



Controllers for electric heating



Wall mounting



DIN-rail mounting

Electric heating controllers for radiators or heating batteries. The controllers can be mounted on a wall or in a cabinet. The controllers pulse the entire power output ON/OFF and utilise time-proportional triac-control. Automatic adaption of control function, P or PI-control.

- Automatic adaption of control function and supply voltage

Technical Data	
Supply voltage	200...415 V AC 50...60Hz, single or two phase, automatic adoption
Ambient temperature	Maximum 30°C. N.B Pulser generates 20W.
P-band	20K (Rapid temperature changes) 1.5K (Slow temperature changes)
Reset-time	6 min (Rapid temperature changes)
Pulse period	60 seconds
Inputs	
Sensor	One, main sensor or two (Only Pulser-M)
Setpoint	0...30°C, the sensor determines the scale range (for use with Regin NTC-sensor)
Nightset-back	0...10K
Output (load)	16 A (min. 1 A) 1-phase max 3.6 kW 2-phase max 6.4 kW
Mounting	DIN-rail or wall-mounting
Protection class	IP30 (PULSER/D IP20)

For automatic adaption both 230 V AC or 400 V AC

Description	Mounting	Type	Leaflet
Basic model	Wall	PULSER	1-240
	DIN-rail	PULSER/D	1-245
ADD-on unit	Wall	PULSER-ADD	1-250
For additional, Main and Min./Max limiting sensor	Wall	PULSER-M	1-255
For external control signal 0...10 V.	Din-rail	PULSER-X/D	1-248

Single phase 230 V AC or two phase 400 V AC

Description	Supply voltage	Mounting	Type	Leaflet
With reset function for heater high temperature limit	230 V AC	Wall	PULSER220R	
For external control signal 0...10 V	230 V AC	Wall	PULSER220X010	1-260
	400 V AC	Wall	PULSER380X010	1-260



Electric heating controller



Pulser-DSP is a zone controller intended for electric heating control. The controller can be connected to one- or two-phase electric heating i.e. electric batteries, radiators etc. Pulser-DSP has a built in sensor and an external sensor can also be used. Presence detector can be connected for control of so called comfort heating. This means, when the room is empty, the controller is set to stand-by position with reduced setpoint. Setpoint, P-band and stand-by settings etc. are set by using the buttons on the controller.

- With display
- Adjustable P-band and I-time

Technical Data	
Supply voltage	230...415 V AC, automatic adaption
Output (load)	2.3 kW at 230 V AC, 4 kW at 400 V
Settings	
Setpoint	0...30°C, the sensor determines the scale range (for use with Regin NTC-sensor)
Comfort heating	0...30°C
Stand-by temperature	0...30°C
P-band	0.5...99.9 K
I-Time	1...999 sec.
Presence detection	On / Off
Mounting	Wall-mounting
Protection class	IP30

Description	Type	Leaflet
Room controller with display	PULSER-DSP	1-242

Electric heating controller



Pulser-Lon is a zone controller based on Lon-technology. It has a triac output for controlling electric heating (10A) and an extra output (cooling or heating), 3-position or 24V thermal actuator. The controller has a built in sensor and setpoint knob where the setpoint can be shifted +/- 3°C. An external sensor or setpoint device can also be used. Pulser-Lon can operate in different running modes: present, non-present and stand-by. The basic setpoint can be shifted with different values for heating and cooling. A window contact can be used to block the control when a window is open.

- With communication
- Heating and cooling

Technical Data	
Supply voltage	Single-phase 230 V AC
Output (load)	10A
Setpoint	0...30°C, the sensor determines the scale range (for use with Regin NTC-sensor)
Setpoint adjustment	+/-3°C adjustment
Load (extra output)	24 V AC, 3-point or one on/off. 0.5 A
Mounting	Wall-mounting
Protection class	IP30

Description	Type	Leaflet
Zone controller with communication, heating or cooling in sequence	PULSER-HC-LON	10-200



Electric heating controller



The controller is designed for wall-mounting and can be used with internal or external setpoint. Automatic adaption of control function, P or PI control. The controller can also be set to be controlled by an external 0...10 V signal. To control extra load the slave board TT-S1 is easily mounted into the unit.

- 3-phase
- Wall mounting

Technical Data	
Supply voltage	3-phase 210...415 V AC automatic adaption
Setpoint	0...30°C, the sensor determines the scale range (for use with Regin NTC-sensor)
Max. load	Max. 25 A, min. 3 A/ phase
Sensor inputs	Two (2), main- and max/min.-limit sensors
Control signal	0...10 V (external signal)
Mounting	Wall-mounting
Protection class	IP30

Description	Type	Leaflet
Controller for electric heating	TTC2000	1-300

Slave board



To control extra load with the TTC2000 the slave board TT-S1 is easily mounted into the unit.

Description	Type	Leaflet
Slave board for controlling extra load (+17 kW)	TT-S1	1-391



Electric heating controller



TTC25

Electric heating controllers for electric heating batteries or radiators. The controller pulses the entire power output ON/OFF and utilises time-proportional triac control. The controller is intended for DIN-rail mounting. Automatic adaption of control function, P or PI control. It can also be set to be controlled by an external 0...10 V signal.

- 3-phase
- DIN-rail



TTC40



TTC63

Technical Data	
Supply voltage	
TTC25...40	3-phase 210...415 V
TTC63...80	3-phase 415 V
Output	
TTC25...	25 A, 400 V, 17 kW
TTC40...	40 A, 400 V, 27 kW
TTC63F	63 A, 400 V, 43 kW
TTC80F	80 A, 400 V, 55 kW
Setpoint	0...30°C (sensor determines the scale range)
Sensor inputs	Two (2), main- and max. min. limit sensors
Control signal	0...10 V
Mounting	DIN-rail
Protection class	IP20

Description	Load	Type	Leaflet
Complete controller, also for 0...10 V control signal	25 A	TTC25	1-305
External control signal 0...10 V DC only	25 A	TTC25X	1-305
Complete controller, also for 0...10 V control signal	40 A	TTC40F	1-310
External control signal 0...10 V DC only	40 A	TTC40FX	1-310
Complete controller, also for 0...10 V control signal	63 A	TTC63F	1-320
Complete controller, also for 0...10 V control signal	80 A	TTC80F	1-325