DL05 Error Codes

Appendix B

In This Appendix...

Error Code Table B–2

DL205 Error Code	Description
E003 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 add RSTWT instructions in FOR NEXT loops and subroutines or use AUX 55 to extend the time allotted to the watchdog timer.
E041 CPU BATTERY LOW	The CPU battery is low and should be replaced. SP43 will be on and the error code will be stored in V7757.
E099 PROGRAM MEMORY EXCEEDED	If the compiled program length exceeds the amount of available CPU RAM, this error will occur. SP52 will be on and the error code will be stored in V7755. Reduce the size of the application program.
E104 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.
E151 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 EEPROM or the CPU.
E155 RAM FAILURE	A checksum error has occurred in the system RAM. SP44 will be on and the error code will be stored in V7755. This problem may possibly be due to a low battery, electrical noise or a CPU RAM failure. Clear the memory and download the program again. Correct any grounding problems. If the error returns, replace the CPU.
E202 MISSING I/O MODULE	An I/O module has failed to communicate with the CPU or is missing from the base. SP45 will be on and the error code will be stored in V7756. Run AUX42 to determine the slot and base location of the module reporting the error.
E210 POWER FAULT	A short duration power drop-out occurred on the main power line supplying power to the base.
E250 COMMUNICATION FAILURE IN THE I/O CHAIN	A failure has occurred in the local I/O system. The problem could be in the base I/O bus or the base power supply. SP45 will be on and the error code will be stored in V7755. Run AUX42 to determine the base location reporting the error.
E252 NEW I/O CFG	This error occurs when the auto configuration check is turned on in the CPU and the actual I/O configuration has changed either by moving modules in a base or changing types of modules in a base. You can return the modules to the original position/types or run AUX45 to accept the new configuration. SP47 will be on and the error code will be stored in V7755.
E262 I/O OUT OF RANGE	An out-of-range I/O address has been encountered in the application program. Correct the invalid address in the program. SP45 will be on and the error code will be stored in V7755.
E312 HP COMM ERROR 2	A data 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. SP46 will be on and the error code will be stored in V7756.

DL205 Error Code	Description
E313 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. SP46 will be on and the error code will be stored in V7756.
E316 HP COMM 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. SP46 will be on and the error code will be stored in V7756.
E320 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.
E321 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 and, if the error continues, replace the CPU first and then the Handheld Programmer, if necessary.
E4** 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.
E401 MISSING END STATEMENT	All application programs must terminate with an END statement. Enter the END statement in the appropriate location in your program. SP52 will be on and the error code will be stored in V7755.
E402 MISSING LBL	A GOTO, GTS, MOVMC or LDLBL instruction was used without the appropriate label. Refer to the programming manual for details on these instructions. SP52 will be on and the error code will be stored in V7755.
E403 MISSING RET (DL240 ONLY)	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.
E404 MISSING FOR (DL240, DL250-1, DL260)	A NEXT instruction does not have the corresponding FOR instruction. SP52 will be on and the error code will be stored in V7755.
E405 MISSING NEXT (DL240/250–1/260)	A FOR instruction does not have the corresponding NEXT instruction. SP52 will be on and the error code will be stored in V7755.
E406 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.
E412 SBR/LBL>64 (DL240/250–1/260)	There are more than 64 SBR, LBL or DLBL instructions in the program. This error is also returned if there is greater than 128 GTS or GOTO instructions used in the program. SP52 will be on and the error code will be stored in V7755.

DL205 Error Code	Description
E413 FOR/NEXT>64 (DL240/250–1/260)	There are more than 64 FOR/NEXT loops in the application program. SP52 will be on and the error code will be stored in V7755.
E421 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.
E422 DUPLICATE SBR/LBL REFERENCE	Two or more SBR or LBL instructions exist in the application program with the same number. A unique number must be allowed for each Subroutine and Label. SP52 will be on and the error code will be stored in V7755.
E423 NESTED LOOPS (DL240/250–1/260)	Nested loops (programming one FOR/NEXT loop inside of another) is not allowed in the DL240/250–1/260 series. SP52 will be on and the error code will be stored in V7755.
E431 INVALID ISG/SG ADDRESS	An ISG or SG must not be programmed after the end statement such as in a subroutine. SP52 will be on and the error code will be stored in V7755.
E432 INVALID JUMP (GOTO) ADDRESS (DL240/250–1/260)	An LBL that corresponds to a GOTO instruction must not be programmed after the end statement such as in a subroutine. SP52 will be on and the error code will be stored in V7755.
E433 INVALID SBR ADDRESS (DL240/250–1/260)	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.
E435 INVALID RT ADDRESS (DL240/250–1/260)	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.
E436 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.
E438 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.
E440 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).
E441 ACON/NCON (DL240/250–1/260)	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.

DL205 Error Codes	Description
E451 BAD MLS/MLR	MLS instructions must be numbered in ascending order from top to bottom.
E452 X AS COIL	An X data type is being used as a coil output.
E453 MISSING T/C	A timer or counter contact is being used where the associated timer or counter does not exist.
E454 BAD TMRA	One of the contacts is missing from a TMRA instruction.
E455 BAD CNT	One of the contacts is missing from a CNT or UDC instruction.
E456 BAD SR	One of the contacts is missing from the SR instruction.
E461 STACK OVERFLOW	More than nine levels of logic have been stored on the stack. Check the use of OR STR and AND STR instructions.
E462 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.
E463 LOGIC ERROR	An STR instruction was not used to begin a rung of ladder logic.
E464 MISSING CKT	A rung of ladder logic is not terminated properly.
E471 DUPLICATE COIL REFERENCE	Two or more OUT instructions reference the same I/O point.
E472 DUPLICATE TMR REFERENCE	Two or more TMR instructions reference the same number.

DL205 Error Code	Description
E473 DUPLICATE CNT REFERENCE	Two or more CNT instructions reference the same number.
E480 INVALID CV ADDRESS	The CV instruction is used in a subroutine or program interrupt routine. The CV instruction may only be used in the main program area (before the END statement).
E481 CONFLICTING INSTRUCTIONS	An instruction exists between convergence stages.
E482 MAX. CV INSTRUCTIONS EXCEEDED	Number of CV instructions exceeds 17.
E483 INVALID CVJMP ADDRESS	CVJMP has been used in a subroutine or a program interrupt routine.
E484 MISSING CV INSTRUCTION	CVJMP is not preceded by the CV instruction. A CVJMP must immediately follow the CV instruction.
E485 NO CVJMP	A CVJMP instruction is not placed between the CV and the SG, ISG, BLK, BEND, END instruction.
E486 INVALID BCALL ADDRESS	A BCALL is used in a subroutine or a program interrupt routine. The BCALL instruction may only be used in the main program area (before the END statement).
E487 MISSING BLK INSTRUCTION	The BCALL instruction is not followed by a BLK instruction.
E488 INVALID BLK ADDRESS	The BLK instruction is used in a subroutine or a program interrupt. Another BLK instruction is used between the BCALL and the BEND instructions.
E489 DUPLICATED CR REFERENCE	The control relay used for the BLK instruction is being used as an output elsewhere.
E490 MISSING SG INSTRUCTION	The BLK instruction is not immediately followed by the SG instruction.

DL205 Error Code	Description
E491 INVALID ISG INSTRUCTION ADDRESS	There is an ISG instruction between the BLK and BEND instructions.
E492 INVALID BEND ADDRESS	The BEND instruction is used in a subroutine or a program interrupt routine. The BEND instruction is not followed by a BLK instruction.
E493 MISSING REQUIRED INSTRUCTION	A [CV, SG, ISG, BLK, BEND] instruction must immediately follow the BEND instruction.
E494 MISSING BEND INSTRUCTION	The BLK instruction is not followed by a BEND instruction.
E499 PRINT INSTRUCTION	Invalid PRINT instruct usage. Quotations and/or spaces were not entered or entered incorrectly.
E501 BAD ENTRY	An invalid keystroke or series of keystrokes was entered into the Handheld Programmer.
E502 BAD ADDRESS	An invalid or out-of-range address was entered into the Handheld Programmer.
E503 BAD COMMAND	An invalid instruction was entered into the Handheld Programmer.
E504 BAD REF/VAL	An invalid value or reference number was entered with an instruction.
E505 INVALID INSTRUCTION	An invalid instruction was entered into the Handheld Programmer.
E506 INVALID OPERATION	An invalid operation was attempted by the Handheld Programmer.
E520 BAD OP–RUN	An operation which is invalid in the RUN mode was attempted by the Handheld Programmer.

DL205 Error Code	Description
E521 BAD OP–TRUN	An operation which is invalid in the TEST RUN mode was attempted by the Handheld Programmer.
E523 BAD OP–TPGM	An operation which is invalid in the TEST PROGRAM mode was attempted by the Handheld Programmer.
E524 BAD OP–PGM	An operation which is invalid in the PROGRAM mode was attempted by the Handheld Programmer.
E525 MODE SWITCH (DL240/250–1/260)	An operation was attempted by the Handheld Programmer while the CPU mode switch was in a position other than the TERM position.
E526 OFF LINE	The Handheld Programmer is in the OFFLINE mode. To change to the ONLINE mode, use the MODE key.
E527 ON LINE	The Handheld Programmer is in the ONLINE mode. To change to the OFFLINE mode, use the MODE key.
E528 CPU MODE	The operation attempted is not allowed during a Run Time Edit.
E540 CPU LOCKED	The CPU has been password locked. To unlock the CPU, use AUX82 with the password.
E541 WRONG PASSWORD	The password used to unlock the CPU with AUX82 was incorrect.
E542 PASSWORD RESET	The CPU powered up with an invalid password and reset the password to 00000000. A password may be re-entered using AUX81.
E601 MEMORY FULL	Attempted to enter an instruction which required more memory than is available in the CPU.
E602 INSTRUCTION MISSING	A search function was performed and the instruction was not found.
E604 REFERENCE MISSING	A search function was performed and the reference was not found.

DL205 Error Code	Description
E610 BAD I/O TYPE	The application program has referenced an I/O module as the incorrect type of module.
E620 OUT OF MEMORY	An attempt to transfer more data between the CPU and Handheld Programmer than the receiving device can hold. DV-1000: mismatch between MOVMC and LBL instructions.
E621 EEPROM NOT BLANK	An attempt to write to a non-blank EEPROM was made. Erase the EEPROM and then retry the write.
E622 NO HPP EEPROM	A data transfer was attempted with no EEPROM (or possibly a faulty EEPROM) installed in the Handheld Programmer.
E623 SYSTEM EEPROM	A function was requested with an EEPROM which contains system information only.
E624 V-MEMORY ONLY	A function was requested with an EEPROM which contains V-memory data only.
E625 PROGRAM ONLY	A function was requested with an EEPROM which contains program data only.
E627 BAD WRITE	An attempt to write to a write protected or faulty EEPROM was made. Check the write protect jumper and replace the EEPROM if necessary.
E628 EEPROM TYPE ERROR	The wrong size EEPROM is being used. The DL230 and DL240 CPUs use different size EEPROMs.
E640 COMPARE ERROR	A compare between the EEPROM and the CPU was found to be in error.
E650 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.
E651 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.
E652 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.

Notes