

inepro®

Measuring Instruments



DM Metering

www.inepro.com

Inepro Metering

About Inepro Metering

Inepro Metering is part of the Inepro Group, a manufacturer of innovative payment and accounting solutions, renowned on the international market for over 50 years. Inepro Metering specializes in the production of high end measuring instruments such as electricity and water meters. These products are distributed under the brand name DMMetering®. In 2005 Inepro Metering decided to expand its horizons by establishing Inepro Industries Limited as its sales office located in Hong Kong in order to handle sales and production. Cost effective production ensuring high quality products is a key element in Inepro Metering's strategy. This, combined with the high level of service, differentiates Inepro Metering from the competition. Within a few years time, Inepro Metering has proven that the combination of Dutch expertise with the strength and efficiency of Chinese capacity result in a high quality product range at competitive prices.

Value-Added Pricing

Inepro Metering is not a newcomer to the international metering market. DMMetering, one of the registered trademarks of Inepro Metering, has over a decade of European metering experience. In conjunction with the Asian sales office represented by Inepro Industries Ltd. this results in swift answers to changing international markets. Inepro Metering understands competitive prices are a key element to success, however, flexibility, fast delivery, excellent service and good quality products with warranty, are just as important keys to healthy and long-term business relations.

The measuring instruments of DMMetering, developed by Inepro, represent products with a high price-performance ratio. Good quality comes first, where fast delivery and reliable services are synonymous with, and represent value-added features to the brand.

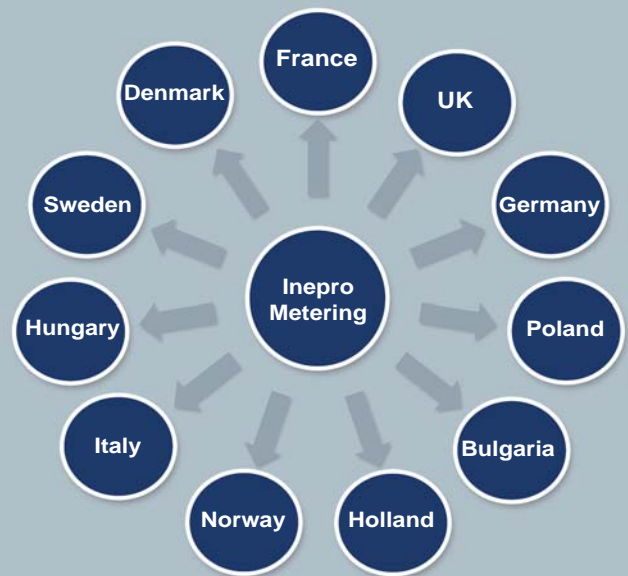
Worldwide Business

High quality products and reliable services have gained the Inepro Group a good reputation for its services and high product standards among her customers worldwide. With this same excellence, Inepro Metering aims to not only anticipate & meet its clients' needs, but also provide custom-made solutions to their challenges. As a market-oriented and innovative company, Inepro Metering has extensive experience in product design and product development. Due to the dual sales office structure in both Asia and Europe and the European warehouse, no matter how small or large the required quantity, fast and reliable delivery for competitive prices is how Inepro Metering stands out from its competitors worldwide.



European distribution network Inepro Metering

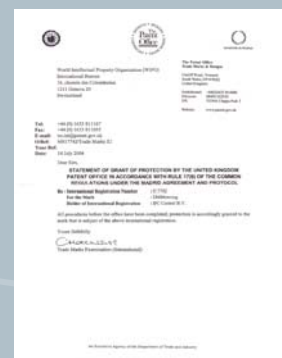
The distribution network of Inepro Metering has grown rapidly over the last couple of years. An increasing number of distributors realize the advantages that Inepro Metering has to offer. Inepro Metering's focus on high quality certified products combined with the very competitive price level makes Inepro Metering one of the most interesting players in the market. The growth of Inepro Metering is parallel with the growing market for quality certificates.



Quality Certificates

There is a growing demand for certified meters, especially on the European Market. This made Inepro Metering decide to implement a strategy of aiming to have the majority of its product range MID (Measuring Instruments Directive) certified within a period of time. With the MID quality certificate, one of the highest existing quality requirements, a product can be safely installed throughout the entire European market and used for billing, industrial and commercial purposes. Every DMMetering electricity & water meter, leaving the ISO-certified production facility is not only tested extensively, but also manufactured according to the highest ISO- and EN-standards. Inepro is convinced of the quality of its products; in order to convince others, it aims to certify the majority of its meters. At present, several products are KEMA, MID or CSA certified and more will follow in the near future.

Let our quality certificates convince you!





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3	PRO1250 DIN Rail Series Three Phase
4	ADM1TE DIN Rail Series Single Phase MID Approved
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European Measuring Instruments Directive (MID)

Introduction

On the 30th October 2006, the new European Directive that covers a number of different measuring instrument types, including utility meters such as electricity and water meters, came into force. With this new directive manufacturers such as Inepro Metering, can obtain a European Type Approval Certificate; i.e. for electricity meters for example under MI-003 of the directive.

When an MID certificate is obtained for a specific product, it means that this product can be installed in any EU country and used for billing purposes as well as industrial and commercial purposes.

The principal aim of the new Directive is to create a single market in measuring instruments for the benefit of manufacturers and of course ultimately, consumers across Europe, in contrast to the past where each country had its own regulation. With the MID this is history, because all European countries accept the MID approval.

Within the MID regulation for electricity meters there are 2 partial approvals, MID B & D and MID B & F and one MID H1 approval, which is a full quality assurance for design and production.

The MID B is the type examination for the product itself. When a product obtains the MID B Annex MI-003, it means that all components and casing (technical content), are approved. The MID D approval can be obtained when the production process is approved by an authorized company (notified body) such as KEMA. With MID B & D the manufacturer is allowed and able to calibrate its own meters so they are ready to be installed directly throughout Europe and used for billing purposes. If the meters can't be calibrated in the factory, the manufacturer can offer the products to an external notified body. In this case the MID B & F will be obtained.

Currently MID Pending:

- PRO1250A
- PRO1250D
- PRO1250D Mbus
- PRO1250D Modbus
- ADM1 LCD
- ADM 1.5TE
- DRM370A
- DRM370D
- DRM370D Mbus

Inepro Metering and Quality Certificates

Inepro Metering is convinced of the quality and reliability of its brand DMMetering, but also understands that quality certificates such as the MID approval are a value added and extra assurance to our clients. As a reliable and innovative company, Inepro Metering decided to obtain approvals for several products. The ADM1TE single phase kWh meter for example has several approvals such as the MID B+D approval, as well as the CSA certificate and recently the Pro75A (analogue) and Pro75D (digital) series have received the MID B approval. The latest news regarding obtained quality approvals, a list of MID pending products and more can be found on our website www.inepro.com.

Our goal is to offer a complete product range with MID certificates within a few years. We understand that these approvals will be a strong advantage, especially since we aim to continue offering our products at very competitive prices.



PRO75 DIN Rail Series Single Phase

Introduction

The production process of one of the best kWh meters around is now improved and ready to take 5 years of warranty.

All PRO meters are produced with the highest quality level components and are available in different currents and voltages.

The standard currents are 10/100A direct and the 3 phase meters are also available in a 5A CT version to measure with current transformers. All meters are class1 and available with LCD or 5+1 mechanical register.

Functions and features

- MID B approved
- DIN rail mounting
- LCD 6+1 or Mechanical register
- SO output
- Easy installation
- High price/quality ratio
- Indoor meter
- 5 year warranty
- PRO75 is also for 2 phase available
- MODBUS RTU (Remote Terminal Unit) available
- MID D approval expected in 2009

Technical specifications

Voltage	230V AC
Frequency	50 / 60Hz ±10%
Current	10(100)A
Power consumption	< 2W / 10VA
AC voltage withstand	2KV – 1 minute
Impulse voltage withstand	6KV – 1,2μS waveform
SO output	according to DIN43864
Temperature range	-20°C ~ + 55°C
Case	75 mm DIN Rail mounted
Packaging dimensions	55x33x26.5cm - 11.85kg (36pcs/ctn)

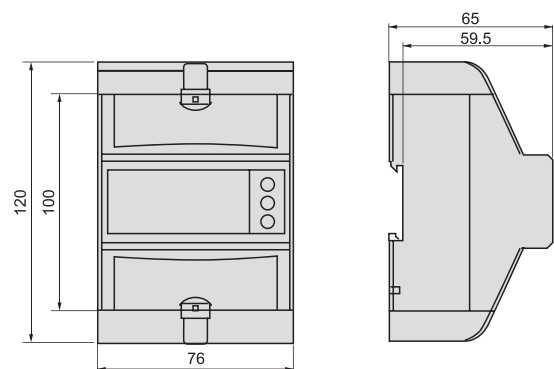


PRO75A



PRO75D

Outline dimension



PRO1250 DIN Rail Series Three Phase

Introduction

The PRO-1250 is the 3 phase version in the PRO Series with a 5 year warranty, just like for all other products in the PRO range.

The meter is built with the highest quality components. There is a 10/100A direct meter and a -/5A version for measuring with current transformers. In the digital meter for current transformers are 2 buttons to set ratio of the used current transformer.

Functions and features

- DIN rail mounting
- LCD 6+1 or Mechanical register
- SO output
- Easy installation
- High price/quality ratio
- Indoor meter
- 5 year warranty
- MODBUS RTU (Remote Terminal Unit) available
- 5A CT version for measuring with current transformers available
- MID approval expected in 2009

Technical specifications

Voltage	230 / 400V AC
Frequency	50 / 60Hz ±10%
Current	100A or -/5A
Power consumption	≤ 2W / 10VA per phase
AC voltage withstand	2KV – 1 minute
Impulse voltage withstand	6KV – 1,2µS waveform
SO output	SO according to DIN43864
Temperature range	-20°C ~ +55°C
Case	126 mm DIN Rail mounted
Dimensions (wxhxd)	126x100x65mm
Accuracy Class	1
Packaging dimensions	55x33x26.5cm - 15.1kg (24pcs/ctn)

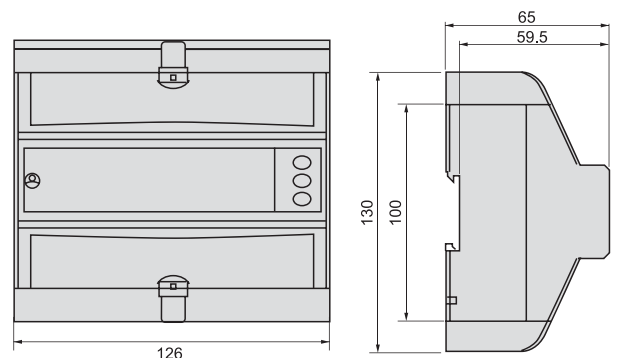


PRO1250A



PRO1250D

Outline dimension



ADM1TE DIN Rail Series Single Phase MID Approved

Introduction

The ADM1TE series is only 18mm wide and can measure up to 32A direct. The ADM1TE is available in 4 different configurations. All meters are available for 120V or 230V and for 50Hz or 60Hz.

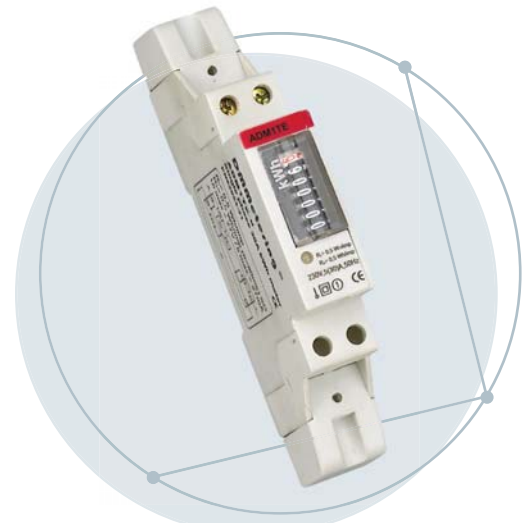
An MID approval is obtained for the ADM1TE with 6+1 mechanical motorstep counter. LCD version will obtain the MID approval in 2009. With this approval it is allowed to use the meter for billing purposes throughout Europe.

Functions and features

- ADM1TE Register. Contains a 6+1 motorstep counter and is MID B+D, KEMA and CSA approved.
- ADM1LCD version 1. Contains an LCD display.
- ADM1LCD version 2. Contains an LCD display with possibility to connect an external voltage to read out the meter when there is no power.
- ADM1LCD version 3. Contains an LCD display with backlight and built in battery to read out the meter when there is no power.

Technical specifications

Voltage	127 / 230V AC (-15%+10%)
Frequency	50Hz or 60Hz (±10%)
Current	5(20), 5(25), 5(30), 5(23)A
Power consumption	< 0,6W
AC voltage withstand	2KV for 1 minute
SO output	SO according to DIN43864
Temperature range	-25°C ~ +55°C
Case	1 module DIN rail
Dimensions (wxhxd)	18x90x58,5mm without protection cover
Accuracy class	1 or 2
Packaging dimensions	32x22x29.5cm - 12kgs (100pcs/ctn)

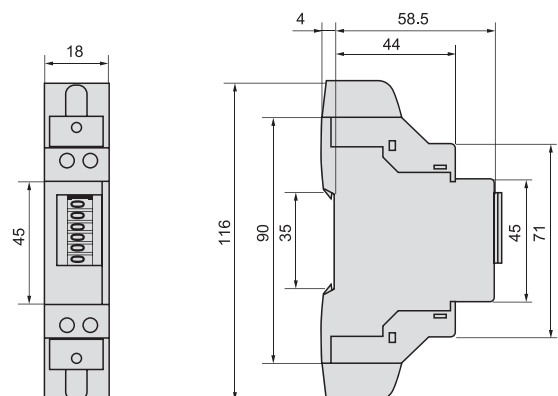


ADM1TE-s



ADM1 LCD

Outline dimension



ADM1.5 DIN Rail Meter Single Phase

Introduction

This meter is only 26mm wide and can be used for measuring up to 65A. The meter is based on our ADM1TE and the same technique is used in this meter. It is also equipped with an SO (pulse) output.

The ADM1.5 is pending for MID but is already CSA approved.

Functions and features

- Small casing
- High Amperage
- 6+1 new motorstep counter
- SO output
- Easy installation
- Indoor Meter
- The ADM1.5 is pending for MID approval
- CSA Approved
- LCD model pending

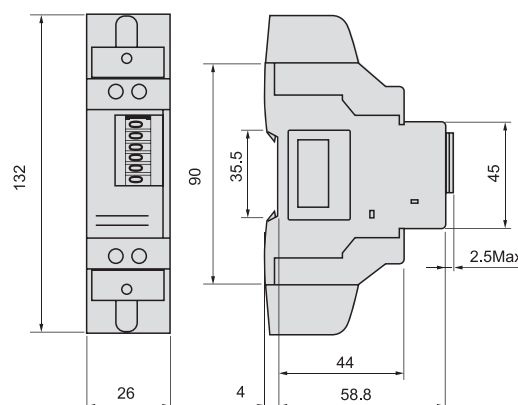
Technical specifications

Voltage	127 / 230V AC (-15%+10%)
Frequency	50Hz or 60Hz (± 10%)
Current	10(65)A
Power consumption	≤2W / 10VA
AC voltage withstand	2KV for 1 minute
SO output	According to DIN43864
Temperature range	-10°C ~ +50°C
Case	1,5 module DIN rail
Dimensions (wxhxd)	26x90x58,5 mm
Accuracy class	1
Packaging dimensions	31.5x28.5x38.5cm - 17.44kg (100pcs/ctn)



ADM1.5

Outline dimension



DRM75 Series DIN Rail Meters

Introduction

DRM75A

The DRM75A is the most basic meter within our range with a mechanical impulse/step counter and pulse output for external applications. The meter has a 5+1 mechanical register with a clear readout.

Standard we produce this meter in a 50A and 100A version, but other currents are also available between 5-100A.

DRM75D

The digital version of the DRM75D series has an LCD display to show all measured data and it also provides reverse reading. The total reverse energy can be read in a specific menu.

The standard meter is available in 90A. Other currents available on request.



DRM75A

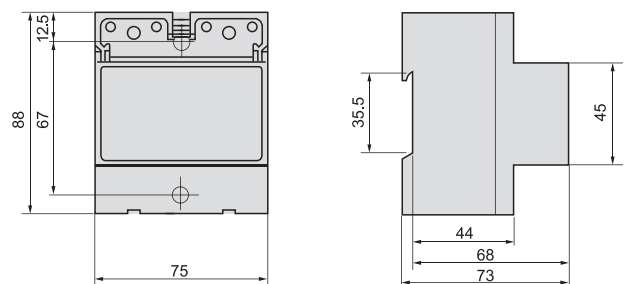


DRM75D

Functions and features

- Quality range for a low price
- All with SO output
- Easy installation

Outline dimension



DRM75 Series DIN Rail Meters

Introduction

DRM75DE

The DRM75DE is a basic 2-tariff kWh meter. The meter can work as a 1 or 2 tariff system by connecting an external timer switch. When no power is on the pins of the meter, it is tariff 1 and when a 220 volt signal is on the pins, it will measure on tariff 2. With this easy solution, the meter can be used everywhere. You just have to be sure that your timer switch has an automatic summer/winter time correction, and the meter will work perfectly.

DRM75RR

This meter is designed and developed especially for temporary and frequently changing users such as camping or harbor visitors.

The meter has 2 reading modes, a total and a daily used kWh (like in a car). Any new user can reset the daily counter. This way the consumption per user per time area can be monitored into detail.

Functions and features

- Resettable version available
- All with SO output
- 2 tariff meter available
- Easy installation

Technical specifications

Voltage	127V / 230V AC (-15%+10%)
Frequency	50Hz or 60Hz (±10%)
Current	2,5(10)A - 3(15)A - 5(30)A - 10(50)A - 15(90)A - 20(100)A - 5(40)A - (100)A
Power consumption	≤1.5W / 16VA
AC voltage withstand	2KV - 1 minute
Impulse voltage withstand	6KV - 1,2μS waveform
SO output	SO according to DIN43864
Temperature range	-25°C ~ +55°C
Case	75mm DIN Rail and/or wall mounted
Dimensions (wxhxd)	38.7x33.5x36.5cm - 17kgs (64pcs/ctn)
Accuracy class	1 or 2
Packaging dimensions	38.7x33.5x36.5cm - 17kgs (64pcs/ctn)
RS485	optional

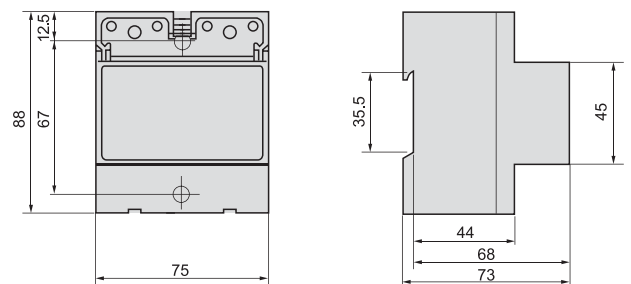


DRM75DE



DRM75RR

Outline dimension



DRM370 Three Phase 70mm DIN Rail Meter

Introduction

New in the DRM series is the DRM 370. This three phase electricity meter is only four modules (70mm) wide and is available in a 5/100A direct version as well as in a CT operated (-/5) version.

Its high level of performance combined with its small size make this meter a worthy extension to the Inepro Metering product assortment. This product is MID pending and is expected to obtain the approval in 2009.

Functions and features

- Din Rail mounting
- 6+1 mechanical or LCD register
- LCD register will be available with backlight
- SO (pulse) output
- Will become available with Mbus
- MID pending
- 100A direct or /-5A CT operated

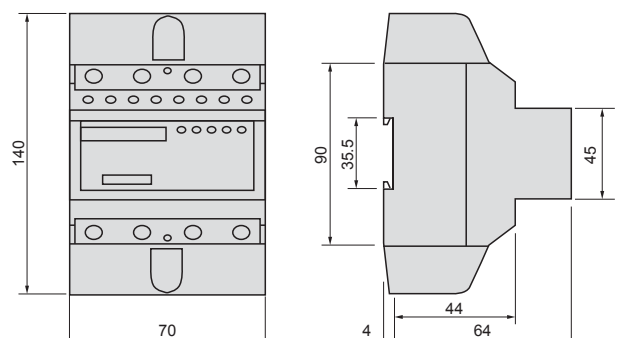
Technical specifications

Nominal voltage	(Un) 230/400V AC (3~)
Operational voltage	161/279 – 300/520V AC (3~)
Basic current (Ib)	5A
Maximum rated current (Imax)	100A
Operational current range	0.6A - 100A
Over current withstand	3000A for 0.01s
Operational frequency range	50Hz ±10%
Internal power consumption	≤2W / 10VA per phase



DRM 370

Outline dimension



DRM1250 Series DIN Rail Meters

Introduction

The DRM1250A and DRM1250D are three phase electricity meters based on the same specifications as the DRM75 series.

Designed both for installation on a 35mm DIN-rail board, as for direct mounting on a meter board. Both meters comply with the IEC-EN 62053-21 specifications and are available for either 50Hz or 60Hz AC electricity networks. The meters are also equipped with an SO pulse output for convenient monitoring with external equipment.

The DE version is a simple 2-tariff kWh meter. If no external timer is connected to the pins, the meter will work as a dedicated 1-tariff meter.

When the external connected timer switches ON and connects the pins, the DRM1250DE will switch to tariff 2.

With this function, the kWh meter can be used on any location and does not need to be reprogrammed. Simply make sure to have a multifunctional daily timer with automatic summer/winter time correction and DRM1250DE will be working perfectly.



DRM1250A



DRM1250D



DRM1250DE

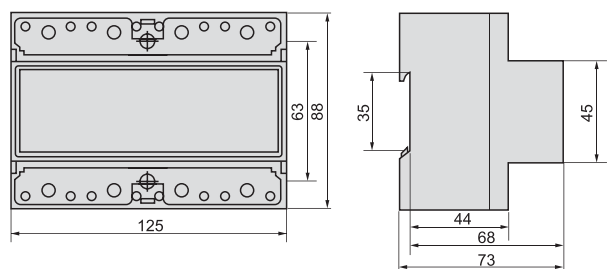
Functions and features

- Analogue or LCD display
- Attractive price setting
- DRM1250D 5A has an adjustable CT ratio: read-out 1:1
- 3 or 4 wire available
- Pulse output
- Easy installation

Technical specifications

Voltage (-15%+10%)	3 wire	4 wire
	3x100V, 3x400V	3x57,5 / 100V AC, 3x230 / 400V AC
Current	CT type	1,5(6)A - 3(6)A
	Direct	5(30)A - 10(50)A - 15(90)A - 20(100)A - 5(40)A - 5(100)A
Frequency	50Hz / 60Hz(± 10%)	
Power consumption	< 1.5W / 6VA per phase	
Impulse voltage withstand	6KV - 1,2µS waveform	
SO Output	SO according to DIN43864	
Temperature range	-25°C ~ +55°C	
Case	7 module DIN rail	
Dimensions (wxhxd)	125x88x73mm	
Accuracy class	1 or 2	
RS485 output	Optional	
Packaging dimensions	29x27x33.2cm -18.6kgs (24pcs/ctn)	

Outline dimension



EMP230 Single Phase kWh Meter

Introduction

The EMP230 is an electronic type single phase electricity meter which complies with the IEC-EN 62053-21 specifications.

It can be used both in 50Hz or 60Hz AC electricity networks. The consumed electricity is displayed on a horizontally positioned 5+1 impulse/step register, LED or LCD display.

The meter is also equipped with an SO output for convenient monitoring with external equipment.

Functions and features

- LED, LCD or mechanical register
- SO output
- Small or large protection cover

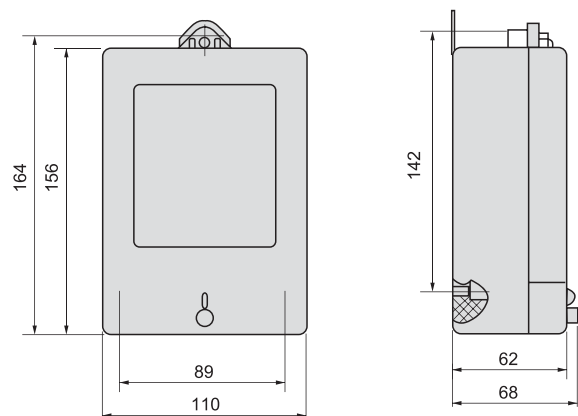
Technical specifications

Voltage	230V AC (-15% +10%)
Frequency	50Hz / 60Hz (± 10%)
Current	1,5(6)A -1,5(9)A - 2,5(10)A - 3(12)A - 5(20)A - 5(30)A -10(40)A -15(60)A - 20(80)A - 20(100)A - 30(100)A
Power consumption	≤2W / 8VA
Impulse voltage withstand	6KV - 1,2μS waveform
SO output	SO according to DIN43864
Temperature range	-25°C ~ + 55°C
Case	Meter board connection
Dimensions (wxhxd)	110x164x68mm without protection cover 110x187x68mm with large protection cover 117x108x50mm with large protection cover
Accuracy class	1 or 2
Packaging dimensions	41.5x35.5x28cm -15kgs (24pcs/ctn)



EMP230 Analogue

Outline dimension



EMP380 Three Phase kWh Meter

Introduction

The EMP380 is an electronic three phase electricity meter with high accuracy. The meter is suitable for measuring in 50Hz and 60Hz electricity networks.

This meter complies with the IEC-EN 62053-21 and the IEC-EN 62053-23 standards for active energy. The meter is also equipped with an SO pulse output for convenient monitoring with external equipment.

The EMP380 is available with a mechanical 5+1 register, a 6 digit LED or a 7 digit LCD display.

Functions and features

- Mechanical, LED or LCD display
- High accuracy meters
- SO output
- Large protection cover available

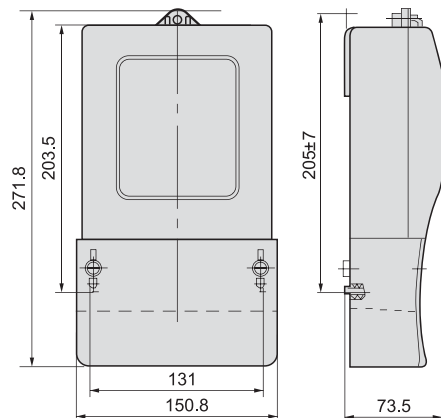
Technical specifications

Voltage (-15%+10%)	3 wire active	4 wire active	4 wire reactive
	3 x 220V	3 x 57.5/100V AC	3 x 57.5/100V AC
	3 x 400V	3 x 230/400V AC	3 x 230/400V AC
Current (active)	CT/VT type	3x1,5(6)A - 3x3(6)A	
	Direct	3x5(25)A - 3x10(50)A - 3x15(60)A - 3x20(80)A - 3x20(100)A	
Frequency	50Hz/60Hz (±10%)		
Power consumption	< 1,5W / 6VA per phase		
AC voltage withstand	2KV for 1 minute		
Impulse voltage withstand	6KV - 1,2µS waveform		
Temperature range	-25°C ~ +55°C		
Pulse output	SO according to DIN43864		
Case	Meter board connection		
Dimensions (wxhxd)	218x145x73,5mm without protection cover		
	271,8x150,8x73,5mm with large protection cover		
Accuracy class	1 or 2		
Packaging dimensions	49.8x32x38.5cm - 24.5kgs (16pcs/ctn)		



EMP380

Outline dimension



Flexmate Portable Energy Meter CEE Plug & Socket

Introduction

This single phase plug and socket electricity meter is available in a 16A and a 32A version.

This electricity meter is ideal for camping sites and marinas but can also be used for industrial purposes.

The standard Flexmate comes with 50 cm of cable on both sides and can be changed on request.

The plugs of the Flexmate can be customized according to the customer's wishes, a non plug version is also offered.

Functions and features

- 16A or 32A version
- High price-quality ratio
- High level of customization
- IP54 protection level
- Sealed by state of the art sonar technique

Technical specifications

Meter type	Flexmate
Nominal voltage	(Un) 230V AC
Operational voltage	161/279 AC
Maximum rated current (Imax)	16A or 32A depending on model
Operational current range	0.4% Ib- Imax
Over current withstand 3	0Imax for 0.01s
Operational frequency range	50Hz ±10%
Internal power consumption	≤2W / 10VA



Flexmate

SEM230/400 Multifunction 4 Tarrif Energy Meter

Introduction

The SEM meter is a new multifunctional meter with RS485 communication and additional software to read and control the meter from a distance. There are various measurements such as active and reactive energy, power factor, frequency and voltage that one can read.

The meter stores all data which can be read out on the clear LCD display and/or through the PC software. The meter has 4 yearly time zones, 4 different tariffs and 10 daily tariffs.

Maximum demand is programmable on the meter or with the software as well. The meter has different pulse outputs, and registers how many times the cover has been opened and will provide extra information regarding tamper-efforts. More information can be found on the special leaflet.

Functions and features

- Measures V, I, kvarh, Hz, $\cos \phi$, kWh, sum of all tariffs and peaks
- Maximum demand
- Alarm function
- Data of last 2 months
- Management software
- RS485 DL/T645 or IEC 1107 communication
- Active and reactive pulse output

Technical specifications

Electric parameter:

Normal working voltage	0.9Un ~ 1.1Un
Limit working voltage	0.7Un ~ 1.3Un
Energy consumption for voltage circuit	≤2W and 5VA
Energy consumption for current circuit	≤1VA
Battery voltage of system working after power off	3Vdc×2
Battery voltage of keeping clock	3.6Vdc

Backup working parameter:

Clock accuracy p.d.	<0.5S (23°C)
Battery capacity for system working after power off	≥1400mAh (can be replaced) CR123A 3V limno2
Battery capacity for clock	≥1100mAh (Period of validity 15 years)
Battery woking limit for clock	6000000min(About 11 years)
Energy consumption for clock CMOS chip after power off	≤10uA

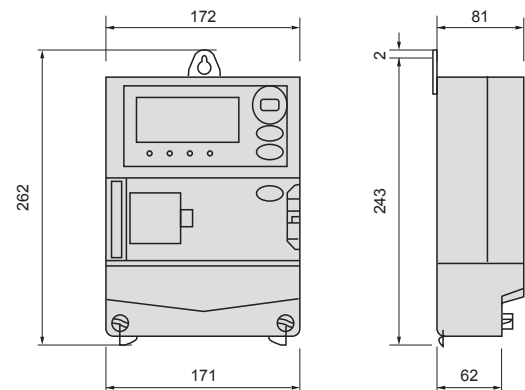
Tariff parameter:

Number of time zone	4
Day off	1-7
Holiday	13 days
Number of tariff number	4
Number of daily period	10
Minimal time interval of daily period	1min



SEM 400

Outline dimension



Climate condition:

Normal working temperature	-25°C ~ +60°C
Limit working temperature	-35°C ~ +80°C
Storage and transport temperature	-25°C ~ +80°C
Storage and working humidity	≤85%

Other parameter:

Display	LCD (configure backlighting)
Counting range	0 ~ 999999.99kW · h 0 ~ 999999.99kvar · h
Communication baudrate	RS485-1:1200bps, 2400bps 4800bps, 9600bps Infrared & RS485-2:1200bps
Communication protocol	DL/T 645-1997 and IEC 1107

Prepaid System Solutions

Inepro Metering Prepaid Products

The worldwide demand for prepaid products is increasing every day. Prepayment metering has been around since the early sixties but the prepaid technology became especially well-known through the mobile phone industry and spread to other markets such as water, electricity and the gas meter market. The last few years utility companies rediscover the many benefits of prepayment measuring to help meet their challenges such as cost recovery, cash flow and reliable consumer data collection.

Inepro Metering offers under her brand name DMMetering, a range of prepaid electricity and water meters.

It is a short and logical step to implement prepaid systems in our product range, thanks to the very long history and experience in prepaid solutions of the Inepro Group.

Prepaid systems have lots of advantages from which a few main advantages are shown hereunder.

Utility Company Benefits

- Cost reduction in human resources (no debt collection or meter reading staff)
- Improved cash flow (100% certain that all used electricity or water is paid).
- Reduced non-technical losses
 - No consumer debt (with the disposable software systems)
 - Debt control & recovery (reloadable system)
- Improved supply management
- Accurate meter reading
- Fraud control:

All meters are protected against fraud with an internal contact. If someone opens the cover, the relay will switch off or the valve from the water meter will close.
- Various tariff structures (i.e. peak tariff, flat rate)

Consumer Benefits

- In control of consumption, payment and budget:
 - The meter display will give clear information about the credit that has been used and how much is left.
 - The meter warns the user before the electricity reaches zero so they will have enough time to buy new credit.
- Fair system (pay for used quantities instead of pay what's estimated by utility company)
- Privacy (no utility staff paying home visits)

General benefits

- The systems are easy to use and software based. No training is needed.
- Price changes can be programmed very easily in the software.
- All projects are protected by project security codes during the production.
- The software will store all data in the database and clear invoices and reports can be printed



Prepaid System Solutions

The Inepro Metering Concept in Prepaid Solutions

As a member of Inepro Group, Inepro Metering has a long history with payment and registration technology, so the step to create our own prepaid metering system solutions was a simple step forward. Add to this, the benefit that Inepro Metering shares a worldwide, complete marketing and service network to manufacture and implement the Inepro Metering systems. Customer defined and tailor-made system solutions can be offered due to its own software and hardware development departments.

We offer a range of single and three phase prepaid electricity meter system solutions, as well as prepaid water meter systems. Both systems work with a chip card that can be loaded with the PC software so that all data will be stored in the PC.

The first launch of our prepaid meter system was to the Bayelsa State in Nigeria. This project was a very easy-to-use prepaid system. After that the SBEE in Benin followed and then many other countries such as Peru, Ghana, Tahiti, The Caribbean, Italy, UK, Dominican Republic, West Bank and many more.

We offer 2 different systems, RCM (Reloadable) and DCM (Disposable), which can be modified to the wishes of our customers. In the following pages more information can be found on how both systems work.

Apart from our prepaid kWh meters, we also offer prepaid water meters with corresponding software. This system is basically the same as the prepaid kWh meters, except for the cards used. The cards for the water meters are changed to RF chip-less cards, or so-called infra red cards. This is to prevent failures from IC chip cards as a result of contact with water or dust. The security level of both systems is AES (advanced Encryption Standard), the highest possible level.

Customers buy credit at the sales point in a local shop, or at the utility office. When the loaded card is inserted in the meter or connected through RF or infrared, all credit on the card will be transferred into the meter. When the credit in the meter is zero, the meter will stop working. In the water meter, the valve will close automatically, and in the kWh meter, the internal relay will switch off, and a message will appear on the display.

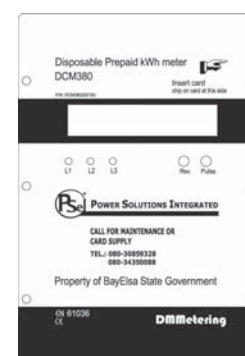
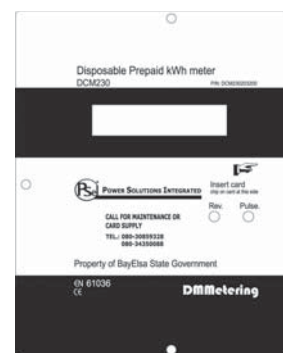
Before the meter will shut off, it passes 1 or 2 alarm levels which are shown on the display. These alarm levels can be pre-programmed in order to define when they will go off (after only a certain amount of credit is left on the meter) by the company. This will remind the user that the credit is at a low level, and new credit needs to be purchased.

After the customer transfers new credits, the meter will work again until the credit is back down to zero. Both meters, water and electricity, feature a clear display, LCD or LED, where customers can see how much credit has been used and how much is left. With this information users are able to control their consumption and plan when they have to buy new credits.

Our prepaid meters are also equipped with an anti-fraud mechanism. This will prevent stealing electricity or water in a very simple but effective way. An internal contact will control the circuit. When the cover is opened, the relay will switch off or the valve of the water meter will close and a message appears on the display. To activate the meter again, an authorized person from the utility company can unlock the meter again with a special tool card or a handheld programmer. Utility staff can at the same time investigate what happened to the meter and why it shut off.

All our prepaid meters are part of an integrated software program which allows us to change effortlessly functions at request of our customers.

Extensive support and supervisory programs, tailored to clients' individual requirements are but examples of the services offered.



Disposable Chip Card Meter (DCM Series)

Introduction

The disposable system is the easiest and a very simple system we offer as a prepaid meter system. This is because the cards that are used in this system will work in each meter. After the consumer has bought electricity it is his choice in which DCM meter he will put it. So, he is able to buy electricity for someone else, which can be an advantage.

With a stand-alone programmer you are able to program the disposable cards. The owner of a complete system can set the total amount of kWh into each programmer by entering the owner password. For example, when the local shop reaches that amount, he is not able to program any further until the owner of the system will upgrade the programmer. In this way it is easy to keep control of the system and to put some programmers into local shops who can then sell electricity. The owner of the system can easily check at each selling point how much electricity is sold. The amount of each kWh is also programmable so the owner of the system knows not only how many kWh are sold, but also how much money he needs to get from the local shops and control them in this way.

Another advantage of this system is that it is possible to order pre-programmed cards straight from our factory with specified amounts of kWh on it. In this way you need less programmers and make it a very easy to use system.

All disposable cards inserted into the meter will be cancelled automatically after the credit has flown from the card to the meter so the cards are useless after inserting for the first time. In this way it is not possible to crack or copy the card.

Each meter project can be protected with a security project code that we implement in the factory. In this case it is not possible to buy cards in villages where the electricity is much cheaper and you will avoid the cards appearing on the black market.

Technical specifications

Voltage	230/400VAC
Current	1,5(6)A - 1,5(9)A - 2,5(10)A - 5(20)A - 5(30)A - 3(12)A
	10(40)A - 15(60)A - 20(80)A - 20(100)A - 30(100)A
Frequency	50Hz/60Hz
Power consumption	<2W / 8VA
AC voltage	2Kv for 1 minute
Impulse voltage withstand	6Kv
Starting current	0,4% Ib 0,5% Ib
Temperature range	-25°C ~ +55°C
Case	Meter board connection
Dimensions	See outline picture below Excluding large protection cover
Accuracy class	1 or 2



DCM230

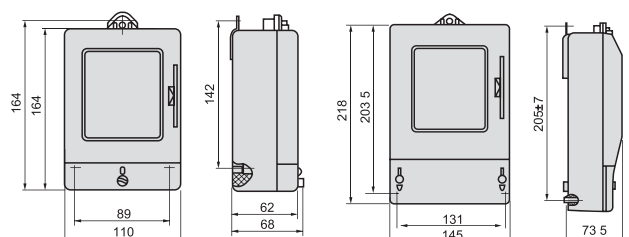


DCM380



DCCP

Outline dimension



Reloadable Chip Card Meter (RCM Series)

Introduction

The Reloadable system is a system where the utility company can monitor each user and 1 card can be reused thousands of times. The cards in this system are related to a registered meter, which means that the utility company can monitor the consumption of each user.

With the PC software the user cards can be uploaded and the details of each user will be registered in the database. The utility company has the option to print reports to monitor which user buys how much electricity. For example, in case of extreme low consumption, the utility company can decide to investigate possible fraud.

There are several tool cards which can be programmed by a registered and authorized manager of the system. With these cards you can reset meters, solve fraud problems, make special tests to the meter, read the meter and user information and several other options.

Management Software

The Management Software is the heart of our prepayment meter system and manages the complete data transfer and card programming. With the management software the utility has the possibility to add taxes and other fees to the electricity price. There is also a possibility to program different price levels and link this to specific users.

Because some users need to use certain details of the management software for other purposes as well, Inepro Metering implemented a button to export data to Microsoft Excel.

There is a standard version of the software, and modifications can be implemented on request. With this service we offer a suitable software system for each requirement.



RCM230

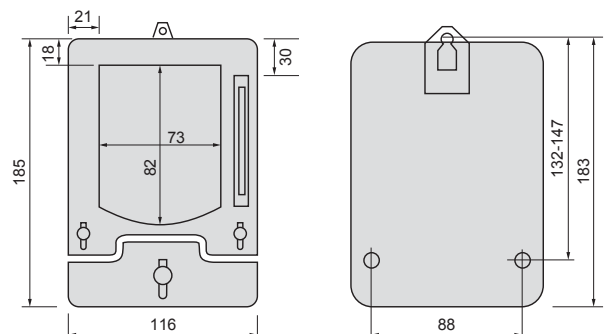


RCM380

Technical specifications

Voltage	230/400V AC
Current	1,5(6)A - 1,5(9)A - 2,5(10)A - 5(20)A - 5(30)A - 3(12)A
	10(40)A - 15(60)A - 20(80)A - 20(100)A - 30(100)A
Frequency	50Hz/60Hz
Power consumption	< 2W / 8VA
AC voltage	2Kv for 1 minute
Impulse voltage withstand	6Kv
Starting current	0,4% Ib 0,5% Ib
Temperature range	-25°C ~ +55°C
Case	Meter board connection
Dimensions	See outline picture below Excluding large protection cover
Accuracy class	1 or 2

Outline dimension



PPWM15 Prepaid Watermeter With Chipcard

Introduction

One household with one meter to record the water quantity consumed.

Valve will shut down as a warning when the remaining water is less than the warning limitation, and the valve will open up when inserting the card.

Valve will shut down when water is used up, then the consumer has to purchase water again.

Valve will shut down and reopen automatically to prevent rust.

Detailed LCD display. Low consumption design. Data will be saved even if the power is cut.

Battery life is more than 5 years. Low battery warning.

Patent ball valve. Low pressure loss.

Technical specifications

Size	20mm (15mm)
Operating pressure	1MPa
Pressure loss	<0.1MPa
Class	B
Normal flow	2.5m ³ /h (1.5m ³ /h)
Max. flow	5m ³ /h (3m ³ /h)
Max. count	99999.9m ³
Max. charger every time	999m ³
Water temperature	0-40°C
Water quality	clean water
Battery life	>5 Years



PPWM



Programmer RCCP

IRWM15/20/25 Infra-Red Prepaid Water Meter

Introduction

New in our prepaid line is the infra-red prepaid water meter. This meter works through infra-red communication and is secured with the highest possible standard.

The water meter, user card and card reader/writer are all provided with an infra-red eye. With this communication type, there will be no problems caused by the environment such as dust and moisture, and the communication will go smoothly.

The management software, which is available in different languages, will provide clear information from each user and transaction. There is also a possibility within the system to easily switch from the prepaid mode to an open meter mode. Clear invoices can be printed, and each transaction will be stored in the database.

With different alarm levels, that utility company can pre-program, the customer will be warned for low credit in time to prevent unwelcome surprises.



IRWM-20E

Functions and features

- Real time clock
- Multi tariff
- Open or prepaid meter mode
- Infra red communication
- Clear LCD display
- Different alarm levels for low credit
- Management software

Technical specifications

Power voltage	DC3.6V(lithium battery)
Quiescent current	≤20uA
Nominal working pressure	≤1.0MPa;
Gauge grade	B
Working life	>10 years;
Water medium temperature	0°C ~ +45°C (Cold water); +30°C ~ +90°C (hot water)
Indication error limit	included (Qs) ±2% (cold water), ±3% (hot water)
Relative humidity	<85%
Standard caliber	DN15; DN20 ;DN25

Model	DN	L	W	H	Normal flow	Transition flow	Min. flow	Connector	
								Pipe	Nut
IRWM-15	15	165	85	110	1.5	0.12	0.03	R1/2	G3/4
IRWM-20	20	195	85	110	2.5	0.20	0.05	R3/4	G1
IRWM-25	25	225	85	110	3.5	0.28	0.07	R1	G1 1/4
IRWM-15 (Hot water)	15	165	85	110	1.5	0.12	0.03	R1/2	G3/4
IRWM-20 (hot water)	20	195	85	110	2.5	0.20	0.05	R3/4	G1
IRWM-25 (hot water)	25	225	85	110	3.5	0.28	0.07	R1	G1 1/4

RMM230, RMM380 Mechanical Energy Meter

Introduction

The RMM meters are low cost single and three phase meters, which makes them ideal as substitution of the European refurbished meters.

All RMM mechanical meters are built against the IEC-EN 62053-21 normalisation. The meters are available in plastic, aluminium or glass covers.

Functions and features

- Attractive price
- Small or large protection cover
- Reliable quality

Technical specifications

	RMM230 single phase	RMM380 three phase
Voltage	230VAC (-15%+10%)	230 / 400VAC (-15%+10%)
Current	30A, 40A or 60A	30A, 40A, 60A, 100A, -/5A
Frequency	50Hz or 60Hz	50Hz or 60Hz
Power consumption	<2W / 8VA	<2W / 8VA per phase
Impulse voltage withstand	6KV - 1,2 μS waveform	6KV - 1,2 μS waveform
Temperature range	-25°C ~ +55°C	-25°C ~ +55°C
Case	Meterboard connection	Meterboard connection
Dimensions (wxhxd)	115x195x105mm with protection cover	165x321x124,5mm with protection cover
Accuracy class	2	2
Packaging dimensions	36x24,5x37,5cm - 14kg (12pcs/ctn)	40,5x35,2x30cm - 23kg (6pcs/ctn)



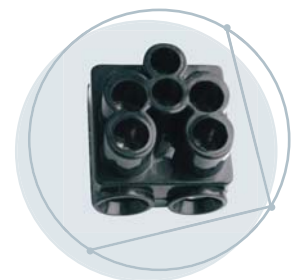
RMM230



RMM380

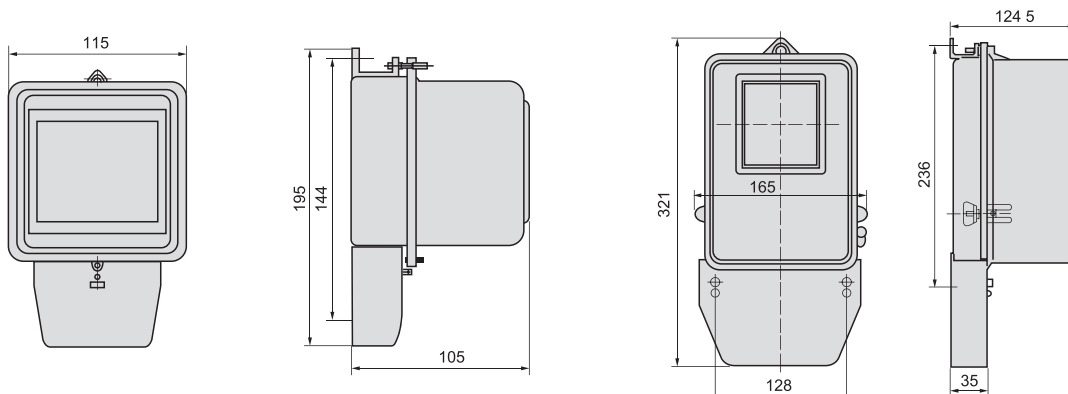


Mounting Nut



Neutral Unit

Outline dimension



Current Transformers

Introduction

The SCT series of current transformers have been especially designed to facilitate their installation in new or already existing networks. Thanks to its split core they may be installed without opening any cable or bus bar circuit. The connection of conventional CT's usually requires the interruption of the primary side circuit to pass cables or bus bars through the transformer core or to connect such cables to the primary terminals. The SCT series transformers core can easily be opened and they may be installed and connected without any supply interruption, thus saving time and installation costs.

Functions and features

- Small size and easy mounting
- Wide inner window, allowing clamping of big cables or bus bars
- Wide range of sizes to accommodate all the existing installations
- High accuracy and reliability

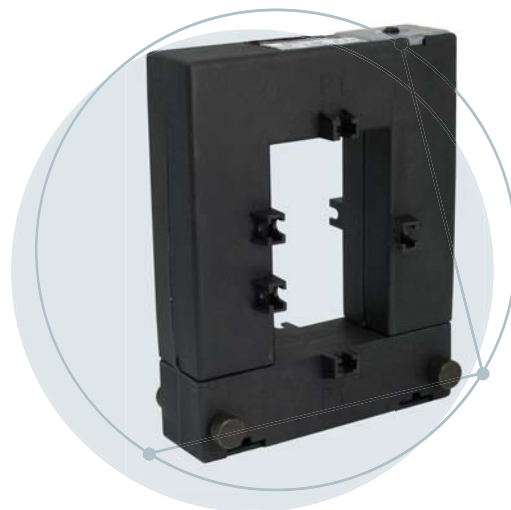
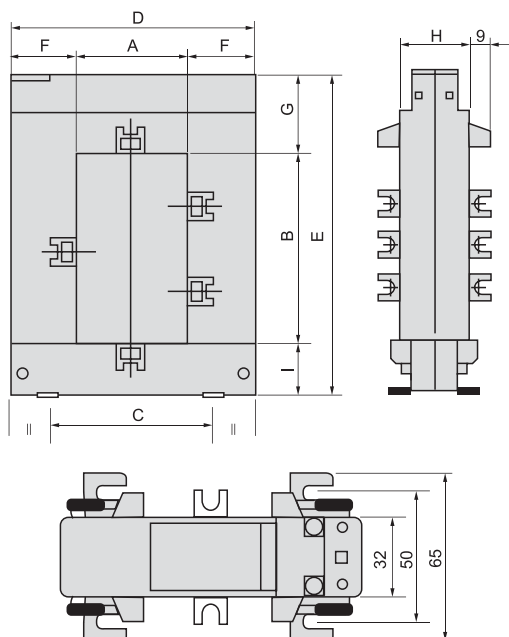
Available Models

SCT23 100/5A – 400/5A

SCT58 250/5A – 1000/5A

Model	A	B	C	D	E	F	G	H	I	Weight (kg)
DP-23	20	30	51	89	111	34	47	40	32	0.75
DP-58	50	80	78	114	145	32	32	32	33	0.90

Outline dimension



Current Transformers

CT DIN Series

The CT DIN series of current transformers are transformers which are easy to use in combination with a DIN-Rail. They can be mounted in many ways, including directly on a DIN-Rail with the special clip.

These transformers are available from 5/5A till 3000/5A.

Functions and features

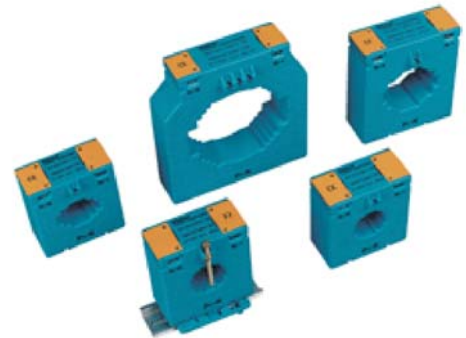
- Easy mounting on many ways
- Wide range of sizes to accommodate all the existing installations
- High accuracy and reliability
- High price/quality ratio

CT 3 in 1 Series

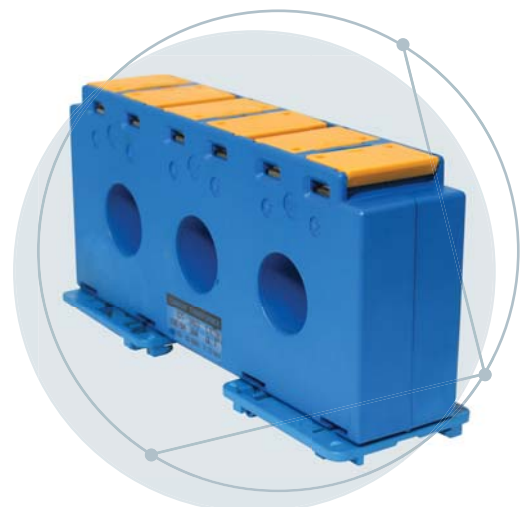
The CT 3 in 1 is a new product in our CT range. This CT is suitable when there is not a lot of space. With special DIN-Rail mounting clips, the transformer can be mounted very easily. There are 2 different models with 2 different sizes of the holes.

Functions and features

- Easy mounting with the included mounting set
- Small model for 3 phase
- 2 sizes available
- High accuracy and reliability
- Available in a range from 40/5A till 600/5A



CT DIN Series



CT 3 in 1 Series

Current Transformers

Introduction

CT066 is an advanced current transformer suitable for measuring current and energy in 50Hz, Max. 0,66kV AC electricity networks to provide relaying protection.

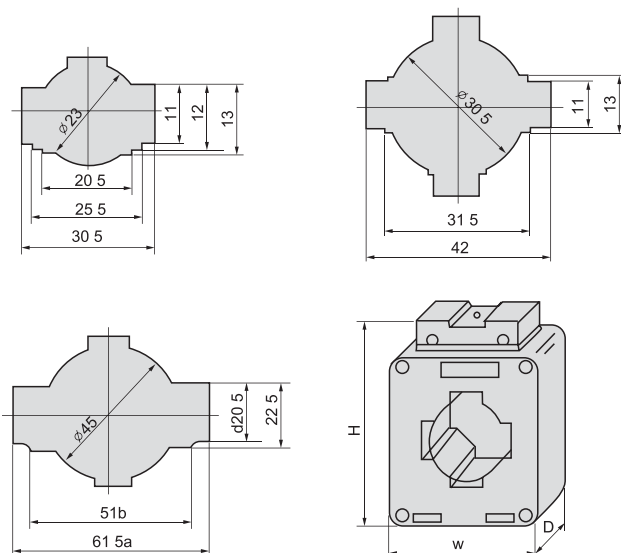
Functions and features

- Reliable quality
- Solid construction
- Competitive prices

Technical specifications

Type	Rated current	Dimensions (mm)	Nr. of roots	Rated load	Accuracy	Maximum voltage	Nr. of turns
CT066-30	150/5	30x10	1	2,5	0,5	660	1
	200/5	30x10	1	5	0,5	660	1
	250/5	40x10	1	5	0,5	660	1
CT066-40	300/5	40x10	1	5	0,5	660	1
	400/5	40x10	1	5	0,5	660	1
CT066-60	500/5	60x10	1-2	10	0,5	660	1
	600/5	60x10	1-2	10	0,5	660	1
	750/5	60x10	1-2	10	0,5	660	1
	800/5	60x10	1-2	10	0,5	660	1

Outline dimension



CT066-30



CT066-40



CT066-60

DMM3000 Power Analyzer

Functions and features

- Measured Variables: U, I, P, Q, S, COSØ, F, kWh, kvarh
- RMS measurement to the 21st Harmonic
- Programmable PT(1~6500), CT(1~6500)
- Automatic scale change and overload protection on Inputs
- RS-485 communication port, Standard MODBUS(RTU) Protocol, Baud rate setting: 2400, 4800, 9600bps
- Programmable 4 channel analogue outputs (4mA~20mA or 0V~5V) (optional)
- Programmable 4 channel alarm & relay contact outputs (optional)
- Relay alarm, PC-controlled programmable output setting, Alarm signal direct reading thru RS-485
- Programmable relay execution delay time and relay release delay time
- Dual energy pulse output (kWh, kvarh), pulse constants setting
- PC-controlled digital calibration
- Password protection, Memory recovery of all the settings and energy data after power interruption



DMM3000

Technical specifications

No.	Item	Contents	Direction	Display (Max.)	Accuracy
1	Phase Voltage	Va, Vb, Vc		9999V/kV	0.2%
2	Line Voltage	Vab, Vbc, Vac		9999V/kV	0.2%
3	Current	Ia, Ib, Ic		9999A/kA	0.2%
4	Power Factor	cosØa, cosØb, cosØc, cosØ	Directional	1.000	0.2%
5	Frequency	Hz		70.00Hz	0.01HZ
6	Active Power	Wa, Wb, Wc, W	Directional	99999W/kW/MW	0.5%
7	Reactive Power	vara, varb, varc, var	Directional	99999var/kvar/Mvar	0.5%
8	Apparent Power	VAA, VAb, VAc, VA		99999VA/kVA/MVA	0.5%
9	Active Energy	kWh		999999kWh/MWh	Class 1 IEC1036
10	Reactive Energy	kvarh		999999kvarh/Mvarh	Class 2 IEC1268

Input :

Current input	1A, 2A, 5A
Measurement range	0.5%~120%
Power consumption	≤0.1VA per Phase
Voltage input	AC100V, 220V, 380V, 600V (Direct Input when Voltage Input ≤600V)
Measurement range	20%~120%
Power consumption	≤0.1VA per Phase
Frequency	45~65Hz
Auxiliary power supply	85V~270V AC/DC, 24V AC/DC
Power consumption	≤5W
Relay contact capacity	5A/250V AC

Overload capacity :

Current	=2X standard (continuous), 100A/1S (discontinuous)
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Voltage	=2X standard (continuous), 2500V/1S (discontinuous)
Isolation	Galvanic isolation on all inputs, outputs and power supply.
Stability	<0.2%/annual
Analog output response time	≤300mS
Relay contact capacity	5A/250VAC
Contact delay duration	0~255S
Display	long life span backlit LCD display
Operating temperature	0°C ~ +45°C or -20°C ~ +60°C
Storage temperature	-30°C ~ +80°C
Operating humidity	95% non-condensing
Material of Housing	Lexan 940, Flammability acc. to UL 94V0
Dimensional size	96×96×126mm ³
Installation size	91×91mm ²
Weight	550g

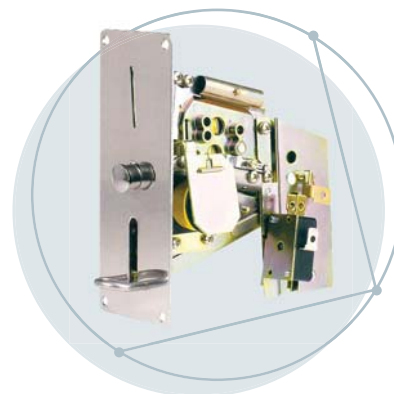
Mechanical Coin Mechanism

Robust and reliable coin selector

This mechanical coin mechanism values the inserted coin on its mechanical characteristics, diameter, thickness, weight and mechanical alloying. The coin mechanism accepts coins and tokens with a maximum diameter of 32mm and a thickness of 3,2mm.

When accepted the coin falls down and pulls a micro switch. The micro switch gives a pulse as a starting signal to the electronics to be switched on. Coins with a wrong weight or size will not be accepted, but will be rejected in the designated bracket.

Jammed coins can be released by pushing the return button and will be released in the bracket. This button and bracket are not meant for returning unused change.



Functions and features

- Where can a mechanical coin mechanism be used?
In several applications where a pulse is sufficient to start the electronics.
- Why a mechanical coin mechanism?
For heavy duty usage.

Technical specifications

Acceptance 1 type coin or token	Optional:
Coin size diameter 32 mm, thickness 3,2 mm	- Mounting bolts
Front plate 50*150mm	- Coin blocker
Built-in depth ± 10,5cm	

Art. nr.	Description
350005	WH MPR N1-WK-AKS6H, insert 0,01
350010	WH MPR N1-WK-AKS6H, insert 0,02
350015	WH MPR N1-WK-AKS6H, insert 0,05
350020	WH MPR N1-WK-AKS6H, insert 0,10
350025	WH MPR N1-WK-AKS6H, insert 0,20
350030	WH MPR N1-WK-AKS6H, insert 0,50
350035	WH MPR N1-WK-AKS6H, insert 1,00
350040	WH MPR N1-WK-AKS6H, insert 2,00
350100	WH MPR N1-WK-AKS6H, insert 18.5 mm token
350105	WH MPR N1-WK-AKS6H, insert 22mm token
350110	WH MPR N1-WK-AKS6H, insert 25mm grooved token
350115	WH MPR N1-WK-AKS6H, insert 26mm token
350120	WH MPR N1-WK-AKS6H, insert 27mm token
350125	WH MPR N1-WK-AKS6H, insert 27mm grooved token
350500	WH MPR M2-WOS6H 960, insert 27mm grooved token no return
350510	WH MPR M2-WOS6H 960, insert 22,5mm grooved token no return
Optional	
120900	Mounting bolts M4 x 15mm per 100 pcs
356000	Coin blocker

MicroTimer MT2400

Introduction

The MicroTimer MT2400 is a manually operated timer, equipped with PicoTimer electronics.

The MT2400 is especially suitable for switching time for remote applications such as sunbeds, saunas, showers, hair dryers, play table lights, etc. The time steering from the MT2400 is programmable in minutes. Programming and operating the MT2400 is user-friendly and easy through the integrated start/stop and pause buttons. The MT2400 is as standard equipped for switching distances up to 5 meters. In case the distance is more than 5 meters, the MT2400 can be equipped with a Long Distance board for switching distances up to 100 meters. Through the patented ECOS concept, the functionality of the MT2400 can be extended with i.e. a pre-time or post-time. See the ECOS information for all possible extensions.

Application

In all (semi) controlled institutions where controlled usage of time is desired, such as for sunbeds, saunas, play table lights, showers etc.

Why a MicroTimer

- For strict control on usage of the connected machines.
- For costs control



Functions and features

- ECOS software modules AD2400
- Switching over large distances
- Magnet valve 1/2" and 1/4"
- Magnet switch 20A 220/380V
- Coin blocking relay
- Transformer 220/24V 60VA
- Class A product. Made in Holland

Technical specifications

Dimensions	H173xB76xD60mm	Contacts	Current free
Weight	0,7kg	Fuse	500mA
Power	24VDC / 230VAC	Electronics	Casted in
Material	ABS plastic	Mounting	Wall mounting
Relays	2x6,3 Amp		

Art. nr.	Description	Remarks
199950	MicroTimer MT2400	
Options	ECOS software modules	Optionally addable software modules for configuring the individual application
121205	EM01 - Extension main-time	Max. 255 minutes
121207	EM02 - Pre-time	Up to 99 minutes
121209	EM03 - Post-time	Up to 99 minutes
121211	EM04 - Maximum start inputs / insert (accumulation)	Proportionally buying extra time
121213	EM05 - Minimum start inputs / insert	
121215	EM06 - Service-indicator	
121217	EM07 - After-start	For washing machines with an electronically door lock
121219	EM08 - Beeper	
121221	EM09 - Cleaning	The timer must be released manually after each session
121223	EM10 - Resetable time / start pulse counter	
121225	EM11 - Time Adjustment Table	
121227	EM12 - Total time / start pulse counter	Not resetable
121229	EM13 - Main time adjustment	During the pre-time, the main time can be decremented by minutes
121231	EM14 - Display	Standard the display is not programmed, but can be activated
121165	Configuration costs (Loading software keys)	Configuration costs when deviating from the base configuration

In case you want to have modules programmed after delivery, sales prices x2

PayCon Timer ChiplinQ

Introduction

The ideal chipcard solution to optimize your cash handling

The Inepro chipcard payment system works from the principle that the user's balance is available on their chipcard: all electronic payment systems work from the purse on the chipcard. ChiplinQ is a collective name for a closed payment system, which serves as a payment and/or registration system within an organization. Within the ChiplinQ concept you can choose from the following chipcard technologies: the contact chipcard or the contactless chipcard called Mifare or a combination of both. The PayCon Timer can be connected to every application where payment or registration should take place for used time.

Optionally the PayCon Timer can be equipped with an Ethernet connection so the PayCon can be put in a standard computer network. In this network a back office software package can be installed, CashPRO, for management of all payment terminals, or as a central management program for solaria or launderettes. More information on this back office software and the centralized payment system, Inepro Back Office Suite, is available in the relevant documentation. The PayCon Timer has the same functionality as the conventional Inepro coinbox. The functionality of the PayCon Timer can be extended through the patented ECOS concept such as happy hour discount and several user groups.

Application

In all (semi) controlled institutions where controlled usage of time is desired, such as for sunbeds, saunas, play table lights, showers etc.



Technical specifications

Dimensions (hxwx d)	8x10x23cm
Weight	0,5kg
Power	230VAC via adapter
Material	ABS plastic
Relays	2x6,3 Amp
Contacts	Current free
Electronics	MTC.Net
O.S.	Embedded Linux
Web browser onboard	
Graphic 2 line LCD display	
Singular keyboard	
ChiplinQ acceptance	

Functions and features

- ECOS software modules MTC.Net
- Mifare acceptance
- Legic acceptance
- 100 Mb Ethernet
- USB memory stick
- Central payment system steering
- Class A product. Made in Holland

PayMatic -F AD2400

Introduction

The PayMatic@-F AD2400 coin box is available for all currencies.

The PayMatic@-F AD2400 coin box has as standard, time deduction of a maximum of 15 minutes. By using casted in electronics and a mechanical coin mechanism, the coinbox is ideal to operate in a moist environment. The mechanical coin selector is fit for acceptance of most types of coins or tokens. The coin box housing is made out of the extreme strong plastic type ABS. Through software extensions, called ECOS, the functionality of the coinbox can be extended. The cash tray is fully integrated in the bottom of the coinbox so that it can be locked securely.

Reading out the counters and programming the coinbox is simplified by the push buttons on the front of the coinbox, activated by a service key.

Application

In all self-service applications where a payment for used time is required such as for showers, sun beds, washing machines, hair dryers, irons, barriers, air conditionings, car washes, heaters, etc.

Why a PayMatic-F AD2400?

- For strict control on usage of connected machines.
- For costs control.



Technical specifications

Dimensions (hxwx d)	25x18x14 cm	Fuse	500mA
Weight	2,25kg	Electronics	Casted in
Power	24VDC / 230VAC	Mounting	Wall mounting
Display	Single led 2 digit 8mm	Coin capacity	200 - 400 coins
Material	ABS plastic	Mechanical coin mechanism	
Relay	2x6,3 Amp.	Easy installation	
Contacts	Current free	Easy usage	

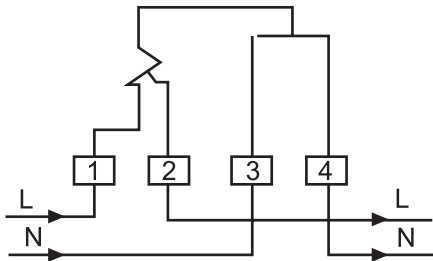
Functions and features

- ECOS software modules AD2400
- Coin blocking
- Switching over long distances
- Transformer 220/24V 60VA
- Magnetic valve 1/2" and 1/4"
- After-start button washing machines
- Magnetic switch 20A 220/380V
- Class A product. Made in Holland

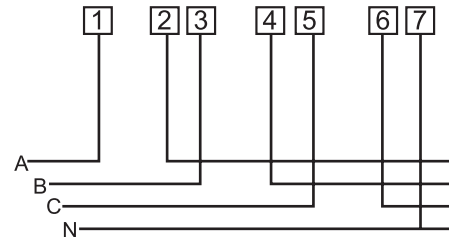
Art. nr.	Description	Remarks
Options	ECOS software modules	
121205	EM01 - Extension main-time	Optionally addable software modules for configuring the individual application
121207	EM02 - Pre-time	Max. 255 minutes
121209	EM03 - Post-time	Up to 99 minutes
121211	EM04 - Maximum start inputs / insert (accumulation)	Up to 99 minutes
121213	EM05 - Minimum start inputs / insert	Proportionally buying extra time
121215	EM06 - Service-indicator	
121217	EM07 - After-start	For washing machines with an electronical door lock
121219	EM08 - Beeper	
121221	EM09 - Cleaning	The timer must be released manually after each session
121223	EM10 - Resetable time / start pulses counter	
121225	EM11 - Time Adjustment Table	
121227	EM12 - Total time / start pulses counter	Not resetable
121229	EM13 - Main time adjustment	During the pre-time, the main time can be decremented by minutes
121231	EM14 - Display	Standard the display is not programmed, but can be activated
121165	Configuration costs (Loading software keys)	Configuration costs when deviating from the base configuration

Connection Diagram

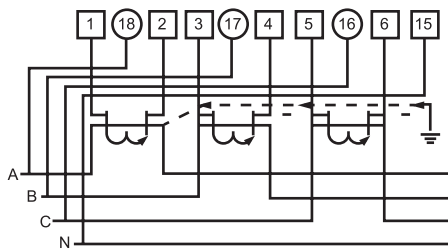
PRO75



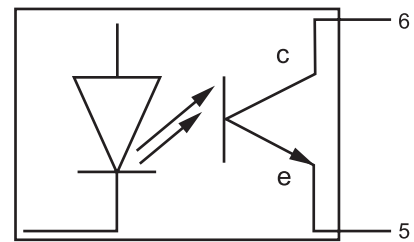
PRO1250 Direct connected



PRO1250 CT Connection

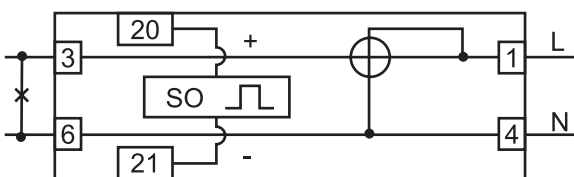


PRO Meters

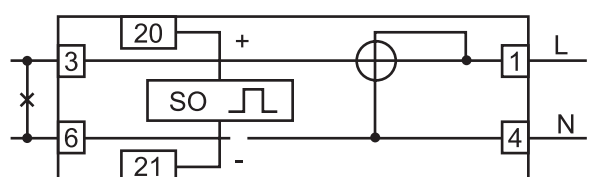


Only for PRO Series

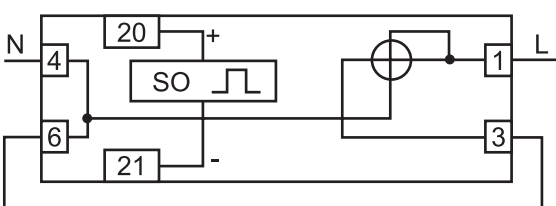
ADM1.5TE



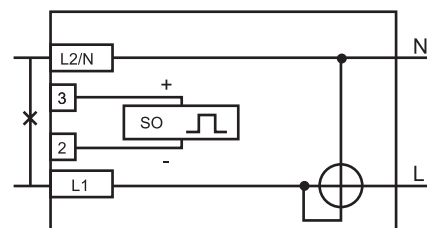
ADM1TE



ADM1TE-u

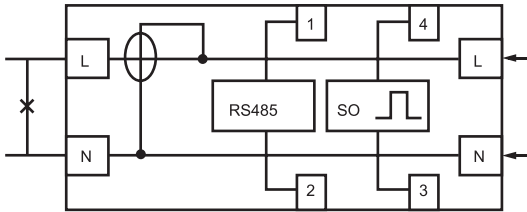


DRM75A

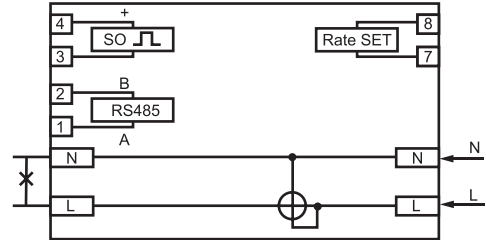


Connection Diagram

DRM75D

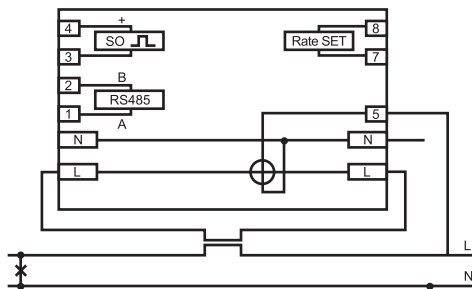


DRM75DE



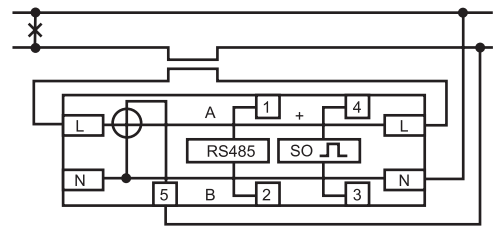
0V_{AC} - F1
220V_{AC} - F2

DRM75DE 5A CT

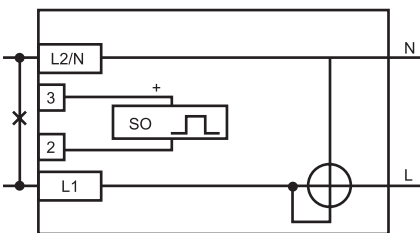


0V_{AC} F1
220V_{AC} F2

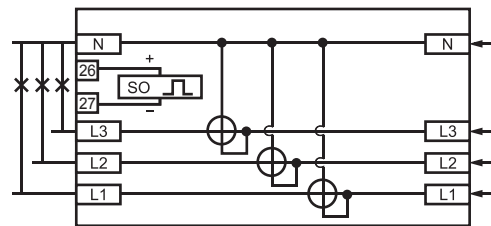
DRM75D



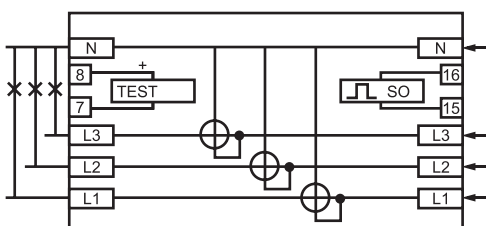
DRM75RR



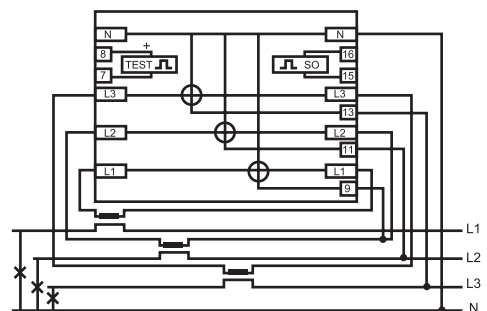
DRM370



DRM1250A

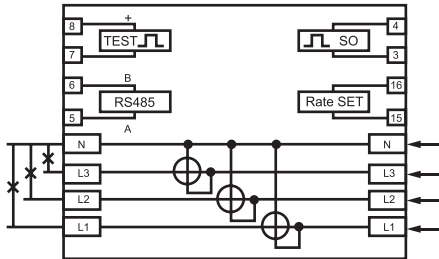


DRM1250A 5A CT

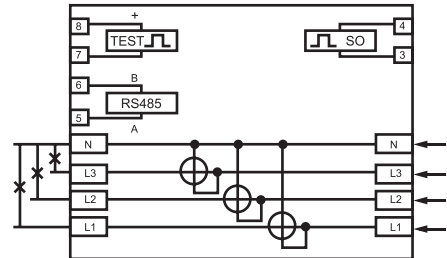


Connection Diagram

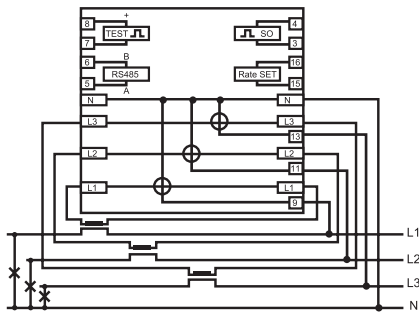
DRM1250DE



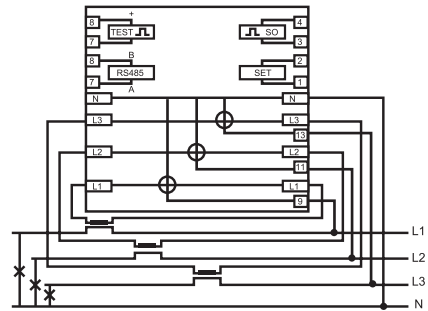
DRM1250D & DRM1250DM



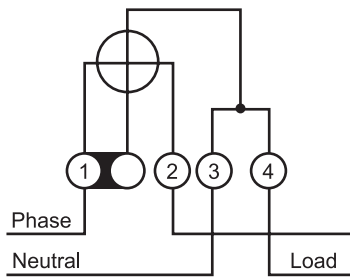
DRM1250DE 5A CT



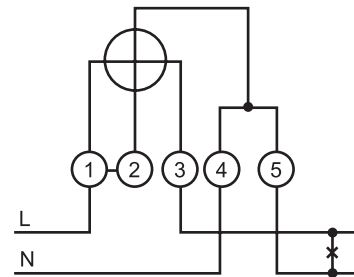
DRM1250D & DRM1250DM 5A CT



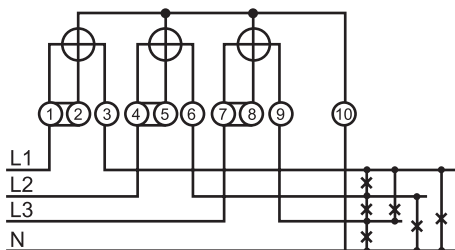
EMP230



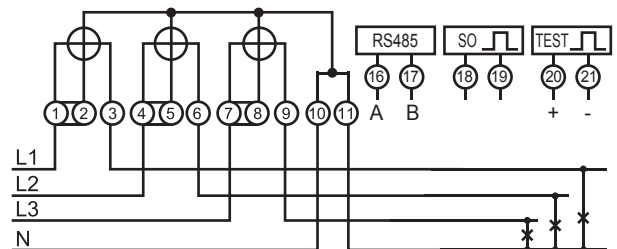
RMM230



EMP380

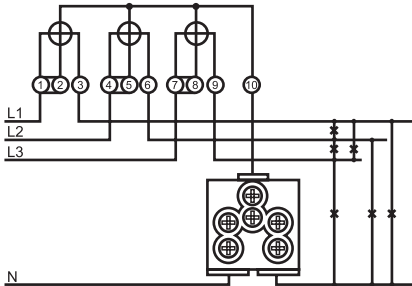


SEM 400

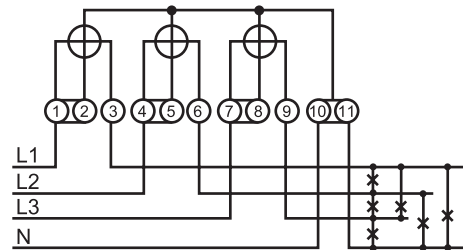


Connection Diagram

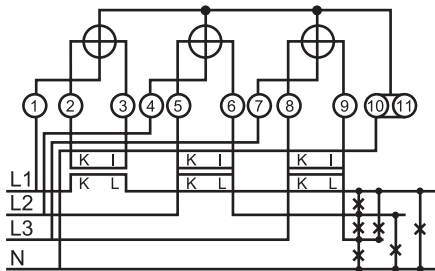
RMM380 40/60/80/100/120A



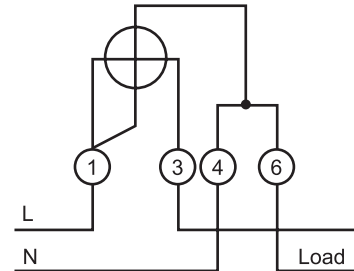
RMM380 30A



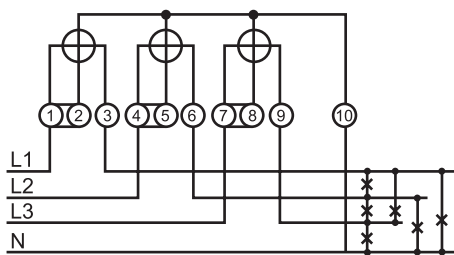
RMM380 5A CT



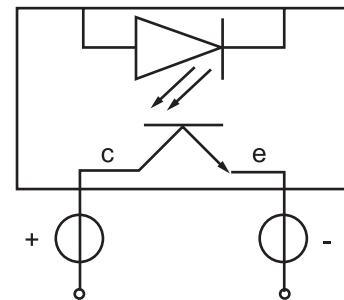
DCM230 & RCM230



DCM380 & RCM380

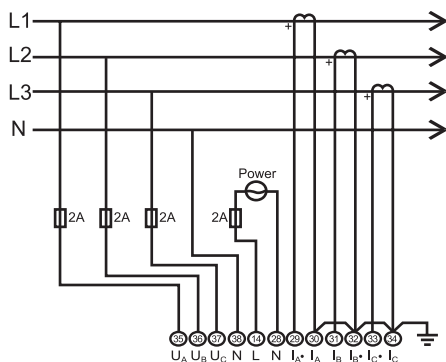


SO Connection



Only for DRM meters

DMM3000



ADM1TE-u / ADM1TE	pin 20+ pin 21-
DRM75A / RR	pin 3+ pin 2-
DRM75D / DE / DM	pin 4+ pin 3-
DRM1250A	pin 16+ pin 15-
DRM1250D / DE / DM	pin 4+ pin 3-
EMP230 (Analogue model)	pin 5+ pin 6-
(LED & LCD model)	pin 2+ pin 5-
EMP380	pin 9 + pin 10-
DCM230 / RCM230	pin 2+ pin 5-
DCM380 / RCM380 (with relay)	pin 11+ pin 12-
(without relay)	pin 9+ pin 10-
MMP230	pin 5+ pin 5-
MMP380	pin 13+ pin 15-

CT = Current Transformer
VT = Voltage Transformer

Technical Details

Model	Current (A)	Starting current (A)	Impulse (kWh)	Impulse length (ms)	Size of connection clamp (LxH) (mm)	Size of connection clamp (Diagonal) (mm)
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PRO75 DIN Rail Series Single Phase MID B Approved

PRO75A	10(100)	0.04	1600	80	10*8	12.8
PRO75D	10(100)	0.04	1600	80	10*8	12.8

PRO1250 DIN Rail Series Three Phase

PRO1250A	10(100)	0.04	400	80	10*8	12.8
PRO1250D	10(100)	0.04	400	80	10*8	12.8
PRO1250A CT	1,5(5)	0.075	1600	80	10*8	12.8
PRO1250D CT	1,5(5)	0.075	1600	80	10*8	12.8

ADM1TE DIN Rail Series Single Phase MID B & D Approved

ADM1TE	5(30)	0.25	2000	80	4*4	5.66
ADM1LCD	5(30)	0.25	2000	80	4*4	5.66

ADM1.5 DIN Rail Meter Single Phase

ADM1.5	10(65)	0.5	1000	80	6*6	8.49
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DRM75 Series DIN Rail Meters

DRM75A	10(50)	0.5	1600	80	11*11	15.56
DRM75A	20(100)	1	800	80	11*11	15.56
DRM75D	20(100)	1	800	80	11*11	15.56
DRM75DE	20(100)	1	800	80	11*11	15.56
DRM75 RR	10(50)	0.5	1600	80	11*11	15.56

Technical Details

Model	Current (A)	Starting current (A)	Impulse (kWh)	Impulse length (ms)	Size of connection clamp (LxH) (mm)	Size of connection clamp (Diagonal) (mm)
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DRM1250 Series DIN Rail Meters

DRM1250A	20(100)	1	3600(led) 100(so)	80	9*9	12.73
DRM1250D	20(100)	1	3600(led) 100(so)	80	9*9	12.73
DRM1250DE	20(100)	1	160(led) 10(so)	80	9*9	12.73
DRM1250A CT	1,5(5)	0.075	3600(led) 10(so)	80	9*9	12.73
DRM1250D CT	1,5(5)	0.075	3600(led) 10(so)	80	9*9	12.73

EMP230 Single Phase kWh Meter

EMP230	10(30)	0.5	3200	80	7*7	9.9
EMP230	15(60)	0.75	1600	80	7*7	9.9

EMP380 Three Phase kWh Meter

EMP380	20(100)	1	100	80	7*7	9.9
EMP380 CT	1,5(5)	0.075	1600	80	7*7	9.9

DCM230 Disposable Chip Card Meter (DCM Series)

DCM230	10(30)	0.5	3200	80	7*7	9.9
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RCM230 Reloadable Chip Card Meter (RCM Series)

RCM230	10(30)	0.5	3200	80	7*7	9.9
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DCM380 Disposable Chip Card Meter (DCM Series)

DCM380	15(90)	0.75	100	80	7*7	9.9
DCM380	15(90)	0.75	100	80	7*7	9.9

Inepro Metering has done its utmost to prepare a complete catalogue in which all products, as available on the moment of editing this catalogue, are included.

The company cannot be held responsible for misprints such as technical specifications or descriptions. Please contact your local **Inepro Metering** distributor for the exact specifications. For example: In the United States 60Hz is used and in Europe 50Hz. Both are available but not always mentioned.

All our models and their specifications as well as the end of a product life-cycle are subject to change without previous notice.

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DM Metering

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