

# **DL05 ERROR CODES**

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**In This Appendix...**

DL05 Error Codes.....B-1

DL05 Error Code	Description
<b>E003</b> SOFTWARE TIME-OUT	If the program scan time exceeds the time allotted to the watchdog timer, this error will occur. SP51 will be on and the error code will be stored in V7755. To correct this problem use AUX 55 to extend the time allotted to the watchdog timer.
<b>E004</b> INVALID INSTRUCTION	The CPU attempted to execute an instruction code, but the RAM contents had a parity error. Performing a program download to the CPU in an electrically noisy environment can corrupt a program's contents. Clear the CPU program memory, and download the program again.
<b>E043</b> MC BATTERY LOW	The battery in the CMOS RAM cartridge is low and should be replaced.
<b>E104</b> WRITE FAILED	A write to the CPU was not successful. Disconnect the power, remove the CPU, and make sure the EEPROM is not write protected. If the EEPROM is not write protected, make sure the EEPROM is installed correctly. If both conditions are OK, replace the CPU.
<b>E151</b> BAD COMMAND	A parity error has occurred in the application program. SP44 will be on and the error code will be stored in V7755 . This problem may possibly be due to electrical noise. Clear the memory and download the program again. Correct any grounding problems. If the error returns replace the Micro PLC.
<b>E263</b> CONFIGURED I/O ADDRESS OUT OF RANGE	Out of range addresses have been assigned while manually configuring the I/O. Correct the address assignments using AUX46.
<b>E311</b> HP COMM ERROR 1	A request from the handheld programmer could not be processed by the CPU. Clear the error and retry the request. If the error continues replace the CPU. SP46 will be on and the error code will be stored in V7756.
<b>E312</b> HP COMM ERROR 2	A data error was encountered during communications with the CPU. Clear between the two devices, replace the handheld programmer, then if necessary replace the CPU. The error code will be stored in V7756.
<b>E313</b> HP COMM ERROR 3	An address error was encountered during communications with the CPU. Clear the error and retry the request. If the error continues, check the cabling between the two devices, replace the handheld programmer, then if necessary replace the CPU. The error code will be stored in V7756.
<b>E316</b> HP COMM E ERROR 6	A mode error was encountered during communications with the CPU. Clear the error and retry the request. If the error continues, replace the handheld programmer, then if necessary replace the CPU. The error code will be stored in V7756.
<b>E320</b> HP COMM TIME-OUT	The CPU did not respond to the handheld programmer communication request. Check to ensure cabling is correct and not defective. Power cycle the system. If the error continues, replace the CPU first and then the handheld programmer, if necessary.
<b>E321</b> COMM ERROR	A data error was encountered during communication with the CPU. Check to ensure cabling is correct and not defective. Power cycle the system. If the error continues, replace the CPU first and then the handheld programmer, if necessary.

DL05 Error Code	Description
<b>E360</b> HP PERIPHERAL PORT TIME-OUT	The device connected to the peripheral port did not respond to the handheld programmer communication request. Check to ensure cabling is correct and not defective. The peripheral device or handheld programmer could be defective.
<b>E4**</b> NO PROGRAM	A syntax error exists in the application program. The most common is a missing END statement. Run AUX21 to determine which one of the E4** series of errors is being flagged. SP52 will be on and the error code will be stored in V7755.
<b>E401</b> MISSING END STATEMENT	All application programs must terminate with an END statement. Enter the END statement in appropriate location in your program. SP52 will be on and the error code will be stored in V7755.
<b>E402</b> MISSING LBL	A MOVMC or LDLBL instruction was used without the appropriate label. Refer to Chapter 5 for details on these instructions. SP52 will be on and the error code will be stored in V7755.
<b>E403</b> MISSING RET	A subroutine in the program does not end with the RET instruction. SP52 will be on and the error code will be stored in V7755.
<b>E404</b> MISSING FOR	A NEXT instruction does not have the corresponding FOR instruction. SP52 will be on and the error code will be stored in V7755.
<b>E405</b> MISSING NEXT	A FOR instruction does not have the corresponding NEXT instruction. SP52 will be on and the error code will be stored in V7755.
<b>E406</b> MISSING IRT	An interrupt routine in the program does not end with the IRT instruction. SP52 will be on and the error code will be stored in V7755.
<b>E412</b> SBR/LBL>64	There is greater than 64 SBR or DLBL instructions in the program. This error is also returned if there are greater than 2 INT instructions used in the program. SP52 will be on and the error code will be stored in V7755.
<b>E421</b> DUPLICATE STAGE REFERENCE	Two or more SG or ISG labels exist in the application program with the same number. A unique number must be allowed for each Stage and Initial Stage. SP52 will be on and the error code will be stored in V7755.
<b>E422</b> DUPLICATE LBL REFERENCE	Two or more LBL instructions exist in the application program with the same number. A unique number must be allowed for each and label. SP52 will be on and the error code will be stored in V7755.
<b>E423</b> NESTED LOOPS	Nested loops (programming one FOR/NEXT loop inside of another) are not allowed. SP52 will be on and the error code will be stored in V7755.
<b>E431</b> INVALID ISG/SG ADDRESS	An ISG or SG instruction must not be placed after the end statement (such as inside a subroutine). SP52 will be on and the error code will be stored in V7755.

## Appendix B: DL05 Error Codes

DL05 Error Code	Description
<b>E433</b> INVALID SBR ADDRESS	An SBR must be programmed after the end statement, not in the main body of the program or in an interrupt routine. SP52 will be on and the error code will be stored in V7755.
<b>E434</b> INVALID RTC ADDRESS	An RTC must be programmed after the end statement, not in the main body of the program or in an interrupt routine. SP52 will be on and the error code will be stored in V7755.
<b>E435</b> INVALID RT ADDRESS	An RT must be programmed after the end statement, not in the main body of the program or in an interrupt routine. SP52 will be on and the error code will be stored in V7755.
<b>E436</b> INVALID INT ADDRESS	An INT must be programmed after the end statement, not in the main body of the program. SP52 will be on and the error code will be stored in V7755.
<b>E437</b> INVALID IRTC ADDRESS	An IRTC must be programmed after the end statement, not in the main body of the program. SP52 will be on and the error code will be stored in V7755.
<b>E438</b> INVALID IRT ADDRESS	An IRT must be programmed after the end statement, not in the main body of the program. SP52 will be on and the error code will be stored in V7755.
<b>E440</b> INVALID DATA ADDRESS	Either the DLBL instruction has been programmed in the main program area (not after the END statement), or the DLBL instruction is on a rung containing input contact(s).
<b>E441</b> ACON/NCON	An ACON or NCON must be programmed after the end statement, not in the main body of the program. SP52 will be on and the error code will be stored in V7755.
<b>E451</b> BAD MLS/MLR	MLS instructions must be numbered in ascending order from top to bottom.
<b>E453</b> MISSING T/C	A timer or counter contact is being used where the associated timer or counter does not exist.
<b>E454</b> BAD TMRA	One of the contacts is missing from a TMRA instruction.
<b>E455</b> BAD CNT	One of the contacts is missing from a CNT or UDC instruction.
<b>E456</b> BAD SR	One of the contacts is missing from the SR instruction.

DL05 Error Code	Description
<b>E461</b> STACK OVERFLOW	More than nine levels of logic have been stored on the stack. Check the use of OR STR and AND STR instructions.
<b>E462</b> STACK UNDERFLOW	An unmatched number of logic levels have been stored on the stack. Ensure the number of AND STR and OR STR instructions match the number of STR instructions.
<b>E463</b> LOGIC ERROR	A STR instruction was not used to begin a rung of ladder logic.
<b>E464</b> MISSING CKT	A rung of ladder logic is not terminated properly.
<b>E471</b> DUPLICATE COIL REFERENCE	Two or more OUT instructions reference the same I/O point.
<b>E472</b> DUPLICATE TMR REFERENCE	Two or more TMR instructions reference the same number.
<b>E473</b> DUPLICATE CNT REFERENCE	Two or more CNT instructions reference the same number.
<b>E499</b> PRINT INSTRUCTION	Invalid PRINT instruct usage. Quotations and/or spaces were not entered or entered incorrectly.

## Appendix B: DL05 Error Codes

DL05 Error Code	Description
<b>E501</b> BAD ENTRY	An invalid keystroke or series of keystrokes was entered into the handheld programmer.
<b>E502</b> BAD ADDRESS	An invalid or out of range address was entered into the handheld programmer.
<b>E503</b> BAD COMMAND	An invalid command was entered into the handheld programmer.
<b>E504</b> BAD REF/VAL	An invalid value or reference number was entered with an instruction.
<b>E505</b> INVALID INSTRUCTION	An invalid instruction was entered into the handheld programmer or a program which includes an instruction requiring a Memory Cartridge (D0-01MC) to be installed in the DL05, but was placed in RUN without the MC.
<b>E506</b> INVALID OPERATION	An invalid operation was attempted by the handheld programmer.
<b>E520</b> BAD OP-RUN	An operation which is invalid in the RUN mode was attempted by the handheld programmer.
<b>E521</b> BAD OP-TRUN	An operation which is invalid in the TEST RUN mode was attempted by the handheld programmer.
<b>E523</b> BAD OP-TPGM	An operation which is invalid in the TEST PROGRAM mode was attempted by the handheld programmer.
<b>E524</b> BAD OP-PGM	An operation which is invalid in the PROGRAM mode was attempted by the handheld programmer.
<b>E525</b> MODE SWITCH	An operation was attempted by the handheld programmer while the CPU mode switch was in a position other than the TERM position.
<b>E526</b> OFF LINE	The handheld programmer is in the OFFLINE mode. To change to the ONLINE mode use the MODE key.
<b>E527</b> ON LINE	The handheld programmer is in the ON LINE mode. To change to the OFF LINE mode use the MODE key.
<b>E528</b> CPU MODE	The operation attempted is not allowed during a Run Time Edit.
<b>E540</b> CPU LOCKED	The CPU has been password locked. To unlock the CPU use AUX82 with the password.
<b>E541</b> WRONG PASSWORD	The password used to unlock the CPU with AUX82 was incorrect.
<b>E542</b> PASSWORD RESET	The CPU powered up with an invalid password and reset the password to 00000000. A password may be re-entered using AUX81.
<b>E601</b> MEMORY FULL	Attempted to enter an instruction which required more memory than is available in the CPU.
<b>E602</b> INSTRUCTION MISSING	A search function was performed and the instruction was not found.

DL05 Error Code	Description
<b>E603</b> DATA MISSING	A search function was performed and the data was not found.
<b>E604</b> REFERENCE MISSING	A search function was performed and the reference was not found.
<b>E620</b> OUT OF MEMORY	An attempt to transfer more data between the CPU and handheld programmer than the receiving device can hold.
<b>E621</b> EEPROM NOT BLANK	An attempt to write to a non-blank EEPROM in the handheld programmer was made. Erase the EEPROM and then retry the write.
<b>E622</b> NO HPP EEPROM	A data transfer was attempted with no EEPROM (or possibly a faulty EEPROM) installed in the handheld programmer.
<b>E623</b> SYSTEM EEPROM	A function was requested with an EEPROM in the handheld programmer which contains system information only.
<b>E624</b> V-MEMORY ONLY	A function was requested with an EEPROM in the handheld programmer which contains V-memory data only.
<b>E625</b> PROGRAM ONLY	A function was requested with an EEPROM in the handheld programmer which contains program data only.
<b>E626</b> PROM MC	An attempt to transfer data from a tape to a UVPRAM Memory Cartridge. This transfer must be made using a CMOS RAM Cartridge.
<b>E627</b> BAD WRITE	An attempt to write to a write-protected or faulty EEPROM in the handheld programmer was made. Check the write protect jumper and replace the EEPROM if necessary.
<b>E628</b> EEPROM TYPE ERROR	The wrong size EEPROM is being used in the handheld programmer. This error occurs when the program size is larger than what the HPP can hold.
<b>E640</b> COMPARE ERROR	A compare between the EEPROM handheld programmer and the CPU was found to be in error.
<b>E641</b> VOLUME LEVEL	The volume level of the cassette player is not set properly. Adjust the volume and retry the operation.
<b>E642</b> CHECKSUM ERROR	An error was detected while data was being transferred to the handheld programmer's Memory Cartridge. Check cabling and retry the operation.
<b>E650</b> HPP SYSTEM ERROR	A system error has occurred in the handheld programmer. Power cycle the handheld programmer. If the error returns replace the handheld programmer.
<b>E651</b> HPP ROM ERROR	A ROM error has occurred in the handheld programmer. Power cycle the handheld programmer. If the error returns replace the handheld programmer.
<b>E652</b> HPP RAM ERROR	A RAM error has occurred in the handheld programmer. Power cycle the handheld programmer. If the error returns replace the handheld programmer.