TAL ENGINEERING

VITA
Lift Controllers

Lift Controllers for Modernization and New projects

NEW

CONTROL PANELS
WITH NO
CONTACTORS!

Lift Control Experts

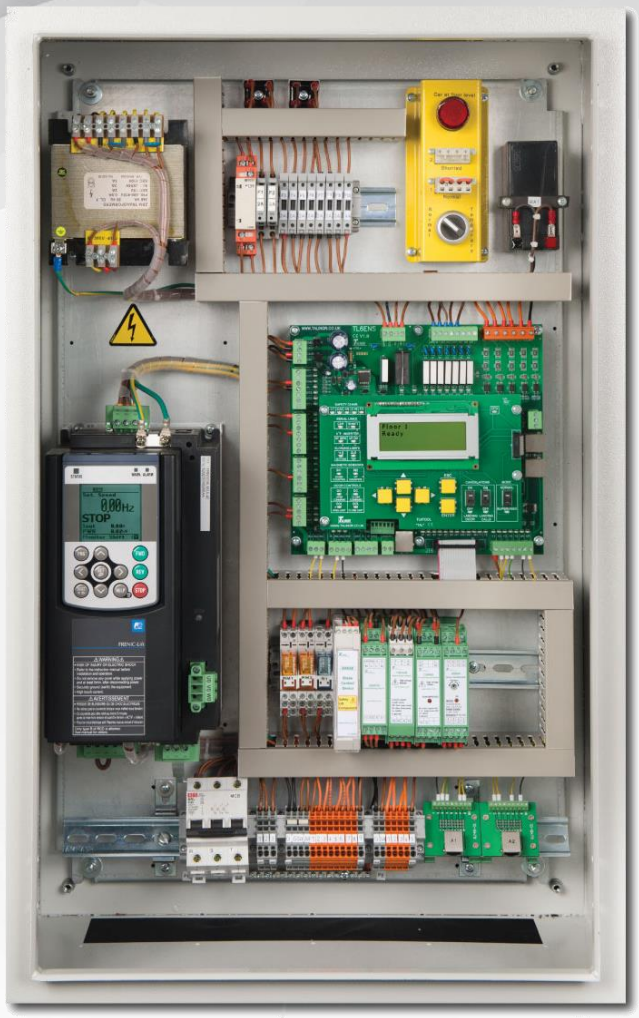
For Residential, Commercial, Industrial, and Hoist lifts

Tal Engineering, the leading Israeli lifts Control Experts, since year 1989

Contact us : sales@taleng.com , Phone: +972-3-9612387, ,1 Saharov st, Rishon Lezion, Israel 7570701

VITA Revolutionary Lift Controllers

WITH NO Motor or Brake contactors



NEW

CONTROL PANELS
WITH NO
CONTACTORS!

COMPLETELY SILENT OPERATION
LONGER SERVICE LIFE
LESS MAINTENANCE

Available now!

NO CONTACTORS

- No motor contactors
- No brake contactors
- No retiring cam contactor
- No door motor contactors

Based on TAL Engineering patent-pending Brake Control Safety Device – Approved by Liftinstituut
Design and Manufactured by TAL Engineering.
EN81-20/50 compliant

Main Features

VITA

Contactor-less

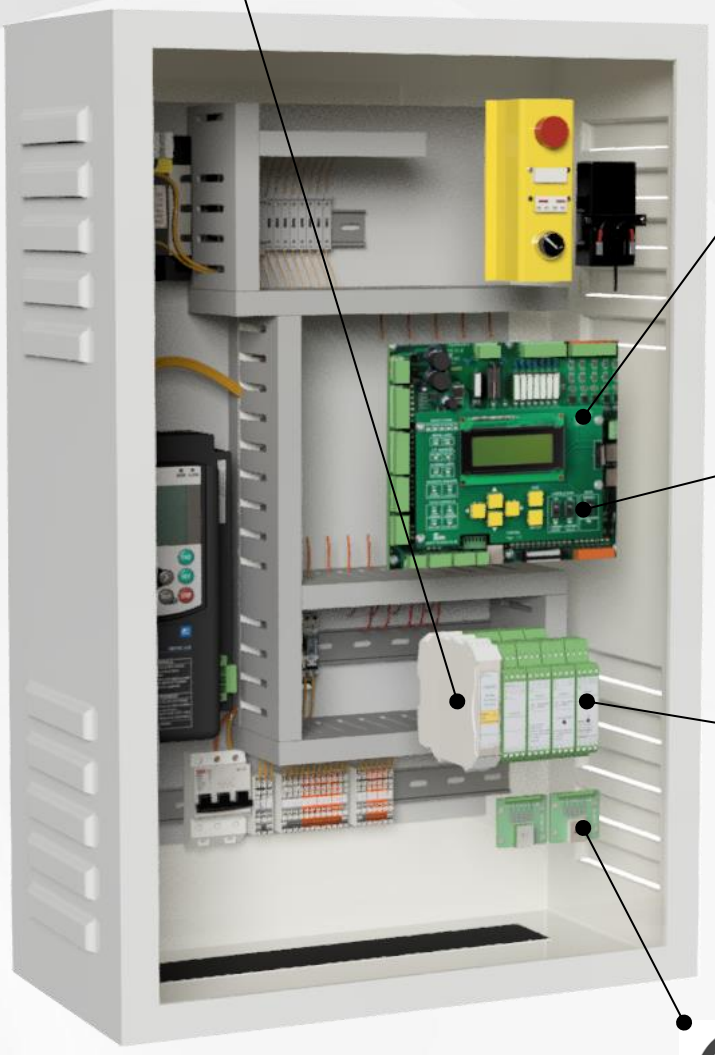
Contactor-less operation

- No Motor Contactors
- No brake Contactors
- No car door contactors
- No retiring CAM contactors
- “Zero Noise” – Completely silent operation
- High life expectancy and reliability

BlackBox
Powerful Fault Finding Software

Intelligent Diagnostics & Fault finding

Based on our many years of experience, helps to trace and solve lift faults easier and much faster



3S ACCULANDING™

3S Acculanding™

Exclusive high precision landing with VVVF systems

Smart Modular design

Modular design fast configuration and same day delivery

Plug & Play wiring

Reduce the time and effort up to 50% by using our innovative Plug & Play solution

Next Day Delivery

Why Choose Us?

- VITA Lift Controllers
- Contactor-less
- Next Day Delivery
- COSTS
- 3 YEAR GUARANTEE
- Quick & Easy Installation Process — **Quick & Easy Installation**
- **Smart Modular Design**
- **Plug & Play**
- BlackBox — Powerful Fault Finding Software

VITA Controllers with no electromechanical switchgear

Contactor-less

- ✓ **No moving parts or mechanical power switching**
  - ■ **No Motor Contactors**
  - ■ **No Brake Contactors**
  - ■ **No Retiring CAM Contactors**
  - ■ **No Door Contactors**
- ✓ **"ZERO NOISE"** - completely silent operation
- ✓ **Longer service lift** – High life expectancy and reliability
- ✓ **Less on-site maintenance** - Minimum failures and on-site visits
- ✓ **Much lower technical support** - Improving system's life-cycle cost
- ✓ **No price change**
- ✓ **Suitable for any type of lifts**

BRAKESR

No Brake contactors

Brake control **safety device** for replacing the operation of the traditional mechanical brake contactors, designed and developed by TAL Engineering and **approved by *Liftinstituut***

certificate number 17-400-1002-091-05 – see page 21

LIFTINSTITUUT

TREVSR
SIUSR

No Door Motor Contactors
No Retiring CAM contactors

Our innovative solid state modules for both the door motor and retiring CAM for replacing the operation of the traditional mechanical contactors and relays used to operate these

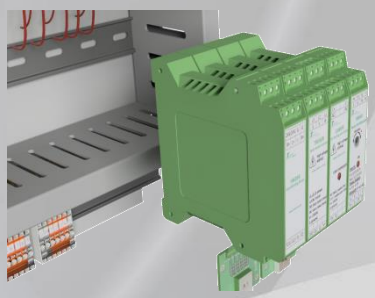
Fuji Frenic drive

No Motor contactors

By implementation the STO ("Safe Torque Off") function of the Fuji Frenic Lift drive.

Smart Modular Design

VITA



Next Day Delivery

Smart Modular Design

Our innovative & Smart Modular Design enables easy adjustments and configuration of VITA Controllers to the specific elevator's configuration by using only 8 types of modules.

- ✓ **Easley add needed modules to the base configuration to customize the VITA control panel for your specific lift***
- ✓ **Next day delivery for most projects** – add in modules to the basic control panel configuration for fast ship to customer**
- ✓ **Few minutes to configure for any type of elevator** - using only 8 basic modules to meet all types of elevator configurations.
- ✓ **Short downtime and simple maintenance -** By easy replacing modules on site.
- ✓ **Logistic cost efficiency and flexibility**– keep only 8 basic modules on stock
- ✓ **Quick and easy mounting/dismounting and robust design** - Industrial DIN modules, with pluggable terminals

TREV1SR – single phase car door operator
TREV3SR – 3 single phase car door operator

HWDSR
Hand winding device

DBRSR
Voice announcer

SIUSR – Retiring CAM / Brake unit with built-in adjustable power supply (40-220VDC)

MRM – Motor rotation indication for geraless motors

SF2 – Releveling device

Fuji Frenic Lift – one drive for all lift applications by replacing option cards

* For technical specification of the base configuration please see selection guide
**For distributor with basic VITA control panel and modules in stock, will be able to deliver to side on the same day

"Black Box" Diagnostics and Fault finding

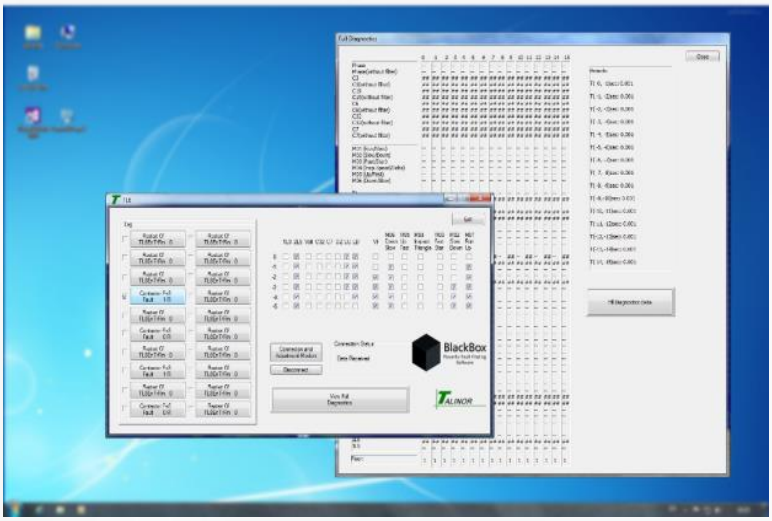
BlackBox
Powerful Fault Finding Software

Onboard Powerful Fault Finding software, based on our many years of field experience, helps tracing, understand and resolving lift's faults much easier and faster.

- **Pre-Fault Records -** Recorded lift 's status prior to the fault – helping to analyze and get a clear insight understanding of elevator's status prior to the failure and pointing to the exact failure.
- **Fault logging** with detailed fault description on each fault.
- **User friendly comprehensive faults list–** Helps the technician on site to easily understand the fault and reasons that might cause it to occur.
- **Inputs & outputs check** – enable you to check the individual status of every input and to individually active every output in order to check their proper operation
- **LED indication** for each input / output
- **Manual door commands** - Open or close the car door
- **Test Modes:**
  - Door test mode - generate predefined number of car door operations
  - Gong test mode - generate gong sound
  - Trip test mode - generate predefined number of car and landing calls

Remote Monitoring

- **Remote monitoring** combined with "BlackBox" enables remote support and diagnostics of the control panel.
- Optional Mobile Remote Monitoring device via Cellular or Wired connection
- Dedicated detailed visual PC software for alarms and fault log display



Customer's Benefits

VITA

Simple to select and purchase

- Advice on the right control panel selection ,for specific needs

3 years guarantee

Easy to install and setup on-site

- Simple & Clear electrical drawings
- Fully preconfigured per customer's requirements
- Pre-configured controller and inverter
- Simple and intuitive setup
- User friendly
- 2 steps tuning
- YouTube setup tutorials
- technical support on installation
- Detailed documentation
- Plug & play wiring
- Multi language support
- Easy stop accuracy adjustments
- High stopping precision
- Fully Tested before delivery

Quick & Easy Installation

Minimum maintenance

- No power switching
- Top Quality components
- Robust design
- Every controller is tested under an elevator simulator
- Over engineered consonants
- Automatic fault recovery (when allowed by the fault type)

Superior class service & support

- Telephone quick technical advice
- After sale technical support
- Spare parts in stock
- Training courses for ease of setup and installation
- Webx remote training days
- YouTube setup tutorials

Flexible and open for customized projects

Our Advantages

VITA

High precision landing

3S ACCULANDING™

Our open-loop Controllers have an exclusive high precision landing by use of embedded "**3S Acculanding**" software, which gives a landing accuracy similar to that of a closed loop Control panel.

Next Day Delivery

VITA Controllers innovative , module-based design ,makes it possible to customize the base configuration according to the specific elevator requirements and thus enables next day delivery for all standard VITA VVVF Controllers for the majority of lifts*

Fuji Frenic Lift drive

The leading VVVF inverter for Lifts

Distributed exclusively in Israel by TAL Engineering

- Able to control any motor (e.g. motor with peripheral encoder)
- Simple to use for the lift technical staff
- Advanced LCD Keypad
- STO compliant to EN 81-20
- UCM - built in brake monitoring function for UCM
- Multi language
- Up to 3 inverter setting can be saved

Highest Quality Components

Allen-Bradley

Fuji Electric

WAGO®

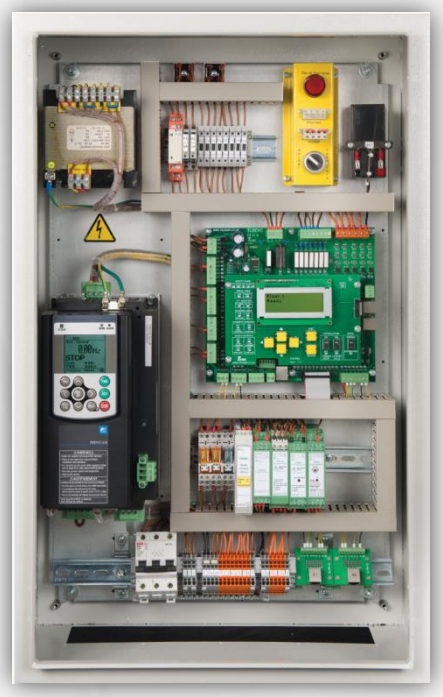
*See selection guide for more details and specifications

Traction VVVF Controllers

VITA

VITA VVVF

- Traction VVVF – 4KW up to 15KW
- No motor contactors, brake contactors or electromechanical switchgear as standard
- Same control panel for all VVVF lifts (by selecting a single module)
  - Asynchronous (geared) - Open / Closed loop
  - Synchronous (gearless)
  - Pancake gearless
- Simplex, Duplex or Group Lifts
- Up to 1.8 m/s
- Up to 8 floors (parallel) / 32 floors (serial)
- Full collect / Down collect / SAPB / Non-selective
- Fuji Frenic Lift VVVF, the market leader drive for lifts.
- Only 5 parameters setup to run the lift
- Modular Design for maximum flexibility
- Plug &Play , pre-wired for both parallel (FDC8) or Serial (FL168)*
- Hand winding device as standard
- Next - Day delivery**



Standard sized frame

800(H) x 500(W) x 250(D) mm
up to 15KW

MRL
Frame

3 YEAR GUARANTEE

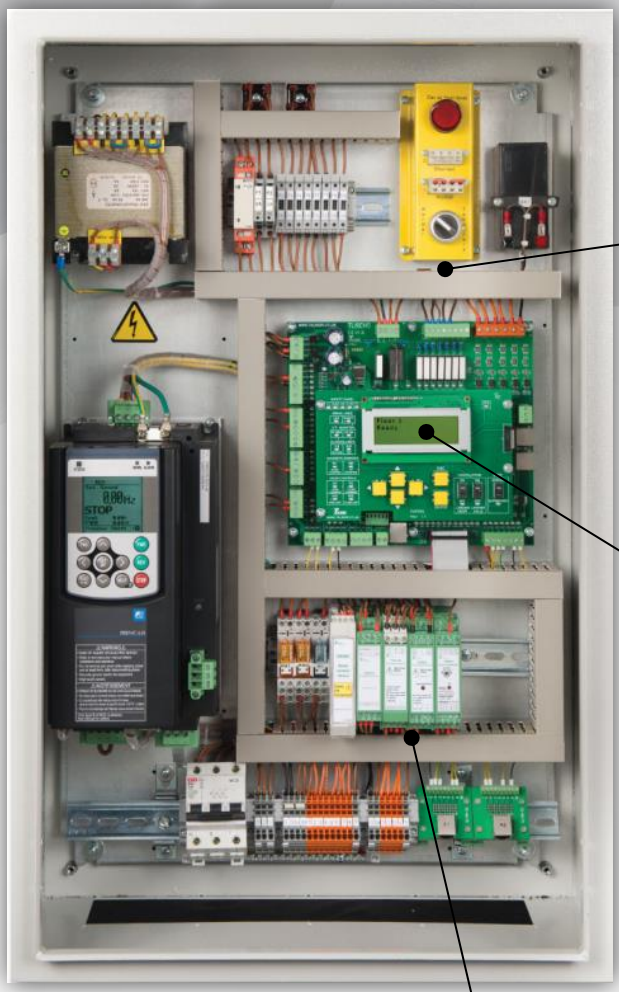
VITA Lift Controllers | Contactor-less | 3 YEAR GUARANTEE | Smart Modular Design | Plug & Play | BlackBox Powerful Fault Finding Software | 3S ACCULANDING | Quick & Easy Installation Process — Quick & Easy Installation | Next Day Delivery

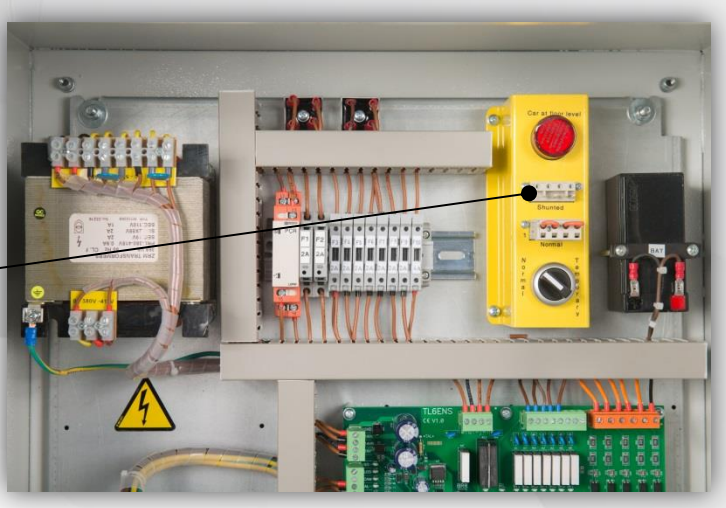
*/** please see relevant chapter in this catalogue

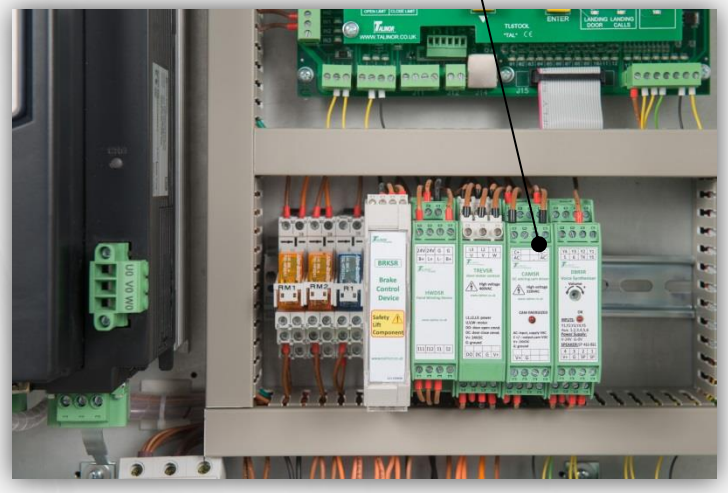
Traction VVVF Conterollers

VITA

VITA VVVF







VITA Lift Controllers

Contactor-less

3 YEAR GUARANTEE

Smart Modular Design

Plug & Play

BlackBox Powerful Fault Finding Software

3S ACCULANDING

Quick & Easy Installation Process

Quick & Easy Installation

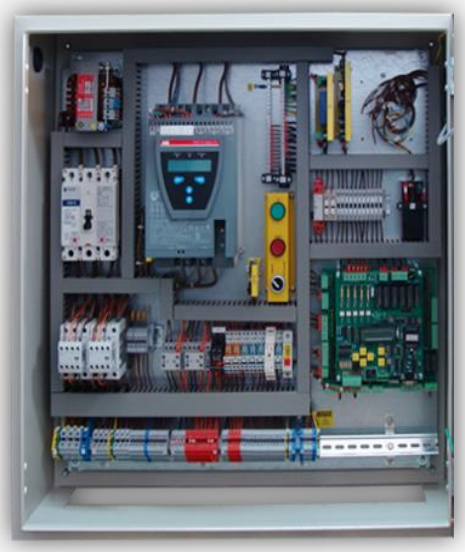
Next Day Delivery

VITA Hydraulic

- Hydraulic Controllers
- Any valve configuration (1, 2, 3 or 4 AC / DC) and Proportional valves
- Direct start / YΔ / Soft-starter / Hydraulic VVVF
- Suitable for Bucher / Beringer (LRV, I-Valve), Blain, GMV, ALGI, Morris, Leisrtritz, EIMO, Hydronic, 2MC, MP Spain, Hydrax valve blocks and many others.
- No limit on pump power
- Simplex, Duplex or Group Lifts
- Up to 8 floors
- Re-leveling with open doors / Pawl device
- Full collect / Down collect / SAPB / Non-selective
- Modular Design for maximum flexibility
- Plug & Play pre-wired for both parallel (FDC8)
- Hand winding device as standard
- 32 Bit Powerful Processor

Direct start / YΔ

Soft-starter



Hydraulic VVVF

VITA Lift Controllers | Contactor-less | 3 YEAR GUARANTEE | Smart Modular Design | Plug & Play | BlackBox Powerful Fault Finding Software | 3S ACCULANDING | Quick & Easy Installation Process | Quick & Easy Installation | Next Day Delivery

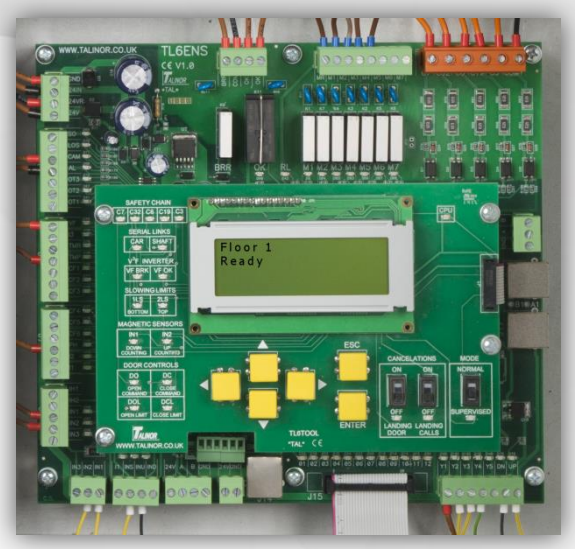
Control Board specifications

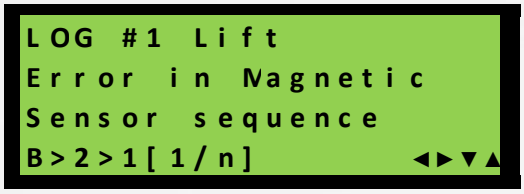
VITA

GENERAL:

- **One control board for all types of lifts (VVVF or Hydraulic)**
- Full collect / Down collect / SAPB / Non-selective
- 5 points safety chain monitoring
- Simplex, Duplex or Group Lifts
- Up to 32 floors (serial), Up to 12 floors (parallel)
- All types of doors (manual, swing, automatic)
- Short floors
- Selective doors
- Fire fighters lifts (EN81-72)

Designed & Manufactured by TAL Engineering





- Onboard programming tool with 20x4 LCD display
- On board switch for Inspection from control panel (temporary mode)
- Onboard switch for landing calls cancelation
- Onboard switch for landing doors cancelation

- LED indication for inputs, outputs, CPU, serial com., and safety chain status
- Enhanced safety - Safety chain bridging detection
- Enhanced safety - watchdog and OK relay
- Serial communication to peripherals (speech unit and position indicators)
- Overload and short circuit protection for inputs and outputs
- Advanced on-board signalization for easy fault finding

- RTC (real time clock)
- Separated 24V supply for external peripherals
- 32-bit Microprocessor
- Door commands from control panel
- Trip counter

Control Board specifications

VITA

Standard inputs:

Door nudge, automatic light, lift out of service, motor temperature (PTC, contact), car preference, photocell, NCL (door force restrictor) stop button in car, door open button, door close button, overload, full load, fire recall, door open, door closed, phase lost & sequence, VVVF drive brake command, inspection.

Standard outputs:

Brake, CAM, Display (serial & binary), Direction arrows, door open(n.c /n.o), door close (n.c/n.o), releveling, door nudge, automatic light, gong, door open buzzer, serial

Modes:

- Programing mode
- Change password mode
- Logging mode (fault log)
- Autotune mode
- Remote monitoring mode

Test Modes:

- Trips test mode (Random calls generation)
- Group test mode
- Door test mode
- Gong test mode
- Inputs test mode
- Outputs test mode

Standard features:

Onboard 4x16 LCD programming tool, Onboard temporary mode, onboard Landing door cancelation switch, onboard landing call cancelation switch , calls from programming tool, door test mode from programing tool, BlackBox powerful fault&log diagnostic, onboard temperature sensor.

*remote monitoring as optional extra cost using 3G modem

Any special requirements ?

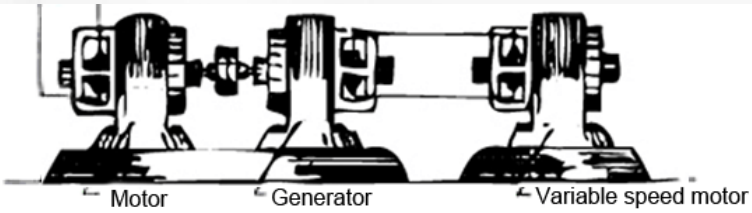
TAL Engineering designed and manufactured special controllers per customer's specific requirements.

Experience with OEM projects and Customizations like:

- Any size of VVVF control panel up to 45KW and above
- Any size of Hydraulic control panel
- Special / non standard lifts
- Software modifications according to customer specific needs
- Hardware & Software customization for elevator manufacturers
- OEM and Private labeling control panes, control boards and peripherals
- Special applications

Special projects examples:

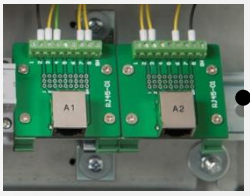
- WARD LEONARD lifts
- DC MOTOR lifts
- Pancake gealess motors

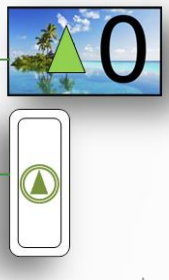


Plug & Play Shaft loom

Reduce installation time and effort up to 50% by using our innovative FDC8 parallel Plug&Play pre-wired shaft loom wiring system for quick and error free wiring compering to traditional per floor wiring method.

- **A single cable running between landing floors to the control panel**
- **Reducing the wiring time and effort up to 50% by using our innovative FDC8 wiring system (compered to traditional wiring)**
- Plug & play for both serial and parallel
- Quick and error free wiring to the control panel
- Single line chained wiring for parallel wiring (not one line per floor)
- Up to 8 floors parallel using FDC8
- Wiring for landings buttons, position indicators, up slowing limit switch, down slowing limit switch and fire recall key.
- Standard RJ45 connectors and cables





RJ45 cable

RJ45 cable

FDC8 floor card

FDC8 floor card

Up Slowing Limit Switch - 2LS

Fire Recall Switch - FR

Down Slowing Switch - 1LS

VITA control panel designed to save energy

Energy Saving

- ✓ Electronic switch contactor- less with no Electromechanical contactors
- ✓ ISO 25745 & VDI 4707 standard compliant for energy saving (drive)
- ✓ Sleep Mode by activating a digital input (drive)
- ✓ High- Performance Transformer
- ✓ Switching Power Supply
- ✓ Energy Saving function reducing the power consumption
- ✓ Single 24V power supply

Project References

VITA

MRL Lift, Shaft and Machine Room Control Panels

VVVF CLOSED LOOP CONTROL PANEL

VVVF CLOSED LOOP CONTROL PANEL

Small Lifts VVVF Control Panel

Triplex Hydraulic Control Panels

32KW VVVF CLOSED LOOP CONTROL PANEL

90KW CLOSED LOOP VVVF Control Panel

DUPLEX MRL CONTROL PANELS

Small Lifts Hydraulic Control Panel

LIFTINSTITUUT

TYPE-EXAMINATION CERTIFICATE

Issued by Liftinstituut B.V.

Certificate nr.	: NL12-400-1002-091-04	Revision nr.: -
Description of the product	: Controller board for lifts with monitoring circuit for safety chain	
Trademark, type	: TAL Engineering LTD, TL6	
Name and address of the manufacturer	: TAL Engineering LTD. 1 Sacharov ST. Rishon Le Zion 75707, Israel	
Name and address of the certificate holder	: TAL Engineering LTD. 1 Sacharov ST. Rishon Le Zion 75707, Israel	
Certificate issued on the following requirements	: Lifts Directive 95/16/EC EN 81-1/2 + A3, article 14.1.1, 14.1.2.1.3 and Annex H	
Test laboratory	: None	
Date and number of the laboratory report	: None	
Date of type-examination	: December 2012 - January 2013	
Annexes with this certificate	: Report belonging to the type-examination certificate nr.: NL12-400-1002-091-04	
Additional remarks	: The printed circuit board IS NOT subjected to the laboratory tests according to annex F.6 of EN 81-1/2+A3	
Conclusion	: The printed circuit board meets the requirements referred to in this certificate taking into account any additional remarks mentioned above.	

Issued in Amsterdam
Date of issue : 18-01-2013

ing. A.J. van Ommen
Manager Business Unit
Certification

Certification decision by

LIFTINSTITUUT

PRODUCTS
RvA C 067

TYPE-EXAMINATION CERTIFICATE

Issued by Liftinstituut B.V.

Certificate nr.	:	NL 08-400-1002-091-02 Revision nr. : -
Description of the product	:	PCB's for bridging the door safety circuit during re-leveling
Trademark, type	:	TAL ENGINEERING, SF2 VER2 and SF2 VER3
Name and address of the manufacturer	:	TAL ENGINEERING 1 SAHAROV ST RISHON LE ZION, ISRAEL
Name and address of the certificate holder	:	TAL ENGINEERING 1 SAHAROV ST RISHON LE ZION, ISRAEL
Certificate issued on the basis of the following requirements	:	Lifts Directive 95/16/EC EN 81-1/2, article 14.1.1, 14.1.2.1.3 and annex H
Test laboratory	:	Liftinstituut
Date and number of the laboratory report	:	December 5, 2008 / NL 08-400-1002-091-02
Date of type-examination	:	September – December 2008
Annexes with this certificate		Report belonging to the type-examination certificate nr: NL 08-400-1002-091-02
Additional remarks	:	The printed circuit boards ARE NOT subjected to the laboratory tests according to annex F.6 of EN 81-1/2
Conclusion	:	The printed circuit board meets the requirements referred to in this certificate taking into account any additional remarks mentioned above.

Issued in Amsterdam
Date of issue : December 5, 2008

Liftinstituut Holding
Senior Officer Certification
and Technology

LIFTINSTITUUT B.V., BUIKSLOTERMEERPLEIN 381, 1025 XE – P.O. BOX 36027, 1020 MA AMSTERDAM

LIFTINSTITUUT

PRODUCTS RvA C 067

EU-TYPE EXAMINATION CERTIFICATE

Issued by Liftinstituut B.V.
identification number Notified Body 0400,
commissioned by Decree no. 2016-0000038870

Certificate no.	: NL17-400-1002-091-05 Revision no.: -
Description of the product	: Electronic lift brake current interruption circuit
Trademark, type	: BRAKESR
Name and address of the manufacturer	: TAL Engineering Ltd. 2 Eliahu-Eitan Str. Rishon le Zion, 7570302 ISRAEL
Name and address of the certificate holder	: TAL Engineering Ltd. 2 Eliahu-Eitan Str. Rishon le Zion, 7570302 ISRAEL
Certificate issued on the following requirements	: Lifts Directive 2014/33/EU
Certificate based on the following standard	: Parts of EN81-20/50:2014
Test laboratory	: Carmell Environmental Test Laboratories 22 Alexander Yannai St. PetachTikva, Israel Hermon Laboratories Ltd. Harakevet Industrial Zone, Binyamina 30500, Israel
Date and number of the laboratory report	: March 7, 2017: 2122A9081 April 6, TALEMC_EN.29291
Date of EU-type examination	: 02-10-2017
Additional document with this certificate	: Report belonging to the EU-type examination certificate no.: NL17-400-1002-091-05
Additional remarks	: Key parameters for detecting UCM Max. response time BRAKESR board : 10 ms
Conclusion	: The safety component meets the requirements of the Lifts Directive 2014/33/EU taking into account any additional remarks mentioned above.

Amsterdam

Date : 02-10-2017
Valid until : 02-10-2022

ing. J.L. van Vliet
Managing Director

Certification decision by

CERTIFICATE

TAL ENGINEERING

VITA

Lift Control Experts

Over 25 years of experience and know-how in the lift industry have taught us that the most important feature of the controller is the support and fault detection. To this end, we have created extensive, built-in powerful yet simple-to-use diagnostic tools (modem, last steps registration, fault log) for easy fault finding to enable us to support our customers at installation and during the product lifetime with greater speed and efficiency. Our support is given by a trained team of engineers, all experts in their field.

Standards

- EN81-20
- EN81-50
- EN81-72 (Fire fighters)
- EN12015
- EN12016
- Type-Examination
- EU Type-Examination

LIFTINSTITUUT

Top Quality

All the products are designed, manufactured and tested in-house and undergo a stringent quality assurance process (ISO 9001:2008) prior to shipment. As suppliers of mechanical parts, we supply only the equipment from manufacturers with a long-standing track record of quality.

About us

TAL Engineering is an established leading Israeli manufacturer of lift controllers that has been supplied to the lift global market since year 1989.

All the controllers developed by our own R&D expert department ensures that our products genuinely meet customer needs in even the most demanding environments, supporting all types of lifts and applications.

Our long history of cooperation with OEM customers and partners enable us to develop many tailor-made solutions that fulfill their special needs.

Our dedicated team of highly trained engineers is always on hand during installation and commissioning and throughout the life of the product.

VITA Lift Controllers | Contactor-less | 3 YEAR GUARANTEE | Smart Modular Design | Plug & Play | BlackBox Powerful Fault Finding Software | 3S ACCULANDING | Quick & Easy Installation | Next Day Delivery

Contact us : sales@taleng.com , Phone: +972-3-9612387, ,1 Saharov st, Rishon Lezion, Israel 7570701