Smartrise Engineering, Inc 1235 N. Union Bower Rd, Irving TX 75061 Phone: 469.678.8000 – Fax: 916.457.4948 sales@smartrise.us www.smartrise.us

# TRACTION AC

.....

#### Engineering Data Form – Page 1

Rev 6.1 210422

#### Warning: Review Before Submittal

- Failure to Provide Accurate and Complete Information could result in the following: Delayed Controller Shipment, Price Change, and Incurred Engineering Charges.
- If a job specification is included you must complete the 'Build to Job Specification' section on page 3.
- All Fixtures must be 24 VDC / 6 Watts Max.
- If a category is not completed, the default option will be assumed.

.....

-	TRACTION AC - Table of Contents by Page
1. Job Information	6. Fixtures
2. Shipping & Pre-Wire	7. Car Door Data
3. General Controller Information	8. Landings and Openings
4. Motor/Encoder, and Brake Data	9. Elevator(s) Physical Layout
5. Features & Functions	10. Motor Purchase from Smartrise

This document can be edited, saved, and submitted electronically using Adobe Reader.

Job Details				
Job Name: PO #:		Market Segment:	Health Care	Financial Residential
Job Location (	(City & State)	Education	Hospitality	Other
Purchasers In	formation (If Packager, Fill in End User Info on Right)	End User Informati	ion (For Packager Use O	nly)
Name:		Name:		
Title:		Title:		
Company:		Company:		
Phone:	Fax:	Phone:	Fax	
Cell:		Cell:		
Email:		Email:		
Name: Phone: Cell: Email:	Fax:	Street:		
Building Own	er/Manager Information		FULL ELEVATOR SYS	STEMS
Name:		Should you have a	need for complete or par	tial elevator systems,
Phone:		contact Smartrise S	ales for more informatio	on.
Email: Street:		Sr	martrise Packager Pa	artners
City:		*Alliance * AVT Lifts '	*Canton * Delaware Manı *IGV * MEI*	ufacturing * EV Elevator Intl
State: Zip Code:		*M	lodular Elevator * Phoeni	x Modular*

### Shipping and Pre-Wire

Contact Name:       Phone:         Phone:	
Shipping Schedule       Controller(s)       Desired Ship Date from Smartrise       Controller(s)       Desired Ship Date from Sm	artrise
Additional Shipping Instructions	
Pre-wire Fixtures (Must be 24 VDC / 6 Watt Max) Not Requ	ired C
Pre-wire COP Boards:     Yes     No (Default)       Pre-wire Hall Boards:     Yes     No (Default)	
Fixture Manufacturer     Innovation     ECC   Other     Ship to Address:     Monitor     MAD     PTL   Otis     RSL Car Calls     DPI Hall Calls	
RSL Hall Calls         Job Reference:       Contact Person at Mfg.	

### **General Controller Information**

#### TRACTION AC - Engineering Data Form – Page 3

Electrical Main Line and Transformer Specification	Configuration
Main Line Specification:         Main Line Volts (Transformer required if motor volts are 10% greater than main line)         Three Phase (Default)         VAC L1 to GND       VAC L2 to GND         Single Phase         Hz (Main Line is 60Hz unless otherwise stated)         Main Line Transformer (If Customer Requires)         Provided by Smartrise         Provided By Customer (Customer to provide drawing)         Secondary Voltage         kVA         Data Plate Copy Included	Simplex       # Cars         Group       # Cars in Group       # of Hall Risers/Group         Group Redundancy       Swing Riser, Car #         Selective Collective (2 buttons/floor, multiple calls)         Non-Selective Collective (1 button/floor, multiple calls)         Non-Selective Non-collective (1 button/floor, 1 call at a time)         Build to Job Specifications         Not Required         We will review the spec and will provide a list of exceptions when necessary.         Job needs to be built to meet Engineering Specifications in Document provided EXCEPT those listed below (Provide page/section & description of exceptions)
Environmental Considerations       Not Required         Controller Cabinet Air-pressure cooled (Add Vortex) (Customer to provide Air Compressor)       Controller Cabinet Air conditioned cooled (Add A/C Unit) Controller         Cabinet Forced Air cooled (Add fan and filter)       Arc Flash Protection         Special attention to hoistway shaft (Provide details in notes below)       Outdoor or Hostile (Industrial Environment)         NEMA Rating for Machine Room Controller Cabinet (If required, Default NEMA 1)       NEMA Rating for Top of Car Enclosure	
(If required, Default NEMA 1)	ASME 17.1 Elevator Safety Code Compliance
NEMA For Landing System (If required, Default NEMA 1)         Connection Package (Run Box)         SmartConnect Package - Recommended (Pre-Wired Car Top Inspection Box Included)         Car Operating Panel         Single Panel (Default)	2019     Additional Local Code       2016     2013       2010     2007       2007     NYC (Appendix K)       2004     No Fire Service       2000     MASSACHUSETTS
	Controller Layout Preference
Dual Panels       Remote Panel         Notes and Special Instructions	Standard (MR, CT, and COP) (Default)         No Cartop         No COP         Custom:    We will notify you if the preference chosen cannot be honored

### Traction Features, Motor/Encoder, and Brake Data

#### **TRACTION AC - Engineering Data Form – Page 4**

Rev 6.1 210422

Tracti	ion Features (	Features fo	or all cars is the s	ame as car 1) Failure to pr	ovide data will resu	ılt in delay	of controller shipme	nt	
Car	Contract Speed	Capacity	Motor Provided By	Encoder Provided By	Customer Supplied Encoder Info	Regn Kit	MRL Battery Rescue	Gov Rese Is 24 VDC	et Coil Is Is 120 VAC
1			Smartrise	Smartrise* None Customer (Include info in notes)	Make		Auto Rescue Operation Manual Brake Release		
2			Smartrise	Smartrise* None Customer (Include info in notes)			Auto Rescue Operation Manual Brake Release		
3			Smartrise	Smartrise* None Customer (Include info in notes)	Model		Auto Rescue Operation Manual Brake Release		
4			Smartrise	Smartrise* None Customer (Include info in notes)			Auto Rescue Operation Manual Brake Release		

\*Except encoders and cables for PM

Motor	<b>r/Encoder Data</b> ( Data for al	cars are	e the sar	ne as ca	ar 1) <mark>Fail</mark>	ure to p	rovide	data will r	esu	lt in dela	y of cont	roller sh	ipment		
Car	Machine Brand/Model	Motor Volts	FLA	HP	RPM	Motor Freq.	# of Poles	PM Accel Volts		Rope Ratio	Sheave Dia.	Gear Ratio	Encodr PPR	Enc Cbl Length	Enc Shaft Dia
1															
2															
3															
4															

Mot	Motor Data for IM & PM Motors ( Data for all cars are the same as car 1) Failure to provide data will result in delay of controller shipment							
Car	Motor Type	Machine Type	MRL Location Mount Peak Amps					
1	Induction Motor Single Speed Motor (Default) Dual Speed Motor Permanent Magnet Motor	Geared Gearless	Overhead     Foot       Basement     Flange					
2	Induction Motor Single Speed Motor (Default) Dual Speed Motor Permanent Magnet Motor	Geared Gearless	Overhead     Foot       Basement     Flange					
3	Induction Motor Single Speed Motor (Default) Dual Speed Motor Permanent Magnet Motor	Geared Gearless	Overhead     Foot       Basement     Flange					
4	Induction Motor Single Speed Motor (Default) Dual Speed Motor Permanent Magnet Motor	Geared Gearless	Overhead     Foot       Basement     Flange					

Brake	e Data ( Data for all c	ars are the	same as car	r 1) Failure	to provide	e data will result in delay of controller shipment			
Car	DC/AC	Pick Volts (DC or AC)	Hold Volts (DC Only)	Coil Resistance	Coil Amperage	Emergency (2 <sup>nd</sup> ) Brake	Indeper	endent (2' Hold XÖÔ	ke Data Coil Amp
1	DC AC (3-Phase) (Default) AC (1-Phase)					120 VAC Hollister-Whitney Rope Gripper     Independent 2nd     Draka Rope Brake			
2	DC AC (3-Phase) (Default) AC (1-Phase)					120 VAC Hollister-Whitney Rope Gripper     Independent 2nd     Draka Rope Brake     DC Brake			
3	DC AC (3-Phase) (Default) AC (1-Phase)					120 VAC Hollister-Whitney Rope Gripper     Independent 2nd     Draka Rope Brake     DC Brake on Motor		Ţ	
4	DC AC (3-Phase) (Default) AC (1-Phase)					120 VAC Hollister-Whitney Rope Gripper     Independent 2nd     DC Brake on Motor			
						Hollister-Whitney Rope Gripper if NOT 120 VAC. Spe	ecify Vo	ltage:	

#### Motor Control Preference

#### Filters

Magnetek - Default

K.E.B.

EMI/RFI Filter Harmonic Filter

We will notify you if the preference chosen cannot be honored

#### Notes and Special Instructions

Magnetek Quattro AC

Line Reactor

### **Features & Functions**

#### TRACTION AC - Engineering Data Form – Page 5

Special Features	Not Required 🔵	Car Call Security (Specify floors on page 8)	Not Required
Remote (2 <sup>nd</sup> ) Fire Key Switch & Lamp	Shunt-Trip	Using COP Floor Buttons as Code Entry	
Earthquake	Flood Sensor	Using Dry Contacts from Card Readers and/or	r Key Switches
(Includes Buzzer and Lamp)	'S' Button	Input in Car Station (Default) Input in Machine Room	
Car-to-Lobby Key Switch		Override Security When on Independent Servi	ice or Attendant
Fan and Light Auto Shutoff Circuit (CT only)		Provide a Car Call Security Override Input	
Machine Room Cabinet Light		Input in Car Station (Default) Input in Machine Room	ı
Machine Room Cabinet Power Plug		Door Open Button Functions on Secured Land	lings
Special Modes of Operation	Not Required	Other Considerations	
Independent Service (Default)			
Hoistway Access Yes (Default) No			
In-Car Inspection Switch (Uses top/bottom	car calls)		
CT Inspection will not work unless an In-Ca is active (Access or IC Inspection)	r Key Switch		
Non-standard			
Medical Emergency Service (Provide floor(s) on p	age 8)		
Building is a Hospital with keys at every fl			
In Car Buzzer, In Car Lamp, and Hallway Lamp at each Non-Hospital – Phase 1 key at main level			
In Car Buzzer and In Car Lamp are included	only		
Sabbath (Attach spec)		Hall Call Security	Not Required
		Provide Enable/Disable all Hall Calls Input (sir	mplex)
Start End		Provide a Hall Call Security Override Input (pe	ar floor)
		Dry Contacts in Hall Fixtures Signals in Mach (Default)	,
Key Switch		Other Considerations	
Patient Security			
Other (Attach spec)			
Attendant Service	Not Required		
	·		
Attendant Service (Is NOT Independent Servi	ce)		
Choose 1: Hall Call Above/Below Lamps (Default)		Controller Monitoring System	Not Required
Non-directional (All hall call lamps)		Designed and Manufactured by Smartrise Engineer	ing
Other:		Machine Room Monitoring	
Emergency Power (If generator can not run all c	ars) Not Required	Local Monitoring (Lobby/Engineering/Management)	
E.P. Contact from Generator is		Remote Monitoring (Cloud) – Requires Internet Connection	
Normally Open Normally Closed		Designed and Manufactured by Integrated Display S	<u>Systems</u>
Power Pre-Transfer Contact from Generator is	Dracant	Lift-Net with USB RS-422 Interface (Serial)	
Normally Open (Default) Normally Closed Nor	Present	Lift-Net with Moxa Unit Interface (Ethernet / LAN)	
Emergency Power Car Selector Switch	n (Provide details below)	Designed and Manufactured by Kings III of America	<u>a</u>
Number of cars the generator can opera			-
	te simultaneously	ORM (Interface only)	
(Default value is 1 car) Generator powers other Simplex/Groups	te simultaneously	ORM (Interface only) BACnet	

### **Cables and Fixtures**

<ul> <li>Custom Traveler and Hoist-way Cardian</li> </ul>	able (Purchase from Smartrise)
Draka James Monroe	Not Required
Cable #1         Cable #2         Cable #3         Cable #4         Cable #4	Length of Cable(s) Per Car (in feet) Hoistway Cable Per Car 1 Car 2 Car 3 Car 4 Car 5 Car 6 UL & CSA Hoistway NEC Compliant
• All Fixtures must be 24 VDC / 6 W	······
In Car Position Indicator Not Required	In Hall Position Indicator Not Required
CE Micro Com (Default)       Discrete Signals (One line per floor)         Emotive 3-Wire       Discrete Signals (Binary)         DL-20 (Interface only)       RSL         MAD (Giotto)       Other:	CE Micro Com (Default)       Discrete Signals (One line per floor)         Emotive 3-Wire       Discrete Signals (Binary)         EX-51 (Interface only)       RSL       MAD (Giotto)         # of Floors with Hall Position Indicators
In Car Arrival Lantern Not Required	Other:
CE Micro Com (Default)       Discrete Signals         Emotive 3-Wire       Bulb/Chime wattage (If discrete):         MAD (Giotto)       RSL         Other:	In Hall Arrival Lanterns       Not Required         First Floor Only (Discrete)       CE Micro Com Lanterns (Type: SA130M Req.)         All Floors (Smartrise Hall Boards)       Emotive 3-Wire         EX-51/EX31 (Interface only)       RSL         If Lamps/Gongs are not 24 VDC / 6 Watt (Explain below)
CE Micro Com Emotive 3-Wire Speaker is Remote	
CL Micro conn       Enfotive 3-Wire       Speaker is identified         RSL         Provided By:       Customer (Must be CE or Emotive 3-Wire - Default)         Other:	Lobby Panel       Not Required         Door Open Lamp       In Use Lamp         On Independent Svc. Lamp       In Service Lamp         Emergency Power Lamp       Other Requirements

### Car Door

# TRACTION AC - Engineering Data Form – Page 7

_		L F L R	FR FR FR					
la	II Door Type	r 🖂 Powered Frei						
	(Default)	(See * below)	) Manual Other					
el	ect Door Ope	erator						
	Abell	ATS 0090	Field "EZ"					
	GAL	MODCTL	24vdc interface relays					
	GAL	MOD	L, G, or X					
	GAL	MOVFR	230 VAC input voltage					
	Kone	Мас	104 or 105D Interface board					
	Kone	PMSSC	104 or 105D Interface board					
	Otis	AT-400	240 AC/120 VDC Interface GLIDE A (Discrete)					
	Otis	AT-400/Glide P	Multi-Drop (Serial)					
	TKE	Dover HD-03	Requires IO Card: 6300TX2 (110 VAC)					
	TKE	Dover HD-73	Type D/IVO					
	TKE	Dover HD-91	DC Motor					
	TKE	HDLM	Requires UIT_I/O Card					
	Fermator	VVVF5	Linear Door Operator					
	None		Manual Car Gate					
	Peelle	Wireless	*Input Freight/door information					
	Courion	lLearn	at bottom					
	EMS							
	Other		*Input Other door information at bottom					
	(Default) Cam Mechanica Volts Gate Relea	al DC AC Amps See AC (3-Phase) AC	Mechanical Safety Edge Door Hold Button (3-Phase) AC (Single Phase) C (Single Phase)					

						Re	v 6.1 210422					
	Door											
Type 2			All	Car 1	Car 2	Car 3	Car 4					
		F	F	F	F	F						
На	Auto Passenger Powered Freight Manual Other											
	(Default)		(See * below)		anual	Other						
Select Door Operator												
	Abell .	S 0090										
	GAL	МС	DCTL	Field "EZ" 24vdc interface relays								
	GAL	1	NOD	L, G, or X								
	GAL	М	OVFR	230 VAC	input volta	age						
	Kone		Mac		ice board							
	Kone		MSSC	-	)5D Interfa							
	Otis		T-400	240 AC/120 VDC Interface GLIDE A (Discrete)								
	Otis AT-40		0/Glide P	Multi-Drop (Serial)								
	ТКЕ	Dove	er HD-03	Requires IO Card: 6300TX2 (110 VAC)								
	ТКЕ	Dove	er HD-73	Type D/I	V0							
	ТКЕ	Dove	er HD-91	DC Moto	r							
	ТКЕ		IDLM	Requires UIT I/O Card								
	Fermator	V	VVF5	Linear Door Operator								
	None			Manual Car Gate								
	Peelle	W	reless									
	Courion	IL	earn	*Input Freight/door information								
	EMS			at bottom								
	Other			*Input Other door information at bottom								
Door Protection  Photo Eye/Light Curtain Mechanical Safety Edge Door Hold Button (Default)												
Cam Mechanical DC AC (3-Phase) AC (Single Phase) Volts Amps												
Gate Release       DC     AC (3-Phase)     AC (Single Phase)     Amps												
Other Door Considerations												

Notes and Special Instructions:

Manufacturer	
Model	
Reference #'s	
Job Prints from	Door Manufacturer are Required

## Landings and Openings

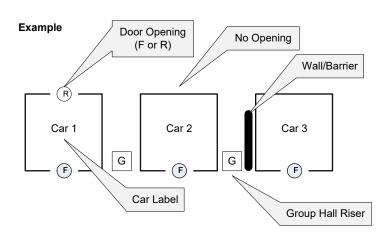
#### TRACTION AC - Engineering Data Form – Page 8

Floor Informa	Floor Openings			Car Call Security			Hall Call Security			Hosp					
PI Labels Flo		Car 1	Car 2	Car 3	Car 4	Car 1	Car 2	Car 3	Car 4	Car 1	Car 2	Car 3	Car 4		
Overhead (Default 13)	d ->	FR	FR	FR	FR	FR	FR	FR	FR	FR	FR	FR	FR	FR	
27															
26															
25															
24															
23															
22															
21															
20															
19															
18															
17															
16															
15															
13	—														
13	—														
12															
We will default to the lobby landing 11															
and the landing above for main and <b>10</b>															
alternate fire floor respectively. 9															
Default Dit	->		<u> </u> P					∟∟ Pit				it		Pit	
PI labels (Defa	ult 4ft)						cars sa		Cor 1		cars sa		Cor 1		
			cars sar walk-thr				walk-th		Cari		walk-th		Cari		
Main	n Fire/Lobby Floor	□ All f		eug.				e.g.			front				
	Fire Floor 7/Flood Floor		per of flo	oors:		Num	ber of fl	oors:		Num	ber of f	loors:			
Total Hoistway	_				lf mixe	ed F/R pl	ease se	elect bo	oxes abo	ve.					
Height (ft)			noludo I			AT5 pac									
Car 1								CAT5	Cable L	enath	25 ft	(Defau	lt)	] 50 ft [	] 100 ft
Car 2															
Car 3	FR	Walkthrough Only: Top F R Location of Hoistway Up/Dn Switch Car#s Hoistway Considerations													
Car 4			Ambient Light Present in Corner Post Rails									Rails			
				hrough O	nly: Bottor	n			Hoistwa	ау		L			
				ion of Hoi	stway Up/	Dn Switch (	Car#s	-							
Notes and Special Instruc	tions:														
							]								
									Overlay with Existing Equipment						
									Cross Registration System						
														neer will cont	tact you
									gather det			-		6.	
								In	nportant: F	Provide Ph	iysical La	yout on S	sheet 9		

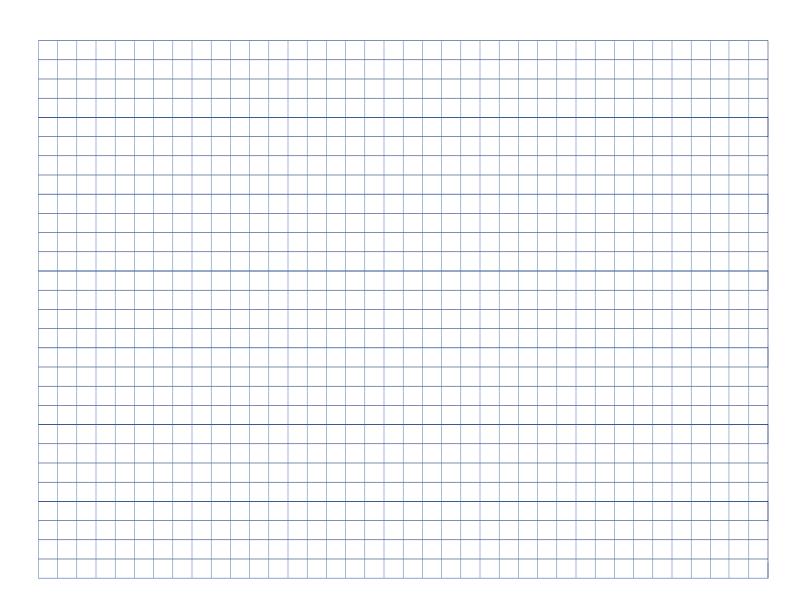
### Elevator(s) Physical Layout

### TRACTION AC - Engineering Data Form – Page 9





1	Draw a topographical map of elevator(s) location on grid provided.							
*	* Accurately label each car by number/letter * Mark openings: F (front) or R (rear) * Label risers as:							
	I = Inconspicuous Riser							
*	* Draw in walls/barriers (heavy line)							
1	Notes/Special Considerations							
L								
	H = Hospital Service Riser Draw in walls/barriers (heavy line)							



ſ

### **Traction Motor Purchase from Smartrise**

- \* Complete only if purchasing a motor from Smartrise\* All other motor data is provided on Page 4

Existing Machine Information	Existing Motor Information
Machine Brand	Manufacturer:
Model	Frame Size/Style:
Style	Foot Mount Flange Mount
Counter Weight Percentage:	HP Volts RPM
New Motor Information	Car Speed
Volts Encoder Cable Length	Car Capacity
RPM 30 Ft 40 Ft 50 Ft.	Machine Location Overhead Basement
Straight Shaft Other Ft.	
Coupling Survey (only if provided by Smartrise)	
Image: CF) Coupling Flange Diameter         Image: Number of Mounting Bolts         Bolt Size         Image: Bolt Bolt Size         Image: Bolt Bolt Bolt Hole Diameter         Image: Bolt Bolt Bolt Bolt Circle         Image: Bolt Bolt Bolt Bolt Circle         Image: Bolt Bolt Bolt Bolt Circle         Image: Bolt Bolt Bolt Bolt Bolt Circle         Image: Bolt Bolt Bolt Bolt Bolt Bolt Bolt Bolt	