

# Product datasheet

Specifications



servo motor SH3 070  
1,25Nm,nokey,multi,nobrake,  
90°conn.IP54/IP65,8k RPM

SH30701P02A2000

EAN Code: 3606485295725

## Main

|                           |             |
|---------------------------|-------------|
| Range compatibility       | PacDrive 3  |
| Device short name         | SH3         |
| Product or component type | Servo motor |

## Complementary

|                           |                                                                                                                                                                 |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Maximum mechanical speed  | 8000 rpm                                                                                                                                                        |
| [Us] rated supply voltage | 115...480 V                                                                                                                                                     |
| Network number of phases  | Three phase                                                                                                                                                     |
| Continuous stall current  | 1.8 A                                                                                                                                                           |
| Continuous stall torque   | 1.25 N.m at 115...480 V three phase                                                                                                                             |
| Continuous power          | 690 W                                                                                                                                                           |
| Peak stall torque         | 3.5 N.m at 115...480 V three phase                                                                                                                              |
| Nominal output power      | 220 W at 115 V single phase<br>440 W at 230 V single phase<br>820 W at 400 V three phase<br>950 W at 480 V three phase                                          |
| Nominal torque            | 1.4 N.m at 115 V single phase<br>1.4 N.m at 230 V single phase<br>1.1 N.m at 400 V three phase<br>1.1 N.m at 480 V three phase                                  |
| Nominal speed             | 1500 rpm at 115 V single phase<br>3000 rpm at 230 V single phase<br>6000 rpm at 400 V three phase<br>7200 rpm at 480 V three phase                              |
| Maximum current Irms      | 5.7 A                                                                                                                                                           |
| Shaft end                 | Smooth shaft                                                                                                                                                    |
| Shaft diameter            | 11 mm                                                                                                                                                           |
| Shaft length              | 23 mm                                                                                                                                                           |
| IP degree of protection   | IP54 shaft bushing without shaft seal ring: conforming to IEC 60034-5<br>IP65 motor: conforming to IEC 60034-5<br>IP65 shaft bushing: conforming to IEC 60034-5 |
| Encoder type              | Absolute multiturn SinCos Hiperface                                                                                                                             |
| Speed feedback resolution | 128 periods                                                                                                                                                     |
| Holding brake             | Without                                                                                                                                                         |
| Mounting support          | International standard flange                                                                                                                                   |
| Motor flange size         | 70 mm                                                                                                                                                           |
| Electrical connection     | Straight connector                                                                                                                                              |

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

|                                              |                                                                                                                            |
|----------------------------------------------|----------------------------------------------------------------------------------------------------------------------------|
| Torque constant                              | 0.69 N.m/A at 120 °C                                                                                                       |
| Back emf constant                            | 46 V/krpm at 20 °C                                                                                                         |
| Number of motor poles                        | 3.0                                                                                                                        |
| Rotor inertia                                | 0.25 kg.cm²                                                                                                                |
| Stator resistance                            | 10.4 Ohm                                                                                                                   |
| Stator inductance                            | 21.3 mH                                                                                                                    |
| Maximum radial force Fr                      | 660 N at 1000 rpm<br>520 N at 2000 rpm<br>460 N at 3000 rpm<br>410 N at 4000 rpm<br>380 N at 5000 rpm<br>360 N at 6000 rpm |
| Maximum axial force Fa                       | 80 N                                                                                                                       |
| type of cooling                              | Natural convection                                                                                                         |
| Length                                       | 154 mm                                                                                                                     |
| Centring collar diameter                     | 60 mm                                                                                                                      |
| centring collar depth                        | 2.5 mm                                                                                                                     |
| Number of mounting holes                     | 4                                                                                                                          |
| Mounting holes diameter                      | 5.5 mm                                                                                                                     |
| Circle diameter of the mounting holes        | 82 mm                                                                                                                      |
| Net weight                                   | 2.1 kg                                                                                                                     |
| Sizing reference                             | SH30701P                                                                                                                   |
| Network number of phases                     | 3                                                                                                                          |
| Temperature copper hot                       | 130 °C                                                                                                                     |
| compatible drive output current<br>3s peak 2 | 6 A                                                                                                                        |
| Electrical connection                        | rotatable right angled connector                                                                                           |

## Packing Units

|                              |         |
|------------------------------|---------|
| Unit Type of Package 1       | PCE     |
| Number of Units in Package 1 | 1       |
| Package 1 Height             | 11.5 cm |
| Package 1 Width              | 39.5 cm |
| Package 1 Length             | 19.0 cm |
| Package 1 Weight             | 2.7 kg  |

## Logistical informations

|                   |    |
|-------------------|----|
| Country of origin | DE |
|-------------------|----|

## Contractual warranty

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

Environmental Data

Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing “Use Better, Use Longer, Use Again” campaign to extend product lifetimes and recyclability.

[Environmental Data explained >](#)

[How we assess product sustainability >](#)

| Environmental footprint                               |                                               |
|-------------------------------------------------------|-----------------------------------------------|
| Carbon footprint (kg.eq.CO2 per CR, Total Life cycle) | 1947                                          |
| Environmental Disclosure                              | <a href="#">Product Environmental Profile</a> |

Use Better

| Materials and Substances               |                                                            |
|----------------------------------------|------------------------------------------------------------|
| Packaging made with recycled cardboard | Yes                                                        |
| Packaging without single use plastic   | No                                                         |
| <a href="#">EU RoHS Directive</a>      | Pro-active compliance (Product out of EU RoHS legal scope) |
| SCIP Number                            | Ead0850d-370a-47c5-8cf7-1d93c2c974a4                       |
| REACH Regulation                       | <a href="#">REACH Declaration</a>                          |
| PVC free                               | Yes                                                        |

Use Again

| Repack and remanufacture |                                                                                                                                                                                                                 |
|--------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Circularity Profile      | No need of specific recycling operations                                                                                                                                                                        |
| Take-back                | No                                                                                                                                                                                                              |
| WEEE                     |  The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins |