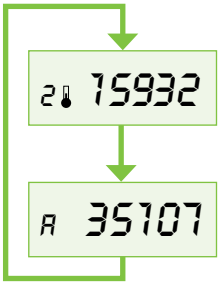
doprimo 3 radio net – intelligent and future-oriented heat cost allocation



Display loop

Current display value
2-sensor operation (2 sec)

Effective date figure
(2 sec)

Storage data

- Current consumption figure
- Last year's consumption figure
- Year before last's consumption figure
- 14 month-end figures
- Error status with error date
- t_{max} (radiator sensor) current
- t_{max} (radiator sensor) last year

Performance features

The heat cost allocation meter is designed as a 2-sensor recording device. It is available in compact and remote sensor versions. Power is supplied via a 10+2-year long-life lithium battery. This saves the last 14 month-end values as well as the effective dates of the last year and the year before last.

The ista heat cost allocation meter has a five-digit, high-temperature-resistant, multi-functional LCD with alternating display, which is activated via the integrated button. The device comes equipped with a unit scale as standard. Conversion to a product scale is possible. It can be mounted quickly and easily using all customary weld stud spacings (32 mm, 50 mm and 57 mm). A special plastic cover can elegantly conceal unattractive areas at the installation site.

Functional description

The doprimo 3 radio net is an electronic heat cost allocation meter that records the temperature of the radiator surface and room air with its two sensors. The temperature difference is the measure for heat consumption. The device starts to meter as soon as there is a temperature difference between the radiator sensor and room air sensor of at least 4.5 Kelvin. No metering takes place below a temperature reading of 23°C on the radiator.

Area of application

The area of application of the doprimo 3 radio net lies between

- 35 °C and 90 °C (compact version)
- 35 °C and 110 °C (remote sensor version)
  (average design temperature of the heating medium t_m, A)

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Your benefits

- Wide range of application via 2-sensor technology
- High billing security and billing quality via electronic reading
- The previous 14 month-end figures can be called up at any time, ensuring that no figures are lost during a change of tenancy
- Economic thanks to the 10+2-year long-life battery
- Inconspicuous elegance, through contemporary design
- High reliability thanks to consistent development of the technology

Technical data – doprimo 3 radio net

Device type	**doprimo 3 radio net**	
Part No.	Compact device: **11190**	Remote sensor device: **11199**
Operating modes	2-sensor operation (automatic switchover to 1-sensor operation at tL > 25 °C)	
Dimensions in mm (H x W x L)	▪ Compact device: ▪ Remote sensor housing: ▪ Remote sensor on radiator: ▪ Length of remote sensor cable:	92.3 x 40.2 x 29.1 190.2 x 51.6 x 31.6 45.0 x 12.9 x 11.5 3.0 m
Material	▪ Upper section: ABS plastic	▪ Lower section: Aluminium alloy F22
Display	▪ Multi-functional LC display, 5-digit + symbols ▪ Alternating display between current display figure and effective date figure (2 sec) ▪ Zero setting following effective date	
Manipulation protection	▪ In the event of heat accumulation, switchover from 2-sensor operation to 1-sensor operation ▪ Registration of the time of errors/manipulation to sensors and cables	
Idling suppression	Temperature at radiator	< 23 °C
Metering start temperature	Δt_m > 4.5 K (radiator sensor/room air sensor)	
Seasonal heating operation detection Summer/winter	40 °C (June–September)/29 °C (October–May)	
Min. average design temperature of the heating medium (t_{min})	2-sensor operation:	35 °C
Max. average design temperature of the heating medium (t_{max})	▪ Compact device: ▪ Remote sensor device:	90 °C 110 °C
Scale	▪ Unit scale ▪ Product scale	
Calendar function	▪ Display value storage on programmable effective date at month end (14 dates/year) ▪ Last year memory ▪ Year before last memory	
Power supply	3.0 V lithium battery for 10 year service life + 1 year reserve + 1 year storage	
Transmission data update	Upon request	
Transmitting power	< 10 mW	
Radio frequency	868 MHz	
Duration of send telegram	< 10 msec/transmission	
Transfer rate	~ 90 kBaud (bits/sec)	
Transmission procedure	Bidirectional data transfer	
Data security	Telegram encrypted	
Protection class	IP 42 (EN 60529)	
Radio interface	For reading systems and programming (with stationary gateway or mobile gateway with data recording device)	
Technology	Standard microprocessor	
Function test	Can be activated and controlled independently and without opening the device from the outside	
Installation point	Normally centrally at 75 % of radiator height	
Installation tools/materials	Identical to previous model	
Assembly Type	Screw and welding assembly	
Approval Number	A2.01.2004	
European standard	DIN EN 834	
CE mark	1999/5/EG	89/336/EEC