

# ODIN Meter

## An electricity energy meter from ABB

Technical documentation





# ODIN Meter

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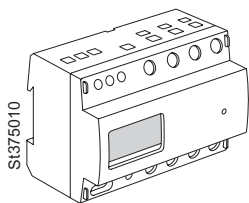
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# ODIN Meter

## General Description

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ODIN Meter is a compact electricity energy meter made for measuring active electrical energy and designed to be mounted on a DIN rail in distribution boards or in standard cabinets.

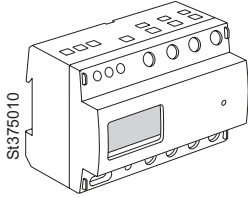
During the development process creating SIMPLICITY was the number one priority. The ODIN Meter shall be perceived as easy to install, use and distribute.

Examples of this can already be seen on the front of the electricity energy meter, clear marking, strong screws in the connecting terminal and an easy to read display. Enclosed in the carton are easy to understand instructions, which use text and diagrams to describe in detail how the installation should be carried out.

The ODIN Meter is certified according to the international standard IEC 61036. The standard covers several technical requirements including climate, mechanics, electronics, EMC and accuracy. Furthermore the ODIN Meter has a national approval from Sweden's Test and Research Institute (SP) as a revenue meter. This guarantees the ODIN Meter is highly reliable, has a long life expectancy and maintains its measuring accuracy.

# ODIN Meter

OD4165 direct connection, 3 phase meter up to and including 65 A



Article number	Type	Voltage (V)	Pulse output frequency
2CMA131024R1000	OD4165	230/400V	100 imp./kWh

## Technical Data

### Voltage:

Voltage range	3x230/400 V AC -20% to +15%
Max current	65 A
Start current	25 mA
Power consumption of current circuits	< 3 VA/phase
Frequency	50/60 Hz
Accuracy of measurement	Class 2 ( $\pm 2\%$ )
Standard	IEC 61036
Temperature range	-25 to +55°C
Material of front cover	Polycarbonate
Material of back cover	Polycarbonate/glass fibre
Resistance to heat and fire	Equivalent to IEC 695-2-1
Protection against penetration of dust and water	IP 20
Connection area in the current connecting terminals	1 – 16 mm <sup>2</sup>

### Pulse output

Connection area in the connecting terminal	0.5 – 2.5 mm <sup>2</sup>
External pulse voltage	5 – 40 V DC
Max. current	100 mA
Pulse length	100 ms $\pm 2.5$ ms
Pulse frequency	100 imp/kWh
Standard	IEC 62053-1 (S0)

### LED

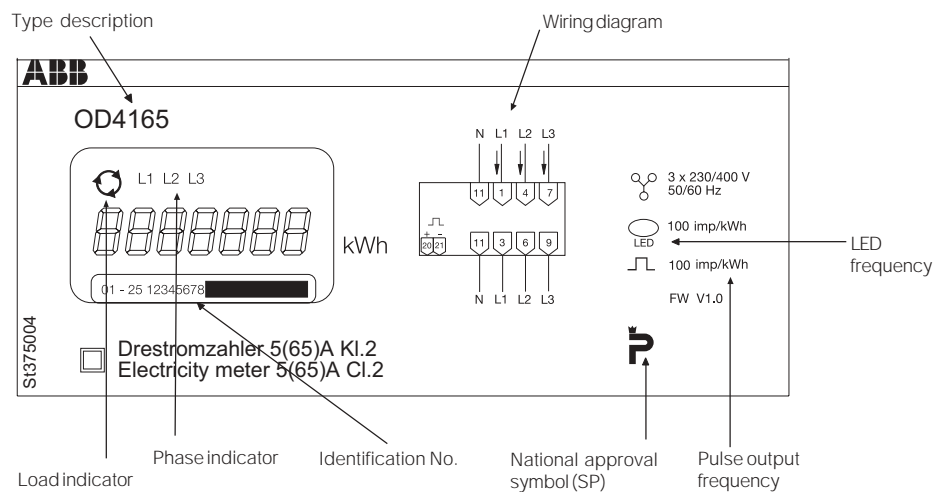
Pulse frequency	100 imp/kWh
Pulse length	40 ms

### Display

LCD with 7 digits without a decimal place, 6 mm

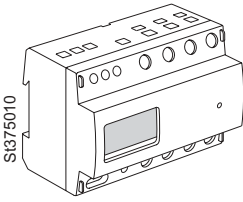
## Front view

### Direct connection



# ODIN Meter

OD4110 connection via external current transformers, 3 phase meter



Article number	Type	Voltage (V)	Pulse output frequency
2CMA131025R1000	OD4110	230/400V	1 imp./kWh

## Technical Data

<b>Voltage:</b>	3x230/400 V AC
Voltage range	-20% to +15%
Max. current	10 A
Starting current	15 mA
Power consumption of current circuits	< 0.02 VA/phase
Power consumption of voltage circuits	< 2 VA/phase
Frequency	50/60 Hz
Accuracy of measurement	Class 2 ( $\pm 2\%$ )
Standard	IEC 61036
Temperature range	-25 to +55°C
Programmable transformer ratios	5/5, 75/5, 100/5 150/5, 200/5, 250/5, 300/5, 400/5, 500/5, 600/5, 700/5 750/5, 800/5, 900/5 A/A

Material of front cover	Polycarbonate
Material of back cover	Polycarbonate/glass fibre
Resistance to heat and fire	Equivalent to IEC 695-2-1
Protection against penetration of dust and water	IP 20
Connection area in the current connection terminal	1 – 16 mm <sup>2</sup>
Connection area in the voltage connection terminal	0.5 – 6 mm <sup>2</sup>

## Pulse output

Connection area in the connection terminal	0.5 – 2.5 mm <sup>2</sup>
External pulse voltage	5 – 40 V DC
Max. current	100 mA
Pulse length	100 ms $\pm 2.5$ ms
Pulse frequency	1 imp/kWh
Standard	IEC 62053-1 (S0)

## LED

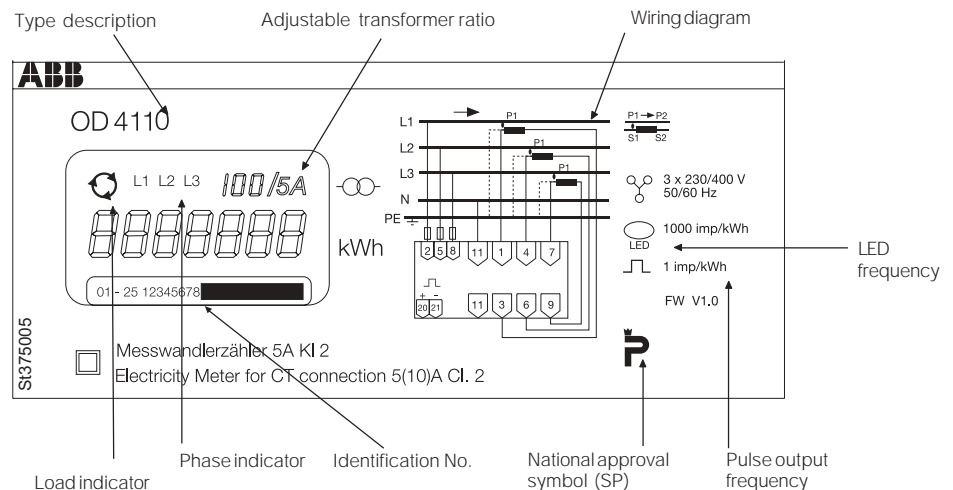
Pulse frequency	1000 imp/kWh
Pulse length	40 ms

## Display

LCD with 7 digits whitout a decimal place, 6 mm

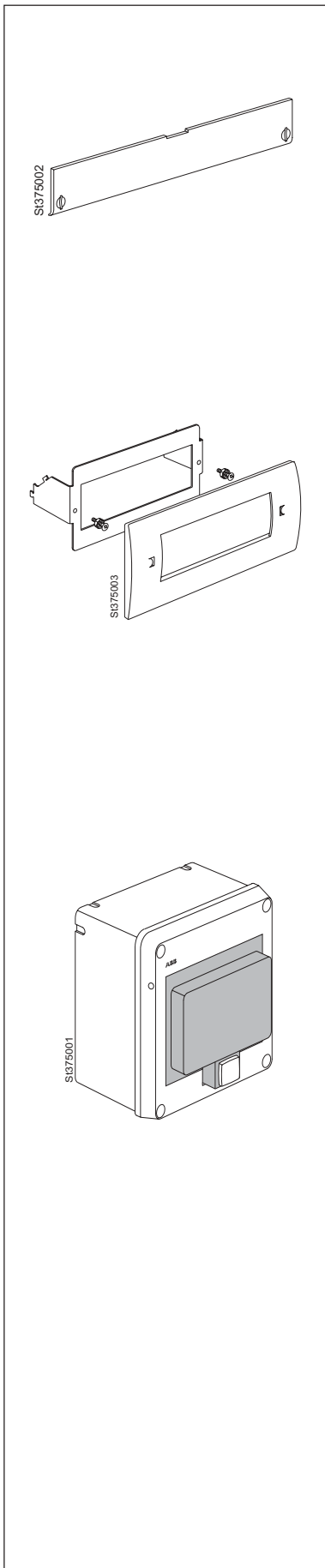
## Front view

### Connection via current transformer



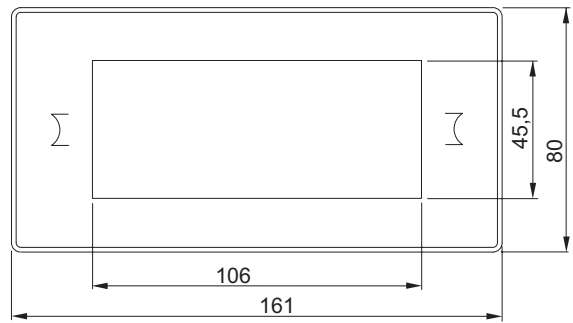
# ODIN Meter

## Accessories



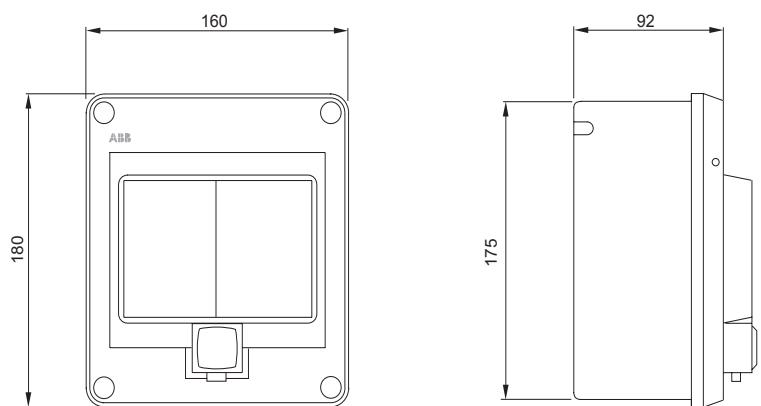
Article number	Type	Use	Picture No.
09 809 25	Protective sealable flap	When sealing	
09 811 84	Front mounting kit	For panel mounting	2
09 809 50	Enclosure (6 modules)	For wall mounting	3

**Picture No. 2**



Mt375003

**Picture No. 3**



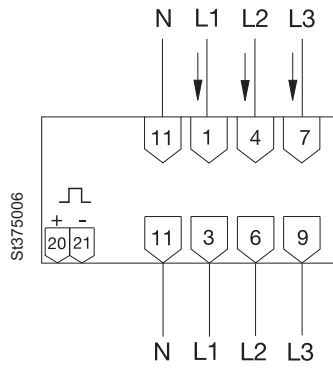
Mt375001

# ODIN Meter

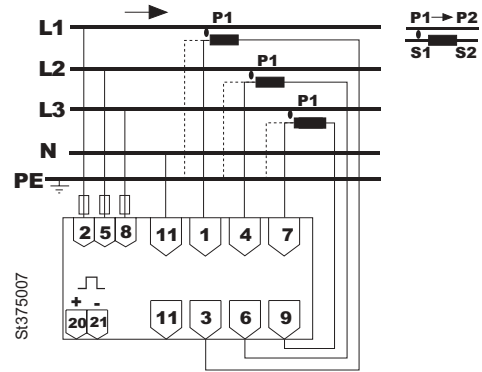
## Wiring diagrams

### Wiring diagrams

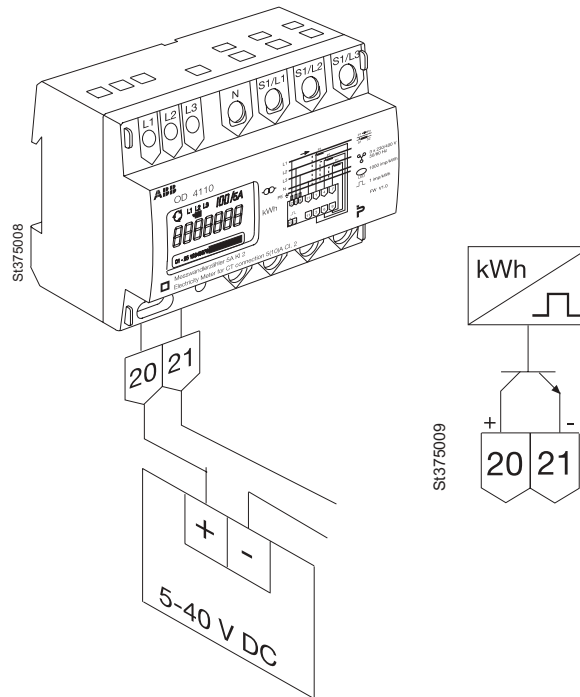
Direct connection



Connection via current transformer



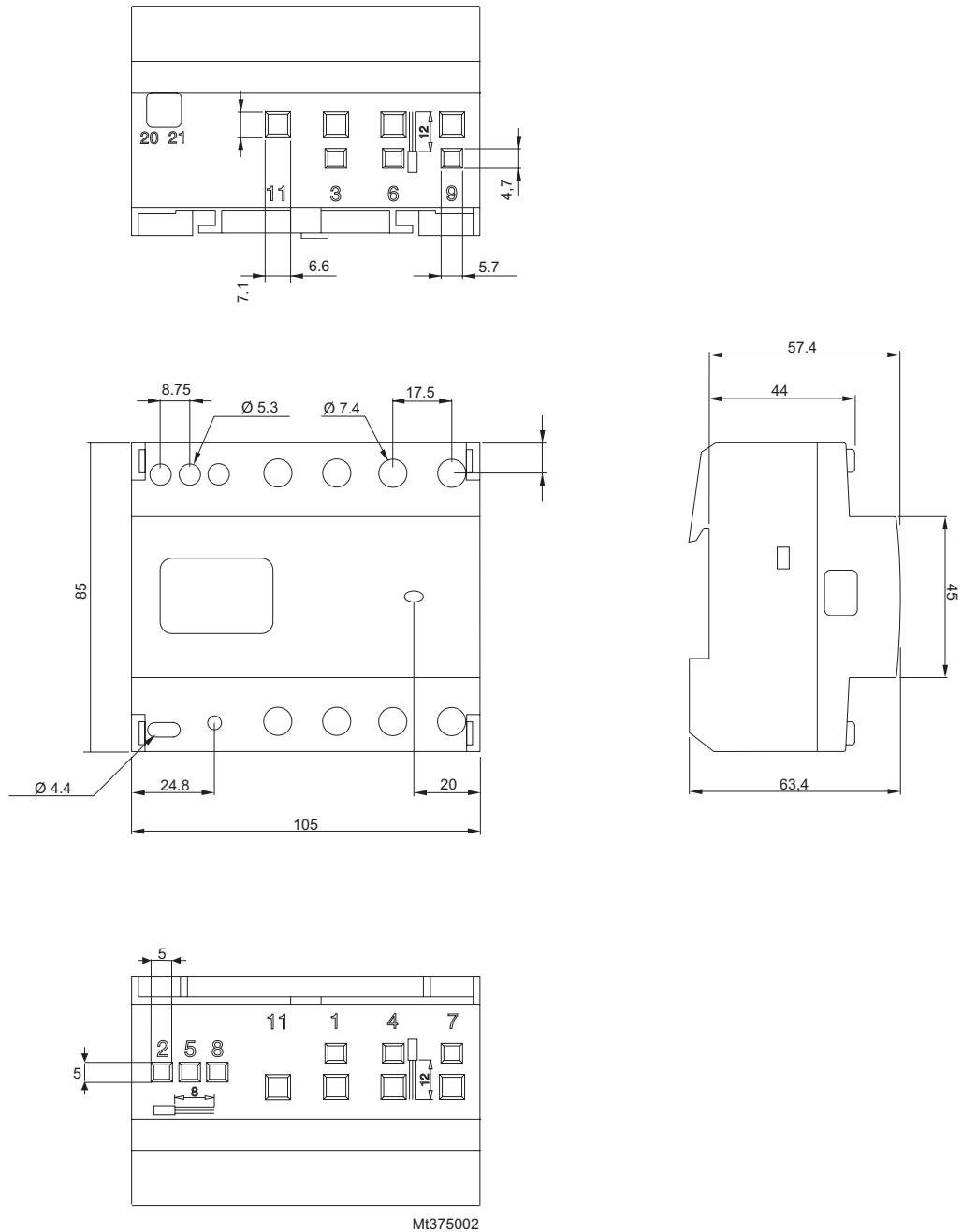
Pulse output



# ODIN Meter

## Device dimensions

### Device dimensions





# ODIN Meter

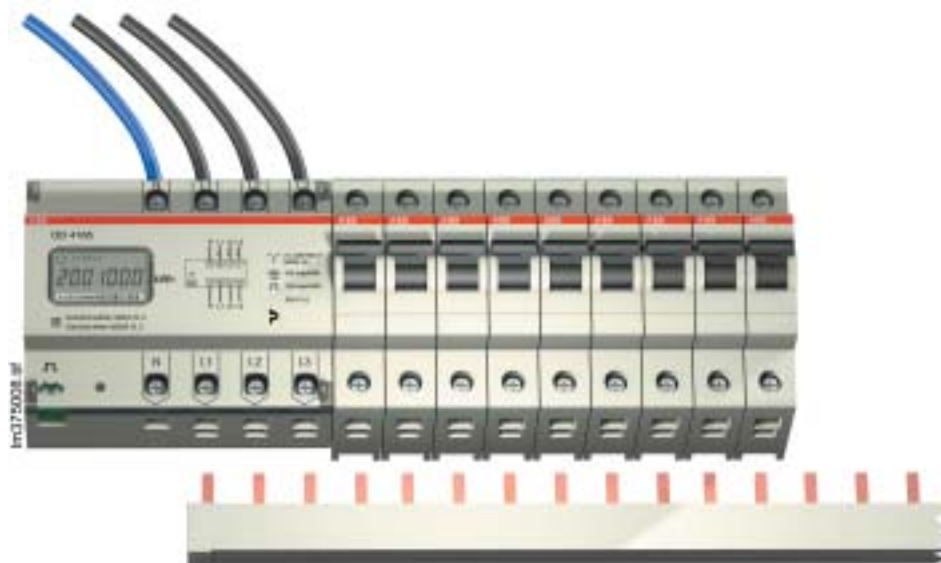
## Examples of connections

### Connections with cables



The electricity meter will function correctly with the neutral connected to either the upper or lower terminal

### Connections with cables and busbar





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