

### SERVO MOTOR 115UDC200BACAA115190-SSAA

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115 PCD EXTENDED FEF, Ø19 x 40mm OUTPUT SHAFT  
(motor derated - torque output from motor limited by output shaft diameter)



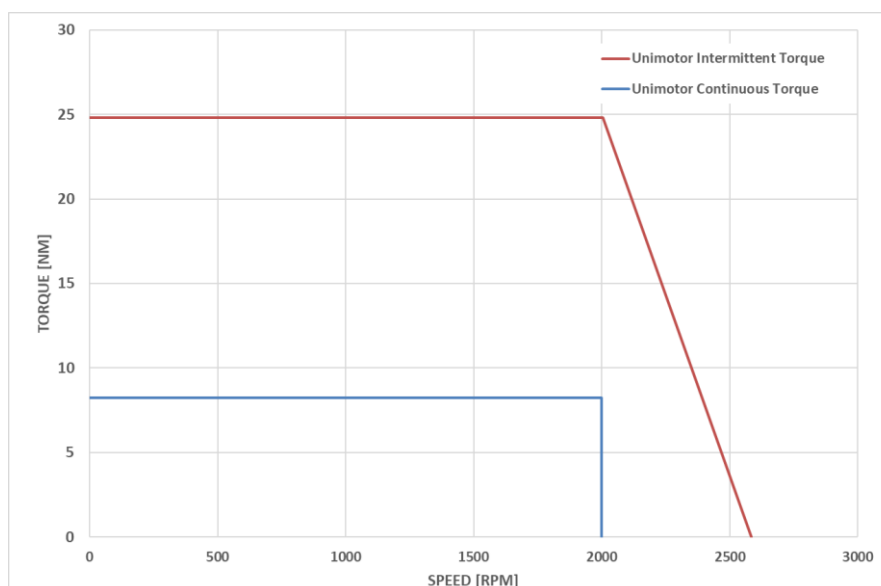
#### Definition

|                            |                      |  |
|----------------------------|----------------------|--|
| Type                       | Unimotor HD          |  |
| Frame Size (mm)            | 115                  |  |
| Voltage                    | U                    | 400 V  |
| Magnet type                | D                    | High Dynamic   |
| Frame Length               | C                    |  |
| Speed (min <sup>-1</sup> ) | 20                   | 2000   |
| Brake                      | 0                    | Unbraked   |
| 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                    | Standard 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)          | 3.44 |
| Rated Torque (N.m)                | 8.25 | Nominal Current (A)        | 3.44 |
| Motor Peak Torque (N.m)           | 24.8 | Kt (Nm/A)                  | 2.4  |
| Rated Power (kW)                  | 2.5  | Ke (V/kmin <sup>-1</sup> ) | 147  |
| Winding Thermal Time Constant (s) | 168  | R (ph-ph) (Ohm)            | 2.4  |
| Number of Poles                   | 10   | L (ph-ph) (mH)             | 24.7 |
| Typical Cogging (N.m)             | 0.22 |                            |      |
| Inertia (kg.cm <sup>2</sup> )     | 6.39 | Weight (kg)                | 8.6  |
| Ingress Protection Level (IP)     | IP65 |                            |      |

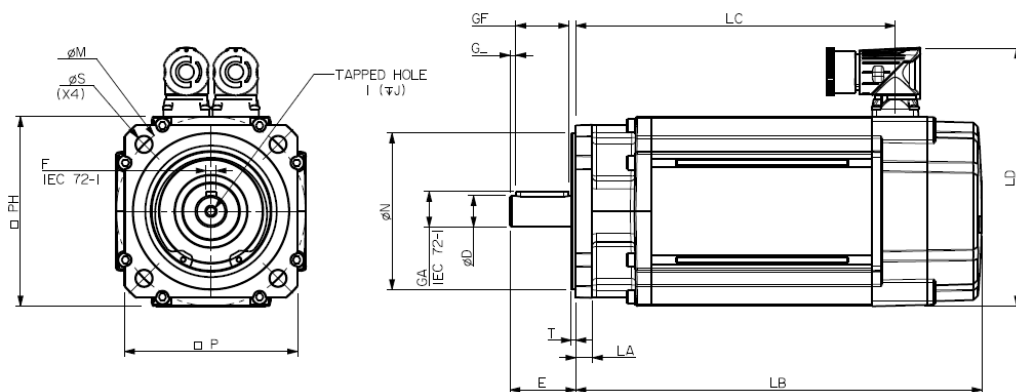
#### Torque / speed graph



Enquiry N°: 2579

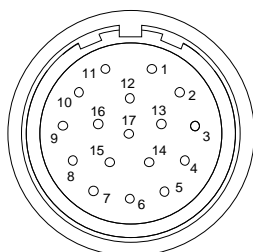
Created by: SB/ Approved by: FA

## SERVO MOTOR 115UDC200BACAA115190-SSAA

**Motors ( $^{\circ}$  & *mm*)**

|    |                          |          |
|----|--------------------------|----------|
| LB | Total length             | 269.5    |
| LC | Power connector position | 216.7    |
| 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       |

**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 +5 VDC |
| 8 - W            | 17 - 0V           |
| 9 - W/           | Body - Screen     |

**Connection type: B – Power and Signal 90° rotatable (Size 1)**

