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ED5 Forms

tvc Thames Valley Controls

Manor Farm Industrial Estate,
Flint, Flintshire CH6 5UY

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

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

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:

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MAINS SUPPLY

	Volts
	Phase
	Hz

Is a Suitable Neutral Available? — Yes (4 Wire) / No (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	Vdc	Lift Current	A
Hold Voltage	Vdc	Hold Current	A

Method 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	V	Phases	
Current	A		

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

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LIFT SETUP / APPLICATION

No of Floors

Please insert floor markings

Front Entrances															
Rear Entrances *(If applicable)*															
Floor Height (M)															

(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

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DOOR CONTROL

No of Car Entrances | 1 | 2 | If 2 entrances → | Non-Selective Door Opening | Selective 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					
SEMATIC 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

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DIGITAL POSITION INDICATORS

24Vdc

	Select Manufacturer	Specify Type
TVC		*If selected, complete the details on attached "**TVC-DDU**" form.*
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

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TVC-DDU

TVC Digital Display units | Yes | No | → *If Yes, complete all sections below.* ***If No, proceed to next sheet.***

Car DDU | Yes | No | *If yes, select type* → | 5" | 7"

The following options are available for the Car DDU, select all that are required.

Orientation | Portrait | Landscape **

Background image | Yes | No ** | *If yes, file reference:*

Additional display items *Select one only* | None ** | 12h Clock & Date | 24h Clock & Date | Payload & Capacity → *If selected, state Payload:* KG *and Capacity:* Persons

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Landing DDU's | Yes | No | *If yes, select type* → | 5" | 7"

The following options are available for the Landing DDU's, select all that are required.

Orientation | Portrait | Landscape **

Background image | Yes | No ** | *If yes, file reference:*

If different background images are required for each floor, please email all images and clearly specify where each one should be used.

Email the background image files to: ***info@tvcl.co.uk***
and clearly specify where each one should be used, together with the contract site reference.

** *Denotes the default configuration unless stated otherwise*

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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

	Lifts with relevelling	Absolute Position	Auto Shaft Learn	Firefighting Applications	Speeds up to:
Can be used for lifts requiring the these features	✓	✓	**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)*		EN81-21 § 5.7.2.3
Deceleration control for Reduced stroke buffer	*When specified/required*	EN81-20 § 5.12.1.3

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CONTROLLER OPTIONS

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

Remote OSG Trip Solenoid interface		*Voltage:* V
Remote OSG Reset Solenoid interface		*Voltage:* V
Digital Handwind Unit (HW03)		
Eco-mode		
Panel mounted Emergency Stop switch	✓	*Fitted as standard*
Swipe Card interface		*Supply full details.*
Automatic Rescue Device (UPS) *(Requires a suitable Neutral connection)*		→ *Rescue lift at reduced speed to:* Nearest Floor & shutdown / Main Floor & shutdown
Regenerative Drive		
Engineer's Access Control		*Allows safer access to the lift Cartop for maintenance personnel*
Advance Brake Lift		*Allows Lift Brake to energise whilst lift doors are closing for faster take off*
Building Management interface		*Supply full details.*
Emergency Generator Supply		
TVC Elevator Monitoring Unit (EMU)		
TVC EM181 Autodialler		
E-Director		*E-Director offers a graphical representation of the Ethos control systems, from simplex to full group*
Hospital Priority control		*Supply full details.*
EN81-20 Compliant Lift		
EN81-21 Compliant Lift		*If selected, complete the details on attached "**EN81-21**" form.*
EN81-71 Vandal Resistant Lift		→ Category 1 Lift / Category 2 Lift
EN81-72 Fire fighting Lift		*Note: TVC only offer a Robust enclosure, not Certified Vandal resistant*
EN81-73 Fire Alarm		
BS9999 Evacuation control		
Lift Consultants' Specification		→ *Specification reference:* / *Applicable pages:*
Rubber Electrical Safety Mat		*1200mm x 1000mm x 9mm*
Cabinet Plinth		*Height* → 100 / 200 / 300 mm
Cabinet Wall Mounting Brackets		

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.*

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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 

*If Moveable stops have been selected, please complete EN81-21:Moveable stops sheet.

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

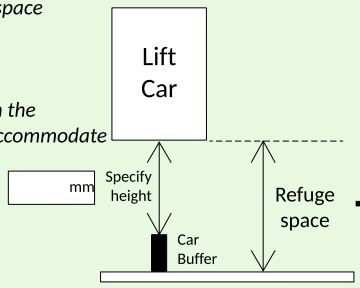
If required, select method to be used:

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 

*If Moveable stops have been selected, please complete EN81-21:Moveable stops sheet.

EN81-21: Clause 5.8
Extendable apron

→ Please provide full details of system to be used

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EN81-21 Moveable Stops Operating Principle

Please confirm which inspection operation option is required for this lift installation with reduced clearances in the headroom and/or pit. *(If not specified, the default will be Option B)*

Option A – *Associated Moveable Stops Only Required* **Option A selected** ☐

*(Inspection operation permitted when **only the relevant refuge space** is protected)*

- *Inspection operation is enabled **only when the moveable stops associated with the occupied area are active**.*
- *If personnel are present:*
  - *On the **cartop** → headroom moveable stops must be active.*
  - *In the **pit** → pit moveable stops must be active.*
- ***Simultaneous cartop and pit inspection** is permitted **only when all relevant moveable stops are active**.*
- *When no personnel are present in an area, inspection operation may be permitted from an occupied area even if the moveable stops for the unoccupied area are inactive.*

Option B – *All Moveable Stops Required at All Times* **Option B selected** ☐

*(Inspection operation permitted **only when all refuge spaces are protected**)*

- ***Any cartop or pit inspection operation** is enabled **only when all moveable stops (headroom and/or pit) are in the active position**, regardless of personnel location.*
- *No inspection operation is possible unless **every moveable stop is active**.*

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STANDARD FEATURES INCLUDED IN THE CONTROL PANEL

Control Features

- 110V/230VAC Door detector supply
- Alarm supply 12Vdc 20W
- 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