

POWERTECH

TORQUE
MOTORS

ST
SERIES

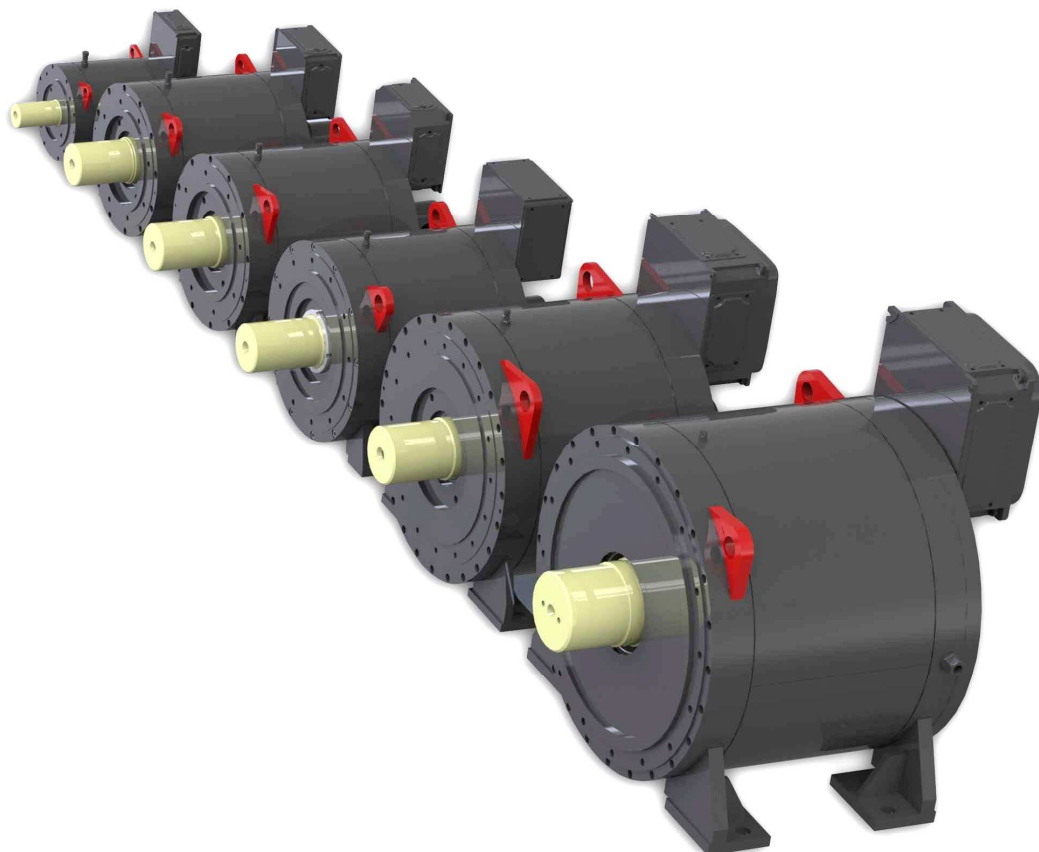
SYNCHRONOUS PERMANENT MAGNETS TORQUE MOTORS

RELIABILITY
VERY HIGH TORQUE
EXCELLENT TORQUE/WEIGHT RATIO
VERY HIGH EFFICIENCY AT LOW SPEED
HIGH POLARITY (up to 44 poles) FOR EASY
CONTROL AT LOW SPEED
SUITABLE FOR VECTOR DRIVES
IGBT COMPLIANT
WIDE RANGE OF CUSTOMIZATION AND
OPTIONS

TYPICAL APPLICATIONS

PRESSES
ENERGY RECOVERY SYSTEMS
FOOD BOXES EXTRUDERS
PAPER AND CARDBOARD PRODUCTION
MACHINERY
PROCESSING AND CUTTING METAL PLATES
METAL WIRE PROCESSING MACHINERY
PLASTIC AND RUBBER EXTRUDERS
LIFTING AND HANDLING SYSTEMS
PACKAGING MACHINERY
PRINTING MACHINERY
TRACTION CONTROL
MACHINE TOOLS
COMPRESSORS

IP PROTECTION **IP54** or **IP55**
COOLING METHOD **LIQUID**



TECHNICAL SPECIFICATIONS

| | |
|--------------------|---|
| IP PROTECTION | IP54 (IP55 on request) |
| THERMAL PROTECTION | PT100 (and other on request) |
| SHAFT EXTENSION | FITTED KEY (PLAIN SHAFT on request) |
| BALANCING | FULL KEY (HALF KEY on request) |
| VIBRATION GRADE | A (B on request) |
| INSULATION CLASS | F |
| COOLING METHOD | Liquid 20°C (68°F) + GLYCOL 20% Flow rate by size |
| AMBIENT CONDITIONS | 0 ÷ 40°C (32 ÷ 104°F) 1000m ASL |
| TRANSDUCER | ENCODER OR RESOLVER (on request) |
| MOUNTING FORM | B3, B5, B35 by request |
| PAINTING | NITRO, POLYURETHANIC, C5M, on request |

STANDARD WINDINGS DATA

| TYPE | Poles 2p= | Max. torque at 400V Nm | RATED POWER RANGE kW | RATED TORQUE RANGE Nm | RATED SPEED RANGE rpm | Max. suggested speed at const. Power 400V rpm |
|---------------|--------------|------------------------------|-------------------------------|--------------------------------|-----------------------------|--|
| ST22 FLUID 13 | 22 | up to 1295 | 6,1 - 30 | 292 - 730 | 200 - 400 | up to 700 |
| ST22 FLUID 16 | 22 | up to 2515 | 13,1 - 62,2 | 595 - 1530 | 200 - 400 | up to 700 |
| ST30 FLUID 20 | 30 | up to 6030 | 13 - 94 | 1200 - 3100 | 100 - 300 | up to 500 |
| ST30 FLUID 25 | 30 | up to 9410 | 21,6 - 131 | 2000 - 5150 | 100 - 250 | up to 450 |
| ST44 FLUID 31 | 44 | up to 17730 | 49,6 - 225 | 4600 - 8850 | 100 - 250 | up to 400 |
| ST44 FLUID 40 | 44 | up to 31450 | 100 - 419 | 11650 - 20400 | 80 - 200 | up to 350 |

All data outputs are referred to power converter clocking frequency (PWM) >4kHz

NOT COOLED VERSION IC410 on demand (POWER DERATING -55% ~ than ST FLUID SERIES)