Faults Diagnosys and reset

The diagnostic value are available using Status word - MODBUS Register 4608dec, 0x1200hex.

Fault list

Fault code [DEC]	Fault code [HEX]	Fault State	Description	How to solve
6	0x6	OVERLOAD_I2T	Motor overload due to RMS current	Reduce the acceleration rate or increase the waiting time between the motion tasks.
10	0xA	STORE_CONFIG_TO_FLASH_ERROR	Problem to store the data inside the Flash memory	Try to reset the system using a power cycle and retry
13	0xD	SINCOS_OVERRANGE	Encoder SIN/COS signal too low	Check the encoder signal usign oscilloscope, check the calibration data inside the expert window usign NiLAB Starter. Paramters from 214 (dec) to 217 (dec)
14	0xE	MOTOR_OVERTEMP	Motor & Drive over temperature	Reduce the acceleration rate or increase the waiting time between the motion tasks. Check the threshold temperature level insider the NiLAB Starter - Paramenter 69 (dec)
15	0xF	MOTOR_OVERCURRENT	Power stage overcurrent	–
16	0x10	MOTOR_DCLINK_OVERRRANGE	DC Link over range	Check the power supply level or the current capabilty of your power supply. Check the threshold level in the Parameter 4636 (dec)
17	0x11	MOTOR_PT600	Motor thermal sensor overtemperature	Reduce the acceleration rate or increase the waiting time between the motion tasks. Check the threshold temperature level insider the NiLAB Starter - Paramenter 182 (dec)

19	0x13	SAFE STOP	The motor receive the power supply (24VDC) with the enable and trigger high (the two digital inputs set to high)	Please when the motor receive the 24VDC power supply the two inputs must be low (not active)
20	0x14	SAFE TORQUE OFF (only in Ethercat version avaiable)	The motor was enabled with the safe torque off inputs not set to 24VDC	Please connected the safe inputs to 24VDC
21	0x15	OUTPUT FAULT	One of more digital outputs are overloaded or shorted to ground.	Please remove the load or short

How to reset fault using Digital Inputs

When a Fault occurs, in order to reset the fault using digital input you need to use Digital Input 1. The fault is reset when two impulse on Digital Input 1 - (Pin 9).The Digital Input 0 must be set to low (motor disable) before sending the reset sequence. The reset sequence must be the following: