

NEW

Motion Control Systems
 V3.0, 4-Quadrant PWM
 with RS232 or CANopen interface

160 mNm
140 W

MCS 3274 ... BP4 RS/CO

| Values at 22°C and nominal voltage | MCS 3274G | 024BP4 RS/CO | |
|---|----------------------------|--------------|-------------------|
| Power supply electronic | U_P | 12 ... 50 | V DC |
| Power supply motor | U_{mot} | 0 ... 50 | V DC |
| Nominal voltage for motor | U_N | 24 | V |
| No-load speed (at U_N) | n_0 | 7 400 | min ⁻¹ |
| Peak torque (S2 operation for max. 1s) | $M_{max.}$ | 320 | mNm |
| Torque constant | k_M | 28,4 | mNm/A |
| PWM switching frequency | f_{PWM} | 100 | kHz |
| Efficiency electronic | η | 95 | % |
| Standby current for electronic (at $U_P=24V$) | I_{el} | 0,06 | A |
| Speed range (up to 36V) | | 1 ... 11 600 | min ⁻¹ |
| Shaft bearings | ball bearings, preloaded | | |
| Shaft load max.: | | | |
| – with shaft diameter | 5 | | mm |
| – radial at 3 000 min ⁻¹ (5 mm from mounting flange) | 50 | | N |
| – axial at 3 000 min ⁻¹ (push / pull) | 5 | | N |
| – axial at standstill (push / pull) | 50 | | N |
| Shaft play: | | | |
| – radial | ≤ 0,015 | | mm |
| – axial | = 0 | | mm |
| Operating temperature range | -40 ... +100 | | °C |
| Housing material | aluminium, stainless steel | | |
| Protection class, with option V ring | IP54 | | |
| Mass | 524 | | g |

Rated values for continuous operation

| | | | |
|-------------------------------|-------|-------|-------------------|
| Rated torque | M_N | 160 | mNm |
| Rated current (thermal limit) | I_N | 5,6 | A |
| Rated speed | n_N | 6 350 | min ⁻¹ |

Interface / range of functions

| | ... RS | ... CO |
|---------------------------------------|---|---------|
| Configuration from Motion Manager 6.0 | RS232 | CANopen |
| Fieldbus | RS232 | CANopen |
| Operating modes | PP, PV, PT, CSP, CSV, CST and homing acc. to IEC 61800-7-201 or IEC 61800-7-301 as well as position-, speed- and torque control via analog setpoint or voltage controller | |
| Speed range | see motor diagram | |
| Application programs | Max. 8 application programs (BASIC), one of which is an autostart function | |
| Additional functions | Touch-probe input, connection of a second incremental encoder, control of a holding brake | |
| Indicator | LEDs for displaying the operating state Trace as recorder (scope function) or logger | |

Note:

The display shows the range of possible operation points of the drives at a given ambient temperature of 22°C.

The diagram indicates the recommended speed in relation to the available torque at the output shaft.

It includes the assembly on a plastic- as well as on a metal flange (assembly method: IM B 5).

The nominal voltage linear slope describes the maximal achievable operating points at nominal voltage. Any points of operation above this linear slope will require a supply voltage $U_{mot} > U_N$.



