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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	No
4 Wire	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
Dewhurst		
Stentorgate		
ILE 4 Wire Serial		
A&A Omega 4		
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
Dewhurst	
Stentorgate	
ILE	
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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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	✓	✓	✗	✓	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	☐		
Swipe Card interface	☐	*Supply full details in the "Special Requirements" section on page 7*	
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 in the "Special Requirements" section on page 7*	
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 in the "Special Requirements" section on page 7*	
EN81-20:2014 Compliant Lift	☐		
EN81-21:2018 Compliant Lift	☐	*If selected, complete the details on attached "**EN81-21**" form.*	
EN81-71:2018 Vandal Resistant Lift	☐ →	Category 1 Lift / Category 2 Lift	
EN81-72:2015 Fire fighting Lift	☐	*Note: TVC only offer a Robust enclosure, not Certified Vandal resistant*	
EN81-73:2016 Fire Alarm	☐		
BS9999:2017 Evacuation control	☐		
Lift Consultants' Specification	☐ →	*Specification reference:*	
		Applicable pages:	

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.*

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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	

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

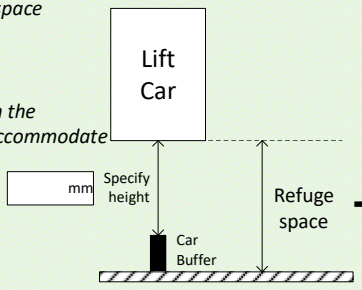
If required, select method to be used:

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



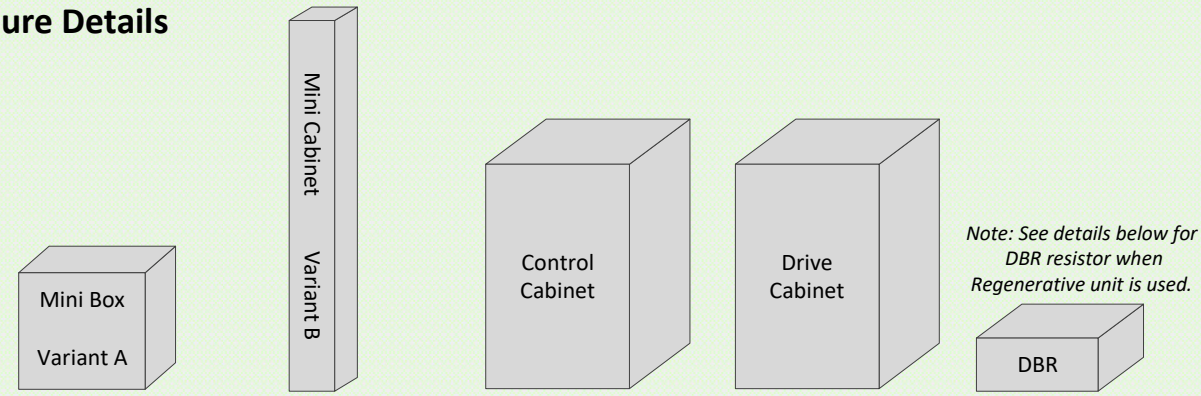
0,5M Laying	
1,00M Crouching	
2,00M Upright	

EN81-21: Clause 5.8
Extendable apron

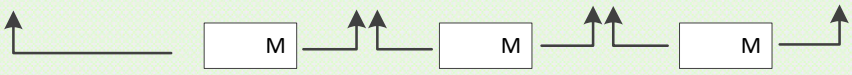
Please provide full details of system to be used

Cabinet Enclosure Details

Mini



	Landing Cabinet **		Control Cabinet	Drive Cabinet	DBR Resistors (Non-Regen)
	Variant A	Variant B			
Height	632 mm	2200 mm	1364 mm	752 mm ***	150 mm
Width	632 mm	160 mm	455 mm	455 mm ***	465 mm
Depth	115 mm	100 mm	158 mm	315 mm ***	300 mm
Material	RAL 7032 Powder Coated	304 Brushed Stainless Steel 240 Grit	Galvanised Steel	Galvanised Steel	Galvanised Steel
Cable entry	Rear	Base/Bottom Rear	Base	Base	Base
Ventilated	Not required	Not required	On both sides & Front	On both sides & Front	All round
Hinged **	LEFT / RIGHT	LEFT / RIGHT (Note door space required)	Lift off Cover	Lift off Cover	Not Applicable
Mounting Site	Landing	Landing Architrave	Lift Shaft	Lift Shaft	Lift Shaft



** Please delete as applicable

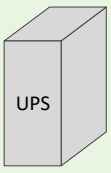
*** Drive cabinet size for upto 30A FLC

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

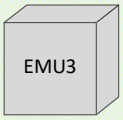
The following UPS is required to be mounted remotely from the above cabinets



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

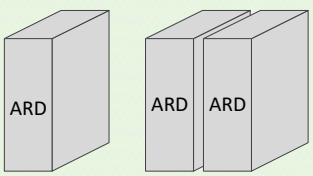
The following features (when requested) are required to be mounted remotely from the above cabinets

TVC Elevator Monitoring Unit (EMU3)



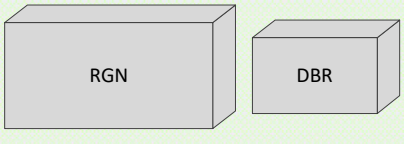
Height	350 mm
Width	350 mm
Depth	100 mm

Automatic Rescue Device (ARD)



	5/6KVA Single unit	8/10KVA Double unit
Height	448 mm	2 x448 mm
Width	131 mm	2 x 131 mm
Depth	640 mm	2 x 640 mm

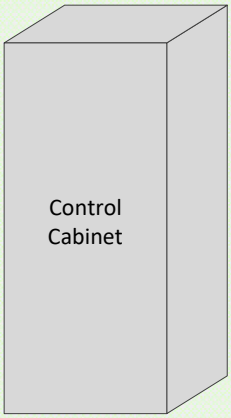
Regenerative Unit (RGN)

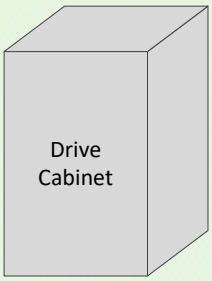


	13KW	26/39KW	DBR (With Regen)
Height	400 mm	828 mm	230 mm
Width	790 mm	376 mm	300 mm
Depth	128 mm	190 mm	185 mm

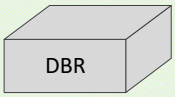
Cabinet Enclosure Details

Midi





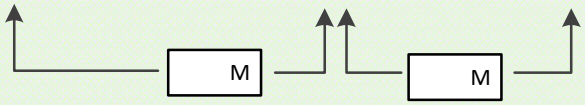
Note: See details below for DBR resistor when Regenerative unit is used.



	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

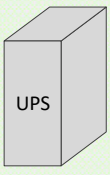


Approximate Distance between cabinets

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

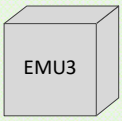
The following UPS is required to be mounted remotely from the above cabinets



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

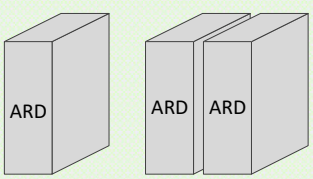
The following features (when requested) are required to be mounted remotely from the above cabinets

TVC Elevator Monitoring Unit (EMU3)



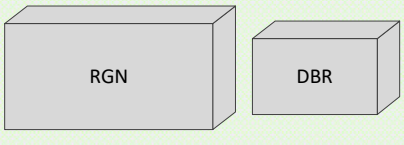
Height	350 mm
Width	350 mm
Depth	100 mm

Automatic Rescue Device (ARD)



	5/6KVA Single unit	8/10KVA Double unit
Height	448 mm	2 x448 mm
Width	131 mm	2 x 131 mm
Depth	640 mm	2 x 640 mm

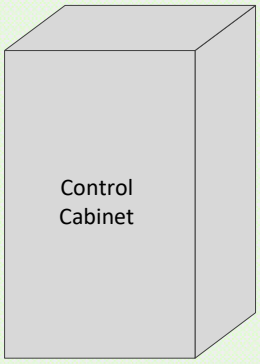
Regenerative Unit (RGN)



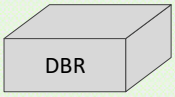
	13KW	26/39KW	DBR (With Regen)
Height	400 mm	828 mm	230 mm
Width	790 mm	376 mm	300 mm
Depth	128 mm	190 mm	185 mm

Cabinet Enclosure Details

Maxi



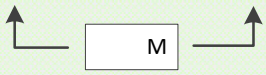
Note: See details below for DBR resistor when Regenerative unit is used.



	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

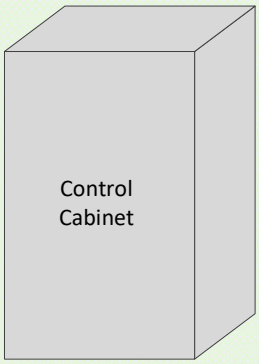
** Please delete as applicable

*** Control cabinet size for upto 30A FLC

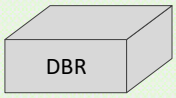


Approximate Distance between enclosures

Hybrid



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



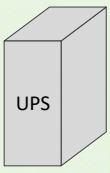
	Control Cabinet	DBR Resistors (Non-Regen)
Height	1200/1400/1600mm **	150 mm
Width	800 mm	465 mm
Depth	400 mm	300 mm
Material	Powder Coated Mild Steel	Galvanised Steel
Cable entry	Base	Base
Ventilated	On both sides & Front	All round
Hinged	Centre Opening	Not Applicable
Mounting Site	Dedicated room/cupboard	

** Please delete as applicable

Control 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

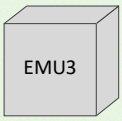
The following UPS is required to be mounted remotely from the above cabinets



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

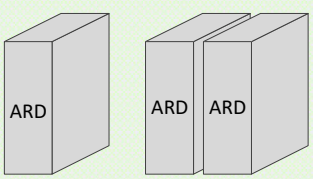
The following features (when requested) are required to be mounted remotely from the above cabinets

TVC Elevator Monitoring Unit (EMU3)



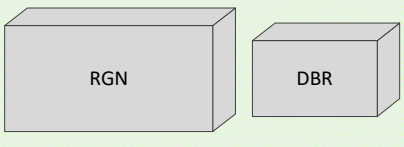
Height	350 mm
Width	350 mm
Depth	100 mm

Automatic Rescue Device (ARD)



	5/6KVA Single unit	8/10KVA Double unit
Height	448 mm	2 x448 mm
Width	131 mm	2 x 131 mm
Depth	640 mm	2 x 640 mm

Regenerative Unit (RGN)



	13KW	26/39KW	DBR (With Regen)
Height	400 mm	828 mm	230 mm
Width	790 mm	376 mm	300 mm
Depth	128 mm	190 mm	185 mm

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