The MOVIMOT® performance drive unit





Drive unit consisting of a synchronous motor and integrated inverter

Boasting impressive flexibility and overload capacity, MOVIMOT® performance is the go-to expert for dynamics. It combines a synchronous motor and frequency inverter in a decentralized drive unit and can be flexibly combined with any standard and servo gear unit from SEW-EURODRIVE. What's more, MOVIMOT® performance is compatible with all standard Ethernet-based infrastructures.

MOVIMOT® performance – variants and performance classes						
Motor size	CM3C80M CM3C80M					
Inverter assignment	0020	0025	0032	0040	0040	0055
Nominal output current of the inverter	2.0 A	2.5 A	3.2 A	4.0 A	4.0 A	5.5 A
Nominal torque	3.6 Nm	4.5 Nm	5.7 Nm	7.2 Nm	8 Nm	9 Nm

Gear unit variant	Suitable for combination with all series 7 and 9 standard gear units Can be combined with helical-bevel servo gear units		
Brake variant	 Available with BZ3 brake Option of manual brake release with automatic disengaging function Capable of absorbing regenerative energy and thus replacing internal braking resistors 		
MOVILINK® DDI	Contains an electronic nameplate with all the drive unit details No startup necessary		
Speed setting range	1:40 (without encoder)1:2000 (with encoder)		
Encoder option	Single-turn encoder /EZ2Z Multi-turn encoder /AZ2Z		
Overload capacity	Up to 300% Prevents oversizing in static operation Reduces the installed size of the necessary supply infrastructure Integrated overload protection device		
Communication/installation variants	 DFC – direct fieldbus communication (PROFINET, EtherNet/IP™, Modbus TCP, POWERLINK/CiA 402) DBC – direct binary communication DAC – direct AS-interface communication DSI – direct system bus installation (EtherCAT®/SBusPLUS, EtherCAT®/CiA 402) 		
Digital and analog inputs/outputs	 DFC/DSI: Up to 4 digital inputs and up to 2 digital inputs or outputs DBC: 4 digital inputs / 1 relay output and 1 analog input (0 - 10 V, 0 - 20 mA, 4 - 20 mA) DAC: 4 digital inputs / 1 relay output 		

Optional plug connectors	 AC 400 V – supply with M15 or M23 plug connectors Safe Torque Off (STO) with M12 plug connectors (A coded, 5-pin) DC 24 V – backup voltage with M12 plug connectors (L coded, 5-pin) M23 plug connectors for hybrid installation All plug connectors can also be used for further looping. 		
More options	 Optionally available as a brakemotor (incl. manual brake release) Optionally available with the DynaStop® electrodynamic deceleration function 		
Functional safety	 integrated STO (Safe Torque Off) safety function to IEC 61800-5-2 Safety Integrity Level 3 to EN 61800-5-2: 2017, EN 61508: 2010 PL e to EN ISO 13849-1: 2015 PROFIsafe and FSoE optional In preparation: CIP Safety 		
Certifications/conformity	CE (Europe) / CMIM (Morocco) / RCM (Australia) / UL-approved (USA and Canada) In preparation: EAC (Russia, Belarus, Kazakhstan) / UA.TR (Ukraine) /		
Connection voltage	380 V – 500 V at 50/60 Hz (also available as IT system variant)		

Energy-saving potential

Motor energy efficiency class to IEC 60034	Motor energy efficiency class ≙ IE5 to IEC TS 60034-30-2		
Drive system efficiency class to	Meets the highest defined energy efficiency class IES2 to IEC 61800-9-2 for the system		
IEC 61800-9-2 (Power Drive System)	comprising motor and inverter		

Dimensions and weight

A	Motor size						
H	CM3C80S				СМ3С80М		
Decentralized inverter size	1	1	1E	1E	1E	1E	
SIZE							
Decentralized inverter variant	Without cooling fins	Without cooling fins	With cooling fins	With cooling fins	With cooling fins	With cooling fins	
Brake option	_	BZ3	_	BZ3	_	BZ3	
Dimensions (L × W × H) in mm	145 × 307 × 298	145 × 348 × 298	168 × 307 × 318	168 × 348 × 318	168 × 333 × 318	168 × 374 × 318	
Weight in kg	14.19	22.87	14.64	23.32	17.03	25.71	

Surface protection	Optionally available with surface protection OS 1 or OS 2, others in the pipeline		
Degree of protection	Standard: IP65 to EN 60529		
Ambient temperature	-25 °C to +40 °C, up to 60 °C with derating		