

| MOTOR PERFORMANCE | | Winding codes | PD | PD | RD | RD |
|-------------------|-------------------------------------|---------------|------------------|--------------------|------------------|--------------------|
| | | UNIT | FREE AIR COOLING | FORCED AIR COOLING | FREE AIR COOLING | FORCED AIR COOLING |
| Fp | Peak force | N | 1950 | 1950 | 1980 | 1980 |
| Fc | Continuous force | N | 292 | 311 | 295 | 315 |
| Fs | Standstill force | N | 221 | 235 | 224 | 238 |
| Ip | Peak current | Arms | 44.3 | 44.3 | 70.1 | 70.1 |
| Ic | Continuous current | Arms | 6.56 | 6.98 | 10.4 | 11.0 |
| Is | Standstill current | Arms | 4.96 | 5.27 | 7.85 | 8.34 |
| vs | Rated low speed | mm/s | 0.38 | 0.69 | 0.38 | 0.68 |
| Pc | Power dissipation @ Ic | W | 232 | 261 | 233 | 262 |
| Fd | Max. detent force (average to peak) | N | 0 | 0 | 0 | 0 |
| Fa | Attraction force | N | 0.0 | 0.0 | 0.0 | 0.0 |

| MOTOR SETTING | | UNIT | | | | |
|---------------|-----------------------------------|------------|-------|-------|-------|-------|
| Kt | Force constant | N/Arms | 46.2 | 46.2 | 29.6 | 29.6 |
| Ku | Back EMF constant (*) | Vrms/(m/s) | 27.9 | 27.9 | 17.8 | 17.8 |
| Km | Motor constant | N/√W | 23.8 | 23.8 | 24.0 | 24.0 |
| R20 | Electrical resistance at 20°C (*) | Ohm | 2.51 | 2.51 | 1.01 | 1.01 |
| L | Electrical inductance (*) | mH | 4.51 | 4.52 | 1.85 | 1.85 |
| rth | Thermal time constant | s | 1670 | 928 | 1680 | 941 |
| Rth | Thermal resistance | K/W | 0.475 | 0.420 | 0.473 | 0.419 |
| 2tp | Magnetic period | mm | 64 | 64 | 64 | 64 |
| mw | Magnetic way mass | kg/m | 13.3 | 13.3 | 13.3 | 13.3 |
| mm | Motor mass | kg | 1.50 | 2.09 | 1.52 | 2.11 |

| MOTOR ENVIRONMENT | | UNIT | | | | |
|-------------------|----------------------------------|-------|------|------|------|------|
| Udc | Nominal DC bus voltage | VDC | 600 | 600 | 600 | 600 |
| Ss | Stator exchange surface | m² | 0.25 | 0.25 | 0.25 | 0.25 |
| x | Assumed stroke | m | 1.1 | 1.1 | 1.1 | 1.1 |
| θamb | Ambient temperature | °C | 20 | 20 | 20 | 20 |
| θmax | Maximum coil temperature | °C | 130 | 130 | 130 | 130 |
| θa | Inlet air temperature | °C | N/A | 20 | N/A | 20 |
| qa | Minimum air flow | l/min | N/A | 66 | N/A | 66 |
| Δpa | Minimum inlet air gauge pressure | bar | N/A | 0.8 | N/A | 0.8 |

Notes: (*) terminal to terminal.
Hypotheses and tolerances are in ETEL Integration Manual.

Caution: Any use of the motor beyond speed/force limit could lead to hazardous voltage and serious injuries. Customer is responsible for setting safeties/limitations that will keep the motor in its safe operating area. ETEL cannot be held responsible if the motor is used in an improper way.

