



General Catalogue

Reliable made affordable





About Himel

Himel is a multinational manufacturer and provider of electrical products successfully combining global expertise with local knowledge.

Founded by a Spanish entrepreneur in 1958, the company pioneered in exporting quality electrical enclosures, establishing Himel brand globally.

Today, our global footprint and technology enable us to provide the best combination of affordable and reliable offers for Low Voltage Power distribution, Industry Automation and Home Electric to our long-term customers and partners in over 50 countries where we are present.

Himel. Reliable made affordable



METERING

Electronic Watt-hour Meters

HDDS606 & HDT(S)S606

Product Introduction

Our new generation watt-hour meters are designed and developed to adapt to the reconstruction of power network. They are the high-tech products manufactured with high quality, intelligent and convenient applications. Our new meters are widely used in high and low voltage metering cabinets, final distribution metering cabinets, residentials, shopping malls, etc..

New generation includes:

- Single-phase: HDDS606 dial display or LCD display with optional RS485 or infrared.
- Three-phase: HDT(S)S606 dial display or LCD display with optional RS485 or infrared.

Selection Code

Model	Voltage	Accuracy	Current Specification	Frequency	Connection	Display Mode	Optional Function
HDDS606	M	1	6M4	6	H	C	4
HDDS606: Single-phase Electronic Watt-Hour Meter	M: 220V N: 230V	Default: Class 1 2: Class 2	6M4: 1.5(6)A 10M4: 2.5(10)A 20M4: 5(20)A 40M4: 10(40)A 60M4: 15(60)A 100M10: 10(100)A	Default: 50Hz 6: 60Hz	Default: Direct connection (No external CT/VT type)	Default: Dial display C: LCD display	Default: without any optional function 4: 485 interface I: infraed
HDT(S)S606: Three-phase Four-wire Electronic Watt-Hour Meter	Q: 3*220/380V V: 3*230/400V Y: 3*57.7/100V	Default: Class 1 2: Class 2	6M4: 1.5(6)A 6M2: 3(6)A 20M4: 5(20)A 40M8: 5(40)A 60M12: 5(60)A 80M4: 20(80)A 100M10: 10(100)A	Default: 50Hz 6: 60Hz	Default: Direct connection H: Connect via VT/CT	Default: Dial display C: LCD display	Default: without any optional function 4: 485 interface I: infraed
HDSS606: Three-phase Three-wire Electronic Watt-Hour Meter	Q: 3*380V V: 3*400V Y: 3*100V	Default: Class 1 2: Class 2	6M4: 1.5(6)A 6M2: 3(6)A 20M4: 5(20)A 40M8: 5(40)A 60M12: 5(60)A 80M4: 20(80)A 100M10: 10(100)A	Default: 50Hz 6: 60Hz	Default: Direct connection H: Connect via VT/CT	Default: Dial display C: LCD display	Default: without any optional function 4: 485 interface I: infraed

METERING

Electronic Watt-hour Meters - HDDS606 & HDT(S)S606

Product Features



Smaller and Elegant

- 50% smaller in size to save installation space
- Upgraded appearance design

Accurate Measurement & Safe and Reliable

- Automatic calibration for inspection
- Three lead sealings: factory, verification and installation; more secure for electricity anti-stealing.

Well Designed & Intelligent and Convenient

- Wider current range, and easier for model selection
- First limit design of bump on the tail cover in our industry, and flip angle of the tail cover can be more than 135°
- More convenient and firming on wiring.



Qualified Materials & Excellent Performance

- Temperature rise is only 15K, which is far less than national standard 25K.
- Power loss is less than 0.5W.
- Heat deformation temperature reaches to 200°C .

METERING

Electronic Watt-hour Meters - HDDS606 & HDT(S)S606



Technical Parameters			
Energy Meters	HDDS606	HDT(S)S606	HDDS606
Connection Method	Single phase	Three-phase four-wire	Three-phase three-wire
Accuracy	Class 1, Class 2		
Rated Voltage (V)	220, 230	3*57.7/100V (External transformer) 3*220/380V, 3*230/400V	3*100V (External transformer) 3*380V, 3*400V
Current Specification	1.5(6)A, 2.5(10)A, 5(20)A, 10(40)A, 15(60)A, 10(100)A	3*57.7/100V: 1.5(6)A	3*100V: 1.5(6)A
		3*220/380V, 3*230/400V: 1.5(6)A, 3(6)A, 5(20)A, 5(40)A, 5(60)A, 20(80)A, 10(100)A	3*380V, 3*400V: 1.5(6)A, 3(6)A, 5(20)A, 5(40)A, 5(60)A, 20(80)A, 10(100)A
Display Mode	Dial meter or LCD		
Optional Functions	Infrared communication, RS485 communication		
Normal working voltage	0.9~1.1 (Reference voltage)		
Ultimate working voltage	0.0~1.15 (Reference voltage)		
Rated Voltage	0.75Un~1.15Un		

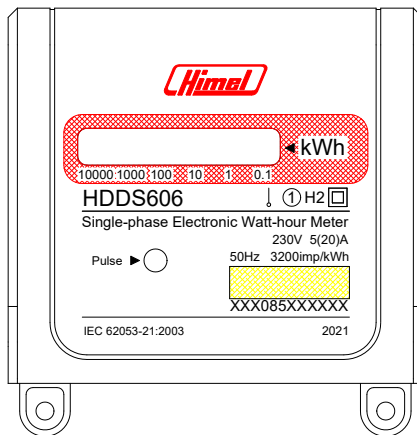
Working Conditions

- Power consumption
Power consumption in voltage circuit: 2W/10VA
Power consumption in current circuit: 4VA
- Temperature range
Range of specified working temperature: -10°C~+45°C
Range of ultimate working temperature: -25°C~+55°C
- Humidity range
Annual average relative humidity: <75%.

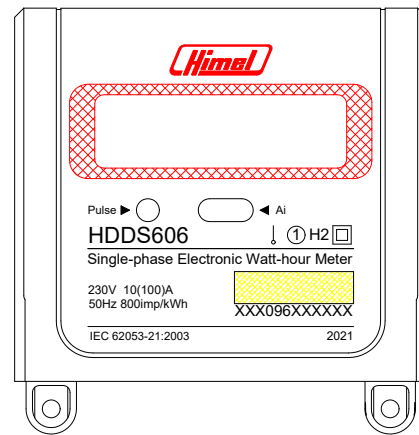
METERING

Electronic Watt-hour Meters - HDDS606 & HDT(S)S606

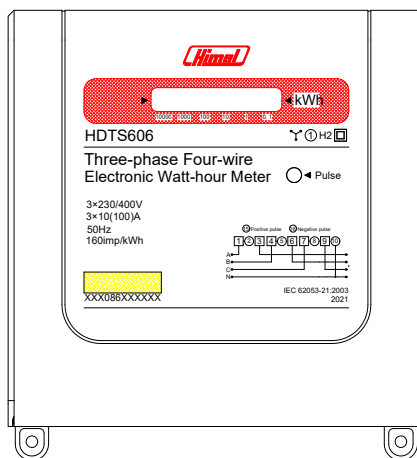
Nameplate Design



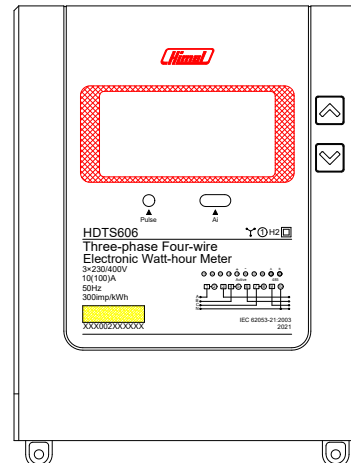
HDDS606 - Dial display



HDDS606 - LCD display



HDT(S)S606 - Dial display



HDT(S)S606 - LCD display

Electronic Watt-hour Meters - HDDS606 & HDT(S)S606

Error Limit of Watt-hour Meters

• HDDS606

Load Current	Power factor COS ϕ	Error (%)	
		Class 1	Class 2
$0.05I_b \leq I < 0.1I_b$	1	± 1.5	± 2.5
$0.1I_b \leq I \leq I_{max}$	1	± 1.0	± 2.0
$0.1I_b \leq I < 0.2I_b$	0.5L	± 1.5	± 2.5
	0.8C	± 1.5	-
$0.2I_b \leq I \leq I_{max}$	0.5L	± 1.0	± 2.0
	0.8C	± 1.0	-

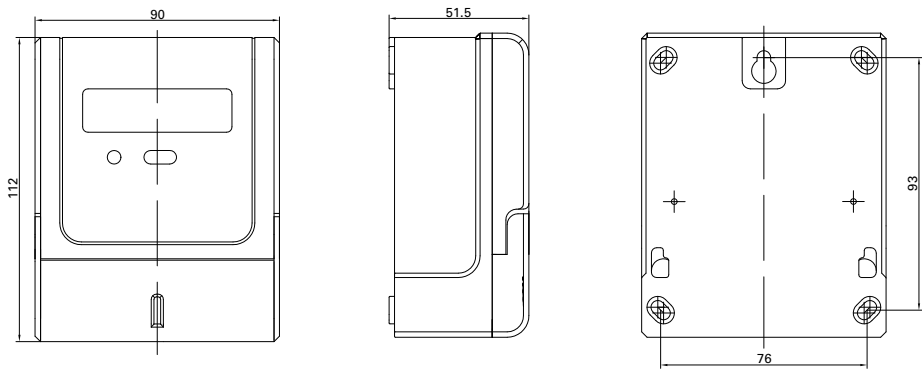
• HDT(S)S606

Current value		Active Power Class 1		Active Power Class 2	
Direct connection	Through the transformer	Power factor COS ϕ	Error %	Power factor COS ϕ	Error %
$0.05I_b \leq I < 0.1I_b$	$0.02I_n \leq I < 0.05I_n$	1	± 1.5	1	± 2.5
$0.1I_b \leq I \leq I_{max}$	$0.05I_n \leq I \leq I_{max}$	1	± 1.0	1	± 2.0
$0.1I_b \leq I < 0.2I_b$	$0.05I_n \leq I < 0.1I_n$	0.5L	± 1.5	0.5L	± 2.5
		0.8C	± 1.5	0.8C	± 2.5
$0.2I_b \leq I \leq I_{max}$	$0.1I_n \leq I \leq I_{max}$	0.5L	± 1.0	0.5L	± 2.0
		0.8C	± 1.0	0.8C	± 2.0

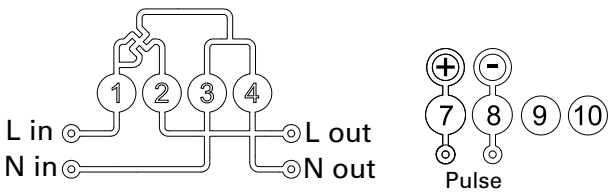
Installation dimensions and Wiring Diagrams

Single-phase

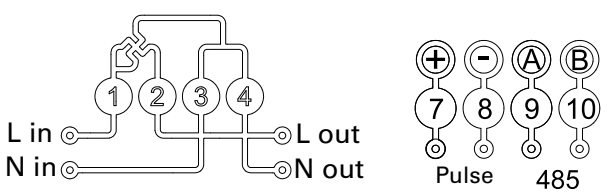
• Overall Dimension



• Wiring Diagram



Without communication



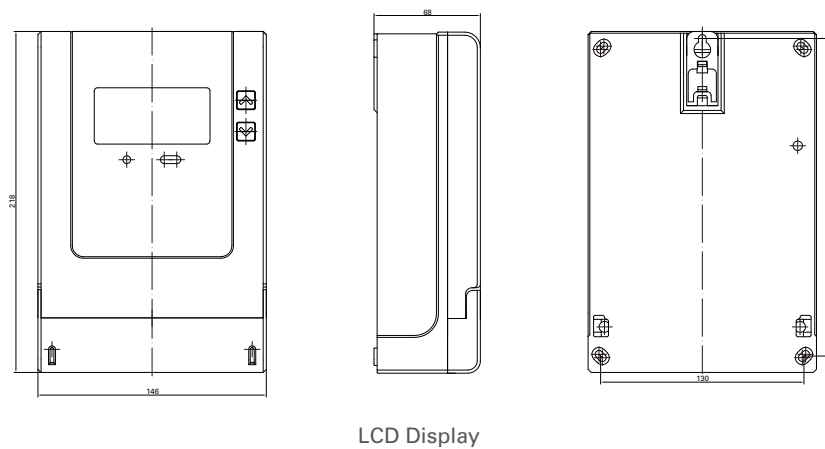
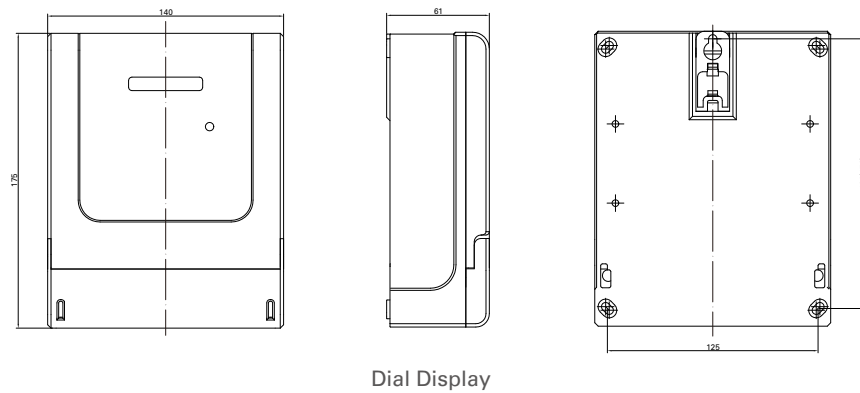
With communication

Electronic Watt-hour Meters - HDDS606 & HDT(S)S606

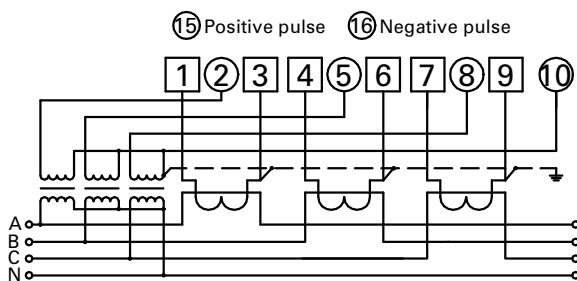
Installation dimensions and Wiring Diagrams

Three-phase

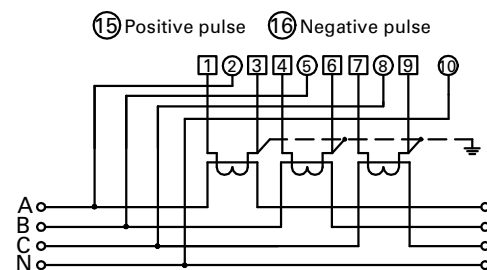
• Overall Dimension



• Wiring Diagram



Wiring diagram of three-phase four-wire external current and voltage transformer connection
($3 \times 57.7/100V$ $3 \times 1.5(6)A$, $3 \times 3(6)A$)



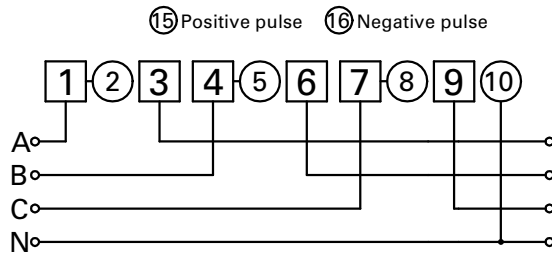
Wiring diagram of three-phase four-wire external current transformer connection
($3 \times 220/380V$ or $3 \times 230/400V$ $3 \times 1.5(6)A$, $3 \times 3(6)A$)

Electronic Watt-hour Meters - HDDS606 & HDT(S)S606

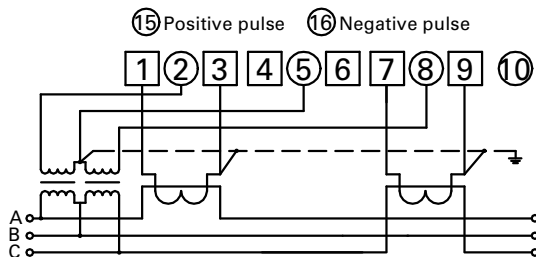
Installation dimensions and Wiring Diagrams

Three-phase

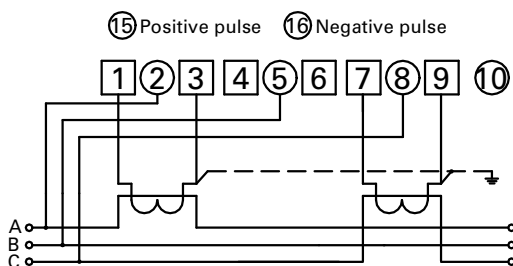
• Wiring Diagram



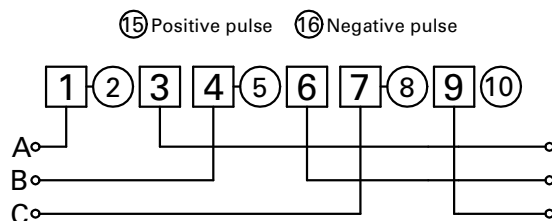
Wiring diagram of three-phase four-wire direct-connection
($3 \times 220/380\text{V}$ or $3 \times 230/400\text{V}$ $\geq 3 \times 5(20)\text{A}$)



Wiring diagram of three-phase three-wire external current
and voltage transformer connection
($3 \times 100\text{V}$ $3 \times 1.5(6)\text{A}$, $3 \times 3(6)\text{A}$)



Wiring diagram of three-phase three-wire external current
transformer connection
($3 \times 380\text{V}$ or $3 \times 400\text{V}$ $3 \times 1.5(6)\text{A}$, $3 \times 3(6)\text{A}$)



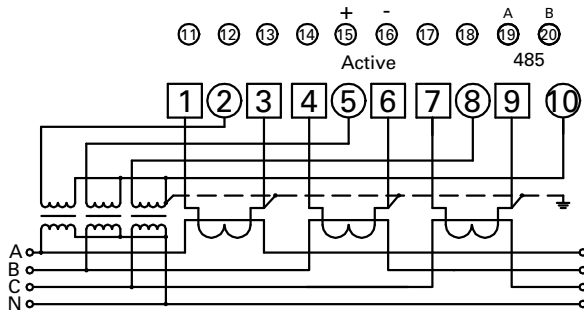
Wiring diagram of three-phase three-wire direct connection
($3 \times 380\text{V}$ or $3 \times 400\text{V}$ $\geq 3 \times 5(20)\text{A}$)

Electronic Watt-hour Meters - HDDS606 & HDT(S)S606

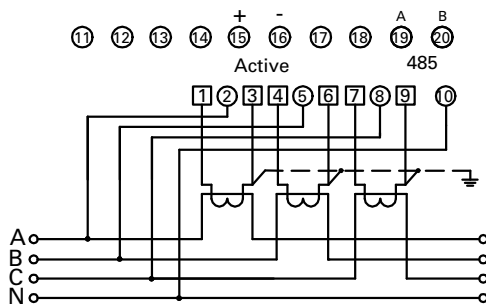
Installation dimensions and Wiring Diagrams

Three-phase

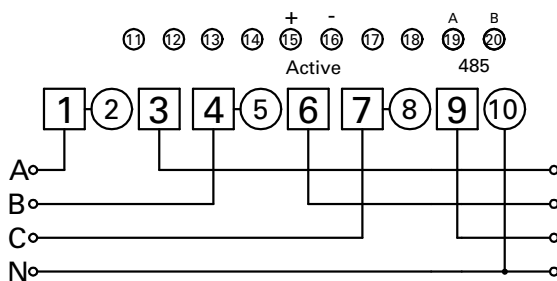
• Wiring Diagram



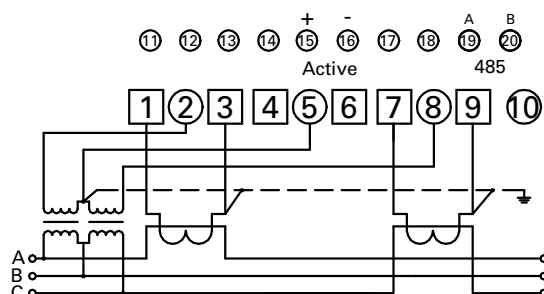
HDTS606 three-phase four-wire electronic watt-hour meter (LCD, infrared, and 485) $3 \times 57.7/100V \leq 3 \times 10A$, connected through the external current and voltage transformer



HDTS606 three-phase four-wire electronic watt-hour meter (LCD, infrared, and 485) $3 \times 220/380V$ or $3 \times 230/400V \leq 3 \times 10A$, connected through the external current transformer



HDTS606 three-phase four-wire electronic watt-hour meter (LCD, infrared, and 485) $3 \times 220/380V$ or $3 \times 230/400V \geq 3 \times 20A$, direct connection type



HDSS606 three-phase three-wire electronic watt-hour meter (LCD, infrared, and 485) $3 \times 100 \leq 3 \times 10A$, connected through the external current and voltage transformer

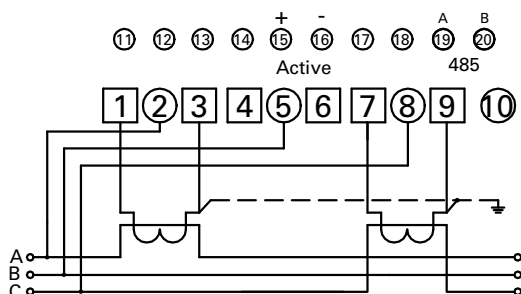
METERING

Electronic Watt-hour Meters - HDDS606 & HDT(S)S606

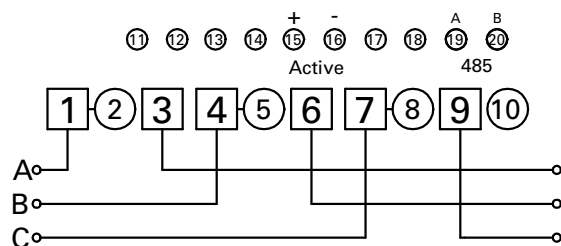
Installation dimensions and Wiring Diagrams

Three-phase

• Wiring Diagram



HDDS606 three-phase three-wire electronic watt-hour meter (LCD, infrared, and 485) $3 \times 380V$ or $3 \times 400V \leq 3 \times 10A$, connected through the external current transformer



HDDS606 three-phase three-wire electronic watt-hour meter (LCD, infrared, and 485) $3 \times 380V$ or $3 \times 400V \geq 3 \times 20A$, direct connection type

