

Code	Error Code Description	Possible Reason	Solution
External Error Code			
201	Invalid Sub-Module		Set ZMIO_OFFSET as minus or the No. that exceeds starting IN & OUT No., and it must be the times of 8, such as, ZMIO_OFFSET = -8.
210	Oversize File		Downloaded zpj project or zar file is too large, please check controller specification by “?*max”.
211	File Size Error		
212	State Error	When in Resume, it is non-pause state.	When in Resume, it is in non-pause state, see if RT running state is switched too fast, this usually appears MotionRT7.
213	Download & Upload File Error, Package Loss	Appear when calling PC function.	
214	Downloaded File Length Verify Error		
215	Insufficient Buffer Length	when the sending character string is too long, return this.	Check the length of character string command. It can't be too long.
217	Unsupported Controller Function		
218	Wrong Called & Transferred Parameters		
219	Downloading Error, Multi-File Downloading		See if several files now are downloading at the same time.
220	Filename Error, Be with Special Character		See if the filename has unsupported character.
221	Too Long Filename		See if the filename's length exceeds.

222	Invalid File		The file may not exist, open it, see whether there is alarm, and check which one.
223	Locked, Password Protection		Enter correct password.
224	Locked, Password Protection 2		Don't unlock the controller too frequently, and the password must be correct.
225	Unknown Error		
226	Disk Space Error		
227	Firmware Version Error		<ol style="list-style-type: none"> 1. Check whether it is the latest one – update. 2. See if it matches with your controller – change correct one.
228	File Open Error		
229	Connection Error		
230	Fail to “bind”		
231	File Read Error		
232	File Write Error		
233	Link Encrypted		
234	Firmware Error		1. Update dll.
235	File Delete Error		
236	Path Error		
237	File Close Error		
240	XPCI Sub-Card State Error		
241	XPCI Sub-Card Memory Resource Error		
242	Sub-Card Setting Error		
243	Unsupported Sub-Card		
Chip Self-Checking Error			
260	Hardware Error, LED Shrinks		

261	Disk Unformatted		
262	RTC Error		
263	NORFLASH Error		<ol style="list-style-type: none"> 1. There is strong interference, please restart, if still, contact with us. 2. For XPCIE, please check wiring cable, make sure it is good.
264	RAM Error		<ol style="list-style-type: none"> 1. Make sure internet stable. 2. Hardware error, contact with us.
265	NANDFLASH Error		Same as code 263.
266	U Disk Error		<ol style="list-style-type: none"> 1. See whether U disk is plugged in stably. 2. Interface error, contact with us.
267	FPGA Error		1. Contact with us.
268	Ethernet Hardware Error		1. Contact with us.
Software Error			
271	Backup Power Error		1. Contact with us.
272	Sub-Card Doesn't Exist		
273	ID File Lost		1. Contact with us.
274	System File Lost		1. Contact with us.
275	No Master Control, Appear in Sub-Card		
276	Program File Verify Error		<ol style="list-style-type: none"> 1. For ZMC0XX, see whether is ROM file. 2. Check if ZAR file is correct.
277	Program File Error		1. See whether it lacks program file.
278	ZAR File "apppass" Error		

279	ZAR File ID Error		
280	Too Many BAS Files		1. Check controller supported BAS file numbers (?*max – max_file), then see whether it exceeds.
281	Sub-Card ID Conflict / Multi-Master Conflict		
282	Unsupported Function		1. The controller doesn't support this function. 2. See if it is controller new function, then update the firmware.
283	“set” File Error	Parameter file lost.	1. Please modify needed parameters that are saved into flash, then generate as set file automatically.
284	ZAR File Not Matched with Controller		
285	Image File Error		
286	Font File error		
287	.c File Function Syntax Error	Usually C language program error	1. Check your edited C language program. 2. If bottom layer C language error, please contact with us to update.
288	Above Abnormal, Alarm Again when Powered On.		
289	Too Fast Reset		
290	Drive Program Init Error		
291	fpga Error		1. Please restart. 2. Contact with us.
292	Insufficient mmap		

293	MotionRT Trial Expires		<ol style="list-style-type: none"> 1. Check whether the License is configured 2. For trial mode, please restart MotionRT.
zmotion			
1000	Motion Offset Error		
1001	Must Be Interpolation State		
1002	No Motion Buffer		
1003	Can't Be in Interpolation State		
1004	Slave Axis is Moving		
1005	Unsupported Motion Control Function		
1006	Arc Position Error		
1007	Ellipse Para AB Error		
1008	Motion Module Para IN Error		
1009	In Motion, Operate Not Allowed		
1010	Repeat Run "Pause" & Others		
1011	In IDLE, Can't Do Pause, etc.		
1012	Now Motion Doesn't Support Pause		
1013	Pause Point Not Found		
1014	Unsupported ATYPE		
1015	ZCAN ATYPE Conflict		
1016	Unsupported Axis Function		
1017	FRAME Correction Data Error		
1018	Too Less FRAME Correction Data		
1019	Too Less Met FRAME Data		
1020	Too Less FRAME Data Auxiliary Para		
1021	Too Small Span Between FRAME Correct Data, < Joint-Axis Numbers		

1022	FRAME IN Coordinate Error		
1023	In FRAME, No Way to Modify Coordinates		
1024	FRAME Inverse Kinematic Error		
1025	Not FRAME Status		
1026	FRAME HAND Error		
1027	Can't Switch Attitude in Interpolation		
1028	UNITS of Special Joint-Axis & Virtual-Axis Should Be Same		
1029	FRAME Called INIT Para Error	Distance / angle para exceeds, note the angle unit.	
1030	CORNERMODE 7-Bit Set Already, But Unsupported Motion		
1031	CORNERMODE 7-Bit Set Already, But Not in FRAME.		
1032	AXIS_ADDRESS Error		
1033	Too Many Interpolation Axes		
1034	INTCYCLE Time Out		
2000	RTBASIC Module Offset, Para in Module Error		
2001-2020	Internal Error in RTBASIC Module		<ol style="list-style-type: none"> 1. Check if there are same definition name of different types' variables according to the message hint. 2. Check if it prints unassigned variable in the function.
2021	Manual Stop		
2022	Task Stops Because Other Tasks Error		
2023	Operate RO Para		1. Read only parameter

			can't be modified.
2024	Array Exceeds		1. Modify the number of defined arrays (table index starts from 0).
2025	Variables > Controller Allowed		1. Check <code>?*max - max_sub</code> , if more, please select other models.
2026	Arrays > Controller Allowed		
2027	Array Space > Controller Allowed		
2028	SUB > Controller Allowed		
2029	Mark Name Error	Command edit error / no note for Chinese	1. See if there are unsupported symbols (especially in function, variable definition).
2030	Too Long Mark Name		1. See if function or variable definitions are too long, controller has own limit.
2031	No “)”		1. See if the parentheses are full. 2. See if the parentheses are correct or if there is special character in the middle.
2032	Unknown Character	Command para's comma is Chinese symbol.	1. See if there are unsupported symbols.
2033	Unknown Name in Expression	Undefined variable / array	1. See if commands are edited correctly, and whether commands are supported.
2034	SUB Can't Be Used in Expression		1. Modify SUB usage method, SUB function only can be

			called.
2043	Unknown Command Mark (Now Line 1 st Mark Name)	Command editing error	1. See if there are wrong editing commands, and if commands are supported.
2044	Stack Overflow	SUB function recursive calling > system allowed times	1. Check “?*max” – “max_callstack”, see the limit, each controller is different. 2. See if functions are called mutually.
2045	Too Complex Math expression		1. Check and modify the math expression, each controller is different.
2046	No End Quote Mark Found		1. Check and modify quote mark.
2047	No Returned Value for The Command, Can't Read		1. Cancel related commands / functions in expression or use in online command.
2048	Function Must Return a Value, Not at Beginning of First Line		1. See if executed function that needs return value but the expression didn't output the value, like, directly run SIN(1).
2049	Special Command Must Be One Separate Line	Some commands must occupy one whole line.	1. Edit related commands in separate line.
2050	Para / Array Needs Index		
2051	Variables Can't Use Index		
2052	Array Redefine & Inconsistent Length	Define same arrays many times.	1. Check if the array is redefined, and see if the length is not same.
2053	Array Defined Length Para Error,		

	Minus / Oversize		
2054	Mark Defined as SUB	SUB progress mark can't be defined again.	1. Check if the function name is redefined.
2055	Mark Defined as Parameter		1. Check if the parameter name is redefined.
2056	Mark Reserved, Can't Use		1. Check defined mark name, see if conflict with existed para command, (mpos, ..)
2057	Unrecognizable Character	Like "&" can't be identified by system	1. See if undefined value is transferred.
2058	SUB Calling Out Stack (Repeat)		1. Check SUB calling logic and correct it.
2060	Syntax Format Error		1. Find the wrong line, and correct it.
2061	Parameter Overflow		
2062	Function Para Range Error		<ol style="list-style-type: none"> 1. Check the command parameter or custom function parameter, see if the range exceeds. 2. Check task No., if it is more than allowed by ?*max – max_task 3. Check if there inputs too many contents in executing line.
2063	Too Many Function Parameters		
2064	Too Less Function Parameters		
2065	Lack Operands		1. Check if the operation expression is full.
2066	Lack Operands after Operators		
2067	Lack Operands before Operators		

2068	Unknown Operators		
2069	Lack Binary Operators	2 commands are in one line, one operator is needed.	
2070	CALL Must Call SUB		1. Correct the content to be called after CALL, it must be SUB type.
2071	No AUTO, Won't Start		
2072	Lack Assignment Symbol	When there is no comma between data, use "space".	1. Correct expression information, add needed assign symbol
2073	Empty File		
2074	SUB Defined Mark Name Conflicts		1. Check and correct parameter definition.
2075	Task to Be ON is Running		1. Check if there is conflict on executing task No.
2076	Multi-Para, Please Use Comma		1. Check parameter used format, correct.
2077	No "<"		1. Check if the brackets are full
2078	Too Much "IF"		1. Cut down the number of IN, each controller is different.
2079	Too Much "Loop"		1. Cut down the number of LOOP, see "?*max -- max_loopnest", each controller is different.
2080	Too Less Interpolation Axes		1. Correct the number of axes.
2081	CONST Can't Be Modified.	It will report and error when defined constant data is assigned again.	1. Correct CONST usage.

2082	Command Doesn't Support Online Sending		
2083	Too Many SUB Defined Para		1. Cut down local parameters (< ?*max -- max_local of one sub), each controller is different.
2084	SUB with Para Can't Use in GOTO		1. Use GOTO command correctly.
2085	Too Many LOCAL Defined Para		1. Cut down the number, each controller is different.
2086	LOCAL Variable Name & File Variable Name / Others Conflict		1. Correct related content.
2087	LOCAL Doesn't Support Array Definition.		1. Correct LOCAL command usage.
2088	GSUB Defined Para Letters Repeat		1. Correct repeated part.
2089	GSUB Defined Para Only Can Be Single Letter		1. Correct non-single part.
2090	RO Parameter Error		1. Read only parameter can't be modified.
2091	GSUB_IFPARA Usage Error		
2092	Divisor is 0		1. See if one divisor in the code is 0, correct.
2093	Over Buffer		
2094	Online Commands Blocking Too Long (Time)		1. Check the network. 2. Check if there are too much data transferring in a short time. 3. Make sure link stable, and bandwidth is OK.
2095	Same Para Name		1. Rename.
2096	Use Uninitialized Value		1. Initialize the value.

2097	Axis No. Conflicts		1. Correct axis mapping
2098	Data Type Error		
2099	Inside Error		1. Usually defined name conflict, correct.
2100	Too Many SCANEDGE		
2101	ZINDEX Type Mismatch		
2102	ZVOBJ > Allowed Numbers		
2103	Inconsistent ZVOBJ Definition		
2104	ZINDEX Value Error		
2110	Call Command Not Enabled		
2120	Structure Define Conflict, Can't Define Multi at the Same Time		
2121	Name & System Command Conflict		
2122	Structure Definition Can't Be Recursive		
2123	Structure "item" & Structure Name Conflict		
2124	Syntax Error, Lack Structure Type		
2125	Structure "item" Error		
2126	Lack Structure Element		
2127	Lack Structure Variable		
2128	Structure > Allowed Numbers		
2129	Structure Element > Allowed		
2130	Structure Type Undefined		
2131	Data Type Undefined		
2132	Structure Define Should Be Before Codes		
2133	Can't Dynamically Delete Static Definition		
2134	Lack Array Type		
2150	Function Return Not Immediate Done		
2151	Function Can't Immediate Return		

	Because Now Expression Doesn't Support		
2152	Dynamic Stake is Overflow		
2200	Function Calling Not Done		
2901	System Error, Too Many Defined Mark (variable, array, process...)		
3201	Over Buffer		
3202	File Abnormal End		
3203	Program Structure Command Lack Something	no THEN after IF.	1. Compatible error, see if the command is full, such as, no THEM in IF.
3204	Internal State Error		
3205	Unsupported Function		1. The controller doesn't support this function. 2. See if it is controller new function, then update the firmware.
3206	Internal Calling Para Error		1. You used controller unsupported function, please see whether controller supports. 2. EtherCAT config file is not loaded.
3212	Unknown Error		
3230			
3231	Insufficient Resources		
3232			
3233	OS Return Error		
3242	"os" Error		
3243	U Disk Uninserted		1. Check if the U disk is inserted and is stable.

			2. Check if the U disk that can be known by your controller.
3244	File Opened Again		
3245	Oversize File		
3248	Filename Error		
3249	Too Long Filename		
3250	No This File		
3301	Arc 3 Points are in One Line		1. Correct command usage.
3302	2 Parallel Lines, No Intersection Point		1. Correct command usage.
3401	MODBUS Master Para Error		1. See if MODBUS master para is correct, see if the length exceeds.
3402	Message Response Timeout		1. See communication configuration. 2. See if there is blocking / unstable network.
3403	Message Length > Max Buffer		1. Sending data exceeds the limit.
3404	MODBUS Message Bytes / ID Error		
3405			
3406			
3407	MODBUS Return Para Error		
3408	MODBUS Return Doesn't Support		
3410	Receive Data in Blocking		
3420	MODBUS Salve Returns		

	Unsupported Function Code		
3421	MODBUS slave station returns invalid function codes		
3422	MODBUS Slave Return Address Space Error		1. Master and slave addresses are not matched, please read & write not existed register addresses, then set correct one.
3423	MODBUS Slave Return Data Length Error		
3424	MODBUS Slave Return Length Too Long		
3501	ZCAN Return No Sub-Card		
3502	ZCAN Return No Sub-Card Related Axis		
PLC (Controller Side)			
4001			
4002	Parameter Error		
4003	Unknown Type		
4004	Unknown Function	Unknown function is called, or the called function is not GLOBAL type.	Modify the syntax usage.
4005	Stack Too Many STL		
4006	Too Many Stakes		
4007	Too Complex Program, Too Much BLOCK		
4008	No Stack BLOCK		
4009	No Stack STL		
4010	No Stack	when using MPP and MPS commands, MPP > MPS	Determine error position, then modify the script., MPP used times should be same as MPS.

4011	MC Can't Be in the Middle of STL		
4012	MC Level Error		
4013	STL Only Can Be Main File Main Task		
4014	File Content Error		
4015	RET Must Be after STL		Correct it.
4016	> Register Range		
4017	< register Range		
4018	L Not Defined		
4019	Don't Support G Code Function		
4020	COTO Can't Cross PLC & BASIC	In Basic, you used GOTO to jump to PLC.	Use syntax correctly.
4021	Only One PLC Main Task		
4022	Syntax Error		
4023	FOR NEXT Error, Mismatched		Use syntax correctly.
4024	FOR NEXT Error, no NEXT		Use syntax correctly.
4026	FOR MC Mixed Use		Use syntax correctly.
4027	FOR STL Mixed Use		Use syntax correctly.
4030	Must Use in PLC Main Task		
4031	Must Use in Interrupt		
4032	Too Less Parameters		
4033	Too Many Parameters		
4034	Multiples of 8		
4035	Register Mark Error		
4036	Register Type Error	STL command and others use wrong register type	Determine alarm position and correct the script.
4037	Too Many LV		
4038	Read-Only		
PLC (PC Side)			
4501			
4502			
4503	Insufficient Memory	The memory	Optimize the memory.

		exceeds allowed	
4504	Reflow to Busbar	The soft component is connected direct, and parallel to the busbar.	Delete the connection that is not correct.
4505	Reflow	Direct connect, and parallel to other soft components without the soft component.	Delete the connection that is not correct.
4506	AND Command Can't Connect to Busbar Directly.	No other elements between AND type and busbar.	Add the component, or delete this ladder diagram.
4510	Not Full, No OUT Command in the Right	No output command is connected after ANB command or after the component.	Determine where is wrong, then correct it.
4511	In the Rightmost, it is Not OUT Type.		Check if it is output type in the rightmost side.
4512	Rightmost Must Be Separate	2 output types of components that are in the rightmost side are connected.	Check if they are connected in the rightmost.
4513	OUT Type Must Be in Right Most	Output types' component is not the rightmost side of ladder diagram, but in the middle or left side.	Check if there is output type is in the middle or left.
4514	Unsupported Command Type		Check where the unsupported type is, and correct it.
4515	Inside Error		
4516	Inside Error		
4517	Empty Register	There is no any value in called	Assign the register that is to be called.

		register.	
4518	DOT Value Exceed		
4519	Register Exceed	Called register exceeds the number of registers.	Modify the usage range of the calling register to be within the specified number range
4520	Too Many Characters		
4521	Register Type Error	Script used register type is not controller standard register type.	Check if the used register type is consistent, valid.
4522	Register Value Error	Register value input by the component / command is wrong.	Find the wrong component or command (wrong register value).
4523	Too Many Registers		
4524	Too Less Registers	The component didn't set the register.	Add register for the component or command that didn't set register.
4525	STL Usage Error		
4526	RET Usage Error	RET should be used after STL.	
4527	RET Repeat	RET command or component is used again.	Delete one.
4528	END / LBL Position Error		
4529	Function Can't Be Connected to Busbar Directly		
4530	No Push when Out the Stack	when using MPP and MPS commands, $MPP > MPS$	
4531	Too Many MPS	Keep using MPS over 11 times	Determine the usage times, and correct it.
4532	Register Type Usage Error	You used supported register type.	Use correct register type.

4533	ANB Error, Insufficient Blocks	No others after ANB, real numbers of used is not consistent with needed.	
4534	ORB Error, Insufficient Blocks	No others after ORB, real numbers of used is not consistent with needed.	
4535	ANB Error, Can't Combine after OUT	After OUT command, then you call ANB.	
4536	ORB Error, Can't Combine after OUT	After OUT command, then you call ORB.	
4537	AND Can't Be Connected to Busbar Directly	AND command or other components are connected to busbar directly, before, there is no other command / component.	Determine where is the wrong position, then correct the script or LAD.
4538	OR Can't Be Connected to Busbar Directly	OR command or other components are connected to busbar directly, before, there is no other command / component.	Determine where is the wrong position, then correct the script or LAD.
4539	OR Can't Be after OUT		
4540	STL & MC Can't Be Shared		
4541	MC Can't Be Connected to Busbar Directly		
4542	@Register Without Brackets		

4543	Note Error		
4544	Too Many LAD Columns	LAD columns > controller allowed	Too many LAD columns, please delete some.
4545	OUT Type Can't Be Connected to Busbar Directly.	Output types component connects to busbar directly.	Delete the corresponding OUT type component.
HMI			
5000	LCD No. Error	HMI running tasks > controller allowed.	See if it is more than allowed (allowed can be known from ?*max - max_hmi), more, please select other controllers.
5001	HMI File Error	Inside error	Please contact with us.
5002	LCD No. Conflict	Multiple HMI file use same LCD No.	See if there are same LCD No.
5003	Unsupported Object	Inside error	Please contact with us.
5004	Insufficient Memory	Too small memory setting for VPLC7 or other controllers don't support.	1. For VPLC7XX, adjust "config -- hmisize". 2. Contact with us.
5005	"Control" Error	One abnormal "layer" value set by PC software is transferred.	Contact with us.
5006	Window No. Exceed	You set too large window No.	1. Set it as a small one. 2. If it is full, contact us.
5007	Invalid Window No.	1. In base window, you opened one window that doesn't exist. 2. One invalid window is opened by the HMI_SHOW -	Check if you opened the base window that had been opened by the command already.

		WINDOW.	
5008	HMI Content Error	Inside error	Contact with us.
5009	Same Window No.	Two HMI files or several windows use same window No.	See if they are same.
5010	Object Property Lost	Inside error	Contact with us.
5011	>1 KeyboardShow in Keyboard		
5012	ACTION Type Error	Because action value is abnormal in PC configuration.	Contact with us.
5013	Too Many Events		
5014	Back to Last Window Failed		
5015	Can't OFF Base Window		Check HMI file's base window, and check script "close" logic.
5016	No Related Character in Font	This will not alarm, but the character that can't be known will not be shown.	
5017	Must Use in HMI Task		
5018	Wrong Control Type	Because the control is operated by the command but it doesn't support.	Check parameter configuration and related HMI window, see if they are consistent.
5019	Control ID Not Exist		
5020	Control ID Conflict	Different controls are set same component No.	Correct it.
5021	LCD No. Error	PC host computer error	PC host computer error
5022	No Valid LCD Found		
5023	LCD No Opened		
5024	LCD No Data		
5025	Program Reset		
5026	LCD Opened		
5027	Not Network LCD	PC host computer error (300 uses internal LCD No., the HMI with x uses network LCD No.)	

5028	Unsupported Compress	Reserved	Reserved
5029	Unsupported Color Depth	Controller doesn't support that.	Contact with us.
5030	Unsupported Data Type	Inside error	Contact with us.
5031	Device No. Error		
5032	LCD_SET Can't Use	Reserved	
5033	Don't Set REDRAW in DRAW	In draw function, you used set_redraw command.	"set_redraw" is one refresh function that must be used in refresh function.
5034	DRAW Function Only Can Be DRAW	"draw" command is used in refresh function.	Draw command (usually the beginning of draw) must use in draw function.
5035	Can't Call in DRAW	The command that operates control is used in draw function.	Commands that operate control to show, control state can't be used in draw function.
5036	Fixed Inner LCD Resolution		
5037	LCD Resolution Beyond	Set resolution > controller allowed	You can check x and y parameter (?*max - max_hmi), that is, the resolution size.
5038	Library File Name Error	Called library file name is wrong while using text library.	Check the control "text library" or the command, correct the name.
5039	Too Many Characters		
5040	Object Property Lost	Inside error	Contact with us
5041	No KeyboardShow in keyboard		
5042	Too Many States		
5043	Unsupported Draw Property		
5044	Remote Communication Device Name Error		
5045	Remote Communication Data No Update		
5101	Invalid Date Format	You used invalid	Use correct data format: %

		format while using SYSTEM command (like, not the format of % + letter).	+ letter
5102	Control Not Exist	You use the command to operate the control that doesn't exist (such as, online change control text).	Use correct control ID.
5103	Too Many / Less Polygon Points	The polygon points is <2 / >32.	Check the point numbers, and better to use DRAW_POLYGONS.
5104	No Free Scroll Bar	You used auto-allocate ID syntax while initializing the scroll bar.	Note to release ID No. that is not used, if you need more, please contact with us.
5105	Invalid Scroll Bar ID	You called invalid scroll bar ID when using scroll bar command (such as, you used ID (>31)).	Use correct initialization scroll ID.
5106	Unsupported Function	Controller used unsupported HMI control / command.	Contact with us to see if there is new firmware.
5107	Not Load Image	You don't import the image while CAD command is executing.	Please use CAD control to import corresponding graphics, then do other CAD operations.
5108	File Broken	Usually appears when importing broken format of strong formats (bin file).	Reexport broken bin file.
5019	Menu Para Error		

5110	Not Enough table Space when Exporting, then Overflow		Make table space large through the command or change one controller if now it is the max space.
5111	Unsupported Data Type		Change as correct data type.
5112	Unsupported Control Type		Change control ID, and use correct control.
5113	Array Overflow	Exceed max value	Check array size, and see whether transferred array max value exceeds or not.
5114	Inside Error	Error in HMI inside	Contact with us.
5115	Channel Overflow		
EtherCAT Bus Errors			
6000	EtherCAT Module Error, SLOT No. Error		
6001	Inside Error, Unsupported Function		
6002	No Stack		
6003	Unknown		
6004	“mbox” Occupied		
6005	Parameter Error		
6006	Supported Device Types Exceed		
6009	NODE Operated Exceed		
6010	Slave State Error		
6011	Unsupported Slave		
6012	Insufficient Resources		
6013	Slave Device Respond Timeout		Slave doesn't respond when master writes data several times for a long time (like, >400ms), please check from drive error, time when problem appears, and controller

			performance, etc.
6014	Insufficient Buffer		
6015	Respond Package WKC Error		Slave returned WKC counts is wrong, please check specific reason.
6016	Too Long SDO Respond Content		Slave respond SDO length is too long, please check if the sent SDO data type is correct.
6017	SDO Respond Error		The transmission of the SDO read or write operation is actively rejected by the servo and terminated. The cause of the error needs to be analyzed in combination with the specific SDO content sent, such as reading a data object that does not exist in the data dictionary, or writing PDO data during operation.
6018	SDO Respond Data Length Error	Usually because sent SDO data type is incorrect or unsupported.	Check SDO data type, if it is correct.
6019	WKC Timeout		Slave returned WKC timeout, please check from drive error, controller performance, time when problem appears, etc.
6020	STATE Switch Timeout		SoE state switching timeout, that is, master doesn't get correct

			respond from slave after s long time requesting on switch the state, please check from drive error, controller performance, time when problem appears, etc.
6021	SDO ABORT, Drive Return Error	Data dictionary reading or writing error / write drive function that is not supported.	The transmission of the SDO read or write operation is actively rejected by the servo and terminated. The cause of the error needs to be analyzed in combination with the specific SDO content sent. Generally, because sent incorrect / unsupported SDO.
6022			
6023	NODE PROFILE Error		
6024	Axis PROFILE Error		
6025	Too Many Axes		Bus axis numbers exceed allowed, please check and correct.
6026	Exceed Custom PDO Buffers		
6027	Too Many Custom Numbers		
6028	Don't Modify PROFILE after ON		
6029	PDO Package Length > System Allowed		Check "profile" setting, for functions that will not use, don't configure PDO.
6030	Scan First		
6031	Too Many Devices		
6032	Over buff Length		
6035	Preset & profile Conflict		

6036	Too Many PDO		
6037	Special Profile, Drive doesn't Support it.		
6038	"preset scan" Not Matched		
6039	"preset" Empty		
6040	No Scan		
6042	Device Not Support		
6045	Mail Timeout		
6046	Data Lost		
6047	Data Type Error		
6048	PDO Not Support		
6049	Unsupported Sub-Module		
6050	Too Many Submodules		
6051	Unknown Submodule		
6055	Operated PDO Type Length Not Matched		
6056	PDO R & W Content Not Found		
6057	PDO Key Content Error (like, DRIVE_STATUS)		
6058	AL State Reading Error		
6059	AL State Error, Non-OP State		
6060	Drive Error		
6061	Insufficient XmlEsi Buffer		
6065	IO PDO Must Byte Offset ($\neq 0$)		
6066	IO PDO Not Continuous		
6067	DA PDO Type Conflict, Only Can Be Single Type		
6068	ZML File SM Info Lost		Correct xml file, and convert it to zml again, contact with us to add.
6069	ZML File Key Info Lost		
6070	ZML File Needs More Space		
6071	Wrong ECAT Module Numbers		
6072	ZML File Message Repeat		
6073	Module startup Doesn't Support CA Method		

6208	RTEX Drive ID Conflict		
6209	Scan Timeout	Usually because cable.	
6210	RTEX Initialize Failed		
6211	RTEX Scan Result Error		
6212	RTEX Device Type Error		
6213	RTEX Message Timeout		
6214	RTEX SDO Message Error		
6500-6520	EIO Error		
6501	PDO Length Settings Error		
6502	Mail Length Settings Error		
6503	Don't Modify RO Data Dictionary		Read only data dictionary can't be modified.
6504	Too Many Data Dictionary Arrays		
6510	PDO Written Content Error, First Level Index Content Error		
6511	PDO Data Content Repeat		
6512	PDO Content Error, Dictionary No. Error		
6513	PDO Content Error, Dictionary Sub No. Error		
6514	PDO Content Error, Dictionary Length Error		
6515	Too Many PDO		
6516	Slave AML Alarm		
6517	Slave WDOG Alarm, PDO Package Loss All the Time		
NC Module			
7003	Unsupported Syntax when Analyzing		
7006	No Info about which Axis & Channel of The Command		

7008	ACOS Operation Command Parameters Out of Range		
7009	ASIN Operation Command Parameters Out of Range		
7010	The Divisor Can't Be 0		
7011	The Exponent Must Be an Integer When the Base is Negative.		
7012	Character Error	Because there are characters that can't be analyzed.	
7014	Wrong Digit Format		
7032	Inner Syntax Error		
7034	Flat Switching Error	One wrong flat value is transferred.	
7037	Unsupported Operation Command		
7041	Feed Speed is 0, Can't Run G1		
7043	Feed Speed is 0, Can't Run G2, G3		
7057	Appear Unused Axis Parameter		
7066	Too Long of This Line Code	256 characters can be edited in one line.	
7069	Arc Start Point = End Point by Radius Method		
7077	No "=" in Assignment Command		
7078	Illegal G Code		
7096	Lack "[" after ATAN		
7097	Lack "[" after Operation Command		
7098	Illegal N Code > 999999		
7100	Illegal M Code		
7101	Arc Para R & IJK Mixed Use		
7102- 7119	Muti Axis Specified Info (A~F, H~L, P~Z, 7012=A, 7107=H, 7112=P), Can't Know Which One		

7121	Negative Can't Be Squared		
7124	Negative in G Code		
7127	Negative in M Code		
7132	Brackets Embedded in One Bracket for Noting		
7133	Syntax Error, No Read Value		
7134	Digit Lost		
7135	Read Value is Not Integer		
7136	Inner Syntax Error		
7142	Illegal Para & Variable Address		
7147	Arc Parameter Lack		
7153	Too Small Arc Radius to Arrive End		
7156	ATAN No "/"		
7161	Inner Syntax Error		
7168	≥2 Same Type Command of G		
7169	≥2 Same Type Command of M		
7170	Can't Open NC File		
7171-7188	Inner Syntax Error		
7196	0 / - Value in LN		
7197	Arc Radius R is 0		
7200	Empty Analysis Code		
7201	No Symbol, Integer Can't Be with "+ / -" Symbol.		
7202	No Integer (without symbol) Read		
7203	No Symbol, Read Number Can't Be with "+ / -" Symbol.		
7204	No Real Number (without symbol) Read		
7220-7246	Unused Key Words in Code Line, 7220-7228: XYZABCUVW, 7229-7231: FST, 7232-7241: EDHIJKLPQR		

7301	Command Type / Command Code Not Exist		
7302	Register Command Existed Already		
7303	Microprogram No. Exceed		
7304	Command Group No. Exceed		
7305	Command Code Exceed		
7306	Expand Type Not Exist		
7307	Command Priority Exceed		
7308	Empty Command (for the function "call")		
7309	Command Not Exist		
7311	Command of Priority 0 & Others Appear at the Same Time		
7312	Here are Multi Motion Commands / Commands with Coordinate Para Synchronously		
7313	Inner Error		
7314	Inner Error		
7315	Inner Error		
7319	Too Many Parameters Checked		
7320	Lack Parameter to Check		
7350	Illegal Parameter Checking		
7351	Undefined G Code		
7352	Undefined Length Unit		
7353	Undefined Type / Mode		
7354	Inner Error		
7355	Unknown Coordinate Axis	You used unset axis.	
7356	No p, IJK Para for Scaling Command		
7357	Scaling Command's Para P & IJK Mixed Use		
7358	Inner Error		
7359	Tool Compensation Radius > the Cutting Arc Radius		

7360	Inner Error, Preset GOTO Numbers > Allowed (256)		
7361	Invalid Channel No.		
7362	Target Channel is Running Other Tasks		
7363	No Run Task of Target Channel	Pause / stop the free channel task	
7364	Can't Switch Work Plane, Unit after ON Tool Compensation / Coordinate Rotate Function		
7365	Can't Use Gsub Expand Command in "Online Output"		
7366	G04.1 Q_ Transferred Wrong Q Arguments	Q arguments doesn't contain its own channel.	
		Transferred channel No. by Q arguments is out of the range.	
7367	G04.1 Q_ Wait P Signal Error	Channels that wait mutually, signal P are different.	
7370	No WHILE / DO for Microprogram		
7371	WHILE & END Should Be Together		
7372	WHIE > Allowed Layers (5)		
7373	Not Found "GOTO" Target Address		
7374	Subprogram Calling > Allowed Layers Embedded	8 layers can be embedded at most.	
7375	Empty Subprogram File		
7376	Subprogram File Oversize	<10k	
7379	Unsupported Microprogram No.		
7380	Mian Axis is In Motion of Feed Axis, Can't Modify Main Axis	When the main axis and feed axis are	

	Speed & Ratio	same axis, please switch motion and speed well.	
7400	Parameter Error		
7401	Para Address No Open		
7402	Invalid Para Address		
7403	Invalid Para Value	Parameter value exceeds valid range.	
7404	No Permission to R & W Para		
7405	Can't Modify Para Description		
7407	Para Form File Reading Error		
7408	Parm Form File Writing Error		
7410	G Code File (Expand Type) is Full	Max: 12 expansion names	
7411	Expand G Code File Type Failed	Transferred invalid suffix name	
7412	Para Form File ON Failed		
7413	Dynamically Expand Para Failed	Expand the number of parameters that can be expanded, parameter address is out of range.	
7414	System Variable Unused	Access invalid system variables	
7421-7436	Your Assigned Axis Direction, which Exceeds the Range of the First Journey (soft limit)		
9912	Pull-Down List, Control Call Function Error		
PC Side Error			
20000	Offset Error from PC		
20001			

20002	Wrong Parameter		
20003	Timeout	fifo buffer blocked	
20004			
20005			
20006	Operating System Error		
20007	Serial Port Open Failed		
20008	Ethernet Open Failed		Check if IP is correct, see if it can be scanned, the network link is normal?
20009	Handle Error		Check if the network breaks because of wiring / unstable network.
20010	Sending Error		
20011	File Error: Unsupported Head File, Unrecognizable		
20012	File Length Error		
20013	Too Many Filename		Check project related filename, whether it is too long, if yes, then correct.
20014	File Not Exist		Check project file's related folder, maybe one file lacks, usually it appears when deleted the file without IDE operation.
20015	ZLB Library File Error		
20016	File Not Compile	Usually because PLC file is not compiled.	Generally, PLC file has no compile.
20018	Firmware File Error	Usually because firmware file is broken.	
20020	Incorrect Firmware File		Check if updated firmware is consistent with controller model.
20021	Unsupported Function		1. Check the controller

			<p>model, whether it supports this function</p> <p>2. Check if there is new function for the controller, if yes, try to update firmware.</p>
20022	“mmap” Failed RT LOCAL Open Failed	RT memory config is too large.	
20023	“xplcterm” Runs Incorrectly / No Enough Permission		
20024	No Card / No Drive in PCI Link		
20025	Drive Enumerate Failed		
20026	Interface Enumerate Failed		
20027	Unknown		
20028	PCI Card Not Exist		
20029	Too Many PCI Cards Connected		
20030	Insufficient IN Buffer Length		<p>1. Check if defined function name, para name are too long.</p> <p>2. Check the firmware version, if it is low, then this length of IN command name is not supported.</p>
20031	Password Protection, Return after LOCK		
20032	Password Protection, Too Fast to Unlock.		
20033	File Open Failed		
20034	Unsupported Function		
20035	Too Long Message		
20036			
20037	Too Many Parameters		
20038	Report Para Numbers Error		
20039	No Assigned Para in Report Para		

20040	MotionRT Connect Failed MotionRT Not Opened		
20100	Response Buffer Length Not Enough		
30000	Above 30000 – ZAUX Auxiliary Library Errors		