## Features

- Precise control
- Fast response
- Stable operation
- Compact structure
- High efficiency

# RS PRO Servo Drive

**RS Stock No.:**

**885326, 885327, 885328, 885329**




RS PRO is the own brand of RS. The RS PRO Seal of Approval is your assurance of professional quality, a guarantee that every part is rigorously tested, inspected, and audited against demanding standards. Making RS PRO the Smart Choice for our customers.

## Product Description

**What are the products used for?**

- Servo drives are devices used to control servo motors precisely.
- They regulate position, speed, and torque of the motor.
- They receive commands from a PLC, CNC, or motion controller and use feedback from encoders to ensure accurate motion.

**Applications they are most suited for**

- CNC machines
- Robotics and automation systems
- Packaging and labeling machines
- Pick & place systems
- Printing and textile machines
- Any application requiring **high precision and fast response**

**What are they used with?**

- Servo motors
- Encoders or resolvers (feedback devices)
- PLCs or motion controllers
- Industrial communication networks (EtherCAT, CANopen, Modbus, etc.)
- HMI systems for monitoring and configuration
- Together they form a complete motion control system.

## General Specifications

| POWER SUPPLY | | | | |
|---|---|---|---|---|
| RS-PRO CODES | 885326 | 885327 | 885328 | 885329 |
| Specs | 400 W | 750 W | 1000 W | 1500 W |
| Phase-Voltage | Single / Three Phase200 ~ 230 Vac, +15% ~ -10% | | | |
| Input Current (Arms) | Three Phase → 2,2Single Phase → 4,4 | Three Phase → 3,8Single Phase → 7,0 | Three Phase → 4,9Single Phase → 9,7 | Three Phase → 6,7Single Phase → 13,5 |
| Control Input Voltage (Vac) | 200 ~ 230 | | | |
| Continuous Output Current (Arms) | 2,6 | 5,1 | 7,3 | 8,3 |
| Output Voltage (Vrms) | 0 – 110 | 0 – 110 | 0 – 110 | 0 – 110 |
| Max Output Current (Arms) | 7,8 | 15,3 | 21,9 | 24,9 |
| Overload (%) | 300% (5s) | | | |
| 24V Input | External | | | |

| BRAKE | | |
|---|---|---|
| Internal Resistor (Ω) | 40 (60 W) | 40 (100 W) |
| POSITION CONTROL MODE | | |
| Position Command Type | Pulse & Direction, AB Mode | |
| Max. Input Frequency | 500 Kbps (Line Driver), 250 Kbps (Open Collector) | |
| Electronic Gear | Supported | |
| Feedback Compensation (%) | 0 – 100 | |
| Filter | Low-Pass Filter | |

| Speed Control Mode | | |
|---|---|---|
| | Speed Command Type | Analog Speed Command (±10V), Internal Speed Command |
| | Speed Control Range | 1 – 5000 rpm |
| | Filter | LPF and S-Curve Filter |
| | Speed Accuracy | ±0.1% (with absolute encoder) under ±10 W load variation±0.1% (with absolute encoder) under 0–50°C ambient fluctuation |

| Torque Command Mode | | |
|---|---|---|
| | Torque Limit | Via parameter setting or analog input |
| | Torque Command Type | Analog Torque Command (±10V), Internal Torque Command |
| | Filter | Low-Pass Filter |

| | | |
|---|---|---|
| | Speed Limit | Via parameter adjustment or Analog Input |

| Control & Communication | | |
|---|---|---|
| | Control Mode | Vector Control |
| | fe / (Electrical Frequency) | 0 – 250 Hz / 0 – 166.7 Hz |
| | Encoder Resolution | 13 bit Incremental / 17–21 bit Absolute BiSS Encoder |
| | Communication | RS-232 / RS-485 (MODBUS RTU), USB, CANopen, EtherCAT |

| Digital Inputs / Outputs | | |
|---|---|---|
| | Inputs | Servo Enable, Alarm Reset, Control Command Input, Active Torque Limit, Emergency Stop, Reverse Restriction Limit, Forward Restriction Limit, Forward JOG Input (JOGU), Reverse JOG Input (JOGD), Speed Command Selection 0, Speed Command Selection 1, Torque Command Selection, Zero Speed Control |
| | Outputs | Servo Active, Servo Alarm Output, Electromagnetic Brake, Servo Ready, Zero Speed, Reached Torque Limit, Overload Warning Output, Speed Command Selection 0, Speed Command Selection 1, Torque Command Selection 0, Zero Speed Control |
| Safe Protection | | |
| | Protection | Overcurrent, Overvoltage, Ambient Temperature of Box, Undervoltage, Overload, Overspeed, IPM Temperature, IPM Error, Encoder Error, Fan Error, Brake Error, Phase Loss, Motor Error, EEPROM Error, Emergency Stop, WDT Reset |

## Mechanical Specifications

| Mechanical Measurements & Temperature | | |
|---|---|---|
| | Ambient Temperature | 0 – 55 °C |
| | Cooling | DC Fan |
| | Dimensions (HxWxL) | 17 × 65 × 170 mm |
| | Weight | 1.5 kg / 1.6 kg |

| Automatic Adjustment | | |
|---|---|---|
| | Offline Auto-tuning | Supported |

| Commissioning | | |
|---|---|---|
| | Setup | Easy commissioning with PC interface, display and keypad |

## Compatible Products

| Parameters | Stock# | Stock# | Stock# | Stock# |
|---|---|---|---|---|
| **Brand** | RS RPO | RS RPO | RS RPO | RS RPO |
| **Compatible Motor Type** | **885332** | **885335** | **885338** | **885341** |
| **Motor Type** | 400W | 750W | 1000W | 1500W |
| **Output Speed** | 3000rpm | 3000rpm | 3000rpm | 3000rpm |
| **Maximum Output Torque** | 3,81 Nm | 6,26Nm | 11,8Nm | 18,6Nm |
| **Supply Voltage** | 310 V | 310V | 310 V | 310V |
| **Power Rating** | 400 W | 750W | 1000W | 1500W |
| **Current Rating** | 2,7 A | 5A | 5A | 8A |
| **No Load Speed** | 5000 rpm | 5000 rpm | 5000 rpm | 5000 rpm |
| **Stall Torque** | 1.30 Nm | 2,40Nm | 4,8Nm | 7,2Nm |
| **Stall Current** | 8,1 A | 15A | 16,5A | 24A |
| **Maximum Efficiency** | 90.5 % | 92.5 % | 92% | 93.5 % |
| **Back-EMF Constant** | 45,8 V/k rpm | 42 V/k rpm | 77,55 V/k rpm | 81 V/k rpm |
| **Shaft Diameter** | 14mm | 19mm | 22mm | 22mm |
| **Core Construction** | Permanent Magnet, Brushless AC Servo Motor | Permanent Magnet, Brushless AC Servo Motor | Permanent Magnet, Brushless AC Servo Motor | Permanent Magnet, Brushless AC Servo Motor |
| **Dimensions** | 191,4mmx156,4 mm | 176,4 x 141,4 mm | 201.4 x 146.4 mm | 211,4 x 156,4 mm |
| **Length** | 191mm | 176.4mm | 201,4mm | 211,4mm |
| **Width** | 60mm | 80mm | 130mm | 130mm |
| **Depth** | 75mm | 95mm | 179,35mm | 179mm |
| **Weight** | 1.54kg | 3.5kg | 5,7kg | 8,5kg |
| **Ambient Temperature** | 0°C to 40°C | 0°C to 40°C | 0°C to 40°C | 0°C to 40°C |
| **Applications** | CNC, Industrial automation systems, Robotics, | CNC, Industrial automation systems, Robotics, | CNC, Industrial automation systems, Robotics, | CNC, Industrial automation systems, Robotics, |