

Manor Farm Industrial Estate,
Flint, Flintshire CH6 5UY

**PLEASE COMPLETE AND RETURN AS SOON AS POSSIBLE
TO ALLOW DESIGN/MANUFACTURE TO PROGRESS**

Telephone +44 (0)1352793222
Email: orders@tvcl.co.uk

TVC Quote No.	
Company Name	
Company Contact	
Address	
Delivery Address (if different from above)	

Customer Job No.	
Site Reference	

The above references will be added to
all documentation including drawings

Note: this document will be the official document used to configure your controller. Complete it carefully as any changes may result in additional cost and delayed delivery. Any features requested in this document that are not already included in the quotation may be subject to a price increase.

REQUIREMENTS

Please complete the attached questionnaire and supply all relevant information in order that the lift control panel(s) may be designed and manufactured. Inaccurate or incomplete information may delay delivery.

For Modernisation jobs, all application data on existing equipment and any requirements not covered on the quotation should be recorded and attached to this form.

Please contact TVC if any questions arise regarding the required data.

Authorised By: _____

Print Name: _____ Date: _____

TVC cannot accept this document unless signed and dated

Internal use only. TVC contract number: _____

MAINS SUPPLY

	Volts
	Phase
	Hz

Is a Suitable
Neutral Available?Yes
4 WireNo
3Wire

LIFT MACHINE

PLEASE SUPPLY MOTOR MANUFACTURER DATA SHEET FOR APPLICATION OR COMPLETE DETAILS BELOW

Data Sheet attached

No

Yes

Motor data sheet ref number

Proceed to NEXT SHEET

MOTOR

Manufacturer	
Type	
V	
Hz	
RPM	
KW	
Full Load Current	
Flywheel/Heavy Brake Coupling	Yes No

We will assume the answer is no, however, if yes,
please supply full details including dimensions & material type

APPLICATION DETAILS

Car Speed	m/s	
Roping	1:1	2:1
Sheave Diameter	mm	
Gear Type	Geared	Gearless
Gear Ratio	/	
Motor RPM Required to Achieve Contract Speed		

BRAKE

Lift Voltage VdcLift Current AHold Voltage VdcHold Current AMethod of Brake release
during rescue operation

Mechanical

Electrical

PULSE ENCODER (Closed Loop Only)

1024PPR 10-30Vdc Push/Pull Complimentary

1024PPR 10-30Vdc Differential RS422 Line Driver

4096PPR 5Vdc Differential RS422 Line Driver

2048PPR 5Vdc EnDat Absolute Multi-Turn

Other (Please provide details)

Pulses per Revolution

PPR

Voltage

V

Output
Configuration

MOTOR FAN

Electrical Motor Fan

Yes

No

Voltage VPhases Current A

Note: All new Sassi motors require a
230V 0.14A 1Phase motor fan

LIFT SETUP / APPLICATION

No of Floors

Please insert floor markings

Front Entrances	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Rear Entrances (If applicable)	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Floor Height (M)	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

(3M floor heights will be assumed if not specified)

Main (Homing) Floor

Control System

Simplex

Duplex

Group

HCD
Navigator

If Duplex, Group or HCD system and all lifts do not serve all floors, supply full details of entrance layout

Full Collective

Down Collective

Non-Selective Collective

FAPB Control

SAFETY FEATURES

Safety Gear
(EN81-20 § 5.6.2)

Mechanical

Electromechanical

Provide full details
(Bi-directional with 24Vdc solenoid required)

Unintended Car Movement Protection
(EN81-20 § 5.6.7.7 / 5.6.7.8)

Stopping element	Dual Lift Brake		
	Electromechanical Safety Gear	Only available via a Bi-directional Electromechanical Safety Gear.	
	OSG Solenoid activating mechanical safety gear	Manufacturer	Solenoid Voltage V
	Other	Please provide details	

Reduced Buffer Stroke
(EN81-20 § 5.12.1.3)

Yes

No

If yes, specify
maximum Buffer speed

m/s

DOOR CONTROL

No of Car Entrances

1

2

If 2 entrances

Non-Selective
Door OpeningSelective
Door Opening**Select Type**

Fully Automatic Car & Landing

☐
Complete **SECTION A** below only

Manually Operated Car & Landing

☐
Complete **SECTION B** below only

Fully Automatic Car & Manually Operated Landing

☐
Complete **SECTIONS A & B** below**CAR DOOR OPERATOR****SECTION A****Select Type**

GAL VVVF

☐

Is GAL HA (Fault Monitoring) Unit Fitted

Yes

No

FERMATOR VVVF

☐

SEMACO VVVF

☐

Select Type

SDS

F28

F29

SELCOM VVVF

☐

Select Type

SUPRA

MIDI

ECO

SIEMENS

☐

Select Type

AT18

AT25

AT40

OTHER

☐

Provide Details

RETIRING RAMP**SECTION B**

Voltage

Vdc

Power Rating

W

SPECIAL DOOR CONTROL REQUIREMENTS

Please specify any special door control requirements

DIGITAL POSITION INDICATORS

24Vdc

Select Manufacturer

Specify Type

TVC

Dewhurst

Stentorgate

ILE 4 Wire Serial

Drucegrove

Digital Advance

Other

Standard position indicator signals

Floor Position, Lift Direction,
Lift on Fire Control,
Lift Overloaded, Lift Out of Service

Please provide a list of any additional
indicator messages

Displays fitted at:

Car

☐

Main Floor

☐

All Floors

☐

(If free issue encoder, please ensure we receive
the unit at least two weeks before despatch date,
if not, we reserve the right to dispatch the
contract minus the free issue equipment fitted)

Battery Backed Up Indicator Supply
(Lift out of service message)

Y

N

If selected, TVC standard Back up duration is for 1 Hour

Discrete Hall Lantern Arrows
(Not driven by the Digital Display system)

Y

N

Please provide details

SPEECH UNIT

24Vdc

Select Manufacturer

TVC

Dewhurst

Stentorgate

Drucegrove Digitalker

Digital Advance

Other

Standard speech unit signals

Floor Position, Doors Opening, Doors Closing,
Lift Direction, Lift on Fire Control,
Lift Overloaded, Lift Out of Service

Please provide a list of any additional
speech messages

Specify Manufacturer & Type

SPECIAL REQUIREMENTS

Please specify any additional indicator/speech/gong requirements

LIFT POSITIONING SYSTEM

LIMAX3CP – Safe Magnetic Absolute Shaft Information System

- is an easy-to-install, high performance system suitable for all applications.
- requires **NO** door zone switches in the lift shaft.
- uses a shaft mounted tape system, please specify the Tape length required.

M

Can be used for lifts
requiring the these features

Lifts with relevelling	Absolute Position	Auto Shaft Learn	Firefighting Applications	Speeds up to:
✓	✓	X	✓	6.0 m/s

LIMAX3CP can be used for the following safety features, it will be **pre-configured** at TVC to suit the site requirements, therefore, please ensure all safety features required are selected from these forms.



Note: these forms will be the official document used to configure your Limax3CP.

Complete them carefully as any changes will require a replacement Limax3CP, as these features cannot be changed on site.

Safety Feature	Fulfilled by Limax3CP	Normative reference
Overspeed pre-tripping	Only when used with a Bi-directional Electromechanical Safety Gear.	EN81-20 § 5.6.2.2.1.6.a
Overspeed final tripping	Only when used with a Bi-directional Electromechanical Safety Gear.	EN81-20 § 5.6.2.2.1.1.a
Final Limit Switches	Yes	EN81-20 § 5.12.2.3.1.b
Inspection Limit Switches	Yes	EN81-21 § 5.5.3.4 / § 5.7.3.4
Door bridging (Monitoring the levelling and relevelling)	Yes	EN81-20 § 5.12.1.4
Unintended car movement protection	Only when used with either a Bi-directional Electromechanical Safety Gear, Dual Brake or a conventional safety gear triggered by a conventional speed governor, which in turn is triggered via a solenoid	EN81-20 § 5.6.7.7
Upper Pre-triggered Stopping System (Reduced clearances in the headroom)	Only when used with a Bi-directional Electromechanical Safety Gear or a conventional safety gear triggered by a conventional speed governor, which in turn is triggered via a solenoid	EN81-21 § 5.5.2.3
Lower Pre-triggered Stopping System (Reduced clearances in the pit)	Only when used with a Bi-directional Electromechanical Safety Gear or a conventional safety gear triggered by a conventional speed governor, which in turn is triggered via a solenoid	EN81-21 § 5.7.2.3
Deceleration control for Reduced stroke buffer	When specified/required	EN81-20 § 5.12.1.3

CONTROLLER OPTIONS

Please select all options required to be included within the TVC control system

Remote OSG Trip Solenoid interface	<input type="checkbox"/>	Voltage: <input type="text"/> V		
Remote OSG Reset Solenoid interface	<input type="checkbox"/>	Voltage: <input type="text"/> V		
Digital Handwind Unit (HW03)	<input type="checkbox"/>			
Eco-mode	<input type="checkbox"/>			
Panel mounted Emergency Stop switch	<input checked="" type="checkbox"/>	Fitted as standard		
Swipe Card interface	<input type="checkbox"/>	Supply full details.		
Automatic Rescue Device (UPS) <i>(Requires a suitable Neutral connection)</i>	<input type="checkbox"/>	<div style="display: inline-block; vertical-align: middle;"> <div style="text-align: center;">→</div> <div>Rescue lift at reduced speed to:</div> </div> <table border="1" style="display: inline-table; vertical-align: middle;"> <tr> <td>Nearest Floor & shutdown</td> <td>Main Floor & shutdown</td> </tr> </table>	Nearest Floor & shutdown	Main Floor & shutdown
Nearest Floor & shutdown	Main Floor & shutdown			
Regenerative Drive	<input type="checkbox"/>			
Engineer's Access Control	<input type="checkbox"/>	Allows safer access to the lift Cartop for maintenance personnel		
Advance Brake Lift	<input type="checkbox"/>	Allows Lift Brake to energise whilst lift doors are closing for faster take off		
Building Management interface	<input type="checkbox"/>	Supply full details.		
Emergency Generator Supply	<input type="checkbox"/>			
TVC Elevator Monitoring Unit (EMU)	<input type="checkbox"/>			
TVC EM181 Autodialler	<input type="checkbox"/>			
E-Director	<input type="checkbox"/>	E-Director offers a graphical representation of the Ethos control systems, from simplex to full group		
Hospital Priority control	<input type="checkbox"/>	Supply full details.		
EN81-20 Compliant Lift	<input type="checkbox"/>			
EN81-21 Compliant Lift	<input type="checkbox"/>	If selected, complete the details on attached "EN81-21" form.		
EN81-71 Vandal Resistant Lift	<input type="checkbox"/>	<div style="display: inline-block; vertical-align: middle;"> <div style="text-align: center;">→</div> <table border="1" style="display: inline-table; vertical-align: middle;"> <tr> <td>Category 1 Lift</td> <td>Category 2 Lift</td> </tr> </table> </div>	Category 1 Lift	Category 2 Lift
Category 1 Lift	Category 2 Lift			
EN81-72 Fire fighting Lift	<input type="checkbox"/>	Note: TVC only offer a Robust enclosure, not Certified Vandal resistant		
EN81-73 Fire Alarm	<input type="checkbox"/>			
BS9999 Evacuation control	<input type="checkbox"/>			
Lift Consultants' Specification	<input type="checkbox"/>	<div style="display: inline-block; vertical-align: middle;"> <div style="text-align: center;">→</div> <div>Specification reference:</div> </div> <input style="width: 150px;" type="text"/> <div style="display: inline-block; vertical-align: middle;"> <div style="text-align: center;">→</div> <div>Applicable pages:</div> </div> <input style="width: 150px;" type="text"/>		

Select preferred Option

Cabinet Enclosure Details (See attached Mini/Midi/Maxi_Hybrid sheets for further details)

Mini	Midi	Maxi	Hybrid
------	------	------	--------

TVC offer "Pre-wired" lift devices to enable faster site installation:e.g. Trailing Flexes, Cartop Control Unit, COP, LOP.

Select if Pre-wired devices are required ☐ If selected, complete the details on attached "**Pre-wired**" forms.

EN81-21 Compliance

Yes

No

If Yes, please select all options required to be included within the TVC control system design.

If No, proceed to next sheet.

EN81-21: Clause 5.5

Reduced clearances in headroom

☐

If required, select method to be used:

Moveable stops

Yes

No

If yes, provide details

Pre-tiggered

stopping system

Yes

No

If yes, select Height of refuge space as EN81-21 § 5.5.2.4

1,00M
Crouching



2,00M
Upright



EN81-21: Clause 5.6

Extendable car roof balustrade

☐

Please provide full details of system to be used

EN81-21: Clause 5.7

Reduced clearances in pit

☐

If required, select method to be used:

Moveable stops

Yes

No

If yes, provide details

Pre-tiggered

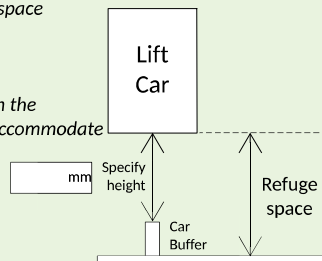
stopping system

Yes

No

If yes, select Height of refuge space
As EN81-21 § 5.7.2.4

And also the distance between the
Car buffer and the lift car to accommodate
The required refuge space



0,5M
Laying



1,00M
Crouching



2,00M
Upright



EN81-21: Clause 5.8

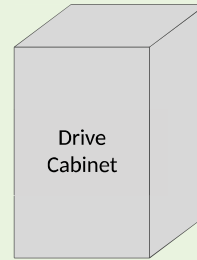
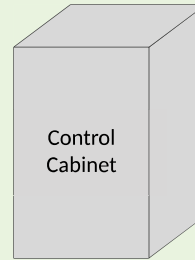
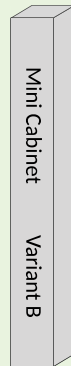
Extendable apron

☐

Please provide full details of system to be used



Cabinet Enclosure Details

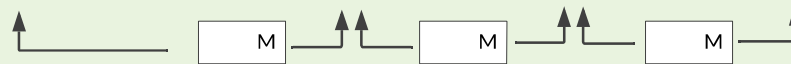
Mini



Note: See details below for DBR resistor when Regenerative unit is used.



	Landing Cabinet	Control Cabinet	Drive Cabinet	DBR Resistors (Non-Regen)
Height	2200 mm	1364 mm	752 mm ***	150 mm
Width	160 mm	455 mm	455 mm ***	465 mm
Depth	100 mm	158 mm	315 mm ***	300 mm
Material	304 Brushed Stainless Steel 240 Grit	Galvanised Steel	Galvanised Steel	Galvanised Steel
Cable entry	Base/Bottom Rear	Base	Base	Base
Ventilated	Not required	On both sides & Front	On both sides & Front	All round
Hinged **	 LEFT  RIGHT (Note door space required)	Lift off Cover	Lift off Cover	Not Applicable
Mounting Site	Landing Architrave	Lift Shaft	Lift Shaft	Lift Shaft



** Please delete as applicable

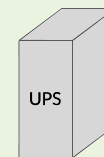
*** Drive cabinet size for upto 30A FLC

Approximate Distance between cabinets

Control Panel Standard features

Consumer Unit	→	Consumer Unit Comprises –
Emergency Stop Switch		30mA RCD
3 Phase isolator		6A Carlight supply
3-Pin 13A Socket		6A Shaft Power supply
Cabinet Light		16A Cabinet power supply
Shaft Light Switch		6A Autodialler supply

The following UPS is required to be mounted remotely from the above cabinets



Height	271 mm
Width	93 mm
Depth	310 mm
Mounted	Lift Shaft

The following features (when requested) are required to be mounted remotely from the above cabinets.
Refer to factory for dimensions.

Automatic Rescue Device (ARD)

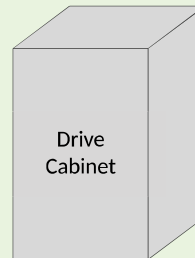
Regenerative Unit (RGN)

Cabinet Enclosure Details

Midi



Control
Cabinet



Drive
Cabinet

Note: See details below for
DBR resistor when
Regenerative unit is used.

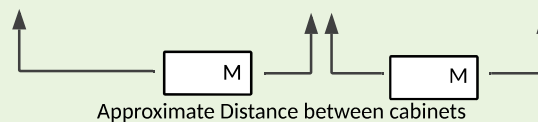


DBR

	Control Cabinet		Drive Cabinet	DBR Resistors (Non-Regen)
Height	2200 mm		752 mm ***	150 mm
Width	500 mm		455 mm ***	465 mm
Depth	200 mm		315 mm ***	300 mm
Material	304 Brushed Stainless Steel 240 Grit		Galvanised Steel	Galvanised Steel
Cable entry	Base/Bottom Rear		Base	Base
Ventilated	Forced Ventilated out of Top rear		On both sides & Front	All round
Hinged **	LEFT	RIGHT	Lift off Cover	Not Applicable
Mounting Site	Landing Architrave		Lift Shaft	Lift Shaft

** Please delete as applicable

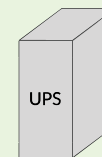
*** Drive cabinet size for upto 30A FLC



Control Panel Standard features

Consumer Unit	→	Consumer Unit Comprises –
Emergency Stop Switch		30mA RCD
3 Phase isolator		6A Carlight supply
3-Pin 13A Socket		6A Shaft Power supply
Cabinet Light		16A Cabinet power supply
Shaft Light Switch		6A Autodialler supply

The following UPS is required to be mounted remotely from the above cabinets



Height	271 mm
Width	93 mm
Depth	310 mm
Mounted	Lift Shaft

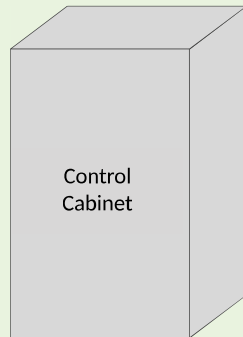
The following features (when requested) are required to be mounted remotely from the above cabinets.
Refer to factory for dimensions.

Automatic Rescue Device (ARD)

Regenerative Unit (RGN)

Cabinet Enclosure Details

Maxi

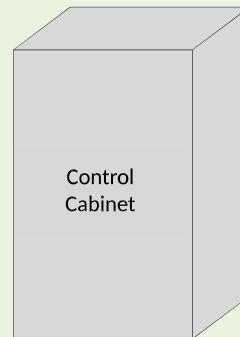


Note: See details below for DBR resistor when Regenerative unit is used.



	Control Cabinet		DBR Resistors (Non-Regen)
Height	2200 mm ***		150 mm
Width	500 mm ***		465 mm
Depth	300 mm ***		300 mm
Material	304 Brushed Stainless Steel 240 Grit		Galvanised Steel
Cable entry	Base/Bottom Rear		Base
Ventilated	Forced Ventilated out of Top rear		All round
Hinged **	LEFT	RIGHT	Not Applicable
Mounting Site **	Landing Mounted		Lift Shaft

Hybrid



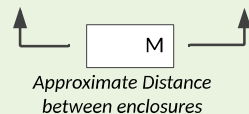
Note: See details below for DBR resistor when Regenerative unit is used.



	Control Cabinet		DBR Resistors (Non-Regen)
Height	1200/1400/1600mm **		150 mm
Width	800 mm		465 mm
Depth	400 mm		300 mm
Material	Powder Coated Mild Steel		Galvanised Steel
Cable entry	Base		Base
Ventilated	On both sides & Front		All round
Hinged	Centre Opening		Not Applicable
Mounting Site	Dedicated room/cupboard		

** Please delete as applicable

*** Control cabinet size for upto 30A FLC

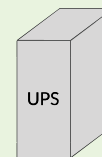


** Please delete as applicable

Control Panel Standard features

Consumer Unit	→	Consumer Unit Comprises –
Emergency Stop Switch		30mA RCD
3 Phase isolator		6A Carlight supply
3-Pin 13A Socket		6A Shaft Power supply
Cabinet Light		16A Cabinet power supply
Shaft Light Switch		6A Autodialler supply

The following UPS is required to be mounted remotely from the above cabinets



Height	271 mm
Width	93 mm
Depth	310 mm
Mounted	Lift Shaft

The following features (when requested) are required to be mounted remotely from the above cabinets.
Refer to factory for dimensions.

Automatic Rescue Device (ARD)

Regenerative Unit (RGN)

STANDARD FEATURES INCLUDED IN THE CONTROL PANEL

Control Features

110V/230VAC Door detector supply
 Alarm supply 12Vdc
 Standard adhesive component labels
 Dewhurst EnBuzz interface
 Dual illumination
 Non-adjustable Thermostat
 Phase failure / phase reversal protection
 Motor thermistor protection
 Door open & door close push indicator outputs
 Alarm Filtering in compliance with EN81-28:2018
 Emergency electrical operation
 ECO mode car light & fan turn off
 Door Nudging
 Advance door opening
 Relevelling
 Volt-free Lift in/out of service & Lift alarm contacts
 Top of Car Termination Box (Including serial Car Module)
 Low Smoke Zero Halogen cable
 Miniature Circuit Breaker protection

The following assumptions will be made unless specifically stated otherwise.

Lift counterweighted at 50%.
 Gear efficiency approximately 70%.
 Well efficiency approximately 80%.
 No compensation ropes fitted.

Maximum acceleration & jerk rates
 Please specify if alternate values are required

Lift speed (m/s)	Accel rate (m/s ²)	Jerk rate (m/s ³)
< 1.0	0.4	0.6
1.0 - 1.5	0.7	0.75
1.6 - 2.4	0.8	0.9
2.5 - 2.9	0.9	1.0
3.0 - 4.9	1.0	1.25
5.0 - 5.9	1.2	1.5
> 5.9	1.2	1.8

Standard Ethos Microprocessor features

Service control / Car preference
 90% load weighing
 110% load weighing
 Emergency recall to fire floor (selected via Ethos MMI), doors dwell closed
 Fire alarm recall to fire floor (selected via Ethos MMI), doors park open (default)
 Homing (floor selected via Ethos MMI)
 Anti nuisance
 Door disable switch
 Prepare to test switch
 Double journey timer
 English language Colour touch screen MMI
 Facility for inserting car & landing calls via Ethos MMI
 Floor position, car direction, doors status & lift status graphical display
 Digital trip counter
 Door nudging buzzer output

Call pushes

24Vdc 3 wire Car & Landing call pushes.
 Maximum power rating for each call push 1W

Controller Mechanics – Non MRL

Wall/floor mounted cabinet, powder coated mild steel
 Dimensions: Height 1200 - 1800mm, Width 800mm, Depth 400mm
 DBR resistors (where required) mounted on the top of the cabinet
 Centre opening doors.
 IP22 rating

Controller Mechanics - MRL

Refer to MRL ED5 forms for available controller mechanical options.

Compliance details

Products are manufactured within a system certified to BS EN ISO9001:2000