	ON - OFF with hysteresis, P, P.I., P.I.D., P.D. time proportioned, dead band
Tuning	manual or automatic
Data protection	Lock of command / alarm setpoint - Access to parameters by password
Alarm modes	Absolute / Threshold, band, High / Low deviation. Alarm with optional manual reset
Soft-Start	Rising gradient expressed as Degrees / Hour
Double P.I.D.	Heating / Cooling P.I.D.
Programmer function	Start / Stop, 3 steps pre-programmed cycle
Timer function	Controller function + single / double Timer
Open / Close logic	Open / Close logic for motorized valves

Ordering codes

ATR142-ABC	1 Analogue Input + 2 Relays 8/5 A + 1 SSR 12Vdc / Supp. 24..230Vac/Vdc
ATR142-ABC-T	1 Analogue Input + 1 Relay 8 A + 1 SSR 12Vdc + RS485 / Supp. 24..230Vac/Vdc

WIRING PLAN



ATR171

Controller multi-setpoint / Dual input

Main features

Box	72x72 (front panel) x 99 mm
Power supply	24..230Vac/dc $\pm 15\%$ 50/60 Hz
Consumption	5,5 VA
Display	4 digits 0,5" green + 4 digits 0,3" red + 6 signaling leds
Operating conditions	Temperature 0-45 °C, 35..95 RH%
Material	Box: Noryl UL94V1 self-extinguishing; Front panel: Silicon rubber V0
Weight	Approx. 250 g
Sealing	Front panel IP54 (with gasket), Box IP30, Terminal blocks IP20
Quick set-up options	Memory Card with / without battery, software LABSOFTVIEW, EASY-UP codes

Inputs

1 Configurable	Selection TC, K, J, S, R, PT100, PT500, PT1000, Ni100, PTC1K, NTC10K (B 3435K), 0/4..20 mA, 0..10 V, 0..40mV, Potentiometer 1..6/160 Kohm
1 Configurable	Selection TC, K, J, S, R, PT100, PT500, PT1000, Ni100, PTC1K, NTC10K (B 3435K) - (code -23ABC-T)
Sampling time	Programmable up to 4,1 ms (Frequency up to 242 Hz)
1 Digital input	1..4 setpoints selection, Hold, Run (codes -11/12/14ABC)

Outputs

1..3 Relays	1..3 Relays 8A - 250 Vac resistive charge + 1 Relay 5A - 30 V resistive charge (code -14ABC)
1 Analogue	Selection SSR 12 Vdc - 30 mA / 0..10V / 4..20mA as command or retransmission setpoint-process (code -23ABC-T)
Serial communication	RS485 Modbus RTU - Slave (code -23ABC-T)

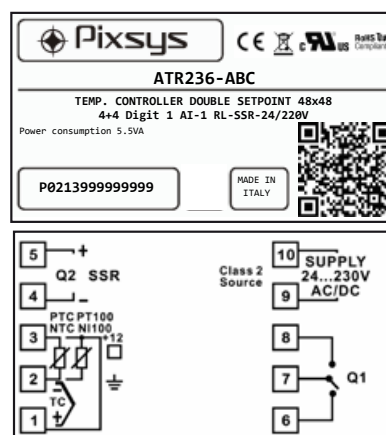
Software features

Control algorithms	ON - OFF with hysteresis, P, P.I., P.I.D., P.D. time proportioned. Automatic / Manual regulation
Tuning	Manual / Automatic
Data protection	Lock of command / alarm setpoint - Access to parameters by password
Alarm modes	Absolute / Threshold, band, High / Low deviation. Alarm with optional manual reset and activation delay.
	Dead band function
Soft-Start	Rising gradient expressed as Degrees / Hour
Double P.I.D.	Heating / Cooling P.I.D.
Programmer function	3 steps pre-programmed cycle with Start / Stop
Timer function	Controller function + decremental Timer
Remote setpoint	Command setpoint corresponding to AI1 4..20 mA / 0..10 V (code -23ABC-T)
Double input mode	AI1 and AI2 input correlation as mean, difference or addition of process (only for temperature sensors TC - RTD on code -23ABC-T)

Ordering codes

ATR171-11ABC	1 Analogue Input + 1 Relay 8 A + 1 SSR 12Vdc - Supp. 24..230Vac/Vdc
ATR171-12ABC	1 Analogue Input + 2 Relays 8 A + 1 SSR 12Vdc - Supp. 24..230Vac/Vdc
ATR171-14ABC	1 Analogue Input + 3 Relays 8 A + 1 Relay 5 A(30V) + 1 SSR 12Vdc - Supp. 24..230Vac/Vdc
ATR171-23ABC-T	2 Analogue Inputs + 3 Relays 8 A + 1 SSR / 0..10V / 4..20mA + RS485 - Supp. 24..230Vac/Vdc

WIRING PLAN



ATR236

Temperature Controller / single setpoint

Main features

Box	48x48 (front panel) x 107 mm
Power supply	24...230Vac/dc $\pm 15\%$ 50/60 Hz (galvanically isolated)
Consumption	5,0 VA, 4W
Display	4 digits 0,4" green + 4 digits 0,3" red
Operating conditions	Temperature 0-45 °C, humidity 35..95 RH%
Material	Box: Noryl UL94V1 self-extinguishing, front panel: PC ABS UL94V0 self-extinguishing
Weight	Approx. 165 g
Sealing	IP65 (Front panel), IP20 (Box and terminal bloks)
Quick set-up options	Memory Card with / without battery, software LABSOFTVIEW, EASY-UP codes

Inputs

1 Configurable	Selection TC, K, J, S, R, PT100, PT500, PT1000, Ni100, PTC1K, NTC10K (B 3435K)
Sampling time	Programmable up to 4,1 ms (frequency up to 242 Hz)

Outputs

1 Relay	Relay 5 A - 250 Vac resistive charge
1 SSR	12 Vdc - 30 mA max

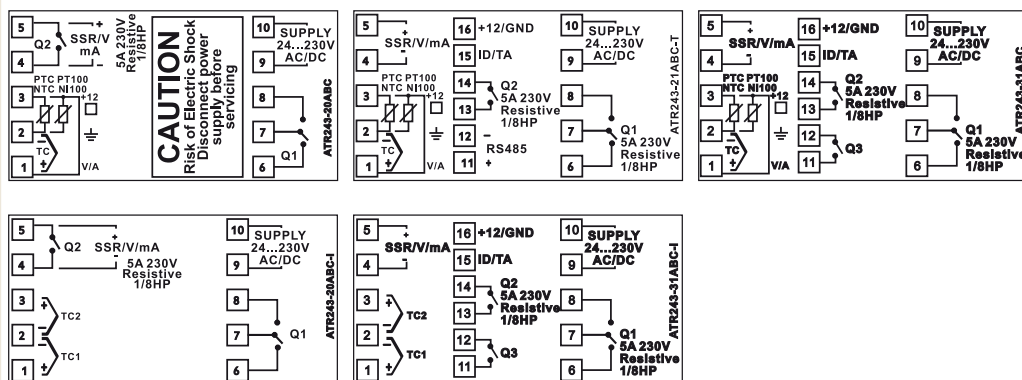
Software features

Control algorithms	ON - OFF with hysteresis, P., P.I., P.I.D., P.D. time proportioned
Tuning	Manual or automatic
Data protection	Lock of control / alarm setpoint, Access to parameters by password
Alarm modes	Absolute / Threshold, band, high / low deviation. Alarm with optional manual reset
Auto / Man function	Command output percentage
Soft-Start	Rising gradient expressed as Degrees / Hour

Ordering codes

ATR236-ABC	1 Analogue input + 1 Relay 5 A + 1 Ssr - 12Volt
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WIRING PLAN



ATR243

Controller multi-setpoint

[YouTube](#)

Main features

Box	48x48 (front panel) x 125 mm
Power supply	24...230Vac/dc $\pm 15\%$ 50/60 Hz (galvanic isolation)
Consumption	5,5 VA, 4W
Display	4 digits 0,4 " green + 4 digits 0,3" red
Operating conditions	Temperature 0-45 °C, humidity 35..95 RH%
Material	Box: Noryl UL94V1 self-extinguishing, front panel: PC ABS UL94V0 self-extinguishing
Weight	Approx. 165 g (-20ABC) -185 g (-21ABC/31ABC)
Sealing	IP65 (Front panel), IP20 (Box and Terminal bloks)
Quick set-up options	Memory Card with / without battery, software LABSOFTVIEW, or EASY-UP codes

Inputs

1 Configurable	Selection TC, K, J, S, R, PT100, PT500, PT1000, Ni100, PTC1K, NTC10K (B 3435K), 0/4...20 mA, 0...10 V, 0...40mV, Potentiometer 1..6/160 Kohm, T.A (1024 points)
Sampling time	Programmable up to 4,1 ms (Frequency up to 242 Hz)
1 Digital input	1/2...4 setpoint change / Hold, Run, Tuning launch, Start/stop cycle
1 T.A. input	Selection T.A. 50 mA - 100 ms - 1024 points (codes -21/-31ABC)

Outputs

2/3 Relays	Relay 5 A - 250 Vac resistive charge
1 SSR	12 Vdc - 30 mA max
1 Analogue	Selection 4 - 20 mA or 0 - 10 Vdc for command or retransmission PV/SPV
Serial communication	RS485 Modbus RTU - Slave (code 21ABC-T)

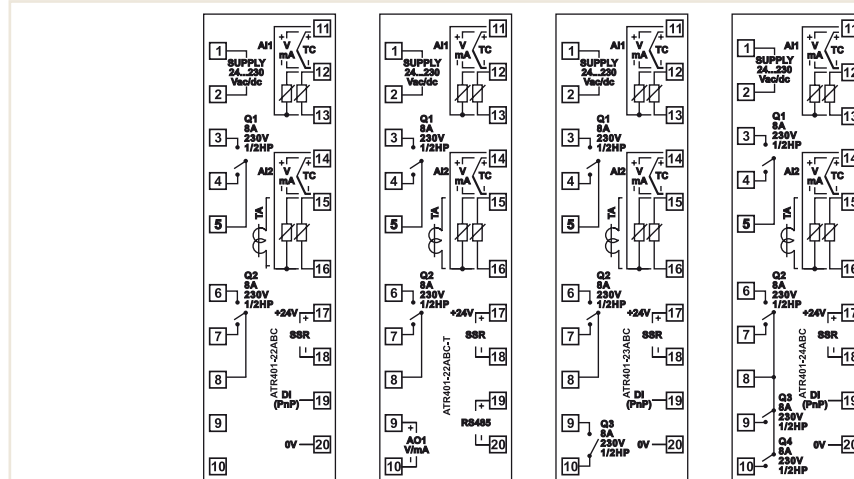
Software features

Control algorithms	ON - OFF with hysteresis, P, P.I., P.I.D., P.D. time proportioned
Tuning	Manual or automatic
Data protection	Lock of control / alarm setpoint, Access to parameters by password
Alarm modes	Absolute / Threshold, Band, High / Low deviation. Alarm with optional manual reset. Loop Break Alarm function
Auto / Man function	Output percentage command also with automatic change in case of sensor failure
Double P.I.D.	Heating / Cooling P.I.D.
Programmer function	Start / Stop pre-programmed cyle with 2/3 steps
Soft-Start	Rising gradient expressed as Degrees / Hour
Open / Close logic	Open / Close logic for motorized valves

Ordering codes

ATR243-20ABC	1 Analogue input + 2 Relays 5 A or 1 Relay 5 A + 1Ssr/V/mA
ATR243-21ABC-T	1 Analogue input + 2 Relays 5 A + 1Ssr/V/mA + RS485 + TA
ATR243-31ABC	1 Analogue input + 3 Relays 5 A + 1Ssr/V/mA + TA
ATR243-20ABC-I	2 Analogue inputs (TC) + 2 relays 5A or 1 Relay 5A +1 SSR/v/mA
ATR243-31ABC-I	2 Analogue inputs (TC) + 3 relays 5A +1 SSR/v/mA+TA

WIRING PLAN



ATR401

Controller multisetpoint / dual input

[YouTube](#)

Main features

Box	48x96 (front panel) x 123 mm
Power supply	24..230Vac/dc $\pm 15\%$ 50/60 Hz (with Jumper 24 - 110..230Vac)
Consumption	5,5 VA, 4W
Display	4 digits 0,4 " green + 4 digits 0,3 " red
Operating conditions	Temperature 0-45 °C, humidity 35..95 RH%
Material	Box: Noryl UL94V1 self-extinguishing, front panel: Silicon rubber V0
Weight	Approx. 350 g
Sealing	IP65 (Front panel), IP20 (Box and Terminal bloks)
Quick set-up options	Memory Card with /without battery, software LABSOFTVIEW, EASY-UP codes

Inputs

2 Configurables	Selection TC, K, J, S, R, PT100, PT500, PT1000, Ni100, PTC1K, NTC10K (B 3435K), 0/4..20 mA, 0..10 V, Potentiometer 6/160 Kohm, T.A.
Sampling time	Programmable up to 4,1 ms (Frequency up to 242 Hz)
1 Digital input	2..4 setpoints selection, Hold, Run, Tuning launch, automatic / manual selection
1 T.A. input	Selection T.A. 50 mA - 100 ms overlapped to AI2

Outputs

2..4 Relays	Relay 8 A - 250 Vac resistive charge
1 SSR	24 Vdc - 25 mA max
1 Analogue	Selection SSR 12Vdc - 4..20 mA or 0..10 Vdc for command or retransmission PV/SPV
Serial communication	RS485 Modbus RTU - Slave

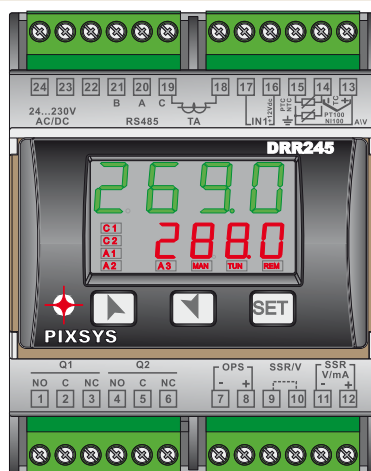
Software features

Control algorithms	ON - OFF with hysteresis, P., P.I., P.I.D., P.D. time proportioned
Tuning	Manual or automatic
Data protection	Lock of control / alarm setpoint, Access to parameters by password
Alarm modes	Absolute / Threshold, band, High / Low deviation. Alarm with optional manual reset. Loop Break Alarm function
Remote setpoint	Command setpoint corresponding to AI2 (4..20 mA / 0..10 V)
Double P.I.D.	Heating / Cooling P.I.D.
Double input mode	AI1 and AI2 inputs correlation as mean, difference or addition of process values
Soft-Start	Rising gradient expressed as Degrees / Hour
Open / Close logic	Open / Close logic for motorized valves

Ordering codes

ATR401-22ABC	2 Analogue inputs + 2 Relays 8 A + 1 SSR 12Vdc
ATR401-23ABC	2 Analogue inputs + 3 Relays 8 A + 1 SSR 12Vdc
ATR401-24ABC	2 Analogue inputs + 4 Relays 8 A + 1 SSR 12Vdc
ATR401-22ABC-T	2 Analogue inputs + 2 Relays 8 A + 1 SSR 12Vdc, 1 Output V/mA + RS485
ATR401-22ABC-D	2 Analogue inputs + 2 Relays 8 A + 1 SSR 12Vdc, 1 Output V/mA + Digital input

WIRING PLAN



DRR245

[YouTube](#)

Multisetpoint controller / Signals converter

Main features

Box	DIN43880, DIN EN50022 rail mounted
Power supply	24..230Vac/dc $\pm 15\%$ 50/60 Hz (galvanically isolated)
Consumption	3 W
Display	4 digits 0,4" green + 4 digits 0,3" red
Operating conditions	Temperature 0-45 °C, humidity 35..95 RH%
Material	Box: Polycarbonate V0; Front panel: Silicon V0
Weight	Approx. 195 g
Sealing	IP65 (Front panel), IP20 (Box and Terminal blocks)
Quick set-up options	Memory Card with / without battery, software LABSOFTVIEW, EASY-UP codes
Wiring	With terminal extension

Inputs

1 configurable	Selection TC, K, J, S, R, PT100, PT500, PT1000, Ni100, PTC1K, NTC10K (B 3435K), 0/4..20 mA, 0..10 V, 0..40mV, Potentiometer 1..6/160 Kohm, T.A (1024 points)
Sampling time	Programmable up to 4,1 ms (Frequency up to 242 Hz)
1 T.A. input	Selection T.A. 50 mA - 100 ms - 1024 points
1 Digital input	1/2..4 setpoints selection , Hold, Run, Tuning launch, Start/stop cycle

Outputs

2 Relays	Relays 5 A - 250 Vac resistive charge
1 SSR	12 Vdc - 30 mA max
1 Analogue	Selection 4 - 20 mA or 0 - 10 Vdc for command or retransmission PV/SPV
Serial communication	RS485 Modbus RTU - Slave

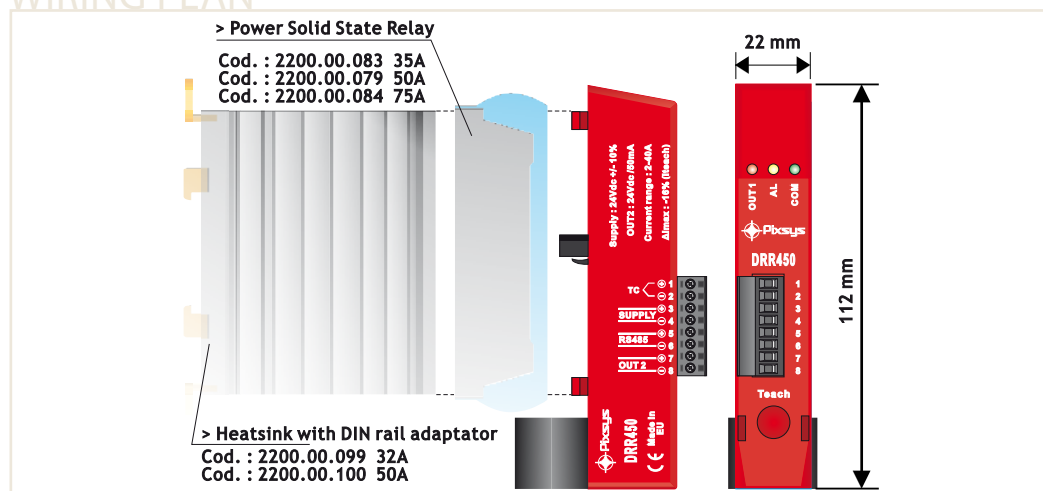
Software features

Control algorithms	ON - OFF with hysteresis, P., P.I., P.I.D., P.D. time proportioned
Tuning	Manual or automatic
Data protection	Lock Command / alarm setpoint
Alarm modes	Absolute / Threshold, band, High / Low deviation. Loop Break Alarm function
Auto/Man function	Output percentage command also with automatic change in case of sensor failure
Double P.I.D.	Heating / Cooling P.I.D.
Programmer function	Start/Stop pre-programmed cycle with 2/3 steps
Soft-Start	Rising gradient expressed as Degrees / Hour

Ordering codes

DRR245-21ABC-T	1 Analogue input + 2 Relays 5 A + 1Ssr/V/mA + RS485 + TA
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WIRING PLAN



DRR450

Temperature controller integrated into SSR unit + current transformer

Main features

Box	Module 22,5mm series Celduc ESUC DIN-rail mounting EN50022
Power supply	24 Vdc ±10% (galvanically isolated) from RS485 and input (no OUT 2)
Consumption	1 W
Operating conditions	Temperature 0-45 °C, humidity 35..95 RH%
Material	Box: Polycarbonate V0
Weight	Approx. 75 g
Sealing	IP20 (Box and Terminal blocks)
Quick set-up options	Software LABSOFTVIEW
Wiring	Terminal extension on wiring system, Plug-in SSR module

Inputs

1 configurable	Selection TC, K, J, T, E
1 T.A. / Current transformer	Integrated Current Transformer with 55A FS - resolution 0,1A

Outputs

1 SSR integrated	5Volt - 20mA
1 SSR auxiliary	24 Vdc - 50 mA max
Serial communication	RS485 Modbus RTU - Slave (9600..115200 Baud)

Software features

Control algorithms	ON - OFF with hysteresis, P., P.I., P.I.D., P.D. time proportioned
Tuning	Manual or automatic
Alarm mode	Absolute / Threshold, band, High / Low deviation. Loop Break Alarm function
Auto/Man function	Output percentage command also with automatic change in case of sensor failure
Double P.I.D.	Heating / Cooling P.I.D.

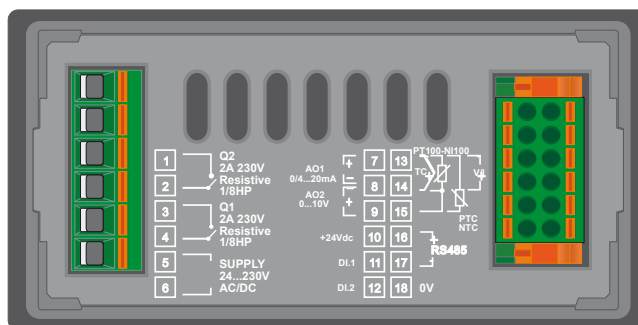
Ordering codes

DRR450-12AD	1 Analogue input + 1 SSR Out. integrated + 1 SSR Out auxiliary + RS485 + TA / Current Transformer
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Ordering codes series SSR series SU / SUL (terminal block for DRR450)

2200.00.085	SSR 30A / 24-400Vac / Ctrl 3,5-32Vdc led and heatsink
2200.00.083	SSR 35A / 24-600Vac / Ctrl 3,5-32Vdc
2200.00.079	SSR 50A / 24-600Vac / Ctrl 3,5-32Vdc
2200.00.084	SSR 75A / 24-600Vac / Ctrl 3,5-32Vdc
2200.00.100	Heatsink for 32A with DIN adapter
2200.00.099	Heatsink for 50A with DIN adapter

WIRING PLAN



STR550

Indicator - Panel meter

Main features

Box	96x48 (Front panel) x 48 mm / or 1/8Din
Power supply	24..230Vac/dc $\pm 10\%$ 50/60 Hz (galvanically isolated)
Consumption	6 W
Operating conditions	Temperature 0-45 °C, humidity 35..95 RH%
Material	Box: Polycarbonate V0
Weight	Approx. 165 g
Sealing	IP54 (Front panel) with gasket - IP20 (Box and Terminal blocks)
Quick set-up options	Software LABSOFTVIEW and/or Memorycard
Wiring	extractable terminal blocks and spring locking

Inputs

1 Analogue (16 bit)	Selectable for TC type K, S, R, J, T, E, N, B (automatic compensation of the cold junction 0..50 °C), thermoresistances PT100, PT500, PT1000, Ni100, PTC1K, NTC10K (β 3435K), process signals 0-10 V (54000 points), 0/4-20mA (40000 points), 0-60 mV (16000 points), Potentiometer 6 K Ω , 150 K Ω (50000 points) Customizable linear input (max 16 steps)
2 Digital	PNP inputs programmable for Run / Hold / Tare-Zero / Alarms rearmament / Peaks reset/ Min. peak reset Activate-Reset Sum / Parameters-Setpoints Lock

Outputs

2 Relays	Contacts 2A - 250Volt AC (resistive charge)
2 analogue outputs	1 output 0..10Volt (60000 points) - 1 output 0/4..20mA (60000 points)
1 Auxiliary output	24 Vdc / 30mA for external sensors supply (loop-powered)
Serial communication	RS485 Modbus RTU - Slave (1200..115200 Baud) galvanically isolated from Power supply / Inputs / Outputs

Software features

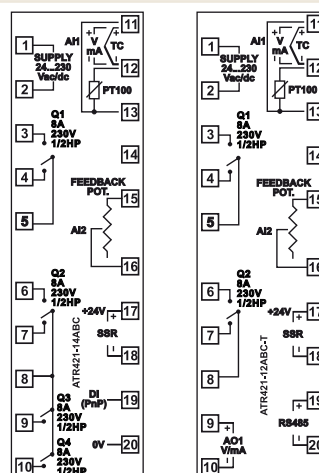
Alarms regulation	ON - OFF with hysteresis
Alarm mode	Absolute / Threshold, Band with instantaneous / delayed / retentive / by digital input activation, Sensor failure / Activation by serial line
Sum Function	By digital input or by keyboard it is possible to sum different process measurements over time
Totalizer Function	Visualisation of instant process value and total value since last reset
Trend visualization	Trend visualisation with selectable time basis 1s to 3600s
Analogue retransmission	Process values / Setpoints
Digital transmission via RS485	Process values / Setpoint / Parameters
Latch-on function	Semi-automatic setting of limits/ calibration values for analogue input
Data Logger	Data logger function with selectable time basis 1s to 3600s, tot memory 2,5k words
Text menus	English/Italian/Deutsch/French/Spanish

Ordering codes

STR550-12ABC-T	1 Analogue input + 2 Relays 2A + 1 Out 0..10V + 1 Out 0/4..20mA + RS485 Modbus RTU /Slave
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WIRING PLAN



ATR421

Process controller / Programmer 15 cycles / 45 steps

Main features

Box	48x96 (front panel) x 123 mm
Power supply	24..230Vac/dc $\pm 15\%$ 50/60 Hz (selection 24 - 110..230Vac with jumper)
Consumption	5,5 VA, 4W
Display	4 digits 0,4" green + 4 digits 0,3" red
Operating conditions	Temperature 0-45 °C, humidity 35..95 RH%
Material	Box: Noryl UL94V1 self-extinguishing; Front panel: Silicon rubber V0
Weight	Approx. 350 g
Sealing	IP65 (Front panel), IP20 (Box and Terminal bloks)
Quick set-up options	Memory Card with / without battery, software LABSOFTVIEW

Inputs

1 configurable	Selection TC, K, J, S, R, PT100, PT500, PT1000, Ni100, PTC1K, NTC10K (B 3435K), 0/4..20 mA, 0..10 V
1 digital input	1..9 cycle selection, Hold, Run, "Open door" lock (code -14ABC)
1 potentiometer input	Position signal by potentiometer for servo/motorized-valves

Outputs

2..4 Relays	Relay 8 A - 250 Vac resistive charge
1 SSR	24 Vdc - 25 mA max
1 Analogue	Selection SSR 12Vdc - 4..20 mA or 0..10 Vdc for command or retransmission PV/SPV (code -12ABC-T)
Serial communication	RS485 Modbus RTU - Slave (code -12ABC-T)

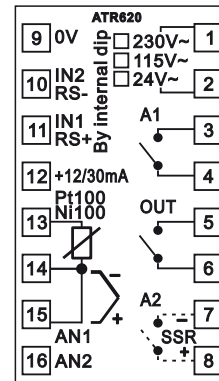
Software features

Control algorithms	ON - OFF with hysteresis, P., P.I., P.I.D., P.D. time-proportioned
Tuning	manual or automatic
Data protection	Lock of control / alarm setpoint, Access to parameters by password
Alarm modes	Absolute / Threshold, band, High / Low deviation, timed auxiliary programmable for single steps
Gas mode	Open / Close logic for motorized valves, management of burners and fan, GID selection (management of burners during falling steps)
Waiting function	Special function to compensate differences SPV / PV in case of overloaded system
Cycle recovery	Resume the cycle after unexpected power failure
Setpoint controller mode	Regulation on a fixed setpoint (function might be enabled from general menu or during a cycle in progress)
Delayed start	Cycle start delayed by decremental timer

Ordering codes

ATR421-14ABC	1 Analogue inputs + 1 digital input + 4 Relays 8 A + 1 SSR 12Vdc
ATR421-12ABC-T	1 Analogue inputs+ 2 Relays 8 A + 1 SSR 12Vdc, 1 Output V/mA + RS485

WIRING PLAN



ATR620

[YouTube](#)

Process controller / Programmer 15 cycles / 20 steps

Main features

Box	72x72 (front panel) x 99 mm
Power supply	24/110/230Vac $\pm 15\%$ 50/60 Hz (selection with jumpers)
Consumption	4W
Display	4 digits 0,56" green + 4 digits 0,4" red + led
Operating conditions	Temperature 0-45 °C, humidity 35..95 RH%
Material	Box: Noryl UL94V1 self-extinguishing; Front panel: Silicon rubber V0
Weight	Approx. 530 gr
Sealing	IP65 (Front panel) , IP20 (Box and Terminal bloks)
Quick set-up options	Memory Card without battery

Inputs

2 configurables	Selection TC, K, J, S, R, T, E, PT100, Ni100, 0/4..20 mA, 0/1..10 V
2 digital input	1..9 cycle selection, Hold, Run, "open door" lock

Outputs

Relays	2 / 3 Relays 8 A - 250 Vac resistive charge
1 SSR	12 Vdc - 30 mA max
Serial communication	RS485 Modbus RTU - Master/Slave

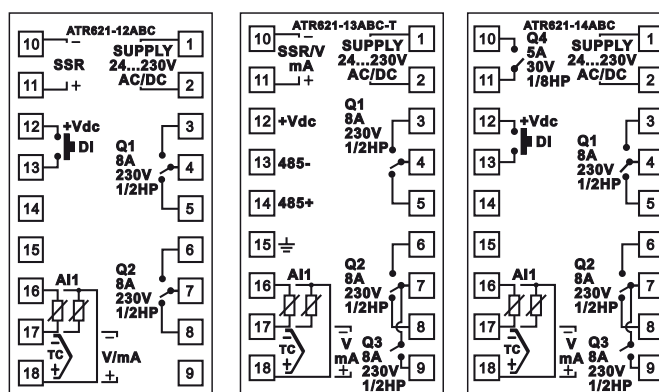
Software features

Control algorithms	ON - OFF with hysteresis, P., P.I., P.I.D., P.D. time proportioned
Data protections	Lock of command / alarm setpoint, Access to parameters by password
Alarm mode	Absolute / Threshold, band, High / Low deviation, timed auxiliary programmable for single steps
Waiting function	Special function to compensate differences SPV / PV in case of overloaded system
Cycle recovery function	Resume the cycle in case of unexpected power failure
Setpoint controller mode	Regulation on a fixed setpoint (function might be enabled from general menu or during a cycle in progress)
Delayed start	Cycle start delayed by decremental timer

Ordering codes

ATR620-21ABC	2 Analogue inputs + 2 Relays 8 A + 1 SSR 12Vdc + RS485
ATR620-22ABC	2 Analogue inputs + 3 Relays 8 A + RS485

WIRING PLAN



ATR621

Process controller / Programmer 15 cycles / 45 steps

Main features

Box	72x72 (front panel) x 99 mm
Power supply	24..230Vac/dc $\pm 15\%$ 50/60 Hz
Consumption	5,5 VA
Display	Display 4 digit 0,5" green + Display 4 digit 0,3" red + 9 Leds
Operating conditions	Temperature 0-45 °C, humidity 35..95 RH%
Material	Box: Noryl UL94V1 self-extinguishing; Front panel: Silicon rubber V0
Weight	Approx. 250 g
Sealing	Front panel IP54 (with gasket), Box IP30, Terminal blocks IP20
Quick set-up options	Memory Card whit/without battery, software LABSOFTVIEW

Inputs

1 configurable	Selection TC, K, J, S, R, N, E, PT100, 0/4..20 mA, 0..10 V
1 digital input	1..5 cycle selection, Hold, Run, "open door" lock, Emergency

Outputs

Relays	2 / 3 Relays 8 A - 250 Vac resistive charges
Relays	1 Relay 5 A - 30 Vac
1 Linear	0/4..20mA or 0..10V
1 SSR	12 Vdc - 30 mA max
Serial communication	RS485 Modbus RTU - Master/Slave

Software features

Control Algorithms	ON - OFF with hysteresis, P., P.I., P.I.D., P.D. time proportioned
Autotune	Manual/Automatic
Data protection	Access to parameters by password
Alarm mode	Absolute/Threshold, band, High/Low deviation, timed auxiliary programmable for single steps.
PV/SPV retransmission	Analogue in Volt/mA or RS485 serial
Waiting function	Special function to compensate differences SPV / PV in case of overloaded system
Cycle recovery function	Resume the cycle in case of unexpected power failure
Setpoint controller mode	Regulation on a fixed setpoint (function might be enabled from general menu or during a cycle in progress)
Delayed start	Cycle start delayed by decremental timer

Ordering codes

ATR621-12ABC	1 Analogue input + 2 Relays 8 A + 1 SSR 12Vdc + 1 Digital input
ATR621-13ABC-T	1 Analogue input + 3 Relays 8 A + 1 Output V/mA/SSR + RS485
ATR621-14ABC	1 Analogue input + 3 Relays 8 A + 1 Relay 5A (30V) + 1 Digital input

WIRING PLAN

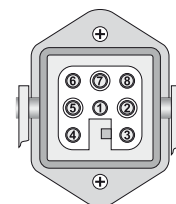
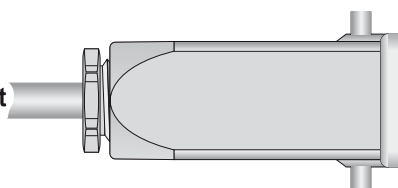


1 - Neutral
2 - Neutral
3 - Thermocouple +
4 - Thermocouple -

5 - Power supply (phase)
6 - Control output (phase)
7 - Aux output (phase)
8 - Not Connected

OPTIONAL :
Multipolar Connector
for panel-mounting
Cod. 0400.70.001

Cable L= 1,5 mt



ATR902

Plug-in process controller 15 cycles / 18 steps

Main features

Box	120 x 65 (front panel) x 65 mm
Power supply	24..230Vac/Vdc $\pm 15\%$ 50/60 Hz
Consumption	4W
Display	Display 4 digits 0,56" red + 4 digits 0,4" green + Bargraph
Operating conditions	Temperature 0-45 °C, Humidity 35..95 RH%
Material	Box: ABS; Front panel: polycarbonate
Weight	Approx. 550 gr
Sealing	IP65 (Front panel), IP20 (Box and Terminal bloks)
Accessori	Connector 7poles/female (kiln side), Bracket for panel mounting

Inputs

1 Configurable	TC K, S, R, J, T, E, N with selection by parameter
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Outputs

Relay	1 Relay 1A - 250 Vac resistive charge + 1 Relay 1A - 250 Vac alarm / auxiliary
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Software features

Control algorithms	ON - OFF with hysteresis, P, P.I., P.I.D., P.D. time proportioned
Tuning	Automatic, Automatic predictive
Data protection	Access to parameters by password, Setpoint modification during cycle only if enabled by parameter
Alarm options	Absolute / Threshold, band, High / Low deviation, timed auxiliary programmable on single steps
Hold function	Hold current setpoint value, with Start / Stop by keyboard
Waiting function	Special function to compensate differences SPV / PV in case of overloaded system or system inertias
Cycle recovery function	Resume the cycle after unexpected power failure
Setpoint controller mode	Regulation on a fixed setpoint (function might be enabled by general menu or during a cycle in progress)
Delayed start	cycle start delayed (function might be enabled by parameter)

Ordering codes

ATR902-12ABC	1 Analogue input + 2 Relays 1A - 230Vac/Vdc
0400.70.001	Harting connector 8P (optional)
1300.20.043	Wall mounting support

WIRING PLAN



DB25		DB9		ALIMENTAZIONE SUPPLY	
□ RS422/485 □ RS232C		□ RS485		1 ALARM + V	
14 0V	7 0V	5 0V		2 0V	12 ÷ 24
18 RX -	12 TX232	4 RS485+		3 +V	Vac/dc
17 RX +	11 RX232	9 RS485-			10VA
16 TX -/RX -					
15 TX+/RX+					

ATR313

Graphic terminal / Process controller 20cycles / 30 steps

Main features

Box	251x146 (front panel) x 66 mm
Power supply	12..24Vac/Vcc ±10% 50/60 Hz
Consumption	10W
Display	Graphic LCD 240x128, monochrome, Reverse option, programmable contrast and backlighting operation
Operating conditions	Temperature 0-45 °C, Humidity 35..95 RH%
Material	Box: chromed steel; front frame: ABS; Keyboard: polycarbonate
Weight	Approx. 1350 gr
Sealing	IP65 (Front panel), IP20 (Box and Terminal bloks)
Memory Card	Upload/download parameters and cycles, Firmware upgrade

Inputs

Analogue-digital inputs	See PL300
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Outputs

Analogue/digital outputs	See PL300
Serial communication	RS485 Modbus RTU - Master, RS232, RS422

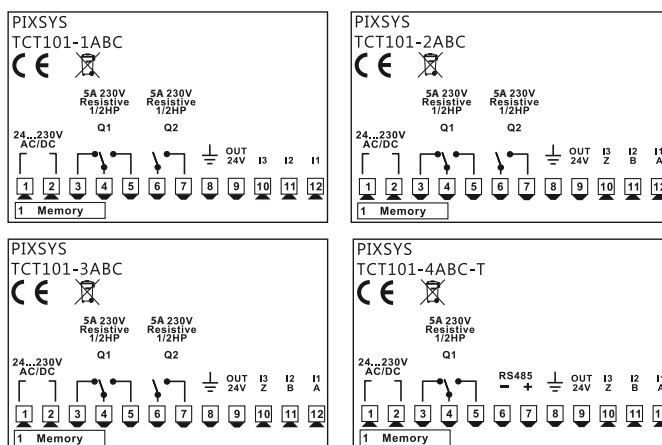
Software features

Control algorithms	ON - OFF with hysteresis, P, P.I., P.I.D., P.D. time proportioned
Data protection	Access to parameter by password, special password to define operator access levels
Alarm options	Absolute / Threshold, band, High / Low deviation, auxiliary functions programmable for each step, programmable type of action on the running cycle, text of alarm messages may be entered by keyboard, alarm source selectable by the user
Waiting function	Special function to compensate differences SPV / PV in case of overloaded system
Cycle recovery function	Resume the cycle after unexpected power failure
Functions for gas-fired kilns	Management of modulating valves by additional PL250
Visualization options	Selection of visualized process values, selection of menus related to function keys, selectable language (Italian, English, German), optional customer logo loaded at starting

Ordering codes

ATR313-1AD	Graphic terminal, LCD display, alphanumeric keyboard
Acquisition modules	See PL300
2100.30.001	Memory card Series TD240-TD320-ATR313

WIRING PLAN



TCT101

[YouTube](#)

Timer - Counter - Tachometer - Multi-function device + RS485

Main features

Box	32x74 (front panel) x 53 mm
Power supply	24..230Vac/Vdc $\pm 15\%$ 50/60 Hz
Consumption	3 VA
Display	4 digits 0,4" green + 4 digits 0,3" red
Operating conditions	Temperature 0-45 °C, humidity 35..95 RH%
Material	Box: Noryl UL94V1 self-extinguishing; Front panel: PC ABS UL94V0 self-extinguishing
Weight	Approx. 100 g
Sealing	Front panel IP65 (with gasket), Box IP30, Terminal blocks IP20
Quick set-up options	Memory Card with / without battery, software LabSoftView

Inputs

3 Digital	Selectable as NPN - PNP - TTL, both high/low/rising edge level
Input I3	Input selection by potentiometer 5/10 KOhm for entering of setpoint value (resolution 1000 points)

Outputs

1/2 Relays	2 Relays 5A - 250 Vac resistive charge (codes -1/2/3) 1 Relay 5A - 250 Vac resistive charge (codes -4ABC-T)
Serial communication	RS485 Modbus RTU - Slave (code -4ABC-T)

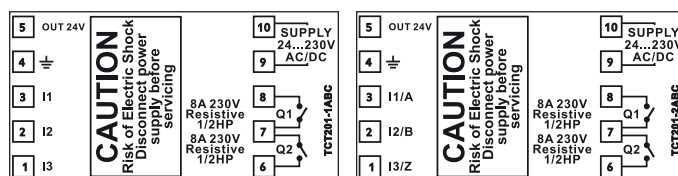
Software features

Timer input selection	Start, Stop, Hold, Reset, Wait
Ranges	Programmable time bases (s/100 , s/10 , s, min , hours)
Counter input selection	Up, Down, Lock, Hold
Counting frequency	Incremental/Decremental up to 100Khz
Counter functions	Count frequency visualization on red display for Flowmeter function
Tachometer input selection	For mono/bi-directional Push/Pull or Line/Driver encoders up to 100Khz
Tachometer functions	Maximum / Minimum peak
Data protection	Parameters protected by password

Ordering codes

TCT101-1ABC	Timer - settable in 5 modes
TCT101-2ABC	Counter - incremental, decremental or bi-directional (encoder)
TCT101-3ABC	Tachometer - for Push-Pull / Line-Driver encoders (mono/bi-directional)
TCT101-4ABC-T	Timer / Counter / Tachometer - with RS485 Modbus RTU/slave serial communication

WIRING PLAN



Same connections for TCT201-2/3

TCT201

Timer - Counter

Main features

Box	48x48 (front panel) x 107 mm
Power supply	24..230Vac/Vdc $\pm 15\%$ 50/60 Hz
Consumption	3 VA
Display	4 digits 0,4" green + 4 digits 0,3" red + led
Operating conditions	Temperature 0-45 °C, humidity 35..95 RH%
Material	Box: Noryl UL94V1 self-extinguishing; Front panel: PC ABS UL94V0 self-extinguishing
Weight	Approx. 100 g
Sealing	Front panel IP65 (with gasket), Box IP30, Terminal blocks IP20
Quick set-up options	Memory Card with / without battery, software LabSoftView

Inputs

3 Digital	Selectables as NPN - PNP - TTL, both on high/low/rising edge level
Input I3	Input selection by potentiometer 5/10 KOhm for setting of setpoint value (resolution 1000 points)

Outputs

2 Relays	2 Relays 8 A - 250 Vac resistive charge
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Software features

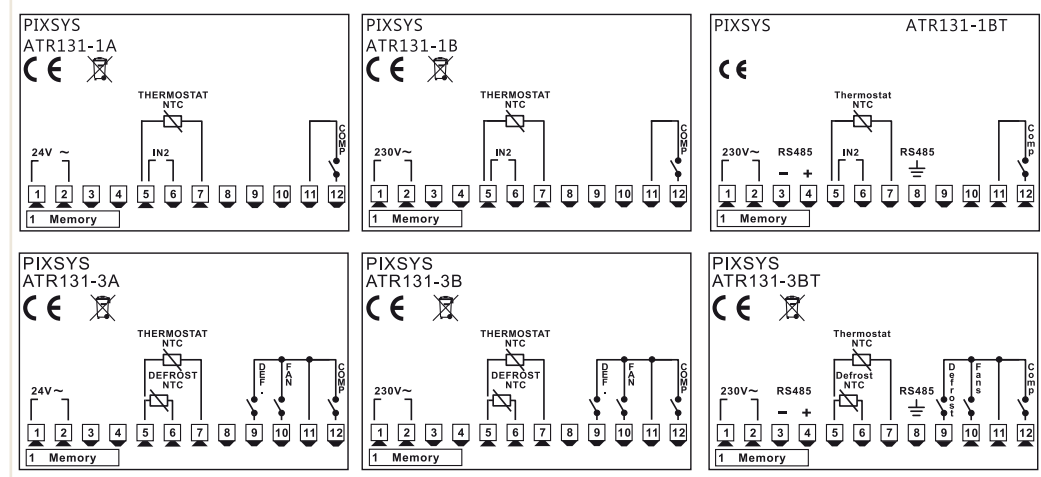
Timer inputs selection	Start, Stop, Hold, Reset, Wait
Ranges	programmable Time basis s/100, s/10, s , min , hours
Counter inputs selections	Up, Down, Lock, Hold
Count frequency	Incremental / Decremental up to 100Khz
Counter functions	Counting frequency visualization on red display for flowmeter function
Tachometer input selection	For mono/bi-directional Push/Pull or Line/Driver encoders up to 100Khz
Tachometer functions	Maximum / Minimum peak
Data protection	Parameters protected by password

Ordering codes

TCT201-1ABC	Timer - settable in 5 modes
TCT201-2ABC	Counter - incremental or decremental
TCT201-3ABC	Tachometer - for Push-Pull / Line-Driver encoders (mono/bi-directional)



WIRING PLAN



ATR131

Thermostat for refrigeration / HVAC

Main features

Box	32x74 (front panel) x 53 mm
Power supply	24Vac/115Vac/230Vac $\pm 15\%$ 50/60 Hz
Consumption	3 W
Display	3 digits 0,56" red + 3 signaling leds
Operating conditions	Temperature 0-45 °C, humidity 35..95 RH%
Material	Box: Noryl UL94V1 self-extinguishing, front panel: PC ABS UL94V0 self-extinguishing
Weight	Approx. 100 g
Sealing	Front panel: IP54 (with gasket) , Box IP30, Terminal blocks IP20
Quick set-up options	Memory Card with / without battery

Inputs

Sensors	1 NTC10K - B 3435K (ATR131-1x) / 2 NTC10K - B 3435K (ATR131-3x)
Accuracy	0.5% $\pm$ 1digit
1 Digital input	1/2 setpoint selection, Heat/Cool regulation selection

Outputs

Compressor	1 Relay 10A - 250 Vac resistive charge
Defrosting	1 Relay 8A - 250 Vac resistive charge (ATR131-3x)
Fans	1 Relay 5A - 250 Vac resistive charge (ATR131-3x)

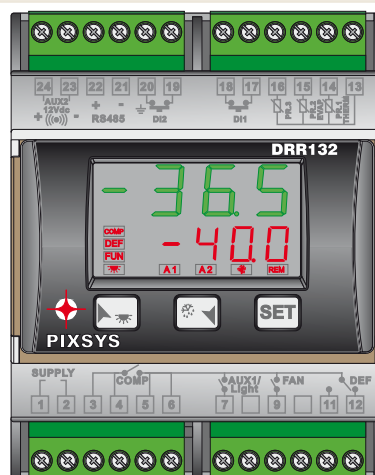
Software features

Control algorithms	ON - OFF with hysteresis
Defrosting functions	Programmable defrost frequency and mode, time counting type, end-defrosting temperature and maximum defrosting time
Data protection	Lock against close compressor starts, Lock of control setpoints, access to parameters by password.
Heating function	NTC range selection -40..50°C or 0..100°C

Ordering codes

ATR131-1A	1 Inp. NTC - 1 Relay / Supp. 24 Vac $\pm 10\%$ 50/60Hz
ATR131-1B	1 Inp. NTC - 1 Relay / Supp. 220 Vac $\pm 10\%$ 50/60Hz
ATR131-1C	1 Inp. NTC - 1 Relay / Supp. 115 Vac $\pm 10\%$ 50/60Hz
ATR131-3A	2 Inp. NTC - 3 Relays / Supp. 24 Vac $\pm 10\%$ 50/60Hz
ATR131-3B	2 Inp. NTC - 3 Relays / Supp. 220 Vac $\pm 10\%$ 50/60Hz
ATR131-3C	2 Inp. NTC - 3 Relays / Supp. 115 Vac $\pm 10\%$ 50/60Hz

WIRING PLAN



DRR132

DIN rail mounted Controller for refrigeration / HVAC

Main features

Box	DIN43880, Din rail mounted DIN EN50022
Power supply	230Vac $\pm 15\%$ 50/60 Hz (galvanic isolation)
Consumption	3 W
Display	4 digits 0,4" green + 4 digits 0,3" red
Operating conditions	Temperature 0-45 °C, humidity 35..95 RH%
Material	Box: polycarbonate V0; Front panel: silicon V0
Weight	Approx. 195 g
Sealing	IP65 (Front panel), IP20 (Box and terminal bloks)
Quick set-up options	Memory Card with / without battery, extractable terminal blocks

Inputs

Sensor inputs	2 selectables for PTC1K, NTC10K (B 3435K)
Fixed	1 for NTC10K (B 3435K)
Sampling time	20 ms
Accuracy	0,5% +/- 1 digit
Digital inputs	2, selectable for lights command or setpoint modification

Outputs

Compressor	Relay 30 A - 250 Vac resistive charge
Defrosting	Relay 8 A - 250 Vac resistive charge
Lights	Relay 8 A - 250 Vac resistive charge
Fan	Relay 8 A - 250 Vac resistive charge
1 SSR	24 Vdc - 25 mA max for Buzzer / Auxiliary command
Serial communication	RS485 Modbus RTU - Slave

Software features

Control algorithms	ON - OFF with hysteresis
Defrosting functions	Programmable defrosting frequency and mode, time counting type and maximum defrosting time
Data protections	Lock against closer compressor starts, Lock of control setpoints, Access to parameters by password

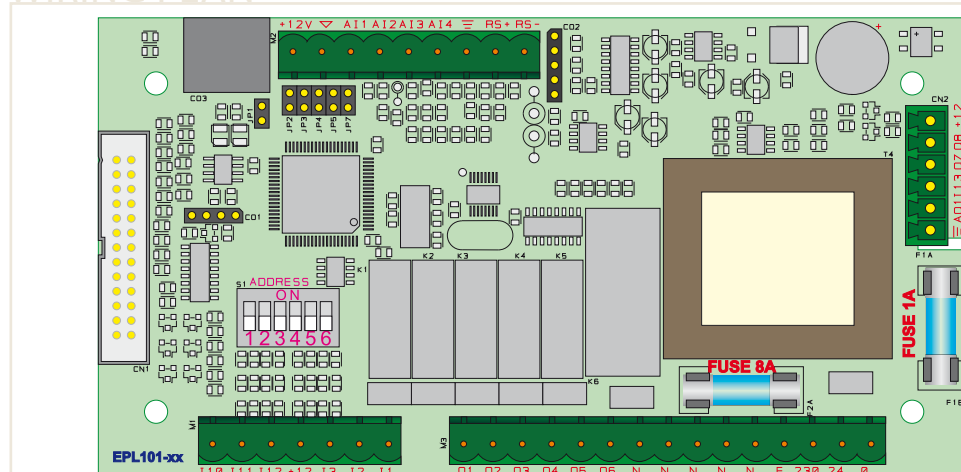
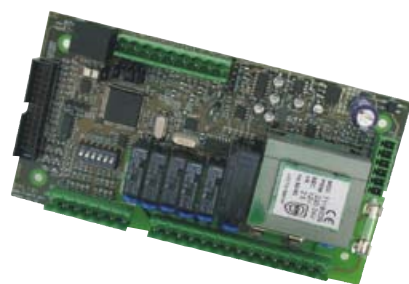
Ordering codes

DRR132-4B-T	2 Inp. NTC10K, PTC1K + 4 Relays 30A/8 A + 1 Static 12Vdc + RS485 Modbus RTU / Slave
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PROGRAMMABLE SYSTEM

WIRING PLAN



EPL101

PLC board 11 Inp / 9 Out

Main features

Size	151 x 80 mm
Power supply	24/230 Vac $\pm 15\%$ 50/60 Hz transformer with double primary
Consumption	4W
Operating conditions	Temperature 0-45 °C, humidity 35..95 RH%
Weight	Approx. 280 gr.
Wiring harness	Extractable terminal bloks or Plug
Connection for display	(Optional) 26 poles connector for customized displays (7 segments)

Inputs

Analogue	4 selectables for TC, K, J, S, R, T, E, PT100, Ni100, 0/4..20 mA, 0/1..10 V (for more details see technical documentation)
Digitals	6 inputs PNP + 1 input NPN
Inputs for Encoders	2 Digitals (overlapped to input PNP) for bi-directional encoder (1Khz), 1 Digital (overlapped to input NPN) for mono-directional encoder (2 KHz)

Outputs

Digitals	5 Relays 5A resistive charge + 1 relay 16A resistive charge
Analogue	1 0..5Volt 8 Bit for command
Open- Collector	2 outputs max 20mA
Communication ports	1 serial RS232 on plug + 1 serial RS485 on Plug or on extractable terminal block

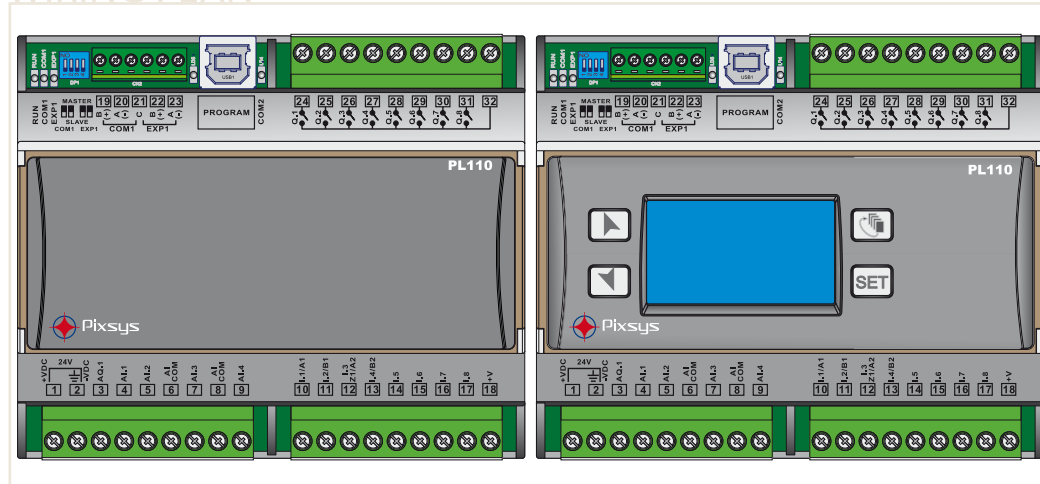
Software features

Programming	Pixsys PLprog software, Ladder diagrams; 128 marker (logic relays), 64 bistables, 96 timer 16 bit, 32 up-down counters, mathematic and logic functions, rescale functions, contacts on bit
Communication protocols	Modbus RTU master / slave; Free-Port mode for Modem protocols or proprietary devices
Memory	64Kbyte Flash for programming, 200 words Ram, 1000 words EEprom, external data memory MMC 32K words optional
Clock	Real-Time clock with Back-up battery (optional)
Analogue input control algorithms	P, PI, PID, PD

Ordering codes

EPL101-1AB	PLC 4 An. Inp. + 6 Digital PNP + 1 NPN + 6 relays + 2 outputs Open-Collector 20mA + 1 output 0..5 Volt (8 bit)
KIT-MORS-EPL101	Kit Terminal blocks for PLC board EPL101
2100.30.010	M.c.Upgrade Series PL250-PL260-PL300-EPL101
2100.30.011	Expansion Memory 32K PL250
EPL101-RTC	Clock for EPL 101
SB-TERMS	LED Display for EPL101 (5 Digits, 6 keys, 5 LED)

WIRING PLAN



PL110

PLC 8+4 Inp. / 8+1 Out

Main features

Box	Standard DIN43880 108 x 90 x 64 (H) mm, Mounting clips DIN RAIL EN50022
Power supply	2 4Vac/Vdc $\pm 15\%$ 50/60 Hz
Consumption	6W
Operating conditions	Temperature 0-45 °C, humidity 5..95 RH%
Material	Noryl V0
Weight	ca.250 g
Sealing	IP20 Box
Terminal blocks	Extractable

Inputs

Analogue	AI 1 0/4..20mA (1024 points); AI 2 0..10Volt (1024 points); AI 3 NTC-10K (-40..+125°C accuracy 0,5°C) + AI 4 NTC-10K (-40..+125°C accuracy 0,5°C), AI 3 and AI 4 Potentiometer (10K)
Digital	8 PNP
Encoder inputs	2 Encoder bidirectional (overlapped to 4 PNP inp.) 15 KHz / or 25KHz for single Encoder

Outputs

Relays	8 Out 2A/250Vac/30Vdc resistive load ($\cos\phi=1$) or 1A/250Vac/30Vdc inductive load ($\cos\phi=0,4$) 6A max total current (Q1..Q8)
Analogue	1 0..10Volt (8 bit/256 points)
Programming port	1 USB type B Serial port, 2 RS485 on extractable terminal block (max. 57600 Baud) galvanically isolated from power supply and inputs (not between themselves)

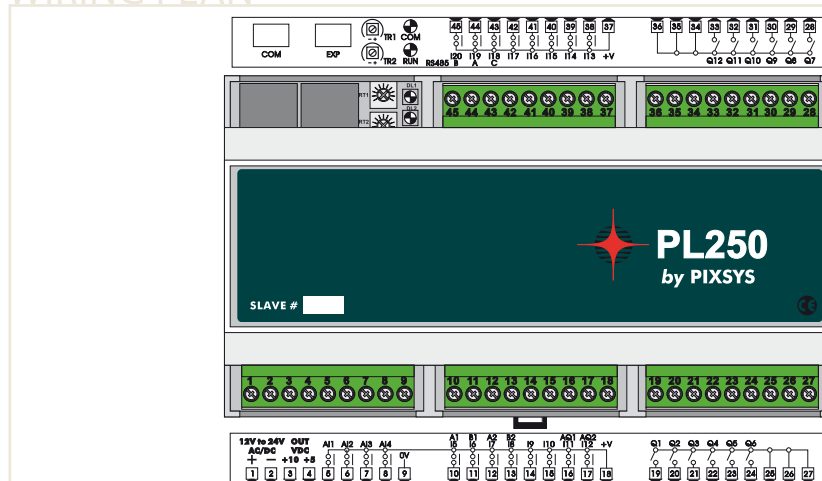
Software features

Programming	Software Pixsys Lprog, Ladder diagrams; 128 markers (logic relays), 32 bistables, 64 timers 16 bit, 16 up-down counters, mathematical and logic functions, range - rescale, bit contacts, 2 timed interrupts (min. 1 ms)
Scanning cycle	min. 2 ms
Communication protocols	Modbus RTU Master/Slave; free-port for Modem or proprietary devices
Memory	64Kbyte Flash for programming, 350 words Ram retentive (accumulator, 6 months), 1000 words EEprom, internal MMC 13000 words data storage
Clock	Real-Time clock, Back-up battery
Control algorithms for analogue inputs	P, PI, PID, PD

Ordering codes

PL110-1A	PLC 2 An.Inp. NTC-10K / Potentiometer + 1 0..10Volt (10Bit) + 1 0/4..20mA (10Bit)+ 8 Inp. PNP + 8 relay Out 2A + 1 Out 0..10 Volt (8 bit)
PL110-2A	PLC 2 An.Inp. NTC-10K / Potentiometer + 1 0..10Volt (10Bit) + 1 0/4..20mA (10Bit)+ 8 Inp. PNP + 8 relay Out 2A + 1 Out 0..10 Volt (8 bit) with optional graphic OLED display
2100.30.010	M.c.Upgrade Series PL250-PL260-PL300-EPL101-PL110

WIRING PLAN



PL250

PLC 20 Inp / 12 Out

Main features

Box	Standard DIN43880 160 x 90 x 58 (H) mm with DIN RAIL mounting fitting EN50022
Power supply	12..24Vac/Vdc $\pm 15\%$ 50/60 Hz
Consumption	10W
Operating conditions	Temperature 0-45 °C, humidity 35..95 RH%
Material	Noryl V0
Weight	Approx. 375 gr.
Sealing	IP20 Box

Inputs

Analogue (10bit)	4 inp. 0..10Volt or 2 inp. 0..20mA (code -10AD)
Analogue (16bit)	4 selectable for TC, K, J, S, R, T, E, PT100, Ni100, 0/4..20 mA, 0/1..10 V for more details see technical documentation (code -11AD)
Digital	16 inputs PNP
Inputs for Encoders	2 bidirectional encoders (overlapped to 4 inputs PNP) 15 KHz simultaneously / 30KHz single
Auxiliary power supply	Terminal for Potentiometer power supply 10,0 Volt
Trimmer	2 for regulations and process variables

Outputs

Digital	12 relay outputs 5A - resistive charge
Analogue	2 0..10Volt , 8 Bit (overlapped to 2 inputs)
Programming port	2 serial RS232 on Plug
Communication port	1 serial RS485 on Plug or on extraible terminal (max. 57600 Baud)

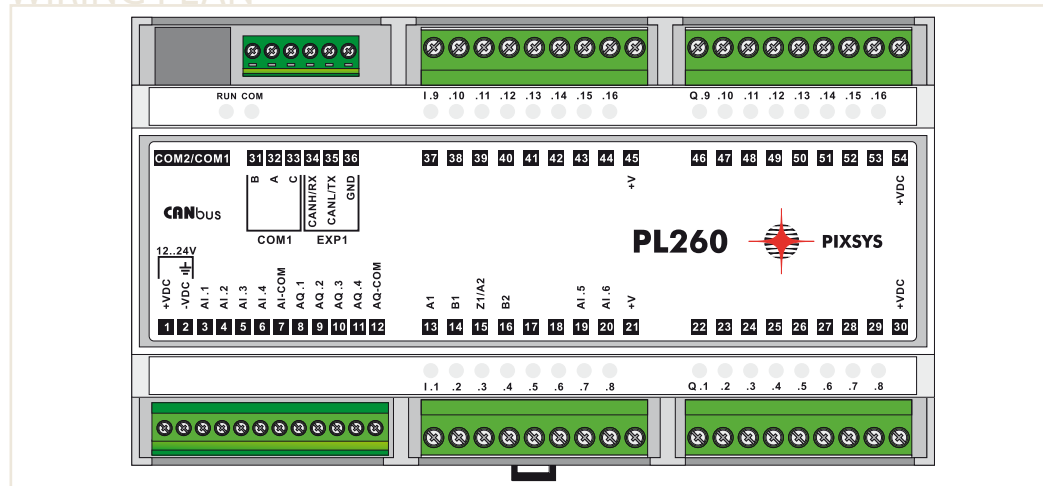
Software features

Programming	Software Pixsys PLprog, Ladder diagrams; 128 markers (logic relays), 64 bistables, 96 timers 16 bit, 32 up-down counters, mathematical and logic functions, range - rescale, contact bits, 2 timed interrupt (min. 1 ms)
Scanning cycle	min. 2 ms
Communication protocols	Modbus RTU master/slave; Free-Port for Modem or proprietary devices
Memory	64Kbyte Flash for programming, 200 words non-volatile Ram memory (6 months), 1000 words EEprom, optional MMC 13000 words
Clock	Real-Time clock, Back-up battery
Control algorithms	P, PI, PID, PD

Ordering codes

PL250-10AD	PLC with 4 An. Inp. (10 bit) + 12 relays 5A
PL250-11AD	PLC with 4 An. Inp. (16 bit for Tc/RTD) + 12 relays 5A
2100.30.010	M.c.Upgrade Series PL250-PL260-PL300-EPL101
2100.30.011	Expansion Memory 32K PL250

WIRING PLAN



PL260

PLC 20 Inp / 16 Out

[YouTube](#)

Main features

Box	Standard DIN43880 160 x 90 x 58 (H) mm with DIN rail mounting fitting EN50022
Power supply	12..24 Vdc $\pm 15\%$ 50/60 Hz
Consumption	10W
Operating conditions	Temperature 0-45 °C, humidity 35..95 RH%
Material	Noryl V0
Weight	Approx. 375 gr.
Sealing	IP20 Box

Inputs

Analogue	4 Selectable for TC, K, J, S, R, T, E, PT100, Ni100, 0/4..20 mA, 0/1..10 V (for more details see technical documentation)
Digitals	16 PNP inputs
Inputs for Encoders	2 Bidirectional encoders (overlapped to 4 PNP inputs) 15 KHz simultaneously / 30KHz single

Outputs

Digital	16 static outputs 700 mA /each output (4A max for groups of 8)
Analogue	2 out 0..10Volt - 8 bit + 2 out 0..12,5Volt - 13 bit
Programming port	1 serial RS232 on Plug
Communication port	1 serial RS485 on Plug or on extractable terminal (max. 57600 Baud) + 1 Bus for CANopen (max. 1 MBaud) RS232

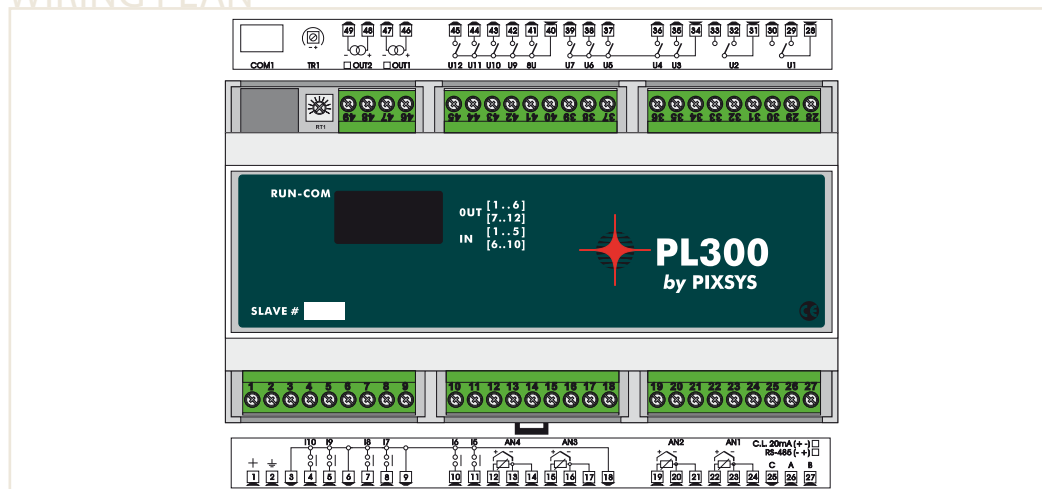
Software features

Programming	Pixsys PLprog software, Ladder diagrams; 128 marker (logic relays), 32 bistables, 64 timers 16 bit, 16 up-down counters, mathematic and logic function, Range - rescale function, contact on bit, 2 timed interrupts (min. 1 ms)
Scanning cycle	minimum 2 ms
Communication protocols	Modbus RTU master/slave; Free-Port mode for Modem or proprietary devices; CANopen Master
Memory	64Kbyte Flash for programming, 350 words non-volatile Ram , 1000 words EEprom, internal MMC data memory 13000 words
Clock	Real-Time clock , Back-up battery
Control algorithms for analogue inp.	P, PI, PID, PD

Ordering codes

PL260-11AD	PLC 4 An. Inp. + 16 Digitali PNP + 16 static outputs 700mA + 4 outputs 0..10 Volt (10/12 bit)
2100.30.010	M.c.Upgrade Series PL250-PL260-PL300-EPL101

WIRING PLAN



PL300

I/O - Data acquisition / actuation module for PLC / HMI

Main features

Box	Standard DIN43880 160 x 90 x 58 (H) mm with DIN RAIL mounting fittings EN50022
Power supply	12..24Vac/Vdc $\pm 15\%$ 50/60 Hz
Consumption	10W
Operating conditions	Temperature 0-45 °C, humidity 35..95 RH%
Material	Noryl V0
Weight	Approx. 460 gr.
Sealing	IP20 Box

Inputs

Analogue	4 Selectable for TC, K, J, S, R, T, E, PT100, PT1000, Ni100, 0/4..20 mA, 0/1..10 V, 0..50mV
Sampling time	250 ms
Resolution	14 bit
Digital	6 PNP inputs

Outputs

Digital	12 Relays 5A resistive charge
Analogue	2 selectable by dip-switch as 0..10Volt or 4..20mA for retransmission or command
Communication ports	1 serial RS232 on plug + 1 serial RS485 on Plug or on extractable terminal

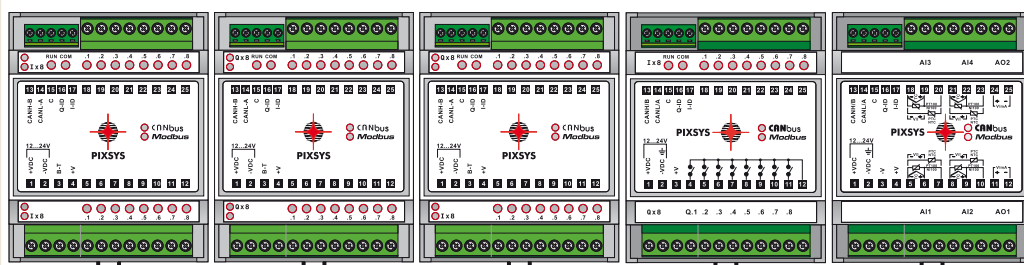
Software features

HMI - Operator interface	ATR313/ATR640 for kilns or environmental chambers, TD240 / TD320 / SCADA for other industrial applications for supervisory/monitoring functions
Communication protocol	Modbus RTU Slave
Analogue inputs control algorithms	ON - OFF with hysteresis, P, P.I., P.I.D., P.D. time-proportioned

Ordering codes

PL300-10AD	4 An. Inp. + 6 Digital + 12 relays + 2 outputs V/mA
PL300-30AD	4 An. Inp. + 6 Digital + 4 SSR-12Volt + 8 relays + 2 outputs V/mA
2100.30.010	M.c.Upgrade Series PL250-PL260-PL300-EPL101

WIRING PLAN



MCM260

I/O expansion module for PLC / HMI

[YouTube](#)

Main features

Box	Standard DIN43880 90 x 71 x 58 (H) mm with DIN RAIL mounting fitting EN50022
Power supply	12..24Vac/Vdc $\pm 15\%$ 50/60 Hz
Consumption	2W .. 4W
Operating conditions	Temperature 0-45 °C, humidity 35..95 RH%
Material	Noryl V0
Weight	Approx. 255 gr.
Sealing	IP20 Box

Inputs

Analogue 16 bit	4 Selectable for TC, K, J, S, R, PT100, PT500, PT1000, Ni100, PTC, NTC, 0/4..20 mA, 0/1..10 V, Potentiometer FS 6/160Kohm (code -5AD)
Analogue 10 bit	2 Inputs 0..10Volt / 500 Hz (overlapped to 2 digital inputs on codes -2AD/-3AD/-4AD)
Digital	8 Inputs PNP (codes -3AD/-4AD) 16 inputs PNP (code -2AD)
Counters / Encoder	2 Input for counters of 2Khz or 1 input for incremental Encoder at 10Khz (overlapped to 2 digital inputs on codes -2AD/-3AD/-4AD)

Outputs

Digital	16 Digital 700mA (code -1AD), 8 Digital 700mA (code -3AD)
Analogue	2 selectable as 0..10Volt or 4..20mA 12 Bit (code -5AD)
Relays	8 relays 5A resistive charge (code -4AD)
Communication ports	1 serial RS485 on extractable terminal + 1 Bus CANopen with EDS file for net configuration

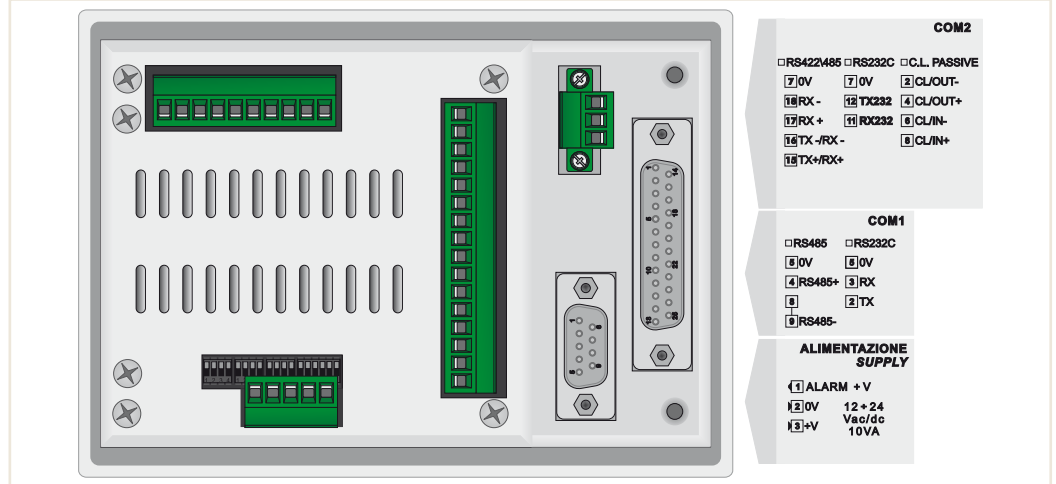
Software features

HMI - Operator interface	TD240 / TD320 / TD430 / TD570 / TD700 / TD750 / TD850 / TD900 / SCADA for control or supervision of any industrial plants
Protocol for RS485	Modbus RTU Slave up to 57600 Baud

Ordering codes

MCM260-1AD	16 Digital outputs 700mA (max 4A tot)
MCM260-2AD	16 Digital outputs PNP
MCM260-3AD	8 Digital outputs 700mA (max 4A tot) + 8 Digital inputs PNP
MCM260-4AD	8 Relay outputs 5A + 8 Digital inputs PNP
MCM260-5AD	4 Universal analogue inputs + 2 Analogue outputs V/mA

WIRING PLAN



TD240

Touch-screen HMI 3,5" 256 colors, integrated PLC

Main features

Box	140x100 (front panel) x 40 mm (-AD) or 65mm (-11AD)
Power supply	12..24Vac/Vdc ±15% 50/60 Hz (12..24 Vdc for TD340-11AD)
Consumption	8W
Display	Display LCD TFT 3,5" - 256 Colours, Integrated resistive Touch-screen
Operating conditions	Temperature 0-45 °C, humidity 35..95 RH%
Material	Front panel: aluminium with polycarbonate coverage; Box: chromed steel
Weight	Approx. 690gr code-AD, approx. 750gr code-11AD
Sealing	IP54 (Front panel), IP20 (Box and Terminal bloks)
Quick set-up options	SLOT Memory Card for programs download (Ladder+graphics)
Expansions	Modules MCM260-1/2/3/4/5 or other Modbus devices

Inputs

Analogue	4 Selectable for TC, K, J, S, R, T, E, PT100, PT1000, PT500, Ni100, NTC10K, (B 3435K), PTC1K (kty1000) 0/4..20 mA, 0/1..10 V (code TD240-11AD)
Digital	16 Selectable as inputs / outputs (code TD240-11AD)
Input for encoder	3 encoder/counter 24bit up to 80Khz (overlapped 6 inputs PNP/TTL)

Outputs

Digital	16 Selectable as static outputs 700mA or digital inputs (code TD240-11AD)
Analogue	4 outputs 0..10Volt (code TD240-11AD)
Serial ports	2 serial ports RS232/RS485

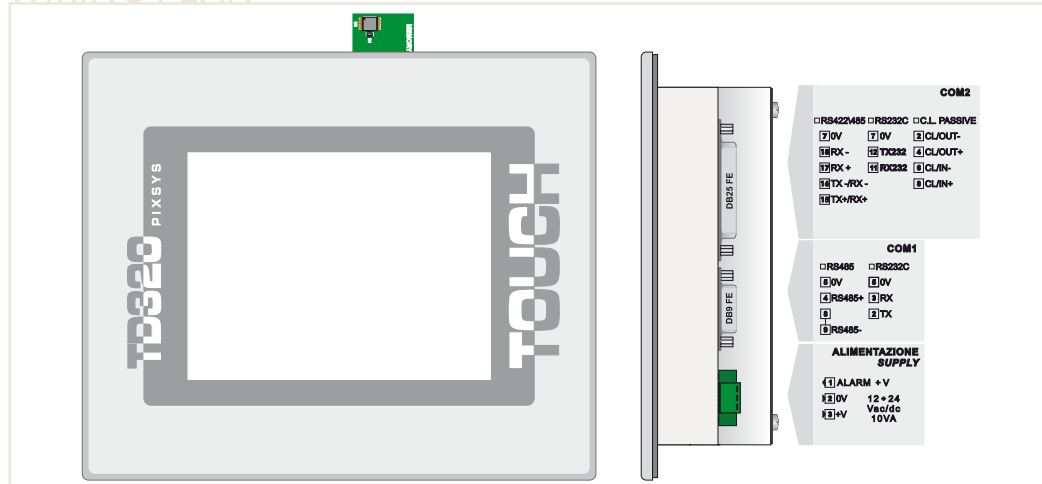
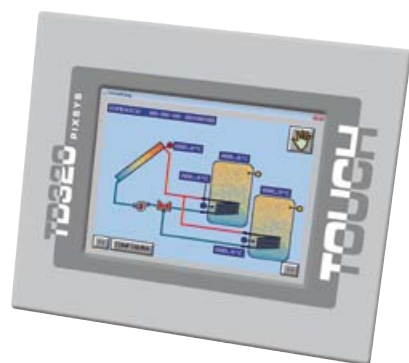
Software features

Programming	Pixsys PLprog software, Ladder diagrams; 10K words variables VW, 800 marker (logic relays), 128 bistables, 128 timer 16 bit, 64 up-down counters, mathematic and logic functions, rescale function, contact on bit
Graphic interface programming	Pixsys TDdesigner software
Communication protocols	Modbus RTU master / slave; Free-Port mode for Modem protocols or proprietary devices
Memory	384Kbyte Flash for programming, 10K words non-volatile Ram (6 months), 1000 words EEPROM, 30k words MMC
Clock	Real-Time clock, Back-up battery
Analogue inputs control algorithms	P, PI, PID, PD

Ordering codes

TD240-AD	HMi 3,5" with soft-plc, 2 serial RS232/RS485 - Modbus
TD240-11AD	HMi 3,5" with soft-plc + 16 digital I / O + 4 Universal analogue inp. + 4 analogue out 0..10Volt + 2 serial RS232/RS485
2100.30.001	M.c.Par Series TD240-TD320-ATR313

WIRING PLAN



TD320

Touch-screen HMI 5,7" 256 colors

Main features

Box	204x170 (front panel) x 48
Power supply	12..24Vac/Vdc ±15% 50/60 Hz
Consumption	10W
Display	Display LCD TFT 5,7" - 256 Colours, integrated resistive Touch-screen
Operating conditions	Temperature 0-45 °C, humidity 35..95 RH%
Material	Front panel: aluminium with polycarbonate coverage; Box: chromed steel
Weight	Approx. 1430 gr
Sealing	IP54 (Front panel), IP20 (Box and Terminal bloks)
Quick set-up options	SLOT Memory Card or program download (Ladder+graphics)
Expansions	Pixsys modules MCM260-1/2/3/4/5 or other Modbus devices

Inputs

Digital	8 Inputs for external contacts on connector 25poles
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Outputs

Digital	1 General alarm output
Serial ports	1 Programming / Communication port with RS232 interface, 1 communication port with RS485/RS422 interface, galvanically isolated, 1 communication port with RS232/RS485 interface

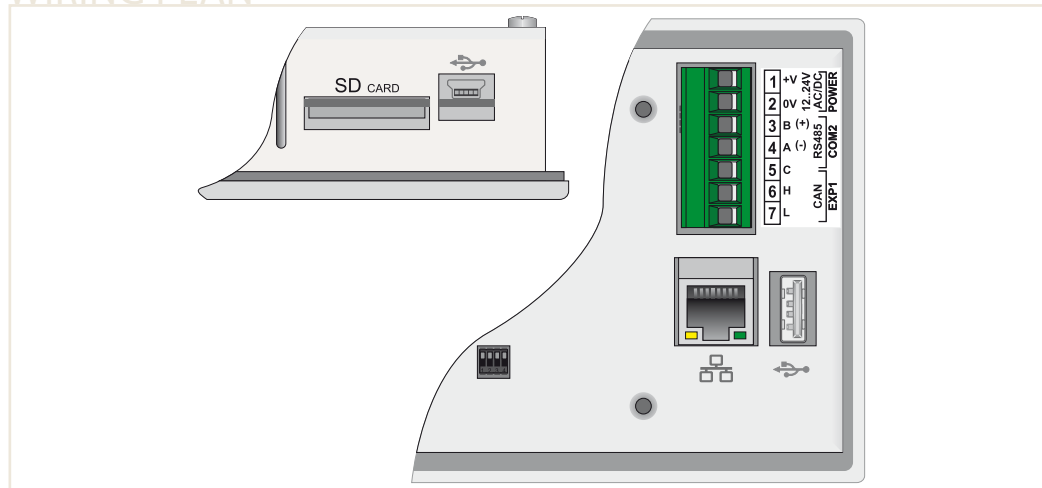
Software features

Operating logic functioning	Pixsys PLprog software for Ladder diagrams; 10K words variables VW, 800 marker (logic relays), 128 bistables, 128 timer 16 bit, 64 up-down counters, mathematic and logic functions, rescale function, contact on bit
Graphic interface programming	Software Pixsys TDdesigner
Communication protocols	Modbus RTU Master / slave; Free-Port mode for Modem protocols or proprietary devices
Memory	768Kbyte Flash for programming, 10K words non-volatile Ram (6 months), 1000 words EEprom, 30k words MMC
Clock	Real-Time clock, Back-up battery

Ordering codes

TD320-AD	HMI 5,7" with soft-plc + 3 serial ports RS232/RS485/RS422
2100.30.001	M.c.Par Series TD240-TD320-ATR313

WIRING PLAN



TD430

Touch-screen Panel PC / HMI with 4,3" Windows CE



Main features

Box	140x100 (front panel) x 38
Power supply	12..24Vac/Vdc $\pm 15\%$ 50/60 Hz
Consumption	3,7W
Display	LCD TFT touch screen 4.3" , 480x272 pixel, 16M colors
Operating conditions	Temperature 0-45 °C, humidity 35..95 RH%
Material	Front panel: aluminium with polycarbonate coverage; Box: chromed steel
Weight	Approx. 476 gr
Sealing	IP54 (Front panel), IP20 (Box and Terminal bloks)
Expansion module	1 x ETD884-AD Expansion: 2 load cell inp. with integrated power supply for the cell, 8 digital inputs, 2 encoder inputs 24bit PNP/TTL, 8 digital outputs, 2 analogue outputs V/mA, 4 analogue inp. NTC /PTC /V/ mA

Hardware features and communication ports

Processor	ARM V4i 200 MHz
Memory	Flash 256 MB
Serial communication	RS485 galvanically isolated
Field bus	CAN galvanically isolated
USB	1 USB for programming on frontal + 1 USB 2.0 on back side
Ethernet	1 Ethernet 10/100 Base-T on RJ45 connector
Memory card	SD/MMC Reader

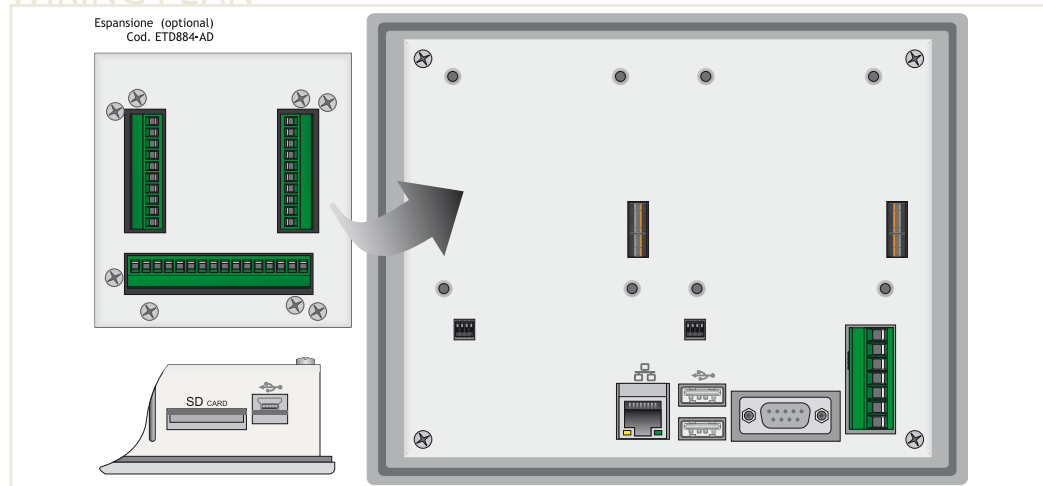
Software features

Operating logic programming	Pixsys Suite LogicLab IEC 61131-3 languages
Graphic interface programming	Software Pixsys Suite PageLab
Communication protocols	Modbus RTU Master / slave; Free-Port mode for Modem protocols or proprietary devices, Modbus TCP/IP Master / Slave, CAN Open Master
Clock	Real-Time clock, Back-up battery

Ordering codes

TD430-AD	HMI 4,3" with soft-plc + RS485 + CANopen
ETD884-AD	Expansion module 2 An. 16bit/1ms (load cells) + 8 Inp. + 8 Statics + 2 outputs Volt/mA

WIRING PLAN



TD570 / TD700

Touch-screen Panel PC / HMI with 5,7" - 7" Windows CE

Main features

Box	204x160 (front panel) x 38
Power supply	12..24Vac/Vdc $\pm 15\%$ 50/60 Hz
Consumption	3,7W
Display	TD570: 5,7" LCD TFT 640x480 pixel, 16M colors - TD700: 7" LCD TFT 800x480 pixel, 16M colors
Operating conditions	Temperature 0-45 °C, humidity 35..95 RH%
Material	Front panel: aluminium with polycarbonate coverage; Box: chromed steel
Weight	Approx. 937 gr
Sealing	IP54 (Front panel), IP20 (Box and Terminal bloks)
Expansions	2 x ETD884-AD Expansion: 2 load cell inp. with integrated power supply for the cell, 8 digital inputs, 2 encoder inputs 24bit PNP/TTL, 8 digital outputs, 2 analogue outputs V/mA, 4 analogue inp. NTC /PTC /V/ mA

Hardware features and communication ports

Processor	ARM V4i 200 MHz
Memory	Flash 256 MB
Serial communication	RS232-RS485 galvanically isolated
Field bus	CAN galvanically isolated
USB	1 USB for programming on frontal + 1 USB 2.0 on back side
Ethernet	1 Ethernet 10/100 Base-T on RJ45 connector
Memory card	SD/MMC Reader

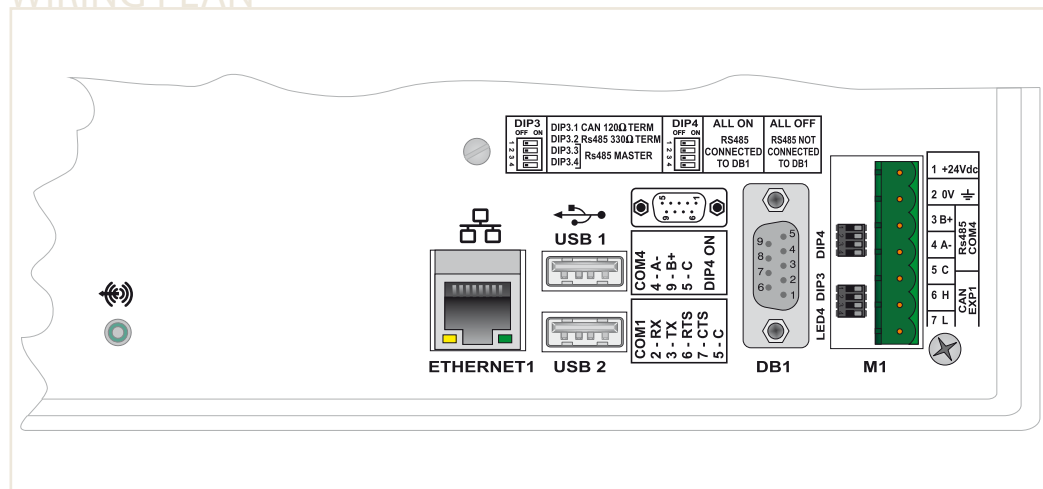
Software features

Operating logic programming	Pixsys Suite LogicLab IEC 61131-3 languages
Graphic interface programming	Software Pixsys Suite PageLab
Communication protocols	Modbus RTU Master / slave; Free-Port mode for Modem protocols or proprietary devices, Modbus TCP/IP Master / Slave, CAN Open Master
Clock	Real-Time clock, Back-up battery

Ordering codes

TD570-AD	HMI 5,7" with soft-plc + 3 serial ports RS232/RS485/RS422
TD700-AD	HMI 7" with soft-plc + 3 serial ports RS232/RS485/RS422
ETD884-AD	Expansion module 2 An. 16bit/1ms (load cells) + 8 Inp. + 8 Statics + 2 outputs Volt/mA

WIRING PLAN



TD750

Panel PC Touch-screen 7"

Main features and display

Box	160 x 204 (front) x 34mm
Power supply	24Vdc $\pm 10\%$
Consumption	Approx. 11W
Display	Display 7" 800x600 24bit LVDS with integrated resistive Touch; backlight Led 500cd (lifetime > 50000h)
Operating conditions	Temperature 5 -50 °C, humidity 10-90 %RH
Frontal panel	6mm aluminium alloy, milled, opaque
Weight	Approx. 2 Kg
Sealing	IP65 (Front panel), IP20 (Box and Terminal bloks)
Cooling	Fanless
UPS	Integrated, assisted shut-down

Hardware features

CPU	Intel (R) Atom(TM) Z530 @ 1,6Ghz / Intel (R) Atom(TM) Z510 @ 1,1Ghz
RAM Memory	1GB DDR2 SDRAM
Hard Disk	Sata Solid State Disk 16 / 64Gb
Ethernet	1 x LAN 10/100 Base-TX Ethernet RJ-45 interface
Serial Interface	1 x RS232, 1 x CAN, 1 x RS485 Optoisolated from power supply
USB	1 Front + 2 Rear USB 2.0 Interface
Audio	Stereo 600 Ohm Out
Clock	Real-Time clock, Back-up battery
Serial ATA	1 X SATA-300 mass storage Interfaces

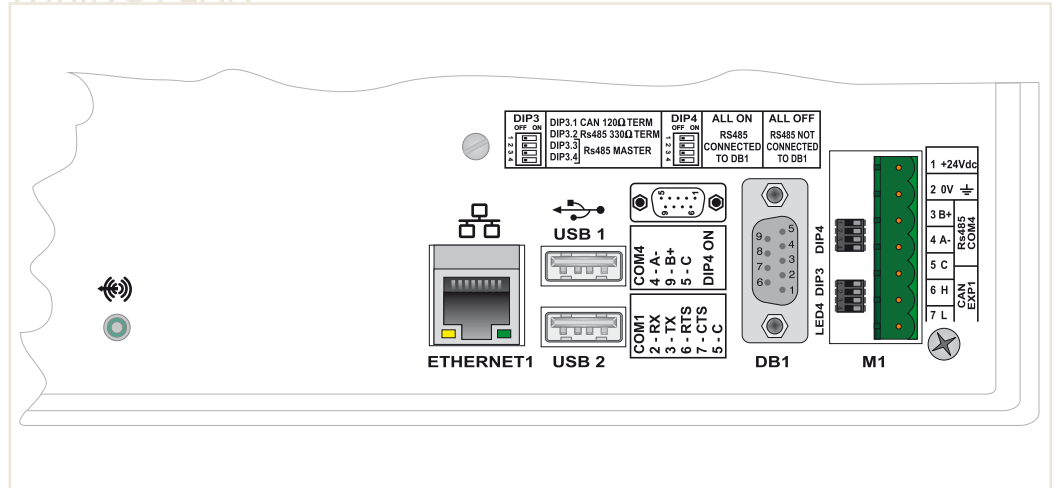
Software features

Operating system	Windows XP Professional / Windows 7 Embedded
Operating logic programming	Pixsys Suite LogicLab IEC 61131-3 languages
Graphic interface programming	Software Pixsys Suite PageLab
Communication protocols	Modbus RTU Master / slave; Free-Port mode for Modem protocols or proprietary devices, Modbus TCP/IP Master / Slave, CAN Open Master

Ordering codes

TD750-APC-WXP	Panel PC 7" with DOM 64Gb
TD750-AEB-XPE	Panel PC 7" with DOM 16Gb
ETDWIF-AD	Optional module Wi-Fi 802.11b,g,n
ETD2RS232-AD	Optional module 2 x UART RS232
ETDLAN1G-AD	Optional module 1 x LAN 10/100/1000T RJ45
ETDHCLEXP	Cover for optional module hole

WIRING PLAN



TD850

Panel PC Touch-screen 10.4"

Main features and display

Box	325 x 260 (front) x 34mm
Power supply	24Vdc $\pm 10\%$
Consumption	approx. 12W
Display	Display 10.4" 800x600 24bit LVDS, integrated resistive Touchscreen; backlight Led 320cd (lifetime>20000h)
Operating conditions	Temperature 5 -50 °C, humidity 10-90 %RH
Front panel	Alluminium alloy 6mm, milled, opaque
Weight	approx. 3 Kg
Sealing	IP65 (Front) , IP20 (Box and Terminal blocks)
Cooling	Fanless
UPS	Integrated, assisted shut-down

Hardware data

CPU	Intel (R) Atom(TM) Z530 @ 1,6Ghz
RAM Memory	1GB DDR2 SDRAM
Hard Disk	Sata Solid State Disk 16 / 64Gb
Ethernet	1 x LAN 10/100 Base-TX Ethernet RJ-45 interface
Serial Interface	1 X RS232, 1 X CAN(optional), 1 X RS485 Optoisolated from power supply
USB	1 Front + 2 USB 2.0 Interfaces on rear panel
Audio	1 Stereo Output 600 Ohm
Clock	Real-Time clock including Back-up battery
ATA Serial	1 X SATA-300 mass storage Interface

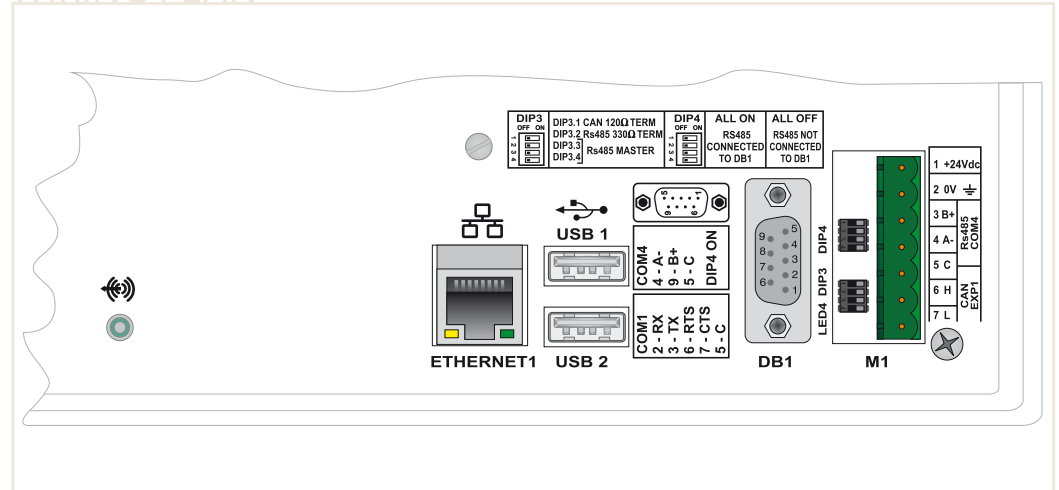
Software data

Operating system	Windows XP Professional / Windows XP Embedded
Operating logic programming	Pixsys Suite LogicLab IEC 61131-3 languages
Graphic interface programming	Software Pixsys Suite PageLab
Communication protocols	Modbus RTU Master / slave; Free-Port mode for Modem protocols or proprietary devices, Modbus TCP/IP Master / Slave, CAN Open Master

Ordering codes

TD850-APC-WXP	Panel PC 10.4", microprocessor Intel® Atom™ Z530 1.6Ghz, 1024Mb RAM DDR2, DOM SATA 64Gb, 24Vdc, Windows XP Professional
TD850-AEB-XPE	Panel PC 10.4", microprocessor Intel® Atom™ Z530 1.6Ghz, 1024Mb RAM DDR2, DOM SATA 16Gb, 24vdc, Windows XP Embedded SP3
ETDWIF-AD	Optional module Wi-Fi 802.11b,g,n
ETD2RS232-AD	Optional module 2 x UART RS232
ETDLAN1G-AD	Optional module 1 x LAN 10/100/1000T RJ45
ETDHCLEXP	Cover for optional module hole

WIRING PLAN



TD900

Panel PC Touch-screen 15"

Main features and display

Box	435 x 330 (front) x 38mm
Power supply	24Vdc $\pm 10\%$
Consumption	approx. 14W
Display	Display 15" 1024x768 24bit LVDS, integrated resistive Touchscreen; backlight Led 500cd (lifetime > 20000h)
Operating conditions	Temperature 5 -50 °C, humidity 10-90 %RH
Front panel	Alluminium alloy 6mm, milled, opaque
Weight	approx. 4 Kg
Sealing	IP65 (Frontal), IP20 (Box and terminal blocks)
Cooling	Fanless
UPS	Integrated, assisted shut down

Hardware data

CPU	Intel (R) Atom(TM) Z530 @ 1,6Ghz
RAM memory	1GB DDR2 SDRAM
Hard Disk	Sata Solid State Disk 16 / 64Gb
Ethernet	1 x LAN 10/100 Base-TX Ethernet RJ-45 interface
Serial Interface	1 X RS232, 1 X CAN(optional), 1 X RS485 Optoisolated from power supply
USB	1 Front + 2 USB 2.0 interface on rear panel
Audio	1 Stereo Output 600 Ohm
Clock	Real-Time clock, Back-up battery
ATA Serial	1 X SATA-300 mass storage Interface

Software data

Operating system	Windows XP Professional / Windows XP Embedded
Operating logic programming	Pixsys Suite LogicLab IEC 61131-3 languages
Graphic interface programming	Software Pixsys Suite PageLab
Communication protocols	Modbus RTU Master / slave; Free-Port mode for Modem protocols or proprietary devices, Modbus TCP/IP Master / Slave, CAN Open Master

Ordering codes

TD900-APC-WXP	Panel PC 15", processor Intel® Atom™ Z530 1.6Ghz, 1024Mb RAM DDR2, DOM SATA 64Gb, 24vdc, Windows XP Professional
TD900-AEB-XPE	Panel PC 15", processor Intel® Atom™ Z530 1.6Ghz, 1024Mb RAM DDR2, DOM SATA 16Gb, 24vdc, Windows XP Embedded SP3
ETDWIF-AD	Optional module Wi-Fi 802.11b,g,n
ETD2RS232-AD	2 x optional UART RS232
ETDLAN1G-AD	1 x optional LAN 10/100/1000T RJ45
ETDHCLEXP	Cover for optional module hole

NET200

Serial converter RS232 / RS485 / USB

Main features

Box	71x101 (front panel) x 28 mm
Power supply	12..24Vac/Vdc $\pm 15\%$ 50/60 Hz or via USB port
Consumption	2 W
Connection	Terminal blok 10poles - 3,81 instrumentation side - USB-B connector + DB 9 poles PC side
Operating conditions	Temperature 0-45 °C, humidity 35..95 RH%
Material	Polycarbonate self-extinguishing
Weight	Approx. 120 g
Fixing	Din Rail EN50022

Software features

Baud Rate	Automatic selection up to 115000 Baud
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Ordering codes

NET200-1AD	RS232/USB > RS232/RS422/RS485
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NET250

Wireless modem - transmitter + receiver

Main features

Box	101mm x 71mm x 28mm (H)
Power supply	12..24 Vac/Vdc $\pm 15\%$ 50/60 Hz for NET250-1AD / From USB for NET250-2AD
Consumption	5,5 VA
Galvanic isolation	Between power supply and serial on NET250-1AD
Operating conditions	Temperature 0-45 °C, humidity 35..95 RH%
Material	Polycarbonate V0
Weight	Approx. 120 g
Fixing	Din Rail EN50022

Software features

Baud-Rate	9600, 19200 and 38400 bit/s (8,N,1) dip-switch selectable
Radio channels setting	Possibility to select (1..7) wireless transmission channel through Hyper-Terminal

Ordering codes

NET250-1AD	Antenna > RS485, RS232
NET250-2AD	USB-B > Antenna
4000.00.005	Ground plane antenna 900Mhz BNC
4000.00.003	Whip antenna 900Mhz BNC for control panel
4000.00.004	Adapter SMA / BNC female
4000.00.006	Cable extension antenna SMA / BNC L=250mm
4000.00.007	Cable extension antenna SMA - MA / FE L=250mm



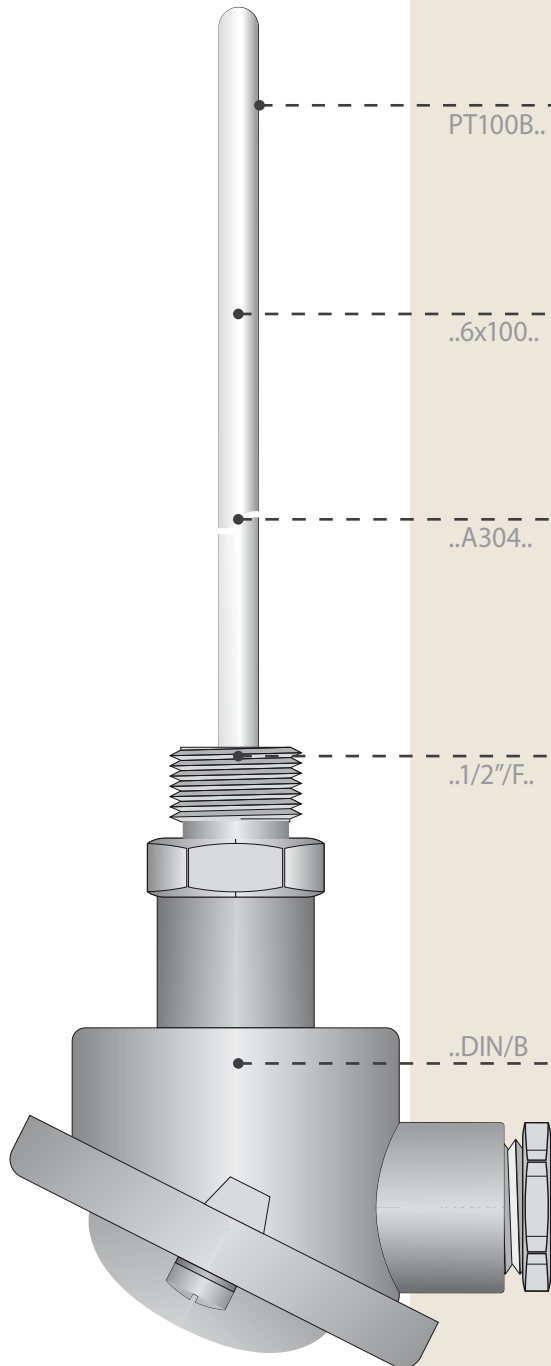


SENSORS AND COMPLEMENTARY FITTINGS

GUIDELINES

for ordering codes

example code: BLI - PT100B - 6x100 - A304 - 1/2"/F - DIN/B



Packaging

BLI	Blister
BOX	Carton

Sensor type

PTC	PT1000	TCS
NTC	Ni100	TCE
PT100A	TCJ	TCR
PT100B	TCK	Other..

Diameter x Length

4x50	6x50	OC/10x5
5x60	6x100	AR/6x100 (air)
6x15	8x150	Other..
8x20	15x400	

Material type

A304	(AISI 304 - 899°C)	OTTN	(brass)
A316	(AISI 316 - 899°C)	KER1	(single ceramic sheath)
I600	(inconel 1180°C)	KER2	(double ceramic sheath)
MGO	(mineral insulated, AISI 304 sheath)	KER3	(triple ceramic sheath)
		Other..	

Connector / Coupling

0000	(no connector)	M12/F	(M12x1,5 fixed)
MN/INOX	(inox rod)	FLNG/S	(sliding flanges)
1/8"/S	(1/8" Gas sliding)	1/8"÷MBAI	(mini-bayonet)
1/4"/	(sliding)	1/4"÷BAI	(bayonet)
1/2"/F	(F=fixed)	M12"÷BAI	(bayonet)
3/8"/S		M10X1:BAI	(thread 1mm bayonet)
M8/F		Other..	
M10/F			

Head / Cable

0000	(no head)	3,0GSC	(silicon cable temperature -60..200°C)
DIN/A		5,0PVC	(PVC cable temperature 30..80°C)
DIN/B		6,0Tfe	(Teflon cable temperature -60..250°C)
DIN/M	(mini DIN)	BA/CER	(ceramic basement)
Eex-D		Other..	
MCR	(ceramic pin)		
MCR/90	(ceramic pin 90°)		
CNM/M	(mini connector)		
0,5TTS	(fibre glass cable temp. -60..250°C)		

Hot junction (only for TC)

IS	(isolated)	IS(2)	(double isolated)
MS	(grounded)	IS(3)	(triple isolated)
SC	(open)	Other..	

Diameter of wires (only for TC)

0,2	0,51	1,29	3,60
0,25	0,81	1,63	
0,35	1,02	2,30	

PT100 EASY-UP

Class B, 3 wires, GSC / TTS cable

Main features

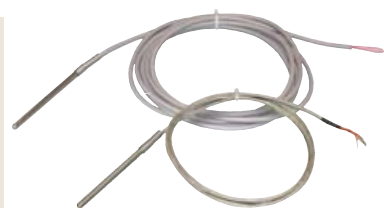
Stem diameter	6mm
Immersion material	Steel AISI 304
Internal insulation	MgO Magnesium oxide > 20Mohm at 25°C (500Vdc)
Sensor	PT100 class B (+/- 0,3°C at 25°C)
GSC cable	Silicon rubber, operating temperature -40 .. 250°
CTTS cable	Glass fiber, operating temperature -200 .. 500°C
Sealing	40mm bend proof spring between cable and stem
Response time	6,5s (normative BS 1904/1984/CEI60751)

Ordering codes

2000.90.039	BLI-PT100B-6X50-A304-0000-3 m GSC cable
2000.90.001	BLI-PT100B-6X100-A304-0000-3 m GSC cable
2000.90.153	BLI-PT100B-6X50-A304-0000-3 m TTS cable
2000.90.520	BLI-PT100B-6X80-A304-0000-2 m TTS cable
2000.90.036	BLI-PT100B-6X100-A304-0000-3 m TTS cable
2000.90.521	BLI-PT100B-6X130-A304-0000-2 m TTS cable
2000.90.522	BLI-PT100B-6X230-A304-0000-2 m TTS cable

Sliding junction ordering codes

2000.30.003	Sliding junction Ø 6x1/8" GAS
2000.30.006	Sliding junction Ø 6x1/4" GAS
2000.30.027	Sliding junction Ø 6x1/4" NPT
2000.30.009	Sliding junction Ø 6x1/2" GAS



PT100 EASY-UP

Air probes, Class B, 3 wires

Main features

Stem diameter	6mm (special holes on the protective sheath)
Immersion material	Steel AISI 304
Internal insulation	Not present
Sensor	PT100 class B (+/- 0,3°C up to 25°C)
GSC cable	Silicon rubber, operating temperature -40 .. 250°
CTTS cable	Glass fiber, operating temperature -200 .. 500°C
Sealing	40mm bend proof spring between cable and stem
Response time	0.9s (BS 1904/1984/CEI60751)
Easy-Up code	2301

Ordering codes

2000.90.091	BLI-PT100B-AR/6X100-A304-0000-3 m GSC cable
2000.90.395	BLI-PT100B-AR/6X100-A304-0000-3 m TTS cable

Sliding junction ordering codes

2000.30.003	Sliding junction Ø 6x1/8" GAS
2000.30.006	Sliding junction Ø 6x1/4" GAS
2000.30.027	Sliding junction Ø 6x1/4" NPT
2000.30.009	Sliding junction Ø 6x1/2" GAS



2000.35.010

SIGNAL CONVERTER

RTD to 4..20mA



Main features

Box	23 mm, Ø 45 mm
Current output	Loop Power (2 wires), Operating range 6-32 Vdc
Connection	Screw pins
Mounting	Din/B head
Operating temperature	-40+85 °C, Humidity 30..90 RH%
Material	Nylon (PA66)
Weight	Approx 30 g
Sealing	IP 20
Conformity	CE, EN 61000-6-4, EN 61000-6-2
Set-up	Programmable by RFid (NFC)

Technical data

Selectable input	PT100 (2/3/4 wires), NI100, PT1000
Output resolution	1µA
Over-range output	f.s. + 5°C
Under-range output	f.s. - 5°C
Failure output	selectable 21,5mA or 3,8mA
Current output protection	30 mA approx.
Rejection	50-60 Hz
Max transmission error	greater between 0,1% f.s. or 0,2°C
Sampling/Response time	300ms / approx. 600 ms
Cable resistance	Max 20Ω
Temperature coefficient	< 100 ppm

Ordering codes

2000.35.010	RTD (PT100/NI100/PT1000) > 4..20mA Loop Powered
2000.35.012	Programmer RF/RFID > USB

Ordering codes current transformers

2000.35.013	Current transformer 50A with 4..20mA loop powered
2000.35.014	Current transformer 50A with RS485 Modbus / 0..10V

PT1000 EASY-UP

GSC / TTS cable, PVC Thermoplastic sealing IP65 / IP67



Main features

Stem diameter	4-5-6mm
Immersion material	Steel AISI 304 / Thermoplastic rubber
Sensor	PT1000B 0,12% 1000 Ohm up to 0°C (-50°C ..+500°C)
Response time	15s
Strength	2000 Vac with resin
Insulation	20 Mohm 500 Vcc
TTS cable	Glass fiber, operating temperature -200 .. 500°C
GSC cable	Silicon rubber, operating temperature -40 .. 250°C
GOT cable	Thermoplastic rubber -30 .. +105°C
Sealing	IP44 with cable TTS / IP67 with resin

Ordering codes

2000.90.232	BLI-PT1000B-4X40-A304-0000-2 m GSC cable
2000.90.233	BLI-PT1000B-5X20-COST-0000-2 m GPT cable
2000.90.234	BLI-PT1000B-6X50-A304-0000-2 m TTS cable

PT100 EASY-UP

Class B, DIN-B head

Main features

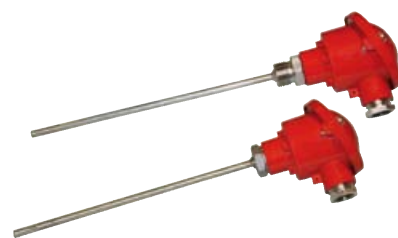
Stem diameter	6mm
Immersion material	Steel AISI 304 or 316
Internal insulation	MgO Magnesium oxide > 20mOhm at 25°C (500Vdc)
Sensor	PT100 class B (+/- 0,3°C up to 25°C)
Response time	6,5s (BS 1904/1984/CEI60751)
Head	DIN/B aluminium alloy, red epoxidic painting
Sealing	IP66
Operating temperature	-100..+500°C

Ordering codes

2000.90.530	BOX-PT100B-6X30-MGO-1/4"/F-DIN/B
2000.90.515	BOX-PT100B-6X100-MGO-0000-DIN/B
2000.95.515	BOX-PT100B-6X100-MGO-0000-DIN/B with thermowell
2000.90.516	BOX-PT100B-6X200-MGO-0000-DIN/B
2000.95.516	BOX-PT100B-6X200-MGO-0000-DIN/B with thermowell
2000.90.517	BOX-PT100B-6X300-MGO-0000-DIN/B
2000.95.517	BOX-PT100B-6X300-MGO-0000-DIN/B with thermowell
2000.90.518	BOX-PT100B-6X400-MGO-0000-DIN/B
2000.95.518	BOX-PT100B-6X400-MGO-0000-DIN/B with thermowell
2000.90.494	BOX-PT100B-6X200-MGO-1/2"/F-DIN/B Transmitter 0..100°C --> 4..20mA

Sliding junction ordering codes

2000.30.003	Sliding junction Ø 6x1/8" GAS
2000.30.006	Sliding junction Ø 6x1/4" GAS
2000.30.027	Sliding junction Ø 6x1/4" NPT
2000.30.009	Sliding junction Ø 6x1/2" GAS



TCJ EASY-UP

GSC / TTS cable

Main features

Sheath diameter	6mm
Immersion material	Steel AISI 304
Internal insulation	MgO Magnesium oxide > 20Mohm at 25°C (500Vdc)
Sensor	Thermocouple J (Fe-CuNi / iron-constantan), Wire 1,02mm, insulated junction
GSC cable	Silicon rubber, operating temperature -40 .. 250°C
TTS cable	Glass fiber, operating temperature -200 .. 500°C
Sealing	40mm bend proof spring between cable and stem
Response time	3,9s (BS 1904/1984/CEI60751)
Operating range	-200..+400°C
Easy-Up code	2301

Ordering codes

2000.90.523	BLI-TCJ-6X80-A304-0000-2 m TTS cable
2000.90.524	BLI-TCJ-6X130-A304-0000-2 m TTS cable
2000.90.525	BLI-TCJ-6X230-A304-0000-2 m TTS cable

Sliding junction ordering codes

2000.30.003	Sliding junction Ø 6x1/8" GAS
2000.30.006	Sliding junction Ø 6x1/4" GAS
2000.30.027	Sliding junction Ø 6x1/4" NPT
2000.30.009	Sliding junction Ø 6x1/2" GAS





TCJ EASY-UP

Washer, GSC / TTS cable

Main features

Sheath diameter	Washer ext. Ø 10mm / Hole Ø 5 mm
Contact material	Stagnated copper
Sensor	Thermocouple J (Fe-CuNi / iron-constantan), Wire 0,25mm, grounded hot junction
TTS cable	Glass fiber, operating temperature -200 .. 500°C
Response time	4,5s (BS 1904/1984/CEI60751)
Operating range	-200..+400°C
Easy-Up code	2301

Ordering codes

2000.90.077	BLI-TCJ-OC/5x10-COPPER-1,5 TTS cable-IS-0,25
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TCK EASY-UP

GSC / TTS cable

Main features

Sheath diameter	6mm
Immersion material	Steel AISI 304 / AISI 316 / Inconel 600
Internal insulation	MgO Magnesium oxide > 20Mohm @ 25°C (500Vdc)
Sensor	Thermocouple K (NiCr-NiAl / Cromel-Alumen), Wire 1,02mm, insulated junction
GSC cable	Silicon rubber, operating temperature -40 .. 250°C
TTS cable	Glass fiber, operating temperature -200 .. 500°C
Sealing	40mm bend proof spring between cable and stem
Response time	1,9s (BS 1904/1984/CEI60751)
Operating range	A316 -100..+600°C / I600 -100..+800°C
Easy-Up code	Code 2352 (-100..+600°C - A316), Code2351 (-100..+800°C - I600)

Ordering codes

2000.90.537	BLI-TCK-6X100-A316-0000-3 m TTS cable
2000.90.068	BLI-TCK-6X100-I600-0000-3 m TTS cable
2000.90.538	BLI-TCK-6X200-A316-0000-5 m TTS cable
2000.90.025	BLI-TCK-6X200-I600-0000-5 m TTS cable

Sliding junction ordering codes

2000.30.003	Sliding junction Ø 6x1/8" GAS
2000.30.006	Sliding junction Ø 6x1/4" GAS
2000.30.027	Sliding junction Ø 6x1/4" NPT
2000.30.009	Sliding junction Ø 6x1/2" GAS

TC-K ALUMINA

DIN-B head, Alumina sheath up 1280°C

Main features

Stem diameter	15mm
Immersion material	Alumina 610 max 1500°C + Coupling steel AISI 316
Internal insulation	Ceramic insulator
Sensor	Thermocouple K (NiCr-Ni), Wire Ø3.20mm, Insulated junction
Response time	120s
Head	DIN/B aluminium alloy, epoxodic painting
Sealing	IP66
Operating temperature	0°..+1250°C

Ordering codes

2000.00.083	TCK-15x250-KER1-MN/INOX-DIN/B-IS2,30
2000.00.015	TCK-15x300-KER1-MN/INOX-DIN/B-IS2,30
2000.00.008	TCK-15x400-KER1-MN/INOX-DIN/B-IS2,30
2000.00.009	TCK-15x500-KER1-MN/INOX-DIN/B-IS2,30
2000.00.056	TCK-15x600-KER1-MN/INOX-DIN/B-IS2,30



PTC1K / EASY-UP

KTY82-121, GSC / PVC cable

Main features

Stem diameter	6mm
Immersion material	Steel AISI 304
Sensor	PTC KTY 82 - 121 1K 1% Range -55°C ..+150°C
Accuracy	1%
GSC cable	Silicon rubber, operating temperature -40 .. 250°C
PVC cable	PVC -30 .. +105°C
Sealing	IP55 / IP67 with resin
Response time	K (constant)= 10s Water flow speed =2m/s
Strength	2000Vac with resin
Insulation	20 Mohm 500Vcc

Ordering codes

2000.90.042	BLI-PTC1K-6X30-A304-0000-3 m PVC cable
2000.90.147	BLI-PTC1K-6X30-A304-0000-3 m GSC cable
2000.90.136	BLI-PTC1K-6X40-A304-0000-3 m GSC cable
2000.90.198	BLI-PTC1K-6X40-A304-0000-6 m GSC cable





NTC10K EASY-UP

β3435, Thermoplastic sealing IP65 / IP67

Main features

Stem diameter	6mm
Immersion material	Steel AISI 304 / Thermoplastic rubber
Sensor	NTC10K Range -50°C ..+120°C
Accuracy	+/-1% beta 3435
GSC cable	Silicon rubber, operating temperature -40 .. 250°C
GOT cable	Thermoplastic rubber, -30 .. +105°C
Sealing	IP55 / IP67 with resin
Response time	10" V=2m/s (liquid) K (constant)= 10s Water flow speed =2m/s
Strength	1500Vac with resin
Insulation	20 Mohm 500Vcc

Ordering codes

2000.90.200	BLI-NTC10K-1%-6X15-COST-0000-1,5 m GOT cable
2000.90.316	BLI-NTC10K-6X50-A304-0000-1,5 m GSC cable



PC21-151-301

Fixed emissivity -20 to 500°C
Including air / water cooled housing

Main features

Measuring ranges	Low(L) -20..100°C; Medium(M) 0..250°C; High(H) 0..500°C
Emissivity	Fixed at 0,95 (modifiable on controller OFFSET parameter)
Optical resolution	PC21 2:1; PC151 15:1; PC301 30:1
Accuracy	+/- 1% of reading or +/- 1°C whichever greater
Response time	240 ms (90% response)
Spectral range	8 to 14 μm
Power supply	24Vdc (min. 9Vdc max. 28 Vdc)
Cable	1 m, two wires plus display
Operating temperature	0..50°C
Operating temperature with cooled housing	0..170°C (air cooling); 0..250°C (water cooling)
Material	Stainless Steel AISI304

Ordering codes

2000.20.018	PC21MT-0 sensor spot 2:1 out 4..20mA/0..250°C
2000.20.019	PC151MT-0 sensor spot 15:1 out 4..20mA/0..250°C
2000.20.022	PC151HT-0 sensor spot 15:1 out 4..20mA/0..500°C
2000.20.024	PC301MT-0 sensor spot 30:1 out 4..20mA/0..250°C
2000.20.021	PC301HT-0 sensor spot 30:1 out 4..20mA/0..500°C
2000.20.023	PC151HT-0 sensor spot 15:1 out 4..20mA/0..500°C with cooled housing
2000.20.025	PC301HT-0 sensor spot 30:1 out 4..20mA/0..500°C with cooled housing
2000.20.012	AIR PURGE COLLAR, accessory for the cleaning of reading optics.

PYROMINI

Miniature sensing head optional Touch-screen / Datalogging

Main features

Measuring ranges	(L) -20..100°C; (M) 0..250°C; (H) 0..500°C, CT configurable up 1000°C
Emissivity	Setting by rotary switch or touch-screen
Optical resolution	2:1 - 15:1 - 30:1
Accuracy	+/- 1% of reading or +/- 1°C whichever greater
Response time	240 ms (90% response)
Spectral range	8 to 14 µm
Power supply	24Vdc +/- 5%
Cable	1 m, two wires plus display
Operating temperature	0..60°C, optional sensing head up to 180°C (no cooling required)
Output	4..20mA or RS485
Touchscreen (optional)	2.83", resistive TFT, 320x240 pixel Configuration of sensor, temperature visualization, graph view
Datalogging	Optional with touch screen, slot for MicroSD Card 2Gb (not included) 28.4 million readings, .CSV format

Ordering codes

2000.20.036	PM-MA-151-CT-CRT spot 15:1 out 4..20mA / -40..1000°C Touchscreen
2000.20.037	PM-MA-151-HT-CB spot 15:1 out 4..20mA / 0..500°C
2000.20.038	PM-MA-151-XT-CB spot 15:1 out 4..20mA / 0..1000°C
2000.20.039	PM-MA-301-HT-CB spot 30:1 out 4..20mA / 0..500°C
2000.20.040	PM-MA-301-XT-CB spot 30:1 out 4..20mA / 0..1000°C



PU151

Configurable emissivity USB cable for PC connection

Main features

Measuring ranges	-40..1000°C (free setting by CalexSoft software)
Emissivity	Free setting by CalexSoft software
Optical resolution	15:1;
Accuracy	+/- 1% of reading or +/- 0,5°C whichever is greater
Response time	240 ms (90% response)
Spectral response	8 to 14 µm
Power supply	24Vdc (min. 9Vdc max. 28 Vdc)
Cable	1 m, two wires plus display
Operating temperature with cooled housing	0..70°C
Material	Stainless Steel AISI304

Outputs

Temperature	4..20mA on range -40..1000°C
Communication port	USB for connection to PC with "Callexsoft" software

Ordering codes

2000.20.020	PU151USB sensor spot 15:1 out 4..20mA/-40..1000°C with USB
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ECT

Low range up to 600mBar

Main features

Sensor	Thick film on ceramic (Al ₂ O ₃)
Output	4..20 mA
Power supply	9..30Vdc 2 wires connection
Process temperature	-25..+85°C
Accuracy at 25°C	+/- 0,5% on full scale (typ.)
Electrical connection	DIN43650-A
Process connection	1/4" G
Housing	AISI316L
EMC emissivity	EN/IEC 61000-6-3/2
Sealing	IP65

Ordering codes

2000.40.088	ECT0.1A range 0..100 mBar, Ceramic
2000.40.089	ECT0.2A range 0..200 mBar, Ceramic
2000.40.090	ECT0.4A range 0..400 mBar, Ceramic
2000.40.091	ECT0.6A range 0..600 mBar, Ceramic



ECT/NAT

Range -1..1000Bar

YouTube

Main features

Sensor	Thick film on ceramic (Al ₂ O ₃)
Output	4..20 mA (options at 0..10Volt)
Power supply	9..30Vdc 2 wires connection
Operating temperature	-25..+85°C
Accuracy at 25°C	+/- 0,3% on full scale (typ.)
Electrical connection	DIN43650-A
Process connection	1/4" G
Housing material	AISI316L
EMC emissivity	EN/IEC 61000-6-3/2
Sealing	IP65

Ordering codes

2000.40.100	ECT1.0A range 0..1 Bar; 4..20mA
2000.40.101	ECT2.5 range 0..2,5 Bar; 4..20mA
2000.40.103	ECT6.0A range 0..6 Bar; 4..20mA
2000.40.104	ECT10.0A range 0..10 Bar; 4..20mA
2000.40.105	ECT16.0A range 0..16 Bar; 4..20mA
2000.40.106	ECT25.0A range 0..25 Bar; 4..20mA
2000.40.107	ECT40.0A range 0..40 Bar; 4..20mA
2000.40.108	ECT100.0A range 0..100 Bar; 4..20mA
2000.40.119	ECT-1.3A range -1..3 Bar; 4..20mA
2000.40.122	ECT-1.0A range -1..0 Bar; 4..20mA
2000.40.033	NAT400.0A range 0..400 Bar ; Out. 4..20mA
Available ranges (NAT)	2,5 to 1000 Bar

ATM.ECO

Submersible transmitter

Main features

Sensor	Piezoresistive
Output	4..20 mA (reverse polarity and short circuit protected)
Power supply	9..33Vdc, 2 Wires connection
Operating temperature	-5..+80°C
Accuracy at 25°C	+/- 0,25% on full scale (typ.)
Burst pressure	> 200 Bar
Gasket	Viton
Housing material	Inox steel 1.4435 or titanium (optional)
Immunity	EN61000-4-2/-3/-4/-5/-6
Weight	Approx. 145 gr

Ordering codes

2000.40.085	ATM.ECO/N 10 m w.c., cable 20m Pur, out 4..20mA
2000.40.086	ATM.ECO/N 4 m w.c., cable 20m Pur, out 4..20mA
2000.40.087	ATM.ECO/N 5 m w.c., cable 20m Pur, out 4..20mA



FL-ME

Flush membrane transmitter

Main features

Sensor	Thin film on steel
Output	4..20 mA
Supply	2 wires 24Vdc (9..32Vdc)
Media temperature	-40..+125°C
Accuracy @ 25°C	+/- 0,3% FS typ., Long term stability 1 year = +/-0,2% FS typ.
Electrical connector	DIN43650-A (EN175301-803A)
Pressure connection	1/2" G male, flush membrane
Housing	AISI316L
Sealing	IP65
Measuring range	0..0,2Bar ; 0..100Bar

Ordering codes

2000.40.135	FPT02.0A 0..200 mBar Flush membrane
2000.40.136	FPT04.0A 0..400 mBar Flush membrane
2000.40.137	FPT06.0A 0..600 mBar Flush membrane
2000.40.138	FPT1.0A 0..1 Bar Flush membrane
2000.40.139	FPT4.0A 0..4 Bar Flush membrane
2000.40.140	FPT6.0A 0..6 Bar Flush membrane
2000.40.141	FPT10.0A 0..10 Bar Flush membrane
2000.40.144	FPT25.0A 0..25 Bar Flush membrane
2000.40.143	FPT100.0A 0..100 Bar Flush membrane





DYNISCO MELT

Pressure transmitters for plastic materials Echo

Main features

Input excitation	mV/V: 10VDC recommended, 12VDC max VDC: 16-30VDC mA: 14-30VDC
Output, analog	3.33mV/V, 0-10VDC, or 4-20mA
Accuracy	±0.5% FS
Pressure ranges (psi)	1.5M, 3M, 5M, 7.5M or 10M
Pressure units	PSI, Bar, Kg/cm ² , or MPa
Diaphragm temperature	662° F (350°C) for Rigid - 752° F (400°C) for Flex
Process connection	1/2-20 UNF thread (45° conical seal) M14, M22
Temperature sensor (optional)	J or K-type thermocouple with 3 inch flex, PT100 RTD

Ordering codes

2000.45.027	ECHO-MV3-PSI-R21-UNF-6PN-S06-F18-NTR
2000.45.021	ECHO-MV3-PSI-R22-UNF-6PN-S06-F18-NTR
2000.45.028	ECHO-MV3-PSI-R23-UNF-6PN-S06-F18-TCJ
2000.45.029	ECHO-MA4-PSI-R21-UNF-6PN-S06-F18-NTR
2000.45.030	ECHO-MA4-PSI-R22-UNF-6PN-S06-F18-NTR
2000.45.031	ECHO-MA4-PSI-R23-UNF-6PN-S06-F18-TCJ

PTx | MDx | SPX

Main features

Input excitation	mV/V: 10VDC recommended, 12VDC max VDC: 16-30VDC mA: 14-30VDC
Output, analog	3.33mV/V, 0-10VDC, 4-20mA, 1-11VDC or 2-10VDC
Accuracy	±0.5% FS
Pressure ranges (psi)	1.5M, 3M, 5M, 7.5M, 10M, 15M or 20M
Pressure units	PSI, Bar, Kg/cm ² , or MPa
Diaphragm temperature	752° F (400°C) optional 530°C
Process connection	1/2-20 UNF thread (45° conical seal) M18
Temperature sensor (optional)	J or K-type thermocouple with 3 inch flex, PT100 RTD

Ordering codes

2000.45.023	TPT463E-15M-6/18
2000.45.032	PT462E-15M-6/18

Vertex

Main features

Input excitation	mV/V: 6-12VDC; mA: 16-36VDC
Output, analog	3.33mV/V or 4-20mA
Accuracy	±0.25% FS
Pressure ranges (psi)	1.5M, 3M, 5M, 7.5M or 10M
Pressure units	PSI, Bar, Kg/cm ² , MPa, KPa
Diaphragm temperature	660°F (350°C), max
Process connection	1/2-20 UNF (with 45° conical seat)
Temperature sensor (optional)	J-type thermocouple

Ordering codes

2000.45.033	VERT-MV3-MM1-NDC-PSI-R21-UNF-6PN-S06-F18-NTR
2000.45.034	VERT-MV3-MM1-NDC-PSI-R22-UNF-6PN-S06-F18-NTR
2000.45.035	VERT-MV3-MM1-NDC-PSI-R23-UNF-6PN-S06-F18-TCJ
2000.45.036	VERT-MA4-MM1-NDC-PSI-R21-UNF-6PN-S06-F18-NTR
2000.45.037	VERT-MA4-MM1-NDC-PSI-R22-UNF-6PN-S06-F18-NTR
2000.45.038	VERT-MA4-MM1-NDC-PSI-R23-UNF-6PN-S06-F18-TCJ

RH96

Hum. / Temp. transmitters OEM applications

Main features

Size	Stem 126mm x 20mm
Power supply	12..30Vdc
Consumption	3,5 mA max on version 0..10Volt
Operating temperature	-10°C .. +60°C
Working range	6..100% RH
Accuracy at 25°C	+/- 5% RH (15..90% RH)
Response time	Approx. 15 min
Cable	3 m
EASY-UP (HR+T) code	Code 6600 (for ATR401 and ATR171)
EASY-UP (HR) code	Code 2401 (all controllers)

Outputs

RH	0..10Volt , 4..20mA
Temperature	PT100 3 wires

Ordering codes

2000.50.018	RH96-3GA - Sens. RH 4..20mA Metal grid filter
2000.50.019	RH96-3GA - Sens. RH 4..20mA Sintered filter
2000.50.020	RH96-3GA - Sens. RH 0..10Volt + PT100 Metal grid filter
2000.50.021	RH96-3GA - Sens. RH 0..10Volt + PT100 Sintered filter



EE06

Compact transmitters OEM applications

Main features

Size	Stem 116mm x 12mm (version with output 0..1Volt), Stem 159mm x 12mm (version with output 4..20mA)
Power supply	4,5..30Vdc (version with output 0..10Volt) , 9..28Vdc (version with output 4..20mA)
Consumption	1,5 mA (typ. on version 0..10Volt)
Operating temperature	-40°C .. +60°C
Working range	0..100% RH
Accuracy at 20°C	+/- 3% RH (10..90% RH), +/- 5% RH (<10%..>90% RH)
Response time	3s (typ.)
Cable	2 m
Filter type	Metal grid, Stainless sintered steel, Sintered teflon
EASY-UP code (HR in 4..20mA)	Code 2401 (all controllers)

Output

RH	0..1Volt , 4..20mA
Temperature	PT100 3 wires

Ordering codes

2000.50.002	EE06-FP1AA1K150 - Sens. RH 0..1 Volt + PT100, Metal grid
2000.50.016	EE06-FP1A1K200 - Sens. RH 0..1 Volt, Metal grid
2000.50.023	EE061-FP6A1K300 - Sens. RH 4..20mA + PT100, Metal grid





EE21

High precision Hum. / Temp. HVAC

Main features

Size	Box 80mm x 80mm Stem 50mm/200mm x 20mm (diameter)
Power supply	15..35Vdc , 15..28Vac
Consumption	5 mA max on version 0..10Volt
Operating temperature	-40°C .. +60°C
Working range	0..100% RH
Accuracy at 25°C	+/- 2% RH (0..90% RH); +/- 3% RH (90..100% RH)
Response time	< 15s
Mounting	On wall or duct, with connection terminals and cable glands
Filter type	Metal grid, Stainless sintered steel, Sintered teflon
EASY-UP code (HR 4..20mA)	Code 2401 (all controllers)

Outputs

RH	0..1Volt , 4..20mA, 0..10 Volt
Temperature	4..20mA, 0..10 Volt

Ordering codes

2000.50.005	EE21-FT1A21/T24 - Sens. RH 0..1Volt + Temp. 0..1Volt, wall mounting
2000.50.006	EE21-FT6A21/T24 - Sens. RH 4..20mA + Temp. 4..20mA, wall mounting
2000.50.007	EE21-FT6B56/T24 - Sens. RH 4..20mA + Temp. 4..20mA, duct mounting
2000.50.011	EE21-FT1B21/T04 - Sens. RH 0..1Volt + Temp. 0..1Volt, duct mounting
2000.50.015	EE21-FT3B56/T24 - Sens. RH 0..10Volt + Temp. 0..10Volt, duct mounting
2000.50.017	EE21-FT3A53/T24 - Sens. RH 0..10Volt + Temp. 0..10Volt, wall mounting



EE23

Hum. / Temp. Industrial applications

Main features

Box	Box 90mm x 135mm x 66mm, steel stem 200mm x 12mm (diameter)
Power supply	15..35Vdc , 15..28Vac
Consumption	110 mA (version 4..20mA), 60 mA (version 0..10Volt)
Operating temperature	-40°C .. +120°C (option up to 180°C with EE31 code)
Working range	0..100% RH
Accuracy at 25°C	+/- 1,3% RH (0..90% RH); +/- 2,3% RH (> 90% RH)
Response time	< 15s with metal grid filter and coating on sensor
Mounting	Panel mounting box IP66, stainless steel probe
Filter type	Metal grid, Stainless sintered steel, PTFE
EASY-UP code	(HR 4..20mA) Code 2401 (all controllers)

Outputs

RH	Selection 4..20mA / 0..10 Volt
Temperature	Selection 4..20mA / 0..10 Volt
Connection cable	Standard 2 m, option 10 m

Ordering codes

2000.50.010	EE23-FTC3025HC01AB6T12 - Sens. RH+Temp. 2 outputs 0..10V/4..20mA Stainless sintered steel filter
2000.50.014	EE23-FTC6025HC01AB6T12 - Sens. RH+Temp. 2 outputs 0..10V/4..20mA Metal grid filter
2000.50.012	EE23-FTC3025HC01AB6T12 - Sens. RH+Temp. 2 outputs 0..10V/4..20mA Stainless sintered steel filter + Display
2000.50.013	EE23-FTC3025HC01AB6T12 - Sens. RH+Temp. 2 outputs 0..10V/4..20mA Stainless sintered steel filter + Display, Cable 10m

EE375

Dew point Temp. transmitters OEM applications

Main features

Size	100mm x 54mm x 40mm with process connection 1/2"G
Power supply	21..28Vdc
Consumption at 24Vdc	80 mA typ. on version 4..20mA (140mA during auto-calibration)
Operating temperature	-60°C (-80°C)
Pressure range	0..20 Bar (max)
Accuracy at 20°C	< 2°C (up to -60°C)
Response time	10 .. 80s
Serial interface	RS232 for configuration software
Sensor protection	Stainless steel sintered filter
Electromagnetic compatibility	EN61326-1, EN61326-2-3

Ordering codes

2000.50.022	EE375-TEHA03CD6TD63TF63 - Dew-point Temp. Transmitter
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SSR series OKPAC

Zero-crossing, Resistive loads 25A..125A / 1ph

Main features

Technology	Zero-Crossing with low zero-crossing level, for applications with resistive charge
Control voltage	8..30Vdc to 3,5..30Vdc
Switching voltage	12..280Vac(25A) to 24..510Vac(125A)
Signaling Led	Signaling Led on input circuit
Protection	Against short-circuit on output
Sealing	Protection cover IP20 on screw connection
Easy-up code	Code 4400 for the whole range

Ordering codes

2200.00.051	SSR 25A / 12-280Vac / Ctrl 7-30Vdc Led
2200.00.053	SSR 50A / 24-600Vac / Ctrl 8-30Vdc Led
2200.00.054	SSR 75A / 24-600Vac / Ctrl 8-30Vdc Led
2200.00.055	SSR 95A / 24-510Vac / Ctrl 3,5-30Vdc Led
2200.00.056	SSR 125A / 24-510Vac / Ctrl 3,5-30Vdc Led
2200.00.090	Heatsink for 25A with DIN adapter
2200.00.092	Heatsink for 50A with DIN adapter





SSR series SAL/SU/SUL

Zero-crossing, resistive loads
30..75A / 1ph

Main features

Technology	Zero-Cross with low zero-crossing level, for applications with resistive charge
Control voltage	8..30Vdc to 3,5..30Vdc
Output voltage	12..280Vac(25A) to 24..600Vac(125A)
Signaling Led	Control status LED
Protection	Against short-circuit on output
Sealing	Protection covers IP20 on screw connection
Easy-up code	Code "4400" for the whole range

Ordering codes series SAL (screw terminals)

2200.00.077	SSR 32A / 24-600Vac / Ctrl 3,5-32Vdc led and heatsink
2200.00.078	SSR 35A / 24-600Vac / Ctrl 3,5-32Vdc led
2200.00.079	SSR 50A / 24-600Vac / Ctrl 3,5-32Vdc led

Ordering codes series SU / SUL (terminal block for DRR450)

2200.00.085	SSR 30A / 24-400Vac / Ctrl 3,5-32Vdc led and heatsink
2200.00.083	SSR 35A / 24-600Vac / Ctrl 3,5-32Vdc
2200.00.079	SSR 50A / 24-600Vac / Ctrl 3,5-32Vdc
2200.00.084	SSR 75A / 24-600Vac / Ctrl 3,5-32Vdc
2200.00.100	Heatsink for 32A with DIN adapter
2200.00.099	Heatsink for 50A with DIN adapter



SSR series SWTA

Phase-angle, resistive / inductive
Ctrl 4..20mA, 32A / 3ph

Main features

Technology	Phase-angle control
Command	4..20mA
Control voltage	200 .. 480Vac
Signaling led	Signaling Led on input circuit
Protection	Varistor 510V Diameter 14mm
Sealing	IP20
Connection	6 screw terminals for input signal and diagnostics, 6 for load control
EMC Immunity	EN61000-2/3/4/5
EMC Emission	NFEN55011
Weight	2 Kg

Ordering codes

2200.00.082	SSR 32A (3ph) / 200-480Vac / Ctrl 4/20mA led and heatsink
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SSR series SIT

Zero-crossing, Ctrl 90-240 Vac
50A / 3ph

Main features

Technology	Zero-Cross with low zero-crossing level, for applications with resistive charge
Control voltage	90..240Vac
Switching voltage	24..520Vac
Signaling Led	Signaling Led on input circuit
Protection	Against short-circuit on output
Sealing	IP20
Easy-up code	Code "4400" for the whole range
EMC Immunity	EN60947-4-3 (IEC947-4-3) and EN60950/VDE0805 (Reinforced Insulation) UL-cUL
Connection	Screw terminals for input signal and load control
Mounting	DINrail EN50022

Ordering codes

2200.00.081 SSR 50A (3ph) / 24-520Vac / Ctrl 90-240Vac led and heatsink



SSR series SGT

Zero-crossing, Ctrl 8-32 Vdc
50A / 3ph

Main features

Technology	Zero-Cross with low zero-crossing level, for applications with resistive charge
Control voltage	8..30Vdc
Switching voltage	24..600Vac
Signaling led	Signaling Led on input circuit
Protection	Against shor-circuit on output
Sealing	Protection cover IP20 on screw terminals
Easy-up code	Code "4400"
Connection	Screw terminals for input signal and load control
EMC immunity	IEC 1000-4-4 (burst)
Weight	370 gr

Ordering codes

2200.00.073 SSR 50A (3ph) / 24-600Vac / Ctrl 8,5-32Vdc led
2200.00.093 Heatsink for 100A with DIN adapter + FAN+TERM./DIN
2200.00.094 Heatsink for 50A with DIN adapter





MDR

1ph, Out 24Vdc

Main features

Sizes	22,5 x 90 x 100(20W); 40 x 90 x 100 (40-60W)
Control voltage	85..264 Vac
Surcharge protection	105..120% (160%) constant , current limiter
Overtension protection	115..135% , 125..135% according to output tension
Setup	500 ms full charge, 230 Vac
Rise	30 ms full charge, 230 Vac
Hold up Time	50 ms full charge, 230 Vac
Operating temperature	-20..55°C
Standard EMC	EN55022 class B; EN61000-6-2 Level heavy industry
Wirings	3/6 screw terminals

Output

Relay	1 Alarm relay
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Ordering codes

2700.10.008	ALM-MDR-20-24 (20W) Monophase
2700.10.009	ALM-MDR-40-24 (40W) Monophase
2700.10.012	ALM-MDR-60-24 (60W) Monophase



DR

1ph / 3ph, Out 24Vdc

Main features

Sizes	55,5x125x100 (75w); 65,5x125x100 (120w)
Control voltage	85..264 Vac; 90..132/180..264Vac (selection by switch) 1Ph/3Ph
Surcharge protection	105..120% (160%) constant , current limiter
Overtension protection	115..135% , 125..135% according to output tension
Over-temperature protection	Output shut down and restart
DC output correction	+/-10% 24..28Vdc
Operating temperature	-10..55°C / -20..70°C
Standard EMC	EN55022 class B; EN61000-6-2 Level ind. pes.
Wirings	3/4 screw terminals

Ordering codes

2700.10.010	ALM-DR-30-24 (30W) Monophase
2700.10.003	ALM-DR-45-24 (45W) Monophase
2700.10.011	ALM-DR-60-24 (60W) Monophase
2700.10.004	ALM-DR-120-24 (120W) Monophase
2700.10.005	ALM-DRP-240-24 (240W) Monophase
2700.10.006	ALM-DRT-240-24 (240W) Three-phase
2700.10.013	ALM-DRT-480-24 (480W) Three-phase
2700.10.014	ALM-DRT-960-24 (960W) Three-phase

ADAPTERS

Panel-mounting adapters and cover plates

Adapters and cover plates are useful when replacing existing instrumentation with new devices in different dimensions. Panel-mounting by plastics fittings and screw.

Ordering codes

1300.20.099	Adapter 72x72 to 48x48
1300.20.059	Adapter 96x96 to 48x48
1300.20.058	Adapter 96x96 to 48x96
1300.20.029	Adapter 96x96 to 72x72
1300.20.063	Adapter 48x96 to 32x74
1300.20.169	Cover plate 32x74
1300.20.064	Cover plate 48x48
1300.20.065	Cover plate 48x96
1300.20.070	Cover plate 96x96
1300.20.066	Cover plate 72x72
1600.50.082	Gasket 32 x 74
1600.50.097	External Gasket 48 x 48
1600.50.099	External Gasket 72 x 72

These adapters enable installation on DIN rail also for panel-mounted devices. Available sizes 32x74mm, 48x48mm (1/16 DIN) and 48x96mm (1/8 DIN).

Ordering codes

1300.50.001	Din Rail adapter 32x74mm
1300.50.003	Din Rail adapter 48x48mm (1/16 DIN)
1300.50.004	Din Rail adapter 48x96mm (1/8 DIN)



SOCKETS FOR SSR - RELAYS

Din-rail adapters/supports for Celduc SSR and relays

Sockets with integrated pin for relays with amperage between 8 and 16A, as well as for SSR with load charges up to 4A. Useful on control panels where the process control instrumentation needs actuators as interface to the load.

Din-rail mounting and screw terminals.

Ordering codes

1200.10.004	Sockets DIN EN50022 (ESD05000)
1200.00.032	Relay 24V 16A 250Vac 1 C/O
2200.00.103	SSR Inp. 24V AC/DC / out 230V 4A AC (series SPA07420)
2200.00.104	SSR Inp. 24V AC/DC / out 230V 2A AC (series STA07220)



SMARTNEXT BASIC

Industrial wireless radio system

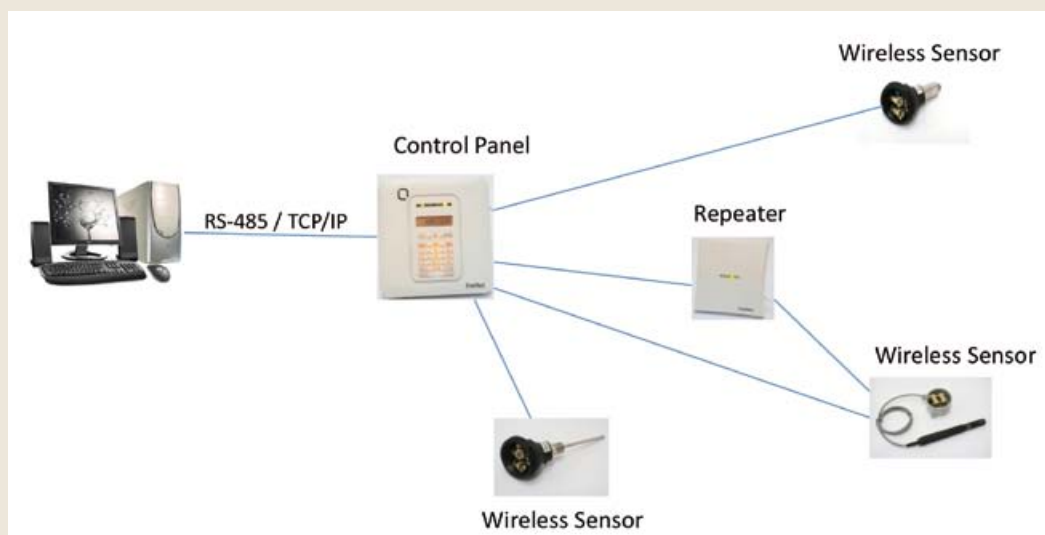


Main data

Technology	Wireless / Frequency-hopping spread spectrum
Installation	Plug-and-play
Control panel	RS485 Modbus RTU/Modbus TCT-IP
Frequency band	433/868/915 MHz
Operating distance	Indoor approx 250m, outdoor approx 1500m

Ordering codes

SMC-485/433	Control panel for 30 - 433MHz RF frequency transm., Modbus RS485, 230Vac
SMC-485/868	Control panel for 30 - 868MHz RF frequency transm., Modbus RS485, 230Vac
SMC-485/915	Control panel for 30 - 915MHz RF frequency transm., Modbus RS485, 230Vac
SMC-100/433	Control panel for 30 - 433MHz RF frequency transm., Modbus TCP-IP, 230Vac
SMC-100/868	Control panel for 30 - 868MHz RF frequency transm., Modbus TCP-IP, 230Vac
SMC-100/915	Control panel for 30 - 915MHz RF frequency transm., Modbus TCP-IP, 230Vac
SMR-500/433	Repeater for control panel - 433MHz frequency RF, 230VAC
SMR-500/868	Repeater for control panel - 868MHz frequency RF, 230VAC
SMR-500/915	Repeater for control panel - 915MHz frequency RF, 230VAC
SMT-420/433	Transmitter for 4-20mA sensors (up to 12Vdc), 433MHz frequency RF, including batteries, STR/KNE Box / Head Housing
SMT-420/868	Transmitter for 4-20mA sensors (up to 12Vdc), 868MHz frequency RF, including batteries, STR/KNE Box / Head Housing
SMT-420/915	Transmitter for 4-20mA sensors (up to 12Vdc), 915MHz frequency RF, including batteries, STR/KNE Box / Head Housing
SMP-100/433	Transmitter for PT100 temp, sensors, 433MHz frequency RF, including batteries, STR/KNE Box / Head Housing
SMP-100/868	Transmitter for PT100 temp, sensors, 868MHz frequency RF, including batteries, STR/KNE Box / Head Housing
SMP-100/915	Transmitter for PT100 temp, sensors, 915MHz frequency RF, including batteries, STR/KNE Box / Head Housing
SMD-010/433	Transmitter for 2 digitals switches, 433MHz frequency RF, including batteries, STR/KNE Box / Head Housing
SMD-010/868	Transmitter for 2 digitals switches, 868MHz frequency RF, including batteries, STR/KNE Box / Head Housing
SMD-010/915	Transmitter for 2 digitals switches, 915MHz frequency RF, including batteries, STR/KNE Box / Head Housing



GENERAL TERMS OF SALE



Placing a purchase order, the Customer implicitly agrees with the Terms of sale listed below and accepts them in full.

ORDERS shall not be binding for Pixsys until the relevant written order confirmation is issued.

PRICES, to be expressed in EUR unless otherwise specified, shall be those of our pricelist in force at the time of order receipt. Prices of customised models or special configurations will be given in the order confirmation, as well as eventual discount options.

Validity of special quotations is usually 30 days and the relevant number must be quoted in the purchase order.

List prices are meant EXW-Mellaredo (our factory), inclusive standard packaging, exclusive of VAT, transport and all other taxes, duties, licenses, export and import duties and other governmental charges which may be imposed on the delivery or carriage of the goods abroad. Transport will be quoted upon request and eventually charged on invoice.

Goods always travel at Buyer's risk and responsibility after leaving our factory. Insurance coverage must be eventually required and beared by the Customer. Claims for shortages, non-conformity or damages during transport will not be accepted unless notified within 3 days of delivery.

Payment, unless otherwise specified, shall take place in advance against Proforma invoice. Bank charges arising from foreign/ intermediary banks will not be accepted. Payment by credit cards is currently not yet available.

Delivery date is meant as day of dispatch to forwarder or pick-up at our factory. Pixsys will do

its best efforts to meet the delivery date set out in the order confirmation and shall promptly notify any reasonable delay, which will anyway not entitle order cancellation or claim for damages.

Proprietary rights shall be reserved by Pixsys with respects to all goods delivered until receipt in full of the relative payment due.

Installation and maintenance on site is not included in our technical after-sales support.

These terms are governed exclusively by Italian law. Eventual disputes will be submitted to jurisdiction of court in Padova and in Italian language.

These general Terms of sale include also the Warranty Terms and RMA system below.

WARRANTY TERMS

Pixsys srl warrants its electronic devices for 12 months from Invoice date. Pixsys liability shall be limited to repairing (or replacing at its option) any defective product which is returned with RMA (Return Material Authorization) priorly obtained from Pixsys and to be clearly marked on documents. Pixsys srl warrants devices reparations for 3 months from Invoice date. Pixsys shall not be responsible for accident, neglect, misuse, damage to objects or people caused using the devices outside their specifications or outside any published performance data, including unauthorized and unqualified repairing or failure to provide proper environmental conditions. In no event shall Pixsys liability exceed the purchase price of the product(s).

RMA (RETURN MATERIAL AUTHORIZATION)

RMA means Return Material Authorization and the purpose is a clear and effective handling of the products which the Customer would like to send us back for any reason.

When do I need to ask for an RMA?

REPAIRING

Technical service for repairing of instruments or complementary fittings

TECHNICAL SUPPORT

Hardware and software changes, upgrade, any technical improvement

RETURN OF FAULTY PRODUCTS

Return of faulty units for replacement or credit note

RETURN FOR NON-CONFORMITY/ RECESS

Shipment of goods received from our Warehouse and not in compliance with the order. This can be caused by a shipment error and to this event belongs also the RECESS right, the customer can request credit note for the purchased materials within one week from the receipt of the goods.

PROCEDURE

Send your request filling in the present form and wait for our communication of RMA by fax or e-mail prior to any shipping

The RMA number obtained from Pixsys must be clearly marked and visible on external side of package

Ship the goods prepaid to our address as listed at top of this form.

Packages without RMA and/or not prepaid will not be collected.

Our technical service will complete test and repairing of defected components as soon as possible.

In case that the shipped devices should result free of defects and in good operating conditions, a minimum NET amount of EUR 25,00 will be charged.

Goods will be returned at customer's expenses, unless otherwise specified.

Repairing cost will be notified in advance only if it exceeds EUR 50,00.



MY PRODUCT

Check online the expiry date of warranty, hardware-software upgrades and any maintenance/service campaign for your product.
Fill-in the RMA form if a return to Manufacturer for technical assistance is necessary.

A

Field verification of warranty
reading QR code
by mobile devices

or

B

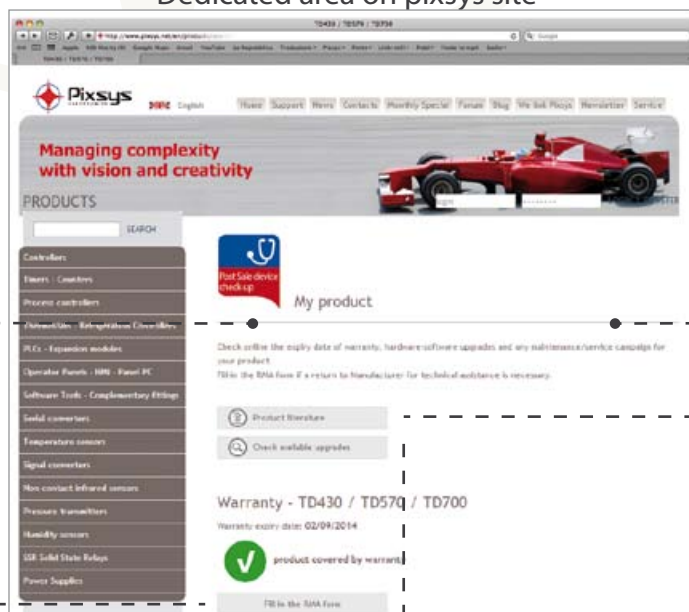
Online verification of warranty
entering product code
and serial number



Read QR code



Dedicated area on pixsys site



Modulo Rientro Merce Autorizzata

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887"

Codice art. Autotela

Partenza acquisto Data

Dati Cliente

Autotela Ref. sig.

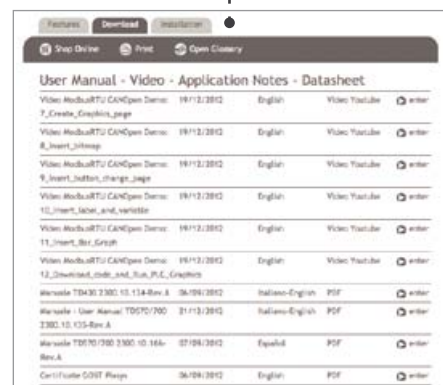
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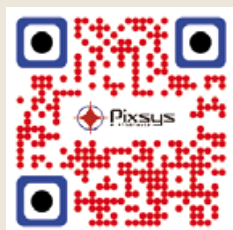
Fill-in RMA form



Software updates



User manuals and video tutorials



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