

Thermoregulators and thermo- regulations controlunit



MODEL Z1

MODEL Z2

MODEL Z DUAL CONTROL

MODEL ZATR243

MODEL ZDRR245

MODEL Z121

MODEL ZATR420

Model Z1



Technical features

General specification

- Microprocessor based
- Ferrous-costantana thermo couple (J) protected input
- Regulation range 0-499° C
- Reference junction compensation
- Digit display provides readout of temperature
- Lexan data entry keypad
- PID control algorithm
- Auto-reset mechanism protects against short blackouts
- Auto/manual operation
- Static output with ZERO-CROSSING switch
- High speed 16A protection fuse
- Adjustable max and min temperature alarms
- Pre-heating
- Softstart
- 2 Led indicators for operative mode
- Removable front

Technical specifications

- 1 to 96 control zones increased on demand
- Available in 9"1/2, 19", 38" cupboard or rack container with protective clear PVC door
- Rack drawers with function and power elements available for installation in pre-existing structures
- Multi-power instruments available on request
- Standard power up to 8000 W
- Power supply 230 V single phase, 230 V three phases, 400 V three phases+neutral frequency 50 ... 60 Hz
- Thermal-magnetic general power supply switch
- Forced air ventilation
- Multipolar power supply and connector cables between resistors and thermocouples

Optional:

- Visual and acoustic alarm
- External alarm connector for maintenance temperature control
- Programmable instrument start-up

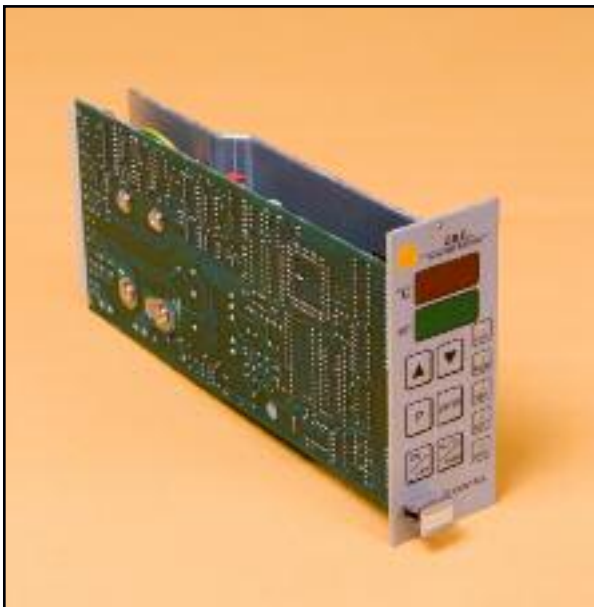
For further information please contact our technical dep..

We reserve the right to change technical details.

How to order

Model Z.1
 Application :
 + N. articolo (se conosciuto):
 + Nr zone:.....
 Tipi di collegamento:
 + Tipo di connettore:.....
 + Numero di poli:.....

Model Z2



Technical features

General specification

- Microprocessor based
- Ferrous-constantana thermo-couple (J) protected input
- Regulation range 0-900° C
- Reference junction compensation
- Double six-digit display provides readout of temperature, parameters and functions
- Lexan data entry keypad
- Latest generation PID control algorithm
- Auto-reset mechanism protects against short blackouts
- Auto/manual operation
- Static output with ZERO-CROSSING switch
- Standard power per zona 3500 watt.

Altre potenze su richiesta.

- High speed 16A protection fuse max power 3500w
- Adjustable max and min temperature alarms
- Pre-heating phase variable in terms of duration, temperature and power
- Dinamic set-point
- 5 Led indicators for operative mode
- All possible malfunctions signalled on display
- Standby temperature
- Remote set-point
- Safety relay power circuit opening
- Removable front

Optional:

- Simultaneous increase and decrease of temperature setting on multiple modules
- External alarm connection for standby temperature adjustment
- Serial RS 485 interface PC connection
- K thermo couple input and PT100 thermoresistor

Technical specifications

- 1...96 control zones increased on demand
- Available in 9"1/2, 19", 38" cupboard or rack container with protective clear PVC door
- Rack drawers with function and power elements available for installation in pre-existing structures
- Multi-power instruments available on request
- Standard power up to 8000 W
- Power supply 230 V single phase, 230 V three phases , 400V three phases + neutral, 50-60 Hz frequency
- Thermo-magnetic general power supply switch
- Forced air ventilation
- Multipolar power supply and connector cables between resistors and thermo couples
- Socket for external alarm connection

Optional

- Visual and acoustic alarm
- External alarm connector for maintenance temperature control
- Programmable instrument start-up

How to order

Model Z.2

Application :

+ N. articolo (se conosciuto):

+ Nr zone:.....

Tipi di collegamento:

+ Tipo di connettore:.....

+ Numero di poli:.....

Model and dimension container

Container	Control zone	Dimension LxHxP [mm]
L1A	1	180x140x400
C2	2	250x140x400
C6	3..6	350x160x480
C8	7..8	450x160x480
C12	9..12	350x300x480
C16	13..16	450x300x480
C24	17..24	535x480x460
C32	25..32	535x610x460
C40	33..40	535x740x460
C48	41..48	535x870x460
C56	49..56	535x1000x460
C64	57..64	535x1130x460
C72	65..72	535x1260x460
C80	73..80	535x1390x460
C88	81..88	535x1520x460
C96	89..96	535x1650x460

Our instruments are produced only with materials and components that meet the highest national and international quality standards.

Our entire product range undergoes rigorous testing to ensure maximum precision and durability over time.

One year guarantee.

Model Z DUAL CONTROL



Technical features

General specification

- Microprocessor based
- thermo-couple J,k protected input
- Regulation range 0-900° C
- Reference junction compensation
- Double six-digit display provides readout of temperature, parameters and functions
- Lexan data entry keypad
- Latest generation PID control algorithm
- Auto/manual operation
- Static output with ZERO-CROSSING switch
- Max power 3500 watt.
- High speed 16A protection fuse
- Adjustable max and min temperature alarms
- Dynamic set point
- Pre-heating phase variable
- Dynamic set-point
- 2 Led indicators for operative mode
- All possible malfunctions signalled on display
- Standby temperature
- Remote set-point
- Safety relay power circuit opening
- Removable front
- Remote set-point
- Safety relay power circuit opening
- Reading of output power
- Self tuning of PID parameters defining the proper functioning of the system
- HDB = Reporting to the load condition by reading the current
- Key copy for multicontrol: set point, boost, standby and other parameters

Option:

- Programmable switch
- External alarm connection for standby temperature adjustment
- Power to the area can be increased on request
- Supply voltage: 230 or 270 V single phase, 230 V three-phase, 400 or 440 three-phase

Model ZATR243



Technical features

General features

Controller 48x48 mm (1/16 Din), single control loop. Distinctive feature is the high configurability, resulting in a limited number of ordering codes.

Universal analogue input selectable for over 15 different types of sensor, beside SSR-Relay-V/mA outputs programmable as command/alarm/event, or analogue retransmission. Optional RS485-ModbusRTU and Loop Break Alarm by current transformer. useful extended power supply range 24....230 Volt ac/dc galvanically isolated.

User-friendly operation, programming tools for quick set-up (MEMORY-CARD, programming and monitoring software LAB-SOFTVIEW).

- Box: 48x48 (front panel) x 125 mm
- Power supply: 24...230Vac/dc $\pm 15\%$ 50/60 Hz (galvanic isolation)
- Display: 4 digits 0,4 " green + 4 digits 0,3" red
- Condizioni ambientali: 0-45°C, 35...95rH%
- Inputs: 1 Configurable Selection TC K, J, S, R, PT100, I100, PT1000, PT500, PTC1K, NTC10K 0...10V, 0/4...20mA, 0...40mV Potentiometer 6K Ω , Potentiometer 150K Ω , TA 50mA.

Outputs

ATR243-20ABC: 2 relay 5A Vac resistive charge or 1 relay and 1 output SSR 12V-30mA / 4..20mA / 0...10Volt per comando o ritrasmissione (4000 punti di risoluzione)

ATR243-21ABC-T: 2 relay 5A resistive charge + 1 output SSR 12V-30mA / 4..20mA / 0...10Volt per comando o ritrasmissione (4000 punti di risoluzione) + RS485 Modbus RTU (57600baud max) + Ingresso TA 50ma per Loop Break Alarm

ATR243-31ABC: 3 relay 5A resistive charge + 1 output SSR 12V-30mA / 4..20mA / 0...10Volt per comando o ritrasmissione (4000 punti di risoluzione)

- Input TA 50ma for Loop Break Alarm
- Digital input: Lancio Tune, Selezione multisetpoint, Man/Auto, Lock Display, Start/Stop ciclo
- Control algorithms: ON - OFF with hysteresis, P., P.I., P.I.D., P.D. time proportioned
- Precisione : 0.5% ± 1 digit per TC/RTD; 0.2% ± 1 digit per V/mA
- Tempo di acquisizione: impostabile (max 15ms)
- Protezione: IP54 Frontale (IP65 con guarnizione), IP30 Contenitore, IP20 Morsettiera
- Configurazione: Parametri protetti da password e Memory card con batteria per produzione in serie, pacchetto software LabSoftView
- Marchi : CE, CSA UL*

For further information please contact our technical dep..

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Model ZDRR245



Technical features

General features

DIN rail-mounted Controller, single control loop. Distinctive feature is the high configurability available in a single ordering code. Beside operation as multi-setpoint PID controller, the unit can be ideally used as signals converter thanks to universal analogue input (selectable by parameter for up to 18 different signals) and the analogue output which is galvanically isolated and programmable for rescalable retransmission of process/setpoint value.. RS485-ModbusRTU, Loop Break Alarm by current transformer. User-friendly operation, programming tools for quick set-up (MEMORY-CARD, programming and monitoring software LAB-SOFTVIEW).

- Box: DIN43880, DIN EN50022 rail mounted
- Power supply 24...230Vac/dc $\pm 15\%$ 50/60 Hz (galvanic insulation)
- Consumption 3 W
- Display 4 digits 0,4" green + 4 digits 0,3" red
- Operating conditions Temperature 0-45 °C, humidity 35..95 RU%
- Input: 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
- Output: 2 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 - Slav. Ingresso TA 50mA per Loop Break Alarm
- Control algorithms ON - OFF with hysteresis, P., P.I., P.I.D., P.D. time proportioned
- Precision: 0.5% ± 1 digit per TC/RTD; 0.2% ± 1 digit per V/mA
- Tempo di acquisizione: impostabile (min 15ms)
- Protezione: IP20 Morsettiera
- Quick set-up options Memory Card with / without battery, software LABSOFTVIEW, EASY-UP codes
- Marchi : CE, CSA UL*

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Model ZATR121



Technical features

General features

Controller 32x74mm, Single control loop, 3-digits Display.

Distinctive feature is the high configurability, resulting in a limited number of ordering codes.

Universal analogue input, selectable for a wide range of sensors, both for industrial or civil applications. Relay/SSR outputs, programmable as command/alarm/event. Optional RS485-ModbusRTU/Slave.

User-friendly operation, programming tools for quick set-up (MEMORY-CARD, programming and monitoring software LABSOFTVIEW).

- Box: 32x74(frontale)x58mm
- Power supply 12...24 Vac/Vdc or 24Vac/115Vac/230Vac $\pm 15\%$ 50/60 Hz
- Display 3 digits, 0,56" red + 3 signaling leds
- Operating conditions Temperature 0-45 °C, humidity 35..95 RH%
- 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+ Ingresso TA 50mA per Loop Break Alarm
- Ingresso digitale: Lancio Tune, Selezione multisetpoint, Man/Auto, Lock Display, Start/Stop ciclo
- Control algorithms ON - OFF with hysteresis, P., P.I., P.I.D., P.D. time proportioned, Dead band
- Precisione: 0.5% ± 1 digit per TC/RTD; 0.2% ± 1 digit per V/mA
- Tempo di acquisizione: 66ms
Filtro su ingresso analogico e su visualizzazione impostabile
- Sealing Front panel IP65 (with gasket) , Box IP30, Terminal blocks IP20
- Quick set-up options Memory Card with/without battery, software LABSOFTVIEW

For further information please contact our technical dep..

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Model ZATR421



Technical features

General features

Process controller 48x96mm (1/8 Din), single loop. It enables the programming of 15 cycles/programs which might include anything up to 45 steps/segments, all free selectable by the operator as rising/dwell/cooling steps. Distinctive feature is the extremely user-friendly programming, easy to handle even for the unskilled operator.

This programmer is specifically conceived for the automation of industrial kilns/environmental chambers/dryers and for the monitoring of thermal processes requiring the programming of cycles/profiles with control of process variables versus time. Special functions like Waiting (useful whenever the process has a delay on the programmed setpoint) and Cycle Recovery (after unexpected power failures) are included.

Universal analogue input, outputs selectable as command/alarm/auxiliary, analogue retransmission, serial communication RS485-ModbusRTU. All options are configurable by keyboard, not requiring any jumpers selection. Useful extended supply range 24...230 Volt ac/dc, galvanically isolated, also between input/outputs.

Programming tools for quick set-up (MEMORY-CARD, programming and monitoring software LABSOFTVIEW).

- 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 RU%
- Material : Box: Noryl UL94V1 self-extinguishing;
Front panel: Silicon rubber V0
- Weight: Approx. 350 g
- Sealing: IP65 (Front panel) , IP20 (Box and Terminal blocs)
- Quick set-up options: Memory Card with / without battery, software LABSOFTVIEW

For further information please contact our technical dep..

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Model ZSRR Serie S

Relè statici



Model	Corrente Max	Tensione di alimentazione	Segnale di input
2200.00.051	25A	12-280Vac	7-30Vdc
2200.00.053	50A	24-600Vac	8-30Vdc
2200.00.054	75A	24-600Vac	8-30Vdc
2200.00.055	95A	24-510Vac	3,5-30Vdc
2200.00.056	125A	24-510Vac	3,5-30Vdc

Technical features

General features

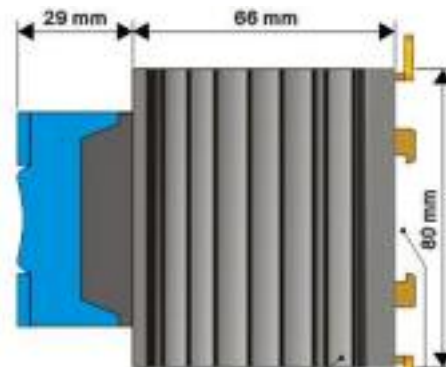
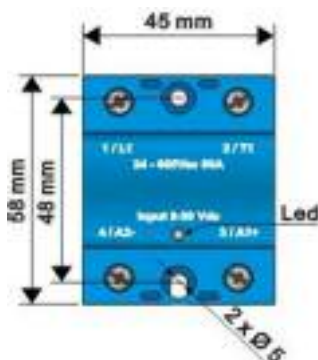
Zero-crossing type Solid State Relays. Particularly suitable for resistive loads.

A range of heatsinks with DIN rail mounting is available for heat dissipation. Control status led, IP20 flaps, screw connections with break washers.

- Dimension(mm): 44,5x58,2x27
- 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: Against short-circuit on output
- Protection: Against short-circuit on output
- Easy-up code: Code 4400 for the whole range
- Sealing: Protection cover IP20 on screw connection

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Opzione:
Cod.:2200.00.090

Attacco a guida
DIN EN50022

Model ZM-GS/ZT-GS

Technical features

Static relay zero-crossing monophasic

- Suitable for check resistive monophasic load.
- LED diagnostic charge and signal check.
- Internal varistor to avoid any damage due to tension rush.
- Logic control 12-24V DC 10mA.
- Canalize couplet DIN for the version M-GS15-20 with ZANCHE for the version M-GS40.

M-GS 15-20-40Amp.48-440V AC



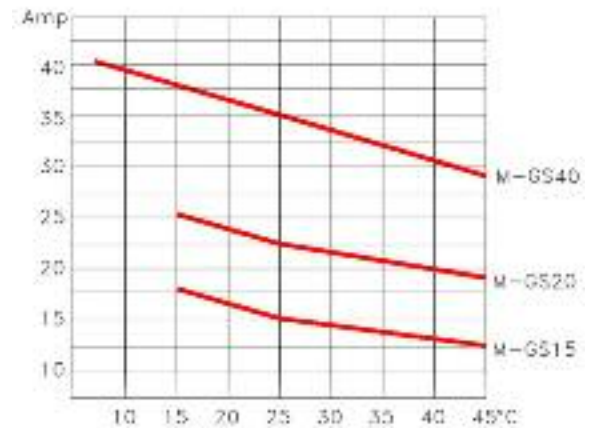
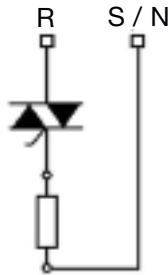
Modelli	Item
M-GS15	5909
M-GS20	5910
M-GS40	5915

12t 10mS
125 Amp.
450 Amp.
880 Amp.

Dimension	
H.80mm	L.24mm P.108mm
H.130mm	
H.195mm	



Monophasic connection



T-GS 15-40Amp.48.440V AC



Static relay zero-crossing three-phase

- Suitable for check resistive three-phase and three.monophasic.
- Internal varistor to avoid any damage due to tension rush.
- Logic control 12-24V DC 20mA. and LED signaling.
- Forced ventilation (230V AC 5VA) for the version T-GS40.

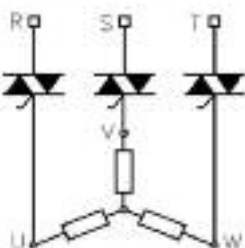
Model	Item
T-GS15	5920
T-GS40	5925

12t 10mS
125 Amp.
880 Amp.

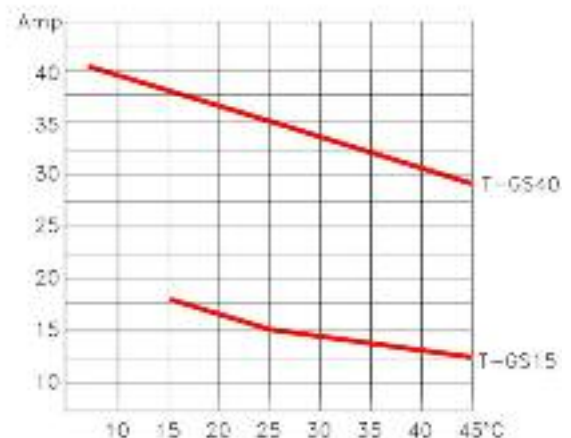
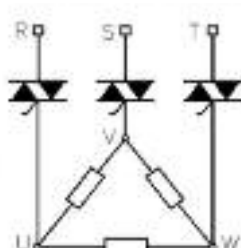
Dimension	
H.100mm	L.60mm P.115mm
H.147mm	

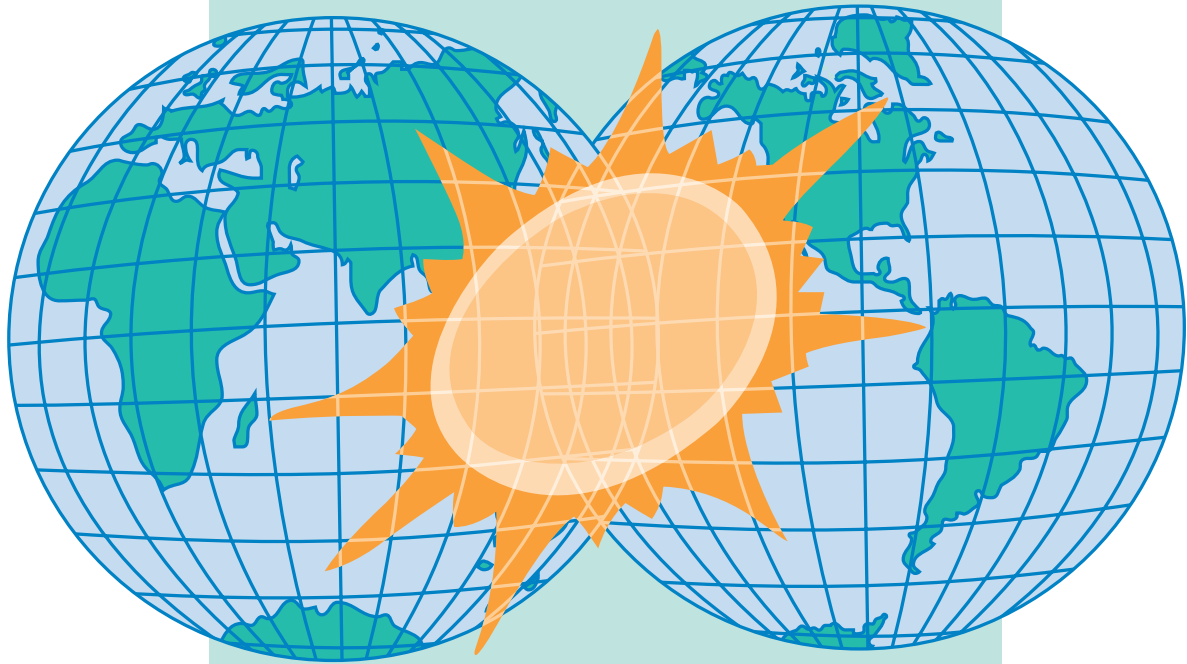
Electric connection

Three-phase star



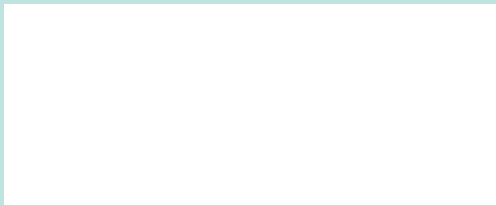
three-phase triangle





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