



# PULZON

Hotrunner controllers



## PULZONSmart single zone controller



PULZONSmart Single zone temperature controller features compact design and easy operation using separate displays and buttons. The unit is operated with input buttons and main switch on front panel. Hotrunner is protected with malfunction alarms such as sensor breakage, manual mode operation allows to use hotrunner even with defective thermocouple and maintains the output percentage command unchanged. The back side of metal housing holds 5-pole connector, circuit fuse and mains cable.

### KEY FEATURES

- 10A per zone, option 16A per zone
- Two 4-digits displays for set- and actual values
- Smart selfoptimization, AUTOTuning/SOFTStart
- Manual / Automatic mode switchable
- Continuous operation of a zone even with a defective thermocouple - Simple operation
- 5 pole connector plug

### TECHNICAL SPECIFICATIONS

**Housing:** Metal enclosure, powder-coated Dimensions (W x H x D) in mm: 205 x 85 x 190, Weight: 2.4 kg

**Temperature Controller:** ATR142 Microprocessor-controlled controller in 71x29mm, modular design, with fully automatic system, individual setpoint and actual value with two 4-digit LED display, status alarm LEDs, and FNC key for switch-over to manual mode

**Thermocouple type:** J / K / PT100 (specify at order)

**Power Outputs:** 230 VAC, max. 10A (option 16A) per zone, with built-in 50A solid-state relay

**Fuse:** fast FF 10A, 6.3 x 32 mm

**Mould Connection:** 5 PIN connector plug ILME/HARTING

**Mains Supply:** 230 VAC, 50Hz, 1P / N / PE

**Mains Connection:** Mains cable with 3 m shock-proof connector

**Ambient Temperature:** Operation: 0...+55°C

5 pole plug



## PULZONSmart hotrunner controller



Temperature controller PULZONSmart is used for hotrunner applications in the automotive, packaging, cosmetic, and medical industries.

PULZONSmart range extends from single zone up to 12 zones controller and they are offering easy to use solution and are cost effective.

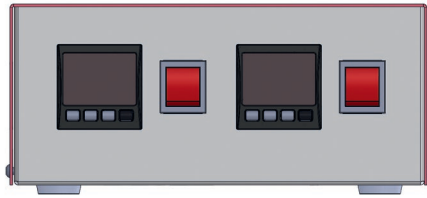
Each zone is equipped with a PIXSYS ATR227 controller and CELDUC SSR50A.

Standard controller includes features such as Autotuning/Softstart, manual mode in case of defective thermocouple (If the sensor breaks during automatic functioning, controller moves to manual mode while maintaining the output percentage command unchanged as generated by the PID immediately before breakage)

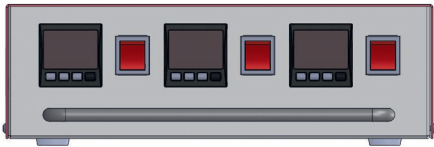
### KEY FEATURES

- Easy to use
- 10A per zone, option 16A per zone
- Two 4-digits displays for set- and actual values
- Smart selfoptimization, AUTOTuning/SOFTStart
- Manual / Automatic mode switchable
- Continuous operation of a zone even with a defective thermocouple

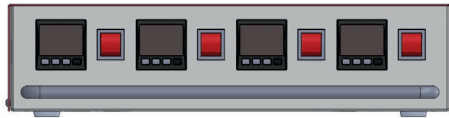




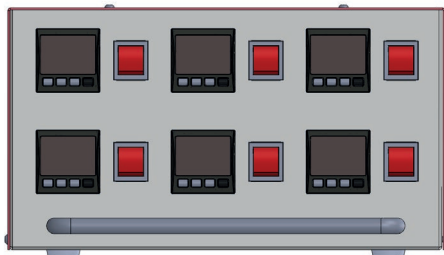
Order number:	PULZONSmart 2
Number of zones:	2
Plug for controller:	1 x 10 pole
Fuse:	FF 10A 6,3x32 mm
Dimensions:	<b>(WxDxH in mm) 235x260x190</b>
Power supply [3m] plug	Schuko
Maximum power outlet:	4kW



Order number:	PULZONSmart 3
Number of zones:	3
Plug for controller:	1 x 16 pole
Fuse:	FF 10A 6,3x32 mm
Dimensions:	<b>(WxDxH in mm) 325x310x109</b>
Power supply [3m] plug	CEE 16A
Maximum power outlet:	6kW



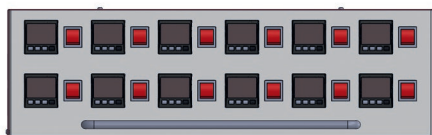
Order number:	PULZONSmart 4
Number of zones:	4
Plug for controller:	1 x 16 pole
Fuse:	FF 10A 6,3x32 mm
Dimensions:	<b>(WxDxH in mm) 420x310x109</b>
Power supply [3m] plug	CEE 16A
Maximum power outlet:	8kW



Order number:	PULZONSmart 6
Number of zones:	6
Plug for controller:	1 x 24 pole
Fuse:	FF 10A 6,3x32 mm
Dimensions:	<b>(WxDxH in mm) 330x360x190</b>
Power supply [3m] plug	CEE 16A
Maximum power outlet:	11 kW



Order number:	PULZONSmart 8
Number of zones:	8
Plug for controller:	2 x 16 pole
Fuse:	FF 10A 6,3x32 mm
Dimensions:	<b>(WxDxH in mm) 420x310x190</b>
Power supply [3m] plug	CEE 32A
Maximum power outlet:	15 kW

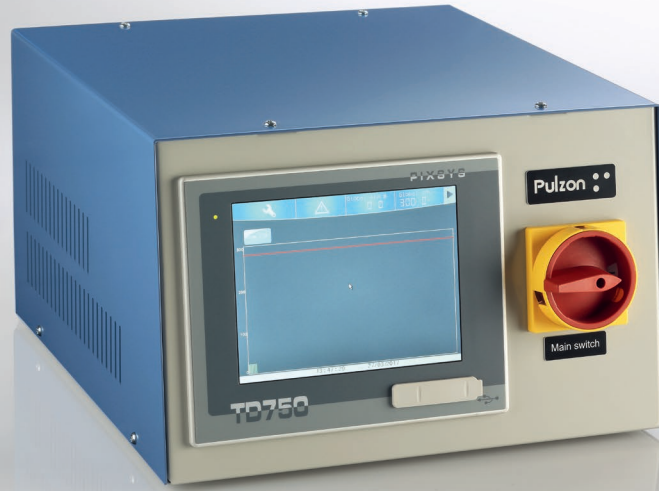


Order number:	PULZONSmart 12
Number of zones:	12
Plug for controller:	2 x 24 pole
Fuse:	FF 10A 6,3x32 mm
Dimensions:	<b>(WxDxH in mm) 605x410x190</b>
Power supply [3m] plug	CEE 32A
Maximum power outlet:	22 kW



Thermocouple Input:	Thermocouple Type: Type J or K
	Temperature range 0...500 °C, 32...932 °F
	Display in °C or °F (automatic compensation of the cold junction 0..50 °C, ± 0,2% F.S. ± 1 Digit F.S.)
Temperature Controller:	ATR227 Microprocessor-controlled controller in 46x46mm, modular design, with fully automatic system, individual setpoint and actual value with two 4-digit LED display, status alarm LEDs, and FNC key for switch-over to manual mode
Power Outputs:	10A 230V option 16A 230V with built in 50A solid-state relays
Plug connectors:	The control outputs are on massive multipolar connectors (see standard table)
Heating circuits:	The heating circuits are uniformly distributed on L1, L2, L3
Fuse:	fast FF 10A, 6.3 x 32 mm
Power Supply:	400VAC, 50Hz, 3P / N / PE
Mains Connection:	Mains cable with 3 m CEE plug
Operating conditions:	Operation: 0...+55°C, humidity 35..95 RH%
Device construction:	Closed cabine, metal-half shell housing, powder painted
Protection type:	IP20
CE marking:	EN 60204-1

PULZONTouch  
hotrunner  
controller



The PULZONTouch series controllers was specifically designed for applications with a higher number of control zones on a mould.

The PULZONTouch have a touchscreen for parametrization and operation, the user can adjust for each zone set-point, actual value, heating current etc. Operator can easily set temperature for all zones at once with selecting global setpoint.

Integrated software allows user to Load / Save hotrunner configuration (number of connected zones, setpoint for each zone, automatic/manual status).

Zone graph is added to each zone, by pressing this icon visualizes the graph scale of trend temperature, setpoint and load current.

The PULZONTouch have extensive monitoring functions to protect tools, hotrunners and controllers.

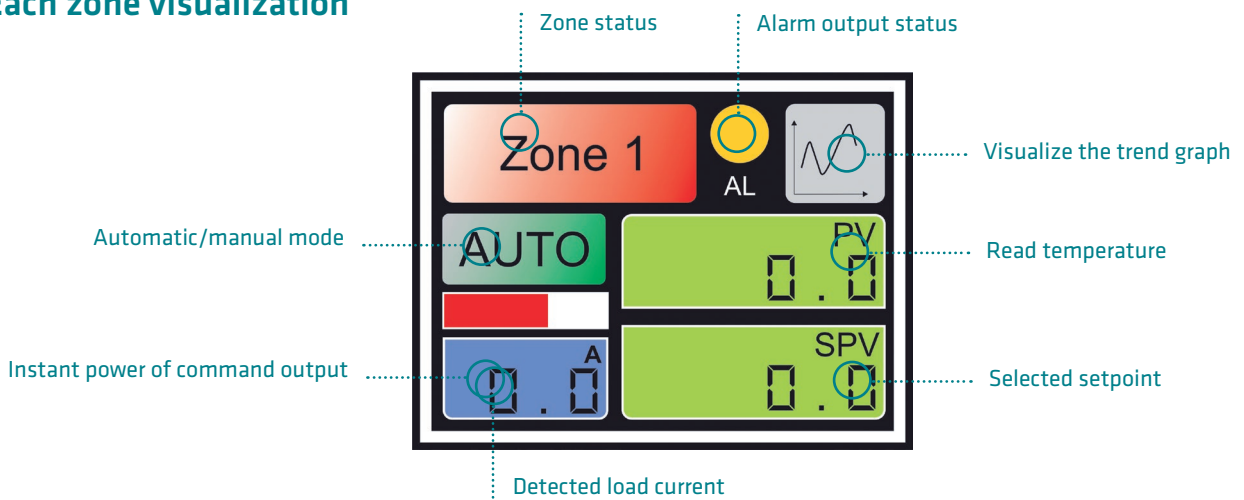
All of the functions and parameters that are relevant to the injection process are constantly monitored and indicated in the alarm log in event of a failure.

This includes monitoring the wiring for reversed polarity, breakages and short circuits, command SSR.

The output rate monitor detects irregularities in the heating behaviour.

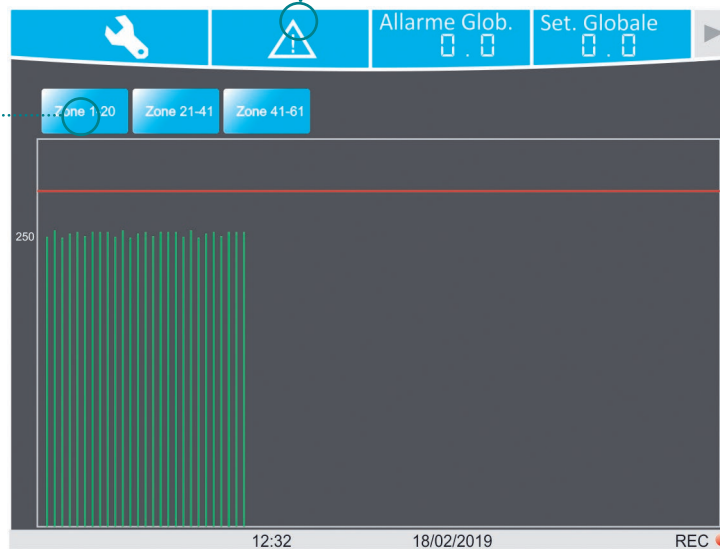
Defective heaters and SSR are also detected.

Each zone visualization



Navigation menu

Visualization of 1-20 zones



## KEY FEATURES

- Available 7", 10" and 15" Touch Screen Display
- PID temperature regulation
- Current monitoring
- Setting of setpoints for all connected zones with one touch
- Small footprint design
- Extensive monitoring functions
- Language switching
- Remote use option



Thermocouple Input:	Thermocouple Type: Type J or K Temperature range 0...500 °C, 32...932 °F Display in °C or °F (automatic compensation of the cold junction 0..50 °C, ± 0,2% F.S. ± 1 Digit F.S.)
Temperature Controller:	PIXSYS DRR450 with MODBUS RTU communication
Power Outputs:	10A 230V option 16A 230V with built in 32A solid-state relays
Plug connectors:	The control outputs are on massive multipolar connectors (see standard table)
Heating circuits:	The heating circuits are uniformly distributed on L1, L2, L3
Fuse:	fast FF 10A, 6.3 x 32 mm
Power Supply:	400VAC, 50Hz, 3P / N / PE
Mains Connection:	Mains cable with 3 m CEE plug
Operating conditions:	Operation: 0...+55°C, humidity 35..95 RH%
Device construction:	Closed cabine, metal-half shell housing, powder painted
Protection type:	IP20
CE marking:	EN 60204-1



Order number:	PULZONTouch 12
Number of zones:	12
Touch panel:	7"
Plug for controller:	2 x 24 pole
Fuse:	FF 10A 6,3x32 mm
Dimensions:	<b>HxWxD (mm) 200x525x420</b>
Power supply [3m] plug	CEE 32A
Maximum power outlet:	22 kW



Order number:	PULZONTouch 18
Number of zones:	18
Touch panel:	7"
Plug for controller:	3 x 24 pole
Fuse:	FF 10A 6,3x32 mm
Dimensions:	<b>HxWxD (mm) 200x640x420</b>
Power supply [3m] plug	CEE 63A
Maximum power outlet:	36 kW



Order number:	PULZONTouch 24
Number of zones:	24
Touch panel:	7"
Plug for controller:	4 x 24 pole
Fuse:	FF 10A 6,3x32 mm
Dimensions:	<b>HxWxD (mm) 400x525x420</b>
Power supply [3m] plug	CEE 63A
Maximum power outlet:	43 kW



Order number:	PULZONSmart 32
Number of zones:	32
Touch panel:	10,5"
Plug for controller:	6 x 24 pole
Fuse:	FF 10A 6,3x32 mm
Dimensions:	<b>HxWxD (mm) 400x640x420</b>
Power supply [3m] plug	CEE 63A
Maximum power outlet:	43 kW



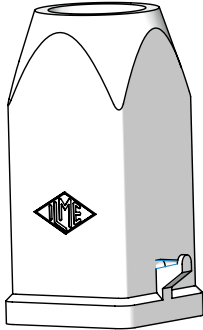
Order number:	PULZONSmart 48
Number of zones:	48
Touch panel:	10,5"
Plug for controller:	8 x 24 pole
Fuse:	FF 10A 6,3x32 mm
Dimensions:	<b>HxWxD (mm) 650x640x420</b>
Power supply [3m] plug	CEE 63A
Maximum power outlet:	43 kW



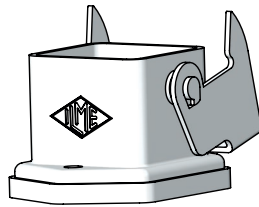
Order number:	PULZONSmart 60
Number of zones:	60
Touch panel:	10,5" or 15"
Plug for controller:	10 x 24 pole
Fuse:	FF 10A 6,3x32 mm
Dimensions:	<b>9 HxWxD (mm) 00x640x420</b>
Power supply [3m] plug	CEE 32A
Maximum power outlet:	43 kW



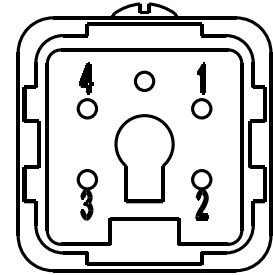
## Accessories



Cabel connector CK03VS



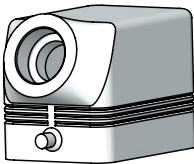
Mould connector Ck03 I



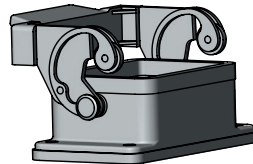
**1 zone**

5 PIN 10A230V

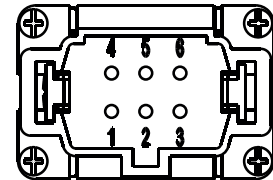
Male & Female insert CKM04/CKF04



Cabel connector CHO06L13



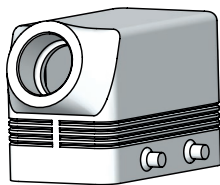
Mould connector CHI06L



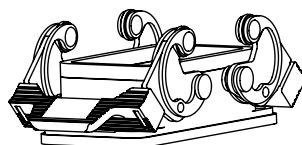
**1 zone(16A)**

6 PIN 16A230V

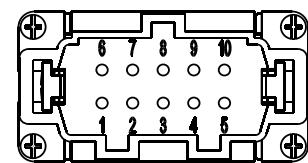
Male & Female insert CNM06/CNF06



Cabel connector CHO10



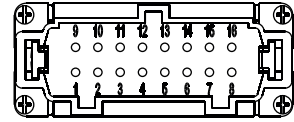
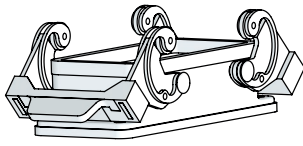
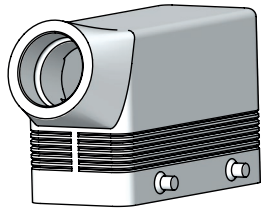
Mould connector CHI10



**2 zones**

10 PIN 16A230V

Male & Female insert CNM10/CNF10



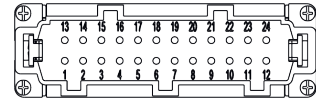
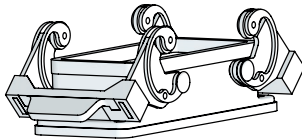
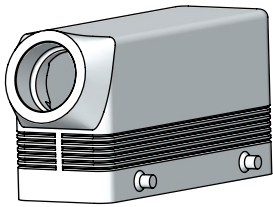
Cabel connector CH016

Mould connector CHI16

**4 zones**

16 PIN 16A230V

Male & Female insert CNM16/CNF16



Cabel connector CH024

Mould connector CHI24

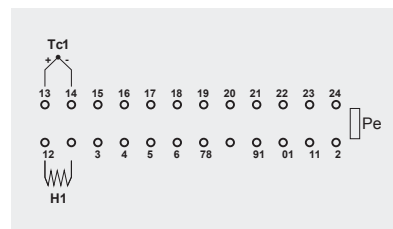
**6 zones**

16 PIN 16A230V

Male & Female insert CNM24/CNF24



## MOULD CONNECTION CABLES



## COMBI CABEL TC & POWER\_ASSEMBLED

Zones	Poles	Lenght	Order code
1	5	3 m	584
2	10	3 m	585
3	16	3 m	586
4	16	3 m	587
6	24	3 m	588

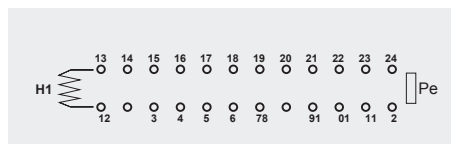
Other lenght on demand. Standard pin assigment, other on request.

### Technical specifications

**TC cabel:** 0,5 mm<sup>2</sup> FeCuNi Type J, RED+ / BLUE-

**Power cabel:** 1,5 mm<sup>2</sup>, copper wire

**Temp. range:** +5 . . . . +80°C



## TC CABEL\_ASSEMBLED

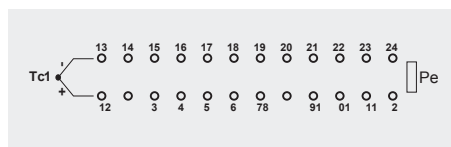
Zones	Poles	Lenght	Order Code
2	10	3 m	620
3	16	3 m	621
4	16	3 m	622
6	24	3 m	623

Other lenght on demand. Standard pin assigment, other on request.

### Technical specifications

**TC cabel:** core section 0,5 mm<sup>2</sup> FeCuNi Type J, RED+ / BLUE-

**Temp. range:** +5 . . . . +70°C



## POWER CABEL\_ASSEMBLED

Zones	Poles	Lenght	Order Code
2	10	3 m	624
3	16	3 m	625
4	16	3 m	626
6	24	3 m	627

Other lenght on demand. Standard pin assigment, other on request.

### Technical specifications

**Power cabel:** core section 1,5 mm<sup>2</sup>, copper wire

**Temp. range:** +5 . . . . +70°C



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