

INTISARI

PENGARUH KEMIRINGAN KEKANAN KWH METER TERHADAP HASIL TERA KWH METER ANALOG 1 FASA MERK ACTARIS

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Telah dilakukan penelitian tentang Pengaruh kemiringan kWh meter terhadap hasil tera kWh meter analog 1 fasa Merk Actaris. Tujuan dari penelitian ini adalah untuk mengetahui seberapa besar kemiringan sudut terhadap hasil pengujian kWh meter di laboratorium uji kWh meter Direktorat Metrologi.

Metode yang digunakan pada pengujian ini adalah dengan menggunakan sub-standart ZERA TPZ-308, yaitu standart uji yang digunakan untuk melakukan pengujian kWh meter.

Hasil penelitian yang dilakukan pada kedua kWh meter Dinamis dengan merk dan spesifikasi yang sama dengan No seri yang berbeda, didapatkan hasil nilai Error rata-rata pada masing-masing sudut kemiringan dari kedua kWh meter. Pengujian kWh meter Dinamis 1 pada Arus Dasar 100% in Cos 1 (10 Putaran) yaitu 0° error 1,33%, 10° error 1,49%, 20° error 1,61%, 30° error 1,69%. Arus Dasar 100% in Cos 0,5 (10 Putaran) yaitu 0° error 1,32%, 10° error 1,32%, 20° error 1,42%, 30° error 1,74%. Arus Dasar 5% in Cos 1 (2 Putaran) yaitu 0° error 1,74%, 10° error 1,84%, 20° error 1,93%, 30° error 2,45%. kWh meter Dinamis 2 pada Arus Dasar 100% in Cos 1 (10 Putaran) yaitu 0° error 1,32%, 10° error 1,50%, 20° error 1,62%, 30° error 1,74%. Arus Dasar 100% in Cos 0,5 (10 Putaran) yaitu 0° error 1,33%, 10° error 1,39%, 20° error 1,64%, 30° error 1,82%. Dan Pada Arus Dasar 5% in Cos 1 (2 Putaran) yaitu 0° error 1,78%, 10° error 1,85%, 20° error 1,91%, 30° error 2,25%.

Kata Kunci : kWh Meter Dinamis, Tera

ABSTRACT

THE INFLUENCE OF KWH METER ON THE RESULT OF TERA OF KWH METER 1 PHASE ANALOGUE OF ACTARIS BRAND

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The impact of kWh meter on the result of Tera of kWh meter 1 phase analogue of actaris brand had been conducted. This research was motivated by the division of the legal metrology field so that the test result on the Kwh meter could be determined whether it pass or not when conducted on the installation position that was less upright. This research aims to identify how big slope angle to the test result kWh meter in lab test kWh meter Directorate of Metrology.

The method used in this research is sub-standard ZERA TPZ-308, the test standard in conducting the kWh meter test.

Both kWh meters Dynamic with the same brand and specification with the different series showed error average value on each slope angle of both kWh meters. The result of kWh meter Dynamic 1 on Basic Current 100% in Cos 1 (10 Rounds) was 0° error 1.33%, 10° error 1.49%, 20° error 1.61%, 30° error 1.69%. Basic Flow 100% in Cos 0,5 (10 Rounds) was 0° error 1.32%, 10° error 1.32%, 20° error 1.42%, 30° error 1.74%. Basic Flow 5% in Cos 1 (2 Rounds) was 0° error 1.74%, 10° error 1.84%, 20° error 1.93%, 30° error 2.45%. While, on the dynamic kWh meter 2 on Basic Flow 100% in Cos 1 (10 Rounds) was 0° error 1.32%, 10° error 1.50%, 20° error 1.62%, 30° error 1.74%. Basic Flow 100% in Cos 0,5 (10 Rounds) was 0° error 1.33%, 10° error 1.39%, 20° error 1.64%, 30° error 1.82%. Whereas, at Basic Currents 5% in Cos 1 (2 Rounds) was 0° error 1.78%, 10° error 1.85%, 20° error 1.91%, 30° error 2.25%.

Keyword : Kwh meter analouge, Tera