

Installation of Insert Transformer To Overload Overload On Transformer  
Distribution in Rayon Cilegon

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## **ABSTRACT**

Distribution transformer is a very important component in distributing electricity from the distribution substation to consumers. Damage to the distribution transformer causes the service continuity to the consumer will be disrupted (the occurrence of electricity outages or blackouts). Extinction is a disadvantage that causes generating costs to increase depending on the price of unsold KWH. The selection of distribution transformer rating which is not suitable to the load requirement will cause the efficiency to be small, as well as the loading on the distribution transformer whose percentage exceeds 80% which can affect the life / life time of a distribution transformer and reduce the level of service quality to the consumer. Therefore, an action is needed so that the distribution transformer of the percentage of loading is not overloaded by adding the inner transformer. In the KPA Distribution Substation the percentage of loading after the addition of transformer in the Insert ALC to be 49.63% and the loading of the transformer in the Distribution Center of the UKS Distribution percentage of loading after the addition of transformer in SUS Inserted SUD to 49.51%. In this case proves that the percentage of the load becomes low which initially the percentage of loading is more than 80%, so it can extend the life / life time of the distribution transformer and improve the quality of service to the customer.

Keywords: Distribution transformer, efficiency, overload, insert transformer