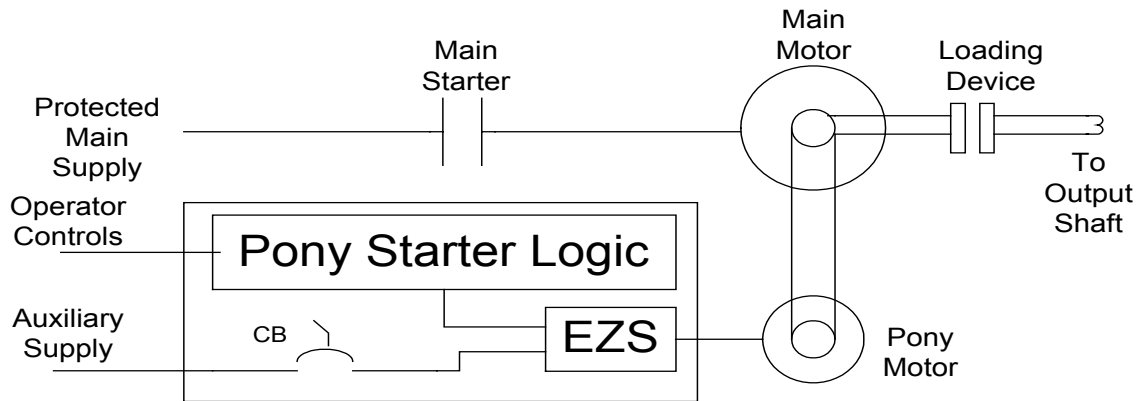


APPLICATION NOTES PONY MOTOR STARTING



Purpose: To minimize starting current when starting a large motor in an unloaded condition.

Sequence of Operation:

- 1) Start signal to the Pony Starter Logic causes the EZ6 to accelerate the Pony Motor in a current limit condition (typically 300% full load), which in turn accelerates the main motor.
- 2) When the "up to speed" circuit in the EZ6 senses that acceleration is complete, it causes the Pony Starter Logic to disable the EZ6 and then enable the main motor starter. Since the main motor is already at full speed, starting current is nearly non-existent (there will be a short surge of current to magnetize the windings.)
- 3) The loading mechanism (clutch, feeder, etc.) is then activated by an auxiliary contact from the main starter to apply the load.
- 4) A stop signal to the Pony Starter Logic disables the main starter and resets the Pony Starter Logic for another sequenced start.

Protection: Since the acceleration time for the Pony Motor precludes use of standard overload protection, stall protection is provided by a stall time circuit which will disable the Pony Starter Logic and provide an alarm contact if the Pony Motor fails to reach full speed in the preset time. A stall trip requires manual reset at the Pony Starter.