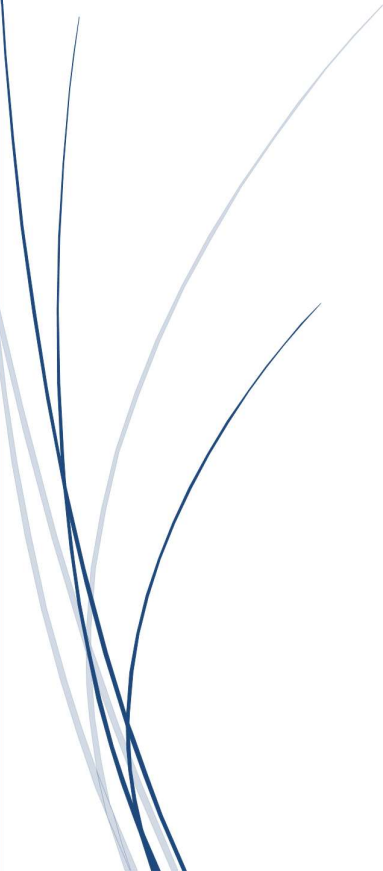




SuRas  
ELEVATORS



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## *Elevator Product Range*



### Home Lift



### Regular Lift



### Goods Lift



### Hospital Lift



### Dumb Waiter



### Car Lift





# Products And Solutions For Every Requirement

Our job is to make customers requirement easy

## Product:

If you need special product that provides users and managers with the best conveniences and excellent services, our product is the right product you are looking for.

The primary features of product are its superior economic efficiency, premium performance, various functions, simple and easy maintenance.

## Energy Efficient Elevators: >>

- ▶ **Gearless drives:** Adoption of PMSM motor with inverter IPM control will save energy up to 30 % over geared drives
- ▶ **Re Gen (Energy saving control system):** Adopting the high-quality IPM, but high-speed DSP chip on the main board can regenerate the high-quality of the electric power. Basically, it returns regenerated energy from motor into the buildings internal power network for re-use.

Not only realization of the function for energy regeneration but also, improvement of noise, vibration and Ride Comfort Enhancement.

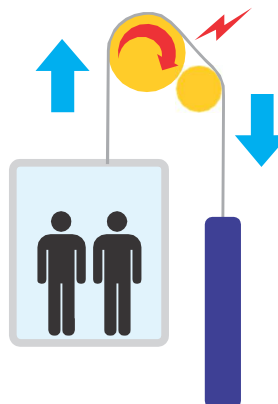
## Feature: >>

- Saving energy, the protection of the environment matching with PMSM and saving 58% energy
- Eco-friendly technology
- Suitable for gearless motor that consumes 50% less power
- Adopted the newest IPM and main board
- 100% energy regeneration under motoring condition as well as regeneration condition
- Adopted high efficient EMI noise filter, more clean feedback energy

### How it works

The condition 1 of the energy regeneration:

The car moves up with the car lighter



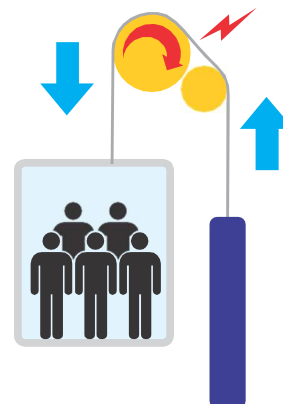
The car moves up with car lighter

In case the car is lighter than the balance weight, the motor works under generation mode.

Also, the electric energy is generated and regenerated to a distribution panel by regen unit.

The condition 2 of the energy regeneration:

The car moves down with the car heavier



The car moves down with the car heavier

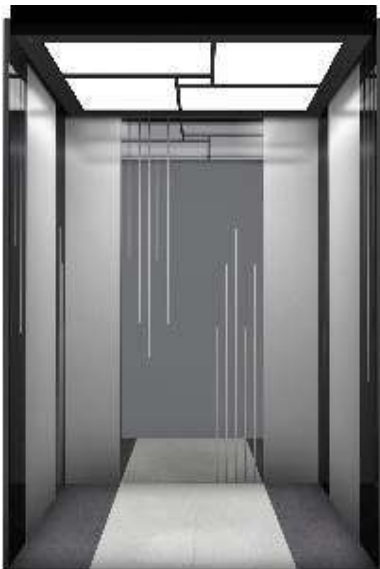
In case the car is heavier than the balance weight, the motor works under generation mode.

also, the electric energy is generated and regenerated to a distribution panel by ReGen Unit

## CAR INTERIORS

### CAGE DESIGN

<b>Ceiling</b>	Mirror SS Frame + Acrylic
<b>Wall</b>	Long Hairline SS plated in black Titanium + Mirror SS Strip
<b>Handrail</b>	SS Pipe
<b>Floor</b>	Marble



### CAGE DESIGN

<b>Ceiling</b>	Hairline SS Frame + Acrylic
<b>Wall</b>	Hairline SS + Mirror SS
<b>Handrail</b>	---
<b>Floor</b>	Marble

### CAGE DESIGN

<b>Ceiling</b>	Hairline SS + Acrylic +LED Light
<b>Wall</b>	Hairline SS + Mirror SS
<b>Handrail</b>	-----
<b>Floor</b>	PVC

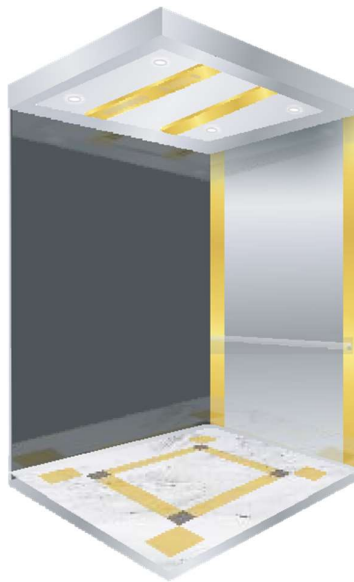


Cabin Panel finish with choices of Powder Coated Steel, Hairline Stainless Steel or Mirror/ Etched Stainless Steel.



**E18105**

Ceiling : E58002 ( Lighting decoration, mirror St. St. frame)  
 Car Wall : Hairline St. St.  
 Floor : PVC



**E18202**

Ceiling : E58009 ( Lighting Decoration, mirror St. St. frame with down light at two sides)  
 Car Wall : St. St. hairline with central panel on all 3 sides of mirror finish or etched.  
 Handrail : E77010 (Hairline st. st.)  
 Floor : PVC



**E18706**

Ceiling : E58017 ( Hairline st. st.)  
 Car Wall : Rear wall (Center Panel of etched mirror finish and additional panels of mirror finish side walls of st. st. hairline finish)  
 Handrail : E77010 (Hairline st. st.)  
 Floor : PVC  
 COP : E18303



**E58002**



**E58009**



**E58017**

## Types of Doors

Imperforated Collapsible Manual Door



Swing Manual Door



Telescope Manual Door



S.S. Centre Opening Auto Door



S.S. Automatic Glass Door



S.S. Telescopic Auto Door



M.S. Central Auto Opening



Collapsible Door



## Elevators Interior Designs (Car Design)

S.S. Cabin



Designer Cabin



MS Cabin





# Ceiling Design



# Accessories

Designed with the same precision as our mechanical engineering to give quality satisfaction.



## Ceiling



Center LED



Square LED



Round LED

## Handrail



SS Hairline

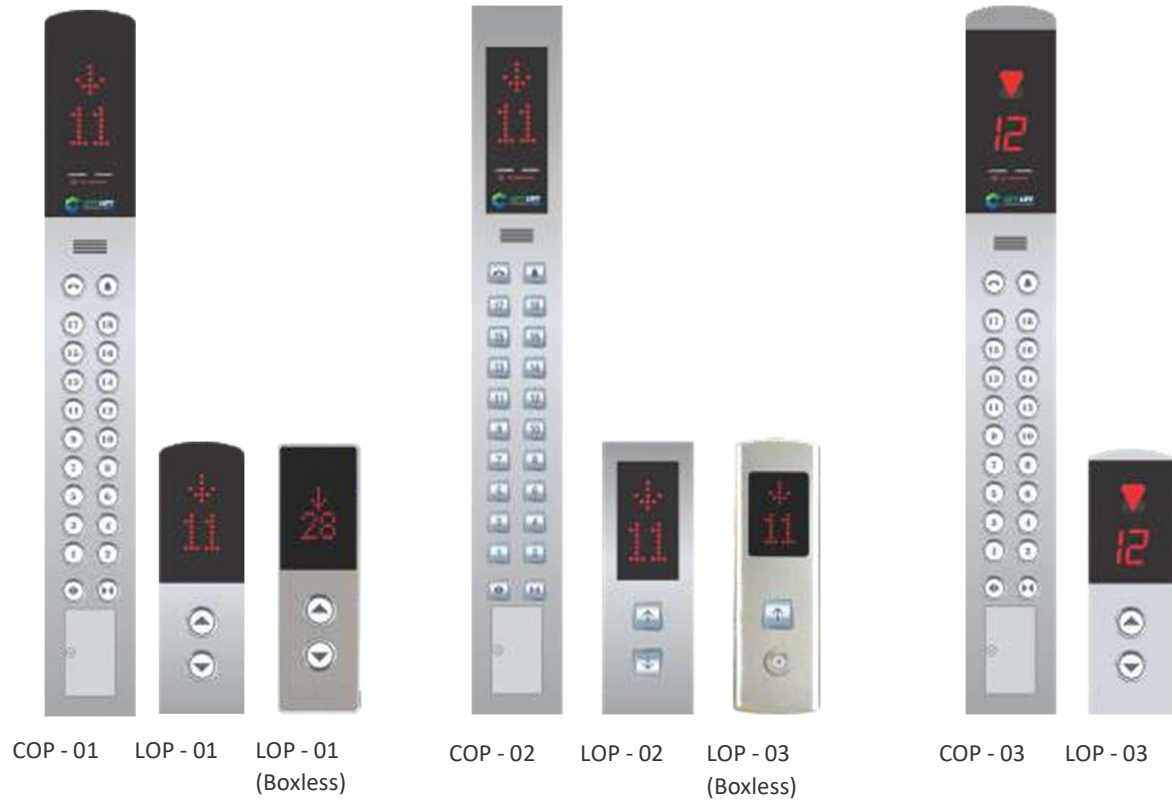
## Half-size mirror



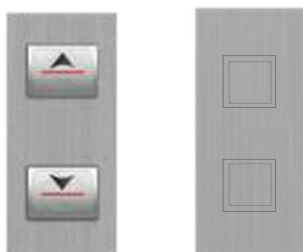
- Actual colors of the product may vary from the printed brochure.
- SS Handrail (on rear wall) and Mirror (full width, half length) is optional.
- COP/LOP/LIOP Button comes with Braille as a standard option.

## CELLING

### CAR OPERATING PANEL



## HALL BUTTONS



## BUTTONS



## CAR & HALL POSITION INDICATORS



### Operative System:

#### Selective Collective Operation

The momentary pressing on one or more car buttons shall send the car to the designated landings in the order in which the landings are reached by the car, irrespective of the sequence in which are in the direction of travel, and each call shall be cancelled when answered.

#### Attendant Operation

The operating of an elevator can be changed from normal full automatic operation to the attendant service by an attendant switch, is located on the car operation panel with a sliding cover.

#### 6-8 cars full group \*

Micro computer employed group operation control system which is provided with a GA (Genetic Algorithm) for allocation process and with a Neural Network or traffic learning of a building is applied to improve service and handling capacity 24 hours a day. It handles various building traffic patterns, based on real time feedback system. passenger waiting time is kept at the absolute minimum.

### Service Functions:

**Safety drive:** When a car stops between floor due to mechanical malfunction, the car descends to the nearest floor below.

**Anti nuisance:** In case of substantial deference between the no. Of calls registered on the car operation panel and actual land in the elevator prevents unnecessary operation by cancelling all registered calls when it arrives at the nearest floor.

**Automatic door open & close time adjustment:** door open and close times are automatically adjusted depending on whether the call is hall or a car call to increase the operating efficiency.

**Car door protective edge:** Extending the full height of the car door this device causes the door to return to the fully open position should the door encounter a person or obstacle while closing.

**Advanced door opening\*** To minimise passenger transfer time and maintain operating efficiency, the car and hoist way doors begin to open as the car arrives at floor level.

**Micro levelling:** An automatic two way levelling device is provided to maintain the car level with the landing, regardless of elevator load or direction of travel.

**Automatic car light and fan turn off:** Car illumination and fan are turned off automatically in case if there is no hall call or car call, saving energy.

**Car call cancellation:** Allows cancellation of an incorrectly registered car call. If you push a wrong floor button in the car you can cancels it by pressing the floor button twice consecutively.

**Detection of jammed hall button and exclusion from operation service\*** If a button jammed mechanically, the hall car will be automatically it bypassed after being serviced once, until the problem is resolved.

**Overload:** (110%of the rated load) Holding stop: when the number of passengers exceeds the normal capacity, a buzzer sounds and the elevator remains stop at that floor. When the number of passengers disembark, the buzzer stops, the elevator doors close, and operation continues.

#### \*Optional Features

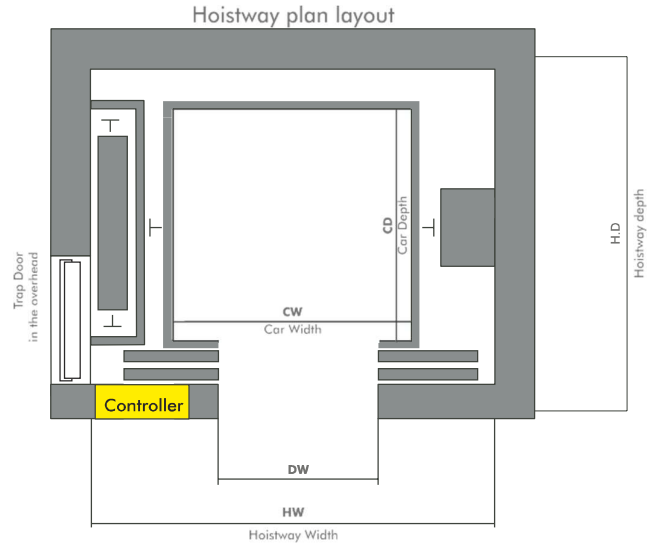
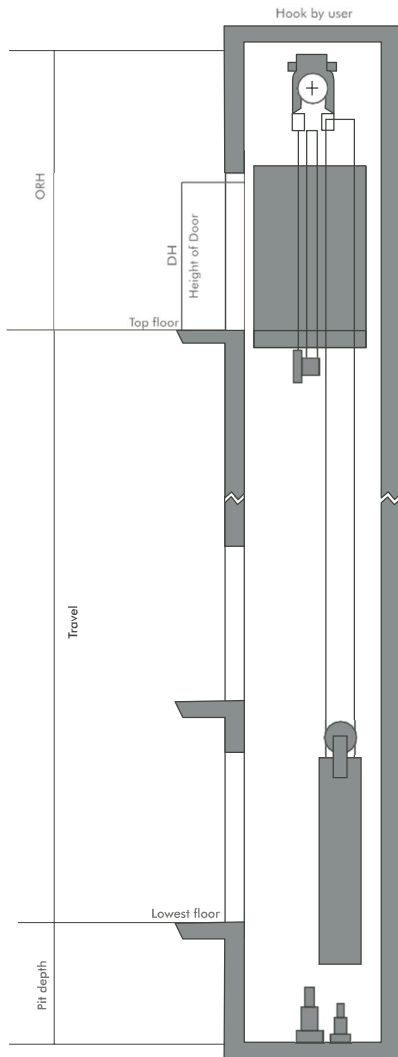
Note: the actual colors of the complected products shall be slightly deferent with those on the catalogue

## TECHNICAL DATA - SPECIFICATION FOR PASSANGER

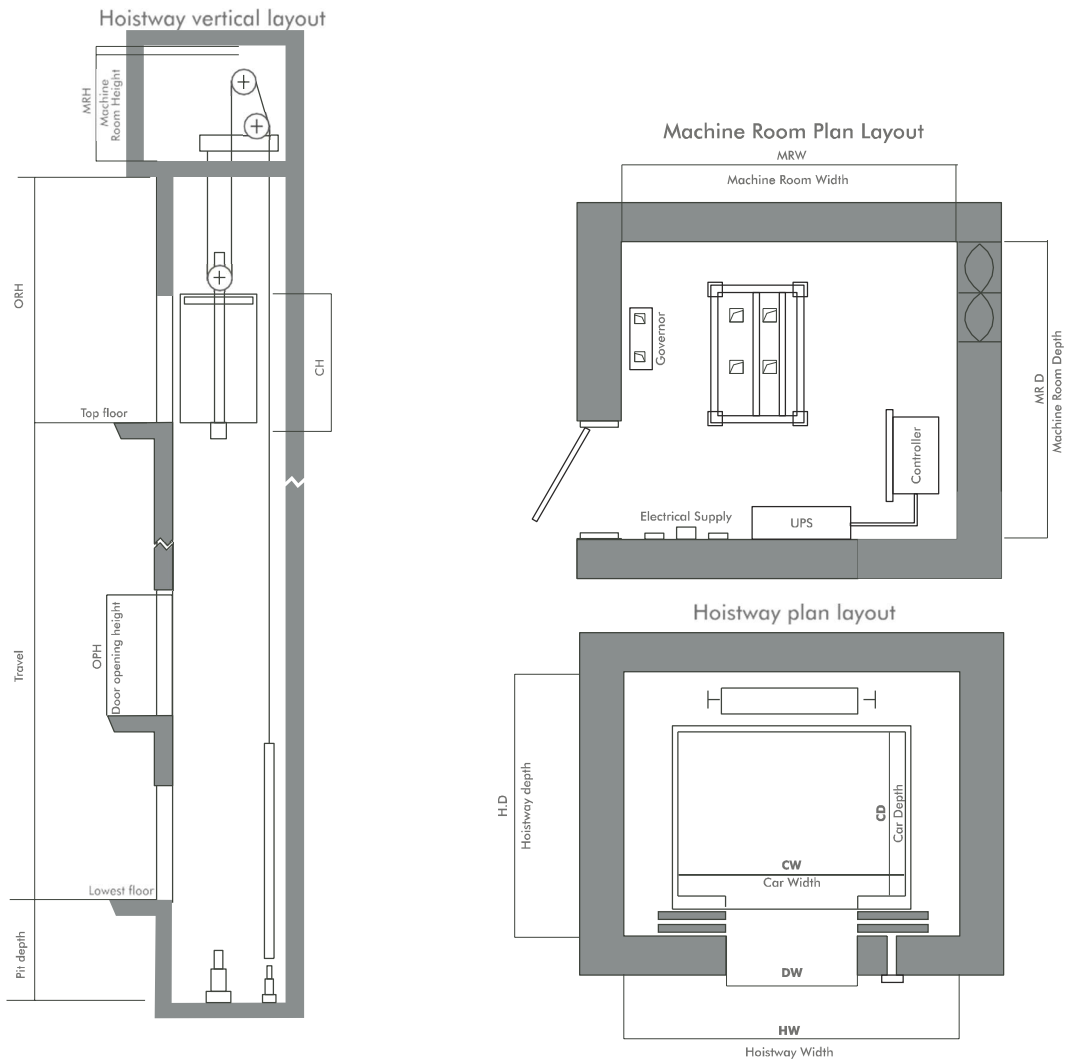
### HIGH-MID-LOW SPEED (MR)

Speed (m/min)	Pass	Load (kg)	Car Size			Hoist Minimum Size				M/R Height	Over Head	PIT Depth	M/R Reaction		Pit Platform Reaction	
			Entrance Width	Inside Width	Inside Depth	Simplex		Duplex					R1	R2	R3	R4
			OP	CA	CB	X1	Y	X2	Y				MH	OH	PIT	R1
105	8	550	800	1400	1030	1800	1650 (1700)	3750	1650 (1700)	2450	5000	2100	4200	2800	5432	3954
	9	600	800	1400	1100	1800	1700 (1750)	3750	1700 (1750)				4500	3100	5725	4127
	10	700	800	1400	1250	1800	1850	3750	1850				4900	3400	6353	4153
	11	750	800	1400	1350	1800	1950	3750	1950				5250	3700	6679	4717
	13	900	900	1600	1350	2000	1950	4150	1950				5750	4100	8211	5843
	15	1000	900	1600	1500	2000	2100	4150	2100				6150	4600	8695	6095
	17	1150	1000	1800	1500	2350	2200	4850	2200				9400	7750	10762	7716
			1100	2000	1350	2550	2050	5250	2050							
20	1350	1000	1800	1700	2350	2400	4850	2400	10000	8250	11916	8392				
		1100	2000	1500	2550	2200	5250	2200								
24	1600	1100	2000	1750	2550	2450	5250	2450	11550	8700	13469	8392				
		1100	2150	1600	2700	2300	5500	2300								
120	13	900	900	1600	1350	2200	2150	4550	2150	2700	5600	2400	11100	7500	13250	10100
	15	1000	900	1600	1500	2200	2300	4550	2300				11650	7850	13950	10550
	17	1150	1000	1800	1500	2400	2300	4950	2300				12300	8250	16600	12650
	20	1350	1000	1800	1700	2400	2500	4950	2500				13100	8850	18050	13550
	24	1600	1100	2000	1750	2600	2550	5350	2550				13900	9350	19550	14350
150	13	900	900	1600	1350	2200	2150	4550	2150	2700	5600	2400	11100	7500	13250	10100
	15	1000	900	1600	1500	2200	2300	4550	2300				11650	7850	13950	10550
	17	1150	1000	1800	1500	2400	2300	4950	2300				12300	8250	16600	12650
	20	1350	1000	1800	1700	2400	2500	4950	2500				13100	8850	18050	13550
	24	1600	1100	2000	1750	2600	2550	5350	2550				13900	9350	19550	14350
180	15	1000	900	1600	1500	It is advisable to avoid		4600	2400	2700	6200	3200	12000	8100	15950	13300
	17	1150	1000	1800	1500		5000	2400	12600				8500	17450	14450	
	20	1350	1000	1800	1700		5000	2600	13300				9000	19100	15600	
	24	1600	1100	2000	1750		5400	2650	14200				9600	20550	16500	
210	15	1000	900	1600	1500			4600	2400	2700	6200	3200	12000	8100	15950	13300
	17	1150	1000	1800	1500	5000	2400	12600	8500				17450	14450		
	20	1350	1000	1800	1700	5000	2600	13300	9000				19100	15600		
	24	1600	1100	2000	1750	5400	2650	14200	9600				20550	16500		
240	17	1150	1000	1800	1500			5000	2400	2700	7000	3800	12600	8500	17500	14450
	20	1350	1000	1800	1700	5000	2600	13300	9000				19100	15600		
	24	1600	1100	2000	1750	5400	2660	14200	9600				20550	16500		
300	18	1150	1000	2000	1550			6000	2600	3000	7800	4500	12800	8900	17600	14600
	21	1350	1000	2100	1650	6400	2750	13500	9200				19500	15800		
	26	1600	1100	2200	1900	6900	3050	14500	9600				20800	16800		
360	18	1150	1000	2000	1550			6000	2600	3000	7800	4500	12800	8900	17600	14600
	21	1350	1000	2100	1650	6400	2750	13500	9200				19500	15800		
	26	1600	1100	2200	1900	6900	3050	14500	9600				20800	16800		

Hoistway vertical layout



No. of person	Load in) (Kg	Car Width mm	Car Depth mm	Door Width mm	Hoist way Width mm	Hoist way Depth mm
6	408	1000	1100	700	1825	1500
8	544	1300	1100	800	2075	1500
10	680	1350	1300	800	2150	1625
13	884	1600	1350	900	2450	1700
15	1020	1600	1500	1000	2450	1820



No. of person	Load in (kg)	Car Width (mm)	Car Depth (mm)	Door Width (mm)	Hoist way Width (mm)	Shaft Depth (mm)
6	408	1000	1100	700	1550	1550
8	544	1300	1100	800	1700	1550
10	680	1350	1300	800	1750	1750
13	884	1600	1350	900	2000	1900
15	1020	1600	1500	1000	2000	2050
16	1088	1600	1625	1000	2150	2100
20	1360	1800	1725	1000	2200	2200