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1 Function block "FB_DSM"

1.1 Brief description

This function block controls the Processdata of Schmalz DSM with IO-Link.

1.2 Image of function block

Example of function block:



1.3 Parameter - Input

name	data type	description
bEnableDrive	BOOL	Enable drive
bMoveToPosition	BOOL	Move to position
bMoveToHomeposition	BOOL	Move to homeposition
bJogForwardSlow	BOOL	Jog forward slow (+)
bJogForwardFast	BOOL	Jog forward fast (++)
bJogReverseSlow	BOOL	Jog reverse slow (-)
bJogReverseFast	BOOL	Jog reverse fast (--)
bAcknowledgeError	BOOL	Acknowledge for errors
bActivateCaptureInput	BOOL	Activate capture input 0 = deactivated 1 = activated
bStartReferencingDrive	BOOL	Start reference drive
bSetRefPosToCurrentPos	BOOL	Set reference position to current position
dwTargetPosition	DWORD	Target position (1/100mm linear) / (Grad rotatory)
wRotationSpeed	WORD	Rotation speed [1/min]
arProcessdata_IN	ARRAY [0..5] OF BYTE	Input bytes of process data

1.4 Parameter - Output

name	data type	description
bPositionReached	BOOL	Position reached
bHomePositionReached	BOOL	Homeposition reached
bDrivesMoving	BOOL	Drive is moving
bDriveInUpperEndPosition	BOOL	Endposition +
bDriveInLowerEndPosition	BOOL	Endposition -
bOperational	BOOL	Operational
bDeviceStatus_Green	BOOL	Device is working optimally
bDeviceStatus_Yellow	BOOL	Device is working but there are warnings
bDeviceStatus_Orange	BOOL	Device is working but there are severe warnings
bDeviceStatus_Red	BOOL	Device is not working properly
bSwitchCam1	BOOL	Switch cam 1
bSwitchCam2	BOOL	Switch cam 2
bSwitchCam3	BOOL	Switch cam 3
bSwitchCam4	BOOL	Switch cam 4
bInputExtSensorPin2	BOOL	Input sensor Pin 2
bInputExtSensorPin4	BOOL	Input sensor Pin 4
bStepLossDetected	BOOL	Step loss detected
bDrivesReferenced	BOOL	Drive referenced
dwCurrentPosition	DWORD	Current position (1/100mm linear) / (Grad rotatory)
arProcessdata_OUT	ARRAY [0..7] OF BYTE	Output bytes of process data

2 Appendix

2.1 List of abbreviations

abbreviation	description
FB	Function block
EPC	Energy- and Processcontrol
CM	Condition Monitoring
EM	Energy Monitoring
PM	Predictive Maintenance

2.2 Note

- The byte order of the product is represented as big endian.

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