E.S.P

Electronic Shear Pin

Total Process protection with Electronic 'Torque Overload Protection'

'No more unreliable shear pins, troublesome slipping clutches or other cumbersome torque limiting devices'

The unique electronic circuitry within the ZENER ESP system monitors certain characteristics of the motor/gearbox to closely approximate the output torque of the drive system. Should the output torque of the motor/gearbox exceed the desirable pre-selected limit, for a pre-selected time, the ESP system will automatically disconnect the motor from it's electrical supply, ensuring complete protection for the entire process.

√ Suitable for Single Phase & 3 Phase Motors

- The ESP is designed for single phase or three phase motors of any size.

√ More Accurate maximum Torque Protection

- Adjustable 'Overload Trip Point' can be accurately set to any desired level from 0-150% of motor/gearbox full load torque, ensuring reliable process protection every time.
- Does not rely on the total motor current only. The ESP's superior electronics accurately monitor a selection of motor/gearbox characteristics to determine the torque output of the drive system.
- The Zener ESP incorporates an adjustable 'Motor Start Time' to enable the motor/gearbox to reach full running speed without nuisance tripping.
- An adjustable 'Trip Time Delay' is provided to eliminate nuisance tripping during momentary overloads when automatic shutdown is not required.

√ Easier to install

- The ESP's simple wiring requirements makes the Zener ESP system easy to install in new or existing equipment.
- An internal test signal is provided for easy and quick calibration of the ESP 'Overload Trip Point', 'Motor Start Time' and 'Trip Time Delay' periods and subsequent testing of System operation.
- The ESP can be supplied on a baseplate complete with C.T.

√ No Maintenance requirements

- The Zener ESP eliminates lengthy and costly mechanical repairs or process downtime due to overload/ over torque damage.
- The ESP's highly reliable electronic componentry requires no regular maintenance schedule or down time for inspection.

√ Convenient, Efficient & Safe

- The Zener ESP can be instantly reset at the push of a button, no process downtime for mechanical repairs.
- The ESP can be adjusted at any time without stopping the machine.
- Operation safety is assured when resetting the ESP after an automatic shut-down as the motor requires re-starting from its independent control system.
- The ESP's operation can be tested at any time whilst the motor is operating or stationary.
- LED's provide indication of internal functions and to assist with the calibration of operating parameters.

ESP Selection	Part No.
ESP-1 Module Only	B032123
ESP-1 on Base Plate (excl CT)	B032130
C.T Selection	**Part No.**
Z701 Transformer	G000013
CT 50/5A	G008002
CT 75/5A	G008003
CT 100/5A	G008004
CT 150/5A	G008005
CT 200/5A	G008006

Refer to instruction manual for details of CT required.

Australian Designed & Manufactured