



### Serie "Classic"

For measuring direct and single- and three-phase active power (effective value!).

During measuring the power in networks having low  $\cos \varphi$ , the instrument provides exact reading.

#### Technical data

**Movement:** the magnetic shielding of the electrodynamic movement with taut-band bearing allows the instrument to be used in inhomogeneous magnetic field.

**Scale:** Practically linear calibration.  
Scale length: 120 mm.

**Class of accuracy:** 1 ( $\cos \varphi = 0,2$ , and  $\cos \varphi = 0,5$ ), 1,5 ( $\cos \varphi = 0,1$ ) according to EN60051

**Rated power factor ( $\cos \varphi$ ):** 0.1 or 0.2 or 0.5

**Rated power:**  $U \cdot I \cdot \cos \varphi$  (HEWa, HEW**a-b**),  
 $\sqrt{3} \cdot U \cdot I \cdot \cos \varphi$  (HEW**a-b**)

**Continuous overload:**  $1.2 \cdot I_N$ , and  $1.2 \cdot U_N$

**Frequency range:** 40...60...100 Hz

**Position of application:** horizontal.

**Safety:** IEC 1010/ EN 61010-1 class 2, degree of pollution 2., CAT III. 600V

**Weight:** approx. 1,4 kg.



Type	Cat. no. 1963-03-..	Current ranges AC/ DC	Selectable voltage ranges AC / DC	
			$\cos \varphi = 0,2$	$\cos \varphi = 0,1$
HEWa ~	313	1A		15-30-60-120-240-480 V
	315	5A		15-30-60-120-240-480 V
	301	0.5-1A	15-30-75-150-300-450-600V	
	305	1A	15-30-75-150-300-450-600V	
	302	2.5-5A	15-30-75-150-300-450-600V	
	306	5A	15-30-75-150-300-450-600V	
	307	10A	15-30-75-150-300-450-600V	

Type	Cat. no. 1963-03-..	Current ranges AC/ DC	Selectable voltage ranges	
			AC / DC $\cos \varphi = 0,2$	Three-phase AC $\cos \varphi = 0,2$
HEWa-b ~ and ~	303	0.5-1A	15-30-60-120-240-360-480 V	52-104-208-416 V
	308	1A	15-30-60-120-240-360-480 V	52-104-208-416 V
	304	2.5-5A	15-30-60-120-240-360-480 V	52-104-208-416 V
	309	5A	15-30-60-120-240-360-480 V	52-104-208-416 V
	310	10A	15-30-60-120-240-360-480 V	52-104-208-416 V

Type	Cat. no. 1963-03-..	Current ranges AC/ DC	Selectable voltage ranges			
			AC / DC		Three-phase AC	
			$\cos \varphi = 0,5$	$\cos \varphi = 0,1$	$\cos \varphi = 0,5$	$\cos \varphi = 0,1$
HEWa-b ~ and ~	316	1A		15-30-60-120-240-480 V		104-208-416V
	318	5A		15-30-60-120-240-480 V		104-208-416V
	372	0,5A	6-12-24-60-120-240-360-480 V	15-30-60-120-240-480 V	104-208-416 V	104-208-416 V
	373	1A	6-12-24-60-120-240-360-480 V	15-30-60-120-240-480 V	104-208-416 V	104-208-416 V
	375	5A	6-12-24-60-120-240-360-480 V	15-30-60-120-240-480 V	104-208-416 V	104-208-416 V

On request other ranges are possible

#### Customers requirement:

-Portable electrodynamic power meter.  
-Range: current 0.5-1A  
Voltage: 15-480V AC/DC, 52-416V Three-phase

#### Ordering data:

-Type: HEWa-b  
-Cat. No. **1963-03-303**  
 $\cos \varphi = 0,2$



## Serie "Classic"

For measuring direct and single- and three-phase active power (effective value!).  
During measuring the power in networks having low cos- $\varphi$ , the instrument provides exact reading.

### Technical data

**Movement:** the magnetic shielding of the electrodynamic movement with taut-band bearing allows the instrument to be used in inhomogeneous magnetic field.

**Scale:** Practically linear calibration. *Scale length:* 120 mm.

**Class of accuracy:** 1, acc. to EN60051

**Rated power factor (cos  $\varphi$ ):** see table

**Rated power:**  $U \cdot I \cdot \cos \varphi$  (HEWa, HEWa-b),  
 $\sqrt{3} \cdot U \cdot I \cdot \cos \varphi$  (HEWa-b)

**Consumption of voltage circuit:**

0,82 mA (cos  $\varphi$  = 0,5), and 4,1 mA (cos  $\varphi$  = 0,2) (HEWa , and HEWa-b)

1mA (cos  $\varphi$  = 1), and 2,5 mA (cos  $\varphi$  = 0,5), and 5 mA (cos  $\varphi$  = 0,2) (HEWa)

**Continuous overload:**  $1.2 \cdot I_N$ , and see table

HEW <u>a</u>	HEW <u>a</u> -b
$1.25 \cdot U_N$ , if cos $\varphi$ = 0,2	$1.2 \cdot U_N$ , if cos $\varphi$ = 0,2
$1.5 \cdot U_N$ , if cos $\varphi$ = 0,5	$1.5 \cdot U_N$ , if cos $\varphi$ = 1
$2 \cdot U_N$ , if cos $\varphi$ = 1	

**Frequency range:** 40...60...100 Hz

**Position of application:** horizontal.

**Safety:** IEC 1010/ EN 61010-1 class 2, degree of pollution 2., CAT III. 600V, CAT II. 1000V, CAT I. 1200V

**Weight:** approx. 1,4 kg



TYPE	Cat. No 1963-03...	Selectable voltage ranges				
		Current ranges AC/DC	AC / DC			Three-phase AC
			cos $\varphi$ = 1	cos $\varphi$ = 0,5	cos $\varphi$ = 0,2	cos $\varphi$ = 0,5
HEW <u>a</u>	355	0,5A		6-12-24-60-120-240-360-480V		
	353	1A		6-12-24-60-120-240-360-480V		
	356	5A		6-12-24-60-120-240-360-480V		
	357	10A		6-12-24-60-120-240-360-480V		
	358	0,1A	3-12-30-60-120-300-600V	7,5-30-75-150-300V	15-60-150-300-600V	
	370	0,5A	3-12-30-60-120-300-600V	7,5-30-75-150-300V	15-60-150-300-600V	
	360	1A	3-12-30-60-120-300-600V	7,5-30-75-150-300V	15-60-150-300-600V	
	362	5A	3-12-30-60-120-300-600V	7,5-30-75-150-300V	15-60-150-300-600V	
	363	10A	3-12-30-60-120-300-600V	7,5-30-75-150-300V	15-60-150-300-600V	
HEW <u>a</u> -b	364	0,1A		6-12-24-60-120-240-360-480V		104-208-416V
	371	0,5A		6-12-24-60-120-240-360-480V		104-208-416V
	366	1A		6-12-24-60-120-240-360-480V		104-208-416V
	368	5A		6-12-24-60-120-240-360-480V		104-208-416V
	369	10A		6-12-24-60-120-240-360-480V		104-208-416V

On request other ranges are possible

-Range: current: 1A

**Customers requirement:**

-Portable electrodynamic power meter.

**Ordering data:**

-Type: HEWa.

-Cat. No. 1963-03-360

-Voltage: AC/DC 3-12-30-60-120-300-600V cos  $\varphi$  = 1

7,5-30-75-150-300V cos  $\varphi$  = 0,5

15-60-150-300-600V cos  $\varphi$  = 0,2