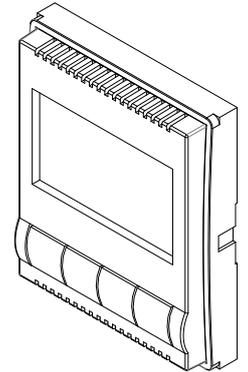


AMR-OP60/xx

Programmable on-wall controller

- Graphical white & blue LCD
- Room temperature measurement
- Four buttons control
- Modbus RTU / Arion communication (RS485)
- ABB Time / Time Arbo / Element design
- Programmable by user
- Power supply 24 V DC



TECHNICAL DATA

Display	Graphical white & blue LCD
Resolution	(256 × 128) pixels (asymmetric pixel)
Display area	(44 × 25) mm
Backlight / lifetime	LED / min. 50 000 hours *)
Temperature measuring	Electronically
Measuring range	-10 °C to 50 °C
Temperature measuring precision	±0.5 °C
Settling time	45 min.
Control	4 × button
Communication	RS485
Galvanic separation	No
Number of devices on RS485 segment	256
RS485 line termination	External resistor **)
Power supply	10 V DC to 30 V DC
Maximum power consumption	40 mA at 24 V DC
Others	
Ingress protection rate	IP20
Operating temperature range	-10 °C to 50 °C
Maximum ambient humidity	< 95 %, non-condensing
Mounting	Into junction box KU68 with frame
Frame design **)	ABB Time / Time Arbo / Element
Weight	47 g
Dimensions (w × h × d)	(71 × 71 × 28) mm ***)
Application software	TA_OP60_FW01AM_xxx
Programming	DetStudio / EsiDet

*) Luminance drop to 50 %

***) Not included

***) Final dimensions depends on frame type

ORDERING INFORMATIONS

AMR-OP60/xx *)	Wall mounted controller with loaded application software, operation manual
RR 120R	External termination resistor for RS485

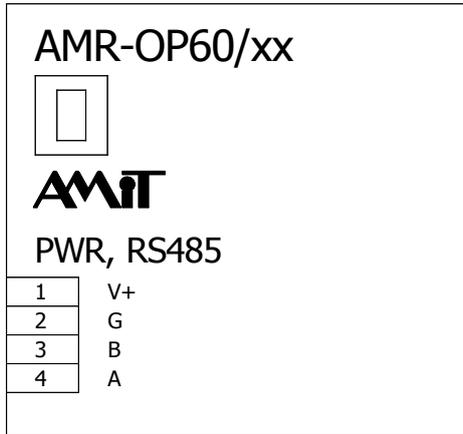
*) xx means colour design, see table on next page.

Note: Application software can be downloaded freely at www.amit.cz

Label	Colour design
AMR-OP60/01	White/ice white, Time / Element
AMR-OP60/03	White/white, Time / Element
AMR-OP60/07	Caramel/ice grey, Element
AMR-OP60/08	Titanium, Time
AMR-OP60/21	Ivory/ice white, Element
AMR-OP60/22	Agave/ice white, Element
AMR-OP60/24	Carminic/ice grey, Element
AMR-OP60/25	Coffeic/ice opal, Element
AMR-OP60/32	Old silver, Time
AMR-OP60/33	Champagne, Time
AMR-OP60/34	Anthracite, Time

Note: small recess on the surface and colours inhomogeneity cannot be taken as a reason for reclamation.

RECOMMENDED DRAWING SYMBOL

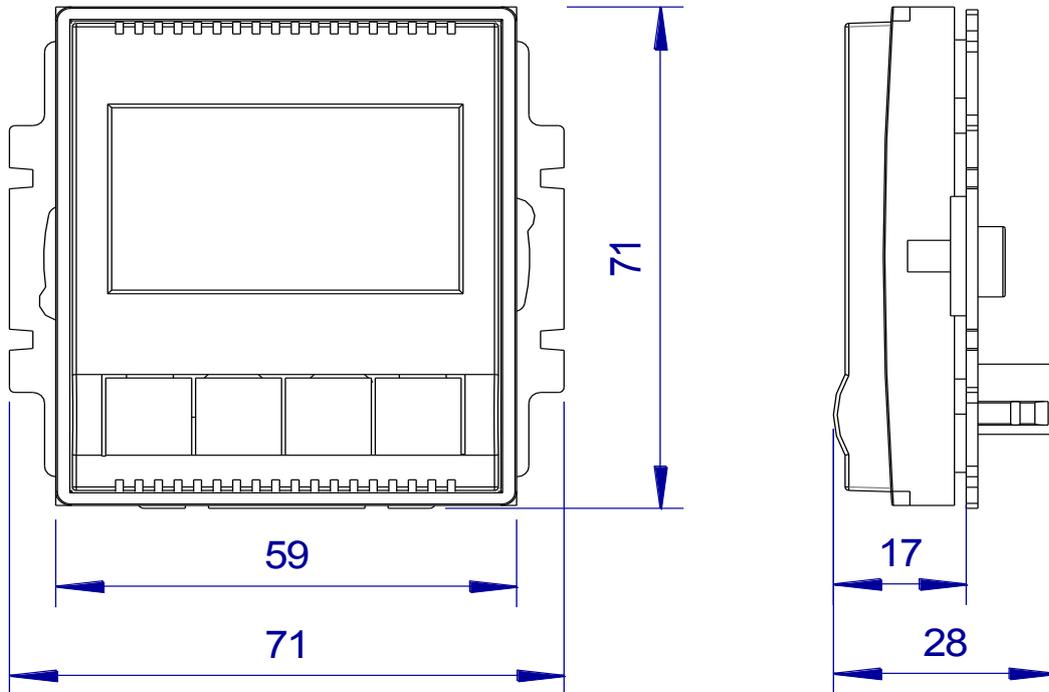


TERMINAL'S IDENTIFICATION

Terminal	Label	Meaning
1	V+	Power supply +24 V DC
2	G	Ground
3	B	RS485 line, signal B
4	A	RS485 line, signal A

Note: If **AMR-OP60/xx** is an end unit on RS485 line, the external termination resistor **RR 120R** must be connected between terminals 3 and 4 (not included).

MECHANICAL DIMENSIONS

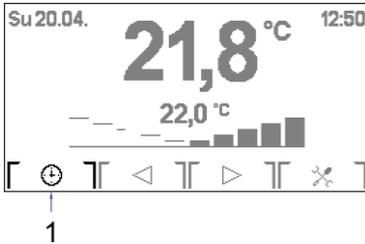


AMR-OP60/xx

Programmable on-wall controller

APPLICATION VERSIONS

Version 1

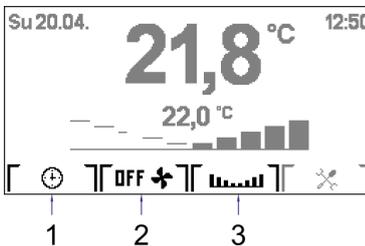


Room mode (1), correction

Icon (1) indicates selected room mode. Pressing button under the icon will toggle between three states.

Icon	Meaning	Description
[☀]	Comfort	Room is heated to constant (comfort) temperature.
[☾]	Energy saving	Room is heated to constant (energy saving) temperature.
[⌚]	Auto	Room is heated according to time schedule plus correction.

Version 2



Room mode (1), fan mode (2), correction (3)

Icon (1) indicates selected room mode. Pressing button under the icon will toggle between three states.

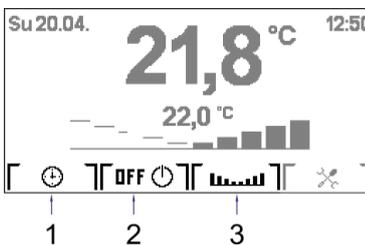
Icon	Meaning	Description
[☀]	Comfort	Room is heated to constant (comfort) temperature.
[☾]	Energy saving	Room is heated to constant (energy saving) temperature.
[⌚]	Auto	Room is heated according to time schedule plus correction.

Icon (2) indicates selected fan mode. Pressing button under the icon will toggle between five states.

Icon	Meaning	Description
[OFF +]	OFF	Fan is off.
[AUT +]	Auto	Fan is controlled automatically.
[I +]	Speed 1	Fan is set to speed 1.
[II +]	Speed 2	Fan is set to speed 2.
[III +]	Speed 3	Fan is set to speed 3.

Icon (3) calls screen for setting correction of requested room temperature (is shown only in Auto mode)

Version 3



Room mode (1), switch (2), correction (3)

Icon (1) indicates selected room mode. Pressing button under the icon will toggle between three states.

Icon	Meaning	Description
[☀]	Comfort	Room is heated to constant (comfort) temperature.
[☾]	Energy saving	Room is heated to constant (energy saving) temperature.
[⌚]	Auto	Room is heated according to time schedule plus correction.

Icon (2) indicates selected switch mode. Pressing button under the icon will toggle between two states.

Icon	Meaning	Description
[OFF ⏻]	Off	Switch is off.
[ON ⏻]	On	Switch is on.

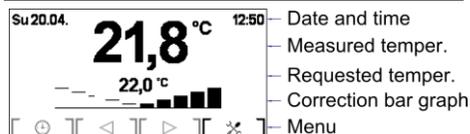
Icon (3) calls screen for setting correction of requested room temperature (is shown only in Auto mode).

AMR-OP60/xx CONTROLLER MAINTAINCE

Basic screen

Basic screen look depends on application version. Version is set by the applicator during the installation. Part of basic screen is common for all versions, part depends on chosen version.

Common icons



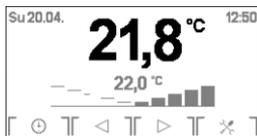
Date and Time

Date and time is received from superior control. Date of superior control system is displayed in left corner, time of superior control system is displayed in right corner.



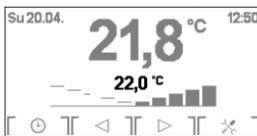
Measured temperature

Room temperature is displayed on LCD independently of communication.



Requested temperature

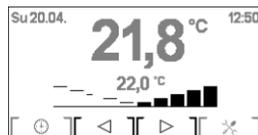
Temperature is received from the superior control system. During correction change, hyphens are displayed, until new requested value is received from the superior control system. Value could be shown with several second delays.



Correction bar graph

Bar graph is displayed in Auto mode. (For Version 2 and Version 3- the icon [] is displayed, which activates possibility to call correction setting screen on particular button. This icon is also displayed only in **Auto** mode. It is not displayed in other modes (Energy saving and Comfort)

Correction value is changed to plus or minus by pressing buttons under icons [<] or [>]. After each correction change, instead of requested temperature, hyphens are displayed, until new requested temperature value is received from the superior control system.



User's menu

User's menu is opened by pressing the button under the icon [*].



Meaning of buttons under icons is as follows:

Icon	Meaning
[Esc]	Leave the screen
[<]	Moving up through list.
[>]	Moving down through list.
[Enter]	Select the unit, open the screen.

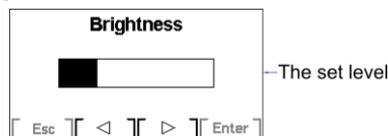
Menu items

Next items can be selected from the menu:

- Brightness
- Contrast
- Language
- Display
- Info

Brightness

The display brightness can be set, under item **Brightness**.

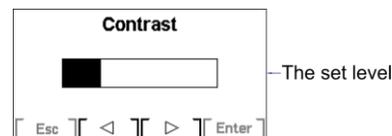


Meaning of buttons under icons is as follows:

Icon	Meaning
[Esc]	Leave the screen without confirmation
[<]	Lower brightness level
[>]	Higher brightness level
[Enter]	Confirmation and leaving the screen

Contrast

The display contrast can be set, under item **Contrast**.

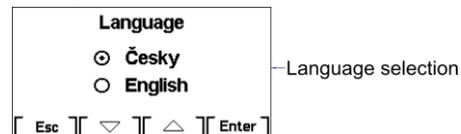


Meaning of buttons under icons is as follows:

Icon	Meaning
[Esc]	Leave the screen without confirmation
[<]	Lower contrast level
[>]	Higher contrast level
[Enter]	Confirmation and leaving the screen

Language

Item **Language** allows to switch between Czech and English texts on controller.



Meaning of buttons under icons is as follows:

Icon	Meaning
[Esc]	Leave the screen without confirmation
[<]	Select next language
[>]	Select previous language
[Enter]	Confirmation and leaving the screen

Display

Item **Display** allows to set screen saver time delay.



Meaning of buttons under icons is as follows:

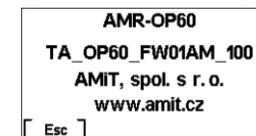
Icon	Meaning
[Esc]	Leave the screen without confirmation
[<]	Lower time value
[>]	Higher time value
[Enter]	Confirmation and leaving the screen

Following values can be set:

Value	Meaning
-1	Screensaver is off
10 to 120	Screen saver time delay in seconds

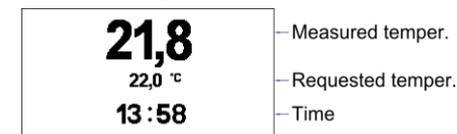
Info

By selecting item **Info** actual version of loaded in to controller application software, is displayed.



Screen saver

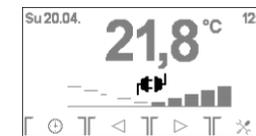
If the screen saver time is set (item **Display** in user's menu)- the screen saver is displayed after pre-set delay of inactivity (screen saver is displayed, backlight is off).



After first press of any key- backlight is on, after second press- basic screen is shown.

Communication interruption / Restart

Interruption of communication with superior control system / controller restart is indicated by icon [], shown under measured temperature.



CE AMIT, spol. s r. o. declare that the product AMR-OP60/xx is in identity with requirement and other clauses of directive 1999/5/ES

Waste Note: Despite the fact that this product is without any dangerous materials, please, do not put it to common waste container, but take it to collection spot for electronic waste. Further information is available on www.amit.cz in section „Technical advices“.

Detailed information can be found in operational manual ([amr-op60xx_g_en_001.pdf](#)). Documentation and examples can be downloaded from www.amit.cz web site.