

Direct current meter  
direct / indirect

# MK-DC / MK-SH-DC

Electronic energy meter of direct current  
for DIN rail mounting



## Description

Electronic energy meter of direct current for DIN rails.

Other features include:

- Voltage up to 800 Vdc.
- 4-digit display with 7 red segments, highly efficient.
- 2-module size.
- Parameters measured: V, A, kW, kW-h
- 1 digital output with opto-coupled transistor.

## Application

- Energy metering of direct current that can be used to control the energy consumed and the energy generated in solar power farms.
- Energy control in telecommunications installations for subsequent management.

## Features

<b>Power supply circuit</b>	115 Vac or 230 Vac (-10...+10%) (*)
Consumption	4 V·A
Frequency	40..0.70 Hz
<b>Metering circuit</b>	
Nominal voltage	5 ... 800 V
Consumption	0,6 V·A
Minimum current	0,5 A / 1 mV (depending on type)
Nominal current	30 A / 60 mV (depending on type)
Maximum current	30 A / 60 mV (depending on type)
<b>Class</b>	
Voltage accuracy	±0.5 % FS ±1 digit
Current accuracy	±0.5 % FS ±1 digit
Power accuracy	±1 % FS ±1 digit
<b>Output transistor</b>	Optoinsulated (collector open) NPN
Maximum switching voltage	35 V
Maximum switching current	50 mA
Maximum Impulse frequency	2 Hz
Duration of the Impulse	240 ms On / 250 ms OFF
Insulation	500 Vdc (10 <sup>10</sup> Ω)
<b>Ambient conditions</b>	
Operating temperature	0 ... +65 °C
<b>Build features</b>	
Type of box	Self-extinguishing ABS plastic
Degree of protection	Fitted unit (frontal): IP 54
Dimensions	31 x 85 x 63.8 mm
Weight	170 g
<b>Standards</b>	
<b>IEC 1010, IEC 384, IEC 664, EN 50081-1, EN 50082-1, IEC/EN 62053-31</b>	

(\*) Other auxiliary power supply options:  
9 ... 18 Vdc / 18 ... 36 Vdc / 36 ... 72 Vdc

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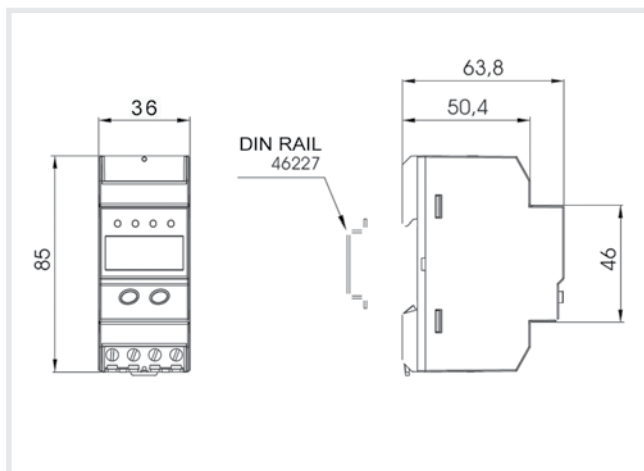
**MK-DC**

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**Codification table**

M	3	X	X	X	X	0	0	X
Code						Internal code	↑	
Auxiliar supply						Standard(230 V)	0	
						100 ... 115 Va.c.	1	
						18 ... 36 Vd.c.	7	

**Dimensions**



**References**

Parameters measured	Input current range	Voltage range	Digital output	DIN Modules	Type	Code
V, A, kW, kW-h	0,5 ... 30 A	0...800 V.c.c	1	2	MK-30-DC	M30300
V, A, kW, kW-h	1 ... 60 mV	0...800 V.c.c	1	2	MK-SH DC	M30400
V, A, kW, kW-h	0,5 ... 30 A	0...125 Vc.c.	1	2	MK-30-DC M125 Vc.c.	M303000000D00
V, A, kW, kW-h	1 ... 60 mV	0...125 Vc.c.	1	2	MK-SH DC M125 Vc.c.	M304000000D00

**Connections**

