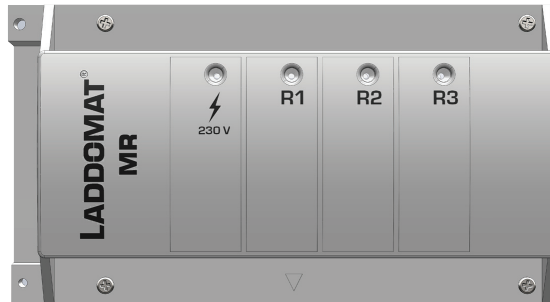
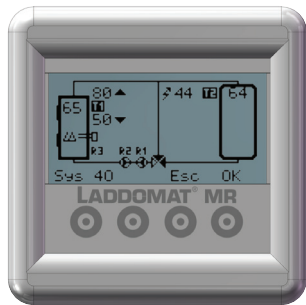


# LADDOMAT<sup>®</sup> MR

Versatile controller with four temperature sensor inputs and three relay outputs. Twelve different control options are available. The display gives a clear overview of set and actual temperatures.



## Sys 0 **NEW!**

Display of up to four different temperatures.

T1 16°C	T2 111°C
T3 60°C	T4 61°C
Sys 0	

## Sys 60 **NEW!**

Start of circulation pump plus display of boiler temperature and three different tank temperatures.

60 24 T1	T2 64
T3 60	T4 24
Sys 60 Esc OK	

## Sys 70 **NEW!**

Differential control with two temperature sensors.

### Examples of areas of use:

Charging from solar collectors when the solar collector is warmer than the tank.  
Charging from one tank to another, when the first tank is warmer than the second.

Additional heating can be started if the temperature T2 is too low.

T1 61°C	T2 56°C	= Δt 5°C
T1-T2 >= 5°C	= R1	1
T1-T2 <= 3°C	= R1	0
T1 < 55°C	= R1	0
T2 < 35°C	= R3	1
Sys 70		

## Sys 90 **NEW!**

Thermostat function, where one, two or three relays can be controlled from one temperature sensor each.

### Example of area of use:

To start circulation pump and additional heating.

T1 75%	T2 62%
SetP > 60%	SetP < 60%
R1 1	R2 1
T- SetP < 60%	Hysteresis R1 0 R2 0
R3 1	R3 0
Sys 90	

## Sys 99 **NEW!**

"Free" function, where optional temperature sensor is used for optional relay.

Up to eight different settings are possible.

Examples of areas of use:

When the sensor T1 is warmer than 80°C, a charging pump is started.

When the sensor T1 is colder than 60°C, a recharging pump is started.

When the sensor T1 is warmer than 95°C or colder than 35°C, an alarm is sent.

S	T	R	ON	OFF	t
1	T1	R1	>=	80°C	78°C
2	T1	R2	<=	60°C	65°C
3	T1	R3	>=	95°C	95°C
4	T1	R3	<=	35°C	35°C
T1	60	T2	90	T3	43
Sys 99					

To the following systems we also have complete packages for optimized function.

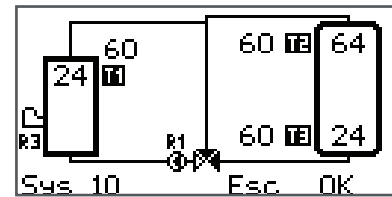
### Sys 10

Burner control for batch charging storage tank(s).

The burner is started when the sensor in the top of the tank becomes cold and the burner stops when the sensor at the bottom of the tank becomes warm.

**Complete product package:**

Laddomat MR 10, different options available depending on boiler output.



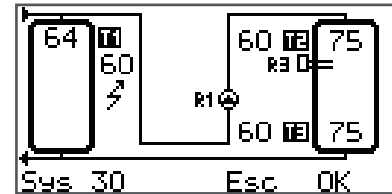
### Sys30

Batch charging between for example a larger main tank in an external boiler room, to a slave tank inside the house.

The charging starts when the sensor in the top of the slave tank becomes cold and the charging stops when the sensor at the bottom of the slave tank becomes warm. This way the losses in the culvert can be lowered significantly. It's also possible to start additional heating in the slave tank if the main tank becomes cold.

**Complete product package:**

Laddomat MR 30, different options available depending on culvert type.

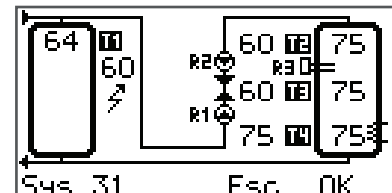


### Sys 31

The same basic function as in Sys 30, but also has the possibility to pump excess heat back to the boiler room, for example if solar collectors are connected to the slave tank.

**Complete product package:**

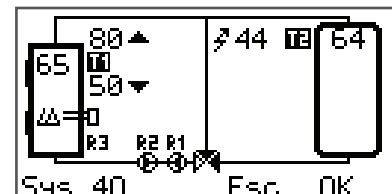
Laddomat MR 30, different options available depending on culvert type.



### Sys 40

Used when the boiler is the source for heat and DHW. The excess heat is sent to the buffer tank(s) when firing and the heat is then sent back as the boiler cools down. It's also possible to start additional heating in the boiler if the tank(s) becomes cold.

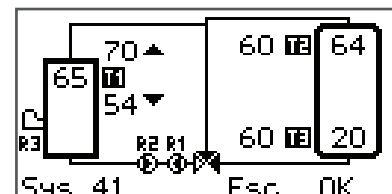
**Complete product package:** Laddomat MR 40



### Sys 41

The same basic function as in Sys 40, but also has burner (e.g. pellet) control. The burner starts when the sensor in the top of the tank becomes cold, and the burner stops when the sensor at the bottom of the tank becomes warm.

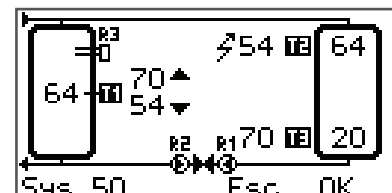
**Complete product package:** Laddomat MR 40



### Sys 50

Used for smooth increase of buffer tank volume, especially when the extra tank(s) must be placed away from the main tank. The excess heat is sent to the extra tank(s) when firing and the heat is then sent back as the main tank cools down. It's also possible to start additional heating in the main tank if the extra tank(s) becomes cold.

**Complete product package:** Laddomat MR 50



### Sys 51

The same basic function as in Sys 50, but also adds increased possibility to optimize the charging by first filling the main tank with a lower temperature (for example if solar collectors are used in the main tank), and then the system can continue to be filled to a higher temperature.

**Complete product package:** Laddomat MR 50

