

MILUX, MILUX STAR, MILUX RF, MILUX STAR RF Series

Programmable room thermostats

Technical Data Sheet



Description

Milux Series programmable thermostats are electronic room temperature controllers with On-Off output, which activate at pre-set times. They are available in Milux and Milux Star versions with wired connection, and Milux RF and Milux Star RF versions with radio frequency connection and receiver module.

MILUX

Digital electronic programmable room thermostat with daily and weekly programming for heating and air conditioning systems.

9 pre-set and 4 custom programmes available. Constant display of room temperature, time and operating status on LCD display. White frame with removable front panel for access to the batteries and connections. Easy wiring: two-wire connection for heating or air conditioning systems.

Complete with 3 LR6 (AA) 1.5V alkaline batteries: **2-year lifetime**.

Batteries can be changed without losing programme settings (within one minute).

Temperature control range: 5÷35°C. Two temperature levels: standard, comfort and night energy saving, with anti-freeze function (0.5÷10°C). Rating: 5A contacts, 2 K P BAND (7.5 cycles per hour, 8-minute cycle). Automatic or manual operating modes.

Special functions:

- reset, keypad lock (to prevent accidental changes to settings);
- holiday mode: to suspend operation temporarily when away from home.

Compliant with the following Directives: LVD 2014/35/EU, RoHS 2011/65/EU, EMC 2014/30/EU, RED 2014/53/EU, GSPD 2001/95/EC.



Type	Part No.	Power supply	IP rating	Min. ord.
MILUX	P185800 (Daily)	3 x 1.5V batteries	IP30	10
MILUX	P185900 (Weekly)	3 x 1.5V batteries	IP30	10

MILUX STAR

Includes all the features of the Milux model plus the following:

- hourly programming with increments of 1 minute;
- **5 pre-set and 2 custom programmes** available;
- for heating and air conditioning systems;
- Summer/Winter changeover.

Compliant with the following Directives: LVD 2014/35/EU, RoHS 2011/65/EU, EMC 2014/30/EU, RED 2014/53/EU, GSPD 2001/95/EC.



Type	Part No.	Power supply	IP rating	Min. ord.
MILUX STAR	P3153 (Weekly)	3 x 1.5V batteries	IP30	10

Technical features of MILUX and MILUX STAR programmable room thermostats

Temperature reading accuracy	0.1°C
Operating temperature	0÷50°C
Control range: Milux Milux Star	5÷35°C 5÷37°C
Control characteristics: Milux Milux Star	Control speed 7.5 cycles per hour (8-minute cycle) 2 K proportional band (pre-set) Proportional/integral (pulse-duration modulation) or static differential 0.5
Electrical protection/IP rating	Class II - IP30
Power supply	3 x AA LR6 1.5V (2-year lifetime)
Output: Milux Milux Star	5A/250VCA relay (DPDT) 5A/250VAC relay (SPDT)
Optional outdoor probe (Milux Star only)	CTN 10K 3m

MILUX RF



Digital electronic programmable room thermostat with weekly programming, complete with radio frequency receiver module, for heating and air conditioning systems.

9 pre-set and 4 custom programmes available. Constant display of room temperature, time and operating status on LCD display. White frame with removable front panel for access to the batteries and connections. Easy wiring: two-wire connection for heating or air conditioning systems.

Complete with 3 LR6 (AA) 1.5V alkaline batteries: **2-year lifetime**.

Batteries can be changed without losing programme settings (within one minute).

Temperature control range: 5÷35°C.

Two temperature levels: standard, comfort and night energy saving, with anti-freeze function (0.5÷10°C).

Special functions:

- reset, keypad lock (to prevent accidental changes to settings);
- holiday mode: to suspend operation temporarily when away from home.

Receiver module: Power supply 230VAC. 12A 250 VAC contacts (DPDT).

Max. distance: 30m in residential environments. IP rating: IP44.

Compliant with the following Directives: LVD 2014/35/EU, RoHS 2011/65/EU, EMC 2014/30/EU, RED 2014/53/EU, GPSD 2001/95/EC.

Type	Part No.	Power supply	IP rating	Min. ord.
MILUX RF	P2054 (Weekly)	3 x 1.5V batteries	IP30 (Transmitter)	10



MILUX STAR RF

Includes all the features of the Milux RF model plus the following:

- hourly programming with increments of 1 minute;
- 5 pre-set and 2 custom programmes available;
- for heating and air conditioning systems;
- Summer/Winter changeover.

Compliant with the following Directives: LVD 2014/35/EU, RoHS 2011/65/EU, EMC 2014/30/EU, RED 2014/53/EU, GPSD 2001/95/EC.

Type	Part No.	Power supply	IP rating	Min. ord.
MILUX STAR RF	P3153 (Weekly)	3 x 1.5V batteries	IP30 (Transmitter)	10

Technical features of MILUX RF and MILUX STAR RF programmable thermostats

Temperature reading accuracy	0.1°C
Operating temperature	0÷50°C
Control range:	
Milux RF	5÷35°C
Milux Star RF	5÷37°C
Control characteristics:	
Milux RF	Control speed 7.5 cycles per hour (8-minute cycle) 2K proportional band (pre-set)
Milux Star RF	Proportional/integral (pulse-duration modulation) or static differential 0.5
Electrical protection/IP rating	Class II - IP30
Power supply	3 x AA LR6 1.5V (2-year lifetime)
Optional outdoor probe (Milux Star RF only)	CTN 10K 3m

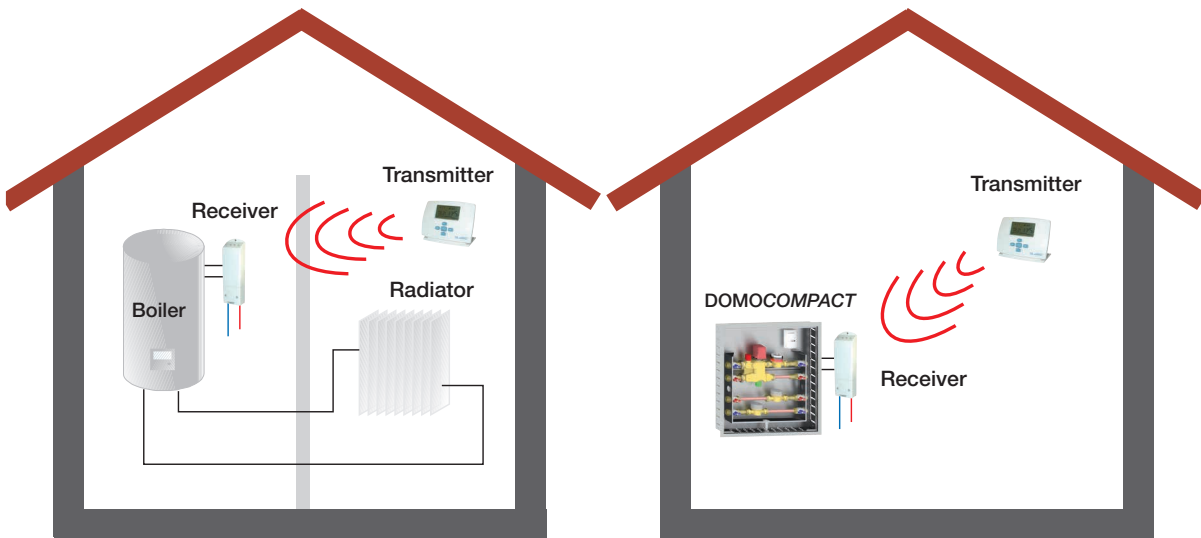
Receiver module technical features

Operating temperature	0÷50°C
Electrical protection/IP rating	Class II - IP44
Power supply	230 VAC +/- 10% 50Hz
Outlet	12/250VAC (16A Relay) (DPDT) FREE/LIVE CONTACT
Radio frequency	433.92 MHz. <10mV Open-field range 100 metres Range in residential environments 30 metres

Application

Milux Series programmable room thermostats are used to control and shut off zone valves, and start pumps, boiler burners or air conditioning compressors.

Milux - Milux Star

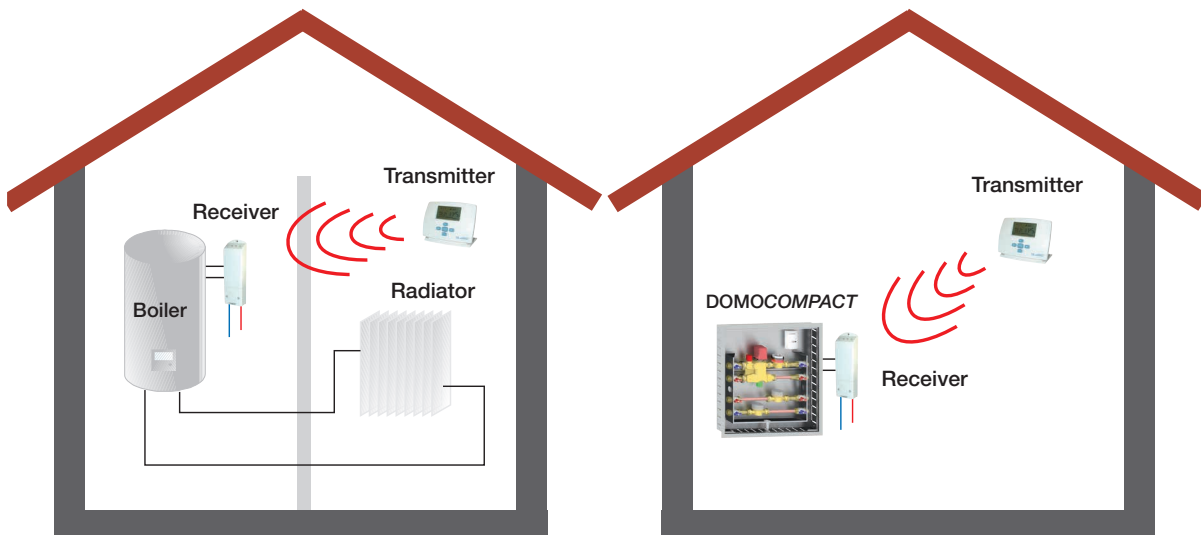


Example of controlling a wall-mounted boiler with a Milux programmable room thermostat

Example of controlling a zone valve with a Milux programmable room thermostat

Milux RF Series radio frequency programmable room thermostats are quick and easy to install because they have no electrical wires, and therefore require no masonry work. Commands are sent via radio waves. A boiler or other heat generator is controlled by a receiver installed nearby, in response to signals sent by a transmitter installed in the desired location. The transmitter can simply be placed on a piece of furniture, for example.

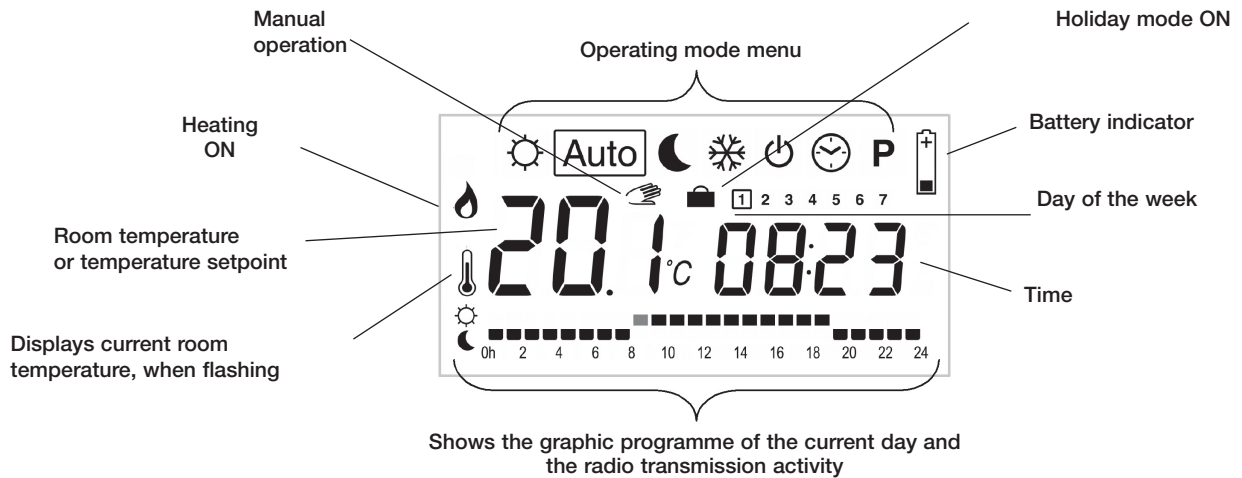
Milux RF - Milux Star RF



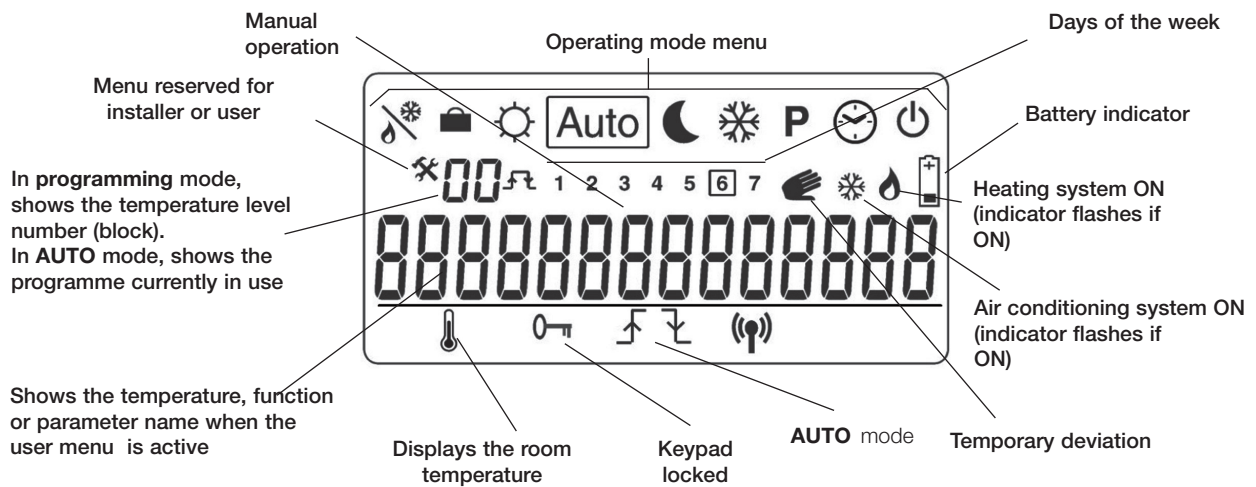
Example of controlling a wall-mounted boiler with a Milux RF programmable room thermostat

Example of controlling a zone valve with a Milux RF programmable room thermostat

Milux-Milux RF: operation



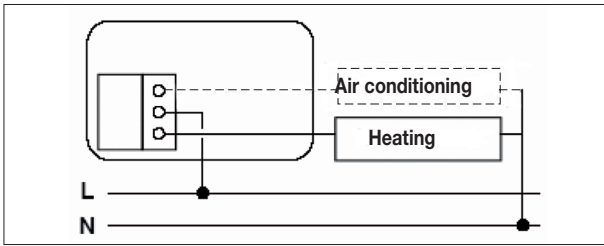
Milux Star-Milux Star RF: operation



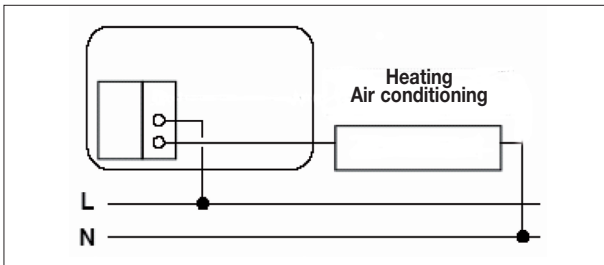
Description of operating mode

- | | | | |
|--|----------------------|--|--------------------|
| | HEATING/COOLING mode | | ANTIFREEZE mode |
| | HOLIDAY mode | | CLOCK SETTING mode |
| | COMFORT mode | | STOP mode |
| | AUTO mode | | PROGRAMME mode |
| | REDUCED mode | | |

MILUX Electrical Connections

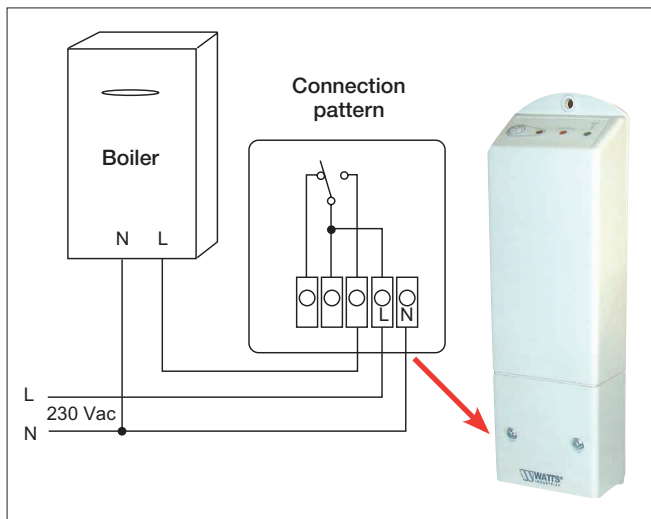


MILUX STAR Electrical Connections



Electrical Connection of the receiver (RF version)

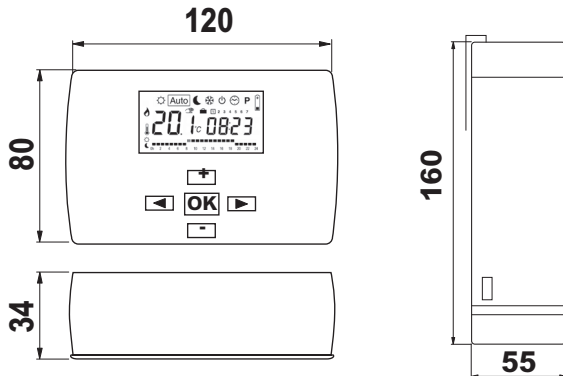
The receiver is very easy to install and connect. Simply fix it to the wall with screws and wall plugs. Make the necessary connections with the screw connectors.



Overall dimensions (mm)

MILUX-MILUX RF
MILUX STAR
MILUX STAR RF

RF



Specification text

MILUX Series

Digital electronic programmable room thermostat **MILUX Series** – WATTS brand – with daily and weekly programming for heating and air conditioning systems. 9 pre-set and 4 custom programmes. LCD display with room temperature, time and operating status function. Powered by 3 x 1.5V alkaline batteries. Temperature control range: 5-35°C. Two temperature levels: standard and comfort, with anti-freeze function (0.5-10°C).

Compliant with the following Directives: LVD 2014/35/EU, RoHS 2011/65/EU, EMC 2014/30/EU, RED 2014/53/EU, GPSD 2001/95/EC.

MILUX STAR Series

Digital electronic programmable room thermostat **MILUX Star Series** – WATTS BRAND – with hourly programming with increments of 1 minute, for heating and air conditioning systems. 5 pre-set and 2 custom programmes. LCD display with room temperature, time and operating status function. Powered by 3 x 1.5V alkaline batteries. Temperature control range: 5-35°C. Two temperature levels: standard and comfort, with anti-freeze function (0.5-10°C).

Compliant with the following Directives: LVD 2014/35/EU, RoHS 2011/65/EU, EMC 2014/30/EU, RED 2014/53/EU, GPSD 2001/95/EC.

MILUX RF Series

Digital electronic programmable room thermostat **MILUX RF Series** – WATTS BRAND – with daily and weekly programming, complete with radio frequency receiver module, for heating and air conditioning systems. 9 pre-set and 4 custom programmes. LCD display with room temperature, time and operating status function. Powered by 3 x 1.5V alkaline batteries. Temperature control range: 5-35°C. Two temperature levels: standard and comfort, with anti-freeze function (0.5-10°C). Receiver module: Power supply 230 VAC, 12A 250VAC contacts, IP30.

Compliant with the following Directives: LVD 2014/35/EU, RoHS 2011/65/EU, EMC 2014/30/EU, RED 2014/53/EU, GPSD 2001/95/EC.

MILUX STAR RF Series

Digital electronic programmable room thermostat **MILUX Star RF Series** – WATTS BRAND – with hourly programming with increments of 1 minute, complete with radio frequency receiver module, for heating and air conditioning systems. 5 pre-set and 2 custom programmes. LCD display with room temperature, time and operating status function. Powered by 3 x 1.5V alkaline batteries. Temperature control range: 5-35°C. Two temperature levels: standard and comfort, with anti-freeze function (0.5-10°C). Receiver module: Power supply 230 VAC, 12A 250VAC contacts, IP30.

Compliant with the following Directives: LVD 2014/35/EU, RoHS 2011/65/EU, EMC 2014/30/EU, RED 2014/53/EU, GPSD 2001/95/EC.



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