

# Energy meters Catalogue



### We Are NOVO

At NOVO Electric Technology UK LTD, we specialize in delivering innovative, accurate, and reliable electrical testing and power monitoring solutions. Our goal is to support the energy industry with advanced tools that simplify measurement, improve system efficiency, and ensure safety across all types of electrical installations.

With a proven track record spanning more than a decade, NOVO has become a trusted name among electrical professionals in the UK and internationally. Our solutions are widely used in commercial buildings, industrial facilities, renewable energy projects, data centres, utilities, and public infrastructure.

We offer a comprehensive range of products including multifunction power analysers, portable energy loggers, networked submeters, earth testers, and insulation resistance testers—each designed with precision engineering and real-world practicality in mind. Whether you're conducting an energy audit, verifying compliance with electrical standards, or implementing an energy management strategy, NOVO tools are built to deliver reliable performance and clear insights.

Our commitment extends beyond hardware. We provide responsive technical support, expert consultation, and user-friendly software to ensure seamless integration and long-term success. With a focus on continuous innovation and customer satisfaction, we help professionals navigate the increasing demands of energy monitoring, sustainability, and grid modernization.

At NOVO, we believe in empowering our clients with smart, scalable solutions that grow with their needs. From on-site troubleshooting to long-term energy data analysis, NOVO products are designed to be dependable, flexible, and easy to use.

Explore our full product range and technical expertise at ests.uk



### NOVOO1VB



#### SINGLE PHASE ELECTRONIC FRONT BOARD INSTALLED ACTIVE ENERGY METER



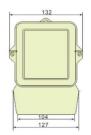
#### **GENERAL**

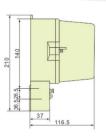
Model NOV001VB single phase electromechanical front board installed active energy meter is a kind of new style single phase two wire active energy meter, it is on the basis of original single phase electromechanical meter, and fully absorb new technologies about electromechanical meter from domestic and abroad, and development long-life technology. The meter completely accord with relevant technical requirements of class 2 single phase active energy meter stipulated in international standard IEC 62053-11. It can accurate and directly measure 50Hz or 60Hz active energy consumption from single phase AC electricity net, it is use for setting indoor or out door meter box, and it can display total energy consumption by drum wheel mechanical register. It has following features: high overload, power loss, long-life, specious appearance, etc.

#### **Functions and features**

Model	Accuracy	Reference Voltage(V)	Current specifications(A)	Starting current(A)	Insulation performance
NOV001VB	Class 1 Class 2	127 230	5(30) 10(60) 20(80) 20(100)	0.025 0.05 0.5 0.1	AC voltage 4kV for 1 minute, 1.2/50µs waveform impulse voltage 6kV

- > Front board three fixed installation, the bottom of the meter and the terminal is made of quality bakelite material which is moisture-resistant, fire-retardant, high temperature molded overall. The cover is also made of bakelite material and has a transparent glass window. It has following features: good weatherability, high rigid, specious appearance, etc.
- > The meter frame adopt top-quality steel plate once molding with excellent mechanical strength, stable structure and anti-impact.
- Voltage components is used of all closed vacuum pouring coil by epoxy resin. Current components is used of double insulation structure, has good electrical characteristics.
- The meter adopt magnetic thrust bottom bearing, oriented bearing is made of lubrication graphite bush and stainless steel needle. It has following features: small abrasion, long life and minimal friction, etc.
- All kinds of adjustment mechanism adopt no step shifting mechanism. The meter starting and creeping needn't be adjust which is finished by anti-creeping hole of disc and convenient for adjusting by users.
- Standard configuration 5 digits display by drum wheel mechanical register, may select 6 digits display by drum wheel mechanical register (Product Configuration code is VE).
- Single component measure single phase two wire active energy consumption. Complying with standard IEC 62053-11.
- Direct correct operation, there are two types wiring you may select. Standard configuration type 1A wiring, may select type 1B wiring (Product Configuration code is VA).
- Standard configuration extension terminals cover, in order to protect to use safety, may select short terminals cover. (Product Configuration code is RB).





Note	
Inlet phase line	
Inlet neutral line	
Outgoing neutral line	
Outgoing phase line	
	Inlet phase line Inlet neutral line Outgoing neutral line



### NOVOO2UG



#### SINGLE PHASE ELECTROMECHANICAL FRONT BOARD INSTALLED ACTIVE ENERGY METER



#### **GENERAL**

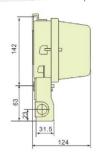
Model NOV002UG single phase electromechanical front board installed active energy watt-hour meter is a kind of new style single phase two wire active energy watt-hour meter, it is designed on the basis of original BB862 single phase electromechanical meter, and fully absorb new technologies about electromechanical meter from domestic and abroad. The meter completely accord with relevant technical requirements of class 2 single phase active energy meter stipulated in international standard IEC 62053-11. It can accurate and directly measure 50Hz or 60Hz active energy consumption from single phase AC electricity net, it is use for setting indoor or out door meter box. The meter has novel design, rational structure, and it can display total energy consumption by drum wheel mechanical register. It has following features: high overload, power loss, long-life, specious appearance, etc.

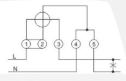
#### **Functions and features**

Model	Accuracy	Reference Voltage(V)	Current specifications(A)	Starting current(A)	Insulation performance
NOV002UG	Class 1 Class 2	127 230	5(20) 10(40) 20(80) 30(100)	0.025 0.05 <mark>0.5</mark> 0.15	AC voltage 4kV for 1 minute, 1.2/50µs waveform impulse voltage 6kV

- > Front board three fixed installation, the cover is made of high definition transparent glass material molded overall, the bottom of the meter and the terminal is made of quality bakelite material which is moisture-resistant, fire-retardant, high temperature molded overall. It has following features: good weatherability, high rigid, specious appearance, etc.
- > The meter frame adopt aluminum molding with excellent mechanical strength, stable structure and anti-impact.
- Voltage components and current components is used of double insulation structure, has good electrical characteristics.
- Standard configuration bottom bearing is used of double gem bearing, oriented bearing is made of high wear resistance copper alloy bush and stainless steel needle. It has following features: long life and minimal friction, etc. May select magnetic thrust bearing (Product Configuration code is PA) or magnetic suspension (Product Configuration code is PM).
- All kinds of adjustment mechanism adopt no step shifting mechanism. The meter starting and creeping needn't to be adjust which is finished by anti-creeping hole of disc and convenient for adjusting by users.
- Standard configuration 5 digits display by drum wheel mechanical register, may select 6 digits display by drum wheel mechanical register (Product Configuration code is PJ).
- Standard configuration without the device which can prevent retrograde, may select add the function of prevent retrograde. (Please specified when ordering).
- Single component measure single phase two wire active energy consumption. Complying with standard IEC 62053-11.
- Direct connect operation, there are two types wiring you may select. Standard configuration type 1B wiring, may select type 1A wiring (Product Configuration code is PH).
- Extension terminals cover, in order to protect to use safety.







Terminals	Note
1	Inlet phase line
3	Outgoing phase line
4	Inlet neutral line
5	Outgoing neutral line





### NOVO03UQ



#### SINGLE PHASE ELECTROMECHANICAL FRONT BOARD INSTALLED ACTIVE ENERGY METER



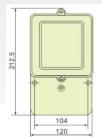
#### **GENERAL**

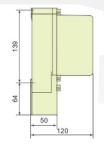
Model NOV003UQ single phase electromechanical front board installed active energy meter is a kind of new style single phase two wire active energy meter. It is designed on the basis of original BB862 single phase electromechanical meter, and fully absorb new technologies about electromechanical meter from domestic and abroad. The meter completely accord with relevant technical requirements of class 2 single phase active energy meter stipulated in International standard IEC 62053-11. It can accurate and directly measure 50Hz or 60Hz active energy consumption from single phase AC electricity net, it is use for setting indoor or out door meter box. The meter has novel design, rational structure, and it can display total energy consumption by drum wheel mechanical register. It has following features: high overload, power loss, long-life, specious appearance, etc.

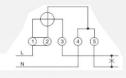
#### **Functions and features**

Model	Accuracy	Reference Voltage(V)	Current specifications(A)	Starting current(A)	Insulation performance
NOV003UQ	Class 1 Class 2	127 230	5(20) 10(40) 20(80) 30(100)	0.025 0.05 <mark>0.5</mark> 0.15	AC voltage 4kV for 1 minute, 1.2/50µs waveform impulse voltage 6kV

- > Front board three fixed installation, the bottom of the meter and the terminal is made of quality bakelite material which is moisture-resistant, fire-retardant, high temperature molded overall. The cover is also made of bakelite material and has a transparent glass window. It has following features: good weatherability, high rigid, good insulation performance, etc.
- > The meter frame adopt aluminum molding with excellent mechanical strength, stable structure and anti-impact.
- Voltage components and current components is used of double insulation structure, has good electrical characteristics.
- > Standard configuration bottom bearing is used of double gem bearing, oriented bearing is made of high wear resistance copper alloy bush and stainless steel needle. It has following features: long life and minimal friction, etc. May select magnetic thrust bearing (Product Configuration code is QD) or magnetic suspension (Product Configuration code is QP).
- All kinds of adjustment mechanism adopt no step shifting mechanism. The meter starting and creeping needn't to be adjust which is finished by anti-creeping hole of disc and convenient for adjusting by users.
- Standard configuration 6 digits display by drum wheel mechanical register, may select 5 digits display by drum wheel mechanical register (Product Configuration code is QG).
- Standard configuration without the device which can prevent retrograde, may select add the function of prevent retrograde. (Please specified when ordering).
- Standard configuration without handle, may select add a handle for carrying the meter conveniently. (Please specified when ordering).
- Single component measure single phase two wire active energy consumption. Complying with standard IEC 62053-11.
- Direct connect operation, there are two types wiring you may select. Standard configuration type 1B wiring, may select type 1A wiring (Product Configuration code is QK).
- Extension terminals cover, in order to protect to use safety.







Terminals	Note	
1	Inlet phase line	
3	Outgoing phase line	
4	Inlet neutral line	
5	Outgoing neutral line	



### NOVOO4VK



#### SINGLE PHASE ELECTROMECHANICAL FRONT BOARD INSTALLED ACTIVE ENERGY METER



#### **GENERAL**

Model NOV004VK single phase electromechanical front board installed active energy meter is a kind of new style single phase two wire active energy meter, it is designed on the basis of original BBB62 single phase electromechanical meter, and fully absorb new technologies about electromechanical meter from domestic and abroad. The meter completely accord with relevant technical requirements of class 2 single phase active energy meter stipulated in international standard IEC 62053-11. It can accurate and directly measure 50Hz or 60Hz active energy consumption from single phase AC electricity net, it is use for setting indoor or out door meter box. The meter has novel design, rational structure, and it can display total energy consumption by drum wheel mechanical register. It has following features: high overload, power loss, long-life, specious appearance, etc.

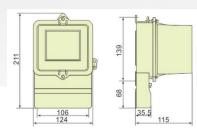
#### **Functions and features**

Model	Accuracy	Reference Voltage(V)	Current specifications(A)	Starting current(A)	Insulation performance
NOV004VK	Class 1 Class 2	127 230	5(20) 10(40) 20(80) 30(100)	0.025 0.05 <mark>0.5</mark> 0.15	AC voltage 4kV for 1 minute, 1.2/50µs waveform impulse voltage 6kV

#### **Functions and features**

- > Front board three fixed installation, the cover is made ABS engineering plastics molded overall, has a transparent glass window, the bottom of the meter is made of quality steel which is after double-through antitrust processing, and the terminal is made of quality bakelite material which is moisture-resistant, fire-retardant, high temperature molded overall. It has following features: economy benefits, specious appearance, etc.
- The meter frame adopt aluminum molding with excellent mechanical strength, stable structure and anti-impact.
- Voltage components and current components is used of double insulation structure, has good electrical characteristics.
- Standard configuration bottom bearing is used of double gem bearing, oriented bearing is made of high wear resistance copper alloy bush and stainless steel needle. It has following features: long life and minimal friction, etc. May select magnetic thrust bearing (Product Configuration code is UE).
- All kinds of adjustment mechanism adopt no step shifting mechanism. The meter starting and creeping needn't to be adjusted which is finished by anti-creeping hole of disc and convenient for adjusting by users.
- Standard configuration 6 digits display by drum wheel mechanical register, may select 5 digits display by drum wheel mechanical register (Product Configuration code is UH).
- Standard configuration without the device which can prevent retrograde, may select add the function of prevent retrograde. (Please specified when ordering).
- Single component measure single phase two wire active energy consumption. Complying with standard IEC 62053-11.
- Direct connect operation, there are two types wiring you may select. Standard configuration type 1A wiring, may select type 1B wiring (Product Configuration code is UJ).

Standard configuration extension terminals cover, in order to protect to use safety, may select short terminals cover. (Product Configuration code is TK).



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Terminals	Note
1	Inlet phase line
3	Inlet neutral line
4	Outgoing neutral line
5	Outgoing phase line



### NOVO05VE



#### SINGLE PHASE ELECTROMECHANICAL FRONT BOARD INSTALLED ACTIVE ENERGY METER



#### **GENERAL**

Model NOV005VE single phase electromechanical front board installed active energy meter is a kind of new style single phase two wire active energy meter, it is designed on the basis of original BB282 single phase electromechanical meter, and fully absorb new technologies about electromechanical meter from domestic and abroad. The meter completely accord with relevant technical requirements of class 2 single phase active energy meter stipulated in international standard IEC 62053-11. It can accurate and directly measure 50Hz or 60Hz active energy consumption from single phase AC electricity net, it is use for setting indoor or out door meter box. The meter has novel design, rational structure, and it can display total energy consumption by drum wheel mechanical register. It has following features: compact structure design, small size, economy benefits, specious appearance, etc.

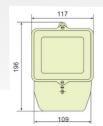
#### **Functions and features**

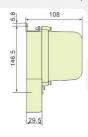
Model	Accuracy	Reference Voltage(V)	Current specifications(A)	Starting current(A)	Insulation performance
NOV005VE	Class 1 Class 2	127 230	10(20) 20(40) 30(60) 20(80) 40(80)	0.5 0.1 0.15 0.5 0.2	AC voltage 2kV for 1 minute, 1.2/50µs waveform impulse voltage 6kV

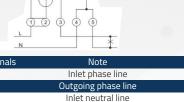
#### **Functions and features**

- > Front board two fixed installation, the cover is made of high definition transparent glass material molded overall, the bottom of the meter is made of quality steel which is after double-through antitrust processing, and the terminal is made of quality bakelite material which is moisture-resistant, fire-retardant, high temperature molded overall. It has following features: good weatherability, high rigid, specious appearance, etc.
- The meter frame adopt aluminum molding with excellent mechanical strength, stable structure and anti-impact.
- Voltage components and current components is used of double insulation structure, has good electrical characteristics.
- Standard configuration voltage circuit and current circuit connect in the case, may select connect outside.
- Standard configuration bottom bearing is used of double gem bearing, oriented bearing is made of high wear resistance copper alloy bush and stainless steel needle. It has following features: long life and minimal friction, etc. May select magnetic thrust bearing (Product Configuration code is QA) or single-precious stone bearing (Product Configuration code is QI).
- All kinds of error adjustment mechanism adopt no step shifting mechanism. The meter starting and creeping needn't to be adjust which is finished by anti-ceeping hole of disc and convenient for adjusting by users.
- Standard configuration 5 digits display by drum wheel mechanical register, may select 6 digits display by drum wheel mechanical register (Product Configuration code is QG).
- Standard configuration without the device which can prevent retrograde, may select add the function of prevent retrograde. (Please specified when ordering).
- Single component measure single phase two wire active energy consumption. Complying with standard IEC 62053-11.
- Direct connect operation, there are two types you may select. Standard configuration type 1B wiring, may select type 1A wiring (Product Configuration code is QF).

Extension terminals cover, in order to protect to use safety.











## Power Measured Right

we create advanced solutions for testing, monitoring, and understanding electrical systems. Built for professionals, our instruments are designed to deliver accuracy, dependability, and real-world performance.

From quick site checks to comprehensive energy audits, NOVO products help industries stay efficient, compliant, and informed. You'll find our tools at work across commercial buildings, industrial sites, energy networks, and critical infrastructure throughout the UK and internationally.

Our mission goes beyond hardware. We're here to support better energy decisions, improve safety, and simplify the way power is measured.

With NOVO, knowledge is power — and precision is built in.

### NOVO06VI



#### SINGLE PHASE ELECTROMECHANICAL FRONT BOARD INSTALLED ACTIVE ENERGY METER



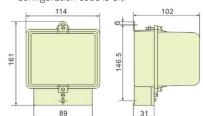
#### **GENERAL**

Model NOV006VI single phase electromechanical front board setting active energy meter is a kind of new style single phase two wire active energy meter, it is designed on the basis of original BB282 single phase electromechanical meter, and fully absorb new technologies about electromechanical meter from domestic and abroad. The meter completely accord with relevant technical requirements of class 2 single phase active energy meter stipulated in international standard IEC 62053-11. It can accurate and directly measure 50Hz or 60Hz active energy consumption from single phase AC electricity net, it is use for setting indoor or out door meter box. The meter has novel design, rational structure, and it can display total energy consumption by drum wheel mechanical register. It has following features: compact structure design, small size, economy benefits, specious appearance, etc.

#### **Functions and features**

Model	Accuracy	Reference Voltage(V)	Current specifications(A)	Starting current(A)	Insulation performance
NOV006VI	Class 1 Class 2	127 230	10(20) 20(40) 30(60) 20(80) 40(80)	0.5 0.1 0.15 0.5 0.2	AC voltage 2kV for 1 minute, 1.2/50µs waveform impulse voltage 6kV

- > Front board two fixed installation, the cover is made of PC material which is transparent and anti-UV molded overall, the bottom of the meter is made of quality steel which is after double-through antitrust processing, and the terminal is made of quality bakelite material which is moisture-resistant, fire-retardant, high temperature molded overall. It has following features: economy benefits, specious appearance, etc.
- The meter frame adopt aluminum molding with excellent mechanical strength, stable structure and anti-impact.
- Voltage components and current components is used of double insulation structure, has good electrical characteristics.
- Standard configuration voltage circuit and current circuit connect in the case, may select connect outside.
- Standard configuration bottom bearing is used of single-precious stone bearing, oriented bearing is made of high wear resistance copper alloy bush and stainless steel needle. May select magnetic thrust bearing (Product Configuration code is TA) or double gem bearing (Product Configuration code is TE).
- All kinds of error adjustment mechanism adopt no step shifting mechanism. The meter starting and creeping needn't to be adjust which is finished by anti-creeping hole of disc and convenient for adjusting by users.
- Standard configuration 5 digits display by drum wheel mechanical register, may select 6 digits display by drum wheel mechanical register (Product Configuration code is TK).
- Standard configuration without the device which can prevent retrograde, may select add the function of prevent retrograde. (Please specified when ordering).
- Single component measure single phase two wire active energy consumption. Complying with standard IEC 62053-11.
- Direct connect operation, there are two types wiring you may select. Standard configuration type 1B wiring, may select type 1A wiring (Product Configuration code is TJ).
- Standard configuration short terminals cover, may select extension terminals cover, in order to protect to use safety. (Product Configuration code is UI).



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Terminals	Note
1	Inlet phase line
3	Outgoing phase line
4	Inlet neutral line
5	Outgoing neutral line



### NOVO07VJ



#### SINGLE PHASE ELECTROMECHANICAL FRONT BOARD INSTALLED ACTIVE ENERGY METER



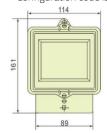
#### **GENERAL**

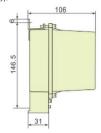
Model NOV007VJ single phase electromechanical front board installed active energy meter is a kind of new style single phase two wire active energy meter, it is designed on the basis of original BBZ84 single phase electromechanical meter, and fully absorb new technologies about electromechanical meter from domestic and abroad. The meter completely accord with relevant technical requirements of class 2 single phase active energy meter stipulated in international standard IEC 62053-11. It can accurate and directly measure 50Hz or 60Hz active energy consumption from single phase AC electricity net, it is use for setting indoor or out door meter box. The meter has novel design, rational structure, and it can display total energy consumption by drum wheel mechanical register. It has following features: compact structure design, small size, economy benefits, specious appearance, etc.

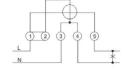
#### **Functions and features**

Model	Accuracy	Reference Voltage(V)	Current specifications(A)	Starting current(A)	Insulation performance
NOV007VJ	Class 1 Class 2	127 230	10(20) 20(40) 30(60) 20(80) 40(80)	0.5 0.1 0.15 0.5 0.2	AC voltage 4kV for 1 minute, 1.2/50µs waveform impulse voltage 6kV

- > Front board two fixed installation, the cover is made ABS engineering plastics molded overall which is black, fire-retardant and has a transparent glass window, the bottom of the meter is made of quality steel which is after double-through antitrust processing, and the terminal is made of quality bakelite material which is moisture-resistant, fire-retardant, high temperature molded overall. It has following features: economy benefits, specious appearance, etc.
- The meter frame adopt aluminum molding with excellent mechanical strength, stable structure and anti-impact.
- Voltage components and current components is used of double insulation structure, has good electrical characteristics.
- Standard configuration voltage circuit and current circuit connect in the case, may select connect outside.
- > Standard configuration bottom bearing is used of single-precious stone bearing, oriented bearing is made of high wear resistance copper alloy bush and stainless steel needle. May select magnetic thrust bearing (Product Configuration code is OB) or double gem bearing (Product Configuration code is OF).
- All kinds of error adjustment mechanism adopt no step shifting mechanism. The meter starting and creeping needn't to be adjust which is finished by anti-creeping hole of disc and convenient for adjusting by users.
- Standard configuration 5 digits display by drum wheel mechanical register, may select 6 digits display by drum wheel mechanical register (Product Configuration code is OL).
- Standard configuration without the device which can prevent retrograde, may select add the function of prevent retrograde. (Please specified when ordering).
- Single component measure single phase two wire active energy consumption. Complying with standard IEC 62053-11.
- Direct connect operation, there are two types wiring you may select. Standard configuration type 1A wiring, may select type 1B wiring (Product Configuration code is OI).
- Standard configuration short terminals cover, may select extension terminals cover, in order to protect to use safety. (Product Configuration code is SJ).







Terminals	Note
1	Inlet phase line
3	Inlet neutral line
4	Outgoing neutral line
5	Outgoing phase line



### NOVOO8VD



#### THREE PHASE FOUR WIRE ELECTROMECHANICAL FRONT BOARD INSTALLED ACTIVE ENERGY METER



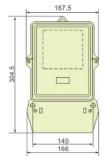
#### **GENERAL**

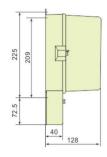
Model NOV008VD three phase four wire electromechanical front board installed active energy meter is a kind of new style three phase four wire active energy meter, it is on the basis of original three phase electromechanical meter, and fully absorb new technologies about electromechanical meter from domestic and abroad, and development long-life technology. The meter completely accord with relevant technical requirements of class 2 three phase active energy meter stipulated in international standard IEC 62053-11. It can accurate and directly measure 50Hz or 60Hz active energy consumption from three phase four wire AC electricity net, it is use for setting indoor or out door meter box, and it can display total energy consumption by drum wheel mechanical register. It has following features: high overload, power loss, long-life, specious appearance, etc.

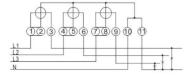
#### **Functions and features**

Model	Accuracy	Reference Voltage(V)	Current specifications(A)	Starting current(A)	Insulation performance
NOVO08VD	Class 1 Class 2	3x127/220 3x230/400	5(30) 10(60) 20(60) 20(80) 20(120)	0.025 0.05 0.5 0.5 0.1	AC voltage 4kV for 1 minute, 1.2/50µs waveform impulse voltage 8kV

- Front board three fixed installation, up and down mounting holes center distance is 209 mm or 225mm, users can choose any one by themselves.
- The cover is made of PC material which is transparent and anti-UV molded overall, the bottom of the meter and the terminal is made of quality bakelite material which is moisture-resistant, fire-retardant, high temperature molded overall. It has following features: good weatherability, high rigid, good insulation performance, etc.
- The meter frame adopt top-quality steel plate once molding with excellent mechanical strength, stable structure and anti-impact.
- Voltage components is used of all closed vacuum pouring coil by epoxy resin. Current components is used of double insulation structure, has good electrical characteristics.
- The type meter adopt magnetic thrust bottom bearing, oriented bearing is made of lubrication graphite bush and stainless steel needle. It has following features: small abrasion, long life and minimal friction, etc.
- All kinds of adjustment mechanism adopt no step shifting mechanism. The meter starting and creeping needn't to be adjust which is finished by anti-creeping hole of disc and convenient for adjusting by users.
- Standard configuration 6 digits display by drum wheel mechanical register, may select 7 digits display by drum wheel mechanical register (Product Configuration code is PJ).
- Three components measure three phase four wire active energy consumption. Complying with standard IEC 62053-11.
- Standard configuration for direct connect operation, type 168 wiring, we can also choose another type of wiring, and use CT (Product Configuration code is PE), type 48B wiring, and PT & CT (Product Configuration code is PF), type 48B wiring for operation.
- Standard configuration extension terminals cover, in order to protect to use safety, may select short terminals cover. (Product Configuration code is OD).







Terminals	Note	Terminals	Note
1	Inlet L1 phase line	7	Inlet L3 phase line
3	Outgoing L1 phase line	9	Outgoing L3 phase line
4	Inlet L2 phase line	10	Inlet neutral line
5	Outgoing L2 phase line	11	Outgoing neutral line



### NOVO09VU



### THREE PHASE FOUR WIRE ELECTROMECHANICAL FRONT BOARD INSTALLED ACTIVE ENERGY METER



#### **GENERAL**

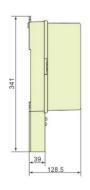
Model NOV009VU three phase four wire electromechanical front board installed active energy meter is a kind of new style three phase four wire active energy meter, it is on the basis of original B86 three phase electromechanical meter, and fully absorb new technologies about electromechanical meter from domestic and abroad. The meter completely accord with relevant technical requirements of class 2 three phase active energy meter stipulated in international standard IEC 62053-11. It can accurate and directly measure 50Hz or 60Hz active energy consumption from three phase four wire AC electricity net, it is use for setting indoor or out door meter box. The meter has novel design, rational structure, and it can display total energy consumption by drum wheel mechanical register. It has following features: high overload, power loss, long-life, specious appearance, etc.

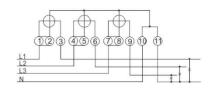
#### **Functions and features**

Model	Accuracy	Reference Voltage(V)	Current specifications(A)	Starting current(A)	Insulation performance
NOV009VU	Class 1 Class 2	3x127/220 3x230/400	5(20) 10(40) 20(60) 20(80) 30(100)	0.025 0.05 0.5 0.1 0.15	AC voltage 4kV for 1 minute, 1.2/50µs waveform impulse voltage 8kV

- > Front board three fixed installation, the bottom of the meter and the terminal is made of quality bakelite material which is moisture-resistant, fire-retardant, high temperature molded overall. The cover is also made of bakelite material and has a transparent glass window. It has following features: good weatherability, high rigid, good insulation performance, etc.
- The meter frame adopt aluminum molding with excellent mechanical strength, stable structure and anti-impact.
- Voltage components and current components is used of double insulation structure, has good electrical characteristics.
- Standard configuration the meter adopt double gem bearing, oriented bearing is made of lubrication graphite bush and stainless steel needle. It has following features: long-life and minimal friction, etc. May select magnetic thrust bearing (Product Configuration code is OD).
- All kinds of error adjustment mechanism adopt no step shifting mechanism. The meter starting and creeping needn't to be adjust which is finished by anti-creeping hole of disc and convenient for adjusting by users.
- Standard configuration 6 digits display by drum wheel mechanical register, may select 7 digits display by drum wheel mechanical register (Product Configuration code is OV).
- Standard configuration without the device which can prevent retrograde, may select add the function of prevent retrograde. (Please specified when ordering).
- Three components measure three phase four wire active energy consumption. Complying with standard IEC 62053-11.
- Standard configuration for direct connect operation, type 16B wiring, we can also choose another type of wiring, and use CT (Product Configuration code is OR), type 48B wiring for operation.
- > Extension terminals cover, in order to protect to use safety.







Terminals	Note	Terminals	Note
1	Inlet L1 phase line	7	Inlet L3 phase line
3	Outgoing L1 phase line	9	Outgoing L3 phase line
4	Inlet L2 phase line	10	Inlet neutral line
5	Outgoing L2 phase line	11	Outgoing neutral line





### NOVOO10VR



### THREE PHASE FOUR WIRE ELECTROMECHANICAL FRONT BOARD INSTALLED ACTIVE ENERGY METER



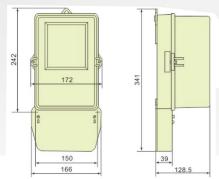
#### **GENERAL**

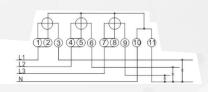
Model NOV0010VR three phase four wire electromechanical front board installed active energy meter is a kind of new style three phase four wire active energy meter, it is on the basis of original B86 three phase electromechanical meter, and fully absorb new technologies about electromechanical meter from domestic and abroad. The meter completely accord with relevant technical requirements of class 2 three phase active energy meter stipulated in international standard IEC 62053-11. It can accurate and directly measure 50Hz or 60Hz active energy consumption from three phase four wire AC electricity net, it is use for setting indoor or out door meter box. The meter has novel design, rational structure, and it can display total energy consumption by drum wheel mechanical register. It has following features: high overload, power loss, long-life, specious appearance, etc.

#### **Functions and features**

Model	Accuracy	Reference Voltage(V)	Current specifications(A)	Starting current(A)	Insulation performance
NOV0010VR	Class 1 Class 2	3x127/220 3x230/400	5(20) 10(40) 20(60) 20(80) 30(100)	0.025 0.05 0.5 0.1 0.15	AC voltage 4kV for 1 minute, 1.2/50µs waveform impulse voltage 8kV

- > Front board three fixed installation, the cover is made of PC material which is transparent and anti-UV molded overall, the bottom of the meter and the terminal is made of quality bakelite material which is moisture-resistant, fire-retardant, high temperature molded overall. It has following features: good weatherability, high rigid, good insulation performance, etc.
- > The meter frame adopt aluminum molding with excellent mechanical strength, stable structure and anti-impact.
- Voltage components and current components is used of double insulation structure, has good electrical characteristics.
- Standard configuration the meter adopt double gem bearing, oriented bearing is made of lubrication graphite bush and stainless steel needle. It has following features: long-life and minimal friction, etc. May select magnetic thrust bearing (Product Configuration code is PD).
- All kinds of error adjustment mechanism adopt no step shifting mechanism. The meter starting and creeping needn't to be adjust which is finished by anti-creeping hole of disc and convenient for adjusting by users.
- Standard configuration 6 digits display by drum wheel mechanical register, may select 7 digits display by drum wheel mechanical register (Product Configuration code is PV).
- Standard configuration without the device which can prevent retrograde, may select add the function of prevent retrograde. (Please specified when ordering).
- Three components measure three phase four wire active energy consumption. Complying with standard IEC 62053-11.
- Standard configuration for direct connect operation, type 16B wiring, we can also choose another type of wiring, and use CT (Product Configuration code is PQ), type 48B wiring for operation.
- > Extension terminals cover, in order to protect to use safety.





Terminals	Note	Terminals	Note
1	Inlet L1 phase line	7	Inlet L3 phase line
3	Outgoing L1 phase line	9	Outgoing L3 phase line
4	Inlet L2 phase line	10	Inlet neutral line
5	Outgoing L2 phase line	11	Outgoing neutral line



### NOVOO11VQ



### THREE PHASE FOUR WIRE ELECTROMECHANICAL FRONT BOARD INSTALLED ACTIVE ENERGY METER



#### **GENERAL**

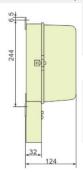
Model NOV0011VQ three phase four wire electromechanical front board installed active energy meter is a kind of new style three phase four wire active energy meter, it is on the basis of original B86 three phase electromechanical meter, and fully absorb new technologies about electromechanical meter from domestic and abroad. The meter completely accord with relevant technical requirements of class 2 three phase active energy meter stipulated in international standard IEC 62053-11. It can accurate and directly measure 50Hz or 60Hz active energy consumption from three phase four wire AC electricity net, it is used for setting indoor or out door meter box. The meter has novel design, rational structure, and it can display total energy consumption by drum wheel mechanical register. It has following features: high overload, power loss, long-life, specious appearance, etc.

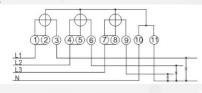
#### **Functions and features**

Model	Accuracy	Reference Voltage(V)	Current specifications(A)	Starting current(A)	Insulation performance
NOV0011VQ	Class 1 Class 2	3x127/220 3x230/400	5(20) 10(40) 20(60) 20(80) 30(100)	0.025 0.05 0.5 0.1 0.15	AC voltage 2kV for 1 minute, 1.2/50µs waveform impulse voltage 6kV

- > Front board three fixed installation, the cover is made of quality aluminum which is after anti-oxidation treatment and has a transparent glass window molded overall, the bottom of the meter is made of quality steel which is after double-through antitrust processing, and the terminal is made of quality bakelite material which is moisture-resistant, fire-retardant, high temperature molded overall. It has following features: good weatherability, specious appearance, etc.
- > The meter frame adopt aluminum molding with excellent mechanical strength, stable structure and anti-impact.
- Voltage components and current components is used of double insulation structure, has good electrical characteristics.
- Standard configuration the meter adopt double gem bearing, oriented bearing is made of lubrication graphite bush and stainless steel needle. It has following features: long-life and minimal friction, etc. May select magnetic thrust bearing (Product Configuration code is RO).
- All kinds of error adjustment mechanism adopt no step shifting mechanism. The meter starting and creeping needn't to be adjust which is finished by anti-creeping hole of disc and convenient for adjusting by users.
- Standard configuration 6 digits display by drum wheel mechanical register, may select 7 digits display by drum wheel mechanical register (Product Configuration code is RV).
- Standard configuration without the device which can prevent retrograde, may select add the function of prevent retrograde. (Please specified when ordering).
- Three components measure three phase four wire active energy consumption. Complying with standard IEC 62053-11.
- Standard configuration for direct connect operation, type 16B wiring, we can also choose another type of wiring, and use CT (Product Configuration code is RQ), type 48B wiring for operation.
- > Extension terminals cover, in order to protect to use safety.







Terminals	Note	Terminals	Note
1	Inlet L1 phase line	7	Inlet L3 phase line
3	Outgoing L1 phase line	9	Outgoing L3 phase line
4	Inlet L2 phase line	10	Inlet neutral line
5	Outgoing L2 phase line	11	Outgoing neutral line



### NOVOO12VS



### THREE PHASE FOUR WIRE ELECTROMECHANICAL FRONT BOARD INSTALLED ACTIVE ENERGY METER



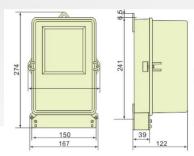
#### **GENERAL**

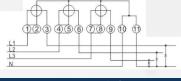
Model NOV0012V5 three phase four wire electromechanical front board installed active energy meter is a kind of new style three phase four wire active energy meter, it is on the basis of original B86 three phase electromechanical meter, and fully absorb new technologies about electromechanical meter from domestic and abroad. The meter completely accord with relevant technical requirements of class 2 three phase active energy meter stipulated in international standard IEC 62053-11. It can accurate and directly measure 50Hz or 60Hz active energy consumption from three phase four wire AC electricity net, it is use for setting indoor or out door meter box. The meter has novel design, rational structure, and it can display total energy consumption by drum wheel mechanical register. It has following features: high overload, power loss, long-life, specious appearance, etc.

#### **Functions and features**

Model	Accuracy	Reference Voltage(V)	Current specifications(A)	Starting current(A)	Insulation performance
NOV0012VS	Class 1 Class 2	3x127/220 3x230/400	5(20) 10(40) 20(60) 20(80) 30(100)	0.025 0.05 <mark>0.5</mark> 0.1 0.15	AC voltage 2kV for 1 minute, 1.2/50µs waveform impulse voltage 6kV

- > Front board two fixed installation, the cover is made ABS engineering plastics molded overall which has a transparent glass window, the bottom of the meter is made of quality steel which is after double-through antitrust processing, and the terminal is made of quality bakelite material which is moisture-resistant, fire-retardant, high temperature molded overall. It has following features: economy benefits, specious appearance, etc.
- 🕥 The meter frame adopt aluminum molding with excellent mechanical strength, stable structure and anti-impact.
- Voltage components and current components is used of double insulation structure, has good electrical characteristics.
- Standard configuration the meter adopt double gem bearing, oriented bearing is made of lubrication graphite bush and stainless steel needle. It has following features: long-life and minimal friction, etc. May select magnetic thrust bearing (Product Configuration code is TD).
- All kinds of error adjustment mechanism adopt no step shifting mechanism. The meter starting and creeping needn't to be adjust which is finished by anti-creeping hole of disc and convenient for adjusting by users.
- Standard configuration 6 digits display by drum wheel mechanical register, may select 7 digits display by drum wheel mechanical register (Product Configuration code is TV).
- Standard configuration without the device which can prevent retrograde, may select add the function of prevent retrograde. (Please specified when ordering).
- Three components measure three phase four wire active energy consumption. Complying with standard IEC 62053-11.
- Standard configuration for direct connect operation, type 16B wiring, we can also choose another type of wiring, and use CT (Product Configuration code is TQ), type 48B wiring, and PT & CT (Product Configuration code is TR), type 48B wiring for operation.
- Standard configuration short terminals cover, may select extension terminals cover, in order to protect to use safety. (Product Configuration code is UP).





Terminals	Note	Terminals	Note
1	Inlet L1 phase line	7	Inlet L3 phase line
3	Outgoing L1 phase line	9	Outgoing L3 phase line
4	Inlet L2 phase line	10	Inlet neutral line
5	Outgoing L2 phase line	11	Outgoing neutral line



### NOVOO13VH



### THREE PHASE FOUR WIRE ELECTROMECHANICAL MULTI-RATE FRONT BOARD INSTALLED ACTIVE ENERGY METER



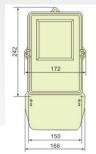
#### **GENERAL**

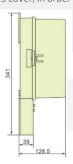
Model NOV0013VH three phase four wire electromechanical multi-rate front board installed active energy meter is a kind of new style three phase four wire active energy meter, it is designed on the basis of original BBM082 meter, which gathers functions of multi-rate (time-sharing billing) electric energy measuring and max demand electric measuring. The meter completely accord with relevant technical requirements of class 2 three phase active energy meter stipulated in international standard IEC 62053-11. It can accurate and directly measure 50Hz or 60Hz active energy consumption from three phase four wire AC electricity net, it is use for setting indoor or out door meter box.

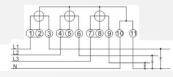
#### **Functions and features**

Model	Accuracy	Reference Voltage(V)	Current specifications(A)	Starting current(A)	Insulation performance
NOV0013VH	Class 1 Class 2	3x127/220 3x230/400	5(20) 10(40) 20(60) 20(80) 30(100)	0.025 0.05 0.1 0.15 0.5	AC voltage 2kV for 1 minute, 1.2/50µs waveform impulse voltage 6kV

- > Front board three fixed installation, the bottom of the meter and the terminal is made of quality bakelite material which is moisture-resistant, fire-retardant, high temperature molded overall. The cover is also made of bakelite material and has a transparent glass window. It has following features: good weatherability, high rigid, good insulation performance, etc.
- > It has four tariffs, 6 time area, 12 date time.
- > Infrared remote-control programmable, password recognition.
- It can keep the data forever when the power cut off, there is maintenance-free reserve battery in it.
- > Function of max demand electric measuring
- May select port of RS485 and output pulse passive, it is useful copying meter conveniently.
- Standard configuration bottom bearing is used of double gem bearing, oriented bearing is made of high wear resistance copper alloy bush and stainless steel needle. It has following features: long life and minimal friction, etc. May select magnetic thrust bearing (Product Configuration code is QD).
- Standard configuration 6 digits display by drum wheel mechanical register, may select 5 digits display by drum wheel mechanical register (Product Configuration code is QV).
- Standard configuration without the device which can prevent retrograde, may select add the function of prevent retrograde. (Please specified when ordering).
- Three component measure three phase four wire active energy consumption. Complying with standard IEC 62053-11.
- Standard configuration direct connect operation, type 16B wiring, may select use CT for operation, type 48B wiring (Product Configuration code is QQ) and PT & CT for operation, type 48B wiring (Product Configuration code is QR).
- Extension terminals cover, in order to protect to use safety.







Terminals	Note	Terminals	Note
1	Inlet L1 phase line	7	Inlet L3 phase line
3	Outgoing L1 phase line	9	Outgoing L3 phase line
4	Inlet L2 phase line	10	Inlet neutral line
5	Outgoing L2 phase line	11	Outgoing neutral line



### **NOVOO14VO**



#### INSERTING TYPE THREE PHASE FOUR WIRE ELECTROMECHANICAL ACTIVE ENERGY METER



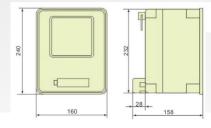
#### **GENERAL**

Model NOV0014VO inserting type three phase four wire electromechanical active energy meter is a kind of new style three phase four wire active energy meter, it is on the basis of original B86 three phase electromechanical meter, and fully absorb new technologies about electromechanical meter from domestic and abroad. The meter completely accord with relevant technical requirements of class 1 or class 2 three phase active energy meter stipulated in international standard IEC 62053-11. It can accurate and directly measure 50Hz or 60Hz active energy consumption from three phase four wire AC electricity net, it is use for inserting installed on all kinds of panels of switchgear and distribution box. The meter has novel design, rational structure, and it can display total energy consumption by drum wheel mechanical register. It has following features: high overload, power loss, long-life, specious appearance, convenient installation, etc.

#### **Functions and features**

Model	Accuracy	Reference Voltage(V)	Current specifications(A)	Starting current(A)	Insulation performance
NOV0014V0	Class 1 Class 2	3x127/220 3x230/400	CT/5A 20(60)	0.02 0.025 0.5	AC voltage 4kV for 1 minute, 1.2/50µs waveform impulse voltage 6kV

- ▶ Inserting installed, the panel opening size: 152x234mm, the cover is made ABS engineering plastics molded overall which has a transparent glass window, the bottom of the meter and the terminal are also made of ABS engineering plastics molded overall. It has following features: good weatherability, high rigid, good insulation performance, etc.
- The meter frame adopt aluminum molding with excellent mechanical strength, stable structure and anti-impact.
- Voltage components and current components is used of double insulation structure, has good electrical characteristics.
- Standard configuration the meter adopt double gem bearing, oriented bearing is made of lubrication graphite bush and stainless steel needle. It has following features: small abrasion and minimal friction, etc. May select magnetic thrust bearing (Product Configuration code is PC).
- All kinds of error adjustment mechanism adopt no step shifting mechanism. The meter starting and creeping needn't to be adjust which is finished by anti-creeping hole of disc and convenient for adjusting by users.
- Standard configuration 6 digits display by drum wheel mechanical register, may select 7 digits display by drum wheel mechanical register (Product Configuration code is PC).
- Standard configuration without the device which can prevent retrograde, may select add the function of prevent retrograde. (Please specified when ordering).
- Three components measure three phase four wire active energy consumption. The accuracy class 1 or class 2 may select by users. Complying with standard IEC 62053-11. (Please specified when ordering).
- Standard configuration use CT, type 482 wiring for operation, may select PT & CT (Product Configuration code is PL), type 482 wiring for operation.
- Short terminals cover.



Terminals	Note	Terminals	Note
1	Inlet LI phase line CT	9	Outgoing LI phase line CT
3	Outgoing LI phase line CT	2	LI phase line
4	Inlet L2 phase line CT	5	L2 phase line
6	Outgoing L2 phase line CT	8	L3 phase line
7	Inlet L3 phase line CT	10	Neutral line



