



## Contador Circutor MK-LCD

Electronic single-phase meter for active energy, with direct connection for DIN rails. Other features include:

- Connection error indicator
- Current up to 120 A (depending on the type)
- RS-485 Communications, (depending on the type)
- 1 digital output with optoinsulated transistor
- Partial meters
- Displays instant parameters, such as the voltage, current and power.

Electrical energy meters for partial consumption: M.3

### FEATURES

<b>Power circuit / Measurement</b>	Single-phase: 110 V - 230 Vac (-15...+20%)
Consumption	3 V·A
Frequency	50...60 Hz
Minimum current	300 mA / 600 mA (depending on type)
Nominal current	30 A / 60 A (depending on type)
Maximum current	60 A / 120 A (depending on type)
<b>Maximum meter value</b>	999,999 kW·h (Minimum resolution of the display 10 W.h)
<b>Class/Accuracy</b>	Class 1
<b>Output transistor</b>	Optoinsulated (collector open) NPN
Maximum switching voltage	24 Vdc
Maximum switching current	50 mA
Maximum Impulse frequency	1 impulse / s
Duration of the Impulse	500 ms ON / 500 ms OFF
Energy output	100 impulses / kW·h (no programmable)
<b>Communications</b>	
Type	RS-485
Communication parameters	9600 bps, 8, n, 1
<b>Build features</b>	
Type of box	Self-extinguishing plastic
Degree of protection	IP 51 Terminals: IP 20
Dimensions	70 x 80 x 75 mm (4 modules)
Weight	200 g

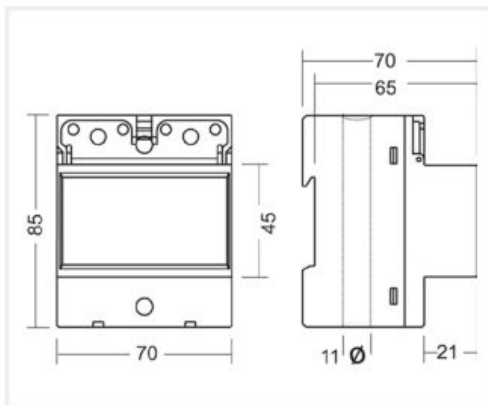


## Contador Circutor MK-LCD

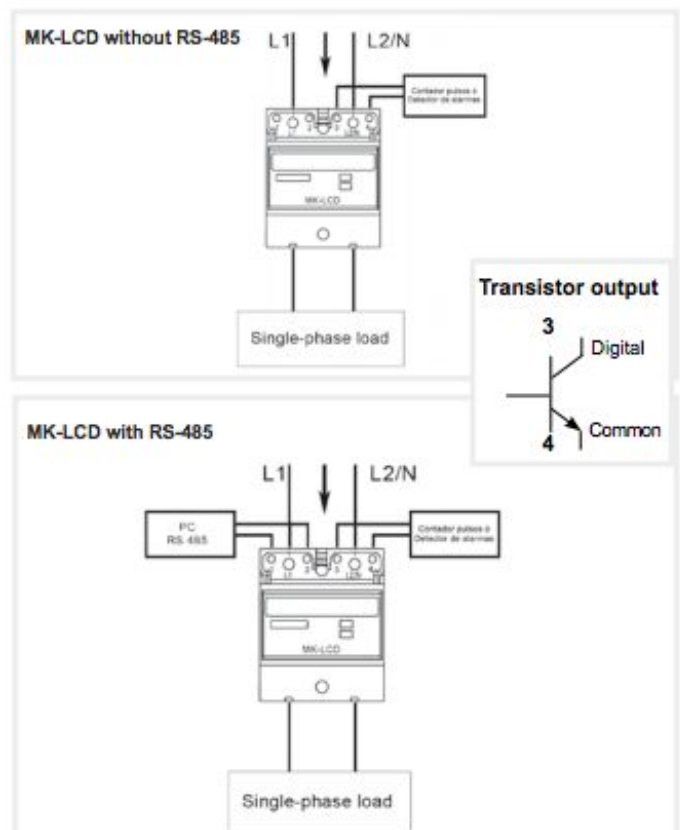
### FEATURES

<b>Ambient conditions</b>	
Operating temperature	0 ... +50 °C
Humidity	95% without condensation
Altitude	2000 m
<b>Safety</b>	
Category III-300 Vac EN 61010. Double-insulated electric shock protection class II	
Standards	EN 61010

### DIMENSIONS

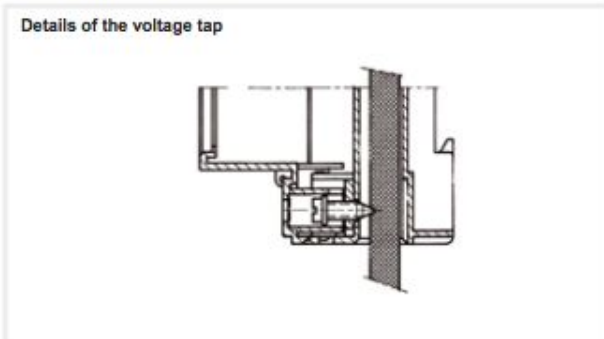


### CONNECTIONS



### DIAGRAM

Details of the voltage tap





## Contador Circutor MK-LCD

### REFERENCES

Parameters measured	Input range	Partial meters	Quadrants	Communications with the MODBUS (RTU) protocol	Rates	Digital output	DIN Modules	Type	Code
kW·h, V, A, W	0.3..0.60 A	Yes	2	-	-	1	4	MK-30 LCD	M30120
kW·h, V, A, W	0.3..0.12 0 A	Yes	2	-	-	1	4	MK-60 LCD	M30220
kW·h, V, A, W	0.3..0.60 A	Yes	2	RS-485	-	1	4	MK-30 LCD-RS485	M30121
kW·h, V, A, W	0.3..0.12 0 A	Yes	2	RS-485	-	1	4	MK-60 LCD-RS485	M30221

### DESCRIPTION OF TERMINALS

No. of Terminals	Description of terminals	
	MK-LCD without RS-485	MK-LCD with RS-485
1	Not used	RS-485 (B)
2	Not used	RS-485 (A)
3	RL1 Relay Output	RL1 Relay Output
4	Common Relay	Common Relay
5	L1 Voltage/Current input	L1 Voltage/Current input
6	N/L2 Voltage input	N/L2 Voltage input