

# ALIMAK SE-H & SE-H Ex

## 1.1

### CAPACITY

Payload capacities:	4630 – 7055 lb
Average speed up/down at rated payload:	
Frequency control (VFC):	105 or 140 fpm
Max. lifting height with std. accessories:	410 ft <sup>1</sup>

1. Depending on the optional equipment chosen

### DIMENSIONS

Internal width:	5' 1 $\frac{3}{8}$ " – 5' 11 $\frac{3}{4}$ "
Internal length:	8' 6 $\frac{1}{4}$ " – 12' 9 $\frac{1}{2}$ "
Internal height:	8' 4 $\frac{1}{2}$ "
Vertical door opening width:	5' 0 $\frac{1}{4}$ " – 5' 10 $\frac{1}{2}$ "
Door opening height:	7' 8 $\frac{1}{2}$ "
Headroom required above landing:	16' 4 $\frac{3}{4}$ " / 17' 8 $\frac{1}{2}$ " <sup>1</sup>
Min. required shaft dimension = Landing enclosure outside dimension	–
Mast section length:	4' 11 $\frac{3}{8}$ "

1. 16' 5" = vertical bi-parting car door. 18' 8 $\frac{1}{2}$ " = vertical full height car door.

### CAR WEIGHT

6500 – 7100 lb

### CONTROLS

Operation:	<ul style="list-style-type: none"> <li>Collective / Selective. 2 – 16 landings</li> </ul>
Separate power voltage:	230V AC / 110V AC
Control circuit voltage:	230V AC
Motor control:	Variable frequency control (VFC)

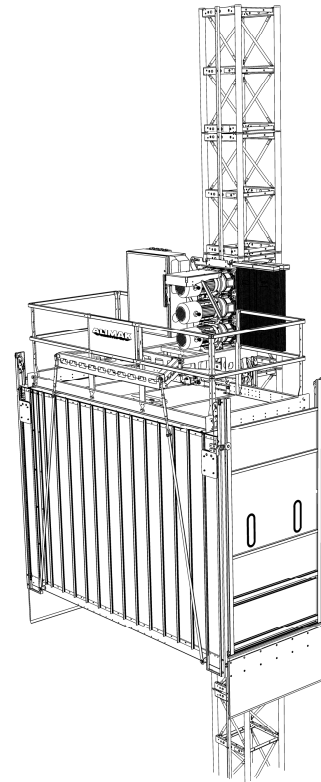


Fig B1

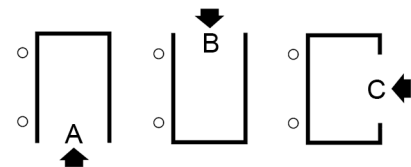


Fig B2  
Car door configuration

## 1.2 ALIMAK SE-H Lifts VFC

Power supply 480V, 60 Hz. Load & car size according to ASME 17.1.

**Table 3** Capacity and dimensions

Lift type	Car size w × l	Speed at 60 Hz VFC	No. of pass.	Payload	Door opening width
		fpm	ASME	lb	
SE 1900	5' 1½" × 8' 6¼"	105	26	4190	5' 0¼"
SE 2200	5' 1½" × 9' 4½"	105	30	4850	5' 0¼"
SE 2500	5' 1½" × 10' 2¾"	105	34	5510	5' 0¼"
SE 2700	5' 1½" × 11' 1"	105	37	5950	5' 0¼"
SE 3000	5' 1½" × 11' 11¼"	105	41	6610	5' 0¼"
SE 3300	5' 1½" × 12' 9½"	105	45	7270	5' 0¼"
SE 2400	5' 11¾" × 8' 6¼"	105	33	5290	5' 10½"
SE 2700	5' 11¾" × 9' 4½"	105	37	5950	5' 10½"
SE 3000	5' 11¾" × 10' 2¾"	105	41	6610	5' 10½"
SE 1900	5' 1½" × 8' 6¼"	140	26	4190	5' 0¼"
SE 2200	5' 1½" × 9' 4½"	140	30	4850	5' 0¼"
SE 2500	5' 1½" × 10' 2¾"	140	34	5510	5' 0¼"
SE 2700	5' 1½" × 11' 1"	140	37	5950	5' 0¼"
SE 3000	5' 1½" × 11' 11¼"	140	41	6610	5' 0¼"
SE 3200	5' 1½" × 12' 9½"	140	45	7270	5' 0¼"
SE 2400	5' 11¾" × 8' 6¼"	140	33	5290	5' 10½"
SE 2700	5' 11¾" × 9' 4½"	140	37	5950	5' 10½"
SE 3000	5' 11¾" × 10' 2¾"	140	41	6610	5' 10½"

**Table 4 Weights**

Lift type	Car size w × l	Car weight excl. machinery <sup>1</sup>	Car weight incl. machinery <sup>2</sup>
		lb	lb
SE 1900	5' 1½" × 8' 6¼"	4519	6504 (7230)
SE 2200	5' 1½" × 9' 4½"	4652	6636 (7385)
SE 2500	5' 1½" × 10' 2¾"	4850	6834 (7584)
SE 2700	5' 1½" × 11' 1"	4972	6955 (7738)
SE 3000	5' 1½" × 11' 11¼"	5115	7100 (NA)
SE 3300	5' 1½" × 12' 9½"	5004	6990 (NA)
SE 2400	5' 11¾" × 8' 6¼"	4784	6768 (7584)
SE 2700	5' 11¾" × 9' 4½"	4906	6890 (7760)
SE 3000	5' 11¾" × 10' 2¾"	5138	7122 (NA)

1. Stated weight for 5' 1½" wide lift car including 2 pcs full height doors (440 lb) each.  
Stated weight for 5' 11¾" wide lift car including 2 pcs full height doors (530 lb) each.  
Reduce stated weight with one (×1) or two (×2) times 100 lb where bi-parting door(s) occur.
2. Car made of stainless steel in brackets ().

**Table 5 Room required**

Lift type	Car size w × l	Headroom required above top landing	Min. required shaft dimensions	Enclosure outside dimensions
				w × l <sup>1</sup>
SE 1900	5' 1½" × 8' 6¼"	16' 5" / 18' 8½"	9' 0¾" × 9' 5¾"	9' 2¼" × 9' 9" / 10' 5¼"
SE 2200	5' 1½" × 9' 4½"	16' 5" / 18' 8½"	9' 0¾" × 10' 4"	9' 2¼" × 10' 7¼" / 11' 3¾"
SE 2500	5' 1½" × 10' 2¾"	16' 5" / 18' 8½"	9' 0¾" × 11' 2¼"	9' 2¼" × 11' 5½" / 12' 2"
SE 2700	5' 1½" × 11' 1"	16' 5" / 18' 8½"	9' 0¾" × 12' 0½"	9' 2¼" × 12' 3¾" / 13' 0¼"
SE 3000	5' 1½" × 11' 11¼"	16' 5" / 18' 8½"	9' 0¾" × 12' 10¾"	9' 2¼" × 13' 1¾" / 13' 11¼"
SE 3300	5' 1½" × 12' 9½"	16' 5" / 18' 8½"	9' 0¾" × 13' 9"	9' 2¼" × 14' 0" / 14' 8½"
SE 2400	5' 11¾" × 8' 6¼"	16' 5" / 18' 8½"	9' 11" × 9' 4½"	10' 0½" × 9' 9" / 10' 5¼"
SE 2700	5' 11¾" × 9' 4½"	16' 5" / 18' 8½"	9' 11" × 10' 2¾"	10' 0½" × 10' 7¼" / 11' 3¾"
SE 3000	5' 11¾" × 10' 2¾"	16' 5" / 18' 8½"	9' 11" × 11' 1"	10' 0½" × 11' 5½" / 12' 2"

1. Single or Double leaf swing door(s) / Horizontal bi-parting sliding door(s).

**Table 6** Speed and power

Lift type	Car size w × l	Speed at 60 Hz fpm	Power supply fuses A	Rated power kW	Starting current A A	Power kVA
SE 1900	5' 1½" × 8' 6¼"	105	50	3 × 13	48	~ 35
SE 2200	5' 1½" × 9' 4½"	105	60	3 × 13	52	~ 37
SE 2500	5' 1½" × 10' 2¾"	105	60	3 × 13	56	~ 46
SE 2700	5' 1½" × 11' 1"	105	80	3 × 13	58	~ 42
SE 3000	5' 1½" × 11' 11¼"	105	80	3 × 13	62	~ 45
SE 3200	5' 1½" × 12' 9½"	105	80	3 × 13	65	~ 47
SE 2400	5' 11¾" × 8' 6¼"	105	60	3 × 13	54	~ 39
SE 2700	5' 11¾" × 9' 4½"	105	80	3 × 13	58	~ 42
SE 3000	5' 11¾" × 10' 2¾"	105	80	3 × 13	62	~ 45
SE 1900	5' 1½" × 8' 6¼"	140	80	3 × 16	65	~ 47
SE 2200	5' 1½" × 9' 4½"	140	80	3 × 16	70	~ 51
SE 2500	5' 1½" × 10' 2¾"	140	80	3 × 16	76	~ 55
SE 2700	5' 1½" × 11' 1"	140	100	3 × 16	80	~ 58
SE 3000	5' 1½" × 11' 11¼"	140	100	3 × 16	86	~ 62
SE 3200	5' 1½" × 12' 9½"	140	100	3 × 16	90	~ 65
SE 2400	5' 11¾" × 8' 6¼"	140	80	3 × 16	74	~ 53
SE 2700	5' 11¾" × 9' 4½"	140	100	3 × 16	80	~ 58
SE 3000	5' 11¾" × 10' 2¾"	140	100	3 × 16	86	~ 62

### 1.3 ALIMAK SE-H Lifts VFD

Power supply 480V, 60 Hz. Load & car size according to ASME 17.1.

**Table 7 Capacity and dimensions**

Lift type	Car size w × l	Speed at	No. of pass.	Payload	Door opening width
		60 Hz			
		fpm	ASME	lb	
Car and car doors of extruded aluminium panels					
SE-Ex 2200	5' 1½" × 9' 4½"	127	30	4850	5' ¼"
SE-Ex 2500	5' 1½" × 10' 2¾"	127	34	5510	5' ¼"
SE-Ex 2400	5' 11¾" × 8' 6¼"	127	33	5290	5' 10½"
Car and car doors of stainless steel					
SE-Ex 2000	5' 1½" × 8' 6¼"	127	26	4630	5' ¼"

**Table 8 Weights**

Lift type	Car size w × l	Car weight incl. machinery <sup>1</sup>	Car weight excl. machinery
		lb	lb
Car and car doors of extruded aluminium panels			
SE-Ex 2200	5' 1½" × 9' 4½"	8270	NA
SE-Ex 2500	5' 1½" × 10' 2¾"	8180	NA
SE-Ex 2400	5' 11¾" × 8' 6¼"	8160	NA
Car and car doors of stainless steel			
SE-Ex 2000	5' 1½" × 8' 6¼"	8600	NA

1. Stated weight for 5' 1½" wide lift car including 2 pcs full height doors (440 lb) each.  
 Stated weight for 5' 11¾" wide lift car including 2 pcs full height doors (530 lb) each.  
 Reduce stated weight with one (× 1) or two (× 2) times 100 lb where bi-parting door(s) occur.

**Table 9** Room required

Lift type	Car size w × l	Headroom required above top landing  m	Min. required shaft dimensions  mm	Enclosure outside dimensions w × l <sup>1</sup>  mm
Car and car doors of extruded aluminium panels				
SE-Ex 2200	5' 1½" × 9' 4½"	16' 5" / 18' 8½"	9' 0¾" × 10' 4"	9' 2¼" × 10' 7¼" / 11' 3¾"
SE-Ex 2500	5' 1½" × 10' 2¾"	16' 5" / 18' 8½"	9' 0¾" × 11' 2¼"	9' 2¼" × 11' 5½" / 12' 2"
SE-Ex 2400	5' 11¾" × 8' 6¼"	16' 5" / 18' 8½"	9' 11" × 9' 4½"	10' 0½" × 9' 9" / 10' 5¼"
Car and car doors of stainless steel				
SE-Ex 2000	5' 1½" × 8' 6¼"	16' 5" / 18' 8½"	9' 0¾" × 9' 5¾"	9' 2¼" × 9' 9" / 10' 5¼"

1. Single or Double leaf swing door(s) / Horizontal bi-parting sliding door(s).

**Table 10** Speed and power

Lift type	Car size w × l	Speed at 50 Hz  m/s	Power supply fuses  A	Rated power  kW	Starting current A  A	Power  kVA
Car and car doors of extruded aluminium panels						
SE-Ex 2200	5' 1½" × 9' 4½"	127	80	3 × 17.2	73	~ 53
SE-Ex 2500	5' 1½" × 10' 2¾"	127	80	3 × 17.2	76	~ 54
SE-Ex 2700	5' 11¾" × 8' 6¼"	127	80	3 × 17.2	75	~ 54
Car and car doors of stainless steel						
SE-Ex 2000	5' 1½" × 8' 6¼"	127	80	3 × 17.2	73	~ 53

**1.4 Common data**  
**Mast section**

**GUIDE RAILS / MASTS**

Type: Tubular steel with integrated rack  
Section length 4' 11<sup>3</sup>/<sub>8</sub>"

Alternative:	Type	Weight <sup>1</sup>	Tie-distance
	A50	243 lb	up to 80 ft

1. tube dia. 3" × 11/64"

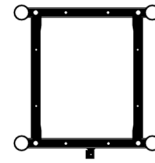


Fig B3  
A. Square tube mast section type A50

**Electrical data**

**POWER SUPPLY**

Voltage: VFC 380 – 500 V, 50/60 Hz

**ELECTRICAL MOTOR**

Type AC squirrel cage motor.

Electrical motor for regular SE lifts

Alternative: (kW at 25 % VFC 3 × 13 kW Star / 1 × 19 kW Delta  
intermittent duty)

Electrical motor for SE-Ex lifts

Alternative: (kW at continuous VFC 3 × 15 kW, Delta (17.2 kW at 60  
duty (100%)) Hz)

**ELECTRICAL BRAKE**

Type spring applied electromagnetic disc brake:

13.0 kW:s motor brake torque: 125 lbf x ft

Electrical ingress protection class: minimum IP 54

Measured noise level in car less than ≤ 80 db(A)

Operating temperature range +104 °F / – 4 °F

**Surface treatment**

Structural parts (mast, car frame):

- Hot dip galvanized

Car and enclosure panels:

- Anodized aluminium
- Stainless steel (for extreme environment)

Other parts:

- Hot dip galvanized
- Stainless steel

**Optional features and others**

- Platforms and stairs
- Automatic rack lubricator
- Ventilation fan
- Extra ventilation
- Overload detection
- Automatic return to base, automatic alarm etc
- Windows in car
- PTC-detection in motor windings
- Heater in motor windings