



TVC Ethos Two Limax33CP Setup Guide (ETSL feature only)

This guide gives detail on the use of the Limax33CP with an Ethos Two controller.

The unit is shipped from TVC pre-configured and must only be used on the lift specified on the drawings, contact TVC for further support. The unit is factory configured to operate as an Emergency Terminal Slowdown Device in case of reduced buffer stroke according to EN81-20 - 5.12.1.3 “Monitoring the normal slowdown of the machine in case of reduced buffer stroke”

Installation and Commissioning

Install as per the schematics supplied, make sure the unit serial and CRC number line up with lift specified. The tape presence switch supplied with the tape mounting kit must be installed and wired in to satisfy code. The unit needs to be taught the extreme limits of the shaft before going into service. The panel will work on Hoist mode and Inspection prior to teaching the reference limits.

Software Operation

The Ethos Two checklist has a button for setup: Limax Safe Setup.

Within this screen there are options for teaching the reference positions and testing the ETSL functions.

Arrive at this screen from Checklist
– Commission Group

Limax Safe
Setup

Limax Safe Setup

Out of Service Wednesday 22/05/13 15:47:00

Instructions:
1) To Commission - Switch to Panel Test, then activate Teach Mode and then Teach Top and Bottom Reference Positions.
2) To Test – Switch Panel to Normal Enable Test Mode, ETSL Up or Down.

View Events	?	
Mode State	Normal	Disable Doors
Active Error/Fault	No Faults	Limax Fault Reset
Fault Codes	0x00000000	System Reset
I/O States	0x0000	OC Test
Configuration CRC	0x00000000	

Teach Top Reference Position: XXXX mm

Teach Bottom Reference Position: XXXX mm

Position: 14000 mm

Help | Teach Mode | Enable Test Mode | ETSL Test Up | Top Car Call | Back

ETSL Test Down | Bottom Car Call

Follow on screen prompts to commission the Limax 33 CP Safety Shaft System.

Teach mode – To Teach / Learn the Top and Bottom Reference Positions.

Limax Teach will only work if the following conditions are met:

- 1) In Emergency Electrical Operation (PTR Input Active).
 - 2) Or safety circuit broken.
 - 3) Terminal limits will need to be linked out, link UP to UL and DN to DL temporarily.
- Make sure these links are removed prior to switching to normal operation.**

Sequence of Teach Operation:

- 1) Select “Limax Safe Setup” from checklist.
- 2) Perform “System reset”.



- 3) Place in “Teach Mode”
- 4) Move car to top of the shaft so the counterweight is on the buffers.



- 5) Press teach top reference position.
- 6) Move car to bottom of the shaft so the car is on the buffers.



- 7) Press teach bottom reference position.
- 8) Move car back to bottom floor level.
- 9) Press normal mode to activate the Limax33CP

During teach mode event code 297 "**Limax33CP Teach Mode**" is logged.

Once the upper and lower reference positions are taught the panel can be switched to normal. The ETSL function can be tested as below:

Test mode – To Test the Up and Down ETSL function.

Limax Test will only work if the following conditions are met:

- 1) In Normal (LAR Input Active).
- 2) Safety Circuit and Locks made up.



Sequence of Operation:

- 1) Select “Limax Safe Setup” from checklist.
- 2) Place in “Enable Test Mode”



- 3) Place in “ETSL Test Up” sub mode.
- 4) Move car from lowest level to top level with MMI car call. Limax OC should trip with ETSL mid shaft.



- 5) Place in “ETSL Test Down” sub mode.
- 4) Move car from top level to lowest level with MMI car call. Limax OC should trip with ETSL mid shaft.
- 5) Press “End Test Mode” to cancel and return to normal.

During test mode event code 298 "**Limax33CP Test Mode**" is logged.

Additional screen info buttons

**Mode State**

Displays Current Mode, Pre-Com, Teach, Normal, Settings or Test.

Active Error/Fault

Shown in orange if there is an active fault from the Limax unit.

Fault Codes

The active faults are scrolled here.

I/O States

Shows IO from the Limax unit, see manual.

Configuration CRC

This shows the units config CRC, if this is red it does not match the Ethos Two's CRC and speed will be limited to dive speed. The CRC is factory set in both the Ethos Two and the Limax unit.

If a fault is active or the CRCs don't match the event code 299 "**SE Limax33CP Fault or Error**" is logged.

Additional screen function buttons**Disable Doors**

Shortcut for disabling doors, test and tech mode will not work unless DDS is active.

Limax Fault Reset

Press this button to clear certain active Limax faults.

System Reset

Press this to send the unit a reset command, this will reboot the device.

OC Test

Press to perform the OC contact test. This forces the unit to open it's OC contact for testing.

Background Limax Services**Limax Reset Service**

Every day the Ethos Two will send an OC test command to the Limax, this is done within the Limax reset start and end times. The times are configurable through the MMI. These are defaulted to between 01:00 am and 02:00 am.

Twice a year a full reset is commanded. This happens on the 1st of January and the 1st of July.

The lift will recall to the bottom floor with its doors shut then sit there for approx. 10 seconds whilst it resets, then the lift will go back into service.

During the reset service the event code 296 "**Limax33CP Reset Active**" is logged.