

MEDIUM SPEED BRUSHLESS SERVO MOTORS 067



24V

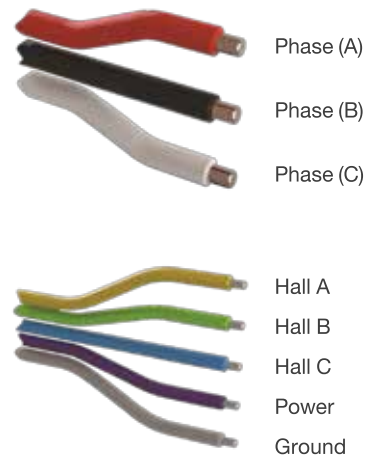
ESRV67S1K7A1-24

36V

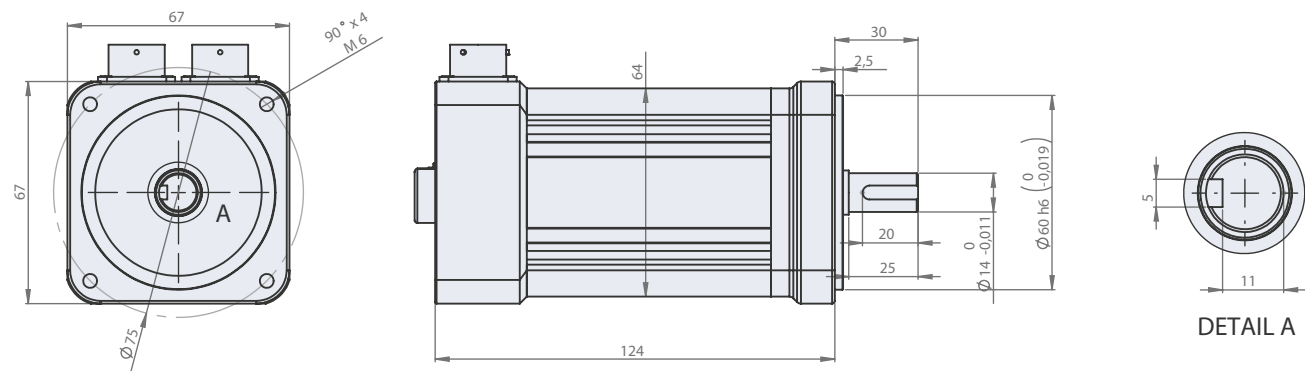
ESRV67S1K7A1-36

48V

ESRV67S1K7A1-48



Dimensional Drawing



Modular System

Product Adaptations

- Other dimensions
- Without housing
- Without hall sensors
- With temperature sensor
- Connector options recording to customer needs

Basic Motor Parameters

| | ESRV67S1K7A1-24 | ESRV67S1K7A1-36 | ESRV67S1K7A1-48 | |
|---------------------------|-----------------|-----------------|-----------------|------|
| Nominal Speed | RPM | 6962 | 7415 | 6961 |
| Nominal Power | W | 350 | 350 | 350 |
| Maximum Continuous Torque | Nm | 0.48 | 0.45 | 0.48 |
| Nominal Current | A | 14.76 | 9.7 | 7.38 |
| No-Load Speed | RPM | 8740 | 9177 | 8740 |
| Efficiency | % | 89 | 89 | 89 |
| Stall Torque | Nm | 9.61 | 10.02 | 9.59 |
| Stall Current | A | 405 | 301 | 202 |

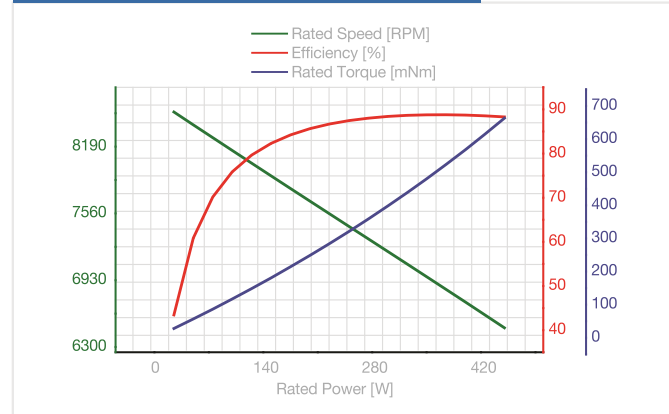
Electrical Characteristics

| | ESRV67S1K7A1-24 | ESRV67S1K7A1-36 | ESRV67S1K7A1-48 | |
|------------------------------|-----------------|-----------------|-----------------|--------------|
| Number of Phases | 3 | 3 | 3 | |
| Number of Poles | 8 | 8 | 8 | |
| Operating Temperature | °C | -55 >> +85 | -55 >> +85 | -55 >> +85 |
| Phase-to-Phase Resistance | mΩ | 59.04 ± 10% | 119.34 ± 10% | 236.76 ± 10% |
| Phase-to-Phase Inductance | mH | 0.118 ± 10% | 0.24 ± 10% | 0.47 ± 10% |
| Rated-Torque Constant | mNm/A | 0.029 ± 10% | 0.041 ± 10% | 0.058 ± 10% |
| Back -EMF Constant | Vs/rad | 0.026 ± 10% | 0.037 ± 10% | 0.052 ± 10% |
| Dielectric Strength at 1000V | MΩ | 500 (min.) | 500 (min.) | 500 (min.) |

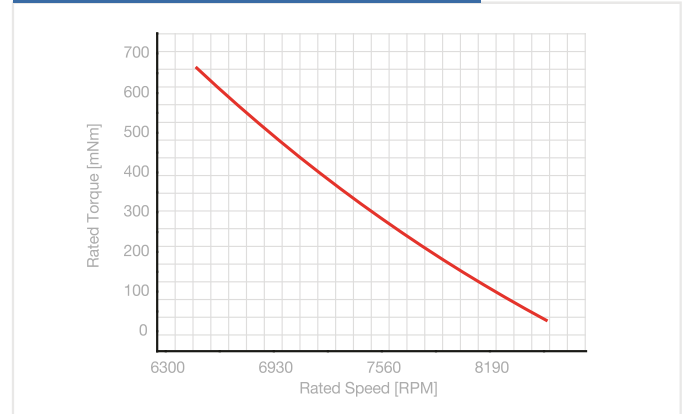
Physical Characteristics

| | ESRV67S1K7A1-24 | ESRV67S1K7A1-36 | ESRV67S1K7A1-48 | |
|----------------|-----------------|------------------|------------------|------------------|
| Service Life | h | 20000 | 20000 | 20000 |
| Weight | g | 1.6 ± 10% | 1.6 ± 10% | 1.6 ± 10% |
| Length | mm | 124 (max.) | 124 (max.) | 124 (max.) |
| Outer Diameter | mm | 67 x 67 | 67 x 67 | 67 x 67 |
| Shaft Diameter | mm | 14 | 14 | 14 |
| Bearing | | NSK Ball Bearing | NSK Ball Bearing | NSK Ball Bearing |

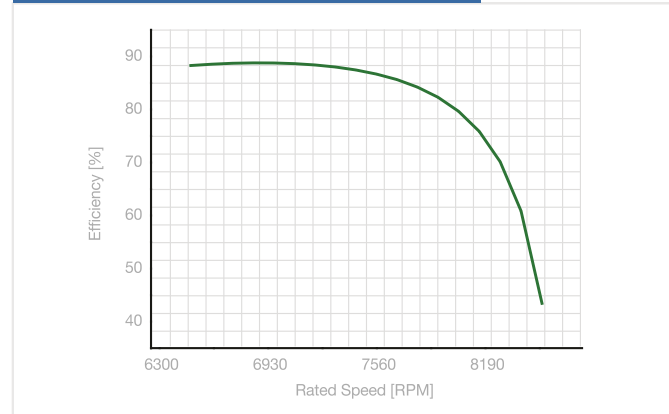
Performance Chart @48V



Torque - Speed Chart @48V



Efficiency - Speed Chart @48V



Power - Speed Chart @48V

