

ONE WORLD. ONE COMPANY. ONE SOLUTION.

# Model 85S

ThyssenKrupp Elevator's synergy 85S is a self-supported application that does not place additional loads onto your building structure. For travel up to 85'-0" and a speed of 150 fpm, this low-cost MRL uses the same footprint and is an alternative to the standard hydraulic unit.

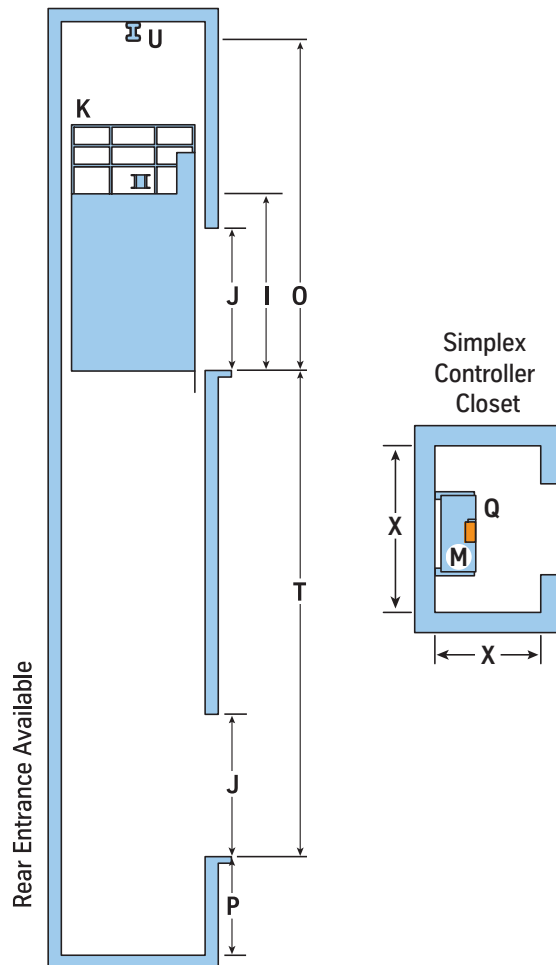
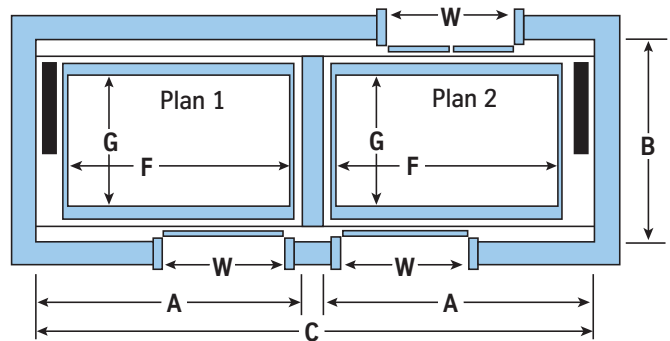
ThyssenKrupp Elevator's determination to develop the most innovative products available has allowed us to become committed to machine room-less elevator technology. synergy is a cost-efficient solution for architects, builders and building owners that uses less space and meets or exceeds today's safety standards.

synergy's compact permanent magnet gearless machine is a highly efficient sustainable solution that provides the performance of a much larger geared-driven system. These permanent magnet gearless machines, coupled with efficient drives in place of conventional geared machines, use less energy. In addition, the machines do not require contaminating gear lubricants.

Both the counterweight and the car are roped 2:1, with standard steel ropes. Innovative design reduces hoistway footprint, as well as overhead and pit depth requirements. In fact, synergy's reduced overhead eliminates the need to alter the superstructure of roofs at all, thus giving it lower overhead requirements than other MRL systems.

The 85S offers many cab options which are quick to install and lighter in weight, while offering a range of aesthetic options. The TKAP and TKLP cabs are available with a standard suspended ceiling in baked enamel or metal pan downlight, featuring a standard column swing return. Depending on the needs of your building, Signa4, Traditional or Vandal Resistant signal fixtures provide a blend of taste and functionality.

It all adds up to maximum design freedom and flexibility – flexibility that allows you to design and plan without compromise. Contact your local ThyssenKrupp Elevator representative at (877) 230.0303.



ThyssenKrupp Elevator Americas



ThyssenKrupp

# Model 85S Data Tables

plan 1

Capacity (lbs.)		2100	2500	3000	3500
Speed (fpm)		150	150	150	150
T	Maximum Travel	85'-0"	85'-0"	85'-0"	85'-0"
A	Hoistway Width	7'-4" <sup>1</sup>	8'-4" <sup>1</sup>	8'-4" <sup>2</sup>	8'-4" <sup>2</sup>
B	Hoistway Depth	5'-9" <sup>1</sup>	5'-9" <sup>1</sup>	6'-3"	6'-11"
C	Duplex Hoistway Width <sup>7</sup>	15'-0" <sup>1</sup>	17'-0" <sup>1</sup>	17'-0" <sup>2</sup>	17'-0" <sup>2</sup>
F	Clear Inside Width	5'-8"	6'-8"	6'-8"	6'-8"
G	Clear Inside Depth	4'-3"	4'-3"	4'-9"	5'-5"
W	Door Opening Width	3'-0"	3'-6"	3'-6"	3'-6"
J	Door Opening Height	7'-0"	7'-0"	7'-0"	7'-0"
I	Cab Height <sup>8</sup>	7'-10"	7'-10"	7'-10"	7'-10"
P	Pit <sup>6</sup>	5'-0"	5'-0"	5'-0"	5'-0"
O	Overhead <sup>4</sup>	13'-0"	13'-0"	13'-4"	13'-4"
	Support Type	Self-Supporting	Self-Supporting	Self-Supporting	Self-Supporting
	Rope Size	8mm	8mm	8mm	8mm
X	Controller Closet <sup>3,5</sup>	4'-4" x 1'-8"	4'-4" x 1'-8"	4'-4" x 1'-8"	4'-4" x 1'-8"
	Cwt Location	Side	Side	Side	Side
	Roping	2:1 Underslung	2:1 Underslung	2:1 Underslung	2:1 Underslung

- 8 Cab heights of 8'-10" and 9'-10" also available (in one foot increments only). Any increase in cab heights will impact overhead requirements.
- 9 Center opening doors are not available on this model.
- 10 Automatic Rescue will increase your controller closet size to 6'-6" x 2'-0".
- NOTES: **(K)** represents Car Top Rail, if required. 5,000 lb. capacity safety beam **(U)** is by others.

Hoistway dimensions are based on 1" out of plumb and no occupied space below the hoistway. If these conditions cannot be met, then consideration must be given for additional required space. Hoistway temperature range = 32° F minimum, 122° F maximum. Relative humidity not to exceed 95% non-condensing.

- For Seismic Zones 2 or greater, add 4" to hoistway width and 1" to hoistway depth. For duplex cars, add 8" in width.
- For Seismic Zones 2 or greater, add 4" to hoistway width. For duplex cars, add 8" in width.
- Local code authority approval required for extending electrical clearances into hall with open doors.
- Overhead requirements increase by 2" with groups of 2 or more cars and/or seismic conditions.
- Controller closet temperature range 32° F. Min., 104° F. Max. 10% - 95% Non-condensing Relative Humidity. **(M)** Disconnect, mounted on top of controller **(Q)**, is by others. Additional controller closet size may be required with security cabinet or additional electrical boxes or features.
- Pit Ladder **(P)** by others. Requirements for Pit Ladder cut out: 1'-11 1/2" x 2 1/2" notch for 5" ladder; 1'-11 1/2" x 5" notch for 7" ladder. Cut out location varies, depending on project conditions. Refer to your specific project layout, or contact your local TKE representative for details.
- Duplex Hoistway Width includes 4" allowance for divider beam.

plan 2

Capacity (lbs.)		2100	2500	3000	3500
Speed (fpm)		N/A	150	150	150
T	Maximum Travel	N/A	85'-0"	85'-0"	85'-0"
A	Hoistway Width <sup>1</sup>	N/A	8'-4"	8'-4"	8'-4"
B	Hoistway Depth	N/A	6'-8 3/4"	7'-2 3/4"	7'-10 3/4"
C	Duplex Hoistway Width <sup>1,6</sup>	N/A	17'-0"	17'-0"	17'-0"
F	Clear Inside Width	N/A	6'-8"	6'-8"	6'-8"
G	Clear Inside Depth	N/A	4'-3 1/2"	4'-9 1/2"	5'-5 1/2"
W	Door Opening Width	N/A	3'-6"	3'-6"	3'-6"
J	Door Opening Height	N/A	7'-0"	7'-0"	7'-0"
I	Cab Height <sup>7</sup>	N/A	7'-10"	7'-10"	7'-10"
P	Pit <sup>5</sup>	N/A	5'-0"	5'-0"	5'-0"
O	Overhead <sup>3</sup>	N/A	13'-0"	13'-4"	13'-4"
	Support Type	N/A	Self-Supporting	Self-Supporting	Self-Supporting
	Rope Size	N/A	8mm	8mm	8mm
X	Controller Closet <sup>2,4</sup>	N/A	4'-4" x 1'-8"	4'-4" x 1'-8"	4'-4" x 1'-8"
	Cwt Location	N/A	Side	Side	Side
	Roping	N/A	2:1 Underslung	2:1 Underslung	2:1 Underslung

NOTES: **(K)** represents Car Top Rail, if required. 5,000 lb. capacity safety beam **(U)** is by others.

Hoistway dimensions are based on 1" out of plumb and no occupied space below the hoistway. If these conditions cannot be met, then consideration must be given for additional required space. Hoistway temperature range = 32° F minimum, 122° F maximum. Relative humidity not to exceed 95% non-condensing.

- For Seismic Zones 2 or greater, add 4" to hoistway width. For duplex cars, add 8" in width.
- Local code authority approval required for extending electrical clearances into hall with open doors.
- Overhead requirements increase by 2" with groups of 2 or more cars and/or seismic conditions.
- Controller closet temperature range 32° F. Min., 104° F. Max. 10% - 95% Non-condensing Relative Humidity. **(M)** Disconnect, mounted on top of controller **(Q)**, is by others. Additional controller closet size may be required with security cabinet or additional electrical boxes or features.
- Pit Ladder **(P)** by others. Requirements for Pit Ladder cut out: 1'-11 1/2" x 2 1/2" notch required for 5" ladder; 1'-11 1/2" x 5" notch required for 7" ladder. Cut out location varies, depending on project conditions. Refer to your specific project layout, or contact your local TKE representative for details.
- Duplex Hoistway Width includes 4" allowance for divider beam.
- Cab heights of 8'-10" and 9'-10" also available (in one-foot increments only). Any increase in cab heights will impact overhead requirements.

