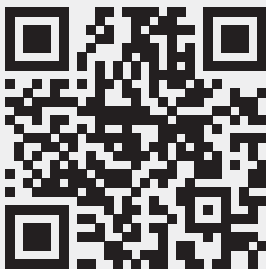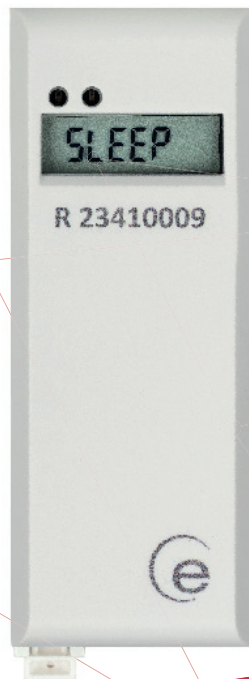Engelmann Heat Cost Allocator

HCA e2

Heat cost allocators record the heat consumption of the individual radiators in a billing unit (building) and thus enable the individual billing of heat energy per user unit (apartment).

SLEEP

R 23410009

Simple installation due to integrated seal

Storage of all monthly and semi-monthly values over the entire lifetime

Radio transmission times fully customizable to your needs and readout infrastructure

Flexible use due to remote sensor that can be fitted and removed at any time

Seamless integration into the Engelmann system landscape

Flexible in use due to individual setting options for billing and radio transmission parameters.
The Engelmann heat cost allocator thus provides you with the basis for future-proof consumption data recording.

The heat cost allocator is a recording device for the consumption-based calculation of heating costs. Unlike a heat meter, for example, it does not measure the amount of heat, but provides dimensionless units that reflect the temporal summation of the temperature difference between the radiator temperature and the room temperature. Ultimately, the individual consumption of the individual users is determined by calculating the ratio of the recording results of all heat cost allocators installed in the billing unit.

The electronic heat cost allocator HCA e2 is fully integrated into the Engelmann system landscape. The consumption data of the installed heat cost allocators are conveniently read out by the respective reception technology used (walk-by or Automatic Meter Reading – AMR). The Engelmann HCA e2 itself provides the basis for flexible adaptation to your individual readout management via its variable radio setup settings. If necessary, the most important data can also be read manually via the high-contrast display.

Gateway/AMR

Read-out Software

Even if you are currently still using walk-by readout, the seamless integration into the Engelmann system landscape makes it easy to switch to stationary readout (AMR/gateway), as no adjustments (setup changes) to the heat cost allocator are necessary.

The new integrated seal as well as an extension and deepening of the rear weld stud mount ensure quick and easy assembly.

Features

- Approved according to EN 834:2013 and compliant with the HKVO
- Type approval: A1.01.2013 according to HKVO
- Storage of 132 monthly and 132 semi-monthly values
- Clip-on remote temperature sensor
- Communication interfaces optical and wireless MBus according to EN 13757-4
- AMR (compliant with OMS)
- Walk-by readout
- Radio transmission of 15 monthly and 15 semi-monthly values via wireless M-Bus
- Flexibility in encryption mode (Mode 5 / Mode 7) and encryption type (ES master, customer master or individual encryption per device)

Thanks to further development in the area of assembly and installation, which we are constantly making easier and more effective, and the possibility of making the determined consumption data available safely and quickly, regardless of the selected readout technology, the HCA e2 is the first choice for use in your estate.

TECHNICAL DATA

General

Device type		2-sensor device; adjustable measuring mode: 2-sensor mode or 1-sensor mode
Estimated lifetime	years	11 + 1
Scaling		unit scale or product scale
Clip-on remote sensor		cable length: 2 m; 5 m
Temperature range	°C	2-sensor mode: 35- 95 (with remote sensor up to 105); 1-sensor mode: 55- 95 (with remote sensor up to 105)
Ambient temperature	°C	-25 – 60
Minimum temperature difference ΔΘ (counting start of temperature difference)	K	4,5
Interfaces		wireless M-Bus and optical interface (M-Bus protocol)
Display		LCD – 7 digits + special characters
Displayed values		current consumption, billing (due) date, billing date value, checksum
Billing date options		annually variable (except 29.02.); monthly variable (1st - 28th day)
Stored monthly values		132 monthly and 132 semi-monthly values
Measuring free summer months		May-June-July-August-September: freely selectable
Detection of manipulation		break contact
Power supply	V	3; lithium battery
Protection class		IP41 (mounted)

Wireless M-Bus radio interface (* factory setting)

Radio protocols		"short telegram" compliant with the OMS (AMR) (current consumption, billing (due) date, billing date value, hint flag); "long telegram" for walk-by readout (factory setting) (current consumption, billing (due) date, billing date value, 15 monthly and 15 semi-monthly values, hint flag)
Transmission power (maximum)	dBm	10
Transmission frequency	MHz	868
Operating modes according to EN 13757-4		S1; T1; C1*
Encryption		AES 128 / Engelmann Master Key*
Start date of radio transmission		annually variable (except 29.02.)
Transmission times (UTC+1)		transmission interval:	2 - 240 min (2 min)*
		transmission times per day:	12 a.m. - 12 p.m. (8 a.m. - 6 p.m.)*
		transmission days per week:	Mon - Sun (Mon - Sun)*
		transmission weeks per month:	1 - 4 (1 - 4)*
		transmission months per year:	Jan - Dec (Jan - Dec)*

Wireless M-Bus radio interface OMS 4 Mode 7 (* factory setting)

Radio protocols		"short telegram" compliant with the OMS (AMR) (current consumption, billing (due) date, billing date value, hint flag)
Operating modes according to EN 13757-4		T1; C1*
Encryption		AES 128 / individual key per device*
Transmission times (UTC+1)		transmission interval:	2 - 240 min (15 min)*
		transmission times per day:	12 a.m. - 12 p.m. (12 a.m. - 12 p.m.)*
		transmission days per week:	Mon - Sun (Mon - Sun)*
		transmission weeks per month:	1 - 4 (1 - 4)*
		transmission months per year:	Jan - Dec (Jan - Dec)*

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