



SIGMA

Solon Premium

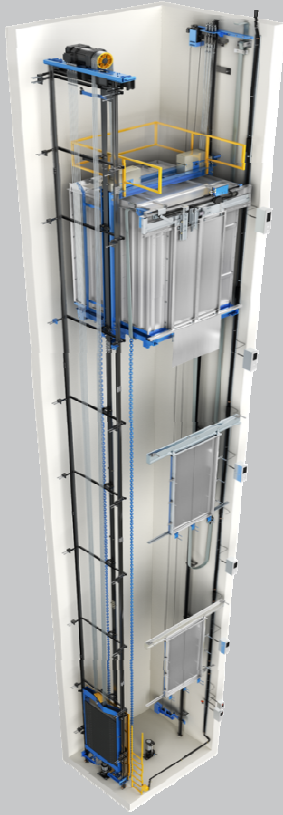
Reaching New Heights



PART 1
PRODUCT OVERVIEW

Reaching New Heights

SOLON PREMIUM (MRL)



Rated Speed (m/s)	Load (Kg)				
	450	550	630	800	1000
1.0					
1.5					
1.75					

80m

Max rise

30

Max stop

200kg

Max Finish Load

G4C

Max group control

DDS

Available

Code: GB7588-A1 & EN81-1 & **EN81-20** & MS2021

Reaching New Heights

SONLON PREMIUM(MRL)



Key Changes

New Pencil machine
MOR



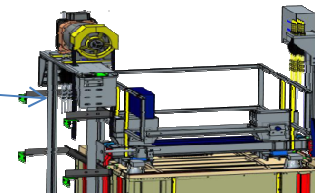
Reinforced car wall
Easy install design



New aesthetics option



Over slung



LED lighting

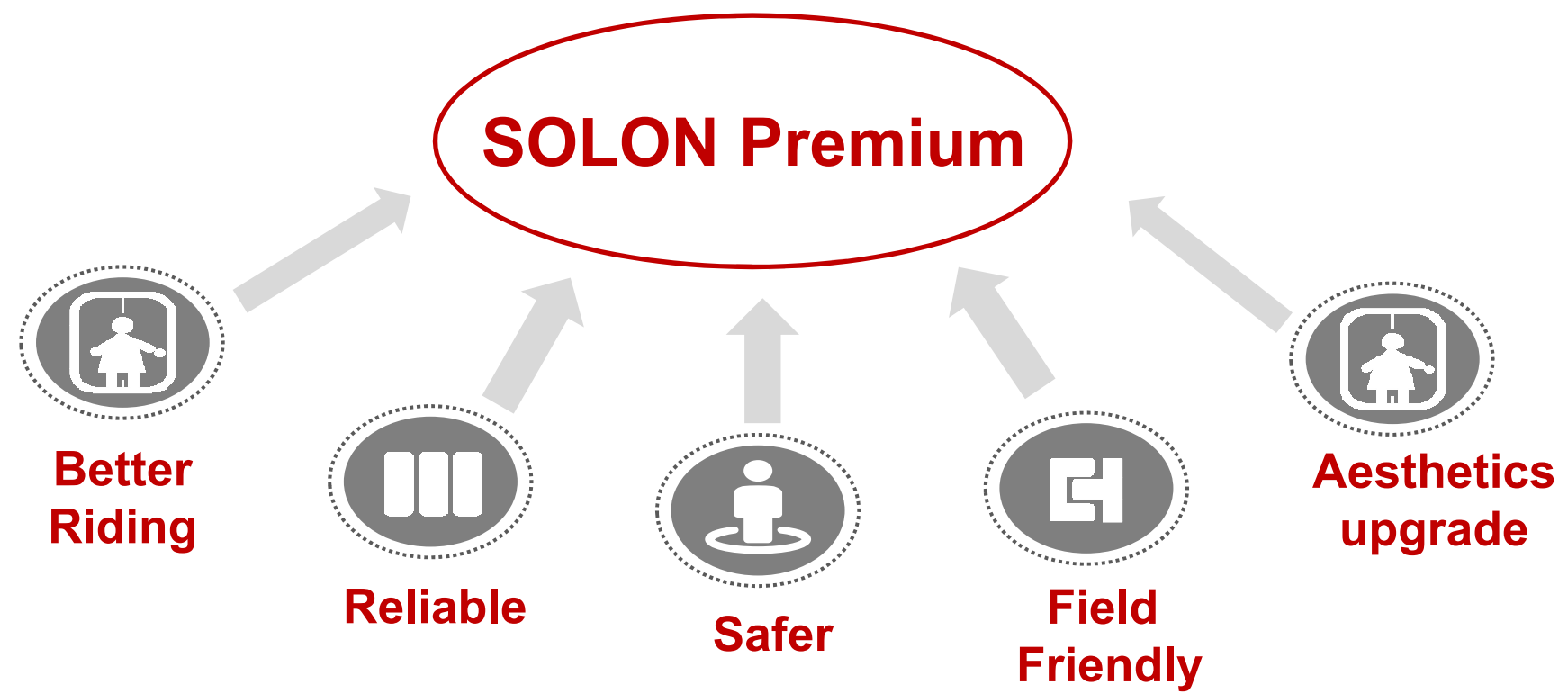


EN81-20 door as standard



Reaching New Heights

KEY AREA OF IMPROVEMENTS



Reaching New Heights



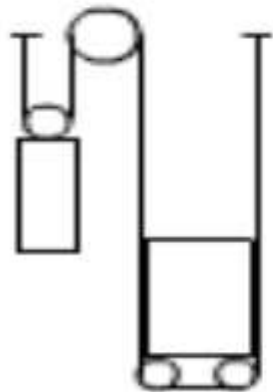
Reaching New Heights

BETTER RIDING

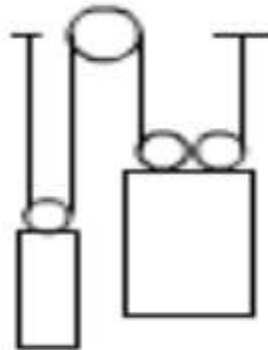


Overslung arrangement

Solon NV
(Underslung)



Solon Premium
(Overslung)



Advantages

- Better ride quality
- Lower pit depth
- Easy installation & adjusting & maintenance

Disadvantages

- Higher OH vs under slung

Key Performance	SEB	Testing Data
Leveling accuracy (mm)	±5	1.8
Vibration: X-Y (mg), peak to peak	10	5.7
Vibration: Z (mg), peak to peak	15	11.6
In-car Noise (dBA), Max peak	60	53.4
In-car Noise (dBA), Average	50	48.5

BETTER RIDING



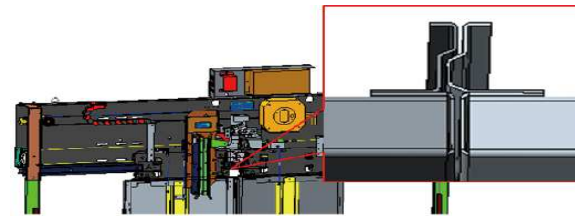
LED lighting



Car illumination Increased from 50lux to **100lux**

- ✓ No glare
- ✓ Living room standard lighting

Car Door



- ✓ Labyrinth structure
- ✓ No bright light gap

Reaching New Heights



PART 3

RELIABLE

Reaching New Heights

RELIABLE



Door System

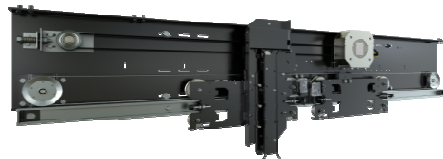
DO3000S (STD)

Non fire rated only, CLD, OP=800/900, OPH=2000/2100 mm
CLD=Center Opening Landing Door



DO3000 (Option)

Fire rated, TLD and CLD other sizes
TLD= Telescope Landing Door



OP=700-1200 , OPH=2000-2400

Test	DO3000S	DO3000	Result
Safety impact (Code Required)	353J Meets Code	450J Exceeds Code	No damage – door still in position
Reliability impact (Otis extra test)	189J Exceeds Code	189J Exceeds Code	Doors still operating normally

Safety impact test

450J = 2 X 75kg people hit the door at 2.5m/s (jogging pace)

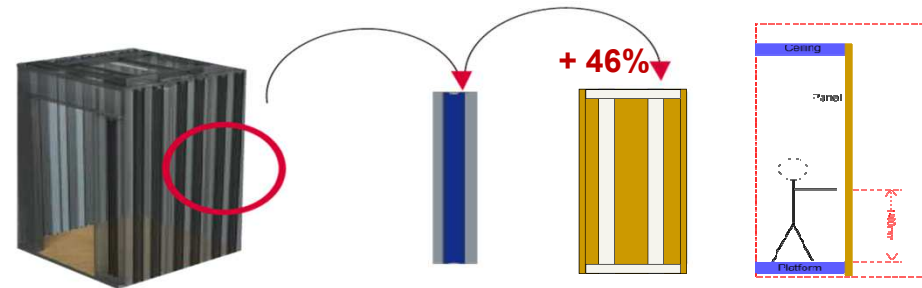
353J = 2 X 75kg people hit the door at 2.1m/s (slower jogging pace)

Reliability impact test

189J = 1 X 75kg people hit the door at 2.3m/s for 15 times

Car Wall

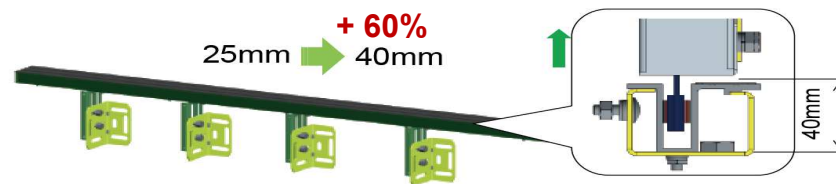
Car wall strength improved **46%**



Less deformation than key competitors, 300N@5cm²

Sill Support

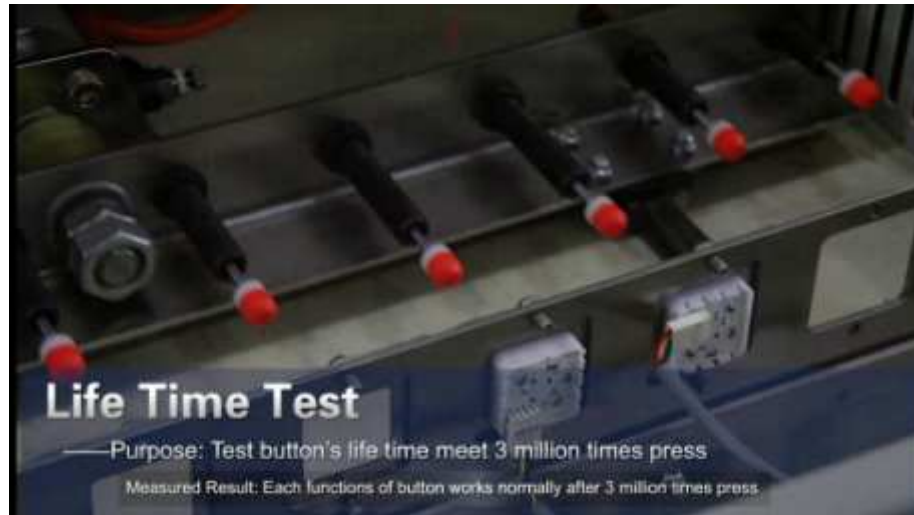
Sill strength improved **60%**



Support heavy loading during building decoration



Fixture



Life test

3,000,000 life cycle test

One press per second continually for 35 days(7x24)

Environmental test

- Salt fog test
- Thermal Shock test
- Temperature & humidity test
- Dusty test
-



PART 4

SAFER

Reaching New Heights

Door system

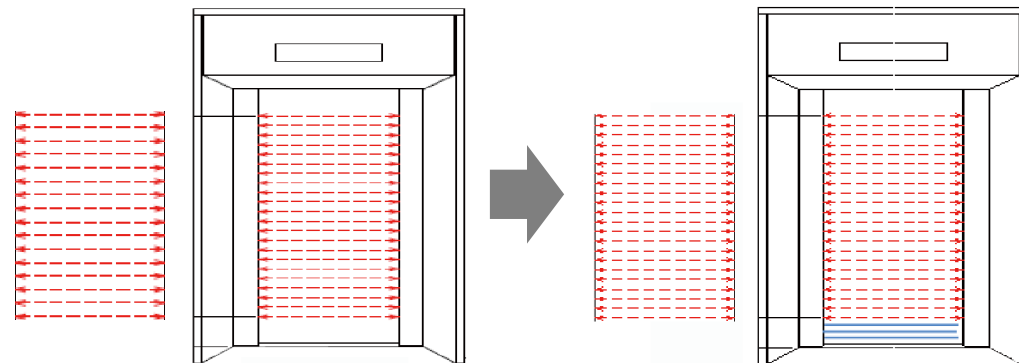


When passenger is trapped in car he cannot open the door manually

Dangerous!

OTIS patented
Door Deterrent Device as standard

Gate Protection



Min. detection distance: **34mm**
Ray density : **154 ray**

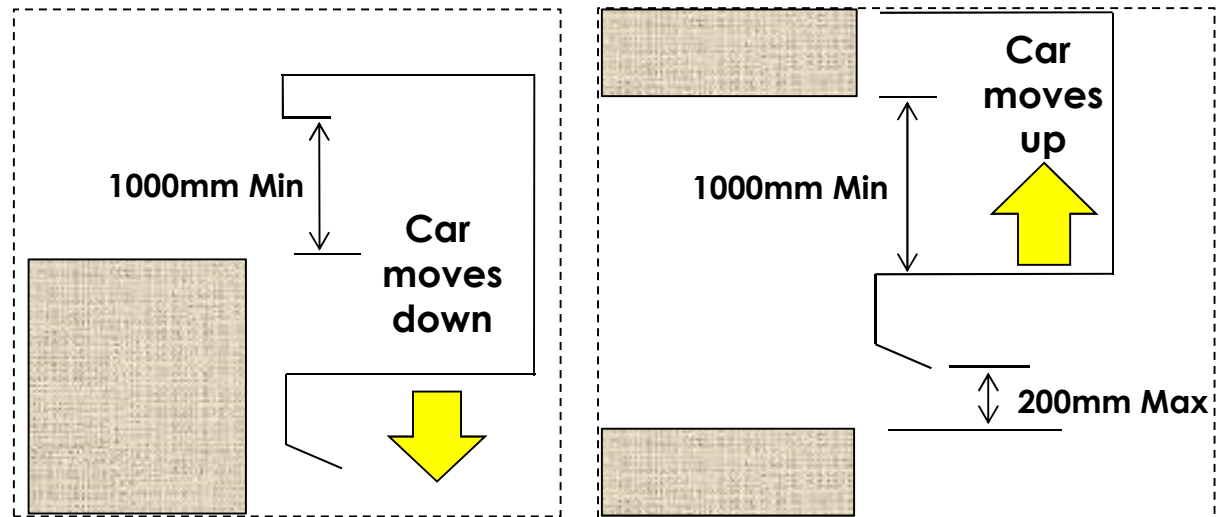
Min. detection distance: **18mm**
Ray density : **194 ray**

UCMP – Uncontrolled movement protection Protection against unintended car movement, required by EN81-1, A3) if a fault occurs during Re-leveling or ADO conditions.

Certified solution



Must be able to stop car with 100% rated load in car



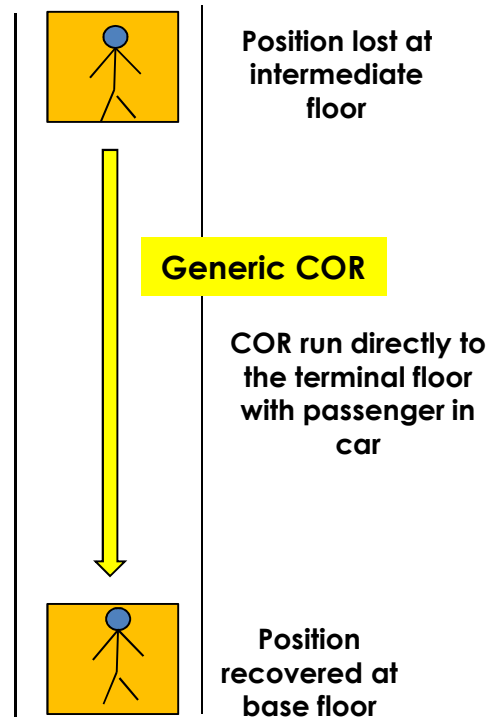
COR

Correction Rescue Run
If control system loses car position feedback

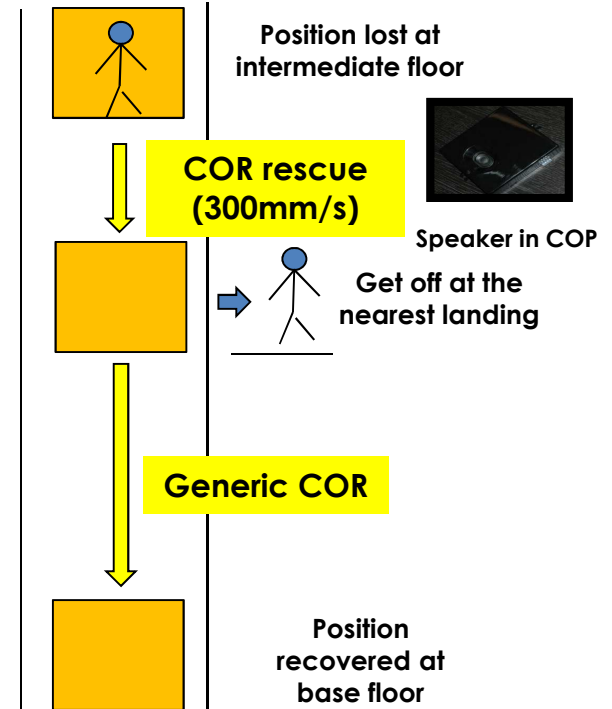
Added Functions

- Comfort passengers during COR via speaker;
- Automatically rescue passenger at the nearest landing

Prior function



Upgraded function



Safety Components



Safety Gear



Speed Governor



Buffer

E3 Qualified

- ✔ Otis design qualification
- ✔ Otis MFG process control
- ✔ Otis change control
- ✔ Reliable
- ✔ Durable
- ✔ Traceability

Component	OTIS E3 Requirements	EN81 -1 Requirements
Safety Gear	25 freefall and runaway test	4 freefall test
Speed Governor	25 Continuous tripping	20 Continuous tripping
Buffer	100 strike test	6 strike test



PART 5

FIELD FRIENDLY

Reaching New Heights

FIELD FRIENDLY



Standard Installation hours (10% saving)



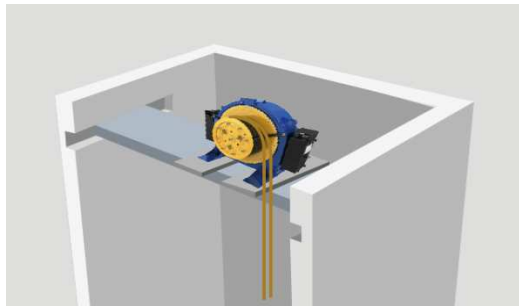
Base: 1.75m/s, 15 stops, 1000kg

Reaching New Heights

FIELD FRIENDLY



Solon NV

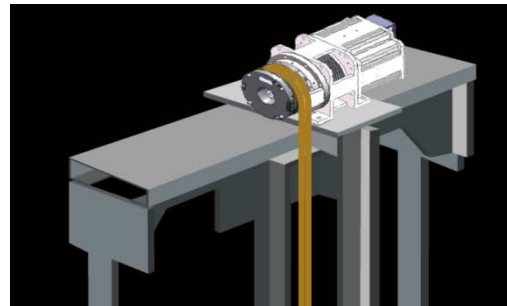


MOR & Overslung

MOB

Machine on Beam

Solon Premium



MOR

Machine on Rail

No cutout

No need 550*450 cutout for beam installation

Reduced

Reduced hoistway limitation

Increased

Hoistway efficiency increased 8% (44%→52%)

Easy

Easy for installation and maintenance

Scaffoldless

Make scaffoldless possible

Reaching New Heights

FIELD FRIENDLY



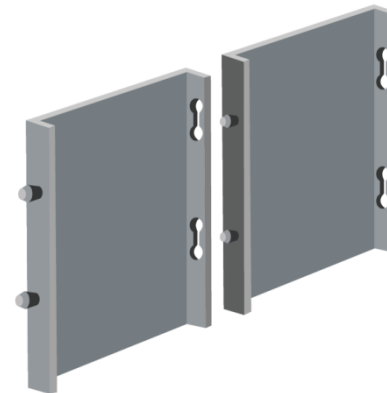
Car Wall Installation

Full bolts connection



Use bolt & nut to connect the car wall in hoist way

Eliminated ~50 bolts connection



Pin connection in middle section

Base:1000kg cab with CRH 2400mm

Reaching New Heights

Key Aesthetics-Ceiling



NL02

-DCH: 175mm



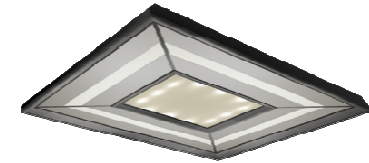
RL02

-DCH: 175mm



C-VS2

-DCH: 0mm



C-LN1

-DCH: 175mm



C-LA1

-DCH: 175mm



CL-31

-DCH: 120mm



CL-32

-DCH: 150mm



CL-37

-DCH: 150mm

▪ LED light

- ✓ More saving energy
- ✓ Longer service life (The service life can reach **60000 ~ 100000** hours)
- ✓ High brightness, low heat
- ✓ Power consumption saving **85%**
- ✓ No glare, no radiation
- ✓ Firm & durable

Reaching New Heights

Key Aesthetics-Car Wall/Door



Material

Finish Type

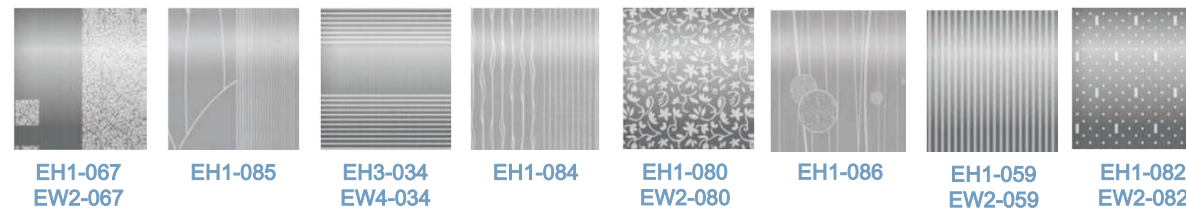
SBC

Opt:



STSET

Opt:



STSMRET

STSHL

STSHL304

STSMR

Reaching New Heights

Key Aesthetics-COP & Button



COP



CBX22C

CBX16C

CBL85CN

CBL82C

CBL-D3C

COP25H-A

HCOP



CBMD4SH

Reaching New Heights

Key Aesthetics-HBP & Button



VIP



VIXM652 VIXM692 VILMBB2SN



VIXMA52S VIXMA92S VHB25H-A

HB



HBMR45 HBMS49 HBMRB5S HBM-RBBS



HBMRA5S HBMSA9S HBMR65 HBM-RD5

HPI



HIXA162



HIXC162



HIXA122



HIXC122



HIL-A193



HIL-C193

HL



HLVC08



HLVC48

Reaching New Heights

Key Aesthetics-Floor & Handrail



Floor



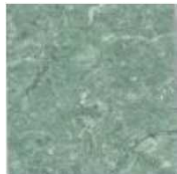
DE103



DE313



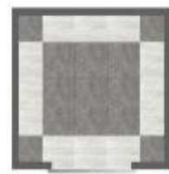
DE111



DE114



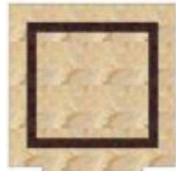
DE2106



DT01



DT02



DT03

Handrails



HR04HL/HR04POL
1Rowφ38mm Hairline/
1Rowφ38mm Polishing



HR08HL/HR08POL
8mm x 80 mm hairline with stretch edge/
8mm x 80 mm polishing with stretch edge

AVAILABLE FUNCTION



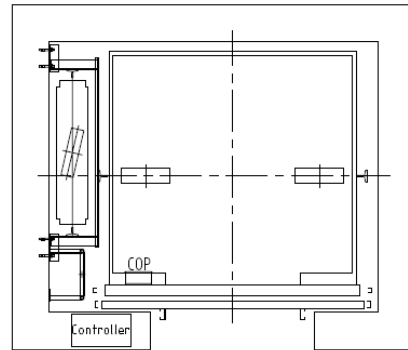
Key functions tailored for residential segment

FCL Full collective operation	TCL Top of car inspection	ECU Emergency car light	CHT Separate Car and Hall Call Door Times	LNS Load non stop	ANS Anti-Nuisance	FAN Fan & light manual and automatic switching	CCM Gong in car	Standard
DCBL/DOBL Door close/open button light	DTP Door closing overtime protection	OLD Overload warning	ICU Security room and car / machine room intercom	ALARB Alarm Bell	CPI Car position indicator	HPI Hall position indicator	UCMP Unintended Car Movement Protection	
THB Machine Overheat Protect	ATT Attendant service	DOB/DCB Door open & close button	RLEV Releveling operation					

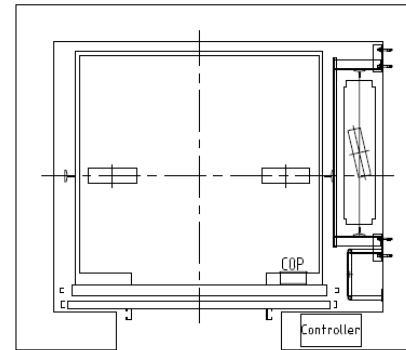
PKS Parking Operation	CCTV CCTV cable	SSM Voice Synthesis	EFO Emergency fire return operation	EFS Emergency firemen service	DRY BA Interface	SVP Elevator Supervisory Panel	CRT Elevator Monitor System With PC	Optional
ARED Automatic Emergency Rescue Device	EQO Earthquake Operation	HCC Hall Call Canceling	CANCELCCM Night Noise Restriction	NSKEY Non stop operation	Group Group Control	GSCS Car door safety shoe with light curtain		

For more information refer to SEB

Standard Layout



M/C location_Left



M/C location_Right

Duty Load (kg)	Open Type	OP(mm) OPxOPH	Car(mm) (CWxCD)	Hoistway(mm) (HWxHD)
450	TLD	800x2100	1000x1250	1600x1650
	CLD	700x2100	1000x1250	1750x1600
550	TLD	800x2100	1100x1250	1700x1650
	CLD	800x2100	1100x1250	1900x1650
630	TLD	900x2100	1100x1400	1700x1800
	CLD	800x2100	1100x1400	1900x1750
800	TLD	900x2100	1200x1450	1800x1850
	CLD	800x2100	1350x1350	1950x1750
1000	TLD	900x2100	1250x1800	1850x2200
	CLD	900x2100	1600x1450	2200x1800

Code	Speed (m/min)	Car Ceiling Height (mm) (CH)	Over Head(mm) (K)	PIT(mm) (S)
EN81-20 2014	60	2400	4100	1250
	90	2400	4300	1350
	105	2400	4350	1400
Other	60	2400	3950	1250
	90	2400	4150	1350
	105	2400	4250	1400

Reaching New Heights



END



Reaching New Heights