

Motion Control Systems

V3.0, 4-Quadrant PWM
with EtherCAT interface

96 mNm

41 W

MCS 3268 ... BX4 ET

Values at 22°C and nominal voltage	MCS 3268G	024BX4 ET	
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	4 700	min ⁻¹
Peak torque (S2 operation for max. 150s)	M_{max}	190	mNm
Torque constant	k_M	43,5	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 30V)		1 ... 6 000	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 ... +85		°C
Housing material	aluminium, stainless steel		
Protection class, with option V ring	IP54		
Mass	394		g

Rated values for continuous operation			
Rated torque	M_N	96	mNm
Rated current (thermal limit)	I_N	2,3	A
Rated speed	n_N	3 700	min ⁻¹

Interface / range of functions	... ET
Configuration from Motion Manager 6.0	RS232
Fieldbus	EtherCAT
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 $U_{mot} > U_N$.



