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Servo Motor Test Equipment  
**KEEP IT RUNNING !**



## TI-3000 V2.8 Rel1 06/28/04

### MANUFACTURERS & TYPES SUPPORTED

| Option   | MFG              | TYPE   | POLES                      | +U -V Lockup                                     |
|----------|------------------|--|----------------------------|--|
| Standard | Generic Brush    | N/A  | N/A                        | N/A  |
| Standard | Generic Resolver | N/A  | 2,4,6,8,12                 | Selectable                                       |
| Standard | Generic Pulse    | 120 Deg<br>60 Deg  | 2,4,6,8,12<br>2,4,6,8,12   | See below<br>See below                           |
| Standard | Generic Encoder  | N/A  | 2,4,6,8,12                 | Selectable                                       |
| Standard | Fanuc            | Alpha, Beta32 & C<br>Alpha i & Beta64<br>Incremental & ABS<br>Pulsecoder A, B & B2<br>Pulsecoder A, B & B2 | 8<br>8<br>8<br>6<br>8      | 330E deg<br>330E deg<br><br>330E deg<br>330E deg |
| TI-3000I | Indramat Digital | ECN212/ECN224<br>ECN413 (1313), ECN425 (1325)<br>DSF 2SN-S (Stegmann)                                      | Memory<br>Memory<br>Memory | Memory<br>Memory<br>Memory                       |
| TI-3000K | Kawasaki         | HE-02, 8192 CPR<br>H20M21 8192 CPR   | 4,6,8<br>4.8               | 150E deg<br>150E deg                             |

| Option    | MFG         | TYPE                           | POLES | +U –V Lockup |
|-----------|-------------|--------------------------------|-------|--------------|
| TI-3000M  | Mitsubishi  | OBE12                          | 8     | 150E deg     |
|           |             | OBA13                          | 4,8   | 150E deg     |
|           |             | OSA104                         | 4,8   | 150E deg     |
|           |             | OSA17 17bit                    | 8     | 150E deg     |
| TI-3000N  | Nachi       | Sumtak AEC2048 (or equivalent) | 8     | 180E deg     |
| TI-3000S  | Sanyo Denki | Incremental U, V, W comm.      | 4     | 150E deg     |
|           |             | Incremental no comm.           | 4     | 150E deg     |
|           |             | HE-02 8192 CPR                 | 4     | 150E deg     |
|           |             | ABS-E 2048, 8192 CPR           | 4     | 150E deg     |
|           |             | E07B151306, 32768 CPR          | 8     | 150E deg     |
| TI-3000SH | Shinko      | Tamagawa TS5778, 8192 CPR      | 8     | 150E deg     |
|           |             | Tamagawa TS5778, 16384 CPR     | 8     | 150E deg     |
| TI-3000H  | Siemens     | Endat01 ECN1313 2048           | 6,8   | 150E deg     |
|           |             | Endat01 EQN1325 2048           | 6,8   | 150E deg     |
| TI-3000Y  | Yaskawa     | Incremental UVW                | 8     | 150E deg     |
|           |             | C Channel                      | 8     | 150E deg     |
|           |             | ABS                            | 8     | 150E deg     |

### COLUMN DESCRIPTIONS

MFG – Motor manufacturer names or generic type selectable using the FBK MFG key.

TYPE – Feedback types selectable using the FBK TYPE key for a given manufacturer.

POLES – Number of poles supported for each manufacturer and feedback type. For Generic types, this information is selectable using the Setup Display accessed by the SETUP key. For manufacturer specific types, the number of poles is selected using the FBK TYPE key.

+U –V Lockup - Generic Pulse – The motor must be aligned such that the V signal is HI, the W signal is LO and the U pulse is at the toggle position for a +U –V lockup.

Generic Resolver and Generic Encoder – The lockup angle from 000 to 359 degrees may be entered on the Setup Display accessed by the SETUP key

Serial Encoders (no memory) – Only motors aligned per the +U -V lockup angle shown in this column are supported.

Serial Encoders (commutation in memory) – These encoders have the commutation information stored in the encoder memory. The TI-3000 reads the commutation information from the encoder memory and runs these motors correctly proving the encoder is aligned on the motor properly.