# COMBIVERT



The optimal frequency inverter system ...







### from Drive Specialist for Textile Machines

#### Your advantages

- 15 years of experience in the textile machine branch realized in a complete frequency inverter series
- competent counsel directly from the manufacturer of textile-machine suited drive systems
- KEB COMBIVERT permits the standard control with analog signals as well as the digital data communication between frequency inverter and primary process control systems
  - e.g.: CAN, LON, Profibus, Interbus Loop. The transparency of the drive is given.
- cost optimization through mass production
- · keeping the corresponding standards CE, VDE, UL, CUL
- worldwide service
- modern manufacturing facilities in Germany, Japan, USA
- options: radio interference suppression, serial networking, system energy recovery, sine-wave filter, choke, transformer



#### Advantages for ring spinning machines

- complete inverter series from 0.37 kW up to 250 kW
- low-noise and low-loss power stages with IGBT power semiconductors
- cooling of power stage
  - a) conventional with forced ventilation of control cabinet or
  - b) with push-through heat sink or
  - c) with liquid cooling, consequently closed design of control cabinets
  - d) as motor inverter
- user friendly operation
- speed presetting for the functions:
- spinning start-up speed
- production speed
- spin-out-speed
- position regulation

analog: ± 10V, 0...10V or 0...20mA, 4...20mA

digital: - as set value, 8 fixed speeds selectable via inputs

- serial interface with
  - DIN 66019 (Ansi X3.28)
  - Profibus
  - Interbus
  - CAN-BUS
  - LON-BUS



- The drive solution with frequency inverters for spinning machines
- 1 main drive for the spinning spindle
- several secondary drives for delivery devices, drafting system, ring rail, conveyor belt doffer etc.
- Advantages of the drive concept KEB COMBIVERT for the modernization of ring spinning machines

Features	Produktivity	Advantage
Short-time high power reserves	□ fast balloon build-up through controlled acceleration to the spinning start-up speed	✓ low thread breakage rate at the start
Programmable parameter sets Multi-REF-Input Multi-I/O-Input	production speed externally selectable and adjustable by way of potentiometer. The relation of max. production speed to thread breakage rate can be optimized.	<ul> <li>weekend shift with reduced operator personal</li> </ul>
Serial interface DIN 66019 (ANSI X3.28) PROFIBUS, INTERBUS CAN BUS, LON-BUS	⇒ optimal drive curve program	<ul> <li>✓ optimally reduced running-in programm</li> <li>✓ highest production rate corresponding to operating state of machine</li> </ul>
Motor voltage stabilization and cosφ - control	high speed constancy even in controlled operation	<ul> <li>no uncertain production results, no uneven balloon</li> </ul>
Liquid cooling	⇒ high availability	<ul> <li>no maintenance relieving the air conditioning systen</li> </ul>
Energy saving function	□ reduced energy consumption	✓ reduction of energy cost ✓ per kg yarn
	reduction of thread breakages by maintaining the centrifugal forces at growing balloon	✓ increased production improved yarn quality
	controlled spin-out, at that commutated machine shut down until underwindings	improved further processing of the full cops, underwindings controllable
	controlled braking until machine standstill while taking into account the ring rail position is possible at any time.	minimal thread breakages at restart
	=> easy operating data acquisition	transparency of ring spinning machine

# Inquire about drive solutions for

- machines for spinning preparation, twisting, rope making, chemical fibers, texture, ...
- spooling, reeling and winding machines
- · machines for the weaving mill, production of carpet, cloth and felt
- hosiery and knitting machines
- textile processing machines: washing, dyeing, printing, tentering, drying and subsequent treatment machines

## **TELEFAX Reply**

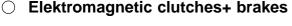
### Fax 05263 / 401-145

Name:	Company:
Function:	Street:
Telephone:	Town:

### Yes, we are interested in your: Delivery Program

#### Open loop frequency inverters 0,37 ... 315 kW 0,75 ... 90 kW Closed loop frequency inverters Regenerative units 11 ... **70 KW** Servo systems 0,2 ... 70 Nm 0,12 ... 45 kW Inline helical geared motors Helical bevel geared motors 0,12 ... 30 kW Shaftmounted helical geared motors 0,12 ... 30 kW 0,37 ... 5,5 kW Worm gears

- **Application-Know-How**
- Info material-handling
- Orivepos
- Info wood processing
- Info plastic machines
- Info food processing technique
- Info lift technology
- Info positioning
- Info pumps and fans
- Info textile industry
- Consultation



- Spring-applied brakes
- Permanent-magnet clutches + brakes



Karl E. Brinkmann GmbH
Försterweg 36 - 38 • D - 32683 Barntrup
Telefon 0 52 63 / 4 01 - 0 • Telefax 4 01 - 116
Internet: www.keb.de • E-mail: info@keb.de

