

### SERVO MOTOR 115UDC406BACAA115190-JSAA

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HIGH INERTIA MOTOR, 115 PCD MOUNTING HOLES, Ø19 x 40mm OUTPUT SHAFT  
(motor derated – torque output from motor limited by output shaft diameter)



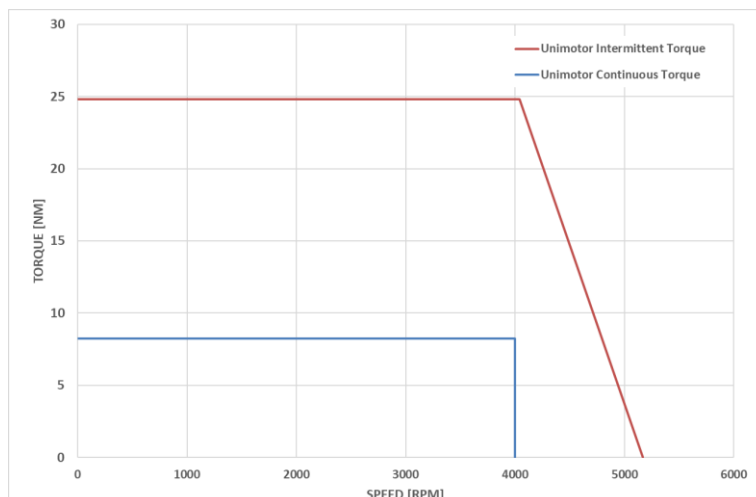
#### Definition

|                            |                      |                                                                     |
|----------------------------|----------------------|---------------------------------------------------------------------|
| Type                       | Unimotor HD          |                                                                     |
| Frame Size (mm)            | 115                  |                                                                     |
| Voltage                    | U                    | 400 V                                                               |
| Magnet type                | D                    | High Dynamic                                                        |
| Frame Length               | C                    |                                                                     |
| Speed (min <sup>-1</sup> ) | 40                   | 4000                                                                |
| Brake                      | 6                    | Braked                                                              |
| Connection type            | B                    | Power and Signal 90° rotatable (Size 1)                             |
| Output shaft               | A                    | With output key                                                     |
| Feedback device code       | CA                   | 4096 ppr Incremental encoder (CFS50)                                |
| Inertia & thermistor       | A-JSAA               | High inertia + PTC thermistor                                       |
| PCD                        | 115                  | 115 (FF 115 / 95)                                                   |
| Shaft Diameter             | 190                  | 19j6 x 40.0 (torque output from motor limited by output shaft dia.) |
| Fan Box                    | -                    |                                                                     |
| Insulation class           | F                    |                                                                     |
| UL Motor / UL Stator       | UL Motor / UL Stator |                                                                     |

#### Nominal characteristics

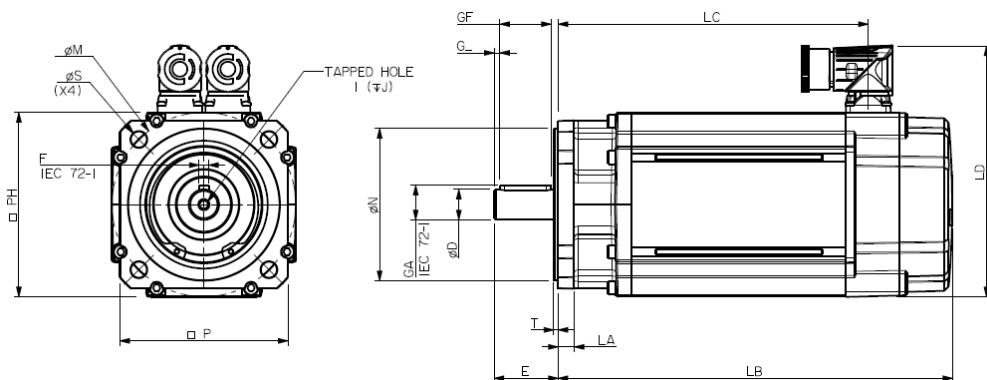
|                                   |        |                            |      |
|-----------------------------------|--------|----------------------------|------|
| Motor Ambient Temperature (°C)    | 40     | Drive Fsw (kHz)            | 12   |
| Motor Stall Torque (N.m)          | 8.25   | Stall Current (A)          | 6.9  |
| Rated Torque (N.m)                | 8.25   | Nominal Current (A)        | 6.9  |
| Motor Peak Torque (N.m)           | 24.8   | Kt (Nm/A)                  | 1.2  |
| Rated Power (kW)                  | 3.46   | Ke (V/kmin <sup>-1</sup> ) | 73.5 |
| Winding Thermal Time Constant (s) | 168    | R (ph-ph) (Ohm)            | 0.6  |
| Number of Poles                   | 10     | L (ph-ph) (mH)             | 6.6  |
| Typical Cogging (N.m)             | 0.22   |                            |      |
| Inertia (kg.cm <sup>2</sup> )     | 14.21  | Weight (kg)                | 12.4 |
| Ingress Protection Level (IP)     | IP65   |                            |      |
| Brake                             | Type 6 | Static Torque (N.m)        | 16   |
| Release Time (ms)                 | 110    | Backlash (°)               | 3    |
| Brake Supply Voltage (V)          | 24     | Brake Coil Power (W)       | 23   |

#### Torque / speed graph



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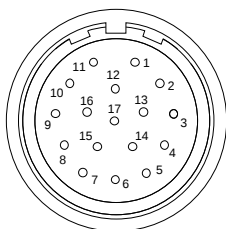
#### Motors (° & mm)



|    |                          |          |
|----|--------------------------|----------|
| LB | Total length             | 336.6    |
| LC | Connector position       | 283.8    |
| LA | Flange thickness         | 10.1     |
| T  | Register Length          | 2.8      |
| N  | Register Diameter        | 95.0     |
| LD | Connector overall height | 156.5    |
| P  | Flange Square            | 105.0    |
| S  | Fixing Hole Diameter     | 10.0     |
| M  | Fixing hole PCD          | 115.0    |
| PH | Motor Housing Width      | 115.0    |
| D  | Shaft Diameter           | 19j6     |
| E  | Shaft Length             | 40.0     |
| GA | Key Height               | 21.5     |
| GF | Key Length               | 32.0     |
| G  | Key to Shaft End         | 3.6      |
| F  | Key Width                | 6.0      |
| I  | Tapped Hole Thread Size  | M6 x 1.0 |
| J  | Tapped Hole Depth        | 17.0     |
|    | Mounting Bolt            | M8       |

#### Motor electrical interface Connectors option:

##### Feedback device code: CA - 4096 ppr Incremental encoder (CFS50)



- |                  |            |
|------------------|------------|
| 1 - Thermistor - | 10 - A     |
| 2 - Thermistor + | 11 - Z     |
| 3 -              | 12 - Z/    |
| 4 - U            | 13 - A/    |
| 5 - U/           | 14 - B     |
| 6 - V            | 15 - B/    |
| 7 - V/           | 16 - Power |
| 8 - W            | 17 - 0 V   |
| 9 - W/           | Screen     |

##### Connection type: B - Power and Signal 90° rotatable (Size 1)

