

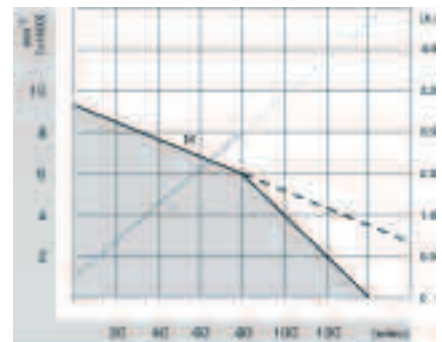
Direct current permanent magnet motor with integrated control electronics



Our SN15GPR & SN15HGPR drive types are now available with a new type of direct current permanent magnet motor. This motor has integrated control electronics with a powerful microcontroller, which makes external control devices unnecessary.

Technical data:

- 3-phase, dynamic internal rotor motor using EC technology with increased starting torque.
- Integrated control electronics with powerful microcontroller.
- Excellent regulating thanks to the 4-Q PI controller.
- High efficiency thanks to the FET final stage.
- Analogue target value input.
- Overload protection thanks to an integrated current limiter.
- Custom versions available through software and hardware adjustments (e.g. fixed rotation speed, direction of rotation).

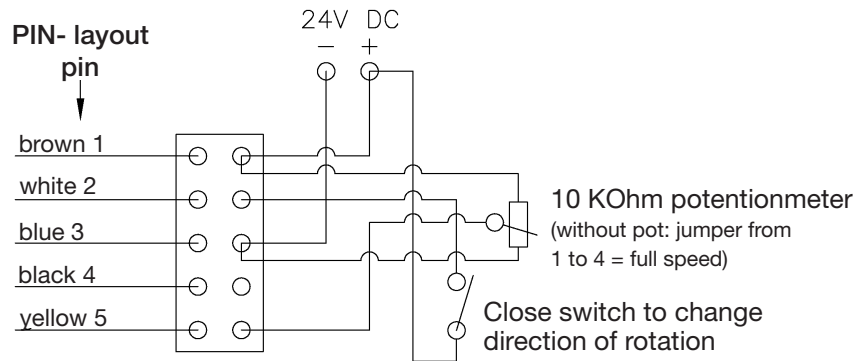


Characteristics

Type

| | | |
|---|-------|-----------|
| Nominal voltage (U_{BN}) | V DC | 24 |
| Nominal rotation speed (n_N) | min-1 | 4 000 |
| Nominal current (I_{BN}) | A | 3,0 |
| Nominal output power (P_N) | W | 40 |
| Target value input | V | 0 ... 10 |
| Temperature monitoring | | yes |
| Overload protection | | yes |
| Protection type | | IP 40 |
| Permissible ambient temperature (T_U) | °C | 0 ... +40 |

Connection scheme: Motor connection scheme for ECI42....



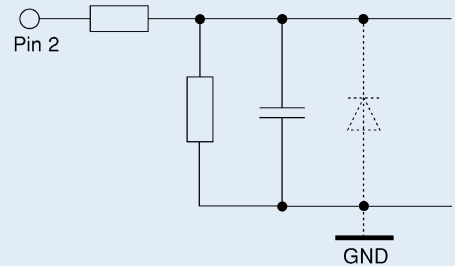
| | |
|-------|-------------------------|
| Pin 1 | U_B |
| Pin 2 | 1 direction of rotation |
| Pin 3 | GND |
| Pin 4 | actual rotation speed |
| Pin 5 | target value input |

1. Control input direction of rotation (Pin 2)

Pin 2

1 rotate to the left
0 rotate to the right

low (0) 0 ... 0,8V
high (1) 2,4 ... 28V



Direction of rotation seen on shaft

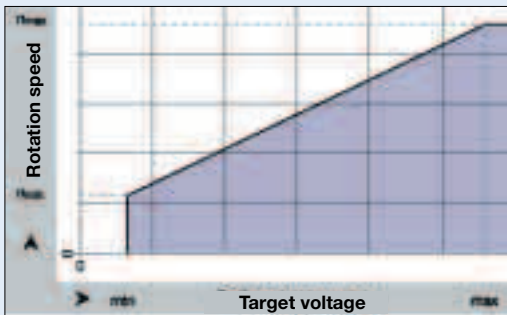
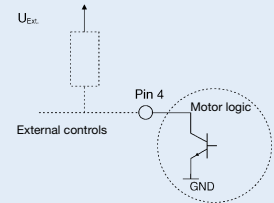
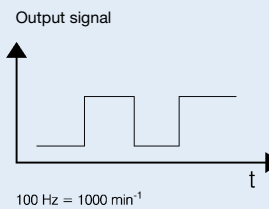
Pin assignment

Lumberg connection type:

Lumberg Type RKT 5-228/...m (straight coupling)
Type RKWT 5-228/...m (angled coupling)
Type FST 5-FKT 5-293/...m (Fixcon plug / coupling)

2. Actual value output (Pin 4)

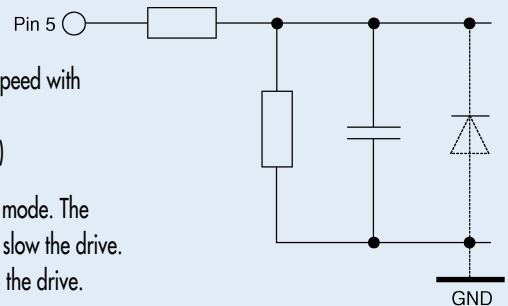
Design:
Open Collector
 $U_{ext. max} = 30 V$
 $UCESAT = 0,5 V$
 $ICMAX = 5mA$



3. Target value input (Pin 5)

Rotation speed input to regulate speed with voltage target value interface
0 ... 10 V DC. (1 V = ~ 400 rpm)

Voltages <0.2 V activate braking mode. The braking function serves merely to slow the drive. It is not a braking function to stop the drive.



RUHRGETRIEBE KG

H. Pferdenges

Am Förderturm 29 · D-45472 Mülheim a.d. Ruhr

Tel.: +49 (0) 2 08 / 78 06 80 · Fax +49 (0) 2 08 / 49 80 00 u. 49 84 59

info@ruhrgetriebe.de · www.ruhrgetriebe.de