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City: State: Zip Code:

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

C4 TRACTION AC

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Engineering Data Form - Page 1

Rev 6.4 210810

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 Specifications' 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								
1. Job Information	7. Car Door Data							
2. Shipping & Pre-Wire	8. Landings and Openings (1-24)							
3. General Controller Information	9. Landings and Openings (25-64)							
4. Motor/Encoder, and Brake Data	10. Landings and Openings (65-96)							
5. Features & Functions	11. Elevator(s) Physical Layout							
6. Cables and Fixtures	12. Motor Purchase from Smartrise							
This document can be edited,	This document can be edited, saved, and submitted electronically using Adobe Reader.							

Job Details Market Segment: Financial Job Name: PO #: Federal Health Care Residential Job Location (City & State) Education Hospitality Other Purchasers Information: (If Packager, Fill in End User Info on Right) End User Information: (For Packager Use Only) Name: Name: Title: Title: Company: Company: Phone: Fax: Phone: Fax: Cell: Cell: Email: Email: Engineering Contact Information: (If different than above) Job Site Address: (Address Where Controller(s) Will Be Installed) Name: Street: Phone: Fax: Cell: City: Email: State: Zip Code: Date Filled Out **Building Owner/Manager Information** FULL ELEVATOR SYSTEMS Name: Should you have a need for complete or partial elevator systems, Phone: contact Smartrise Sales for more information. Email: Street:

Smartrise Packager Partners

* Alliance * AVT Beckett * BTS * Canton * CED *
* Delaware Elevator Manufacturng * Dura-Vator *
* EECO * EV Elevator International (EEVI) * Hidral *
* Lift Solutions * MEI * Phoenix Modular *
EES - Southern Elevator & Electrial Supply * Trumph Electric*

Shipping and Pre-Wire

C4 TRACTION AC - Engineering	g Data	Form – F	Page 2
		Rev 6.4	210810

Shipping Information
Contact Name:
Lift Gate Required: Yes No Freight Terms Use Smartrise Carrier: Yes No Will Call Pre-paid Ves Pre-paid No
Ship to Name/Company: Bill To Address: Shipping Address:
Shipping Schedule
Controller(s) Desired Ship Date from Smartrise Controller(s) Desired Ship Date from Smartrise
Additional Shipping Instructions
Pre-wire Fixtures (Must be 24 VDC / 6 Watt Max) Not Required
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 SEES SEES
Job Reference: Contact Person at Mfg.

General Controller Information

C4 TRACTION AC - Engineering Data Form – Page 3

Rev 6.4 210810

Electrical Main Line and Transformer Specification	Configuration
Main Line Specification: Main Line Volts (Transformer required if there is more than a 10% difference between the main line and motor volts)	Simplex # Cars
Three Phase (Default)	Group # Cars in Group # of Hall Risers/Group Swing Riser, Car #
Single Phase	Selective Collective (2 buttons/floor, multiple calls) (Default)
Hz (Main Line is 60Hz unless otherwise stated)	Other:
Main Line Transformer (If Customer Requires) Provided by Smartrise	Destination Dispatch
Provided By Customer (Customer to provide drawing)	
Secondary Voltage	Lobby Boost (Lobby Only) Full (All Floors)
kVA Data Plate Copy Included	
	Build to Job Specifications Not Required
Environmental Considerations Not Required	We will review the spec and provide a list of exceptions, when
Controller Cabinet Air conditioned cooled (add A/C Unit) Controller Controller Cabinet Forced Air cooled (add Fan and Filter)	Job needs to be built to meet Engineering Specifications in Document provided EXCEPT those listed below (Provide page/section and description of exceptions)
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)	
Car Operating Panel	
Single Panel (Default) Dual Panels	ASME 17.1 Elevator Safety Code Compliance
Remote COP (Discrete in M/R)	2019 Additional Local Code
Notes and Special Instructions	2016 2013
	2010
	2007 NYC (Appendix K) 2004 No Fire Service MASSACHUSETTS 2000 2000
	Connection Package (Run Box)
	SmartConnect Package – Recommended (Pre-Wired Car Top Inspection Box included)

Traction Features, Motor/Encoder, and Brake Data

C4 TRACTION AC - Engineering Data Form – Page 4 Rev 6.4 210810

Tracti	raction Features (Features for all cars are the same as car 1) Failure to provide data will result in delay of controller shipment									
Car	Contract Speed	Capacity	Motor Provided By	Encoder Provided By	Customer Supplied Encoder Info	Regen Kit	Battery Rescue	Gov Rese Is 24 VDC	et Coil Is Is 120 VAC	
1			Smartrise Customer	Smartrise None Customer (Includes info in notes)	Make		Auto Rescue Operation Manual Brake Release			
2			Smartrise Customer	Smartrise None Customer (Includes info in notes)			Auto Rescue Operation Manual Brake Release			
3			Smartrise	Smartrise None Customer (Includes info in notes)	Model		Auto Rescue Operation Manual Brake Release			
4			Smartrise Customer	Smartrise None Customer (Includes info in notes)			Auto Rescue Operation Manual Brake Release			

*Except encoders and cables for PM

Motor	Motor/Encoder Data (Data for all cars are the same as car 1) Failure to provide data will result in delay of controller shipment														
Car	Machine Brand/Model	Motor Volts	FLA	HP	RPM	Motor Freq.	# of Poles	PM Accel Volts	Rope Ratio		Sheave Dia.	Gear Ratio	Encoder 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	Data (Data for all	cars are the	same as ca	ır 1) Failure	to provide	data will result in delay of controller shipment				
Car	DC	Pick Volts (DC)	Hold Volts (DC Only)	Coil Resistance	Coil Amperage	Emergency (2 nd) Brake	Indepe Pick VDC	endent (2 ⁿ	'	
1	DC (Default)				Aimperage	120 VAC Hollister-Whitney Rope Gripper Independent 2nd DC Brake on Motor	Flox VD-C	Hold V D G	00122	
2	DC (Default)					120 VAC Hollister-Whitney Rope Gripper Independent 2nd Draka Rope Brake DC Brake on Motor				
3	DC (Default)					120 VAC Hollister-Whitney Rope Gripper Independent 2nd Draka Rope Brake DC Brake on Motor				
4	DC (Default)					120 VAC Hollister-Whitney Rope Gripper Independent 2nd Draka Rope Brake DC Brake on Motor				
	Hollister-Whitney Rope Gripper if NOT 120 VAC. Specify Voltage:									

Motor Control Preference

Filters

Magnetek - Default

K.E.B.

:		Line Reactor
÷		EMI/RFI Filter
1	\square	Harmonic Filter

Magnetek Quattro AC (Cube Only)

We will notify you if the preference chosen cannot be honored

Notes and Special Instructions:

Features and Functions

C4 TRACTION AC - Engineering Data Form - Page 5

Rev 6.4 210810

Special Features Not Required Car Call Security (specify floors on page 8) Not Required Remote (2nd) Fire Key Switch & Lamp Shunt-Trip Using COP Floor Buttons as Code Entry Earthquake Flood Sensor Using Dry Contacts from Card Readers and/or Key Switches (Includes Buzzer and Lamp) Input in Car Station (Default) Inputs in Machine Room 'S' Button Car-to-Lobby Key Switch Override Security When on Independent Service or Attendant Serviced Fan and Light Auto Shutoff Circuit Machine Room Provide a Car Call Security Override Input (CT only) Cabinet Light Input in Car Station Input in Machine Room Machine Room Cabinet Power Plug Enclosure Legs Door Open Button Functions on Secured Landings Special Modes of Operation Not Required Notes Independent Service (Default) Hoistway Access Yes (Default) No In-Car Inspection Switch Medical Emergency Service (Provide floor(s) on page 8) Building is a Hospital with keys at every floor In Car Buzzer, In Car Lamp, and Hallway Lamp at each floor are included Non-Hospital - Phase 1 key at main level only In Car Buzzer and In Car Lamp are included Sabbath (Attach spec) Times Hall Call Security Not Required Start End Provide Enable/Disable all Hall Calls Input (Simplex) Key Switch Provide a Hall Call Security Override Input (Per floor) Dry Contacts in Hall Fixtures (Default) Signal in Machine Room Patient Security Attendant Service Not Required Attendant Service (Is NOT Independent Service) In Car Buzzer In Car Lamp Choose 1: Hall Call Above/Below Lamps (Default) Not Required Controller Monitoring System Non-Directional All Hall Call Lamps
 Requires Discrete Connection from CT to COP Panel Per Landing Designed and Manufactured by Smartrise Engineering Other: Machine Room Monitoring Local Monitoring (Lobby/Engineering/ Management) Emergency Power (If Generator Cannot Run All Cars) Not Required Remote Monitoring (Cloud) - Requires Internet Connection E.P. Contact from Generator is Designed and Manufactured by Intgrted Display Systems Normally Open Normally Closed Lift-Net with USB RS-422 Interface (Serial) Power Pre-Transfer Contact from Generator is Normally Closed Not Present Normally Open (Default) Lift-Net with Moxa Unit Interfce (Ethernet / LAN) Emergency Power Car Selector Switch Single Car Selection (Default) Multiple Car Selection (Provide details below) Designed and Manufactured by Kings III of America Number of cars the generator can operate simultaneously ORM (Interface Only) (Default value is 1 car) Generator powers other Simplex/Groups BACnet **Emergency Power Lamp**

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Rev 6.4 210810
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 Traveler and Hoistway Cable (Purch 	nase from Smartrise)	
Draka: 🗌 By Draka 🗌 By SEES 🛛 James Monroe: 🗌 Triu	umph Electric NY 📋 CED	Not Required
C4 Traveler Cable #1 C4 Traveler Cable #2 Traveler Cable #8 CUSTOM LABLELING Yes Yes No # OF CONDUCTORS 19 31 69 CORE Steel Steel Steel DIAMETER 0.90" 1.36" 1.570" # OF 14 AWG 4 4 5 # OF 18 AWG 7 14 40 # OF 20 AWG SHIELD 4 Pair 6 Pair 11 Pair COAXIAL (RC/6U) No 1 2 APPROVALS/BOTH UL Type ETT> NEC Compliant, CSA Type ETT, CSA FT1 CSA FT1	Length of Cable(s) Per Car (in feet)	C4 Hoistway Cable Yes 26 N/A 0.55" 0 26 0 26 0 0 No
• All Fixtures Must Be 24 VDC / 6 Wa		
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) MWSF: Hands Free MAD (Giotto) Other:	Emotive 3-Wire Discrete	Not Required C CE Micro Com Lanterns (Type: SA130M Req.) Emotive 3-Wire
CE Micro Com (Default) Discrete Signal		
Emotive 3-Wire Bulb/Chime wattage (If discrete):	Lobby Panel	Not Required
In Car Voice Annunciator Not Required CE Micro Com Emotive 3-Wire Speaker is Remote Interface Only Interface Only Other:		n Use Lamp n Service Lamp
Load Weighing Not Required Load Weigher Provided By Overload Lamp Smartrise Customer Anti-Nuisance # Ropes Rope Diameter 1:1 Roping 2:1 Roping		

Car Door

C4 TRACTION AC - Engineering Data Form – Page 7

Rev 6.4 210810

Door	Use this d	oor for all cars or specify which cars us		Door	U	Use this door for all cars or specify which cars use it						
Туре 1				Туре 2		All F	Car 1	Car 2	Car 3	Car 4		
Hall Door Type			•	н	all Door Type							
Auto Passenge	er (Default)	Auto Passenger (Default)										
Car Door Type				c	ar Door Type							
Auto Passeng		Manual Powered Freight	See * below)		Auto Passenge	er (Default)	N	1an ual	Powered	Freight (See	* below)	
Select Door Op			· · ·	s	elect Door Op	erator						
Abell	ATS 0090	Field "EZ"				ATS 00	090	Field "EZ"				
GAL	MODCTL	24 VDC interface relays			GAL	MODC	TL	24 VDC int	erface rela	avs		
GAL	MOD	L, G, or X			GAL	MOD		L, G, or X		<u> </u>		
GAL	MOVFR	230 VAC input voltage			GAL	MOVF	R	230 VAC ir	nput voltad	je		
Kone	Mac	104 or 105D Interface boar	d		Kone	Mac	;	104 or 105				
Kone	PMSSC	104 or 105D Interface boar	ď		Kone	PMSS	SC	104 or 105	D Interfac	e board		
Otis	AT-400	240 VAC / 120 VAC Interfa	се		Otis	AT-40	0	240 VAC /				
		Glide A (Discrete)						Glide A (Di				
	Dover HD-03	Requires IO Card: 6300TX	2 (110 VAC)		TKE	Dover HI		Requires I		300 I X2 (1	10 VAC)	
	Dover HD-73	Type D/IVO				Dover HE		Type D/IVC)			
	Dover HD-91	DC Motor				Dover H		DC Motor	IT 1/0 0			
	HDLM	Requires UIT_I/O Card	1					Requires L				
Fermator	VVVF5	Linear Door Operator			Fermator	VVVF	-	Linear Doo	r Operato	r		
Peelle	Wireless	*Input Freight/Door Ir	formation		Peelle	Wirele		*Input Fr	eight/Do	or Inforr	mation	
	ILearn	at bottom			Courion EMS	ILear	'n	at bottom	-			
EMS Other		*Input Other Door Informati	on at hattam	┥╟═	Other			*Input Othe	r Door Inf		thattam	
Door Prote	ht N DC Amps ase C (3-Phase) AC	techanical Safety Edge Doo AC (3-Phase) AC (Single Phase)		Door Pro	ght uit) al C Amp ease C (3-Phase) [20 x	lechanical Safet		AC (Sin	ald Button gle Phase)		
*Freight/Other D	oor Operation I	nformation		N	otes and Speci	al Instructio	ons:					
Manufacturer Model Reference #'s												

Job Prints from Door Manufacturer are Required

Landings and Openings

Check this box if more than 24 landings (continued on page 9 for landings 25 - 64)																	
Floor Information (1-24)				I F	-loor O	pening	S		Car Call	Securi	ty	ŀ	Hall Call	Hosp			
	Floor Index	Floor Label	Floor Height	Car 1	Car 2	Car 3	Car 4	Car 1	Car 2	Car 3	Car 4	Car 1	Car 2	Car 3	Car 4		
	Ov	erhead ault 13ft		FR	FR	FR	FR	FR	FR	FR	FR	FR	FR	FR	FR	FR	
	24																
	23																
	22																
	21																
	20																
	19																
	18																
	17																
	16																
	15																
	14	14															
	13																
	12																
	11																
	10																
We will default to the lobby landing	9																
and the landing above for main	8																
and alternate fire floor respectively	7																
	6																
	5																
	4																
	3																
	2																
	1																
	Default PILabeis	Pit -> (Default 4 th)			F	Pit			F	Pit			F	Pit		Pit	
					All cars same as Car 1					me as	Car 1		cars sa				
				 All walk-through All front 				□ All □ All	walk-th	rough		⊔ All □ All	walk-th				
Main Fire/Lobby Floor			nber of	floors			ber of fl	oors [ber of fl						
Alt Fire Floor EMT/Flood Floor				If mixed F/R, select boxes above													
	•																
				 Include Hall Network CAT5 package Controller (MR) to Hall Network (Hoistway) CAT5 Cable Length 25 ft (Default) 50 ft 100 ft] 100 ft	
	l Hoistw eight (ft)																
Car 1				hu Ten													
	F R Location of Hoistway Up/Dn Switch Car #s Hoistway Consideration																
Car 2 Car 3		<u> </u>					Hoi	stway C	onside	ration							
Car 4	FR			ly: Botton	n In Switch C	ar #s		Corr	er Post	Rails							
All cars sa		Local						_									
	1110 do (
				J													
Notes and Spec	cial Inst	ructions:							1								
										Ove	erlay wit	hExist	ing Equ	uipmen	t		

Cross Registration System

When you choose one of the above, a Smartrise engineer will contact you to gather details about the existing elevator controllers.

Important: Provide Physical Layout on 11

Landings and Openings (25-64)

C4 TRACTION AC - Engineering Data Form - Page 9

Rev 6.4 210810

Continued from page 8 Check this box if more than 64 landings (continued on page 10 for landings 65-96)

Floor Information (25-64)				Floor O	pening	s	C	Car Call	Securit	ty	ŀ	Hosp			
Floor	Floor Label	Floor Height	Car 1	Car 2	Car 3	Car 4	Car 1	Car 2	Car 3	Car 4	Car 1	Car 2	Car 3	Car 4	
Overl Defau	head	riciyitt	FR	FR	FR	FR	FR	FR	FR	FR	FR	FR	FR	FR	FR
64															
63															
62															
61															
60															
59															
58															
57															
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46															
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43			┢╧												
42															
41															
40															
39															
38															
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36															
35															
34															
33															
32															
31															
30															
29															
28															
27															
26															
25															
Enter height between landings 24	4 and 25 →														

Additional Landings and Openings (65-96)

C4 TRACTION AC - Engineering Data Form - Page 10 Rev 6.4 210810

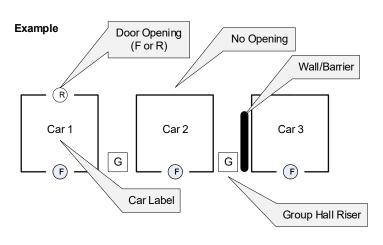
Continued from page 9

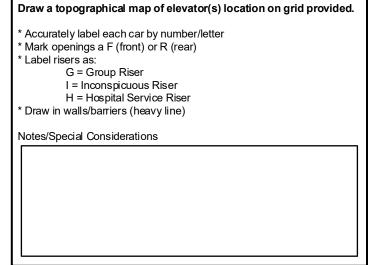
Floo	or Infor	mation (6	5-96)	Floor Openings				Car Call Security				Hall Call Security				Hosp
	Floor Index	Floor Label	Floor Height	Car 1	Car 2	Car 3	Car 4	Car 1	Car 2	Car 3	Car 4	Car 1	Car 2	Car 3	Car 4	
	Ove	erhead ult 13ft	Theight	FR	FR	FR	FR	FR	FR	FR	FR	FR	FR	FR	FR	FR
	96															
_	95															
	94															
-	93															
	92															
	91															
	90															
	89															
	88															
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-	72															
-	71															
-	70															
-	69															
-	68															
-	67															
-	66 65															
Enter height betwee		s 64 and 65→														
	in lanung:	s o4 and o5→														

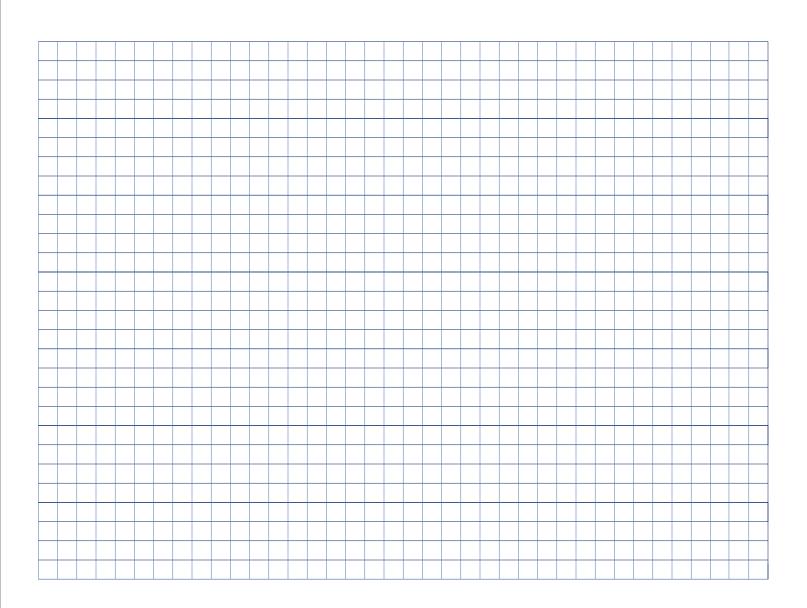
Elevator(s) Physical Layout

C4 TRACTION AC - Engineering Data Form - Page 11

Rev 6.4 210810







Traction Motor Purchase from Smartrise

- * Complete only if purchasing a motor from Smartrise
 * All other motor data must have been provided on page 4

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