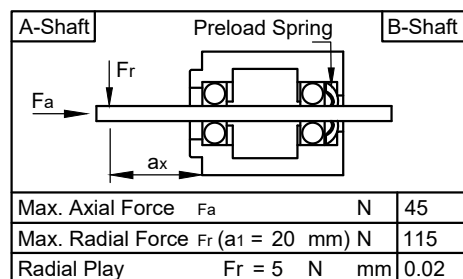
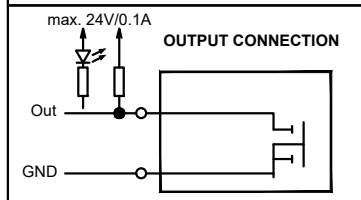
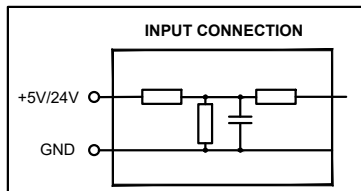


Integrated controller and Encoder
 black varnish for IP65 except for shaft output

| MOTOR SPECIFICATION | | | | | | | | |
|-------------------------------|-------------------|-------------------------|------------------------|------------------------|------------------------|------|------|------|
| PD6-EB80xx-x-65-4 | SD-M | SD-E | MD-M | MD-E | LD-M | LD-E | CD-M | CD-E |
| Motor Length "A" | mm | 134 | 155 | 170 | 190 | | | |
| No. of Poles | | 8 | | | | | | |
| Rated Voltage | V DC | 48 | | | | | | |
| Min. Operating Voltage | V DC | 12 | | | | | | |
| Max. Operating Voltage | V DC | 57.6 | | | | | | |
| Current - Rated / Peak | A | 6.9 / 20 | 14 / 40 | 18.75 / 65 | 25 / 75 | | | |
| Torque - Rated / Peak | Nm | 0.9 / 2.5 | 1.7 / 5 | 2.25 / 6.5 | 3 / 9 | | | |
| Torque Constant | Nm/A | 0.13 | 0.12 | 0.12 | 0.12 | | | |
| Power Rated | W | 283 | 534 | 706 | 940 | | | |
| Speed - No Load / Rated ±10% | rpm | 4100 / 3000 | 4250 / 3000 | 4300 / 3000 | 4250 / 3000 | | | |
| Rotor Inertia | kg m ² | 54.4 x 10 ⁻⁶ | 102 x 10 ⁻⁶ | 136 x 10 ⁻⁶ | 190 x 10 ⁻⁶ | | | |
| Multiturn Encoder Resolution | bit | 17 | - | 17 | - | 17 | - | - |
| Singleturn Encoder Resolution | bit | 16 | 12 | 16 | 12 | 16 | 12 | 12 |
| Weight | kg | ~2.0 | ~2.7 | ~3.1 | ~3.8 | | | |



| | | |
|--|---|------|
| Max. Axial Force F_a | N | 45 |
| Max. Radial Force F_r ($a_1 = 20$ mm) | N | 115 |
| Radial Play $F_r = 5$ mm | N | 0.02 |

| X1 POWER | |
|--------------------------------|----------|
| M12 / 4-Pole / L-Coding / male | |
| Pin No. | Function |
| 1 | +UB |
| 2 | +UB |
| 3 | GND |
| 4 | GND |

| X2 IO | |
|---------------------------------|---------------------------------|
| M12 / 12-Pole / A-Coding / male | |
| Pin No. | Function |
| 1 | GND |
| 2 | Input 1 (+5V/+24V) |
| 3 | Input 2 (+5V/+24V) |
| 4 | Input 3 (+5V/+24V) |
| 5 | Input 4 (+5V/+24V) |
| 6 | Input 5 (+5V/+24V) |
| 7 | Input 6 (+5V/+24V) |
| 8 | Analog Input (0-10V/0-20mA) |
| 9 | Output 1 (open drain) |
| 10 | Output 2 (open drain) |
| 11 | +5V Voltage Supply (max. 100mA) |
| 12 | +UB Logic (24V) |

| X3 Modbus TCP IN | |
|----------------------------------|----------|
| M12 / 4-Pole / D-Coding / female | |
| Pin No. | Function |
| 1 | TD+ |
| 2 | RD+ |
| 3 | TD- |
| 4 | RD- |

| X4 Modbus TCP OUT | |
|----------------------------------|----------|
| M12 / 4-Pole / D-Coding / female | |
| Pin No. | Function |
| 1 | TD+ |
| 2 | RD+ |
| 3 | TD- |
| 4 | RD- |

| X5 Brake OUT | |
|---------------------------------|-----------|
| M8 / 3-Pole / A-Coding / female | |
| PIN No. | Function |
| 1 | Brake |
| 3 | Brake GND |
| 4 | N.C. |

| X6 Mini-USB | |
|-------------|--|
|-------------|--|

| GENERAL MOTOR SPECIFICATION | | |
|--|----|------------|
| Interface | | MODBUS TCP |
| Ambient Temperature | °C | -10 ... 40 |
| Switch-off Temperature | °C | 75 |
| Max. Ambient Humidity (non condensing) | % | 85 |
| Protection Class (except shaft outlet) | | IP65 |
| Protection Class (shaft outlet) | | IP54 |

| ISO 8015 | | ISO 1302 | | ISO 2768 cK | | ISO 13715 | |
|----------|-----------------------|-----------|------------|-------------|------------|-----------|-----------|
| | | | | | | Date | Name |
| | | | | | | Drawn | Schneid_A |
| | | | | | | Reviewed | Rehse_P |
| 02 | correct pos. USB Con. | Schneid_A | 06.09.2022 | Released | 02.08.2022 | Released | Rehse_P |
| 01 | added remarks | Rehse_P | 17.08.2022 | | | | |
| REV | Rev. Text | Name | Date | | | | |



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20001578

State: Released Rev: 02 CONFIDENTIAL

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