TRACTION

MISTRAL

MRL



KLEEMANN

COMPLETE LIFTS

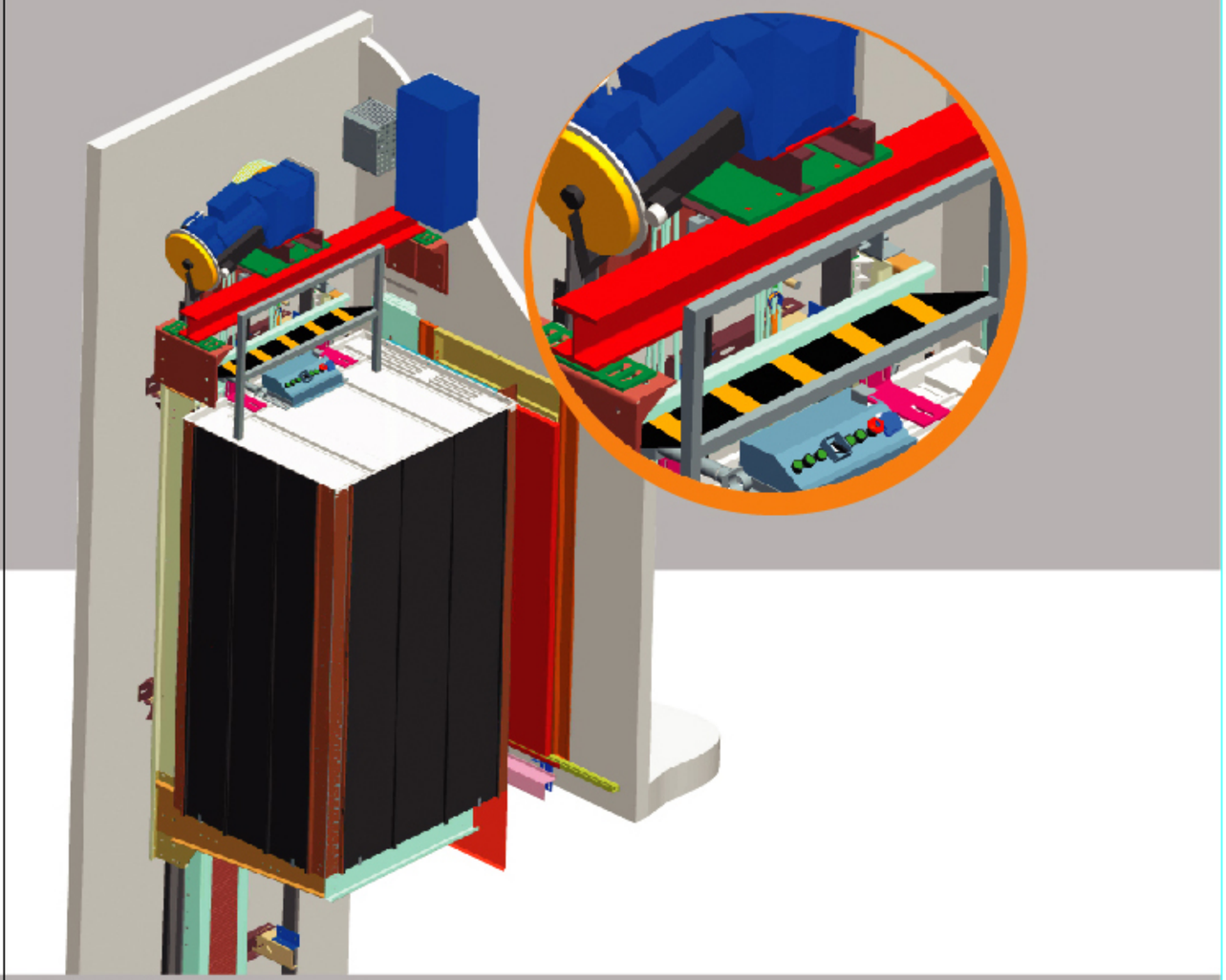
MISTRAL is the ideal Traction Machine Room-Less lift (MRL) for up to 630 kg rated load.

It uses a VVVF driven (or AC2) gearbox, manufactured by Alberto Sassi.

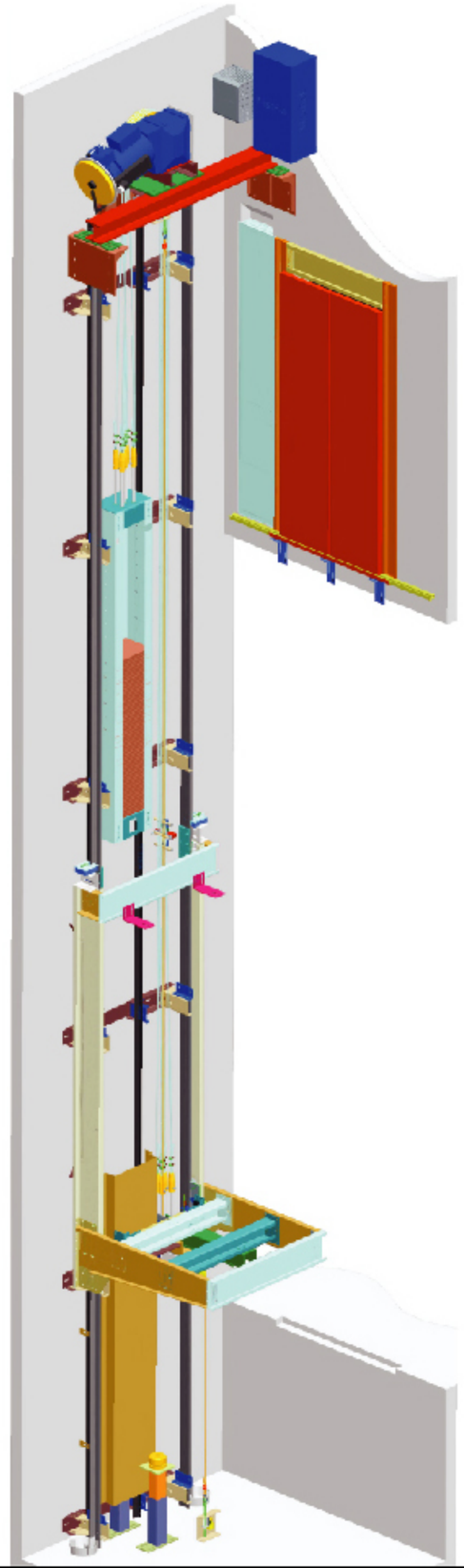
The gearbox is easily placed in the top of the shaft with a special push-cart.

The special design of cantilever-style elevator and the 1:1 roping facilitates easy installation.

The superior quality of the parts and the gearbox guarantee a noiseless and very smooth ride. MISTRAL is a high value Traction MRL, fully customized to your needs!



Top of the shaft



The advantages of MISTRAL:

- 4 weeks ex-works delivery time
- Ease of installation and maintenance
- Type Examination Certificate according to Directive 95/16 EC
- Mechanically operated emergency release
- Pre-assembled electrical installation (pre-wiring)
- 1600 mm x 1800 mm shaft for 630 kg load accommodating 800 mm or 900 mm door opening
- Simple idea, Simple implementation
- KLEEMANN Flexibility, Guarantee and Support

The MISTRAL complete lift is offered with...

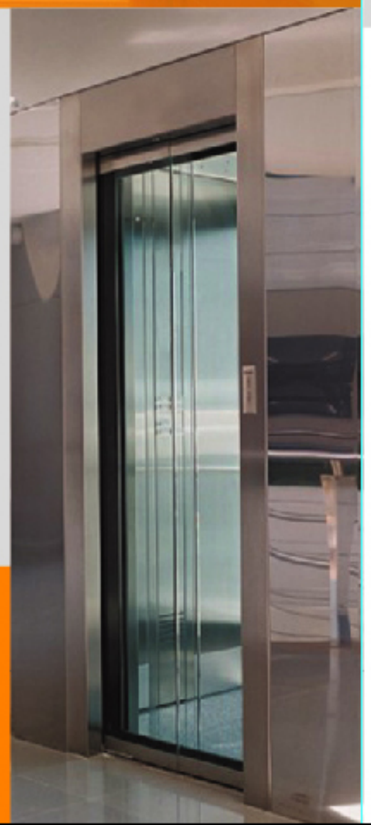


- Guaranteed compatibility with all components
- Detailed installation, operation and maintenance manuals
- Functional packing design

- Automatic doors with VVVF operator
- Side opening and central opening doors, available in various finishings
- Landing doors also as per DIN 18091









MISTRAL

Various attractive cabin designs available



ATHENA

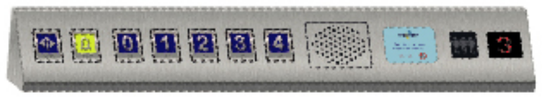


IFIGENIA



DANAE

Large variety of COPs, LOPs



















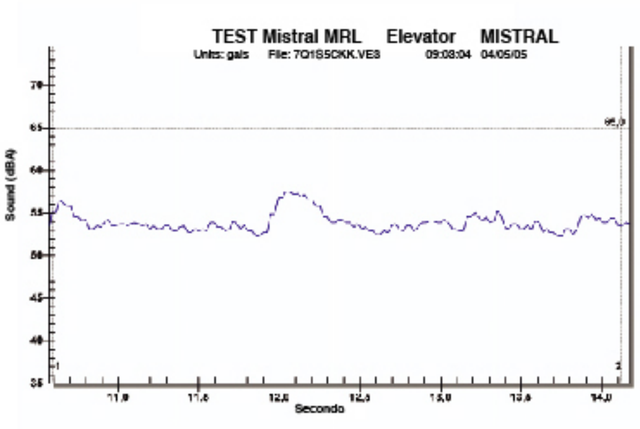




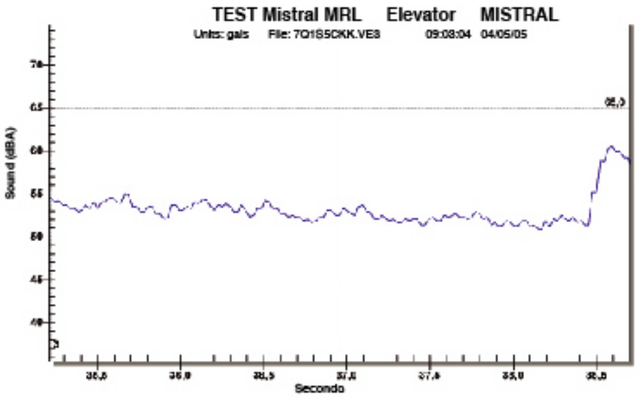




Operation in ascent direction with nominal speed



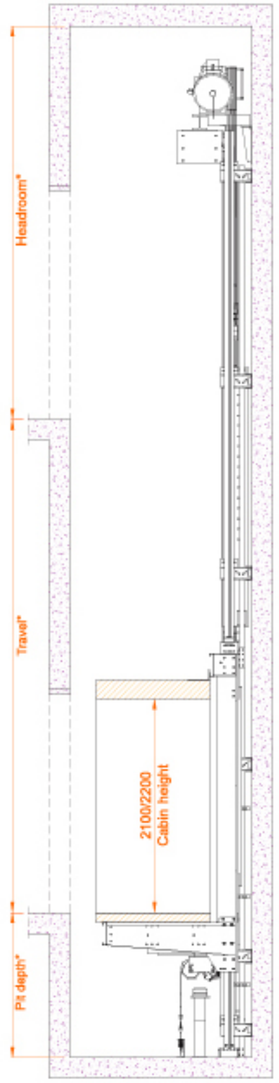
Operation in descent direction with nominal speed

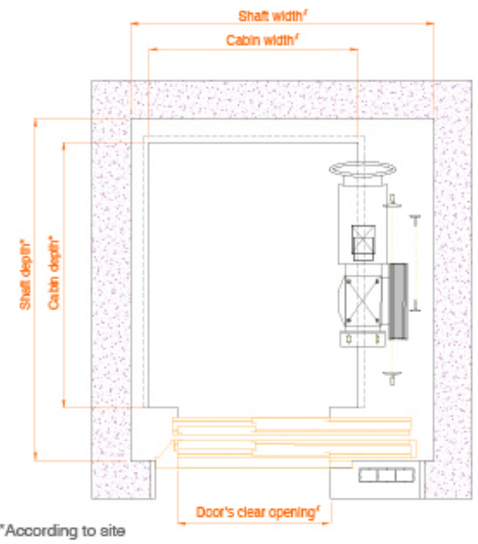


Sound in cabin	Sound level
Operation in ascent direction with nominal speed	54 dBA
Operation in ascent direction on startup – stop	50 dBA
Operation in descent direction with nominal speed	53 dBA
Operation in descent direction on startup – stop	50 dBA

Sound in front of shaft door / controller cabinet	Sound level
Operation in ascent direction with nominal speed	51 dBA
Operation in ascent direction on startup – stop	48 dBA
Operation in descent direction with nominal speed	50 dBA
Operation in descent direction on startup – stop	48 dBA

Sound level measurements effectuated in factory conditions via the EVA-625 measurement device in accordance to the ride quality standard ISO 18738





*According to site

	MISTRAL 450	MISTRAL 630
Rated load (kg)	450	630
Persons	6	8
Roping	1:1	1:1
Max. travel (m)	45	45
Number of stops	16	16
Max. speed (m/sec)	1	1
Cabin sling weight (kg)	300	300
Max. cabin weight (including cabin door) (kg)	550	650
Cabin width (mm)	1100	1100
Cabin depth (mm)	1300	1400
Cabin height (mm)	2100 / 2200	2100 / 2200
Max. entrances	3	3
Door width (mm)	800 / 900	800 / 900
Door height (mm)	2000 / 2100	2000 / 2100
Shaft width (mm)	1600	1600
Shaft depth (mm)	1700	1800
Min. pit depth (mm)	1200	1200
Min. headroom (mm)	3600 / 3700	3600 / 3700
Cabin guide rails	T89x62x16	T89x62x16
Cabin DBG	1000	1000
Counter weight guide rails	T50x50x5	T50x50x5
Counter weight's DBG	400	400
Max. vertical distance between guide brackets (mm)	2000	2000
Gearbox	Alberto Sassi/Leo	Alberto Sassi/Leo
Traction sheave (mm)	⌀ 400	⌀ 400
Starts per hour	AC2:180 / VVVF:240	AC2:180 / VVVF:240
Ropes (mm)	4 x ⌀ 10	5 x ⌀ 10

KLEEMANN GROUP

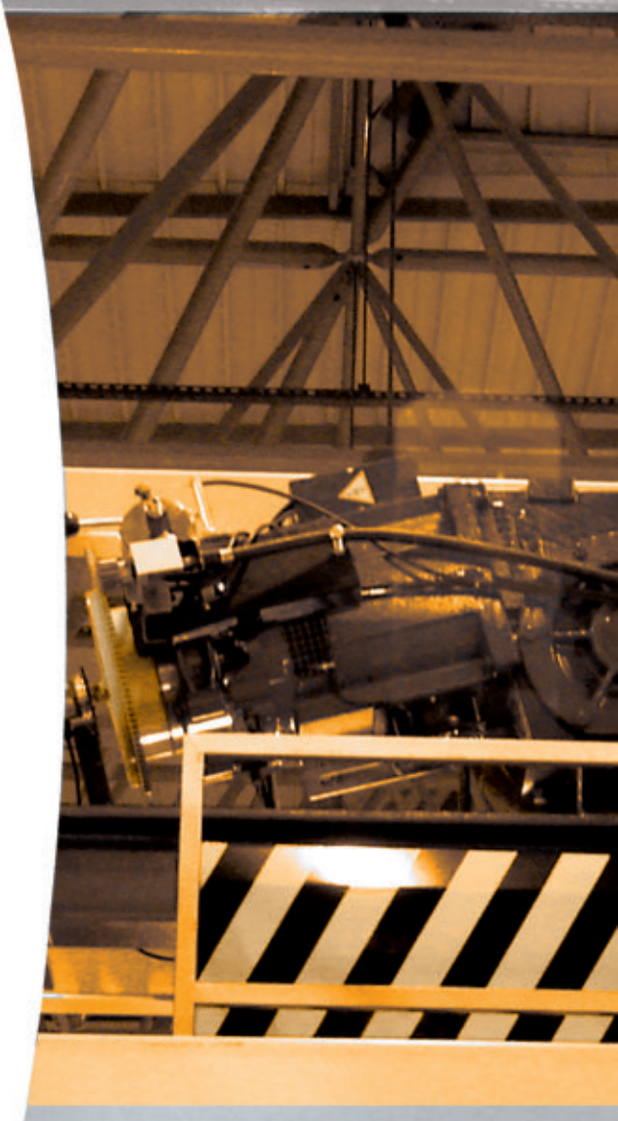
KLEEMANN SOLUTIONS RANGE

COMPLETE LIFT SYSTEMS

- COMPLETE HYDRAULIC / TRACTION SYSTEMS WITH MACHINE ROOM
- MRL SOLUTIONS (HYDRAULIC / TRACTION)

LIFT ASSEMBLIES

- CABINS
  - PASSENGER CABINS
  - FREIGHT / GOODS CABINS
- DOORS
  - AUTOMATIC DOORS WITH VVVF OPERATOR
  - FOLDING DOORS
  - SEMI-AUTOMATIC LANDING DOORS
  - CIRCULAR DOORS
  - MODERNIZATION DOORS
- ELECTRONICS
  - CONTROLLERS
  - CAR AND LANDING OPERATING PANELS
  - PRE-WIRING
- HYDRAULIC ELEVATION SYSTEMS
  - PISTON AND CYLINDER ASSEMBLY
  - POWER UNITS
  - CAR FRAMES
  - GUIDE RAILS
  - WIRE ROPES
  - HYDRAULIC OIL
- TRACTION ELEVATION SYSTEMS
  - TRACTION MACHINES
  - CAR SLINGS
  - COUNTERWEIGHT SLINGS
  - GOVERNORS
  - GUIDE RAILS
  - WIRE ROPES



KLEEMANN — Head offices - Export Sales: Kilkis Industrial Area, P.O. Box 25, Post Code 61 100, Kilkis, Greece.
Operator: +30 23410 38 100, Fax: +30 23410 38200,
E-Mail: headoffice@kleemann.gr, www.kleemann.gr

KLEFER Automatic Lift Doors — Kilkis Industrial Area, Post Code 61 100, Kilkis, Greece, Operator: +30 23410 75 730, Fax: +30 23410 75 733,
E-Mail: info@klefer.gr, www.klefer.gr

KLEEMANN Asansör — Yukari Dudullu, Türker, Cad No 34 34775, Ümraniye Istanbul TÜRKIYE, Tel.: +90 216 4662267, Fax: +90 216 4662285,
E-Mail: info@kleemannturk.com

KLEEMANN Liftovi — Golubinačka b.b, Šimanovci, Beograd Serbia - Montenegro, Tel/fax (+381 22) 80-280, 80-090,
E-Mail: office@kleemann.co.yu

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