

# Measuring current transformers

### Purpose

The current transformer is used for proportional change of high current intensities to lower values, adapted to the measuring ranges of control and measuring devices.

## TI-30 / ... / TI-80 1-phase closed-core transformers



norm No.	IEC 60044 -1
nominal secondary current Is	5 A
rated voltage	0.66 kV AC
insulation breakdown voltage	3 kV/1 min.
frequency	50/60 Hz
security factor	FS<5
working temperature	-5÷40°C
Terminal S1/S2	4.0 mm <sup>2</sup> screw terminals
tightening torque	0.5 Nm
installation	board/busbar
orientation	vertical/horizontal
protection level	IP20

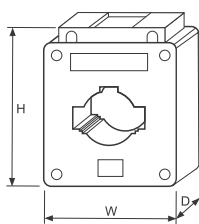
Type	Transformer Ip/Is	Class	Power [VA]	Dimensions of the P1/P2 [mm]	Dimensions [mm]	Weight [kg]
TI-30	30/5	0.5	1	∅22	44×67×30	0.135
TI-40	40/5	0.5	1	∅22	44×67×30	0.135
TI-50	50/5	0.5	2.5	∅22	44×67×30	0.135
TI-60	60/5	0.5	2.5	∅22	44×67×30	0.135
TI-75	75/5	0.5	2.5	∅22	44×67×30	0.135
TI-80	80/5	0.5	2.5	∅22	44×67×30	0.135

## TI-100 / ... / TI-600 1-phase closed-core transformers

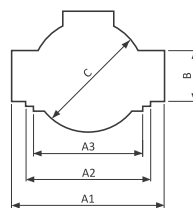


norm No.	IEC 60044 -1
nominal secondary current Is	5 A
rated voltage	0.66 kV AC
insulation breakdown voltage	3 kV/1 min.
frequency	50/60 Hz
security factor	FS<5
working temperature	-5÷40°C
Terminal S1/S2	4.0 mm <sup>2</sup> screw terminals
tightening torque	0.5 Nm
installation	board/busbar
orientation	vertical/horizontal
protection level	IP20

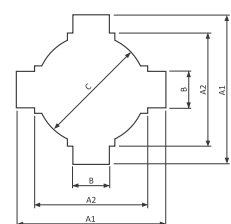
Type	Transformer Ip/Is	Class	Power [VA]	Dimensions of the P1/P2 A1/A2/A3×B; C [mm]	Dimensions [mm]	Weight [kg]
TI-100	100/5	0.5	2.5	30/25/20×10; ∅22	61×80×37	0.235
TI-150	150/5	0.5	2.5	30/25/20×10; ∅22	61×80×37	0.235
TI-200	200/5	0.5	5.0	30/25/20×10; ∅22	61×80×37	0.235
TI-250	250/5	0.5	5.0	30/25/20×10; ∅22	61×80×37	0.235
TI-300	300/5	0.5	5.0	30/25/20×10; ∅22	61×80×37	0.235
TI-400	400/5	0.5	10.0	40/30/00×10; ∅30	75×99×41	0.305
TI-600	600/5	0.5	10.0	40/30/00×10; ∅30	75×99×41	0.305



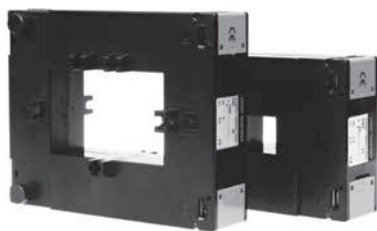
Dimensions



P1/P2 hole  
TI-100; TI-150; TI-200; TI-250; TI-300

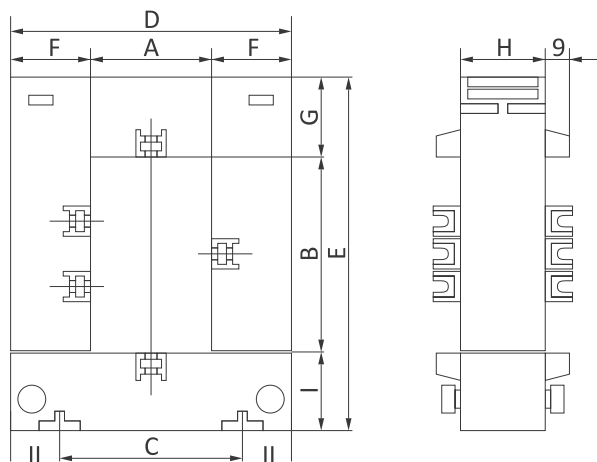


P1/P2 hole  
TI-400; TI-600



norm No.	IEC 60044 -1
nominal secondary current Is	5 A
rated voltage	0.66 kV AC
insulation breakdown voltage	3 kV/1 min.
frequency	50/60 Hz
security factor	FS<5
working temperature	-15÷50°C
terminal S1/S2	4.0 mm² screw terminals
tightening torque	0.5 Nm
installation	board
orientation	vertical/horizontal
protection level	IP20

Type	Transformer Ip/Is	Class	Power [VA]	Dimensions [mm]									Weight [kg]
				A	B	C	D	E	F	G	H	I	
TO-100	100/5	1.0	1.5	21	32	51	90	112	34	45	40	32	0.78
TO-150	150/5	1.0	1.5	21	32	51	90	112	34	45	40	32	0.78
TO-200	200/5	0.5	1.5	21	32	51	90	112	34	45	40	32	0.78
TO-250	250/5	0.5	1.5	21	32	51	90	112	34	45	40	32	0.78
TO-300	300/5	0.5	1.5	21	32	51	90	112	34	45	40	32	0.78
TO-400	400/5	0.5	2.5	21	32	51	90	112	34	45	40	32	0.78
TO-600	600/5	0.5	2.5	50	80	78	116	146	33	33	35	33	0.90
TO-750	750/5	0.5	5.0	50	80	78	116	146	33	33	35	33	0.90
TO-1000	1000/5	0.5	5.0	50	80	78	116	146	33	33	35	33	0.90



It is recommended to connect the secondary system with a wire with a diameter of at least 2.5 mm<sup>2</sup>. Grounding of the S2 terminal is recommended.

Do not turn off the secondary system while the transformer is running (high voltage may cause injury to people or damage to the device).

## 3-phase

### Purpose

The 3-phase (3 in 1) current transformer is used for indirect measurements of 3-phase currents. Its design allows it to be mounted directly on the outputs of the cut-off switches (ABB Isomax series, Merlin Gerlin NS series and similar) saving assembly time and space in the switchgear.

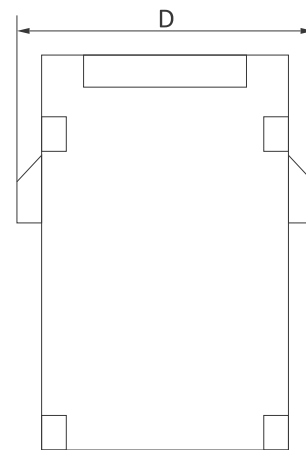
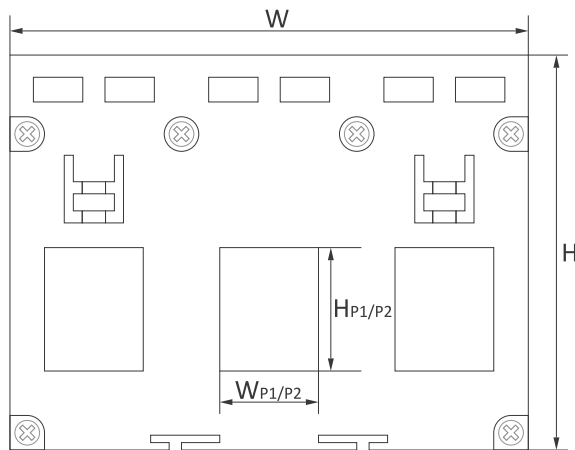
## TP-100 / TP-150 / TP-200 / TP-400 / TP-600

3-phase closed-core transformers



norm No.	IEC 60044 -1
nominal secondary current Is	5 A
rated voltage	720 V AC
insulation breakdown voltage	3 kV/1 min.
frequency	50/60 Hz
security factor	FS<5
thermal short-circuit current (Ith)	60×In
dynamic short-circuit-current (Idyn)	2.55×Ith
working temperature	-5÷40°C
Terminal S1/S2	4 mm <sup>2</sup> screw terminals
installation	DIN rail/board/cable
orientation	vertical/horizontal
protection level	IP20

Type	Transformer Ip/Is	Class	Power [VA]	Dimensions of the P1/P2 hole W×H [mm]	Dimensions W×H×D [mm]	Weight [kg]
TP-100	100/5	1	1.5	15×21	105×80×51	0.452
TP-150	150/5	1	2.5	15×21	105×80×51	0.452
TP-200	200/5	1	2.5	15×21	105×80×51	0.452
TP-400	400/5	1	3.75	31×31	142×96×51	0.570
TP-600	600/5	1	3.75	31×31	142×96×51	0.570





# Section XIII

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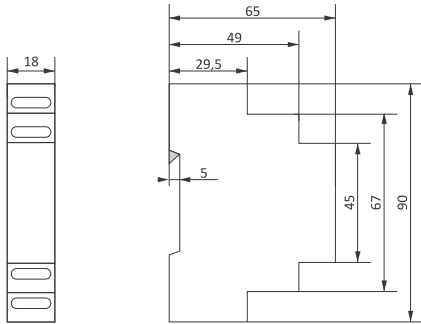
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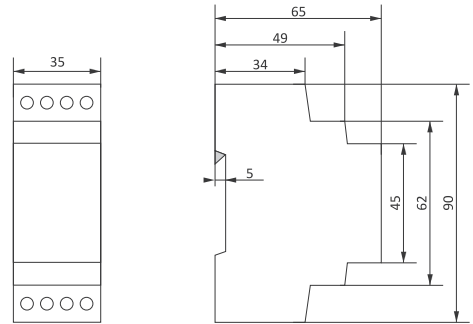


# Types and dimensions of enclosures

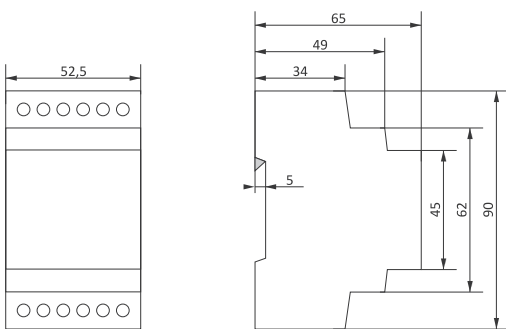
Dimensions in millimeters.  
Tolerance  $\pm 0.5$  mm.



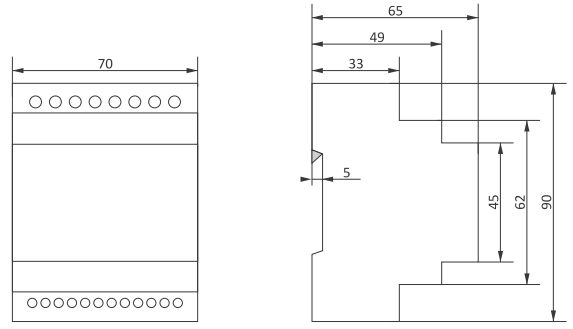
1S module



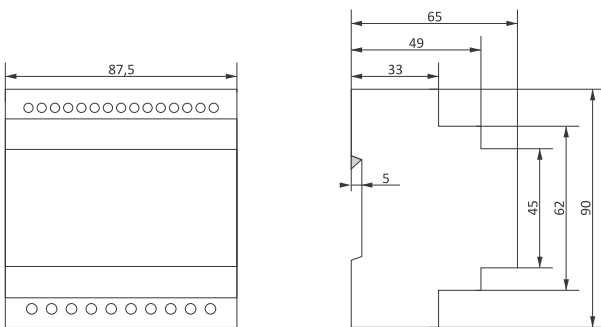
2S module



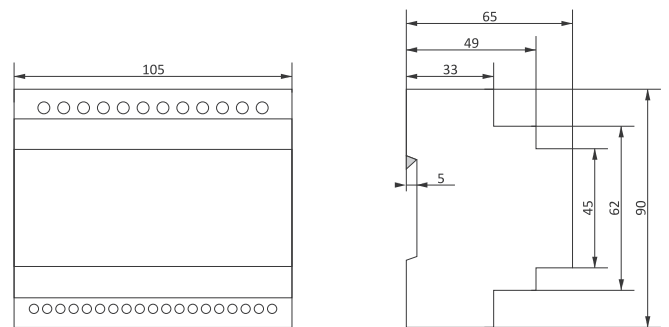
3S module



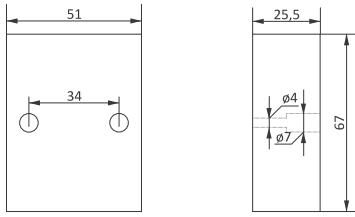
4S module



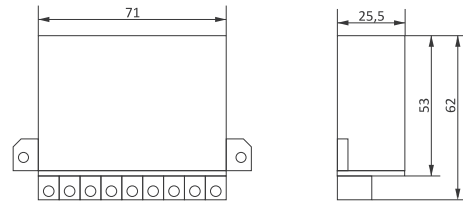
5S module



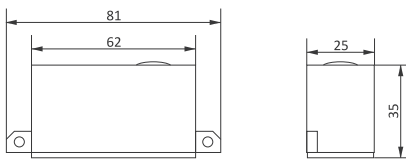
6S module



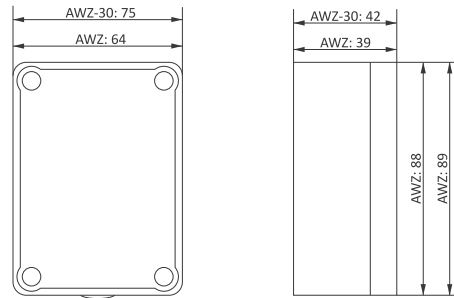
surface-mounted for: ASO, AZH, CKF, CZF, STR



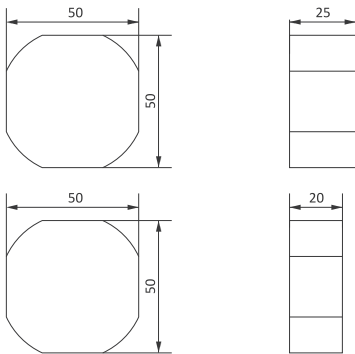
surface-mounted for: CZF2



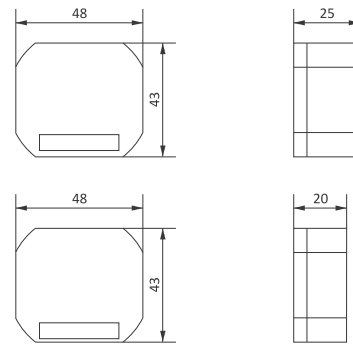
surface-mounted for: AZH-C



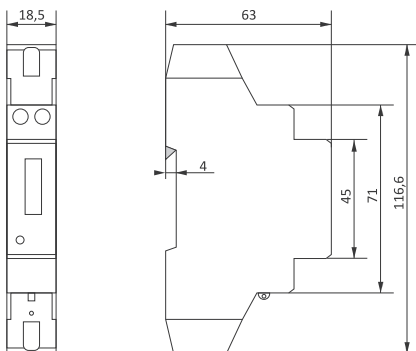
surface-mounted for: AWZ, AWZ-30



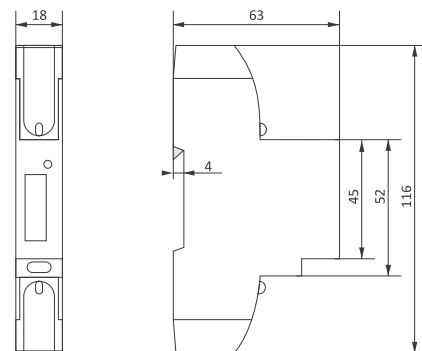
flush-mounted PDT



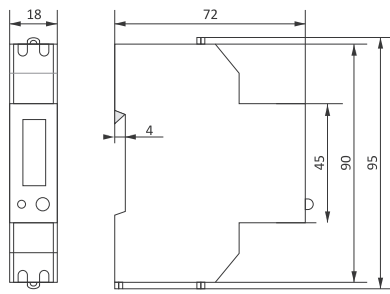
flush-mounted PDTN



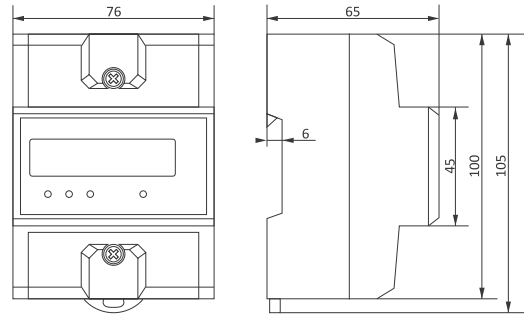
LE-01



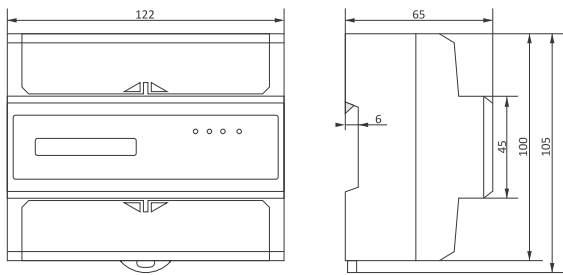
LE-01d



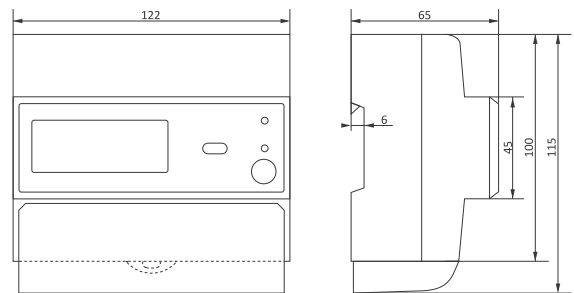
LE-01MR



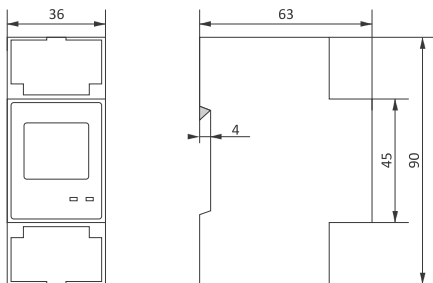
LE-02d/LE-02d CT



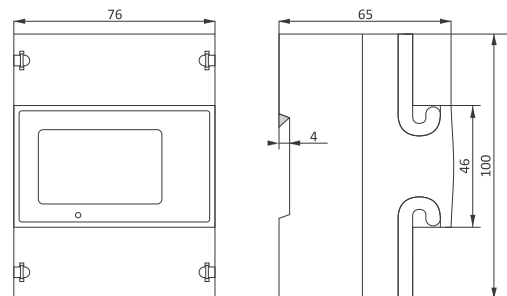
LE-03/LE-03d/LE-03d CT200/  
LE-03d CT400/LE-03M/LE-03M CT



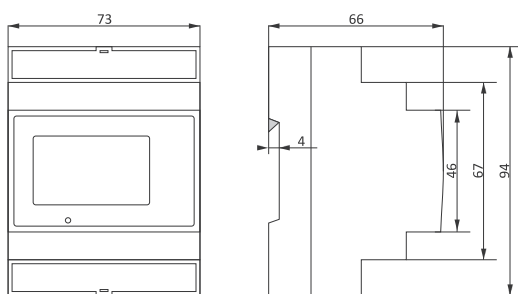
LE-03MP



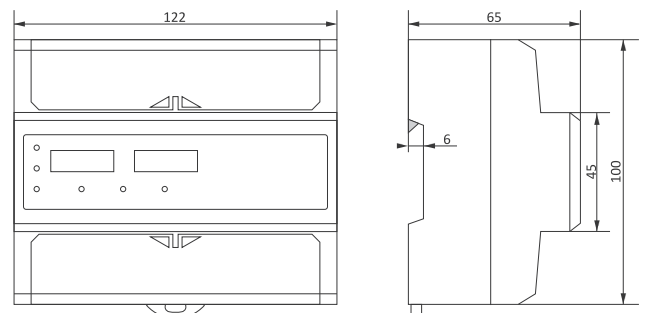
LE-01MB/LE-01MQ



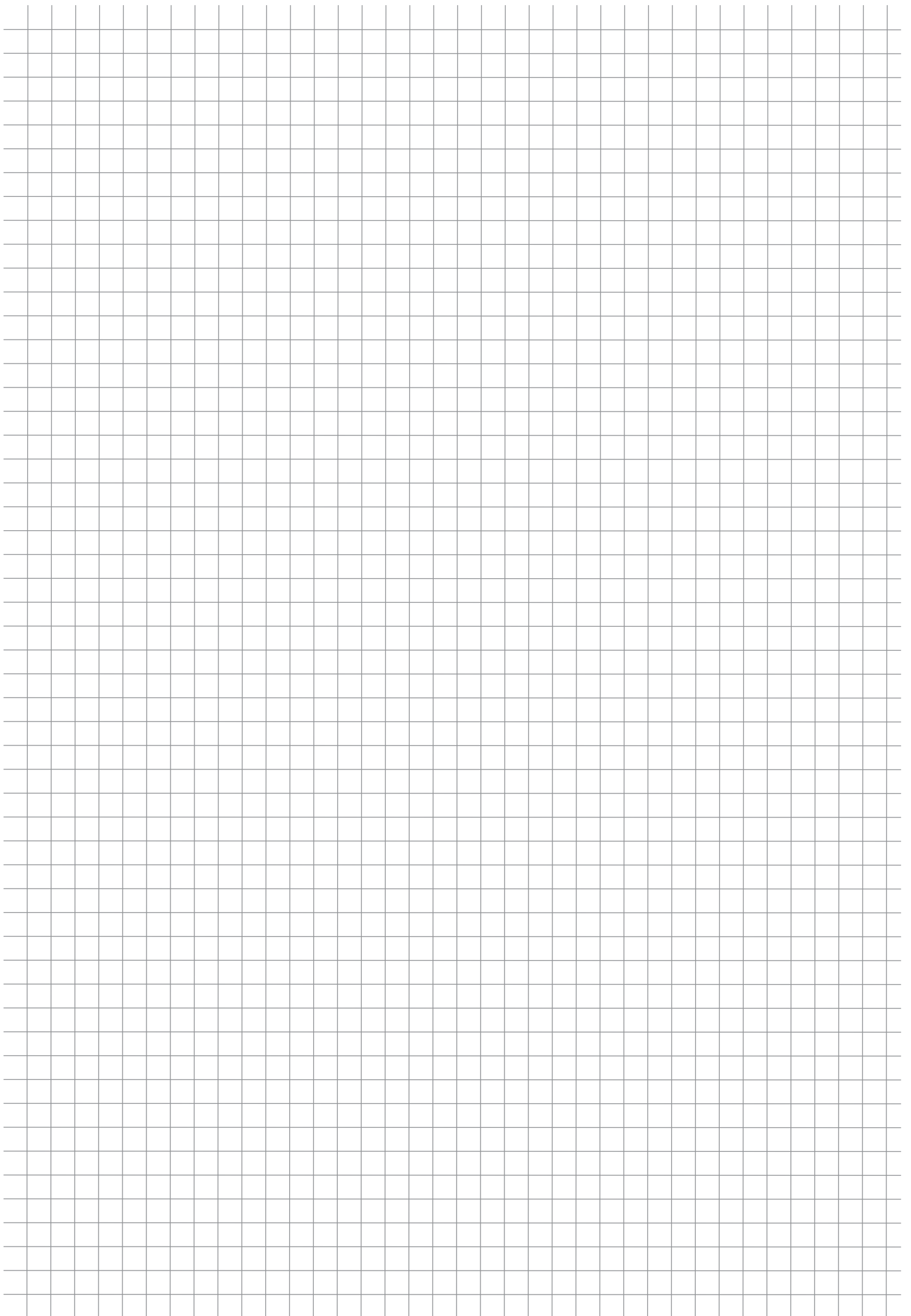
LE-03MB/LE-03MQ



LE-03MB CT/LE-03MQ CT



LE-04d



**«F&F»**



## mH-DEVELOPER

# Smart Home for developers

A module designed for developers to control:

- heating
- lighting
- the power supply of electrical outlets

The device was created based on detailed analyses of customers' needs and in cooperation with developers.

The advantage of the mH-DEVELOPER module is its simple assembly, compact design and the ability to extend the features with additional functions.



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