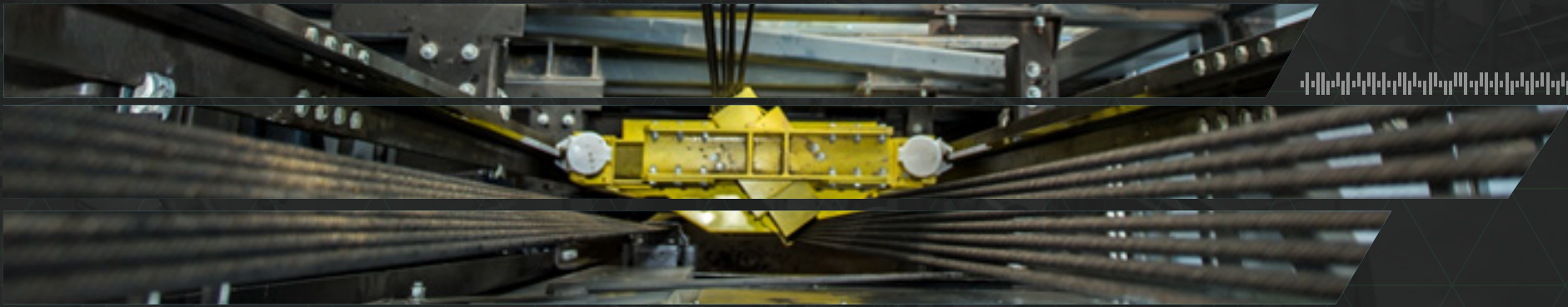




MACHINE ROOM LESS SERIES

NIDEC ELEVATOR

NIDEC ELEVATOR

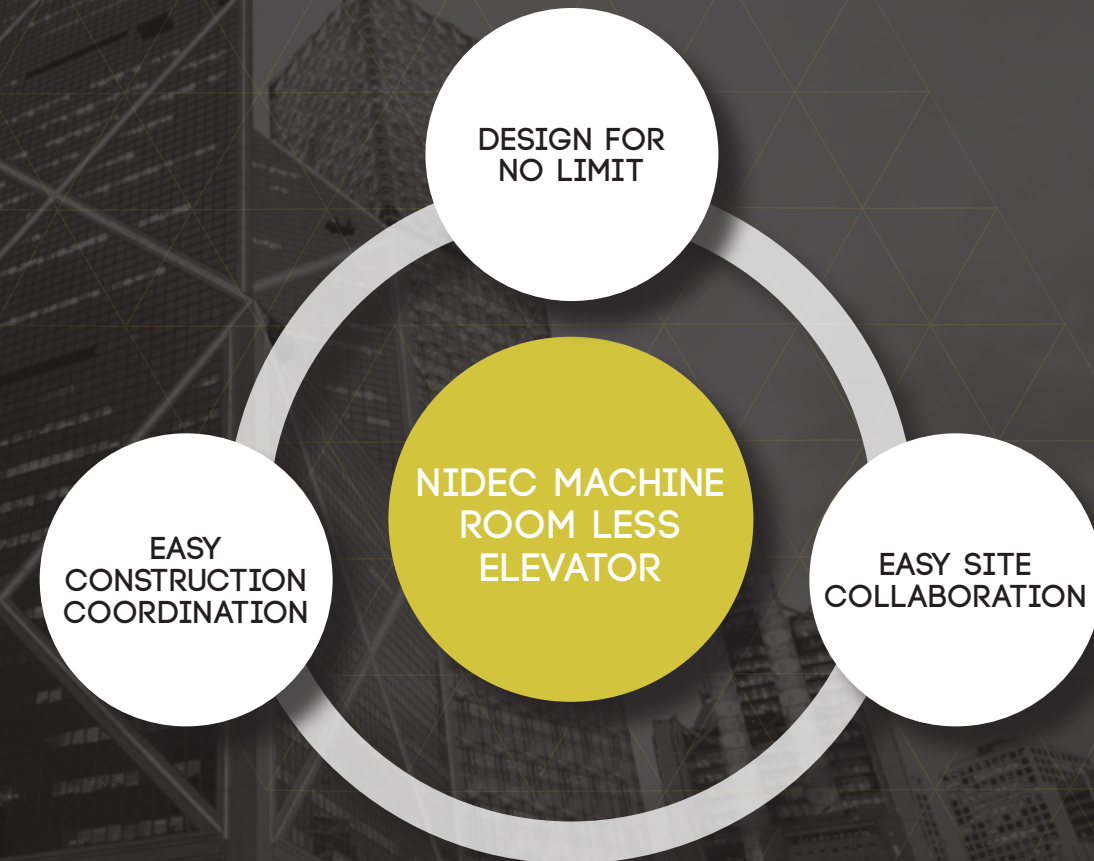


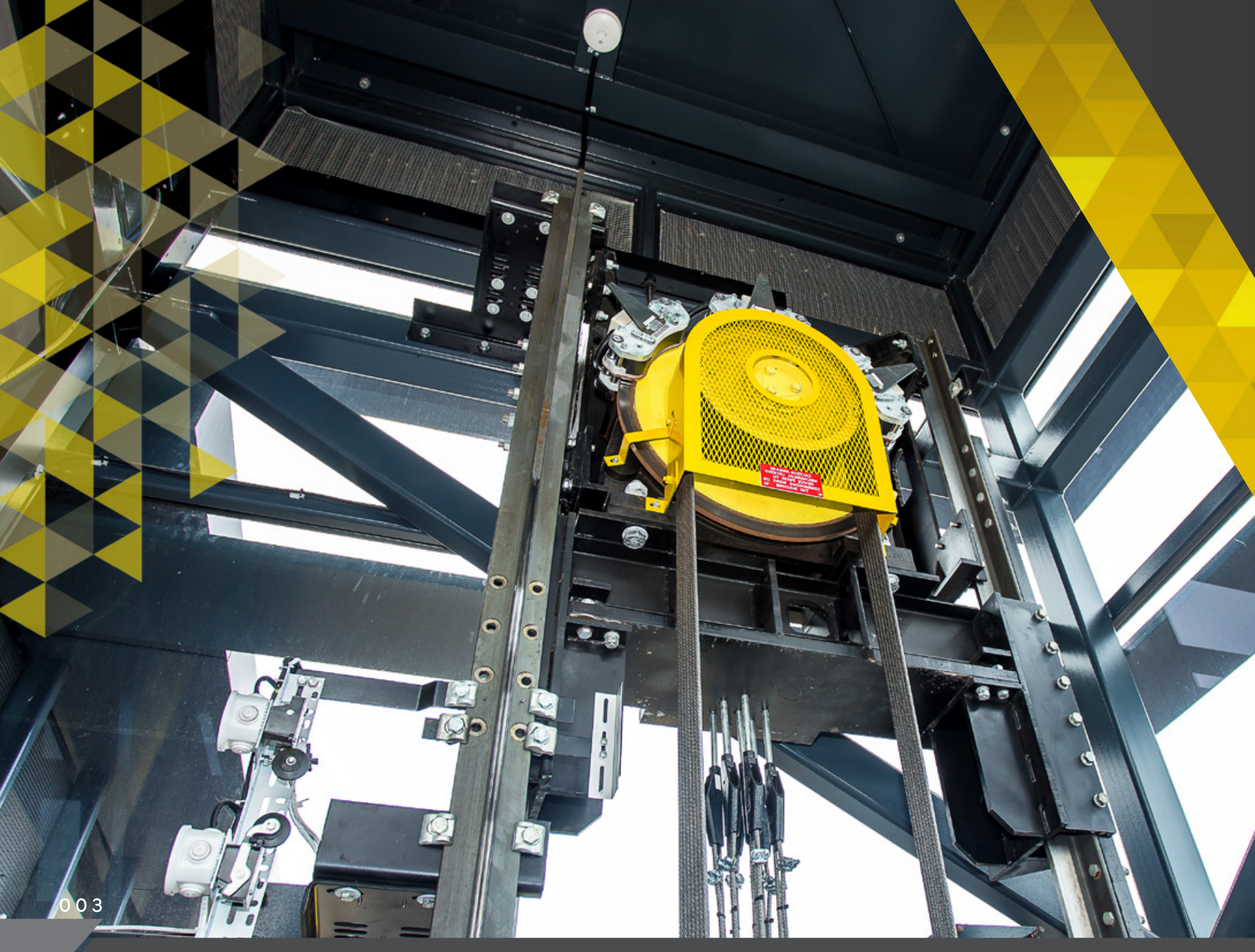
CONTENTS

NIDEC MRL SERIES	001
EASY CONSTRUCTION COORDINATION	003
DESIGN FOR NO LIMIT	005
EASY SITE COLLABORATION	007
GLOBAL MRL STUDY	009 - 014
FINISHES AND FIXTURES	015 - 024
MRL PRODUCT RANGE	025 - 026
MRL HOISTWAY DIAGRAM	027 - 036
CONTACT US	037

NIDEC MRL SERIES

NIDEC MACHINE ROOM LESS ELEVATOR





EASY CONSTRUCTION COORDINATION

Nidec Machine Room Less Elevator provides a wide range of series. We provide MRL elevators from low to mid rise. Our compact control and traction system can easily meet the hoistway condition. Group control can also be applied up to 6 car group to increase the building efficiency. Nidec Elevator developed heavy duty solution for freight purposes to achieve easy coordination with any available construction.



DESIGN FOR NO LIMIT

Nidec Elevator MRL series are specially designed for compact hoistway and machine room less job site. Machine Room Less Elevators can fit into different buildings including commercial, residential and industrial with minimal space and energy. We install directly on the guide rail. With broad product range and design, we design as compact as possible bypassing different limitations.



EASY SITE COLLABORATION

Nidec MRL elevator requires simple elevator system collaboration. The structural design is highly compatible with the job site. All guide support does not install on the hoistway wall, and there is no construction reserve needed. The control system can be installed in the middle or the bottom to match the existing building condition and design. The mechanical design ensures the simplicity of the system installation, electrical operation and minimizes the noise level.

GLOBAL MRL CASE STUDY

CASE STUDY

EVERYMAN THEATER, LIVERPOOL, UK



Everyman Theater in Liverpool was a historical theater built in 1837.

It was reconstructed in 2011 and 2014, and it became the landmark theater in Liverpool.

Project Scope:

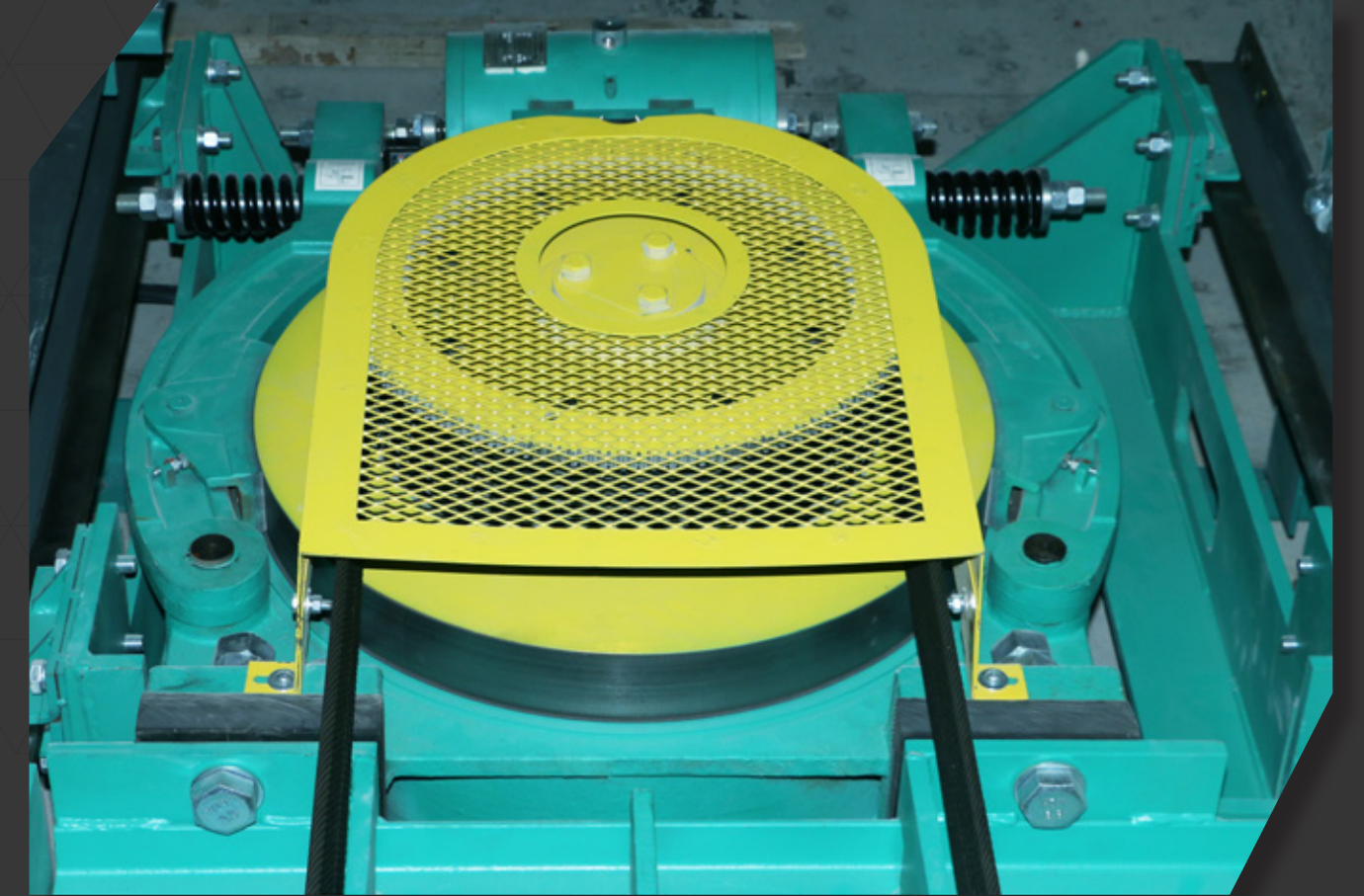
1. The project was installed as cantilevered MRL, 1000kg, 1m/s
2. Landmark in Liverpool, UK
3. Glass door with bullet proof stainless steel on landing

Project Outcomes:

1. The compact machine was successfully installed
2. The elevator fulfilled the historic landmark preservation and installation requirements.



CASE STUDY UNITED STATES EMBASSY, KABUL, AFGHANISTAN



The United States Embassy in Afghanistan was built in Kabul to protect and promote national peace.

Project Scope:

1. The project is a 22 cars MRL elevator installation, 1600kg, 2.0m / s
2. Ultra-thin traction machine system

Project Outcomes:

1. To meet the requirements of the existing overhead and pit.
2. Met the special installation requirements of American Standard A.17

FIXTURES AND FINISHES

STANDARD	
Ceiling	Cold Plate Sprayed Metal LED Light Hairline Stainless Steel (blocked plate) LED Light
Side	Hairline Stainless Steel
Back	Hairline Stainless Steel
Flooring	PVC Flooring



FRONT



REAR

STANDARD CABIN FINISHES

OPTIONAL CABIN FINISHES



OPTIONAL CABIN FINISHES NCA-RH01314

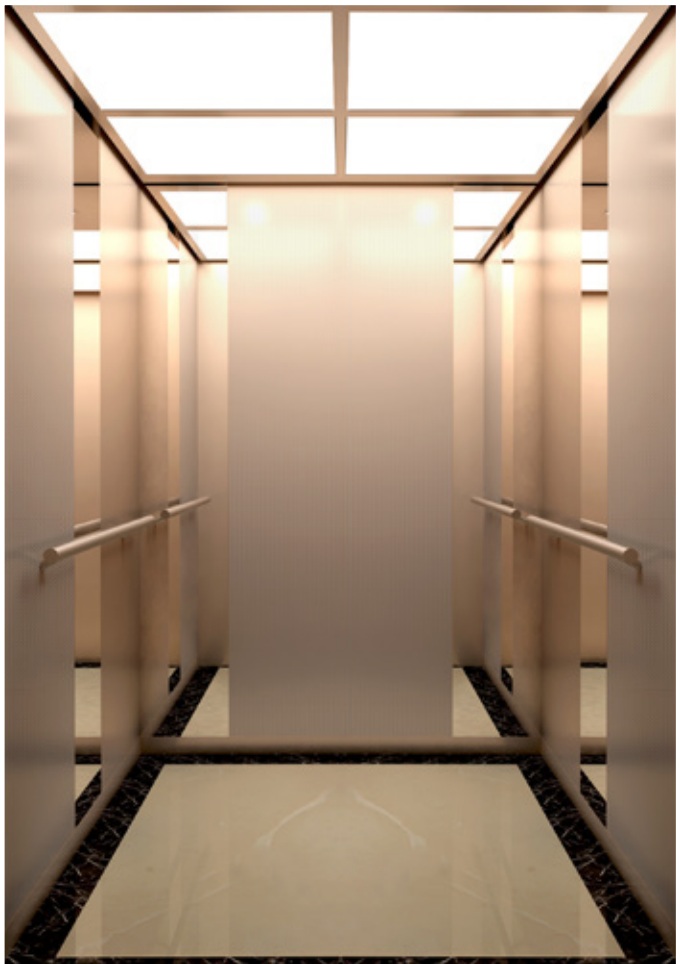
Ceiling	Golden Mirror Stainless Steel Frame LED Strip lighting + LED Spotlight
Rear	Bronze Mirror Stainless Steel, Bronze Hairline Stainless Steel Etched, Golden Mirror Stainless Steel Etched
Side	Bronze Mirror Stainless Steel, Bronze Hairline Stainless Steel Etched, Golden Mirror Stainless Steel Etched
Handrail	Bronze Mirror Stainless Steel Tube
Flooring	Marble
Front	Bronze Mirror Stainless Steel



OPTIONAL CABIN FINISHES NCA-RH01315

Ceiling	Mirror Stainless Steel Frame Blasted Stainless Steel, Acrylic, LED Spotlight
Rear	Black Blasted Stainless Steel Fireproof Lamination, Mirror Stainless Steel Trim
Side	Black Blasted Stainless Steel Decorative Film, Mirror Stainless Steel Trim
Skirting	Black Blasted Stainless Steel
Flooring	Marble
Front	Black Mirror Stainless Steel

OPTIONAL CABIN FINISHES



OPTIONAL CABIN FINISHES NCA-RH01318

Ceiling	Rose Gold Mirror Stainless Steel, Acrylic
Rear	Hairline Stainless Steel Etched With Plated Rose Gold, Rose Gold Mirror Stainless Steel
Side	Hairline Stainless Steel Etched With Plated Rose Gold, Rose Gold Mirror Stainless Steel
Handrail	Stainless Steel Tube With Plated Rose Gold
Skirting	Hairline Stainless Steel
Flooring	Marble
Front	Rose Gold Hairline Stainless Steel



OPTIONAL CABIN FINISHES NCA-RH01329

Ceiling	Hairline Stainless Steel Frame, LED Strip lighting + LED Spotlight
Rear	Black Hairline Stainless Steel, Black Mirror Stainless Steel Etched
Side	Black Hairline Stainless Steel, Mirror Stainless Steel Etched
Handrail	Mirror Stainless Steel + Black Hairline Stainless Steel
Flooring	Marble
Front	Black Mirror Stainless Steel

OPTIONAL CABIN FINISHES



OPTIONAL CABIN FINISHES NCA-RH01333

- Ceiling Mirror Stainless Steel Frame, Colored Acrylic, LED Spotlight
- Rear Hairline Stainless Steel, Mirror Stainless Steel Etched
- Side Hairline Stainless Steel, Mirror Stainless Steel
- Handrail Stainless Steel + Wood
- Flooring Marble
- Front Hairline Stainless Steel

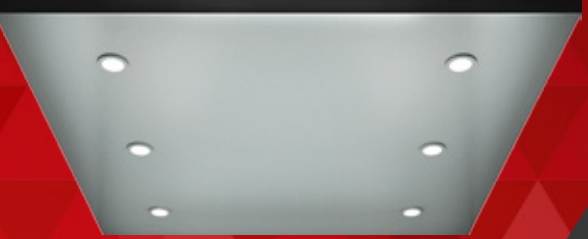


OPTIONAL CABIN FINISHES NCA-RH01339

- Ceiling Champagne Gold Mirror Stainless Steel LED Lighting
- Rear Champagne Gold Hairline Stainless Steel Champagne Gold Mirror Stainless Steel
- Side Wood Veneer
- Handrail Aluminum + Stainless Steel
- Skirting Champagne Gold Hairline Stainless Steel
- Flooring Marble
- Front Champagne Gold Mirror Stainless Steel

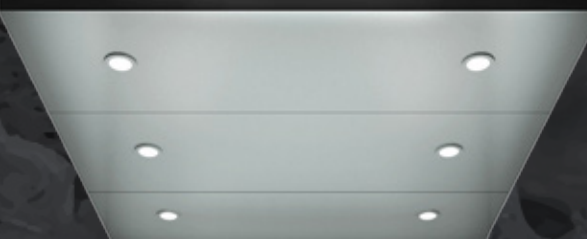
CEILING

NCE-RH0815A



STANDARD MODEL
Cold Plate Sprayed Metal
Led Light

NCE-RH0815B



STANDARD MODEL
Hairline Stainless Steel (blocked plate)
Led Light

NCE-RH01412



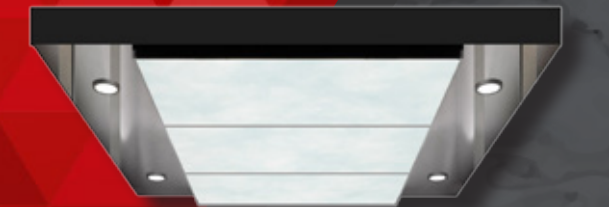
OPTIONAL CEILING
Mirror Stainless Steel
Acrylic

NCE-RH01401



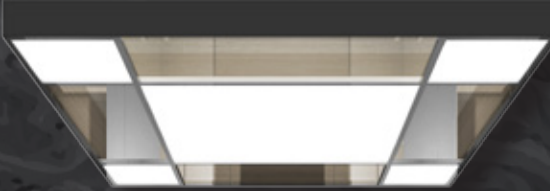
OPTIONAL CEILING
Hairline Stainless Steel Frame
Acrylic

NCE-RH01403



OPTIONAL CEILING
Mirror Stainless Steel Frame
Colored Acrylic LED Spotlight

NCE-RH01408



OPTIONAL CEILING
Mirror Stainless Steel Frame
Acrylic

NCE-RH01413



OPTIONAL CEILING
Hairline Stainless Steel
Acrylic

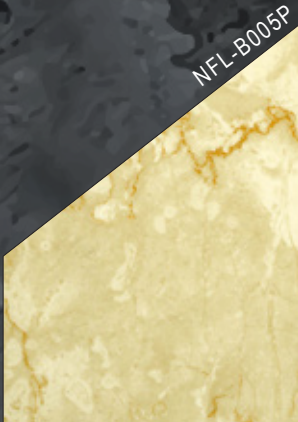
NCE-RH01410



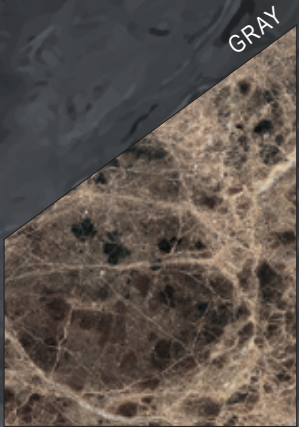
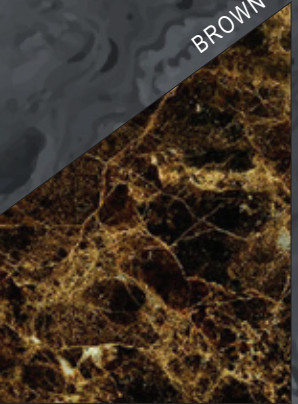
OPTIONAL CEILING
Painted Steel LED Spotlight
LED Strip Lighting

FLOORING FINISHES

STANDARD
PVC Flooring



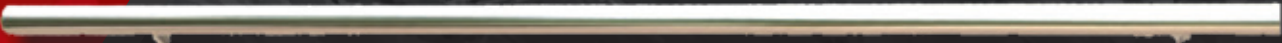
OPTIONAL
Marble Flooring



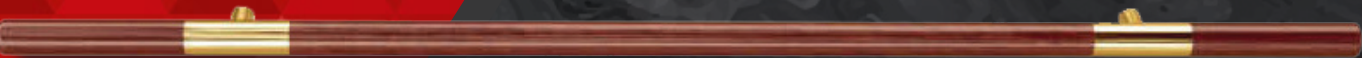
OPTIONAL
Non-slip Flooring



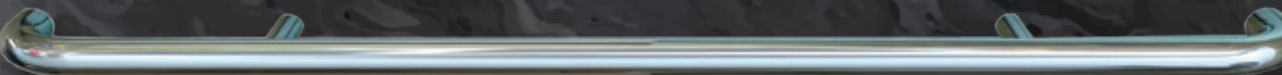
HANDRAILS (OPTIONAL)



NHR-RH0J013



NHR-RH06F1



NHR-C1038-B



NHR-RH0J9701

CAR CONTROL PANEL

STANDARD

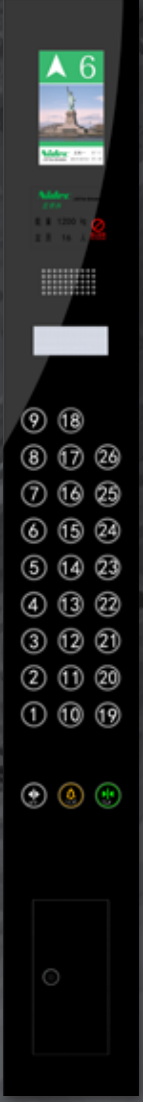
Embedded COP



NCO-B001S

OPTIONAL

Embedded COP



NCO-RBCK191

OPTIONAL

Integrated COP



NCO-A001S

HALL CALL PANEL AND BUTTON

STANDARD

Dot Matrix Display



NLO-B001SD-S

OPTIONAL

LCD Display



NLO-B001SL-S

STANDARD BUTTON

Dual-light Button



NPB-BC390-D



MRL PRODUCT RANGE

MRL	Low Rise	Mid Rise	Panoramic	Heavy Duty
Capacity Range	550kg-1200kg	800kg-2000kg	630kg-1000kg	3000kg-5000kg
	1350kg-2500kg			
Speed Range	0.63m/s-1.75m/s	2.0m/s-2.5m/s	1.0m/s-1.75m/s	0.5m/s-1.0m/s

The traction machine installs inside the machine box. Through horizontal alignment, the rail blade can be grasped in the special composite channel. It greatly reduces the vibration and noise transmission. The track can be pulled to top to avoid complex installation.

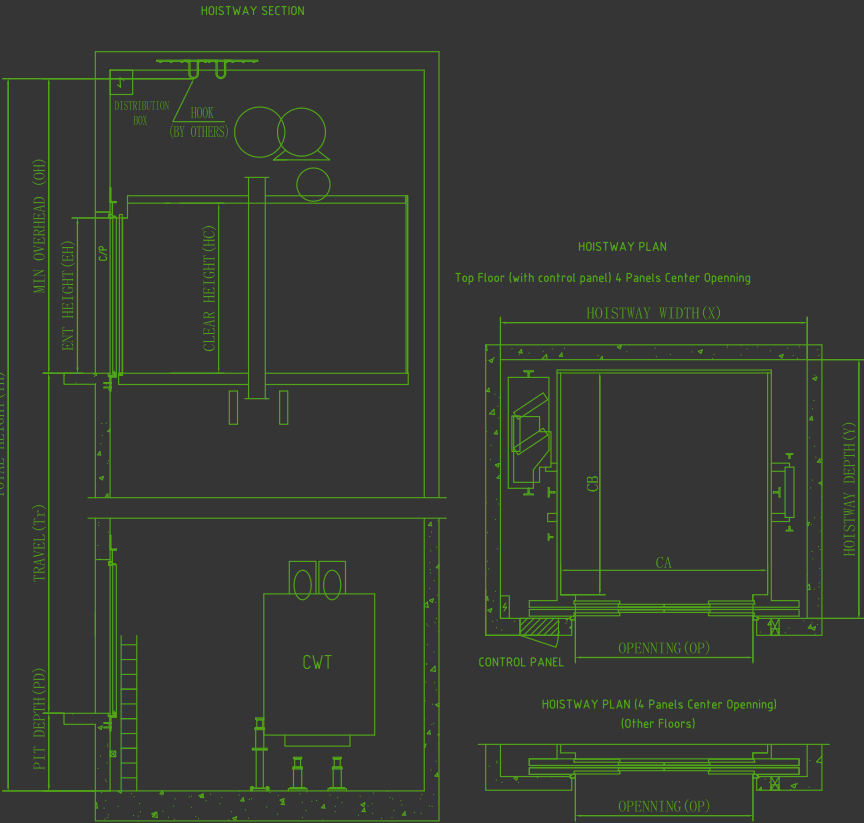
MRL HOISTWAY DIAGRAM

HEAVY DUTY LOW-RISE MRL (SIDE COUNTER WEIGHT- CENTER OPENING 2:1)

SPECIFICATIONS : : : : HEAVY DUTY MRL TECHNICAL DATA (SIDE COUNTERWEIGHT - CENTER OPENING)

SPECIFICATIONS		SPEED (m/s)	CAR INSIDE (mm) CA × CB	CLEAR HEIGHT HC (mm)	MAX CLEAR OPENING OP (mm)	HOISTWAY (mm) X × Y
CAPACITY (kg)	PERSONS					
3000	40	0.5	2050x2800	2350	1800	3200x3300
		1.0				
3500	46	0.5	2250x2900	2350	2000	3550x3400
		1.0				
4000	53	0.5	2500x2900	2350	2200	3800x3400
		1.0				
5000	66	0.5	2900x3100	2350	2400	4200x3600
		1.0				

SPECIFICATIONS		MIN. OVERHEAD OH (mm)	MIN. PIT PD (mm)	MAX TRAVEL Tr (m)
CAPACITY (kg)	PERSONS			
3000	0.5	3900	1600	25
	1.0	3900	1600	45
3500-4000	0.5	3900	1800	25
	1.0	3900	1800	45
5000	0.5	4200	1800	25
	1.0	4200	1800	45



LOW-RISE MRL (SIDE COUNTERWEIGHT-CENTER OPENING)

SPECIFICATIONS :::: LOW-RISE MRL TECHNICAL DATA (SIDE COUNTERWEIGHT - CENTER OPENING; 2:1)

SPECIFICATIONS		MIN. OVERHEAD OH (mm)	MIN. PIT PD (mm)	MAX TRAVEL Tr (m)	REMARKS
CAPACITY (kg)	PERSONS				
550	0.63	3600	1200	28	
	1.0	3600	1200	45	
	1.5	3800	1550	65	
630-1200	0.63	3600	1200	28	If decoration weight is greater than 200KG, increase pit depth 100mm for 1000KG capacity.
	1.0	3600	1200	45	
	1.5	3800	1550	65	
	1.75	3900	1600	75	

LOW-RISE MRL (SIDE COUNTERWEIGHT-SIDE OPENING)

SPECIFICATIONS :::: MRL TECHNICAL DATA (SIDE COUNTERWEIGHT - SIDE OPENING; 2:1)

SPECIFICATIONS		SPEED (m/s)	CAR INSIDE (mm) CA × CB	CLEAR HEIGHT HC (mm)	MAX CLEAR OPENING OP (mm)	HOISTWAY (mm) X × Y	
CAPACITY (kg)	PERSONS						
LIFTING	550	7	1100x1350	2200	900	1700x1750	
							0.63
							1.0
	630	8	1100x1400	2200	900	1800x1800	
							1.5
							0.63
							1.0
	800	10	1400x1400	2200	1000	2100x1800	
							1.5
							1.75
							0.63
	1000	13	1100x2100	2200	1000	1800x2500	
1.0							
1.5							
1.75							
1200	16	1300x2100	2200	1100	2000x2500		
						0.63	
						1.0	
						1.5	

SPECIFICATIONS		MIN. OVERHEAD OH (mm)	MIN. PIT PD (mm)	MAX TRAVEL Tr (m)	REMARKS
CAPACITY (kg)	PERSONS				
550	0.63	3600	1200	28	If decoration weight is greater than 200KG, increase the pit depth 100mm for 1000KG capacity
	1.0	3600	1200	45	
	1.5	3800	1550	65	
630-1200	0.63	3600	1200	28	
	1.0	3600	1200	45	
	1.5	3800	1550	65	
	1.75	3900	1600	75	

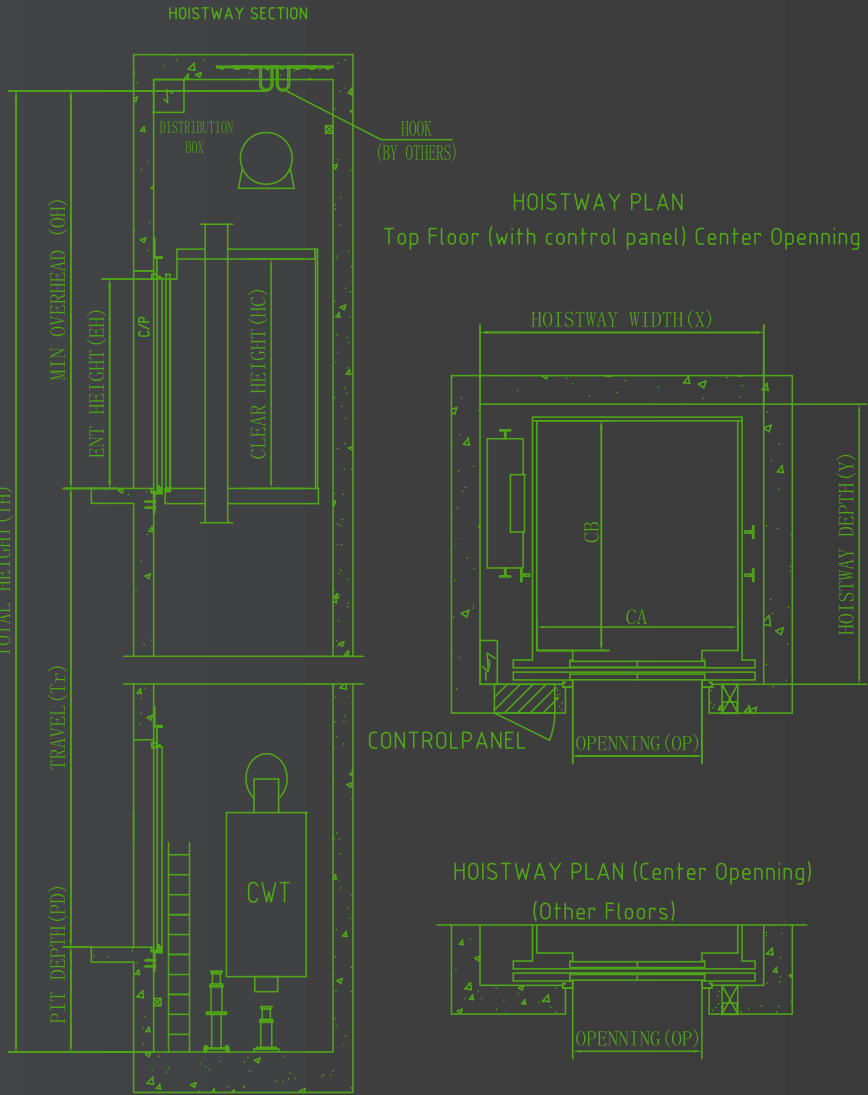
LOW-RISE MRL

(SIDE COUNTERWEIGHT-CENTER OPENING)

SPECIFICATIONS ::: MRL TECHNICAL DATA (SIDE COUNTERWEIGHT - CENTER OPENING; 2:1)

SPECIFICATIONS		SPEED (m/s)	CAR INSIDE (mm) CA × CB	CLEAR HEIGHT HC (mm)	MAX CLEAR OPENING OP (mm)	HOISTWAY (mm) X × Y
CAPACITY (kg)	PERSONS					
1350	18	0.63	1700x1800	2350	1000	2500x2200
		1.0				
		1.5				
		1.75				
1600	21	0.63	1800x1950	2350	1100	2650x2350
		1.0				
		1.5				
		1.75				
2000	26	0.63	2000x2100	2350	1200	2850x2500
		1.0				
		1.5				
		1.75				
2500	33	0.63	2200x2200	2350	1300	3200x2600
		1.0				
		1.5				
		1.75				

SPECIFICATIONS		MIN. OVERHEAD OH (mm)	MIN. PIT PD (mm)	TRAVELING Tr (m)
CAPACITY (kg)	PERSONS			
1350-2000	0.63	3900	1400	28
	1.0	3900	1400	45
	1.5	4000	1550	65
	1.75	4050	1600	75
2500	0.63	3900	1600	28
	1.0	3900	1600	45
	1.5	4000	1750	65
	1.75	4050	1850	75



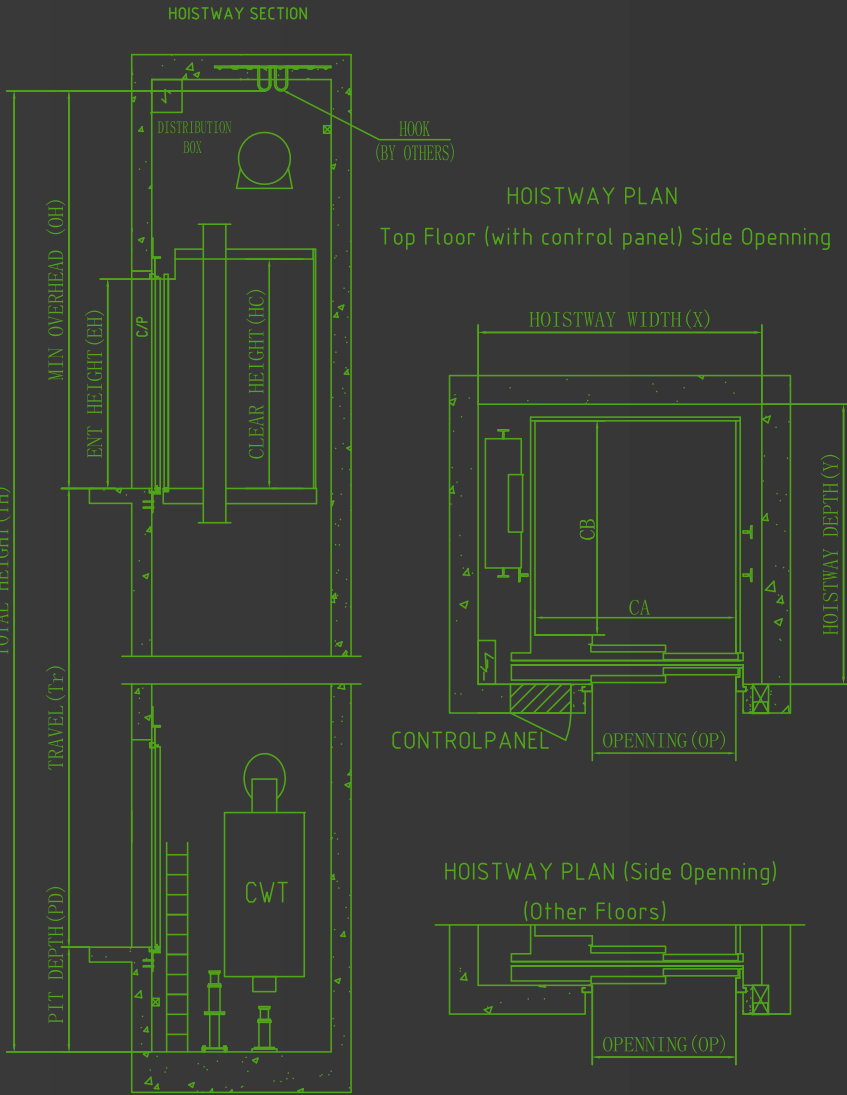
LOW-RISE MRL

(SIDE COUNTERWEIGHT-SIDE OPENING)

SPECIFICATIONS :::: MRL TECHNICAL DATA (SIDE COUNTERWEIGHT - SIDE OPENING; 2:1)

SPECIFICATIONS		SPEED (m/s)	CAR INSIDE (mm) CA × CB	CLEAR HEIGHT HC (mm)	MAX CLEAR OPENING OP (mm)	HOISTWAY (mm) X × Y
CAPACITY (kg)	PERSONS					
1350	18	0.63	1300x2350	2350	1200	2150x2800
		1.0				
		1.5				
		1.75				
1600	21	0.63	1500x2350	2350	1200	2350x2800
		1.0				
		1.5				
		1.75				
2000	26	0.63	1750x2350	2350	1300	2600x2800
		1.0				
		1.5				
		1.75				
2500	33	0.63	2000x2500	2350	1500	3000x3000
		1.0				
		1.5				
		1.75				

SPECIFICATIONS		MIN. OVERHEAD OH (mm)	MIN. PIT PD (mm)	TRAVELING Tr (m)
CAPACITY (kg)	PERSONS			
1350-2000	0.63	3900	1400	28
	1.0	3900	1400	45
	1.5	4000	1550	65
	1.75	4050	1600	75
2500	0.63	3900	1600	28
	1.0	3900	1600	45
	1.5	4000	1750	65
	1.75	4050	1850	75



MID-RISE MRL (SIDE COUNTER WEIGHT - CENTER OPENING)

SPECIFICATIONS :::: MRL TECHNICAL DATA (SIDE COUNTERWEIGHT - CENTER OPENING; 2:1)

MID-RISE MRL (SIDE COUNTER WEIGHT - SIDE OPENING)

SPECIFICATIONS ::: MRL TECHNICAL DATA (SIDE COUNTERWEIGHT - SIDE OPENING; 2:1)

SPECIFICATIONS		SPEED (m/s)	CAR INSIDE (mm) CA × CB	CLEAR HEIGHT HC (mm)	MAX CLEAR OPENING OP (mm)	HOISTWAY (mm) X × Y
CAPACITY (kg)	PERSONS					
800	10	2.0	1400x1400	2500	1000	2300x2000
		2.5				
1000	13	2.0	1100x2100	2500	1000	2050x2700
		2.5				
1200	16	2.0	1300x2100	2500	1100	2250x2700
		2.5				
1350	18	2.0	1300x2350	2500	1200	2300x3000
		2.5				
1600	21	2.0	1500x2350	2500	1200	2500x3000
		2.5				
2000	26	2.0	1750x2350	2500	1300	2750x3000
		2.5				

SPECIFICATIONS	SPEED	MIN. OVERHEARD	MIN. PIT	MAX TRAVEL
CAPACITY (kg)	(m/s)	OH (mm)	PD (mm)	Tr (m)
800-2000	2.0	4400	2000	90
	2.5	4600	2200	112

MRL STANDARD FUNCTION

Type	NO.	Function	Description
Safety	1	●	Door lock short circuit protection
	2	●	Light-curtain protection
	3	●	Overvoltage Protection
	4	●	Bus Voltage Protection
	5	●	Inverter overheat protection
	6	●	Overcurrent protection
	7	●	Overload protection
	8	●	Drive phase protection
	9	●	Fire recall run
	10	●	Rope slip monitoring
	11	●	Fire-fighter service
	12	●	Safety circuit detection
	13	●	Door lock circuit detection
	14	●	Brake travel switch feedback detection
	15	●	Drive feedback detection
	16	●	Limit switch protection
	17	●	Run contactor detection
	18	●	Brake contactor detection
	19	●	Rectifier overheat protection
	20	●	Unintended Car Movement protection
	21	●	Drive feedback protection
	22	●	CPU WDT protection
	23	●	Door lock protection during the run
	24	●	Door zone protection

Type	NO.	Function	Description
Safety Emergency	25	●	Earthquake operation
	26	●	Encoder feedback detection
	27	●	Reverse running protection
	28	●	Motor overheat protection
AI Optimization	29	●	Leveling Adjustment
	30	●	Direct Landing
	31	●	Dynamic auto-tune
	32	●	Anti-rollback
	33	●	Current ramp when stopping
	34	●	Hoistway Learn Errors
	35	●	UI Call Register
	36	●	Full Selective
	37	●	Auto correction of car position
	38	●	Self-leveling Run
	39	●	Light load nuisance
	40	●	Hoistway Learn
	41	●	Door dwell cancellation
	42	●	Position Protection
Display and energy saving	43	●	Floor display setting
	44	●	Scroll to display running direction
	45	●	Dot matrix floor display
	46	●	User interface unprotected access
	47	●	Energy saving
	48	●	Real-time clock management

Type	NO.	Function	Description
Run and Monitoring	49	●	Forced deceleration function
	50	●	Elevator lock service
	51	●	inspection door open/close opreation
	52	●	Programmable input
	53	●	Programmable output
	54	●	Attendant operation
	55	●	Hall call button monitoring
	56	●	Hall door open at leveling
	57	●	Door dwell cancellation
	58	●	Door reopening
	59	●	Brake voltage switching
	60	●	Car call cancellation
	61	●	Auto-homing
	62	●	Inspection run
	63	●	Fault history
	64	●	Door zone signal fault protection
	65	●	Door open/close protection
	66	●	Full load bypass
	67	●	Overload protection
	68	●	Internet monitoring
	69	●	Timed blind floor
	70	●	Emergency power run(machine room inspection)
	71	●	Terminal inspection speed limit
	72	●	Service floor setting

Type	NO.	Function	Description
Run and Monitoring	73	●	Independent run
	74	●	Test run
Optional Features	1	○	Door open re-leveling
	2	○	Car arrival Chime
	3	○	Rear/Front door control
	4	○	Cabin IC card control
	5	○	ADA mode
	6	○	Emergency rescue
	7	○	Hall lantern
	8	○	Duplex
	9	○	Group Control
	10	○	Voice annunciation
	11	○	Rear door control box
	12	○	Hall IC card control
	13	○	Hall arrival Chime

- Standard Features
- Optional Features

CONTACT US

China

Qingdao Headquarter Office
Phone: +86 532 5882 2500
Email: sales@nidec-elevator.com

Sophie Liang
Phone: +86 187 6526 1177
Email: sophie.liang@nidec-elevator.com

Jane Chen
Phone: +86 757 2772 3373
Mobile: +86 136 7068 5440
Email: jane.chen@nidec-elevator.com

Southeast Asia

Sara Li
Phone: +86 757 2772 3135
Mobile: +86 139 2328 2827
Email: sara.li@nidec-elevator.com

Diana Ji
Phone: +86 757 2772 3106
Mobile: +86 159 8910 0750
Email: diana.ji@nidec-elevator.com

Australia

Sunny Zhang
Phone: +86 510 6886 9829
Email: sunny.zhang@nidec-elevator.com

India

Eric Liao
Phone:+86 757 2772 3125
Mobile:+86 189 2326 3501
Email: eric.liao@nidec-elevator.com

Latin America

Jairo Guerrero
Phone: +1 916 463 9238
Email: jairo.guerrero@nidec-elevator.com
Fax: +1 916 858 4238

Camilo Ruiz
Office: +916-463-9413
Mobile: +(57) 311-551-7131
Email: camilo.ruiz@nidec-elevator.com

Gilberto Fuentes
Office: 52 181 8156 1856
Mobile: +52 181 2200 6542
Email: gilberto.fuentes@nidec-elevator.com

Middle East

Mohamed Ezzeddine
Phone: +971 50 3500856
Email: mohamed.ezzeddine@nidec-elevator.com

Faisal Mohamed Aslam
Phone: +1 916 463 9302
Email: faisal.aslam@nidec-elevator.com

Omer Al Mukthar
Phone:+971 52 8096193
Email: omer.mukthar@nidec-elevator.com

North America

Spenser Sellens
Phone: 916 463 9272
Email: spenser.sellens@nidec-elevator.com

Christine Bouma
Phone: 916-463-9495
Email: christine.bouma@nidec-elevator.com

Turkey

Ismail Kosovali
Phone: +90 212 486 01 10
Email: ismail.kosovali@nidec-elevator.com

Firas Toma
Phone: +1 916 805 1665
Email: firas.toma@nidec-elevator.com

Technical Support

Rory Yan
Phone: +0086 510 68869825
Email: rory.yan@nidec-elevator.com

Kenny Kuang
Phone: +86 182 0532 6815
Email: Kenny.Kuang@nidec-elevator.com

Renan Disonglo
Phone: + 63 917 322 4416
Email: renan.disonglo@nidec-elevator.com

Edgar Garrido Rodriguez
Phone: +1 916 463 9200 - 3665
Email: edgar.rodriguez@nidec-elevator.com

Neil Johnson
Phone: +44 0 7748 180921
Email: neil.johnson@nidec-elevator.com

THINK ELEVATOR. THINK NIDEC.
NIDEC ELEVATOR