Plattform MX6
Software option S306
Motion Basic

1 Identification

Identification	
Option ID	S306
Order number	S-05000401-0000
Short name	Motion Basic
Brief description	Motion Basic: This software option makes it possible to command and monitor drives via the PLC (path calculation in the drive).
Revision ID document	V1.0

2 System requirements and restrictions

System requirements and restrictions	
Supported platforms and devices	Berghof PLC devices of the MX6 platform (e.g.: MCs, CCs, DCs). Additional information regarding availability and compatibility can be found in options section of the product catalog.
Firmware	MX6-PLC from version 1.3.3, CODESYS from 3.5 SP5 Patch 4
Additional requirements	— EtherCAT or CANopen fieldbus interface
Restrictions	—

3   Product description

The libraries make it easy to control the motion of several drives using single axis movement (not synchronised). This extends the range of functions from pure logic control to motion control for simple movements of several axes.

In contrast to SoftMotion and SoftMotion CNC, the calculation of the desired axis movements is not performed in the controller. The movements are simply commanded by the controller and the status is monitored. The cyclical nominal value specification and the path calculation is carried out in the drive.

The libraries are suitable for applications with many drives for executing simple single-axis movements and for control tasks that require a low bus and computing load (CPU).

The BGH motion libraries contain basic function blocks for positioning tasks:

— MC_Power, MC_Halt, MC_Stop, MC_Reset
— MC_ReadParameter, MC_WriteParameter
— MC_MoveAbsolute, MC_MoveRelative, MC_Home
— MC_MoveAbsoluteFast, MC_MoveRelativeFast, MC_PepareMove

Further function blocks such as MC_MoveVelocity, MC_MoveTorque or customer specific blocks are optionally available.

The libraries include drivers for the following drives:

— Berghof MC 10XX (CANopen)
— KEB H6 (EtherCAT)
— Panasonic Minas A5B (EtherCAT)
— Servotronix CDHD (EtherCAT or CANopen)
— Servotronix StepIM (CANopen)

4   Technical data

Technical data	
Function Blocks	Function Blocks based on PLCopen MotionControl Part 1

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