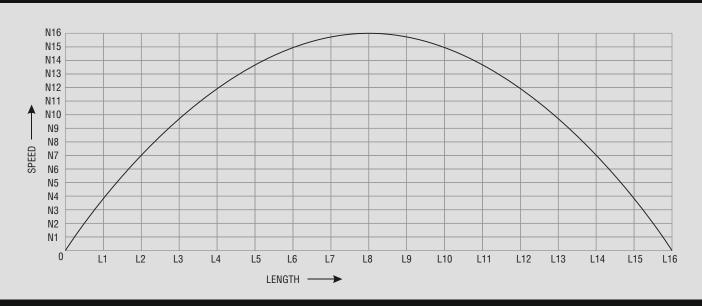
POWERMAG

TEXDRIVE

APPLICATION IN RING FRAME / SPINNING FRAMES





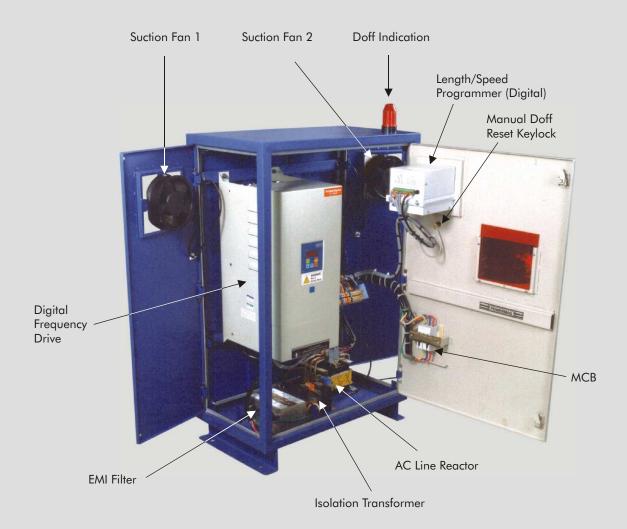
POWERMAG TEXDRIVE

The POWERMAG Textrive for Ring & Spinning Frames has been designed to suit textile environments featuring a totally enclosed panel consists of variable frequency drive, speed/length programmer and a line side AC reactor.

POWERMAG Textdrive controls the speed of the ring frame main motor steplessly and smoothly. It generates different speed-length patterns needed for optimum spinning time and reduction of wastage.

POWERMAG Textrive gives 5-15% increase in production, uniform hanks and minimum manpower on production data collection.

POWERMAG Textrive designed and made indigenously provides trouble free running, easy maintenance, component level service support after sales.



TECHNICAL SPECIFICATION

| MOTOR OUTPUT HP | 10 | 15 | 20 | 25 | 30 | 40 | 50 | 60 | |
|------------------------|-----|----|----|------|----|----|----|----|--|
| CAPACITY | 7.5 | 11 | 15 | 18.5 | 22 | 30 | 37 | 45 | |
| OUTPUT CURRENT IN AMPS | 17 | 22 | 31 | 38 | 43 | 61 | 70 | 84 | |

| Input Ratings | Power Supply Allowable Variation | 3 Phase, 415v, 50Hz Voltage: +/-10% Frequency: +/- 5% Imbalance in power supply 3% or Less. | | | | |
|---|--|--|--|--|--|--|
| Output Ratings | Output Voltage Output Frequency Overload Capacity | 3 Phase, 415V 50/60/100/120/150/180/200/240Hz 150% of rated current for 1 min | | | | |
| Control Specification | Control System Freq. Control Range Torque boost Accel./Decel./time | Sinusoidal Wave PWM 2 to 600 Hz 30 selectable modes 0.1 to 999 Sec (Independently adjustable) | | | | |
| Protection | Stall Prevention | When the Motor current reaches the maximum limit on accel./decel., the frequency change is suppressed, so preventing OLD./OV trip. | | | | |
| | AC Drive trip and error messages | Over Voltage (OV), Under Voltage (UV), Over Current (OLD), Over Temperature (OT), Short Circuit (SC) | | | | |
| Indication | Front panel Indication | Spindle speed, production in hanks, production rate, TPI, TPM, present running step, motor RPM | | | | |
| Memory | Function | Data storage when intermediate stop occurs due to trouble or manual stop or power Interruption. On restarting, the speed and time will immediately return to the settings before stoppage. | | | | |
| Signals | Sensors | Length Sensor, Speed Sensor and Doff Reset Sensor. | | | | |
| Others Bypass Facility (optional) Pneumofil Motor Control | | Bypass facility is provided to bypass Drive. Supply for the pneumofil motor and Interlock with AC Drive is provided. i.e. Drive will not start unless pneumofil motor starts. | | | | |
| | Front Panel Controls | MCB ON/OFF, Manual Doff Reset Keylock, Length/Speed Programmer | | | | |

ADVANTAGES OF POWERMAG TEXDRIVE OVER CONVENTIONAL METHODS

- Optimum speed to be obtained depending on yarn number count, bobbin type and fibre material.
- Reduced thread breakage on start up and full bobbin high speed operation permissible
- Eliminates use of power factor correcting capacitors since AC drive power is unity power factor
- Single motor can be used for all operations, to achieve any required speed, thus eliminating the need to change pulleys etc.
- By programming length characteristics, full automation of the machinery may be achieved as no further annual intervention during spinning is required
- Increased machine life due to soft start
- Since the starting current of the motor is only 100 % instead of 600 %, supply voltage dips and electrical stress on the supply system are eliminated
- No moving parts are used, reducing maintenance
- Motor control switch gear, is totally eliminated.
- Memory function stores the instantaneous speed and timing data before stoppage due to Intermediate stop or power failure. On restarting, the speed and length will Immediately return to pre-stoppage settings
- Additional feature to increase the motor rpm more than the name plate rated speed

OTHER STANDARD FEATURES

- Length based spindle speed selection
- Percentage based spindle speed selection
- Time based spindle speed selection
- Facility to program 16 steps of spindle speed
- Speed pattern can be programmed for 3 different counts
- Set spindle speed is maintained thought the Doff
- Uniform hanks in production
- All the machine parameters can be viewed in the alpha numeric lines LCD display
- Real time clock is provided
- Shift time setting and auto shift changing facility
- Display shows
 - Spindle speed in 5 digits
 - Production in hanks (Shift wise and Total)
 - Production rate (Delivery rate mtrs / min)
 - TPI and TPM
 - Run time, Down time
 - Present running step, length & shift
 - Motor shaft rpm
 - Compulsory slow speed selection time
 - Auto switch ON from compulsory slow
 - Power ON delay time & delay speed in rpm selection facility
 - Pre Doff indication
 - Programmable Acceleration / Deceleration time
 - Due to machine maintenance or any other reason machine is stopped, the elapsed length is in memory to complete the set length
 - ON LINE analysis through computer net working
 - Password protection to avoid unauthorized settings
 - Manual DOFF reset keylock

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