## **Function Block ErrorID List**

ErrorID	Name	Description
0	NoErrorCode	No error
1	TimeLimitExceeded	Time limit exceeded.
2	DistanceLimitExceeded	Distance limit exceeded.
3	TorqueLimitExceeded	Torque limit exceeded.
Motion Sta	te Error	
4369	MotionQueueFull	The move could not be buffered because the axis motion queue is full. 16 moves is the maximum which can be buffered.
4370	MotionProhibited	The move could not be started because motion is prohibited. The drive may not be enabled.  MC_Power.Enable_Positive or  MC_Power.Enable_Negative might be low. Check  MC_Power.Status output. MC_Stop.Execute might be held high, preventing motion. If MC_Stop has control of the axis, no other function block can override the "Stopping" state. Other blocks that try to cause motion while MC_Stop has control of the axis will generate this error.Also, a motion block may be attempting to abort an MC_TorqueControl move.
4371	EnabledFailed	The servo drive failed to enable or disable. Check the amplifier wiring for L1 / L2 / L3. The amplifier could be e-stopped or have an alarm.
4374	TorqueMoveProhibited	Torque move prohibited while non-torque moves queued or in progress.
4375	NoCamForCamOut	CamOut called while not camming.
4376	MasterNotSet	ERROR: Variable (ErrorID_MasterNotSet_Description) is undefined.
4377	CamTableSelectInProgress	File reading already in progress
4378	InvalidAxis	The function block is not applicable for the external axis specified
4379	HomingSequenceInProgress	A homing sequence is already in progress.
4380	SetPositionWhileMoving	MC_SetPosition can not be executed while the axis is moving.



4381	AxisAlarm	Motion aborted due to axis alarm. It is also possible that a software limit has been exceeded.
4382	SetPositionOutofRange	When the axis is in rotary mode, and the MC_SetPosition tries to set a position that is equal to or greater than the MachineCycle, this error is generated, and the position is not set.
4383	HomingFailed	Axis must be commanded at standstill when homing is attempted.Refer to the Motion State Diagram and MC_ReadStatus
4387	CamStructSelectInProgress	Already copying cam data (If Execute transition to TRUE while Busy = TRUE)
4390	SetPositionProhibited	Position cannot be defined while the axis is the cam master of other axes.
4391	VirtualAxisNotAllowed	The function block can not be used with a virtual axis.
4394	UnableToAddPositionMonitor	Unable to add position monitor.
4395	InvalidPositionMonitor	Window parameters are outside the wrap range.
4396	AxisLatchFunctionInUse	Axis latch function already in use.
4397	FailedToMoveAwayFromOT	Over travel limit still ON after attempting to move away from it.
4399	NoDrivePower	The L1 / L2 / L3 power inputs on the drive may not be supplied with power, possibly due to an E-Stop condition.
4400	HardwareBaseBlock	The Safety input (HHB) is preventing the drive from enabling.
4401	AxisUnavailable	The controller cannot communicate with the axis. It may be disconnected from the network.
4402	ExternalAxisRequired	The scan compensation delay parameter 1305 is only valid for external encoders.
4403	HighSpeedOutputNotSupported	The High Speed Output functionality is only available on external encoders.
4406	UnsupportedContinuousLatch	Continuous Latch Mode not supported on Sigma II, Sigma III, or external encoders
4407	InternalBufferOverflow	Internal buffer overflow



4408	PatternOutofRange	PatternSize is out of range (1-8) or PatternCount is out of range (0-255)
Invalid St	ructure Value	
4624	InvalidStructureValue	RESERVED
4625	InvalidAxisID	Axis ID does not correspond to an axis configured on the system. Verify the value of AxisNum matches a logical axis number in the configuration. Tip: Make sure AXIS_REF is properly declared as a VAR or VAR_GLOBAL in all relevant POUs.
4626	InvalidMasterSlave	The master slave relationship is defined. A slave cannot be a master to another axis.
4630	InvalidTrigger	Trigger reference is not valid
4633	InvalidTableSize	Table size results in misaligned data.
4634	InvalidBufferSize	Buffer size results in misaligned data
4635	UnsupportedTableType	Table type is not supported
4636	InvalidStartIndex	Invalid start index.
4637	InvalidEndIndex	Invalid end index
4638	BufferOverrun	Buffer Overrun
Invalid Enumeration Type		
4641	InvalidBufferMode	Buffer mode does not correspond to a valid enumeration value.
4642	InvalidDirection	Direction does not correspond to a valid enumeration value.
4643	InvalidStartMode	Start mode does not correspond to a valid enumeration value.
4646	InvalidMode	Mode does not correspond to a valid enumeration value.
4648	InvalidParameter	The parameter number does not exist for the specified axis
4649	InvalidAdjustMode	Invalid adjust mode



Range Ei	ror	
4657	NonPositive Distance	Distance parameter is less than or equal to zero.
4658	NonPositiveVelocity	Velocity parameter is less than or equal to zero.
4659	NonPositiveAcceleration	Acceleration is less than or equal to zero.
4660	NonPositiveDeceleration	Deceleration is less than or equal to zero.
4663	NegativeTime	Specified time was less than zero.
4665	NegativeVelocity	Velocity parameter is negative.
4667	NonPositiveJerk	Jerk is less than or equal to zero.
4669	InvalidEngagePosition	Engage position is outside the cam table domain.
4670	InvalidEngageWindow	Engage window is less than zero.
4671	InvalidDisengagePosition	Disengage position is outside the cam table domain.
4672	NegativeDisengageWidth	Negative Disengage Window
4673	InvalidStartPosition	StartPosition is outside of master's range.
4674	InvalidEndPosition	EndPosition is outside of master's range.
4677	InvalidArraySize	Array size is too large
4678	InvalidBufferArrayIndex	Buffer array index out of range
Invalid I	nput Data	
4885	InvalidCamFileHeader	Invalid header for the cam file. Cam tables must have a header indicating the number of rows, number of columns and a feed forward velocity flag.
4887	InvalidCamRef	CamTableID does not refer to a valid cam table.
4891	IdenticalMasterSlave	The slave axis can not be the same as the master axis.
4893	InvalidExternalAxis	The specified external axis may not be used. A physical axis is required.



4894	InvalidVirtualAxis	The specified virtual axis may not be used with this function block.
Toolbox E	rror	
10020	InvalidProductSize	ProductSize cannot be less than or equal to zero
10021	MissedMarkLimit	Maximum allowed consecutive missed registration marks reached
10022	BufferOverrun	Product buffer overrun
10023	InvalidBuffer	Buffer size cannot be zero
10024	InvalidSampleSize	SampleSize must be greater than 1.
10025	SensorRangeError	SensorRange Error - Might be crossed or the same non-zero value
10026	PositionLimitsCrossed1	Positive Position Limit must be greater than Negative Position Limit
10027	PositionLimitsCrossed2	Negative Position Limit must be less than Positive Position Limit.
10028	InvalidPositiveVelocityLimit	Positive Velocity Limit must be LREAL#0.0 or greater.
10029	InvalidNegativeVelocityLimit	Negative Velocity Limit must be LREAL#0.0 or lower.
10030	InvalidPositiveAccelerationLimit	Positive Acceleration Limit must be greater than 0.
10031	InvalidNegativeAccelerationLimit	Negative Acceleration Limit must be less than 0.
10032	InvalidPositiveDecelerationLimit	Positive Deceleration Limit must be greater than 0.
10033	InvalidNegativeDecelerationLimit	Negative Deceleration Limit must be less than 0.
10034	CalculationError	Interpolation calculation error.
10035	GripperCloseError	Gripper close error (timeout).
10036	GripperOpenError	Gripper open error (Timeout).
10037	DirectionError	Offset cannot be in the same direction as the original motion into the limit switch.



10038	InvalidSegmentSize	Segment Size Error - Must be greater than 0 and less than 20.
10039	InvalidResolution	Cam Segment Resolution cannot be zero
10040	InvalidCurveType	Curve Type selected in a segment is not valid.
10041	PairsExceeded	Total pairs required would exceed DataType definition based on number of segments and resolution settings.
10042	InvalidMasterData	Master must be always increasing from segment to segment.
10043	TangentMatchError	Tangent Match formula error, cannot have only one segment.
10044	TangentBlendError	Tangent Blend error, must have two segments, a straight line and a Tangent Blend, in either order.
10045	PositionNotFound	Position not found.
10046	SamePointsRequired	Both cam tables must have the same number of point to be added together.
10047	SameMasterCycleRequired	Both tables must have the same master cycle to be added together.
10048	InvalidIndexSpeed	The IndexSpeed is less than 20.
10049	InvalidFrequency	Frequency cannot be less than 1 Hz.
10050	InvalidDwell	The dwell cannot be greater than the IndexTime.
10051	InvalidOscillation	There must be a whole number of oscillations in an index at a given speed.
10052	ProfileDescrepancy	There is a discrepancy between the master values in Profile1 and Profile 2. At the same pair somewhere in the table, the masters have values differing by more than 1 user unit.
10053	LatchError	DataPoint error.
10054	InvalidSegmentType	SegmentType error.
10055	SegmentTooShort	Segment too short.
10056	CircleError	Circle error.



10057	PointError	Point error.
10058	StartAngleError	Start angle error.
10059	SynchronizationError	Synchronization error.
10061	InvalidMasterType	MasterType is something other than 0 or 1.
10062	InvalidMachineCycle	MachineCycle must be a positive value if MasterType = 0
10063	InvalidLastSwitch	LastSwitch is set outside the 0-255 range.
10064	InvalidTrackNumber	Track Number outside the 0-31 range.
10065	InvalidFirstOnPosition	FirstOnPosition is not equal to 0.
10066	InvalidLastOnPosition	LastOnPosition is not equal to 0.
10067	InvalidAxisDirection	AxisDirection is not equal to 0.
10068	InvalidCamSwitchMode	CamSwitchMode is not equal to 0.
10069	InvalidDuration	Duration is set to 0 or a negative value.
10070	InvalidOnCompensationScaler	OnCompensationScaler is set to an invalid value.
10071	InvalidOffCompensationScaler	OffCompensationScaler is set to an invalid value.
10072	InvalidOnPos	Needs to be in the 0-255 range.
10073	InvalidOnOffPosition	Needs to be in the 0-255 range.
10078	Formula27Error	Formula 27 Error is reserved for errors with circle calculations.
10079	UserNoDwellModifiedConstantVelocity	When using UserNoDwellModifiedConstant Velocity, there must be three contiguous segments with the same formula code applied, and the master percentages must be increasing.
10080	Formula29Error	Formula 29 error.
10100	AxesInterlock	Both axes must be configured for the same axis type (Rotary / Linear) and if Rotary, they must have the same Machine Cycle
10110	TabberError1	Too many tabs specified



10111	TabberError2	Pitch between labels would be negative, need more spacing between tabs
10112	TabberError3	Mode Error - Tab mode must be specified as 1 (Tabbing) or 2 (Stamp)
Axis Error		
40960	ServoPackAlarms	RESERVED
45332	ClearAlarmsFailed	Sending clear alarms command to servo drive failed.
45335	Absolute Encoder Initialization Failed	Failed to initialize absolute encoder.
Operating System Error		
57620	InvalidStructureSize	The structure size does not match. This error may occur because data passed to an 'Axis' input on a PLCopen function block is not an AXIS_REF. If you have included a data element into a user structure which includes an AXIS_REF, be sure that the input to the function block is entered correctly.
Kernel Error		
61713	InternalMotionKernelError	An internal assertion in the motion kernel failed indicating the controller is not in a stable state.