

Induction Phase-meters

Analogue indicator to measure $\cos \varphi$



Description

- Does not need an auxiliary power supply
- DIN box with dimensions 96 and 144.
- Class 1.5
- Balanced and unbalanced single and three-phase circuits.
- 4 quadrants

Application

Measurement of $\cos \varphi$ in balanced or unbalanced single and three-phase circuits.

Features

	PIC A / PIC B	PIC E
Voltage circuit		
Consumption	5 V·A / 20 mA	15 mA
Frequency	49.5 ... 50.5 Hz	4 T - 5T
	59.4 ... 60.6 Hz	54 ... 66 Hz
Overloads		1.2 U_n permanent 2 U_n during 5 s
Current circuit		
Nominal current		... 5 A
Consumption	4 V·A	2.5 V·A
Frequency		20 ... 100 Hz
Overloads		1.2 I_n permanent 5 I_n during 30 s 10 I_n during 5 s 40 I_n during 1 s
Accuracy		± 1.5 % FS
Ambient conditions		
Operating temperature		+10 ... +30 °C
Limit temperature		-25 ... +40 °C
Altitude		2000 m
Dimensions		See the following table
Weight		See the following table
Type of box		panel
Degree of protection:		
Front panel		IP 52
Terminals		IP 00
Insulation voltage		2 kV, during 1 min, between the mechanism and the box
Standards	BS 89, EN 60051, IEC 144, UL 94, DIN 43780, IEC 51, UNE 21318	

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References

Induction Phase-meters 360°, single-phase



Type	PIC 96 A	PIC 144 A
Class	1,5	
Scale	360°, P1	
Dimensions (mm)		
a	96	144
b	96	144
c	101,2	102
Weight (g)	1 910	1 960
V	$\cos \varphi$ 0-1-0	
110	M13631	M13641
230	M13632	M13642
400	M13633	M13643

Induction Phase-meters 360°, three-phase



	BALANCED		UNBALANCED	
Type	PIC 96 B	PIC 144 B	PIC 96 E	PIC 144 E
Class	1,5			
Scale	360°, P1			
Dimensions (mm)				
a	96	144	96	144
b	96	144	96	144
c	101,2	102	101,2	102
Weight (g)	1 410	1 460	1 410	1 460
V	$\cos \varphi$ 0-1-0			
110	M13634	M13644	M13637	M13647
230	M13635	M13645	M13638	M13648
400	M13636	M13646	M13639	M13649

Dimensions

	C0	C1	C2	C3	C4	C5	C6	C7
a	48	72	96	144	72	96	96	144
b	44	66	89,6	137	66	89,6	89,6	137
c	41	43	43	64,5	57,2	57,2	95,5	94,7
d	5	5,2	5,2	7,1	5,2	5,2	5,2	7,1
e	45 ⁺¹	68 ⁺¹	92 ⁺¹	138 ⁺¹	68 ⁺¹	92 ⁺¹	92 ⁺¹	138 ⁺¹

Dimensions (mm)

Coding table

Induction Phase-meters	M	1	X	X	X	X	0	0	X
	Code						Internal Code		↑
	Secondary current						Standard ... / 5 A		0
						... / 1 A		1	

Connections

PIC 96A
PIC 144A

PIC 96B
PIC 144B

PIC 96C
PIC 144C

PIC 96E
PIC 144E