

# Model MQM



# The elevator that optimizes space and energy





# The tailor-made solution Maximum flexibility and performance

# Main characteristics

Load (kg)	320 / 450 / 630 / 800 / 1.000 kg	1	4/5/6/8/10/13 persons
Speed	Up to 2,00 m/s		
Travel	Up to 100 meters		
Stops	Up to 40 stops		
Shipments	Single entrance   Two entrance 180º		
Conditioning system	Electric suspension 2:1		
Maneuver	VVVF controled by electronic board		
Door types	Automatics		
Free passage of doors	700 / 800 / 900 mm		
Door clearance	2.000 / 2.100 / 2.200 mm		
Cabin dimensions	Customized according to project		
Interior cabin height	2.100 / 2.200 / 2.300 mm (others available	e)	
Feeding	380 (3 $\sim$ )   220 (1 $\sim$ )		

# The cnological advantages

# **ECO DISSIGN**



- The MQM lift uses a high-performance permanent magnet synchronous gearless machine for its traction during operation. The added incorporation of the VVVF frequency inverter further optimizes energy consumition
- The use of a 2: 1 traction system also reduces the necessary energy demand
- No lubrication or refrigeration oils are used as a consequence of using a gearless machine
- The use of a smaller driving pulley reduces the driving torque and as a result the energy demanded by the system
- Polyamide deflection pulleys reduce the moment of inertia and the energy demand of the system is less

# **CONFORT**



- The movements made are smooth, comfortable and quiet
- The starts and stops are progressive and with great precision
- The acoustic level of the machine (45 dB) makes the noise generated during operation imperceptible to the user

# SAFETY



- Electrical rescue system that allows the automatic evacuation of the user in case of being trapped and with no electrical tension in the building. The elevator is automatically positioned on the ground floor, opening the doors and releasing the user
- Two-way communication system in the cabin
- Prevention system for uncontrolled movement of the cabin up and down

## **OPTIMIZATION**



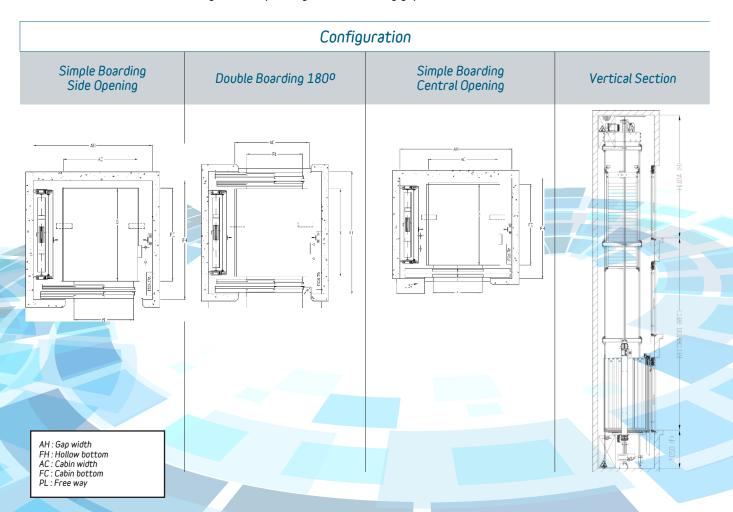
- The spaces in the building are optimized without needing a machine room
- The gap is reduced, leaving more space available for homes, offices, ...
  - Return on investment as a result of existing energy savings on each trip



# Standard Dimensions

		Sing	le / double 18	30 - Lateral Med	chanics				
LOAD (kg)	PERSONS	CABIN	DOOR	SINGLE BOARDING (mm)	BOARDING 180º (mm)	PIT	FLIGHT 81-20	PIT	FLIGHT 81-21
			AT211 700	1.450, 1.400	1.450, 4.500	LIN	01-20	LIN	01-21
320	4	900 x 1.000	AT2H - 700 AC2H - 700	1.450 x 1.400 1.580 x 1.315	1.450 x 1.520 1.580 x 1.460	1.200	3.400	350	3.400
450		4.000 4.050	AT2H - 800	1.550 x 1.570	1.550 x 1.770	4 000	0.400	0.50	0.400
450	6	1.000 x 1.250	AC2H - 800	1.780 x 1.565	1.780 x 1.710	1.200	3.400	350	3.400
630	8	1.100 x 1.400	AT2H - 900	1.650 x 1.700	1.650 x 1.920	1.200	3.400	350	3.400
			AC2H - 900	1.980 x 1.715	1.980 x 1.860				
800	10	1.300 x 1.400	AT2H - 900	1.850 x 1.700	1.850 x 1.920	1.200	3.400	350	3.400
000		1.000 X 1.100	AC2H - 900	1.980 x 1.950	1.980 x 1.920	1.200	0.700	000	0.700
1.000	13	1.400 X 1.600	AT2H - 900	1.980 x 1.950	1.980 x 2.120	1.200	3.400	350	3.400
1.000	13	1.400 × 1.000	AC2H - 900	1.980 x 1.950	1.980 x 2.120	1.200	3.400	300	3.400
1.000	13	1.100 X 2.100	AT2H - 900	1.650 x 2.450	1.650 x 2.620	1.200	3.400	350	3.400
1.000	13	1.100 X 2.100	AC2H - 900	1.950 x 2.450	1.950 x 2.620	1.200	3.400	300	3.400

- 1.- Simple boarding. Hollow bottom with the tread fully completely flown into the hollow
- 2.- Double boarding. Hollow bottom with both treads completely flown into the hollow
- 3.- The cabin dimensions are configurable depending on the exsisting gap





# More about the MQM Model

Regulations	The lift complies with :				
	European Directive of lifts 2014/33/UE	EN 81-20	EN81-50		
	EN 81-21	EN 81-28	EN 81-70		
	EN 12015	EN 12016			
Conditions	Operating				
	Temperature range	of 5-40° in the machin (EN81-2			
		υρ to 95%			
	Humidity	up to	95%		
Performance	Humidity	υρ to	95%		
Performance	Humidity Capacity	ир to 125% of r			
Performance			ated load		
Performance	Capacity	125% of r	ated load mm		
Performance	Capacity Stopping accuracy	125% of r +/- 5	ated load imm n/s²		
Performance	Capacity Stopping accuracy Aceleraction	125% of r +/- 5 0,5 r	ated load imm n/s <sup>2</sup> n/s <sup>2</sup>		

# **ROPPING**

Ropping 2:1

# **MACHINE**

- GEARLESS synchronous permanent magnets machine
- Low energetic consumition
- Does not use oil
- Soft running and low noise (45 dB)
- Reduced diameter sheaves 210, 240 mm. according to lifting loads and speeds
- 380V-3 phases

# BRAKE

Of double effect according to EN 81-20:2014

# **ENCODER**

- Absolute Encoder BISS-C
- Absolute Encoder Endat 1313





# Optional

## TIMER CAR LIGHT

## MECHANICAL LOCK DEVICE

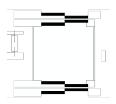
## SELECTIVE OPENING OF DOORS



The turning off the car light can be timed so that after a certain time, an there is an automatic shut-off



This is a device that allows the locking of landing doors preventing its opening, unless the car door and the landing door are facing



Option that allows lift cabins having double entrance on the same floor, to configure the door you want to be open

# FIRE ALARM

## FIRE ALARM

# EARTHQUAKE ALARM



When the switch fire or fire sensors are activated, the elevator will return to the designated floor, opening doors and allowing the release of all passengers.

All existing calls will be canceled and the elevator will be out of service (according to standard EN 81-73)



In addition to the fire emergency, the elevator allows it to be used by firefighters to evacuate people.

For this, they have a panel for exclusive use that allows the elevator to move using keys and as long as the emergency fire alarm has been activated



When the seismic sensor is activated, the cabin will stop at the next floor, will open doors and remain still with open doors

### **AUTOTRANSFORMER**

### REDUCED PIT KIT

### REDUCED HEADROOM KIT



Electrical device that increases the input voltage, maintaining power. It is used to feed 380 V/3F engines or motors when the voltage is 208 V/3F or 220 V/3F



It is used when it is impossible, for architectural or other issues, to obtain a regulatory pit for maintenance by qualified personnel.

It is consists of:

Mechanical stop / System for detecting peopel in pit / Retractable spoiler with safety contact



It is used when it is not possible to obtain superior security space on top of the shaft (headroom). It is consists of: Mechanical stop / System for detecting people on ceiling





