The Library SysLibPLcCtrl.lib

This library contains the following functions for controlling a PLC:

- SysStartPlcProgram
- SysResetPlcProgram
- SysStopPlcProgram
- SysShutdownPlc
- SysEnableScheduling
- SysGetPlcLoad

Additionally there are functions to handle the retain variables:

- SysRestoreRetains
- SysSaveRetains

as well as a function for activating the watchdog:

- SysWdgEnable

SysStartPlcProgram

This function of type DWORD can be used to start a PLC. It will return TRUE in case of success, otherwise FALSE.

Input Variable	Data type	Description
bDummy	BOOL	If bDummy = TRUE a start command will be given to the PLC.

SysResetPlcProgram

This function of type DWORD can be used to reset the PLC. The reset mode is set with the aid of the enumration *Reset_Mode*. The function will return TRUE in case of success, otherwise FALSE.

Input Variable	Data type	Description
rmRESETMODE	RESET_MODE	Choose one of the enumeration values to give the desired reset command to the PLC: 0=RESET_WARM, 1=RESET_COLD, 2=RESET_HARD; RESET_WARM corresponds with the 'Reset' command in the CoDeSys Online Menu, RESET_HARD corresponds with the 'Reset (original)'

SysStopPlcProgram

This function of type DWORD can be used to stop the PLC. It will return TRUE in case of success, otherwise FALSE.

Input Variable	Data type	Description
bDummy	BOOL	If bDummy = TRUE a stop command will be send to the PLC

SysShutdownPlc

This function of type BOOL can be used to shut down the PLC. It will return TRUE in case of success, otherwise FALSE.

Variable	Data type	Description
bDummy	BOOL	Bei bDummy = TRUE wird ein Shutdown-Befehl an die Steuerung gegeben.

SysEnableScheduling

This function (see library SysLibPlcCtrl.lib) of type DWORD can be used to enable resp. disable the scheduler for the IEC tasks in the PLC.

Variable	Data type	Description
bDummy	BOOL	If TRUE: scheduler will be enabled, if FALSE: scheduler will be disabled

SysGetPlcLoad

This function (see library SysLibPlcCtrl.lib) of type DWORD returns the current processor load of the IEC tasks.

Variable	Data type	Description
bDummy	BOOL	If bDummy = TRUE the processor load will be evaluated.

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SysSaveRetains

This function of type BOOL can be used to save the values of retain variables in a file. One of the following values will be returned:

1: OK

0: No program loaded

-1: The given file could not be opened

Variable	Data type	Description
stFileName	STRING	Name of the file where you want to save the retain variables

SysRestoreRetains

This function of type BOOL can be used to restore the retain variables from a file. One of the following values will be returned:

1: OK

0: No program loaded

-1: The file could not be opened

-2: The content of the file is bigger than the retain area.

Variable	Data type	Description
stFileName	STRING	Name of the file where you want to save the retain variables

SysWdgEnable

This function of type BOOL can be used to activate resp. deactivate the watchdog for a certatin. It will return TRUE in case of success, otherwise FALSE.

Variable	Data type	Description
bEnable	BOOL	if TRUE: The watchdog functionality gets activated if FALSE: The watchdog functionality gets deactivated
byIECTaskIndex	BYTE	Index of the IEC task, for which the watchdog should be activated/deactivated
stIECTaskName	POINTER TO STRING	Name of the IEC task, can be a pointer to zero