## SH31001M11F2100

servo motor SH3 100 3,3Nm,key,single,brake,90°conn.IP65/IP65,6k RPM



## Main

| Range compatibility       | PacDrive 3  |  |  |
|---------------------------|-------------|--|--|
| Product or component type | Servo motor |  |  |
| Device short name         | SH3M        |  |  |

## Complementary

| Complementary             |  |
|---------------------------|--|
| Maximum mechanical speed  | 6000 rpm   |
| [Us] rated supply voltage | 115480 V   |
| Phase                     | Three phase  |
| Continuous stall current  | 1.8 A  |
| Continuous stall torque   | 29.21 lbf.in (3.3 N.m) 115480 V three phase  |
| Peak stall torque         | 84.97 lbf.in (9.6 N.m) 115480 V three phase  |
| Nominal output power      | 210 W 115 V three phase<br>410 W 230 V three phase<br>790 W 400 V three phase<br>930 W 480 V three phase   |
| Nominal torque            | 28.32 Lbf.In (3.2 N.m) 115 V three phase<br>27.88 Lbf.In (3.15 N.m) 230 V three phase<br>26.55 Lbf.In (3 N.m) 400 V three phase<br>26.11 lbf.in (2.95 N.m) 480 V three phase |
| Nominal speed             | 625 rpm 115 V three phase<br>1250 rpm 230 V three phase<br>2500 rpm 400 V three phase<br>3000 rpm 480 V three phase  |
| Maximum current Irms      | 6.3 A  |
| Shaft end                 | Parallel key   |
| Shaft diameter            | 0.75 in (19 mm)  |
| Shaft length              | 1.57 in (40 mm)  |
| Key width                 | 0.24 in (6 mm)   |
| IP degree of protection   | Motor IP65 EN/IEC 60034-5<br>Shaft bushing IP65 EN/IEC 60034-5   |
| Encoder type              | Absolute single turn SinCos Hiperface  |
| Speed feedback resolution | 128 periods  |
| Holding brake             | With   |
| Holding torque            | 79.66 lbf.in (9 N.m)   |
| Mounting support          | International standard flange  |
| Motor flange size         | 3.94 in (100 mm)   |
| Torque constant           | 1.83 N.m/A 248 °F (120 °C)   |
| Back emf constant         | 115 V/krpm 68 °F (20 °C)   |
| Number of motor poles     | 4  |
| Rotor inertia             | 2.018 kg.cm²   |
| Stator resistance         | 13.9 Ohm   |
|                           |  |

| Stator inductance                     | 99.15 mH              |
|---------------------------------------|-----------------------|
| Maximum radial force Fr               | 900 N 1000 rpm        |
|                                       | 720 N 2000 rpm        |
|                                       | 630 N 3000 rpm        |
|                                       | 570 N 4000 rpm        |
|                                       | 530 N 5000 rpm        |
| Maximum axial force Fa                | 160 N                 |
| Type of cooling                       | Natural convection    |
| Length                                | 7.85 in (199.5 mm)    |
| Centring collar diameter              | 3.74 in (95 mm)       |
| Centring collar depth                 | 0.14 in (3.5 mm)      |
| Number of mounting holes              | 4                     |
| Mounting holes diameter               | 0.35 in (9 mm)        |
| Circle diameter of the mounting holes | 4.53 in (115 mm)      |
| Net Weight                            | 10.58 lb(US) (4.8 kg) |

## Contractual warranty

| Warranty | 18 months |  |
|----------|-----------|--|
|----------|-----------|--|