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HYDRAULIC

Engineering Data Form – Page 1

Rev 6.5 210910

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.

Table of Contents

1. Job Information
2. Shipping & Pre-Wire
3. General Controller Information
4. Motor and Valve Data
5. Features & Functions
6. Fixtures
7. Car Door Data
8. Landings and Openings
9. Elevator(s) Physical Layout

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

Job Details

Job Name:
PO #:
Job Location (City & State)

Market Segment:
☐ Federal ☐ Health Care ☐ Financial
☐ Education ☐ Hospitality ☐ Residential
☐ Other

Purchasers Information: (If Packager, Fill in End User Info on Right)

Name:
Title:
Company:
Phone: Fax:
Cell:
Email:

Engineering Contact Information: (If different than above)

Name:
Phone: Fax:
Cell:
Email:

Date Filled Out

End User Information: (For Packager Use Only)

Name:
Title:
Company:
Phone: Fax:
Cell:
Email:

Job Site Address (Address Where Controller(s) Will Be Installed)

Street:
City:
State:
Zip Code:

Building Owner/Manager Information

Name:
Phone:
Email:
Street:
City:
State:
Zip Code:

FULL ELEVATOR SYSTEMS

Should you have a need for complete or partial elevator systems, contact Smartrise Sales for more information.

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 ***
*** SEES - Southern Elevator & Electrial Supply * Triumph Electric***

Shipping and Pre-Wire

Shipping Information

Contact Name:
Phone:
Contact Fax/Email:

Smartrise Call Prior to Shipping: ☐ Yes ☐ No
Carrier Call for Delivery Appointment: ☐ Yes ☐ No
Lift Gate Required: ☐ Yes ☐ No

Freight Terms

Use Smartrise Carrier: ☐ Yes ☐ No
☐ Will Call
☐ Pre-paid

Customer's Carrier Name:
Carrier's Account Number:
☐ Collect ☐ Third-Party
Third-Party Billing (Duties & Taxes)

Ship to Name/Company:
Shipping Address:

Bill To Address:

Shipping Schedule

Controller(s)	Desired Ship Date from Smartrise	Controller(s)	Desired Ship Date from Smartrise

Note: Desired ship date from Smartrise is not an arrival date.

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

☐ Dupar ☐ ERM ☐ Monitor ☐ Other
☐ ECC ☐ Innovation ☐ OTIS ☐ PTL
☐ EPCO ☐ MAD ☐ RSL Car Calls ☐ SEES
☐ RSL Hall Calls

Company Name:
Ship to Address:

Job Reference:
Contact Person at Mfg.

General Controller Information

Electrical Main Line and Transformer Specification

Main Line Specification:

- ☐ Main Line Volts (Transformer required if there is more than a 10% difference between the main line and motor volts)
- ☐ Three Phase (Default)
- ☐ Single
- ☐ Hz (Main Line is 60Hz unless stated otherwise)

Main Line Transformer (If Customer Requires)

- ☐ Provided by Smartrise
- ☐ Provided By Customer (Customer to provide drawing)
  - ☐ Secondary Voltage
  - ☐ kVA
  - ☐ Data Plate Copy Included

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)
  - ☐ 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)
- ☐ Other
- ☐ Dual Panels
- ☐ Remote Panel

Notes and Special Instructions

Configuration

- ☐ 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)

ASME 17.1 Elevator Safety Code Compliance

- ☐ 2019
- ☐ 2016
- ☐ 2013
- ☐ 2010
- ☐ 2007
- ☐ 2004
- ☐ 2000

Additional Local Code

- ☐ NYC (Appendix K)
- ☐ No Fire Service
- ☐ MASSACHUSETTS

Controller Layout Preference

- ☐ Standard (MR, CT, and COP) (Default)
- ☐ No Cartop
- ☐ No COP
- ☐ Custom:

We will notify you if the preference chosen cannot be honored

Hydraulic Features, Motor, and Valve Data

Hydraulic Features (☐ Features for all cars are the same as Car 1) Failure to provide data will result in delay of controller shipment Not Applicable ◯

Car	Contract Speed	Capacity	Battery Lowering	Low Pressure, Low Oil, and Oil Temp are all included	Viscocity Control	Adams Life Jacket	Roped	Gov Reset Coil Is 24 VDC	Gov Reset Coil Is 120 VAC
1			☐		☐	☐	☐	☐	☐
2			☐		☐	☐	☐	☐	☐
3			☐		☐	☐	☐	☐	☐
4			☐		☐	☐	☐	☐	☐
								Only if Roped Hydro	

Motor & Valve Data(☐ Data for all cars are the same as car 1) Failure to provide data will result in delay of controller shipment

Car	# Motor Leads	Motor Volts	FLA	HP	Valve Brand/Model	Valve Volts	# of Valves (1 Standard)	# of Coils (4 Standard)	Dual Jacks
1									☐
2									☐
3									☐
4									☐

Hydraulic Motor Control Preference

- ☐ Sprecher+Schuh (Soft Starter) (Default)
- ☐ Siemens (Soft Starter)
- ☐ Wye-Delta (via Contactors)
- ☐ Across the Line (via Contactors)

We will notify your if the preference chosen cannot be honored

Notes and Special Instructions:

Features & Functions

Special Features — Not Required ☐

- ☐ Remote (2nd) Fire Key Switch & Lamp
- ☐ Earthquake (Includes Buzzer and Lamp)
- ☐ Car-to-Lobby Key Switch
- ☐ Fan and Light Auto Shutoff Circuit (CT only)
- ☐ Machine Room Cabinet Light
- ☐ Machine Room Cabinet Power Plug
- ☐ Shunt-Trip
- ☐ Flood Sensor
- ☐ 'S' Button
- ☐ Enclosure Legs

Special Modes of Operation — Not Required ☐

- ☐ Independent Service (Required)
- ☐ Hoistway Access (Required)
- ☐ In-Car Inspection Switch (Uses top/bottom car calls)
- ☐ CT Inspection will not work unless an In-Car Key Switch is active (Access or IC Inspection)
- ☐ Non-standard

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
    Start _____ End _____
  - ☐ Key Switch
- ☐ 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)
  ☐ Non-directional (All hall call lamps)
  ☐ Other: _____

Emergency Power (If generator can not run all cars) Not Required ☐

E.P. Contact from Generator is
☐ Normally Open ☐ Normally Closed

Power Pre-Transfer Contact from Generator is
☐ Normally Open (Default) ☐ Normally Closed ☐ Not Present

- ☐ Emergency Power Car Selector Switch
  ☐ Single Car Selection (Default) ☐ Multiple Car Selection (Provide details below)
- ☐ Number of cars the generator can operate simultaneously (Default value is 1 car)
- ☐ Generator powers other Simplex/Groups

Car Call Security (Specify floors on page 8) — Not Required ☐

- ☐ Using COP Floor Buttons as Code Entry
- ☐ Using Dry Contacts from Card Readers and/or Key Switches
  ☐ Input in Car Station (Default) ☐ Input in Machine Room
- ☐ Override Security When on Independent Service or Attendant Service
- ☐ Provide a Car Call Security Override Input
  ☐ Input in Car Station (Default) ☐ Input in Machine Room
- ☐ Door Open Button Functions on Secured Landings

Other Considerations

Hall Call Security — Not Required ☐

- ☐ Provide Enable/Disable all Hall Calls Input (Simplex)
- ☐ Provide a Hall Call Security Override Input (Per floor)
  ☐ Dry Contacts in Hall Fixtures (Default) ☐ Signals in Machine Room

Other Considerations

Controller Monitoring System — Not Required ☐

Designed and Manufactured by Smartrise Engineering

- ☐ Machine Room Monitoring
- ☐ Local Monitoring (Lobby/Engineering/Management)
- ☐ Remote Monitoring (Cloud) – Requires Internet Connection

Designed and Manufactured by Integrated Display Systems

- ☐ Lift-Net with USB RS-422 Interface (Serial)
- ☐ Lift-Net with Moxa Unit Interface (Ethernet / LAN)

Designed and Manufactured by Kings III of America

- ☐ ORM (Interface only)
- ☐ BACnet

Custom Traveler and Hoistway Cable (Purchase from Smartrise)

Draka: ☐ By Draka ☐ By SEES James Monroe: ☐ Triumph Electric NY ☐ CED Not Required ◯

	Traveler Cable #1	Traveler Cable #2	Traveler Cable #3	Traveler Cable #4	Traveler Cable #5
CUSTOM LABLELING	Yes	Yes	Yes	No	No
# OF CONDUCTORS	26	33	43	27	69
CORE	Jute	Steel	Steel	Jute	Steel
DIAMETER	1.040"	1.190"	1.370"	0.940"	1.570"
# OF 14 AWG	4	4	4	3	5
# OF 18 AWG	14	20	23	20	40
# OF 20 AWG SHIELD	4	4	7	2	11
COAXIAL (RC/6U)	0	1	2	0	2
APPROVALS/BOTH	UL Type ETT, NEC Compliant, CSA Type ETT, CSA FT1				

Length of Cable(s) Per Car (in feet)

	Car 1		
	Car 2		
	Car 3		
	Car 4		
	Car 5		
	Car 6		

Hoistway Cable
Yes
21
N/A
0.640"
0
21
0
0
UL & CSA Hoistway NEC Compliant

All Fixtures must be 24 VDC / 6 Watts Max.

In Car Position Indicator Not Required ◯

☐ CE Micro Com (Default) ☐ Discrete Signals (One line per floor)
☐ Emotive 3-Wire ☐ Discrete Signals (Binary)
☐ MAD (Giotto) ☐ RSL ☐ MWSF: Hands Free

Other: _____

In Car Arrival Lantern Not Required ◯

☐ CE Micro Com (Default) ☐ Discrete Signals
☐ Emotive 3-Wire Bulb/Chime wattage (If discrete): ☐
☐ MAD (Giotto) ☐ RSL

Other: _____

In Car Passing Chime Not Required ◯

☐ CE Micro Com (Default) ☐ Discrete Signal ☐ RSL
☐ Emotive 3-Wire Bulb/Chime wattage (If discrete): ☐

In Car Voice Annunciator Not Required ◯

☐ CE Micro Com Interface Only ☐ Emotive 3-Wire Interface Only ☐ Speaker is Remote
☐ RSL

Other: _____

In Hall Position Indicator Not Required ◯

☐ 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 ☐ MWSF: Hands Free

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)

Lobby Panel Not Required ◯

☐ Door Open Lamp ☐ In Use Lamp
☐ On Independent Svc. Lamp ☐ In Service Lamp
☐ Emergency Power Lamp

Other Requirements

Car Door

Door Type 1	Use this door for all cars, or specify which cars use it				
	All ☐F ☐R	Car 1 ☐F ☐R	Car 2 ☐F ☐R	Car 3 ☐F ☐R	Car 4 ☐F ☐R

Hall Door Type

☐ Auto Passenger (Default) ☐ Powered Freight (See * below) ☐ Manual ☐ Other

Select Door Operator

☐	Abell	ATS 0090	Field "EZ"
☐	GAL	MODCTL	24 VDC interface relays
☐	GAL	MOD	L, G, or X
☐	GAL	MOVFR	230 VAC input voltage
☐	Kone	Mac	104 or 105D Interface board
☐	Kone	PMSSC	104 or 105D Interface board
☐	Otis	AT-400	240 VAC / 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 at bottom
☐	Courion	ILearn	
☐	EMS		
☐	Other		*Input Other door information at bottom

☐ **Door Protection**

☐ Photo Eye/Light Curtain (Default) ☐ Mechanical Safety Edge ☐ Door Hold Button

☐ Cam

☐ Mechanical ☐ DC ☐ AC (3-Phase) ☐ AC (Single Phase)

Volts | Amps

☐ Gate Release

☐ DC ☐ AC (3-Phase) ☐ AC (Single Phase) Volts | Amps

Other Door Considerations

Door Type 2	Use this door for all cars, or specify which cars use it				
	All ☐F ☐R	Car 1 ☐F ☐R	Car 2 ☐F ☐R	Car 3 ☐F ☐R	Car 4 ☐F ☐R

Hall Door Type

☐ Auto Passenger (Default) ☐ Powered Freight (See * below) ☐ Manual ☐ Other

Select Door Operator

☐	Abell	ATS 0090	Field "EZ"
☐	GAL	MODCTL	24 VDC interface relays
☐	GAL	MOD	L, G, or X
☐	GAL	MOVFR	230 VAC input voltage
☐	Kone	Mac	104 or 105D Interface board
☐	Kone	PMSSC	104 or 105D Interface board
☐	Otis	AT-400	240 VAC / 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 at bottom
☐	Courion	ILearn	
☐	EMS		
☐	Other		*Input Other door information at bottom

☐ **Door Protection**

☐ Photo Eye/Light Curtain (Default) ☐ Mechanical Safety Edge ☐ Door Hold Button

☐ Cam

☐ Mechanical ☐ DC ☐ AC (3-Phase) ☐ AC (Single Phase)

Volts | Amps

☐ Gate Release

☐ DC ☐ AC (3-Phase) ☐ AC (Single Phase) Volts | Amps

Other Door Considerations

* Freight/Other Door Operator Info

Manufacturer

Model

Reference #'s

Job Prints from Door Manufacturer are Required

Notes and Special Instructions:

Landings and Openings

Floor Information

	Floor Label	Floor Height
	Overhead -> (Default 13ft)	
15		
14		
13		
12		
11		
10		
9		
8		
7		
6		
5		
4		
3		
2		
1		
Default PI labels	**Pit ->** (Default 4ft)	

We will default to the lobby landing and the landing above for main and alternate fire floor respectively.

☐ ☐ ☐

☐ ☐ ☐

☐ ☐ ☐

☐ ☐ ☐

☐ ☐ ☐

☐ ☐ ☐

☐ ☐ ☐

☐ ☐ ☐

Main Fire/Lobby Floor

Alt Fire Floor

EMT/Flood Floor

Floor Openings

Car 1		Car 2		Car 3		Car 4	
F	R	F	R	F	R	F	R
☐	☐	☐	☐	☐	☐	☐	☐
☐	☐	☐	☐	☐	☐	☐	☐
☐	☐	☐	☐	☐	☐	☐	☐
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☐	☐	☐	☐	☐	☐	☐	☐
☐	☐	☐	☐	☐	☐	☐	☐
Pit							

☐ All cars same as Car 1

☐ All walk-through

☐ All front

Number of floors: ☐

Car Call Security

Car 1		Car 2		Car 3		Car 4	
F	R	F	R	F	R	F	R
☐	☐	☐	☐	☐	☐	☐	☐
☐	☐	☐	☐	☐	☐	☐	☐
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☐	☐	☐	☐	☐	☐	☐	☐
☐	☐	☐	☐	☐	☐	☐	☐
Pit							

☐ All cars same as Car 1

☐ All walk-through

☐ All front

Number of floors: ☐

Hall Call Security

Car 1		Car 2		Car 3		Car 4	
F	R	F	R	F	R	F	R
☐	☐	☐	☐	☐	☐	☐	☐
☐	☐	☐	☐	☐	☐	☐	☐
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☐	☐	☐	☐	☐	☐	☐	☐
☐	☐	☐	☐	☐	☐	☐	☐
Pit							

☐ All cars same as Car 1

☐ All walk-through

☐ All front

Number of floors: ☐

Hosp

F	R
☐	☐
☐	☐
☐	☐
☐	☐
☐	☐
☐	☐
☐	☐
☐	☐
☐	☐
☐	☐
☐	☐
☐	☐
☐	☐
☐	☐
☐	☐
Pit	

If mixed F/R please select boxes above.

☐ Include Hall Network CAT5 package

Controller (MR) to Hall Network (Hoistway) CAT5 Cable Length ☐ 25 ft (Default) ☐ 50 ft ☐ 100 ft

Hoistway Considerations

☐ Ambient Light Present in Hoistway

☐ Corner Post Rails

	Total Hoistway Height (ft)
Car 1	
Car 2	
Car 3	
Car 4	

☐ All cars same as Car 1

F R ☐ ☐

Walkthrough Only: Top

Location of Hoistway Up/Dn Switch Car#s

____ ____ ____ ____

F R ☐ ☐

Walkthrough Only: Bottom

Location of Hoistway Up/Dn Switch Car#s

____ ____ ____ ____

Overlay with Existing Equipment

☐ Cross Registration System

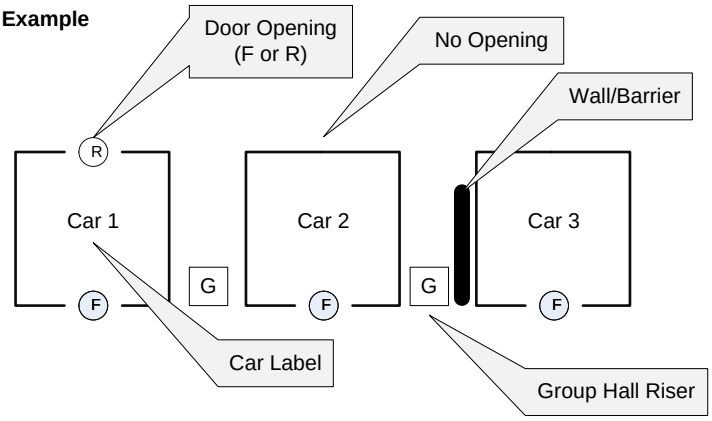
When you choose one of the above, a Smartrise engineer will contact you to gather details about the existing elevator controllers.

Important: Provide Physical Layout on Sheet 9

Notes and Special Instructions:

Elevator(s) Physical Layout

Example



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:
  - G = Group Riser
  - I = Inconspicuous Riser
  - H = Hospital Service Riser
* Draw in walls/barriers (heavy line)

Notes/Special Considerations