KONE			MAIN TITLE **GLOBAL LCE FAULT CODES**	DRAWING NO: **813138**	This document is automatically generated from document #762780! Do not manually modify.
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Fault code			Description	Possible cause	Detection	Operation	Recovery	Testing
Fault code	CEN code	Class Delay	**Description**	**Possible reason**	**Detection**	**Operation**	**Recovery**	**Testing**
00 01	10 01	DS	Drive time supervision elapsed	The car position information has not changed after a certain time period defined in the software. Door zone magnet switch (30) has not been changed. For KCM831 Hydro: Low oil.	Door zone information 30 or B30 haven't change in certain time. For KCM831 Hydro: Drive Time Supervision of Up Valve. (90 seconds for hydro NA).	Elevator stops immediately, when the time has elapsed. KCM831 hydro: If between floors, elevator returns to bottom floor and is out of service.	ROW: A power down is required to reset this fault. NA: Manual Reset by Machine Room Inspection only.	Drive the elevator just below 77:U limit by inspection.Unplug 30, B30, 61:U and 61:N from the LCECCB board. For KCM831 Hydro: Send elevator to bottom floor then send elevator to top floor. Unplug XMV/7,8 (up valve) or close the main valve after the elevator has cleared the 61 and 30 switches.
00 01	10 01	DS	Drive time supervision elapsed (Resolve 20)	The car position information has not changed for a period of time determined in the software.	Neither 30 nor B30 haven't changed for a certain time	Elevator stops immediately, when the time has elapsed.	ROW: A power down is required to reset this fault. NA: Manual Reset by Machine Room Inspection only.	V3F10: Set high speed freq (bn-01) to 2.5 Hz and give car call 2 speed: Set parameter 6.28 to 99.9 and ground LCECPU pins XC11/3 and XC11/4 and give car call 1 Speed: Ground LCECPU pins XC11/3 and XC11/4 and give car call.

Fault code	CEN code	Class Delay	Description	Possible reason	Detection	Operation	Recovery	Testing
00 02	10 02	DS	Traction Loss Detection	Car not moving while traction machine is turning	No car encoder signals detected at XCT terminal on ADON2 board AND no 61:U/N signals detected at LCECPU while car supposed to be moving	After time set by UI:5:15, car stops immediately. Car will not restart	Actuation of Traction Loss Detection Reset Switch at controller	Place car on Machine Room Inspection. Unplug XCT at ADON2 and disconnect 61:U/N signals at XC11/5 & 6 at LCECPU. Run car on inspection mode to exceed time set by UI:5:15
00 03	01 01	DF	Overspeed	V2 LCEDRV: Lift speed is greater than 110% of the nominal speed Overspeed fault is triggered. In RDF or Inspection drive when the speed is >0.66 M/S	LCEDRV board measures too high lift speed	Elevator stops immediately	Automatic (after lift stops)	Increase drive speed 10% above learned speed after performing decel learn.
00 04	11 01	DF	Synchronization failed on three consecutive drives	The system has not seen signals 77:U/N, 61:U/N and 30 correctly after synchronization drive. This happened on 3 consecutive drives.	Position not found during three consecutive synchronization.	After 3 failed synchronization, the elevator remains to a terminal floor.	Power Off and On required.	Difficult to test. DTS will occur first.
00 05	19 92	DS	Unintended car movement detected	The system has detected a non-commanded movement of the car with doors open within door zone away from the landings.	Door open, at door zone, start permit on-state and not at dual door zone.	Elevator stops immediately.	Manual Reset by Machine Room Inspection only.	When doors are open at door zone and start permit is in on-state, remove 30/B30 along with 61:U and 61:N.

Fault code	CEN code	Class Delay	Description	Possible reason	Detection	Operation	Recovery	Testing
00 06	19 05	DS	Incorrect setup for Traction Loss Detection	Incorrect UI:7:43 code year setting for TLD OR TLD bypass test connector on inputs 1 & 2 at OPT board F Rear in excess of 5 minutes OR Incorrect setting for Traction Loss Detection Switch wiring to inputs 1 & 2 at OPT board F Rear	Incorrect UI:7:43 code year setting for TLD OR TLD bypass test connector on inputs 1 & 2 at OPT board F Rear in excess of 5 minutes OR Incorrect setting for Traction Loss Detection Switch wiring to inputs 1 & 2 at OPT board F Rear	Elevator will not start.	See Detection and Testing for possible causes	Set UI:7:43 = 6 or lower while TLD Reset switch is connected to OPT Board F Rear inputs 1 & 2, OR Set UI:7:43 = 7 or higher while both inputs 1 & 2 to OPT Board F Rear are present, AND car is in normal service in excess of five minutes OR Set UI:7:43 = 7 or higher while no connections are at inputs 1 & 2 to OPT Board F Rear.
00 07	06 10	DF	Door zone switch 30 or B30 stuck	Door zone information continuously active.	Leaving edge of the door zone is not detected within certain time from the start.	Elevator drives to the destination floor, does not open doors, and remains at that floor.	ROW: A power down or inspection drive is required to reset this fault. NA: Manual Reset by Machine Room Inspection only.	Connect two lowest pins of XB21 (30) or XB24 (B30) together on LCECCB board
00 12	19 23	DF	Anticreep not released for two consecutive drives (hydraulic lift)	Anticreep device stuck ON on 2 consequtice drives	Anticreep device input indicates that anticreep has not released	Lift remains in OSS mode.	Anticreep device in released condition and Power Off and On.	Connect XC41 1&2 pins.
00 13	19 24	DF	Anticreep not energised for two consecutive drives (hydraulic lift)	Anticreep device not pulled for 2 consequtice drives.	Anticreep device input indicates that anticreep has not energised	Lift returns to bottom floor and remains in out of service mode	Anticreep device in released condition and Power Off and On.	Open XC41 1&2 pins.
00 14	06 01	DF	553 relay in door zone supervision circuit did not operate during two consecutive drives. This fault follows fault 76.	553 relay circuit has not been energized	553 relay in ADO/ACL circuit has not been energized.	Elevator drives to destination floor normally. Out of service.	Power Off and On, or machine room inspection drive is required to reset this fault.	Difficult to test - Need ADON test board

Fault code	CEN code	Class Delay	Description	Possible reason	Detection	Operation	Recovery	Testing
00 15	06 02	DF	Incorrect door zone supervision circuit operation during two consecutive drives. This fault follows fault 82.	ADO/ACL circuit has not been energized. 443:1 or 443:2 or 486 did not energize with car at floor or deenergize with car at speeds above SL1 speed (5-20-9 setting).	At least one of contactors 486, 443:1 or 443:2 has worked incorrectly (has failed to open or close) on two consecutive drive.	Elevator drives to destination floor normally. Out of service.	ROW: Power down required or turned elevator to inspection mode. NA: Manual Reset by Machine Room Inspection only.	Difficult to test - Need ADON test board
00 19	19 38	DF	Cylinder limit switch supervision for hydraulic lifts	Lift has travelled on cylinder limit switch on top of shaft	Cylinder limit switch input indicates open switch	With anticreep device: Lift is not allowed to start before lift is turned to inspection drive. Without anticreep: Lift is returned to bottom floor after lift has creeped out of cylinder limit switch. Lift is not allowed to start before lift is turned to inspection drive.	Clylinder limit switch is closed and lift is turned to inspection dirve. Note:Power Off and On is not eneough to clear the fautl	Open cylinder limit switch (input) when lift is at top floor
00 21	01 02	DM	Safety circuit broken. For NA this fault has sub codes starting with 21 00, as described below.	1) Safety input 1 has lost voltage. One or more devices in safety chain open. 2) Car is on inspection.	230VAC / 120VAC missing at XC1/5 on ADON.	Elevator stops immediately.	Automatic door(s) used only: When the safety chain is closed . Swing door used at landing: Safety chain closed and 1) inspection drive, or 2) new car call, or 3) door opening.	Open the safety chain

Safety Circuit Broken, Fault 00 21 Sub Codes for NA

When a Safety Circuit Broken fault is displayed as the current fault, or in the fault history, pressing the enter button will display the faults' sub code. The sub code shall scroll across the 7-segment display.

Fault code	CEN code	Class Delay	Description	Possible reason	Detection	Operation	Recovery	Testing
Sub Code 21 00	01 02	DM	Safety circuit broken. If ADON, Rev. 1 board is in use, no further diagnosis is possible. If ADON2 Board in use. Safety circuit broken for less than 100ms. Not enough time for software to read the safety chain inputs.	ADON, Rev. 1 1) Safety input 1 has lost voltage. One or more devices in safety chain open. 2) Car is on inspection. ADON2 Power glitch.	ADON, Rev. 1 230VAC / 120VAC missing at XC1/5 on ADON. ADON2 Loss of power at any of the safety circuit test points.	Elevator stops immediately.	ADON, Rev. 1 Automatic door(s) used only: When the safety chain is closed . Swing door used at landing: Safety chain closed and 1) inspection drive, or 2) new car call, or 3) door opening. ADON2 Immediately.	ADON Rev-1. Open the safety chain, (throw the car top switch or turn on car top inspection, or pit switch or RDF, ..etc.). ADON2 Need special equipment to test this feature.
Sub Code 21 01	01 02	DM	ADON2 Board in use. Safety circuit broken between ADON2 terminals XM5/1 and XM1/1.	1) Loss of power at ETS circuit 2) ADON Fuse blown 3) Machine Room Stop Switch is active.	230VAC / 120VAC missing at XM1/1 on ADON.	Elevator stops immediately.	Automatic door(s) used only: When the safety chain is closed . Swing door used at landing: Safety chain closed and 1) inspection drive, or 2) new car call, or 3) door opening.	Test with ADON2. Remove Fuse F1 on ADON2 board.
Sub Code 21 02	01 02	DM	ADON2 Board in use. Safety circuit broken between ADON2 terminals XM1/1 and XH1/1.	Safety chain broken due to one of the following: 1) Pit Stop Switch 2) Tension Weight Switch 3) Compensating Rope/Chain 4) Buffer Contacts 5) Final Limits	230VAC / 120VAC missing at XH1/1 on ADON.	Elevator stops immediately.	Same as Sub Code 21 01.	Test with ADON2. Activate Pit Stop Switch.
Sub Code 21 03	01 02	DM	ADON2 Board in use. Safety circuit broken between ADON2 terminals XH1/1 and XC1/3.	Machine Room Inspection Switch (RDF) is on.	230VAC / 120VAC missing at XC1/3 on ADON.	Elevator stops immediately.	Same as Sub Code 21 01.	Test with ADON2. Activate Machine Room Inspection Switch.
Sub Code 21 04	01 02	DM	ADON2 Board in use. Safety circuit broken between ADON2 terminals XC1/3 and XC1/5.	Car top inspection switch or car stop switch is on.	230VAC / 120VAC missing at XC1/5 on ADON.	Elevator stops immediately.	Same as Sub Code 21 01.	Test with ADON2. Activate Car Top Inspection Switch.
00 22	02 01	DL	Shaft door contact opened during drive	Safety input 3 has lost voltage during drive. Safety inputs 1 and 2 must be at 230 VAC / (120VAC.Chicago)	230VAC / 120VAC missing at XH2/3 on ADON.	Elevator stops immediately.	When the door is closed again.	Open the landing door by a key or unplug XH2 while car is running.

Fault code	CEN code	Class Delay	Description	Possible reason	Detection	Operation	Recovery	Testing
00 23	25 01	DF	Car door contact opened during drive	Safety input 2 has lost voltage during drive. Safety input 1 must be at 230VAC / 120VAC.	230VAC / 120VAC missing at XC1/7 on ADON.	Elevator stops immediately.	When the door is closed again.	Open the car door contact (87). Disconnect wire at XC1/7 while car is running
00 25	06 04	DL	Start permit fault	Contacts in start permit circuit are not closed with car not running.	Input XD1/3 is not at 230VAC with car not running.	Elevator will not start.	When XD1/3 is at 230VAC.	Manually hold in any of 201:1 or 201:2 or 201:3 or 201:4 and attempt to run car.
00 26	06 05	DF	Drive not OK	Drive system is faulted. LCEDRV or LCEMCU or V3F25 has reported a fault to the LCECPU. Refer to LCEDRV or LCEMCU or V3F25 fault codes for more information.	LED "Drive OK" on LCECPU is off.	Elevator doesn't start. If running then elevator will stop.	When fault 26 clears.	KCM831: Unplug thermistor input at XT1 on V3F25. RS20 and KCM831 hydro: Unplug connector XT on LCEDRV. RS100: Unplug connector LCEMCU XM28.
00 27	19 88	DF	K7 (main relay) relay stuck ON	Fault is caused by physical damage to the relay itself or by malfunctioning transistors keeping K7 (main relay) energized.	Main Contactor output is OFF, standing with shaft doors closed, and LCEADON K7 (main relay) relay is ON.	Elevator will not start. DOB is operable. Car call to a current floor will open doors.	LCEADON board replacement required.	Ground collector point of Q77 transistor (point D1 - solder connection to D76 diode) while car is moving. Keep the jumper on after the car has stopped.
00 28	19 20	R	Swing door safety ray broken	Swing door is closed and safety ray (photocell) beam is interrupted	Input "PHOTO_CELL" or "PHOTO_CELL_B" in wrong state.	- Elevatator does not start if standing - Elevator run is terminated by emergency stop if running	Safety ray beam is not interrupted anymore and 1) swing door is opened or 2) new car call is given or 3) inspection drive or 4) automatic door opened at floor	Close swing door and cut safety ray beam
00 29	19 29	R	During Advance Door Opening, a door became fully open before the car reached Floor Level.	During Advance Door Opening, a Door Open Limit is present before the car reached Floor Level.	Door Open Limit signal from door operator is active before both, 61U and 61N, vanes are present.	Elevator will continue operating. The fault is informational.	Door Open Limit is not present before floor level. Recovers automatically at next destination.	Jump XB28/7 to 0v on CCBN board.

Fault code	CEN code	Class Delay	Description	Possible reason	Detection	Operation	Recovery	Testing
00 30	19 20	R	Swing door safety ray supervision device broken	Swing door safety ray device (as CEDES LI) broken.	Safety device check at start fails.	Elevator does not start.	Safety ray device is working properly and new start happened. Power on/off or elevator switched to SFD/RDF mode.	Remove status wire (from CCB NUD output) 'from CEDES LI.
00 32	19 47	R	Brake not released after stop. Resolve 10/20 only.	Brake contact does not work properly after stop. Brake input polarity parameter (6.60) set wrongly. LCEDRV has detected a fault.	Brake closed signal does not come in time after stopping.	Elevator stops immediately. Further drive denied and doors stay closed. Also fault code F0026 displayed.	Power Off and On.	Set brake input polarity wrongly by parameter 6.60
00 36	01 05	R	Main contactor released during drive	V3F25 or LCEMCU or LCEDRV disables main contactor output during drive. LCEDRV or LCEMCU or V3F25 has detected a fault.	V3FMCONTACTOR ENABLE signal from LCEDRV or LCEMCU or V3F25 goes inactive during run. LED on LCEDRV "Main relay enable (201)" goes low. LED on V3F25 "Main Cont" goes low. LED on LCEMCU "Main Enable" goes low.	Elevator stops immediately	Automatic after lift stops and fault resets.	LCEDRV: Pull encoder connector from G5 drive. V3F25: Pull tach signal (XG1) from drive.
00 37	01 06	DF	Brake open fault	1. Brake does not open at start 2. Brake closes during lift run 3. Brake contact input connector loose. Note: Brake state is defined from LCEDRV input XBC. Polarity of XBC input is defined during setup run. To disable this supervision disonnect connector XBC and rerun setup.	During start brake does not open within 1 second or brake closes during drive. Not checked on KCM831 traction or Hydro.	Elevator stops immediately	Power Off and On.	Disconnect connector XBC (LCEDRV)

Fault code	CEN code	Class Delay	Description	Possible reason	Detection	Operation	Recovery	Testing
00 38	19 30	DF	Main brake module feedback fault for ADON2	XEB1 on ADON is connected to XEB1 at the EBrake module (388:2), instead of being connected to XEB1at the Main brake module(388:1).	Elevator is standing for six seconds and LCECPU detects apparent Main brake as picked status from ADON.	Elevator will not start.	–> Power off and on or –> Switch to Inspection (not HAC) or –> Ensure XEB1 on ADON is connected to XEB1 on Main brake module (388:1).	Remove XEB1 from EBrake module (388:1) and connect it to Main brake module (388:2) instead.
00 39	06 17	DM	77:U, 77:N bypass button stuck	77:U , 77:N bypass button on CPU is stuck.	Button in down position while lift is starting.	Elevator doesn't start.	Power Off and On.	Keep button pressed while lift is starting.
00 42	26 01	DM	Car light supply supervision	Car light voltage disappeared.	120vac missing from CCBN and not in fireman drive mode.	Elevator drives to destination floor normally. New starts prohibited.	When the car light voltage appears again.	Switch of light supply in machine room.
00 43	19 01	R	Close door limit missing	Door limit not closed in 10 seconds after hall or car doors are closed, or door limit not working	CDL not detected	Car prevented from starting.	Recovers when door limit is back in correct state.	While car door is open, simulate missing Door Close Limit to CCBN at terminal X2/9 on AMD door operator.Place car call and allow doors to close.
00 44	03 01	DL	Door closing failed too many closing trials	The system has tried to close the door but door closed information has not been received.	Door is closing but the input XC1/7 on the ADON is missing.	Elevator tries to close the doors by opening and closing indefinitely.	Auto recovers if door contact closes.	Unplug XC1 pin 7.
00 46	02 05	DL	Car door contact, hall door contact or close limit do not match	One of the following contacts is open "Car door contact", "Hall door contact" or "CLOSE LIMIT" from door operator	When one of "XC1/7", "XH2/3" or "CLOSE LIMIT" is closed, while closing the door, other inputs have 4 seconds time to get active.	Door re-opens and makes 4 closing attempts more. If failed, 44 fault flashing.	Recovers by timeout, new car call, door close button, elevator mode change	Unplug CLOSE LIMIT wire from door operator. Other way Turn CCBN dip switch to opposite position.
00 48	03 02	DL	Reopen device active longer than 1 minute	Photocell or door open button has been active more than 1 minute.	Photocell input A or B or Door Open Button (DOB) A or B active for more than one minute.	Elevator keeps the door open until obstruction removed.	When obstruction removed.	Interrupt the photocell for more than 1 minute. Hold the DOB longer than 1 minute.
00 50	19 25	R	Anticreep is not released for the first time (hydraulic lift)	Anticreep device is stuck .	Anticreep device input indicates that anticreep has not released	If anticreep is unreleased.Lift is remains in out of service mode	Anticreep device releases	Connect XC41 1&2 pins

Fault code	CEN code	Class Delay	Description	Possible reason	Detection	Operation	Recovery	Testing
00 51	06 06	DL	Start failed	The elevator has not been able to start.	Elevator has made 5 unsuccessful starts. Main contactor has not been pulled after filtering time has passed.	Elevator tries to start but cannot move. Opens the door and tries again 5 times.	Inspection drive or a new car call.	Disconnect XD1/5
00 52	11 02	DF	Top and bottom synchronization switches active simultaneously	Both deceleration switches 77:U and 77:N are active simultaneously.	LED's "77:U and 77:N" on LCECPU are both ON.	Elevators stops immediately. New starts prohibited, except in RDF (machine room inspection) mode.	One of the inputs goes inactive.	Unplug 77:U and 77:N plugs from LCECCBN board.
00 56	37 02	DL	Positive pressure switch (PPS) activated Applies to KCM831 hydro only.	Check positive pressure switch. If PPS not used, parameter 1-3 must not be set to value 6 or 7.	Parameter 1-3, hydraulic selection, set to either 6 or 7. Input X5/6 on LCEOPT (S1=1) goes high (24VDC).	Elevator stops immediatley. Up run allowed. Down run not allowed.	When input X5/6 is low.	Set parameter 1-3, hydraulic selection, to either 6 or 7. Disconnect wire from X5/6 on LCEOPT (S1=1).
00 58	06 07	R	Non drive time out	The elevator has not been able to start within 150 (NA 100) seconds. Reason could be door, group, drive, etc. May also get fault 86.	Elevator has a drive command but does not move. Lift is standing and there are unanswered calls AND lift does not start responding within time determined by parameter OFFNONDRIVE or fault 86 (Start permit continuously ON).	Elevator is disconnected from group control. Car calls are cancelled.	Automatically after certain time (10 seconds for simplex and 100 seconds for group).	Inhibit doors and unplug XH2. Enter a call.
00 59	19 26	R	Anticreep is not energised for the first time (hydraulic lift)	Anticreep device is stuck .	Anticreep device input indicates that anticreep has not released	If anticreep is unreleased.Lift is remains in out of service mode	Anticreep device works again	Connect XC41 1&2 pins
00 61	03 03	R	Nudging taken too long	Door obstruction. Door operator malfunctioning.	All three inputs "safety input 2"(car door), "safety input 3"(hoistway door) and "CLOSE LIMIT" are not activated within 15 seconds of start of nudging close.	Door re-opens and makes more closing attempts as set by UI. If failed after last try, 0044 posted.	Recovers by new car call, door close button, elevator mode change**.**	In nudging operation prevent door closed switch activation by disconnecting XH2

Fault code	CEN code	Class Delay	Description	Possible reason	Detection	Operation	Recovery	Testing
00 62	05 03	R	Inspection direction buttons stuck on.	Either Car top or machine room or HAS board inspection direction inputs are on continuously.	When turned to inspection and any of the inspection direction inputs are ON. When on inspection and any inspection direction input stays ON after stopping. LCECPU inputs XM11/3 or XM11/4 at 0VDC. LCECCBN inputs XB12/2 or XB12/1 at 0VDC. LCEHAS inputs XH1/6 or XH1/5 at 0VDC.	Prevents driving on inspection drive. If moving and both direction inputs become active simultaneously, stops the elevator immediately.	If failed after turning to inspection, requires switching to normal and back.	Put one of the direction buttons ON before turning lift to inspection.
00 64	37 04	DF	K637 relay feedback failure	Failure of K637 relay on the LCECCBN.	Elevator is in any mode other than fire recall and noramlly closed contact of relay K637 fails to feed input on LCECCBN.	Fault detected while standing: Post fault immediately. Fault detected while moving: Lift drives to destination floor and posts fault once standing.	Power Off and On.	While lift is moving, set UI menu 5-11 (K637 test) to 1. Lift should post fault when standing at destination floor.
Sub Code 64 01	37 04	DF	K637 & K637:2 relay feedback failure	Failure of K637 & K637:2 relay on the LCECCBN.	Elevator is in any mode other than fire recall and noramlly closed contact of relay K637 & K637:2 fails to feed input on LCECCBN.	Fault detected while standing: Post fault immediately. Fault detected while moving: Lift drives to destination floor and posts fault once standing.	Power Off and On.	While lift is moving, set UI menu 5-11 = 3 (K637and K637:2 test = K637 and K637:2 are forced energized) . Lift should post fault when standing at destination floor.
Sub Code 64 02	37 04	DF	K637 & K637:2 relay are in wrong state.(either K637 is ON & K637:2 is OFF or K637 is OFF & K637:2 is ON)	K637 & K637:2 relay are in wrong state(either K637 is ON & K637:2 is OFF or K637 is OFF & K637:2 is ON)	Elevator is in any mode other than fire recall and noramlly closed contact of relay K637 & K637:2 fails to feed input on LCECCBN.	Fault detected while standing: Post fault immediately. Fault detected while moving: Lift drives to destination floor and posts fault once standing.	Power Off and On.	While lift is moving, set UI menu 5-11 = 1 & 2 (1 = K637 is forced energized. K637:2 functions normally,2 = K637:2 is forced energized. K637 functions normally) . Lift should post fault when standing at destination floor.

Fault code	CEN code	Class Delay	Description	Possible reason	Detection	Operation	Recovery	Testing
00 65	38 01	DF	Normal relay (K442) on LCEADON failed to pick.	Failure of K442 relay on LCEADON.	K442 relay on LCEADON is deenergized in any mode other than inspection.	Elevator crash stops. Goes to inspection mode, but will not drive on inspection.	If the HW fault condition is corrected, then a power cycle will reset. An LCEADON board change may be required.	Car top inspection and machine room inspection and access enable all on automatic. Jumper LCEADON XM23/3 to +24VDC.
00 66	38 02	DF	HAS relay (K442:1) on LCEADON board failed to drop while NOT in inspection mode.	CCBN(2) XT6/1 not at 0 VDC while car on normal. Possible hoistway access enable switch malfunction.	K442:1 is energized in any mode other than HAS. CCBN(2) XT6/1 terminal not at 0VDC while car on automatic.	Elevator crash stops and is prevented from starting.	Power Off and On, or machine room inspection drive is required to reset this fault.	With elevator on normal, remove wire from XC5/3 on LCEADON and ground XC5/3 on LCEADON. Also jump XM23/4 to +24vdc.
00 67	38 03	R	Fault not Active. HAS relay (442:1) on LCEADON board failed to pick while in HAS.	Defective 442:1 relay. Break in the XC5/3-XT6/3 circuit. Failure of 442:1 relay contacts.	442:1 is deenergized when on HAS.	Stops the elevator immediately. Normal drive not allowed.	When inspection and HAS and NORM inputs are in agreement.	Put elevator on HAS and remove wire from XC5/3 on LCEADON.
00 71	06 11	DF	30 or B30 (door zone) missing	30 or B30 (door zone) not found	30 or B30 (door zone) missing while passing 61:U/N switch at real (not dummy) floors.	Drives to destination floor without opening the door.	Power Off and On, or machine room inspection drive/RDF is required to reset this fault.	Unplug XB21 (30) or XB24 (B30) from LCECCB(N) board and run the elevator past a floor.
00 72	06 12	DF	61:U input stuck fault	61:U does not change state	61:U input has not changed after 30 input turns off.	Drives to destination floor. Makes a test drive to lowest floor, if still failed, remains out of service	ROW: Power down or inspection drive/RDF needed. NA: Manual Reset by Machine Room Inspection only	Connect lowest pins of XB22 together on LCECCB(N) board
00 73	06 13	DF	61:N input missing	61:N input not found Broken wire in traveling cable	61:N input not seen while passing 30 (door zone).	Drives to destination floor. Makes a test drive to lowest floor, if still failed, remains out of service	Power Off and On, or machine room inspection drive/RDF is required to reset this fault.	Unplug XB23 from LCECCB(N) board.
00 74	06 14	DF	61:N input stuck fault	61:N input does not change state	61:N magnet has not been released within certain time from door zone leaving edge.	Drives to destination floor. Makes a test drive to lowest floor, if still failed, remains out of service	ROW: Power down or inspection drive/RDF needed. NA: Manual Reset by Machine Room Inspection only	Connect lowest pins of XB23 together on LCECCB(N) board

Fault code	CEN code	Class Delay	Description	Possible reason	Detection	Operation	Recovery	Testing
00 75	06 15	DF	61:U input missing	61:U input not found Broken wire in traveling cable	61:U magnet rising edge not reached while passing door zone	Drives to destination floor without opening the door. Makes a test drive to lowest floor, if still failed, remains out of service	Power Off and On, or machine room inspection drive/RDF is required to reset this fault.	Unplug XB22 from LCECCB(N) board.
00 76	06 08	R	553 relay in door zone supervision circuit did not work OK - first occurance. If failed on two consecutive drives a fault 14 will be reported.	ADO/ACL circuit has not been energized	553 relay in ADO/ACL circuit has not been energized.	Drives to destination floor normally.	Automatically after 10 seconds.	Jump 553 contact on ADO(N)-board. Special test board to be used.
00 77	13 01	R	Door open limit continuously inactive	Door open limit not reached or limit switch broken	Door is opening but input "open end" or "open end B" does not change. Door open limit inactive for period of time determined by parameter OPENINGLIMIT.	Elevators opens the door for 15 seconds. Door will be closed and new drive allowed.	Automatically, when the door starts to close	Remove door open signal from the door controller.
00 78	05 01	R	Stuck car call	At least one car call is stuck	Car call cannot be cancelled within 60 seconds.	Car call is not served before it returns to normal state	Car call will be served normally once it returns to normal state	Keep a car call pressed 60 seconds.
00 79	05 02	R	Stuck landing call	At least one landing call is stuck	Landing call cannot be cancelled within 60 seconds.	Landing call is not served before it returns to normal state	Landing call will be served normally once it returns to normal state	Keep a landing call pressed 60 seconds.
00 80	19 12	R	Lock check (553) circuit failed	Faulty ADON Board or door circuit overconnected	ROW: Supervision is made when the doors start to close to ensure that there is no wire jumpers in the door circuit. NA: Shaft door lock contact, input 3 on the LCEADON, stays high after lock check command released by LCECPU.	ROW: Door remains opened and new starts are prohibited. NA: Door will remain open until input 3 on LCEADON returns to correct state.	When input 3 returns to correct state.	Jumper XH2-3 to XC1-5

Fault code	CEN code	Class Delay	Description	Possible reason	Detection	Operation	Recovery	Testing
00 81	04 01	DF	Releveling failures	Hydro: Oil leaking. Elevator has not been able to relevel to a floor in certain time. Traction: Problem with vanes or drive or ropes.	After three failed Releveling attempts. Or after ten successful Releveling operations.	Hydro: After three failed Releveling attempts, Releveling is disabled at current floor. Traction: After three failed Releveling attempts, or after ten successful Releveling operations, Releveling is disabled at current floor. Hall call at current floor not assigned to this elevator.	Releveling works again after one normal run.	Prevent elevator reached exact level with shaft simulator.
00 82	06 09	R	Incorrect door zone supervision circuit operation - first occurance. If failed on two consecutive drives a fault 15 will be reported.	ADO/ACL circuit has not been energized. 443:1 or 443:2 or 486 did not energize with car at floor or deenergize with car at speeds above SL1 speed (5-20-9 setting).	At least one of contactors 486, 443:1 or 443:2 has worked incorrectly (has failed to open or close).	Elevator drives to destination floor normally and then drives to the OSS floor (if defined) or main floor to check second zone a second time.	Automatically after 10 seconds.	Keep 443:2 contactor energized, while driving.
00 83	11 04	DL	Position lost	1) Setup not done. 2) LCECPU does not know car position.	Position and shaft information (61:U/N and 77:N/U) do not match.	Elevator drives to terminal floor.	Synchronization at terminal floor	Change the speed of shaft simulator.
00 84	03 04	R	Door open limit continuously active. At least one of the door close limits is active together with the door open limit within certain time.	Door open limit is stuck	"open end" and " close end" active simultaneously.	Fault code is shown on display.	Automatically	Invert the polarity of "open end A" or "open end B" on LCECCB(N).
00 85	13 02	R	Door opening prevention switch turned ON	Not used				
00 87	29 02	DS	Car door contact does not open.	Input broken or override wire.	After certain time after door open command input is checked..	Stuck at level door opened.	ROW: Connect the input is back in correct state,RDF/INSP or Power cycle. NA: Connect the input is back in correct state	Override the input.
00 89	13 03	DS	DOM supervision failed	Two or more shaft doors opened at same time.	Detected by special DOM board (one per door)	Stucks at level door closed.	Power down.	(ROW) Activate DOM board input in opt '0'

Fault code	CEN code	Class Delay	Description	Possible reason	Detection	Operation	Recovery	Testing
00 91	11 05	DF	BAR ChA, ChB, ChC (30) or B30 failure	1. Car outside door zone and lift is not moving (speed < 1.0 cm/sec), or 2. Bar reader channels A or B not working correctly 3. Bar channel C (30) or B30 is stuck to ON state 4. Bar channel C (30) or B30 is stuck to OFF state 5. Door flag or magnet is missing at some floor	Lift movement is not detected when car outside door zone and lift should be acclerating or running at full speed (not decelerating) or Failure in signals 30 or B30	Elevator travels to the terminal floor in the current direction of travel, then opens and closes the doors. Elevator is not permitted to drive.	Correct Chnnels A or B or C or B30 and ROW: power Off and On required. NA: Manual Reset by Machine Room Inspection only.	1. Disconnect positioning system sensor signals (channel A and B) or 2. Disconnect 30 or B30 input or 3. Set 30 or B30 permanently to ON state
00 92	11 06	DF	BAR ChA, ChB cross wired or 77 wrong polarity	Positioning system sensor wires crossed. 77:U becomes active during a down run. 77:N becomes active during an up run.	Sync switch 77U becomes active during down run or sync switch 77N becomes active during up run	Lift stops immediately. Normal drive is not possible. Inspection drive is possible	Correct the 77:U/N input status and power cycle.	Cross positining system sensor wires (BAR channels A & B)
00 93	19 40	DF	Normal relay (K442) on LCEADON failed to drop.	Failure of K442 relay on LCEADON. Accidental ground fault at ADON terminal XM23/5 at LCEADON board	When the elevator is in Inspection mode and relay K442 has not dropped.	The elevator is not permitted to drive.	Recycle power.	While elevator is on any type of Inspection mode: 1) Force K442 Relay to be picked, or 2) Ground terminal XM23/5.
00 95	29 03	DS	Hall door contact does not open.	Door doesn't open. Hall door contact jumpered or input broken	Input Hall door contact	Door will remain open until the input resumes to correct state.	Connect the input is back in correct state & Power cycle. For EN81_20 supervision - Connect the input is back in correct state,RDF/INSP or Power cycle.	Jumper XH2 1-3.
00 96	03 07	DF	Door Close End Switch Stuck On	Door Close End Switch Stuck On	Door Close End Switch detected in wrong state when doors are at the open end	Door will remain open until the Door Close End Switch resumes correct state.	When Door Close End Switch resumes correct state.	Jump X12 to X13 pads on AMD Door Controller Board. Open doors. F96 is reported when doors are to the open end.

Fault code	CEN code	Class Delay	Description	Possible reason	Detection	Operation	Recovery	Testing
00 97	38 14	DF	K616 relay failed to drop	Failure of the K616 relay on the LCEADON.	When the elevator is moving and exceeds an ETS speed reference plus 20 cm/s for more than 2 seconds and relay K616 is still energized.	The elevator will proceed to the destination floor, open doors for a short period, and remove itself from normal service.	Reset is by inspection mode only. Power cycle does not reset the fault.	Select elevator whose contract speed is 1.5 m/s or greater and does not have ETSL boards. Set UI:5:20=100. Physically keep K616 Relays energized. (For ADON Rev.1.x, add jumper across Q90 pins 2 & 3, see drawing 773361, page 8. For ADON2, jump TP1201 to CTR0V). Run car for a high-speed run of more than two seconds.
00 98	38 13	DF	K616 relay failed to pick	Failure of the K616 relay on the LCEADON.	When the elevator is stopped and K616 relay is not energized.	The elevator takes itself out of normal service.	The fault resets if the elevator is stopped and the relay is energized.	Run car on high speed. Once K616 Relays drop, keep them physically de-energized. Check that fault 98 is reported when car has arrived and is stopped at destination floor.
01 45	36 01	DF	EBD device failed	EBD device is broken	Input EBD STATUS in wrong state.	The elevator does not run on EBD mode.	Change EBD device	Disconnect EBD unit from LON
01 46	35 01	DF	EBD battery failed	EBD battery is empty	Input EBD BATTERY STATUS in wrong state.	The elevator does not run on EBD mode.	Change EBD battery	Remove EBD battery
01 48	11 07	DL	V2: 77:N missing	1. Lower sync swith is missing or not connected 2. Operating magnet is not present 3. Wiring is incorrect	Lift is at bottom floor and there is no 77:N input	Fault code is shown on display. No other effect on lift operation.	Automatic	Drive lift to bottom floor and press buffer test button
01 49	11 08	DL	V2: 77:U missing	1. Lower sync swith is missing or not connected 2. Operating magnet is not present 3. Wiring is incorrect	Lift is at top floor and there is no 77:U input	Fault code is shown on display. No other effect on lift operation.	Automatic	Drive lift to top floor and press buffer test button

Fault code	CEN code	Class Delay	Description	Possible reason	Detection	Operation	Recovery	Testing
01 50	11 09	DM	NTS invalid switch fault Does not apply to KCM831 hydro and ReSolve 20.	NTS switch operation is not in the sequence as expected by the V3F25 drive.	V3F25 checks the switch combination and sends a fault bit to LCE	Elevator stops immediately. Correction drive to nearest floor downards and return drive to bottom floor	At bottom floor, when the fault bit disappears	NTS switches.
01 51	11 10	DM	V1 NTS faulty switch Does not apply to KCM831 hydro and ReSolve 20.	NTS switches location changed	V3F25 finds an NTS switch in a location that does not match the shaft setup table.	Elevator stops immediately. Correction drive to nearest floor downards and return drive to bottom floor	At bottom floor, when the fault bit disappears	NTS switches.
01 52	11 14	DM	V1 NTS Stopping fault Does not apply to KCM831 hydro and ReSolve 20.	NTS fault detected. This fault will be set always if NTS faulty switch or invalid combination detected	V3F25 checks the switch combination and location and sends a fault bit to LCE	Elevator stops immediately. Correction drive to nearest floor downards and return drive to bottom floor	At bottom floor, when the fault bit disappears	NTS switches.
01 53	11 15	DM	V2: NTS deceleration Relates to LCEDRV products.	Deceleration started by NTS. Sync switch 77 is too far from terminal floor

Make sure 77:U and 77:N magnets are located on the tape according to values in parmaeters 6-20 and 6-21. | Lift starts deceleration from 77 switch | Lift decelerates | Automatic | Move 77 switches too far from terminal floor |
01 54	11 16	DM	Invalid NTS switch combination Relates to LCEDRV products. 77U active in down direction; 77N active in up direction.	Both deceleration switches 77:U and 77:N are active simultaneously.	Both deceleration switches 77:U and 77:N are active simultaneously.	Lift stops immediately. Normal drive is not possible. Inspection drive is possible	Automatic when fault codition clears	Position 77 switches so that they are active simultaneously
01 56	19 66	R	Either 77:FU or 77:FN active.	Car overshooting either the top floor or bottom floor and activating the 77:Fu or 77:FN switch.	Via LCEDRV software	Lift stops, then performs a relevel.	Automatic when fault condition clears	Activate the switches 77FU in topmost floor (or) Activate the switches 77FN in bottommost floor
01 63	37 07	DL	K486 relay failed to drop.	K486 should drop when car speed is 0.75 m/sec. or greater. 1) Are there car encoder signals coming in on XCT1/2 terminal on ADON board? 2) Has ADON learn been done yet?	LCE checks "NORMAL_SPEED" signal. And compares with speed data from drive.	Prevent Advance door opening, and relevelling with doors open at destination floor. A second subsequent occurrence will prevent re-start.	Recovers automatically, if SL1 works fine during next drive. If not car will shut down and requires power up.	Jump 486 contact on ADON-board. Special board need to be used.

Fault code	CEN code	Class Delay	Description	Possible reason	Detection	Operation	Recovery	Testing
01 64	37 08	DL	K486 failed to pick when car is stopped.	Car moving faster than ADO/ACL speed in door zone.	LCE checks "NORMAL_SPEED" signal when car is stopped. ("NORMAL_SPEED" signal is the back contact of the K486 relay).	Prevent elevator from starting.	Automatic when K486 gets picked.	ADON: Keep relay 486 contact open on ADON-board. Special board need to be used. ADON2: While elevator is stopped, add jumper from TP1203 to 0v. K486 will deenergize.
01 65	30 01	DE	Hydraulic oil level too low	Input 6 on LCE OPT board F, front side, is always open. This input is not currently being used and requires the Hydraulic Oil Monitoring to be activated from the KRM system.	The elevator is standing at the lowest floor and the oil level switch is not active continuously for 5 seconds.	Doors will open, and close, then elevator will go into the Out-of-Service mode.	Correct the LCE OPT input state. Turn on RDF or landing call inhibit switch. After 5 seconds, the fault will reset.	Keep input 6 on LCE OPT board F, front side, always open. Sent the elevator to the lowest floor.
01 66	19 53	R	Relevelling too fast. Valid only for traction products.	K486 Relay drops while car is leveling with doors open.	K486 Relay drops at speeds 0.65m/sec.and higher. If car is car is leveling with doors open at this time, action of K486 dropping will break XC1/5 - XH2/3 circuit.	Elevator stops immediately.	Power Off and On. Check that UI:5:20:9 = 65. (speed at which K486 will drop).	(1) Put car on PRC mode at a floor to keep doors open. (2) Set UI:5:20:9 = 1 (speed at which K486 will drop). (3) Force car to drive a relevel by manipulating 61:N/U signals. (4) K486 dropping will stop elevator. Fault 0166 should be seen on UI. (5) Restore UI:5:20:9 = 65.
01 67	30 02	DS	Hydraulic oil temperature too high	Input 8 on LCE OPT board F, front side, is always open. This input is not currently being used and requires the Hydraulic Oil Monitoring to be activated from the KRM system.	The oil temperature is above the high temperature limit continuously for 5 seconds, and there is no oil low temperature fault.	Oil high temperature detected message shall be sent to the Service Center immediately .	The oil temperature is below the high temperature limit continuously for 10 minutes. Turn on RDF or landing call inhibit switch and the fault will reset.	Keep input 8 on LCE OPT board F, front side, open for 5 seconds.

Fault code	CEN code	Class Delay	Description	Possible reason	Detection	Operation	Recovery	Testing
01 68	30 03	R	Hydraulic oil temperature too low	Input 7 on LCE OPT board F, front side, is always open. This input is not currently being used and requires the Hydraulic Oil Monitoring to be activated from the KRM system.	The oil temperature is below the low temperature limit continuously for 5 seconds, and there is no oil high temperature fault.	Oil low temperature detected message shall be sent to the Service Center.	The oil temperature is above the low temperature limit continuously for 10 minutes.	Keep input 7 on LCE OPT board F, front side, open for 5 seconds.
01 69	17 01	R	The automatic battery test has detected low battery.	The main supply has been off too long or battery itself is broken. Battery is not connected to LCECCB(N) XB32.	LCE runs the test at start up, then 5 hours later, and then every 24 hours. CCB(N) measured the battery condition if the battery is low the CCBN IO Battery Ok tells battery status.	LCE detects the fault and sends Battery Low message to LCECPU. Elevator will not answer landing calls. Elevator will answer car calls.	When Battery OK.	Disconnect the battery by disconnecting connector XB32 on the LCECCB(N) and wait until the battery test is done.
01 70	16 01	DF	AC supply voltage failed	Voltage missing: REC-board broken, cable missing. Fault occurs with each power down.	XM25 input to LCECPU from LCEREC XM25.	Lift stops immediately. Normal and inspection drive is not possible.	When AC supply is restored.	Disconnect XM25 connector on LCECPU.
01 71	07 01	R	24 VDC control voltage too low.	Too low voltage level supplied through XM16 for exaple during EBD run. Or damaged supply voltage transformer.	BNMI interrupt on LCECPU board.	Lift stops and new start prohibited. CPU reset.	When 24VDC control voltage is restored.	Remove car top battery supply and supply less than 18VDC to XM16.
01 72	07 02	R	24 VDC car or shaft supply power missign.	Fuse broken.	Internal input on LCECPU board.	Lift stops and new start prohibited.	When 24Vdc is restored.	Remove XM17 on CPU
01 73	161 01	R	Hydraulic oil level sensor failure	Input 6 on LCE OPT board F, front side, is always open. This input is not currently being used and requires the Hydraulic Oil Monitoring to be activated from the KRM system.	The elevator is standing outside of 77N and the oil level switch is active continuously for 5 seconds.	Oil level sensor failure message shall be sent to the Service Center.	Elevator is standing outside of 77N. Correct the LCE OPT input state. Turn on RDF or landing call inhibit switch and the fault will reset.	Keep input 6 on LCE OPT board F, front side, always jumped to input 10. Send the elevator away from the lowest floor.
01 74	161 02	R	Hydraulic oil temperature sensor failure	Inputs 7 and 8 on LCE OPT board F, front side, are always open. These inputs are not currently being used and require the Hydraulic Oil Monitoring to be activated from the KRM system.	Inputs 7 and 8 on LCE OPT board F, front side, are both open continuously for 5 seconds.	Oil temperature sensor failure message shall be sent to the Service Center.	Immediate recovery when both inputs, 7/8, are jumped to GND.	Keep inputs 7 and 8 on LCE OPT board F, front side, open for 5 seconds.

Fault code	CEN code	Class Delay	Description	Possible reason	Detection	Operation	Recovery	Testing
01 75	19 49	DF	ETS up (136:U) switch failed	With car at top floor and top ETS (136:U) switch is active. XH23/2 terminal not at 0 volts. With car at bottom floor and top floor ETS (136:U) switch is inactive. XH23/2 terminal not at 24 volts. Check magnet to switch 136:U alignment.	With car at top terminal floor check ETS input through 516:U -relay	Lift stops immediately. Normal drive not possible. Inspection drive is possible.	ETS up (136:U) switch in the correct state.	Jumper XH23/2 - XH23/1 with car at top floor. Remove wire XH23/2 with car at bottom floor.
01 76	19 50	DF	ETS down (136:N) switch failed	With car at bottom floor and bottom ETS (136:N) switch is active. XH23/3 terminal not at 0 volts. With car at top floor and bottom ETS (136:N) switch is inactive. XH23/3 terminal not at 24 volts. Check magnet to switch 136:N alignment.	Whith car at bottom terminal floor check ETS input through 516:N relay.	Lift stops immediately. Normal drive not possible. Inspection drive is possible.	ETS down (136:N) switch in the correct state.	Jumper XH23/3- XH23/1 with car at bottom floor. Remove wire XH23/3 with car at top floor.
01 77	14 01	DF	ADON channel 1 detects overspeed governor trip	Overspeed governor switch open. KCM831 hydro: No jumper in terminals LCEADON XM3A-1-3.	Overspeed governor switch open. No 24 VDC at terminal XM3A-3 LCEADON.	K464 relay drops. Ebrake drops.	Close Overseed governor switch. Install jumper for KCM831 hydro.	Open Overseed governor switch.
01 78	14 02	DF	ADON channel 2 detects overspeed governor trip	Overspeed governor switch open. KCM831 hydro: No jumper in terminals LCEADON XM3A-1-3.	Overspeed governor switch open. No 24 VDC at terminal XM3A-3 LCEADON.	K464 relay drops. Ebrake drops.	Close Overseed governor switch. Install jumper for KCM831 hydro.	Open Overseed governor switch.

Fault code	CEN code	Class Delay	Description	Possible reason	Detection	Operation	Recovery	Testing
01 79	14 03	DF	ADON channel 1 detects unintended movement.	(a) Unintended car movement. (b) Motor Encoder noise can cause this. For KCM831 traction, check LCEADON LEDs D169 and D171. LEDs can be on or off but must not be flickering when the car is standing. If LEDs are flickering, it may be necessary to "zero" the V3F25 NTS board. (c) 230 VAC missing at LCEADON XEB1/1-2 while main brake is energized. (d) UI parameter 5:20:3 is set lower than "100".	Unintended car movement detected when Ebrake (or rope gripper) is energized and main brake is not energized.	K464:1 relay drops. Ebrake/rope gripper drops.	Press Yellow ACUM Reset button on ADON Board.	Disable relevelling. After car stopped, hold open main brake mechanically. Allow car to drift away.
01 80	14 04	DF	ADON processor 2 detects unintended movement.	(a) Unintended car movement. (b) OSG/Car/BAR Encoder noise can do this. Check LCEADON LEDs D165 and D167. LEDs can be on or off but must not be flickering. If flickering, check encoder and associated wiring and shielding. (c) 230 VAC missing at LCEADON XEB1/1-2 while the Main Brake is energized. (d) UI parameter 5:20:4 is set lower than "100." (e) For EcoSpace applications, polarity reversed at XEB1/1-2. Pin 1 = + and pin 2 =-.	Unintended car movement detected when Ebrake (or rope gripper) is energized and main brake is not energized.	K464:2 relay drops. Ebrake/rope gripper drops.	Press Yellow ACUM Reset button on ADON Board.	Disable relevelling. After car stopped, hold open main brake mechanically. Allow car to drift away.
01 81	14 05	DF	ADON2 processor 1 detects loss of 24Vdc or 230Vac power.	1) Loss of 230Vac at XM5 connection. 2) Loss of 24Vdc coming from LCE CPU board.	The fault is posted 10 seconds after the actual detection of power loss. This is done to prevent false posting of this fault at power-up/power-down.	LCE CPU will not start elevator. Ebrake/Rope gripper drops.	Automatically after power is restored.	1) Disconnect 230Vac coming in at XM5 connector. 2) Need special ADON2 test board for 24Vdc power loss testing.

Fault code	CEN code	Class Delay	Description	Possible reason	Detection	Operation	Recovery	Testing
01 82	14 06	DF	ADON2 processor 1 detects loss of 24Vdc or 230Vac power.	1) Loss of 230Vac at XM5 connection. 2) Loss .of 24Vdc coming from LCE CPU board.	The fault is posted 10 seconds after the actual detection of power loss. This is done to prevent false posting of this fault at power-up/power-down.	LCE CPU will not start elevator. Ebrake/Rope gripper drops.	Automatically after power is restored.	1) Disconnect 230Vac coming in at XM5 connector. 2) Need special ADON2 test board for 24Vdc power loss testing.
01 83	14 07	DF	Relay K464:2 is not in the same state as K464:1.	Usually occurs when one channel faults and the other channel does not detect the same fault. Should also be another fault reported. See other fault for possible reasons.	K464:2 relay state not same as K464:1state as seen by channel 1.	K464:1 relay drops. Ebrake/Rope brake drops.	Power up or Automatic when both K464 Relays are in same state.	Force K464:2 relay of channel 2 to opposite state of K464:1 relay of channel 1.
01 84	14 08	DF	Relay K464:1 is not in the same state as K464:2.	Usually occurs when one channel faults and the other channel does not detect the same fault. Should also be another fault reported. See other fault for possible reasons.	K464:1 relay state not same as K464:2 state as seen by channel 2.	K464:2 relay drops. Ebrake/rope gripper drops.	Power up or Automatic when both K464 Relays are in same state.	Force K464:1 relay of channel 1 to opposite state of K464:2 relay of channel 2.
01 85	14 09	DF	ADON channel 1 detects K464:1 relay failed	Failure of 464:1 relay or relay contact. Fault can be reported during a power down but will be cleared during power up.	Channel 1 detects K464:1 relay failed to pick when commanded or failed to drop when commanded.	LCE will not start elevator. Ebrake/Rope gripper drops.	Power up or Press Yellow ACUM Reset button on ADON Board.	(1) De-energize K464:1 relay when it is supposed to be energised. (2) Force K464:1 energized when it is supposed to be de-energised. Requires specially modified LCEADON board.
01 86	14 10	DF	ADON channel 2 detects K464:2 relay failed	Failure of 464:2 relay or relay contact. Fault can be reported during a power down but will be cleared during power up.	Channel 2 detects K464:2 relay failed to pick when commanded or failed to drop when commanded.	LCE will not start elevator. Ebrake/Rope gripper drops.	Power up or Press Yellow ACUM Reset button on ADON Board.	(1) De-energize K464:2 relay when it is supposed to be energised. (2) Force K464:2 energized when it is supposed to be de-energised. Requires specially modified LCEADON board.

Fault code	CEN code	Class Delay	Description	Possible reason	Detection	Operation	Recovery	Testing
01 87	14 11	DF	LCEADON channel 1 detects Ebrake/Rope gripper failed to pick.	1) Ebrake failed to pick. 2) Ebrake/Rope gripper switch failed. LED D182 failed to light and/or D181 failed to turn off. Terminal XEB2B/3 remains at 20vdc. XEB2B/1 remains at 0vdc. 3) Channel 2 has detected a fault and does not allow the Ebrake/Rope griper to pick.	1) Terminal XEB2B/3 remains 20VDC on pick cmd. 2) XEB2B/1 remains at 0VDC on pick cmd.	K464:1 relay drops. Ebrake/Rope gripper drops.	Power up or Press Yellow ACUM Reset button on ADON Board. Or Automatic when LCECPU drops Ebrake Cmd.	Disconnect XEB2B/3 while Ebrake is picked.
01 88	14 12	DF	LCEADON channel 2 detects Ebrake/Rope gripper failed to pick	1) Ebrake failed to pick. 2) Ebrake/Rope gripper switch failed. LED D182 failed to light and/or D181 failed to turn off. Terminal XEB2B/3 remains at 20vdc. XEB2B/1 remains at 0vdc. 3) Channel 1 has detected a fault and does not allow the Ebrake/Rope griper to pick.	1) Terminal XEB2B/3 remains 20VDC on pick cmd. 2) XEB2B/1 remains at 0VDC on pick cmd.	K464:2 relay drops. Ebrake/Rope gripper drops.	Power up or Press Yellow ACUM Reset button on ADON Board. Or automatic when LCECPU drops EBrake pick cmd.	Disconnect XEB2B/3 while Ebrake is picked.
01 89	14 13	DF	LCEADON channel 1 detects Ebrake/Rope gripper failed to drop	1) Ebrake failed to drop. 2) Ebrake/Rope gripper switch failed. LED D182 failed to turn off and/or D181 failed to turn on. Terminal XEB2/7 remains at 0VDC XEB2B/1 remains at 20VDC.	1) Terminal XEB2/7 remains 0VDC on drop cmd. 2) XEB2B/1 remains at 20VDC on drop cmd.	K464:1 relay drops. Ebrake/Rope gripper drops.	Automatic or Power Up.	Add jumper XEB2B/2 to XEB2B/3 while Ebrake is picked. Wait for Ebrake to be de-energised.
01 90	14 14	DF	LCEADON channel 2 detects Ebrake/Rope gripper failed to drop	1) Ebrake failed to drop. 2) Ebrake/Rope gripper switch failed. LED D182 failed to turn off and/or D181 failed to turn on. Terminal XEB2/7 remains at 0VDC XEB2B/1 remains at 20VDC.	1) Terminal XEB2B/3 remains 0VDC on drop cmd. 2) XEB2B/1 remains at 20VDC on drop cmd.	K464:2 relay drops. Ebrake/Rope gripper drops.	Automatic or Power Up.	Add jumper XEB2B/2 to XEB2B/3 while Ebrake is picked. Wait for Ebrake to be de-energised.
01 91	14 15	DF		Car not decelerating quickly enough during an emergency stop. Ebrake dropped to assist stopping the car.	Measure decleration rate over the first 500msec after Main Brake drop and car speed greater than 0.75 m/s (150 FPM)	K464:1 relay drops causing Ebrake to drop, to assist stopping.	Automatic recovery when car comes to a stop.	Effect high speed emergency stop empty car up. machine decel must be less than -1.0 meter/sec^2

Fault code	CEN code	Class Delay	Description	Possible reason	Detection	Operation	Recovery	Testing
01 92	14 16	DF	ADON processor 2 assist main brake	Car not decelerating quickly enough during an emergency stop. Ebrake dropped to assist stopping the car.	Measure decleration rate over the first 500msec after Main Brake drop and car speed greater than 0.75 m/s (150 FPM)	K464:2 relay drops causing Ebrake to drop, to assist stopping.	Automatic recovery when car comes to a stop.	Effect high speed emergency stop empty car up. Car decel must be less than -1.0 meter/sec^2
01 93	14 17	DF	LCEADON channel 1 detects sliding distance exceeded parameter UI 5-20-5 value	Brake out of adjustment Excessive brake pad wear.	The speed when main brake dropped was greater than 0.1m/s but less than or equal to 0.75 m/s and the sliding distance exceeded parameter UI 5-20-5 value.	K464:1 relay drops. Ebrake drops.	Press Yellow ACUM Reset button on ADON Board or power cycle.	(1) Set UI:5:20:5 to a value less than machine stopping distance for a speed below 0.75m/sec. (2) Effect emergency stop while car speed is below 0.75m/sec. but above 0.1m/sec.
01 94	14 18	DF	LCEADON channel 2 detects sliding distance exceeded parameter UI 5-20-6 value	Brake out of adjustment Excessive brake pad wear. Loss of traction.	The speed when main brake dropped was greater than 0.1m/s but less than or equal to 0.75 m/s and the sliding distance exceeded parameter UI 5-20-6 value.	K464:2 relay drops. Ebrake drops.	Press Yellow ACUM Reset button on ADON Board or power cycle.	(1) Set UI:5:20:6 to a value less than car stopping distance for a speed below 0.75m/sec. (2) Effect emergency stop while car speed is below 0.75m/sec. but above 0.1m/sec.
01 95	14 19	DF	LCEADON channel 1 detects sliding distance exceeded parameter UI 5-20-7 value	Brake out of adjustment Excessive brake pad wear.	The speed when main brake dropped was less than or equal to 0.1m/s and the sliding distance exceeded parameter UI 5-20-7 value.	K464:1 relay drops. Ebrake drops.	Press Yellow ACUM Reset button on ADON Board or power cycle.	(1) Set UI:5:20:7 to a value less than machine stopping distance for a speed below 0.1m/sec. (2) Effect emergency stop while car speed is below 0.1m/sec. but above zero speed.
01 96	14 20	DF	LCEADON channel 2 detects sliding distance exceeded parameter UI 5-20-8 value	Brake out of adjustment Excessive brake pad wear. Loss of traction.	The speed when main brake dropped was less than or equal to 0.1m/s and the sliding distance exceeded parameter UI 5-20-8 value.	K464:2 relay drops. Ebrake drops.	Press Yellow ACUM Reset button on ADON Board or power cycle.	(1) Set UI:5:20:8 to a value less than car stopping distance for a speed below 0.1m/sec. (2) Effect emergency stop while car speed is below 0.1m/sec.

Fault code	CEN code	Class Delay	Description	Possible reason	Detection	Operation	Recovery	Testing
01 97	14 21	DF	LCEADON speed inequality with channel 2	ADON learn not yet done.\n\nEncoder signal missing at XME1/XME2.\n\nEncoder signal missing at XCT1/XCT2.	LCEADON channel 2 speed signal does not does not agree with speed as determined by channel 1.	K464:1 relay drops and Ebrake drops after car stops.	Power up or Press Yellow ACUM Reset button on ADON Board.	(1) Unplug Car Encoder Connection to XCT1/2. (2) Send car on a high speed run.
01 98	14 22	DF	LCEADON speed inequality with channel 1	ADON learn not yet done.\n\nEncoder signal missing at XME1/XME2.\n\nEncoder signal missing at XCT1/XCT2.	LCEADON channel 1 speed signal does not does not agree with speed as determined by channel 2.	K464:1 relay drops and Ebrake drops after car stops.	Power up or Press Yellow ACUM Reset button on ADON Board.	(1) Unplug Motor Encoder Connection to XME1/2. (2) Send car on a high speed run.
01 99	14 23	DF	LCEADON channel 1 is using eeprom defaults	1) ADON Processor has just been flash reprogrammed.\n2) Data corruption in channel 1 eeprom.	eeprom check on power-up detects checksum error.	K464:1 relay drops. Ebrake drops.	Press Yellow ACUM Reset button on ADON Board.	(1) Flash download different version ADON program into channel 1 microprocessor.
02 00	14 24	DF	LCEADON channel 2 is using eeprom defaults	1) ADON Processor has just been flash reprogrammed.\n2) Data corruption in channel 2 eeprom.	eeprom check on power-up detects checksum error.	K464:2 relay drops. Ebrake drops.	Press Yellow ACUM Reset button on ADON Board.	(1) Flash download different version ADON program into channel 2 microprocessor.
02 01	14 25	DF	LCEADON channel 1 system fault	LCEADON processor 1 system fault	By LCEADON software.	K464:1 relay drops. Ebrake drops.	Power Off and On, and then Press Yellow ACUM Reset button on ADON Board. If it does not recover change the LCEADON board.	Specially modified LCEADON board required.
02 02	14 26	DF	LCEADON Channel 2 system fault	LCEADON processor 2 system fault	By LCEADON software.	K464:2 relay drops. Ebrake drops.	Power Off and On, and then Press Yellow ACUM Reset button on ADON Board. If it does not recover change the LCEADON board.	Specially modified LCEADON board required.
02 03	14 27	DF	LCEADON channel 1 communication failure	Communication between LCECPU and LCEADON channel 1 fails.\nExcessive noise on channel 1 encoder (XME1/XME2) signal\nNo power on XM25 at LCECPU.	LCECPU detects slow or no response from LCEADON channel 1.	If Ebrake enabled, LCECPU will not start car.	Automatic when communication is re-established.	Special test ribbon cable required.

Fault code	CEN code	Class Delay	Description	Possible reason	Detection	Operation	Recovery	Testing
02 04	14 28	DF	LCEADON channel 2 communication failure	Communication between LCECPU and LCEADON channel 2 fails. Excessive noise on channel 2 encoder (XME1/XME2) signal No power on XM25 at LCECPU.	LCECPU detects slow or no response from LCEADON channel 2.	If Ebrake enabled, LCECPU will not start car.	Automatic when communication is re-established.	Special test ribbon cable required.
02 05	14 29	DF	ADON software version in Channel 1 is different than in Channel 2	Program version in ADON processor 1 too old for LCE program.	LCE Checks ADON processor 1 program version after power-up thruogh SPI link	N/A - future supervision.	Change ADON board for one with latest program.	N/A
02 06	14 30	DF	ADON software version in Channel 2 is different than in Channel 1	Program version in ADON processor 2 too old for LCE program.	LCE Checks ADON processor 2 program version after power-up thruogh SPI link	N/A - future supervision.	Change ADON board for one with latest program.	N/A
02 07	14 31	DF	LCECPU/LCEADON ID mismatch.	1)LCEADON or LCECPU board was changed. 2)LCEADON has been flash reprogrammed. 3)LCEADON eeprom has returned to default values.	LCECPU checks LCEADON channels 1 & 2 for CPU_ID value after power-up and those do not match the ID stored in the LCECPU memory.	No effect on operation.	An ADON learn is required. Note: During an ADON Learn, the LCECPU sends its CPU_ID to each LCEADON processor.	(1) Flash download any version ADON program into either channel microprocessor.
02 08	14 32	DF	LCEADON PARAM jumper still in "SET" position.	LCEADON PARAM jumper still in "SET" position.	After one run, the LCECPU detects the ADON "PARAM" Jumper is still in the "SET" Position.	Elevator is shut down.	Power Down. Move PARAM Jumper to SET Position. Power up Place car call for a different floor.	Power Down. Move PARAM Jumper to SET Position. Power up Place car call for a different floor.
02 09	09 01	DL	Elevator cannot run (KRM)	The Elevator can not start to move from one floor to next/previous floor during time defined by LCE V1 Analyzer Parameter Automatic Test Frquency.	During the testing period is not processed the movement of Elevator. The testing period is defined by following LCE V1 Analyzer Parameters Test Allowed Weekdays, Test Allowed Start Time, Test Allowed End Time and Automatic Test Frequency.	Analyzer tries to drive Elevator by giving Test Calls during waiting time (~8min.). If there is not noticed the movement of Elevator the failure is created.	The failure is reseted if during failure period the moving of Elevator has been succeeded.	To cause creation / remove the error situations for Elevator during the period defined by according LCE V1 Analyzer Parameters Test Allowed Weekdays, Test Allowed Start Time, Test Allowed End Time and Automatic Test Frequency.

Fault code	CEN code	Class Delay	Description	Possible reason	Detection	Operation	Recovery	Testing
02 10	32 01	DL	CarLight Failure (KRM)	The CLD input is active in the Response of READ_RIF_CONFIG_INPUTS KNXM message.	LCE V1 Analyzer asks after certain period from RIF the status of CLD input by sending request-message READ_RIF_CONFIG_INPUTS. If the CLD input is found in active state the process of handling the error situation is activated.	If the CLD input is found active during 5 minute timeout then the failure is created. The failure resets if during timeout the CLD input goes and stays in nonactive state.	The actual reason for active CLD input in RIF should be checked and improved.	To make the CLD input of RIF active and nonactive.
02 11	33 01	DL	Inaccurate stopping (KRM)	For Elevator is found too many stoppings with bad accuracy.	With LCE V1 Analyzer Parameters are defined following limits to discover the according failure situation - Stopping Accuracy Monitoring to enable/disable the Stopping Accuracy system and to determine which type of sensors are used - internal or external, Stopping Accuracy Good Limit as number of good consecutively correct stoppings, Stopping Accuracy Bad Limit as limit for stoppings with bad accuracy.	If more bad stoppings than Stopping Accuracy Bad Limit is detected during number of Stopping Accuracy Good Limit stops the failure is detected. The number of Stopping Accuracy Good Limit consecutive Elevator stops is reason to reset the failure.	The reason for too many Elevator stops with bad accuracy should be checked and improved.	Set needed values for parameters Stopping Accuracy Monitoring, Stopping Accuracy Good Limit, Stopping Accuracy Bad Limit and give number of calls to Elevator to generate set / reset of failure situations.
02 12	34 01	DL	Uncontrolled movement detected (KRM)	After successful stop at Door Zone the Elevator slides to outside of Door Zone	LCE V1 Analyzer parameter Uncontrolled Moving Monitor disables/enables the system of Uncontrolled Moving. The Uncontrolled moving is detected if Elevator moves away from Door Zone after normal stop at the floor during 3 second timeout	If Elevator moves away from Door Zone after normal stop at the floor during 3 second timeout the failure is generated	After timeout (~n min.) the failure is reseted if the Elevator stays at the floor during 3 second timeout after normal stop	Enable the parameter Uncontrolled Moving Monitor and give number of calls to Elevator to force possibel set / reset situations for failure.
02 13	19 04	DM	No floor nodes found.	Power late or no power in riser	No floor nodes found in roll call during boot up sequence	Elevator tries to find floor nodes continuously	At least one floor node found	Unplug riser.

Fault code	CEN code	Class Delay	Description	Possible reason	Detection	Operation	Recovery	Testing
			LCEETSL Emergency Terminal Speed Limiting Device					

SUBFAULT CODES
When an ETSL fault is displayed as the current fault, or in the fault history, pressing the enter button will display the subfaults. They are formatted as follows:

 1 ETSL board system
 1.a 2.a
 2 ETSL board system
 1.ab 2.ab
 3 ETSL board system
 1.abc 2.abc
 4 ETSL board system
1.abcd 2.abcd

· 1 represents codes from the car encoder channel.
· 2 represents codes from the motor encoder channel.
· abcd digits are either 0 or 1. 1 = fault, 0 = no fault.
· a = board 1, b = board 2, c = board 3, d = board 4.

Example:
The UI displays the following sub-fault codes:
1.011 2.010
1.011 = faults on car channel of boards 2 and 3.
2.010 = faults on motor channel of board 2 only.

Fault code	CEN code	Class Delay	Description	Possible reason	Detection	Operation	Recovery	Testing
02 14	19 69	DM	Failure of K1 or K2 relay check on ETSL board.	Failure of K1 or K2 or Channel 1 or channel 2 on ETSL board.	Test is always performed at end of first run after power up.On all successive runs test is performed only if previous run exceeds ½ Set Speed of the board. Test executes after stop (stop is defined as no current in the 201:3, 4 circuit for 200 msec.). K1 and K2 relays on ETSL board are cycled and channel 1 and channel 2 do not see the relays cycle as expected.	K1 and K2 relays on the ETSL board dropped. Restart not allowed by ETSL	Power cycle required.	Run the lift above 1/2 of the speed setting of the ETSL board. When the run is complete, this test will be performed. Requies a modified ETSL board such that the K1 or K2 relay check fails.
02 15	19 70	R	Current detection failure	1)No current detected at XD1A or B/5 or XD1A or B/7 on ETSL board. 2)Over connection of XD1A and XD1B terminals 5 and/or 7. 3)No connection at XD1A or XD1B 4)Board failure	No current detected in Safety chain (XD1A to XD1B terminals 5 and 7) while running above ½ Set Speed	Fault is announced to the LCECPU.	Notification sent to CPU. No other action taken.	Test is performed when accelerating past 1/2 of the set speed of the ETSL board. If the XD1 connectors bypass the ETSL board and a run is made above 1/2 of the set speed, this fault will appear on the LCECPU board.
02 16	19 71	DM	Speed comparisonTest Failure	1)missing either motor or car encoder. 2)Improper scaling factor. 3)Incomplete or improper setup. 4)Board failure	During acceleration one channel's speed is greater than 70% of Set Speed and other channel's speed is less than 50% of set speed. During deceleration one channel's speed has reached Zero Speed and other channel's speed is still greater than 50% of Set Speed.	If running, car stops at next available floor and K1 and K2 relays on ETSL drop. Restart not allowed.	Power Off and On.	Fault can be forced by making one run up to 70% of the speed setting with one encoder disconnected at either XME or XCT. Encoders must be connected to all other LCEETSL boards and LCEADON boards.

Fault code	CEN code	Class Delay	Description	Possible reason	Detection	Operation	Recovery	Testing
02 17	19 72	R	LCEETSL emergency terminal speed limiting event This event is the purpose of the ETSL board.	1)Car speed faster than ETSL board speed setting when inside termnal zone as defined by the ETSL switches. 2)Velocity regulator too soft on drive. 3)ETSL switch not set according to switch chart. 4)ETSL board speed setting not set according to ETSL speed chart.	Speed exceeds Speed Setting of ETSL board and car position is inside top or bottom terminal zone as defined by the hoistway ETSL (136:U1/N1, U2/N2, U3/N3 …) switches.	K1 and K2 relays on ETSL are dropped immediately when this fault is detected. The fault is announced to the LCECPU. After the lift has been stopped for 10 seconds, the relays are picked & the fault is cleared.	The fault resets itself shortly after the car has stopped.	Run the car faster than the ETSL board speed setting and disconnect the pair (UxA/UxB) of ETSL switches from the Board.
02 18	19 73	R	Setup Jumper Moved	The Setup Jumper was moved from Run to Setup while the board was powered up.	ETSL neuron detects that the Setup jumper has moved from Run to Setup.	If running, car stops at next available floor and K1 and K2 relays on ETSL drop. Restart not allowed.	Power Off and On.	Move the setup jumper from Run to Setup with power on. This fault should appear.
02 19	19 74	R	Startup Error	LCEETSL neuron self-test failure. This error indicates that a new board is needed.	ETSL neuron check.	K1 and K2 relays on the ETSL board dropped. Restart not allowed by ETSL	Power Off and On required. Board replacement probably needed.	These are built in neuron faults, which appear when the neuron has problems.
02 20	19 75	R	Need ETSL Setup	Setup has not been done.	The scale factor values for millimeters per encoder count have not been set.	ETSL board will only pick the K1 and K2 relays on ETSL when running an ETSL setup.	Run ETSL board setup.	For a new ETSL board that has never been setup, this fault should be announced at the LCECPU
02 21	19 76	DM	Unreasonable speed change detected	1)Parmeter 5-54 set too low. 2)Encoder noise. 3)Check proper grounding of encoder cable. 4)Wrong motor encoder.	Speed measured showed an increase greater than parameter 5-54 (Speed Step). Must occur 5 times in a row.	If running, car stops at next available floor and K1 and K2 relays on ETSL drop. Restart not allowed.	Power Off and On will clear fault until next fault detection.	Check is done for each new encoder input. This fault can be triggered if a very large speed difference can be forced.

Fault code	CEN code	Class Delay	Description	Possible reason	Detection	Operation	Recovery	Testing
02 22	19 77	DM	Overvoltage Error	24 VDC power supply is too high.	ETSL board's +24 Vdc power supply exceeds 36.5 Vdc (need to check this value for correctness)	If running, car stops at next available floor and K1 and K2 relays on ETSL drop. Restart not allowed.	Power cycle will clear fault until next fault detection.	ETSL board input voltage exceeds 36.5 VDC
02 23	19 78	DL	Board Missing	1)Parmeter 5-50 is greater than actual number of boards. 2)Bad LON connection 3)Board removed from system.	CPU does not receive any LON message from ETSL after a run from one floor to another. Not generated in inspection mode.	Lift will only run an ETSL setup when this fault is active.	May need to run ETSL board Setup. May need to check hardware.	This check is run by the LCECPU each time a run is made to a new floor.
02 24	19 79	R	Scale Mismatch	1)Replacement board installed without running setup.	One or more of the scale factors reported by the LCEETSL boards is different from the scale factor value stored in the LCECPU.	Lift will not run until an ETSL setup has been run.	Run ETSL board Setup.	Install ETSL board with a different setup(scale factor). Make one run. Fault should be generated at the end of the run.
02 25	19 80	DL	Relay Test Failed to run	One of the neurons has repeatedly run the relay self test, and has been ignored by the other neuron on the LCEETSL board. LCEETSL board failure.	Channel 1 neuron does not receive any response from channel 2 neuron three consecutive times. Same applies to channel 2 requesting response from channel 1.	K1 and K2 relays on the ETSL board dropped. Restart not allowed by ETSL	Power Off and On will clear fault until next fault detection.	Run the lift above 1/2 of the speed setting of the ETSL board. When the run is complete, this test will be performed. Requies a modified ETSL board such that the K1 or K2 relay check fails.
02 26	19 81	DL	Encoder pulses missing	LCEETSL board self-test failure	ETSL neuron check	If running, car stops at next available floor and K1 and K2 relays on ETSL drop. Restart not allowed.	Power Off and On will clear fault until next fault detection.	Running the lift at slow speed with one of the encoder inputs detached for 3 consecutive starts will trigger this fault. Do not exceed 70% of the speed setting, otherwise test will be preempted by speed comparison fault (216).

Fault code	CEN code	Class Delay	Description	Possible reason	Detection	Operation	Recovery	Testing
02 27	19 82	DL	ETSL (136:Ux/Nx) Switch Failure	1)An ETSL switch has failed or been disconnected. 2)Two switches are stuck open or disconenected.	TEST 1 Channel 1 and channel 2 see the switches change state while Speed is greater than ½ Set Speed.The state of all 4 ETSL switches are in an illegal combination. TEST 2 After recieving three 217 faults without detecting a switch state change, the CPU shuts down the elevator. TEST 3 If the CPU fails to shut down the elevator as descriided in TEST 2, the ETSL board will shut down the elevator after three more 217 faults without a switch state change.	TEST 1 Car stops at next available floor and K1 and K2 relays on ETSL drop. Restart not allowed. TEST 2 Car stops. Corrects to next available floor. Restart not allowed by CPU. TEST 3 Car stopped. K1 and K2 relays on ETSL drop. Restart not allowed.	Power Off and On will clear fault until next fault detection.	TEST1 Run the lift at speed less than ETSL board speed setting but > 1/2 of the speed setting with 1 ETSL (136:Ux/Nx) switch disconnected. TEST 2 Disconnect a pair of ETSL (136:UxA and UxB) switches. Run the car at speed greater than ETSL set speed three times until the 227 fault appears. TEST 3 Set UI menu 5-50 to 0. Cycle controller power. Disconnect a pair of ETSL (136:UxA and UxB) switches. Run the car at speed greater than ETSL set speed six times until K1 and K2 on the ETSL remain dropped and prevent restart.
02 29	19 35	R	The Doors Nearly Closed Input is On too early while doors closing.	POS OUT output from AMD door operator is in its default position.	Input 8 on LCEOPT F rear board is On when the door is only half closed. Not supervised if fault 230 is active.	Elevator continues operating without advanced pre-torque.	POS OUT output from door operator is On within 3 inches of door closed state.	1) Set "pos_800" to 80% open on AMD door operator; or 2) Ground input 8 on LCEOPT F rear when the doors just started closing.
02 30	19 36	R	The Doors Nearly Closed Input is stuck ON.	DNC is On while Door Open Limit is present.	Input 8 on LCEOPT F rear board is On when the door is open.	Elevator continues operating without advanced pre-torque.	POS OUT output from door operator is Off when door is open.	Ground input 8 on LCEOPT F rear when the dors are open.

Fault code	CEN code	Class Delay	Description	Possible reason	Detection	Operation	Recovery	Testing
02 31	19 37	R	The Doors Nearly Closed Input failed to turn ON.	DNC is Off when door is closed or locked.	Input 8 on LCEOPT F rear board is Off when the door is closed or locked.	Elevator continues operating without advanced pre-torque.	DNC signal is active just prior to doors being closed or locked.	Remove connection at input 8 on LCEOPT Frear when the doors are closed.
02 32	19 54	R	The Doors Fully Closed Input is stuck ON.	DFC signal from drive is On when the door is open.	MCU message reports DFC signal is present. Supervised when the door is about to start closing.	Elevator continues operating without advanced pre-torque.	MCU message report DFC signal is not active when the doors are open.	Simulate DFC signal by jumper from XM28/3 to XM28/4 on MCU board.
02 33	19 55	DM	The Doors Fully Closed Input failed to turn ON.	Elevator is advance pre-torquing for too long.	DFC not seen within 6 seconds of DNC. Elevator fails to start.	Start is aborted. Doors cycle. After three concecutive occurrences at any one landing the elevator is out of service. After three consecutive faults at different floors fatal fault 226 occurs.	DFC signal is On within 6 seconds after DNC signal. If fault is fatal RDF is required.	Remove connection at terminal XM28/4 on MCU board. Make a call. Check that car does not move, doors reopen, and advance pre-torque is cancelled.
02 34	19 56	DF	GLA, GLB, CGA or CGB relays are in wrong state.	(GLA, GLB, CGA or CGB) are stuck picked.	START PERMIT input is in active state when the doors are open.	Door will not closed. Start aborted. If the fault is not cleared then fault 58 will follow.	START PERMIT input is in inactive state when the doors are open.	While doors are opening remove connection at terminal XD1/3 on ADON board.
NTS-BAR				GSC				
02 35	19 83	R	NTS test failed					
02 36	19 84	R	NTS trip event occurred	The Lift speed in the BAR tape region exceeded the NTS stopping Trip point.	NTS neuron checks speed.	LCECPU displays this fault only. The drive causes an NTS slowdown in response to the NTS slowdown ~~source output~~	The fault resets itself shortly after the car has stopped.	This fault can be triggered by setting the NTS Limit low (UI menu 5-41-1), then making a run.
02 37	19 85	R	NTS warning event occurred	1)Poorly adjusted drive. 2)NTS tripping frequency set too low (UI menu 5-41-1). 3)BAR tape improperly located.	NTS neuron checks speed. Elevator is within 97% of trip event	LCECPU display this fault. No other action is taken.	Fault is cleared when speed drops below the Warning Limit speed.	This fault can be triggered by setting the NTS Limit low (UI menu 5-41-1), then making a run.
02 38	19 86	R	NTS bypass event occurred	NTS bypass button is pressed.	Bypass button is pressed and elevator is stopped. No fault generated if the elevator is running.	No run is permitted.	Release the bypass button.	Trigger this fault by pressing the bypass button, when the lift is stopped.

Fault code	CEN code	Class Delay	Description	Possible reason	Detection	Operation	Recovery	Testing
02 39	19 87	R	NTS tape missing	BAR tape not seen when drive signals that it should be seen. BAR input is missing.	Check initiated & stopped by MCU processor & run by NTS neuron processor	Lift goes to floor & stops	Power Off and On will clear fault until next test failure.	This fault may be forced by removing the encoder input & making a run past the tape.
KRM								
02 40	19 88	R	Door contact supervision failed. Note! In use only if parametrized via KRM.	Car Door or Shaft Door Contact jumpered or input broken	Car Door or Shaft Door Contact does not open when door open command active at floor level	Lift goes out of service	1) turning lift to inspection mode or 2) switching inhibit door opening switch to ON position or 3) switching landing calls switch to ON position	Configurate KRM analyser following way: LCE Main Menu -> KRM Analyzer Configuration -> Elevator Monitoring Parameters -> Door Contact Supervision Turn out of use -> Door
BSD								
02 41	19 93	R	High Wind Operation	High Wind Operation signal from the Building Sway Detector (BSD) unit is active.	LCEOPTG11, F front, input 3 for NA, LCEOPTG11, 1 front, input 3 for ROW is active.	Elevator drives at reduced speed.	When the High Wind Operation signal becomes inactive.	Activate LCEOPTG11, F front, input 3 for NA, LCEOPTG11, 1 front, input 3 for ROW.
02 42	19 94	R	Storm Operation	Storm Operation signal from the Building Sway Detector (BSD) unit is active.	LCEOPTG11, F front, input 5 for NA, LCEOPTG11, 1 front, input 5 for ROW is active.	Elevator parks to the storm parking floor.	When the Storm Operation signal becomes inactive.	Activate LCEOPTG11, F front, input 5 for NA, LCEOPTG11, 1 front, input 5 for ROW.

Fault code	CEN code	Class Delay	Description	Possible reason	Detection	Operation	Recovery	Testing
02 43	20 01	R	Ultra rope condition monitoring first level alarm	Ultra rope condition monitoring first level alarm is active.	OPTG11_row, G13_row OPT F Front - input 1 , OPTG11_na, G13_naOPT F Rear - input 6	F0243 is posted in UI.	Ultra rope condition monitoring first level alarm inactive.	Activate OPTG11_row, G13_row OPT F Front - input 1 , OPTG11_na, G13_naOPT F Rear - input 6
02 44	19 05	DS	Governor Tension Weight Switch Actuated	Governor Tension Weight Switch is activated	LCEOPTG11, F Rear, input 4 for NA	The Tension weight switch signal will cause a traveling car to slow down and stop at the next available landing.	The Tension weight switch signal becomes inactive.	Activate LCEOPTG11, F Rear, input 4 for NA.
02 45	20 02	DS	Ultra rope condition monitoring second level alarm	Ultra rope condition monitoring second level alarm is active.	OPTG11_row, G13_row OPT F Front - input 2 , OPTG11_na, G13_naOPT F Rear - input 7	F0245 is posted in UI. Elevator goes to OSS mode and stop at nearest floor.	Ultra rope condition monitoring second level alarm inactive.	Activate OPTG11_row, G13_row OPT F Front - input 2 , OPTG11_na, G13_naOPT F Rear - input 7
02 46	20 03	DS	Serial communication from LCECPU to DRIVE is not OK Applicable only for parallel drive(UI menu 1-95 - 0)	Drive communication supervision fault. Fault happens while the elevator is running and the serial communication from LCECPU to DRIVE is not OK	LED "Drive OK" on LCECPU is off.	Elevator doesn't start. If running then elevator will stop.	When fault 246 clears.	Disconnect either pin 31 (V3FTD)or pin 33(V3FRD) in X4 connector.
02 47	19 06	R	Supervision for telephone line communication.monitors the dedicated telephone line medium which is provided for Emergency Communications	The dedicated telephone line medium which is provided for Emergency Communications is not OK	The dedicated telephone line medium which is provided for Emergency Communications is not broken or not connected	Visual Alarm: HASG11: Output XFA6 Audible Alarm: HASG11: Output XFA5	The dedicated telephone line medium which is provided for Emergency Communications is OK	Disconnect telephone line connected in KRM board.

Fault code	CEN code	Class Delay	Description	Possible reason	Detection	Operation	Recovery	Testing
02 48	19 07	DF	Reset elevator if man trap condition exists	Elevator stays out of door zone for 10 seconds	Make the elevator stays out of door zone for 10 seconds	CPU board reset and Elevator goes to OSS mode and stop at nearest floor.	Turn on RDF/Car top inspection , the fault will reset.	Make the elevator stays out of door zone for 10 seconds
02 49	19 08	DF	Three failed starts after F0108(applicable to V3F16L)	Elevator failed to make a start after 3 attempts during F0108	Remove the tachometer cable from drive unit in V3F16L	After 3 attempts, F0249 is posted in UI and CPU board reset with F0248 and Elevator goes to OSS mode and stop at nearest floor.	Turn on RDF/Car top inspection , the fault will reset.	Remove the tachometer cable from drive unit in V3F16L
02 50	19 14	R	MainFloor counter reached the count of 4,75,000	MainFloor counter reached the count of 4,75,000. counter value stored in UI menu 4-7	MainFloor counter reached the count of 4,75,000.counter value stored in UI menu 4-7	After MainFloor counter reached the count of 4,75,000 and elevator serves car/landing call	NVRAM reset clears the counter value to 0.or software update clears the counter. F0250 is posted only if counter value is equal to 4,75,000	make the MainFloor counter value of 4,75,000.
02 51	19 15	DS	MainFloor counter reached the count of 5,00,000	MainFloor counter reached the count of 5,00,000. Counter value stored in UI menu 4-7	MainFloor counter reached the count of 5,00,000.Counter value stored in UI menu 4-7	After MainFloor counter reached the count of 5,00,000 and Elevator goes to OSS mode.	NVRAM reset clears the counter value to 0 or software update clears the counter.	make the MainFloor counter value of 5,00,000.
02 52	19 18	DS	Close end signal is active for 4s even after door open command is ON (Applicable for EN81_20 Supervision feature)	Close end is active for 4s even after door open command is ON.Supervision enabled based on menu 3-36(Applicable for EN81_20 Supervision feature)	Close end is active for 4s even after door open command.Supervision enabled based on menu 3-36 ,EN81_20 Supervision feature.	F0252 is posted in UI. Elevator goes to OSS mode and lift doors are opened at same floor	Turn on RDF/Car top inspection or power cycle ,the fault will reset	Make close end signal for either A or B door continously in active state after door open command for that specific door is ON
02 53	19 17	DM	CPU Reset due to software exception	CPU Reset due to software exception	Not possible to make sofware reset in CPU561. One way is to Make the elevator stays out of door zone for 10 seconds(software reset option used for passenger	Not possible to make sofware reset in CPU561. One way is to Make the elevator stays out of door zone for 10 seconds(software reset option used for passenger	Fault is cleared after power up within 15 seconds	One way is to Make the elevator stays out of door zone for 10 seconds(software reset option used for passenger entrapment for china UI 3-33 =1)
02 54	20 06	DS	Closed end signal is not ON with in 10 sec of door closing . This fault is thrown when the elevator is in Car top / RDF	Close end is not acive. Supervision enabled based on menu 3-36(Applicable for EN81_20 Supervision feature)	Close end is not acive. Supervision enabled based on menu 3-36(Applicable for EN81_20 Supervision	F0254 is posted in UI. Elevator doesn't start.	Door contact bypass input located in LCEOPT 0 Front input-7 is in correct	Closed end signal is not ON within 10 sec
02 57	20 07	DS	Anticreep input XB41 is not connected or removed	Anticreep input XB41 is not connected or removed	Anticreep input XB41 is not connected or removed	F0257 is posted in UI.	Anticreep input XB41 is connected (This input is used for monitoring the	Disconnect or Remove the Anticreep input XB41

Fault code	CEN code	Class Delay	Description	Possible reason	Detection	Operation	Recovery	Testing
Drive faults			**Reference Documents**	**Drive faults by drive type:** **KDL16 50302632D06** **KDM 994525D02** **KDH 823022, 823029** **KDD 917717D01, EC973372** **KDL32 948570D02** **V3F18/V3F25 1361777** **V3F25S 870044** **V3F16L / V3F16R 804611** **Resolve 100, (Allen-Bradley) 773406**				
Network errors								
1001	122 01		CRC – errors in some node exceed 1 % of the whole network traffic	Broken node, bad terminating resistor, high network traffic	Node statistics retrieved periodically by node supervision. Test done 15 minutes interval.	SIngle lift remains in normal service. UI fault code.	When crc - errors in all nodes are below 1%.	
1002	123 01		Lost messages in some node exceed 1% of the network traffic	High network traffic	Node statistics retrieved periodically by node supervision. Test done 15 minutes interval.	SIngle lift remains in normal service. UI fault code.	When lost messages in all nodes are below 1%.	
1005	137 01		Roll Call Failed	Node network mismatch with shaft file. Missing nodes. Nodes in wrong order.	Roll Call	SIngle lift remains in normal service. UI fault code.	Correct node chain and cycle power.	
1010	124 01		LON group network and CAN common memory network mismatch	Broken CAN board, broken wiring, broken GTW board	Node statistics retrieved periodically by node supervision. Test done 15 minutes interval.	SIngle lift remains in normal service. UI fault code.	When networks match.	Overconnect some CAN or GTW board group network.
LCECCB, LCECCBS, LCECCBN, LCECCBN2 Car top cross connection board								

Fault code	CEN code	Class Delay	Description	Possible reason	Detection	Operation	Recovery	Testing
11 01	100 01	DF	LCE can't see car Top cross connection board	Wiring mistake. Fuse from Power supply burnt. Board broken. LCEOPT or car LON network broken.	Network supervision	Normal deceleration to the next level. Stays doors closed in inspection mode. UI fault code.	When board can be found by the network sup.	Disconnect loop back connector XMB on last OPT board
11 02 (Lower deck node when DD)	100 01	DF	LCE can't see car Top cross connection board	Wiring mistake. Fuse from Power supply burnt. Board broken. LCEOPT or car LON network broken.	Network supervision	Normal deceleration to the next level. Stays doors closed in inspection mode. UI fault code.	When board can be found by the network sup.	Disconnect loop back connector XMB on last OPT board
LCECEB Car operating panel extension board								
A-side								
12 01	101 01	DL	LCE can't see the second CEB in the front side Car Operating Panel (COP)	Wiring mistake between CEB and COB. Check power supply +24V Side (A/B) jumper or index jumpers in wrong position. Check AS-10.22.042 for trouble shooting.	Network supervision	SIngle lift remains in normal service. UI fault code.	When board can be found by the network sup.	Remove board.
12 02	101 02	DL	LCE can't see the nn CEB in the front side Car Operating Panel (COP)	Wiring mistake between CEB and COB. Check power supply +24V Side (A/B) jumper or index jumpers in wrong position. Check AS-10.22.042 for trouble shooting.	Network supervision	SIngle lift remains in normal service. UI fault code.	When board can be found by the network sup.	Remove board.
:		:						
12 nn	101 nn	DL	LCE can't see the nn CEB in the front side Car Operating Panel (COP)	Wiring mistake between CEB and COB. Check power supply +24V Side (A/B) jumper or index jumpers in wrong position. Check AS-10.22.042 for trouble shooting.	Network supervision	SIngle lift remains in normal service. UI fault code.	When board can be found by the network sup.	Remove board.

Fault code	CEN code	Class Delay	Description	Possible reason	Detection	Operation	Recovery	Testing
A-side Lower deck CEB(Only for DD)								
12 05	101 06	DL	LCE can't see the nn CEB in the front side Car Operating Panel (COP)	Wiring mistake between CEB and COB. Check power supply +24V Side (A/B) jumper or index jumpers in wrong position. Check AS-10.22.042 for trouble shooting.	Network supervision	SIngle lift remains in normal service. UI fault code.	When board can be found by the network sup.	Remove board.
12 06	101 07	DL	LCE can't see the nn CEB in the front side Car Operating Panel (COP)	Wiring mistake between CEB and COB. Check power supply +24V Side (A/B) jumper or index jumpers in wrong position. Check AS-10.22.042 for trouble shooting.	Network supervision	SIngle lift remains in normal service. UI fault code.	When board can be found by the network sup.	Remove board.
:	:							
12 08	101 08	DL	LCE can't see the nn CEB in the front side Car Operating Panel (COP)	Wiring mistake between CEB and COB. Check power supply +24V Side (A/B) jumper or index jumpers in wrong position. Check AS-10.22.042 for trouble shooting.	Network supervision	SIngle lift remains in normal service. UI fault code.	When board can be found by the network sup.	Remove board.
B-side Lower deck CEB(Only for DD)								
22 05	101 06	DL	LCE can't see the second CEB in the Rear side Car Operating Panel (COP)	Wiring mistake between CEB and COB. Check power supply +24V	Network supervision	SIngle lift remains in normal service. UI fault code.	When board can be found by the network sup.	Remove board.
22 06	101 06	DL	LCE can't see the second CEB in the Rear side Car Operating Panel (COP)	Wiring mistake between CEB and COB. Check power supply +24V	Network supervision	SIngle lift remains in normal service. UI fault code.	When board can be found by the network sup.	Remove board.
:								
22 08	101 06	DL	LCE can't see the second CEB in the Rear side Car Operating Panel (COP)	Wiring mistake between CEB and COB. Check power supply +24V	Network supervision	SIngle lift remains in normal service. UI fault code.	When board can be found by the network sup.	Remove board.
B-side								

Fault code	CEN code	Class Delay	Description	Possible reason	Detection	Operation	Recovery	Testing
22 01	102 01	DL	LCE can't see the first CEB in the rear side Car Operating Panel (COP)	Wiring mistake between CEB and COB. Check power supply +24V Side (A/B) jumper or index jumpers in wrong position. Check AS-10.22.042 for trouble shooting.	Network supervision	SIngle lift remains in normal service. UI fault code.	When board can be found by the network sup.	Remove board.
22 02	102 02	DL	LCE can't see the second CEB in the rear side Car Operating Panel (COP)	Wiring mistake between CEB and COB. Check power supply +24V Side (A/B) jumper or index jumpers in wrong position. Check AS-10.22.042 for trouble shooting.	Network supervision	SIngle lift remains in normal service. UI fault code.	When board can be found by the network sup.	Remove board.
:			:					
22 nn	102 nn	DL	LCE can't see the nn CEB in the rear side Car Operating Panel (COP)	Wiring mistake between CEB and COB. Check power supply +24V Side (A/B) jumper or index jumpers in wrong position. Check AS-10.22.042 for trouble shooting.	Network supervision	SIngle lift remains in normal service. UI fault code.	When board can be found by the network sup.	Remove board.
F2KMUL/LCECOB Car operating panel board								
A-side								
13 01	103 01	DL	LCE can't see the MUL or COB in the front side Car Operating Panel (COP)	Wiring mistake Check power supply +24V In case of COB: side (A/B) jumper in wrong position. In case of MUL: check button bus DOB configured incorrectly or is broken. Check AS-10.22.042 for troubleshooting	Network supervision	Drives to the destination, stays there with door opened	When board can be found by the network sup.	Remove board.

Fault code	CEN code	Class Delay	Description	Possible reason	Detection	Operation	Recovery	Testing
13 02 (Lower deck node when DD)	103 01	DL	LCE can't see the MUL or COB in the rear side Car Operating Panel (COP)	Wiring mistake. Check power supply +24V. In case of COB: side (A/B) jumper in wrong position. In case of MUL: check button bus. DOB configured incorrectly or is broken. Check AS-10.22.042 for troubleshooting	Network supervision	Drives to the destination, stays there with door opened	When board can be found by the network sup.	Remove board.
B-side								
23 01	104 01	DL	LCE can't see the MUL or COB in the rear side Car Operating Panel (COP)	Wiring mistake. Check power supply +24V. In case of COB: side (A/B) jumper in wrong position. In case of MUL: check button bus. DOB configured incorrectly or is broken. Check AS-10.22.042 for troubleshooting	Network supervision	Drives to the destination, stays there with door opened	When board can be found by the network sup.	Remove board.
23 02 (Lower deck node when DD)	103 01	DL	LCE can't see the MUL or COB in the rear side Car Operating Panel (COP)	Wiring mistake. Check power supply +24V. In case of COB: side (A/B) jumper in wrong position. In case of MUL: check button bus. DOB configured incorrectly or is broken. Check AS-10.22.042 for troubleshooting	Network supervision	Drives to the destination, stays there with door opened	When board can be found by the network sup.	Remove board.
LCEFCB Floor control board								
A-side								

Fault code	CEN code	Class Delay	Description	Possible reason	Detection	Operation	Recovery	Testing
14 01	105 01	R	LCE can't see first floor front side control board (FCB)	Side (A/B) jumper in wrong position. Check FCB power supply +24V (green led). Check wiring. FCB board missing. Roll call chain broken. Check AS-10.22.042 for troubleshooting	Network supervision	Normal service. UI Fault code.	When board can be found by the network sup.	Remove board.
14 02	105 02	R	LCE can't see second floor front side control board (FCB)	Side (A/B) jumper in wrong position. Check FCB power supply +24V (green led). Check wiring. FCB board missing. Roll call chain broken. Check AS-10.22.042 for troubleshooting	Network supervision	Normal service. UI Fault code.	When board can be found by the network sup.	Remove board.
:			:					
14 nn	105 nn	R	LCE can't see nn floor front side control board (FCB)	Side (A/B) jumper in wrong position. Check FCB power supply +24V (green led). Check wiring. FCB board missing. Roll call chain broken. Check AS-10.22.042 for troubleshooting	Network supervision	Normal service. UI Fault code.	When board can be found by the network sup.	Remove board.
B-side								

Fault code	CEN code	Class Delay	Description	Possible reason	Detection	Operation	Recovery	Testing
24 01	106 01	R	LCE can't see first floor rear side control board (FCB)	Side (A/B) jumper in wrong position. Check FCB power supply +24V (green led). Check wiring. FCB board missing. Roll call chain broken. Check AS-10.22.042 for troubleshooting	Network supervision	Normal service. UI fault code.	When board can be found by the network sup.	Remove board.
24 02	106 02	R	LCE can't see second floor rear side control board (FCB)	Side (A/B) jumper in wrong position. Check FCB power supply +24V (green led). Check wiring. FCB board missing. Roll call chain broken. Check AS-10.22.042 for troubleshooting	Network supervision	Normal service. UI fault code.	When board can be found by the network sup.	Remove board.
:		:						
24 nn	106 nn	R	LCE can't see nn floor rear side control board (FCB).	Side (A/B) jumper in wrong position. Check FCB power supply +24V (green led). Check wiring. FCB board missing. Roll call chain broken. Check AS-10.22.042 for troubleshooting	Network supervision	Normal service. UI fault code.	When board can be found by the network sup.	Remove board.
LCEFOB Floor control option board								
A-side								

Fault code	CEN code	Class Delay	Description	Possible reason	Detection	Operation	Recovery	Testing
15 01	107 01	R	LCE can't see first floor front side control option board (FOB)	Nodes missing, roll call chain broken. Board broken.	Network supervision	Normal service. UI fault code.	When board can be found by the network sup.	Difficult to test
15 02	107 02	R	LCE can't see second floor front side control option board (FOB)	Nodes missing, roll call chain broken. Board broken.	Network supervision	Normal service. UI fault code.	When board can be found by the network sup.	Difficult to test
15 03	107 03	R	LCE can't see third floor front side control option board (FOB)	Nodes missing, roll call chain broken. Board broken.	Network supervision	Normal service. UI fault code.	When board can be found by the network sup.	Difficult to test
15 04	107 04	R	LCE can't see fourth floor front side control option board (FOB)	Nodes missing, roll call chain broken. Board broken.	Network supervision	Normal service. UI fault code.	When board can be found by the network sup.	Difficult to test
15 05	107 05	R	LCE can't see fifth floor front side control option board (FOB)	Nodes missing, roll call chain broken. Board broken.	Network supervision	Normal service. UI fault code.	When board can be found by the network sup.	Difficult to test
:			:					
15 nn	107 nn	R	LCE can't see nn floor front side control option board (FOB)	Nodes missing, roll call chain broken. Board broken.	Network supervision	Normal service. UI fault code.	When board can be found by the network sup.	Difficult to test
B-side								
25 01	108 01	R	LCE can't see first floor rear side control option board (FOB)	Nodes missing, roll call chain broken. Board broken.	Network supervision	Normal service. Fault code.	When board can be found by the network sup.	Difficult to test
25 02	108 02	R	LCE can't see second floor rear side control option board (FOB)	Nodes missing, roll call chain broken. Board broken.	Network supervision	Normal service. Fault code.	When board can be found by the network sup.	Difficult to test
25 03	108 03	R	LCE can't see third floor rear side control option board (FOB)	Nodes missing, roll call chain broken. Board broken.	Network supervision	Normal service. Fault code.	When board can be found by the network sup.	Difficult to test
25 04	108 04	R	LCE can't see fourth floor rear side control option board (FOB)	Nodes missing, roll call chain broken. Board broken.	Network supervision	Normal service. Fault code.	When board can be found by the network sup.	Difficult to test
25 05	108 05	R	LCE can't see fifth floor rear side control option board (FOB)	Nodes missing, roll call chain broken. Board broken.	Network supervision	Normal service. Fault code.	When board can be found by the network sup.	Difficult to test

Fault code	CEN code	Class Delay	Description	Possible reason	Detection	Operation	Recovery	Testing
:			:					
25 nn	108 nn	R	LCE can't see nn floor rear side control option board (FOB)	Nodes missing, roll call chain broken. Board broken.	Network supervision	Normal service. Fault code.	When board can be found by the network sup.	Difficult to test
LCEGTW Gateway board								
16 01	109 01	R	LCE can't see Gateway board (GTW*)	Wiring mistake between GTW* and CPU (connector XM13) Board missing Check AS-10.22.042 for troubleshooting	Network supervision.	Normal single lift operation. UI fault code.	When board can be found by the network sup.	Override board with special cable set.
LCEOPT Option board								
A-side								
17 01	110 01	DF	LCE can't see first front side option board OPT (S1=0)	Wrong rotary switch setting (S1). Side (front/rear) jumper in wrong position. UI parameter 7-91 set incorrectly. Wiring mistake. Board missing. Check AS-10.22.042 for troubleshootig	Network supervision.	Depends on the input (FRD,EPD,EAQ…)	When board can be found by the network sup.	Override board with special cable set.

Fault code	CEN code	Class Delay	Description	Possible reason	Detection	Operation	Recovery	Testing
17 02	110 02	DF	LCE can't see second front side option board OPT (S1=1)	Wrong rotary switch setting (S1). Side (front/rear) jumper in wrong position. UI parameter 7-91 set incorrectly. Wiring mistake. Board missing. Check AS-10.22.042 for troubleshootig	Network supervision.	Depends on the input (FRD,EPD,EAQ…)	When board can be found by the network sup.	Override board with special cable set.
17 03	110 03	DF	LCE can't see third front side option board OPT (S1=2)	Wrong rotary switch setting (S1). Side (front/rear) jumper in wrong position. UI parameter 7-91 set incorrectly. Wiring mistake. Board missing. Check AS-10.22.042 for troubleshootig	Network supervision.	Depends on the input (FRD,EPD,EAQ…)	When board can be found by the network sup.	Override board with special cable set.
17 04	110 04	DF	LCE can't see fourth front side option board OPT (S1=3)	Wrong rotary switch setting (S1). Side (front/rear) jumper in wrong position. UI parameter 7-91 set incorrectly. Wiring mistake. Board missing. Check AS-10.22.042 for troubleshootig	Network supervision.	Depends on the input (FRD,EPD,EAQ…)	When board can be found by the network sup.	Override board with special cable set.
:			:					
17 nn	110 nn	DF	LCE can't see nn front side option board OPT (S1= nn)	Wrong rotary switch setting (S1). Side (front/rear) jumper in wrong position. UI parameter 7-91 set incorrectly. Wiring mistake. Board missing. Check AS-10.22.042 for troubleshootig	Network supervision.	Depends on the input (FRD,EPD,EAQ…)	When board can be found by the network sup.	Override board with special cable set.

Fault code	CEN code	Class Delay	Description	Possible reason	Detection	Operation	Recovery	Testing
B-side								
27 01	111 01	DF	LCE can't see first rear side option board OPT (S1=0)	Wrong rotary switch setting (S1). Side (front/rear) jumper in wrong position. UI parameter 7-91 set incorrectly. Wiring mistake. Board missing. Check AS-10.22.042 for troubleshootig	Network supervision.	Depends on the input (FRD,EPD,EAQ…)	When board can be found by the network sup.	Override board with special cable set.
27 02	111 02	DF	LCE can't see second rear side option board OPT (S1=1)	Wrong rotary switch setting (S1). Side (front/rear) jumper in wrong position. UI parameter 7-91 set incorrectly. Wiring mistake. Board missing. Check AS-10.22.042 for troubleshootig	Network supervision.	Depends on the input (FRD,EPD,EAQ…)	When board can be found by the network sup.	Override board with special cable set.
27 03	111 03	DF	LCE can't see third rear side option board OPT (S1=2)	Wrong rotary switch setting (S1). Side (front/rear) jumper in wrong position. UI parameter 7-91 set incorrectly. Wiring mistake. Board missing. Check AS-10.22.042 for troubleshootig	Network supervision.	Depends on the input (FRD,EPD,EAQ…)	When board can be found by the network sup.	Override board with special cable set.

Fault code	CEN code	Class Delay	Description	Possible reason	Detection	Operation	Recovery	Testing
27 04	111 04	DF	LCE can't see fourth rear side option board OPT (S1=3)	Wrong rotary switch setting (S1). Side (front/rear) jumper in wrong position. UI parameter 7-91 set incorrectly. Wiring mistake. Board missing. Check AS-10.22.042 for troubleshootig	Network supervision.	Depends on the input (FRD,EPD,EAQ…)	When board can be found by the network sup.	Override board with special cable set.
:			:					
27 nn	111 nn	DF	LCE can't see nn rear side option board OPT (S1=nn)	Wrong rotary switch setting (S1). Side (front/rear) jumper in wrong position. UI parameter 7-91 set incorrectly. Wiring mistake. Board missing. Check AS-10.22.042 for troubleshootig	Network supervision.	Depends on the input (FRD,EPD,EAQ…)	When board can be found by the network sup.	Override board with special cable set.
LCECIB Car interface board								
A-side								
18 01	112 01	R	LCE can't see front side car interface board	Wiring mistake. Fuse from Power supply burnt. Board broken. ATS (1-44) set on even though there is no LCECIB board.	Network supervision	None	When board can be found by the network supervision.	Remove board.
B-side								

Fault code	CEN code	Class Delay	Description	Possible reason	Detection	Operation	Recovery	Testing
28 01	113 01	R	LCE can't see rear side car interface board	Wiring mistake. Fuse from Power supply burnt. Board broken. ATS (1-44) set on even though there is no LCECIB board.	Network supervision	None	When board can be found by the network supervision.	Remove board.
LCEFSP Fire Status Panel								
19 01	114 01	DL	Fire Status Controller	Board broken. Wiring mistake. Fuse from Power supply burnt.	Network supervision	None	When board can be found by the network supervision.	Remove board after shaft setup.
LCEETS								
31 01	115 01	R	Reserved					
LCECCN								
33 01	117 01	R	Reserved					
LCEEBD Emergency Battery Drive								
34 00	118 00	DL	Emergency Battery Drive interface. Without card information, used only in software	Board broken. Wiring mistake. Fuse from Power supply burnt.	Network supervision	None	When board can be found by the network supervision.	Test it in elevator where EBD does not exist (set parameter 1-87 to 1)

Fault code	CEN code	Class Delay	Description	Possible reason	Detection	Operation	Recovery	Testing
34 01	118 01	DL	Emergency Battery Drive interface	Board broken. Wiring mistake. Fuse from Power supply burnt.	Network supervision	None	When board can be found by the network supervision.	Test it in elevator where EBD does not exist (set parameter 1-87 to 1)
LCEDIS Display Board								
35 01	119 01	R	LCE can't see first display board	Wiring mistake, board missing. Board broken,	Network supervision.	None	When board can be found by the network supervision.	Remove board after networks are active
35 02	119 02	R	LCE can't see second display board	Wiring mistake, board missing. Board broken,	Network supervision.	None	When board can be found by the network supervision.	Remove board after networks are active
35 03	119 03	R	LCE can't see third display board	Wiring mistake, board missing. Board broken,	Network supervision.	None	When board can be found by the network supervision.	Remove board after networks are active
35 04	119 04	R	LCE can't see fourth display board	Wiring mistake, board missing. Board broken,	Network supervision.	None	When board can be found by the network supervision.	Remove board after networks are active
:			:					
35 nn	119 nn	R	LCE can't see nn display board	Wiring mistake, board missing. Board broken,	Network supervision.	None	When board can be found by the network supervision.	Remove board after networks are active
LCEOPT G12 Option Node								
A-side								

Fault code	CEN code	Class Delay	Description	Possible reason	Detection	Operation	Recovery	Testing
36 00	120 00	DL	LCE can't see landing call option node. Without card information , used only in software.	Nodes missing	Network supervision	Normal service. UI Fault code.	When board can be found by the network supervision.	Remove board after networks are active
36 01	120 01	DL	LCE can't see first landing call option node.	Nodes missing	Network supervision	Normal service. UI Fault code.	When board can be found by the network supervision.	Remove board after networks are active
36 02	120 02	DL	LCE can't see second landing call option node.	Nodes missing	Network supervision	Normal service. UI Fault code.	When board can be found by the network supervision.	Remove board after networks are active
:			:					
36 nn	120 nn	DL	LCE can't see nn landing call option node.	Nodes missing	Network supervision	Normal service. UI Fault code.	When board can be found by the network supervision.	Remove board after networks are active
B-side								
46 00	121 00	DL	LCE can't see landing call option node B side. Without card information , used only in software	Nodes missing	Network supervision	Normal service. UI Fault code.	When board can be found by the network supervision.	Remove board after networks are active
46 01	121 01	DL	LCE can't see first landing call option node B side.	Nodes missing	Network supervision	Normal service. UI Fault code.	When board can be found by the network supervision.	Remove board after networks are active
46 02	121 02	DL	LCE can't see second landing call option node B side.	Nodes missing	Network supervision	Normal service. UI Fault code.	When board can be found by the network supervision.	Remove board after networks are active
:			:					
46 nn	121 nn	DL	LCE can't see nn landing call option node B side.	Nodes missing	Network supervision	Normal service. UI Fault code.	When board can be found by the network supervision.	Remove board after networks are active
LCEDOP destination operating panel node								

Fault code	CEN code	Class Delay	Description	Possible reason	Detection	Operation	Recovery	Testing
A-side								
37 00	125 00	DL	LCE can't see destination control operating panel node. Without card information , used only in software.	Nodes missing	Network supervision	Normal service. UI Fault code.	When board can be found by the network supervision.	Remove board after networks are active
37 01	125 01	DL	LCE can't see first destination operating panel node.	Nodes missing	Network supervision	Normal service. UI Fault code.	When board can be found by the network supervision.	Remove board after networks are active
37 02	125 02	DL	LCE can't see second destination operating panel node.	Nodes missing	Network supervision	Normal service. UI Fault code.	When board can be found by the network supervision.	Remove board after networks are active
:			:					
37 nn	125 nn	DL	LCE can't see nn destination operating panel node	Nodes missing	Network supervision	Normal service. UI Fault code.	When board can be found by the network supervision.	Remove board after networks are active
B-side								
47 00	126 00	DL	LCE can't see destination operating panel node B side. Without card information , used only in software	Nodes missing	Network supervision	Normal service. UI Fault code.	When board can be found by the network supervision.	Remove board after networks are active
47 01	126 01	DL	LCE can't see first destination operating panel node B side	Nodes missing	Network supervision	Normal service. UI Fault code.	When board can be found by the network supervision.	Remove board after networks are active
47 02	126 02	DL	LCE can't see second destination operating panel node B side	Nodes missing	Network supervision	Normal service. UI Fault code.	When board can be found by the network supervision.	Remove board after networks are active
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Fault code	CEN code	Class Delay	Description	Possible reason	Detection	Operation	Recovery	Testing
47 nn	126 nn	DL	LCE can't see nn destination operating panel node B side	Nodes missing	Network supervision	Normal service. UI Fault code.	When board can be found by the network supervision.	Remove board after networks are active
LCEDIN destination indication node								
A-side								
38 00	127 00	DL	LCE can't see destination indication node. Without card information , used only in software.	Nodes missing	Network supervision	Normal service. UI Fault code.	When board can be found by the network supervision.	Remove board after networks are active
38 01	127 01	DL	LCE can't see first destination indication node	Nodes missing	Network supervision	Normal service. UI Fault code.	When board can be found by the network supervision.	Remove board after networks are active
38 02	127 02	DL	LCE can't see second destination indication node	Nodes missing	Network supervision	Normal service. UI Fault code.	When board can be found by the network supervision.	Remove board after networks are active
:	:		:					
38 nn	127 nn	DL	LCE can't see nn destination indication node	Nodes missing	Network supervision	Normal service. UI Fault code.	When board can be found by the network supervision.	Remove board after networks are active
B-side								
48 00	128 00	DL	LCE can't see destination indication node B side. Without card information , used only in software	Nodes missing	Network supervision	Normal service. UI Fault code.	When board can be found by the network supervision.	Remove board after networks are active

Fault code	CEN code	Class Delay	Description	Possible reason	Detection	Operation	Recovery	Testing
48 01	128 01	DL	LCE can't see first destination indication node B side	Nodes missing	Network supervision	Normal service. UI Fault code.	When board can be found by the network supervision.	Remove board after networks are active
48 02	128 02	DL	LCE can't see second destination indication node B side	Nodes missing	Network supervision	Normal service. UI Fault code.	When board can be found by the network supervision.	Remove board after networks are active
:	:							
48 nn	128 nn	DL	LCE can't see nn destination indication node B side	Nodes missing	Network supervision	Normal service. UI Fault code.	When board can be found by the network supervision.	Remove board after networks are active
LCEDNS destination next stop indication node								
A-side								
39 00	129 00	DL	LCE can't see destination next stop indication node. Without card information , used only in software.	Nodes missing	Network supervision	Normal service. UI Fault code.	When board can be found by the network supervision.	Remove board after networks are active
39 01	129 01	DL	LCE can't see first destination next stop indication node	Nodes missing	Network supervision	Normal service. UI Fault code.	When board can be found by the network supervision.	Remove board after networks are active
39 02	129 02	DL	LCE can't see second destination next stop indication node	Nodes missing	Network supervision	Normal service. UI Fault code.	When board can be found by the network supervision.	Remove board after networks are active
:	:							
39 nn	129 nn	DL	LCE can't see nn destination next stop indication node	Nodes missing	Network supervision	Normal service. UI Fault code.	When board can be found by the network supervision.	Remove board after networks are active

Fault code	CEN code	Class Delay	Description	Possible reason	Detection	Operation	Recovery	Testing
B-side								
49 00	130 00	DL	LCE can't see destination next stop indication node B side. Without card information , used only in software	Nodes missing	Network supervision	Normal service. UI Fault code.	When board can be found by the network supervision.	Remove board after networks are active
49 01	130 01	DL	LCE can't see first destination next stop indication node B side	Nodes missing	Network supervision	Normal service. UI Fault code.	When board can be found by the network supervision.	Remove board after networks are active
49 02	130 02	DL	LCE can't see second destination next stop indication node B side	Nodes missing	Network supervision	Normal service. UI Fault code.	When board can be found by the network supervision.	Remove board after networks are active
:		:						
49 nn	130 nn	DL	LCE can't see nn destination next stop indication node B side	Nodes missing	Network supervision	Normal service. UI Fault code.	When board can be found by the network supervision.	Remove board after networks are active
LCEDC destination car to floor indication node								
A-side								
51 00	131 00	DL	LCE can't see destination car to floor indication node. Without card information , used only in software.	Nodes missing	Network supervision	Normal service. UI Fault code.	When board can be found by the network supervision.	Remove board after networks are active
51 01	131 01	DL	LCE can't see first destination car to floor indication node	Nodes missing	Network supervision	Normal service. UI Fault code.	When board can be found by the network supervision.	Remove board after networks are active

Fault code	CEN code	Class Delay	Description	Possible reason	Detection	Operation	Recovery	Testing
51 02	131 02	DL	LCE can't see second destination car to floor indication node	Nodes missing	Network supervision	Normal service. UI Fault code.	When board can be found by the network supervision.	Remove board after networks are active
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51 nn	131 nn	DL	LCE can't see nn destination car to floor indication node	Nodes missing	Network supervision	Normal service. UI Fault code.	When board can be found by the network supervision.	Remove board after networks are active
B-side								
61 00	132 00	DL	LCE can't see destination car to floor indication node B side. Without card information , used only in software	Nodes missing	Network supervision	Normal service. UI Fault code.	When board can be found by the network supervision.	Remove board after networks are active
61 01	132 01	DL	LCE can't see first destination car to floor indication node B side	Nodes missing	Network supervision	Normal service. UI Fault code.	When board can be found by the network supervision.	Remove board after networks are active
61 02	132 02	DL	LCE can't see second destination car to floor indication node B side	Nodes missing	Network supervision	Normal service. UI Fault code.	When board can be found by the network supervision.	Remove board after networks are active
:			:					
61 nn	132 nn	DL	LCE can't see nn destination car to floor indication node B side	Nodes missing	Network supervision	Normal service. UI Fault code.	When board can be found by the network supervision.	Remove board after networks are active
LCEEID destination elevator identifier node								
A-side								

Fault code	CEN code	Class Delay	Description	Possible reason	Detection	Operation	Recovery	Testing
52 00	133 00	DL	LCE can't see destination elevator identifier node. Without card information , used only in software.	Nodes missing	Network supervision	Normal service. UI Fault code.	When board can be found by the network supervision.	Remove board after networks are active
52 01	133 01	DL	LCE can't see first destination elevator identifier node	Nodes missing	Network supervision	Normal service. UI Fault code.	When board can be found by the network supervision.	Remove board after networks are active
52 02	133 02	DL	LCE can't see second destination elevator identifier node	Nodes missing	Network supervision	Normal service. UI Fault code.	When board can be found by the network supervision.	Remove board after networks are active
:			:					
52 nn	133 nn	DL	LCE can't see nn destination elevator identifier node	Nodes missing	Network supervision	Normal service. UI Fault code.	When board can be found by the network supervision.	Remove board after networks are active
B-side								
62 00	134 00	DL	LCE can't see destination elevator identifier node B side. Without card information , used only in software	Nodes missing	Network supervision	Normal service. UI Fault code.	When board can be found by the network supervision.	Remove board after networks are active
62 01	134 01	DL	LCE can't see first destination elevator identifier node B side	Nodes missing	Network supervision	Normal service. UI Fault code.	When board can be found by the network supervision.	Remove board after networks are active
62 02	134 02	DL	LCE can't see second destination elevator identifier node B side	Nodes missing	Network supervision	Normal service. UI Fault code.	When board can be found by the network supervision.	Remove board after networks are active
:			:					
62 nn	134 nn	DL	LCE can't see nn destination elevator identifier node B side	Nodes missing	Network supervision	Normal service. UI Fault code.	When board can be found by the network supervision.	Remove board after networks are active

Fault code	CEN code	Class Delay	Description	Possible reason	Detection	Operation	Recovery	Testing
ILINK display module								
A-side								
54 00	138 00	DL	LCE can't see llink display module. Without card information , used only in software.	Nodes missing	Network supervision	Normal service. UI Fault code.	When board can be found by the network supervision.	Remove board after networks are active
54 01	138 01	DL	LCE can't see llink display module.	Nodes missing	Network supervision	Normal service. UI Fault code.	When board can be found by the network supervision.	Remove board after networks are active
54 02	138 02	DL	LCE can't see llink display module.	Nodes missing	Network supervision	Normal service. UI Fault code.	When board can be found by the network supervision.	Remove board after networks are active
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54 nn	138 nn	DL	LCE can't see llink display module.	Nodes missing	Network supervision	Normal service. UI Fault code.	When board can be found by the network supervision.	Remove board after networks are active
B-side								
64 00	139 00	DL	LCE can't see llink display module. Without card information , used only in software.	Nodes missing	Network supervision	Normal service. UI Fault code.	When board can be found by the network supervision.	Remove board after networks are active
64 01	139 01	DL	LCE can't see llink display module.	Nodes missing	Network supervision	Normal service. UI Fault code.	When board can be found by the network supervision.	Remove board after networks are active
64 02	139 02	DL	LCE can't see llink display module.	Nodes missing	Network supervision	Normal service. UI Fault code.	When board can be found by the network supervision.	Remove board after networks are active
:		:						

Fault code	CEN code	Class Delay	Description	Possible reason	Detection	Operation	Recovery	Testing
64 nn	139 nn	DL	LCE can't see llink display module.	Nodes missing	Network supervision	Normal service. UI Fault code.	When board can be found by the network supervision.	Remove board after networks are active