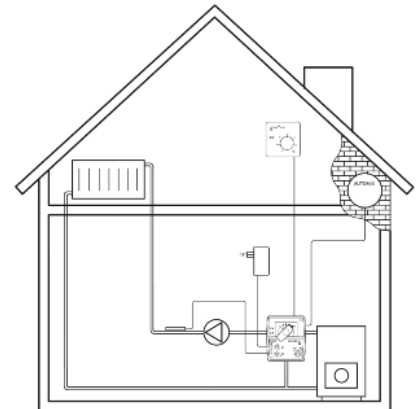


LK 961 Compact Controller

Compact controller for hydronic radiator and underfloor heating applications.

TECHNICAL DATA

Type of control	PI-control with micro processor
Voltage	230 VAC 50 Hz
Power consumption	3 VA
Torque	5 Nm
Angle of rotation	90°, electrically limited
Heating curve	1 - 9, stepless
Parallel displacement	±10°C supply water temperature, stepless
Supply water limiter min.	+15°C - +35°C (Freeze protection)
Supply water limiter max.	+40°C - +90°C
Room sensor (LK 961 RB)	+12°C - +27°C
Remote control (LK 961 RC)	-9°C - +6°C
Manual override	Yes
Protection class, actuator	IP 40
Protection class, remote control	IP 20
Dimensions, actuator, WxDxH	80 x 90 x 93 mm
Weight	0.6 kg



DESIGN

LK 961 fits directly onto a mixing valve and acts as a weather compensated heating controller. The LK 961 automatically adjusts the supply water temperature as the outdoor temperature changes. LK 961 includes a freeze protection feature and an adjustable minimum and maximum temperature limiter for the supply water temperature.

LK 961 includes:

- Valve actuator with built-in electronics
- Mounting kit
- Adapter 230/18 VAC 200 mA with 1.7 m cable
- Supply water sensor T1 with 1 m cable
- Outdoor sensor T2 with 15 m cable
- Room temperature sensor LK 961 RB with 15 m cable (optional)
- Temperature remote control LK 961 RC with 15 m cable (optional)

FITTING/INSTALLATION

LK 961 is very easy to install as all cables are ready to connect without tools. The plug-in adapter provides quick and easy do-it-yourself installation saving on labor costs.

Article Type

LK 961 Weather compensated controller

LK 961 RB Room temperature sensor (accessory)

LK 961 RC Remote control (accessory)

LK 962 Electronic Temperature Controller

Electronic temperature controller for radiator and underfloor heating applications.



TECHNICAL DATA

Type of control	PI-control with micro processor
Voltage	230 VAC 50 Hz
Power consumption	3 VA
Torque	5 Nm
Angle of rotation	90°, electrically limited
Supply water limiter, min.	+5°C – +30°C, (Freeze protection)
Supply water limiter, max.	+20°C – +80°C
Room temperature setting	+5°C – +26°C
Night setback	7 or 9 hours
Temperature setback	1°C, 2°C or 3°C (room temperature)
Indication	Four LED indicators
Manual override	Yes
Protection class, room thermostat	IP 20
Protection class, actuator	IP 40
Dimensions, room thermostat, WxDxH	70 x 30 x 70 mm
Weight	0.8 kg



DESIGN

LK 962 includes an electronic timer with night and day program, adjustments for minimum and maximum supply water temperatures and a freeze protection feature. All essential settings are adjustable at the room thermostat. LK 962 actuator fits directly onto the mixing valve and can easily be integrated into existing heating systems. LK 962 needs no outdoor sensor. It responds to all kinds of temperature changes in the house caused by e.g. solar heat through windows, strong winds etc. The micro processor compensates for such changes in temperature which a system with an outdoor sensor cannot do. LK 962 is an advanced electronic temperature controller. Through impulses from the room sensor, changes in room temperatures are forwarded to a micro processor which directs the actuator to set the mixing valve in the position that corresponds to the heat required in the building.

LK 962 includes:

- Room thermostat with micro processor, electronic timer with daily program facility, four LEDs for indication
- Valve actuator
- Mounting kit
- Adapter 230/18 VAC 200 mA with 1.7 m cable
- Supply water sensor T1 with 1 m cable
- Actuator cable 15 m
- Actuator cable 23 m (optional)
- Actuator cable 40 m (optional)
- Actuator cable 60 m (optional)

FITTING/INSTALLATION

LK 962 is very easy to install as all cables are ready to connect without tools. The plug-in adapter provides quick and easy do-it-yourself installation saving on labor costs. LK 962 is easy to program and use.

Article Type

LK 962 Room temperature controller

Actuator cable 23 m (accessory)

Actuator cable 40 m (accessory)

Actuator cable 60 m (accessory)

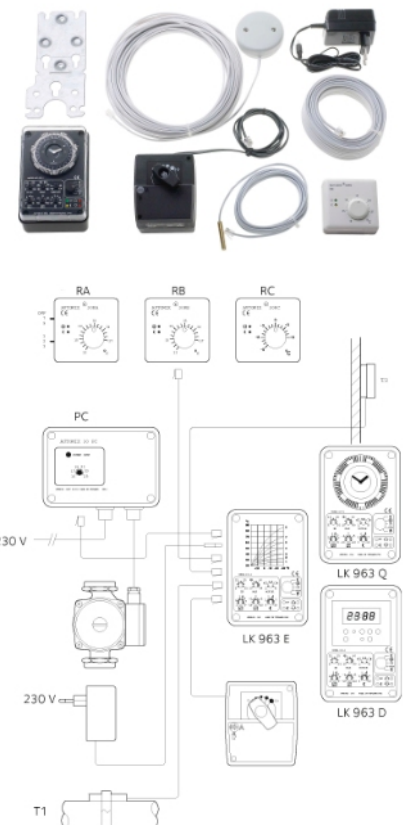
LK 963 Electronic Temperature Controller

Electronic temperature controller for hydronic radiator and underfloor heating applications.



TECHNICAL DATA

Type of control	PI-control with micro processor
Voltage	230 VAC 50 Hz
Power consumption	4 VA
Torque	5 Nm
Angle of rotation	90°
Supply water limiter, min.	+5°C – +35°C (Freeze protection)
Supply water limiter, max.	+20°C – +90°C
Pump control (LK 963 PC)	+15°C – +25°C, outdoor temperature
Heating curve	1-9, stepless
Parallel displacement	± 10°C supply water temperature, stepless
Remote control (LK 963 RC)	-9°C – +6°C supply water temperature
Night setback	0 – +10°C supply water temperature
Room sensor (LK 963 RA/RB)	+12°C – +27°C, room temperature
Indication	Four LED indicators
Manual override	Yes
Protection class, controller	IP 40
Protection class, actuator	IP 40
Protection class, remote control	IP20
Dimensions, controller, WxDxH	90 x 75 x 130 mm
Weight	1.2 kg



DESIGN

LK 963 is available in three designs with options: LK 963 E - electronic timer with 24 h program facility for night setback. LK 963 Q – quartz timer with daily and weekly program facility for night setback. LK 963 D - digital timer with daily and weekly program facility for night setback.

LK 963 has an automatic booster function after night setback. LK 963 includes adjustments for minimum and maximum supply water temperatures and has a freeze protection feature. It supports both left and right turning actuators. LK

963 has room temperature sensor, pump control with warm weather shut down and remote control as optional accessories.

LK 963 includes:

- Electronic controller LK 963 E, LK 963 Q or LK 963 D
- Actuator
- Mounting kit
- Adapter 230/18 VAC 200 mA with 1.7 m cable
- Supply water sensor T1 with 3 m cable
- Outdoor sensor T2 with 15 m cable
- LK 963 RA Room temperature sensor for LK 963 E with 15 m cable (optional)
- LK 963 RB Room temperature sensor for LK 963 Q/D with 15 m cable (optional)
- LK 963 RC Remote control with 15 m cable
- LK 963 PC Pump control with 2 m cable
- Sensor extension cable 5 m
- Sensor extension cable 10 m

FITTING/INSTALLATION

LK 963 plug-in compact control unit is simple to install, program and operate. The main power supply and all sensors have plug-in connections which simplifies installation. The quick and easy installation saves on labor costs.

Article Type

LK 963 E – Electronic timer

LK 963 Q – Quartz timer

LK 963 D – Digital timer

LK 963 RA - Room temperature sensor with 15 m cable for LK 963 E (accessory)

LK 963 RB - Room temperature sensor with 15 m cable for LK 963 Q and D (accessory)

LK 963 RC - Remote control with 15 m cable (accessory)

LK 963 PC - Pump control 230 V 2 A with 2 m cable (accessory)

Sensor extension cable 5 m, 4-pin plug-in connection (accessory)

Sensor extension cable 10 m, 4-pin plug-in connection (accessory)