

| MOTOR PERFORMANCE | | Winding codes | 3QC | | | |
|-------------------|-------------------------------------|---------------|------------------|--|--|--|
| | | UNIT | FREE AIR COOLING | | | |
| Fp | Peak force | N | 3070 | | | |
| Fc | Continuous force | N | 580 | | | |
| Fs | Standstill force | N | 438 | | | |
| Ip | Peak current | Arms | 44.7 | | | |
| Ic | Continuous current | Arms | 6.00 | | | |
| Is | Standstill current | Arms | 4.55 | | | |
| vs | Rated low speed | mm/s | 0.13 | | | |
| Pc | Power dissipation @ Ic | W | 207 | | | |
| Fd | Max. detent force (average to peak) | N | 39 | | | |
| Fa | Attraction force | N | 6880 | | | |

| MOTOR SETTING | | UNIT | | | | |
|---------------|-----------------------------------|------------|-------|--|--|--|
| Kt | Force constant | N/Arms | 102 | | | |
| Ku | Back EMF constant (*) | Vrms/(m/s) | 61.9 | | | |
| Km | Motor constant | N/√W | 50.9 | | | |
| R20 | Electrical resistance at 20°C (*) | Ohm | 2.69 | | | |
| L | Electrical inductance (*) | mH | 18.5 | | | |
| rth | Thermal time constant | s | 2540 | | | |
| Rth | Thermal resistance | K/W | 0.525 | | | |
| 2tp | Magnetic period | mm | 32 | | | |
| mw | Magnetic way mass | kg/m | 12.6 | | | |
| mm | Motor mass | kg | 4.40 | | | |

| MOTOR ENVIRONMENT | | UNIT | | | | |
|-------------------|--------------------------|------|------|--|--|--|
| Udc | Nominal DC bus voltage | VDC | 600 | | | |
| Gm | Mechanical gap | mm | 0.90 | | | |
| Ss | Stator exchange surface | m² | 0.06 | | | |
| x | Assumed stroke | m | 0.51 | | | |
| θamb | Ambient temperature | °C | 20 | | | |
| θmax | Maximum coil temperature | °C | 130 | | | |

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.

