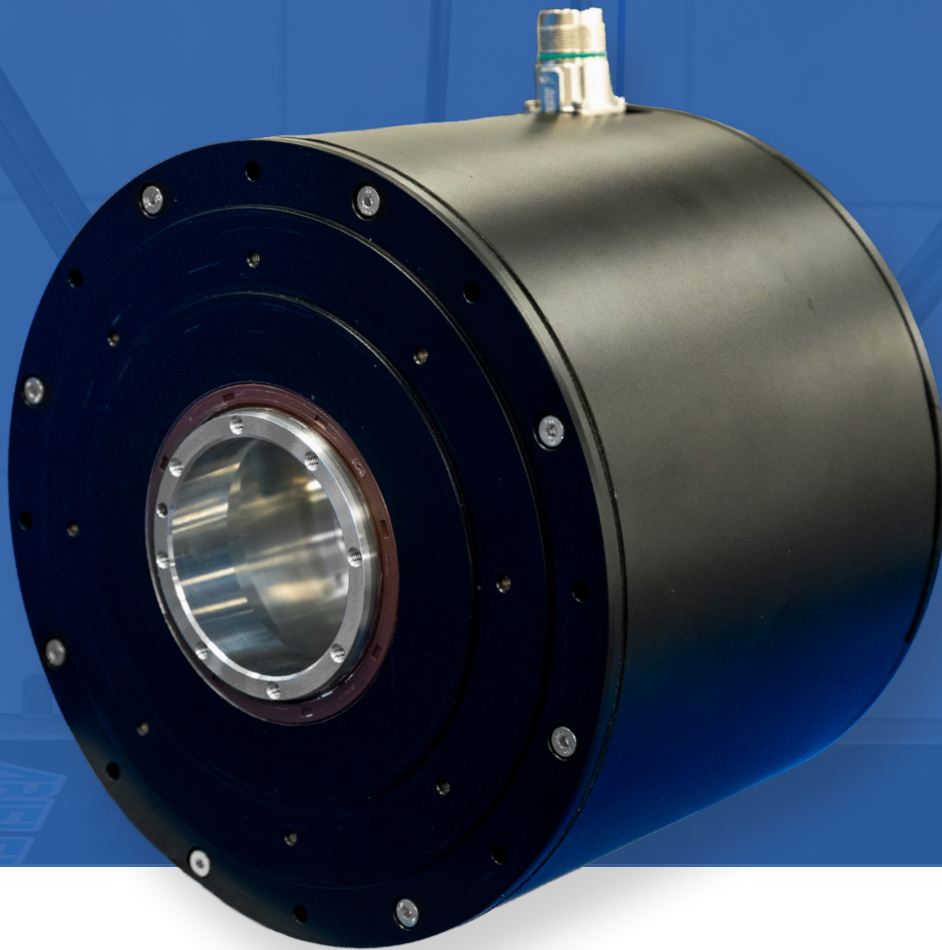




**ABI**

# DIRECT DRIVE MOTOR



ULTRA-SILENT <24 dB(A)



ENERGY EFFICIENT



IP65 RATED



MAINTENANCE FREE



ZERO BACKLASH



MADE IN HOLLAND

Engineered for universal compatibility with Delta robots.

# TECHNICAL SPECIFICATIONS

## KEY FEATURES

- Highly accurate with zero backlash
- Absolute encoder, one cable connection
- Extremely fast, no speed or acceleration limits due to gearboxes
- Maintenance free, no mechanical wear, no lubrication
- More direct drive options available: 4<sup>th</sup> and 5<sup>th</sup> axis
- Mounting flange compatible with Genesis Motion LDD motors
- Low operating noise
- Energy efficient
- IP65 protection rating
- Made in Holland

| Performance                     |       |      |
|---------------------------------|-------|------|
| Nominal Voltage                 | VAC   | 400  |
| Max. Voltage                    | VAC   | 480  |
| Rated torque <sup>1,2</sup>     | Nm    | 50   |
| Peak Torque                     | Nm    | 200  |
| Continuous Current <sup>1</sup> | A     | 3,8  |
| Peak Current                    | A     | 15,2 |
| Rated Speed                     | RPM   | 300  |
| Maximum Speed                   | RPM   | 450  |
| Max. Winding Temp               | °C    | 90   |
| Holding brake torque            | Nm    | 20   |
| Holding brake Voltage           | VDC   | 24   |
| Holding brake Current           | A     | 0,8  |
| Poles                           | N mgn | 26   |

| Electrical            |        |      |
|-----------------------|--------|------|
| Phase resistance      | Ohm    | 4,25 |
| Phase Induction       | mH     | 22,3 |
| Back EMF <sup>2</sup> | V/kRPM | 793  |

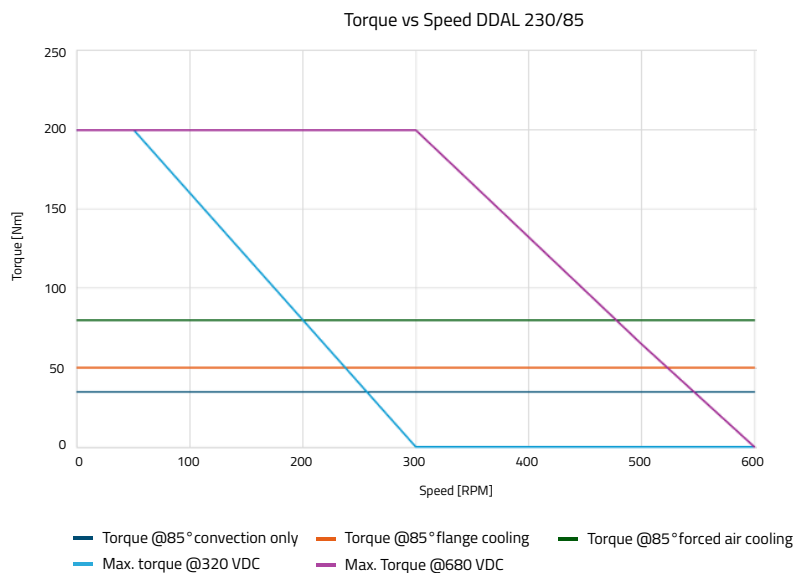
| Encoder     |                 |
|-------------|-----------------|
| Type        | ABS/Single turn |
| Interface   | HDSL            |
| Resolution  | 20 bit          |
| motor temp. | HDSL            |
| enc. Temp   | HDSL            |

| Mechanical                         |                  |       |
|------------------------------------|------------------|-------|
| Diameter                           | mm               | 238   |
| Length                             | mm               | 180   |
| Mass                               | Kg               | 18    |
| Inertia                            | kgm <sup>2</sup> | 0,023 |
| Max. Radial Load                   | N                | 4000  |
| Max. Axial Load                    | N                | 5000  |
| Max. Torsional Load                | Nm               | 350   |
| Operating Temperature <sup>3</sup> | °C               | 0-40  |
| Protection class                   |                  | IP65  |

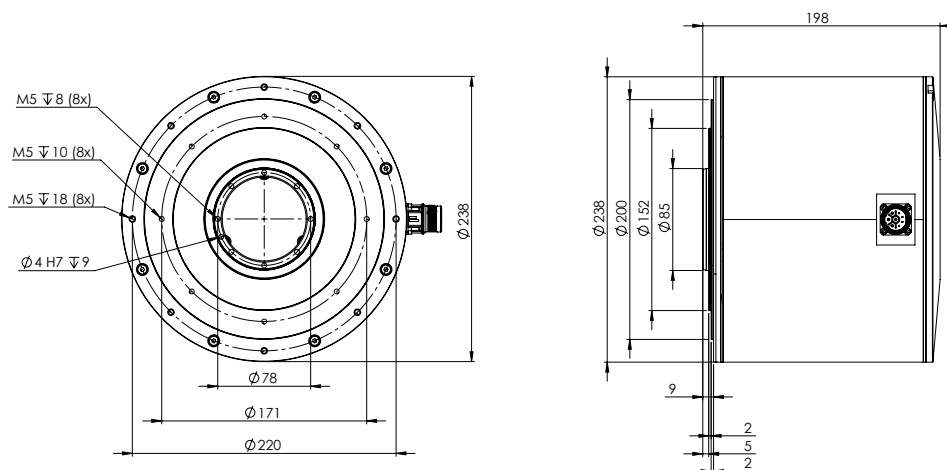
**Note 1** with heat sink 0.2 m<sup>2</sup>, 20 mm thick at 20 °C · **Note 2** @ 300 RPM · **Note 3** non-condensing

# PERFORMANCE & CONNECTION

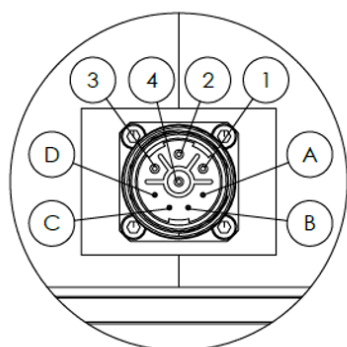
## TORQUE VS. SPEED



## DIMENSIONS



## MOTOR CONNECTION



- |       |           |
|-------|-----------|
| 1. U  | A. HDL+   |
| 2. PE | B. HDL-   |
| 3. V  | C. Brake+ |
| 4. W  | D. Brake- |



# LET'S TALK



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