Technical data

Accuracy Class (SS 4060106):	2 (±2%)
Basic Current, Ib	10 A
Current Range*	0,5 to 63 A
Starting Current**	50 mA
Max. Fuse	63 A
Frequency	50–60 Hz
Internal Frequency (Meter Constant)	640 imp/kWh
Temperature Range	–40° C to +60° C
Temperature Dependence	<0,05 %/° C
Rated Impulse Withstand Voltage	12 kV
Degree of Protection	IP 20
Max. wire size	16 mm^2
Pulse Output	
– Current	max 20 mA
– Voltage	10 to 40 V DC
– Frequency	10 imp/kWh or 640 imp/kWh
– Impulse length	180 ms (average)
	140 ms (minimum)

* The range in which the meter's accuracy has been tested.
** The currant at which the meter start to register energy.

Material

Enclosures are made of polycarbonate with superior impact strength qualities. Terminal blocks are made of polyamide.

Terminals

The terminal clamps are in the form of tunnels, which assure a very reliable connection of the conductor.

The marking of the terminalblock is in accordance with DIN 43856.

Options

The pulse output is as standard a passive transistor with max. current 20 mA.

As an option the output can be delivered as relay output.

Relay Pulse output

Current (max):	300 mA
Voltage (max):	250 V AC/DC
Power (max):	30 W
Temp.Range:	–38° C + 75°C
Working life:	10^6 op. at 30 W

The pulse output has as standard pulse-length 180 ms and pulse frequency 10 or 640 imp/kWh.

Other pulse lengths and pulse frequencies can be delivered as an option on special request.

Pulse length

From 70 ms to 1 000 ms in step of 10 ms.

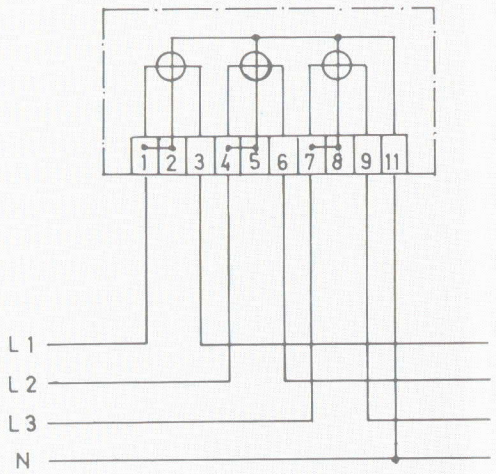
Pulse frequency

Direct measuring ⩽63 A: 1 to 10 imp/kWh
Current transformer ⩽6 A (secondary):

Transistor	1 to 1280 imp/kWh
Relay to 200 ms	>200 to 1000 ms
1 to 640 imp/kWh	1 to 128 imp/kWh

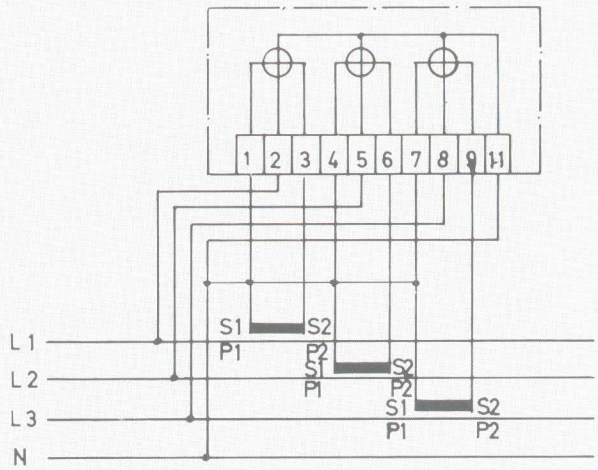
Wiring diagrams

Wh 3063

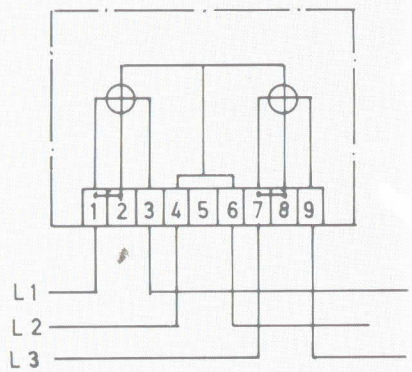


Wh 3063

Measuring over 63 A via external current transformers.

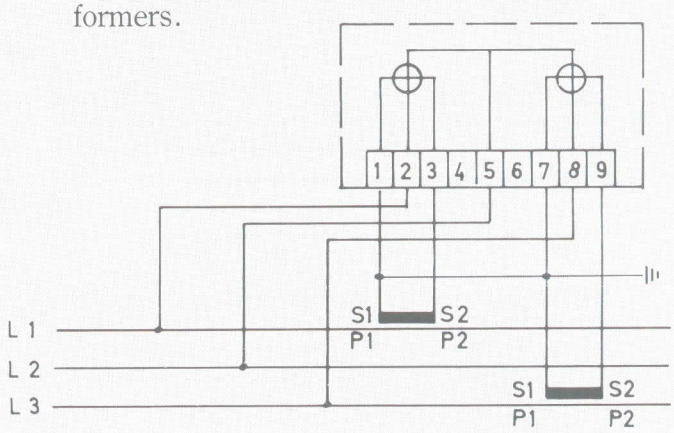


Wh 3163 Wh 3363 Wh 3463 Wh 3563

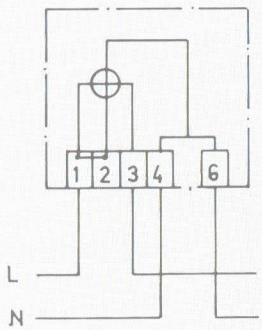


Wh 3163 Wh 3363 Wh 3463 Wh 3563

Measuring over 63 A via external current transformers.

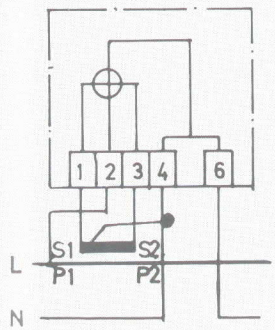


Wh 1063 Wh 1263

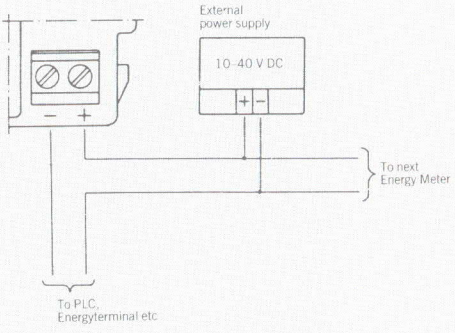


Wh 1063 Wh 1263

Measuring over 63 A via external current transformers.



Wiring of pulse output circuit

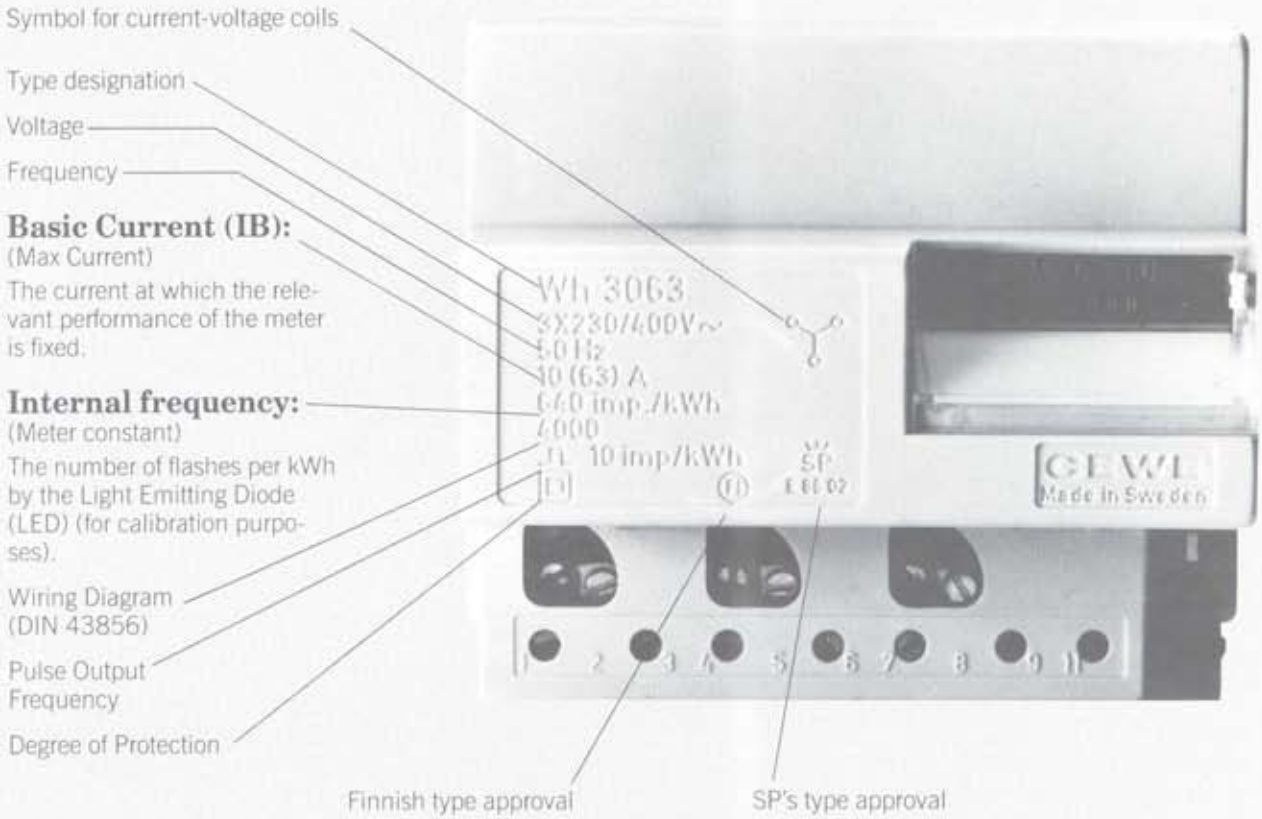


Note! It is important that the current transformer is connected with correct current direction (P1 → P2, S1 → S2). See above wiring diagrams.

All meters can also be connected via voltage transformers. For improved resolution 640 pulses/kWh output is recommended when using current-/voltage transformer. Voltage supply shall be fuse protected.

Symbols for Energy meters

Meters with 1 driving system	Meters with 2 driving systems	Meters with 3 driving systems
		
which has one current and one voltage coil (for single phase, 2-conductor circuits).	each with a voltage and current coil, connected as per the "two-wattmeter method" (for three phase, 3-conductor circuits).	each with a voltage and current coil, connected as per the "three-wattmeter method" (for three phase, 4-conductor circuits).



Standards

The meters comply to the following standards:

IEC 521	Electricitymeter Class 2
DIN 43 880	Mounting Dimensions
DIN 43 856	Terminal markings
DIN 43 857	Terminal dimensions
SS 406 01 06	Electricitymeter Class 2 (IEC 521)
SS 406 01 07	Electricitymeter (IEC 529) Protective Class II
SS 436 15 03	Ability to withstand electrical interference – Environmental Class PL3 (IEC 60-2 and IEC 255 §§ 4,5 & 11)
SS 436 15 22	Ability to withstand electrostatic discharge – Environmental Class PE4 (IEC 801-2)
SS 436 15 23	Ability to withstand electromagnetic fields – Environmental Class PR3 (IEC 801-3)
IEC 65	Personal Safety Requirements for Electronic Devices