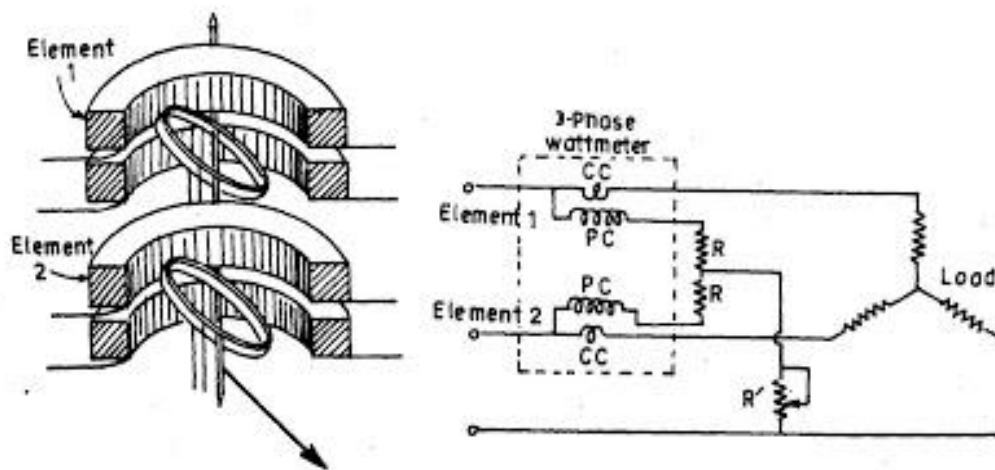


# DYNAMOMETER TYPE THREE-PHASE WATTMETER

- A dynamometer type three-phase wattmeter consists of two separate wattmeter movements mounted together in one case with the two moving coils mounted on the same spindle.
- The arrangement is shown in Fig.
- There are two current coils and two pressure coils.
- A current coil together with its pressure coil is known as an element. Therefore, a three phase wattmeter has two elements.
- The connections of two elements of a 3 phase wattmeter are the same as that for two wattmeter method using two single phase wattmeter.
- The torque on each element is proportional to the power being measured by it.
- The total torque deflecting the moving system is the sum of the deflecting torque of the two elements.
- Hence the total deflecting torque on the moving system is proportional to the total Power.

- In order that a 3 phase wattmeter read correctly, there should not be any mutual interference between the two elements.
- A laminated iron shield may be placed between the two elements to eliminate the mutual effects.



(fig) three phase wattmeter

Source: <http://mediatoget.blogspot.in/2012/01/dynamometer-type-three-phase-wattmeter.html>