

# 1. Description

manusa 🖬

Operator for single-slide or bi-parting hermetic automatic sliding door.

The hermetic Visio+ operator is a product designed specifically to guarantee high levels of airtightness in clean rooms and operating theatres, thanks to its patented system of approximation and closing the leaf on the frame.

Its exclusive assisted opening system allows the door to be easily operated manually without the need for lever systems during power cuts.

# FEATURES

Two drive versions: LD y HD and a chassis with a height of 175mm, allow the door to be adapted to the client's requirements, especially in the case of heavy leaves -up to 200 kg- such as protective doors for radiology rooms.

Highly-reliable asynchronous motors and advanced control electronics result in the best dynamic features for optimising energy savings.

Exclusive Manusa VV-VF Inverter Technology (Adjustment of Speed and Force) and Advanced Motor Control Management, combined with direct drive and the optimised design of the track system, enable a uniquely smooth movement.

The Visio+ family boasts technological and safety features that ensure compliance with the UNE-EN16005 standard. The Manusa hermetic door system comprises and is compatible with P50 and H44carpentry together with MK40 and MK40J, frames .

# CONNECTIVITY

П 4 ~  $\langle \neg \rangle$ ¢  $\langle \rangle$ ¢  $\langle D \rangle$ ð ⊳ ⊘ Right-hand side Left-hand side Bi-parting with fixed **Bi-parting** Right-hand side Left-hand side opening with opening with without fixed opening opening fixed leaf fixed leaf

The inclusion of a new Manusa Plug & Play Communications Bus makes it possible to simplify the connection of devices, providing improved signal integrity, lower electronic noise and easier installation and connection.

Electronic gateway built in for current loop connection of devices and sensors without the Manusa Bus.

Built-in IoTmodule makes it possible to control the door and a series of additional functions using mobile apps for both users and the Technical Support.

The option to load and update the firmware by means of the eSAT app using wireless Technical Support, guarantees the optimum functioning and maintenance of the door under all circumstances.

Hardware and software adapted to comply the specific regulations of certain countries.

# 2. Drive unit technical specifications

Kinematic specifications of the drive unit	
Adjustable leaf opening speed	≤ 1 m/s
Adjustable leaf closing speed	0.15 to 0.6 m/s
Maximum acceleration	2 m/s <sup>2</sup>
LD version: Maximum weight x sliding leaf (Single/Bi-parting)	1X90 kg / 2x65 kg
HD version: Maximum weight x sliding leaf (Single/Bi-parting)	1X200 kg / 2x150 kg

Electrical specifications of the drive unit		
Standard power source	220-240 V +/-6% 50-60 Hz	
110V power source option	100-120 V +/-6% 50-60 Hz	
Motor	2 x Three-phase AC	
Power x Motor	250 W	
Mechanical reducer	NO	
Inverter technology (exclusive to Manusa)	VV-VF	
Protection fuse	3.15 A (220V) / 5A (115 V)	
Operating temperature	-15 °C to 50 °C	
Transport and storage temperature	-15 °C to 50 °C	
Rechargeable fail-safe batteries (open/close)	1x12 V DC 700 mAh	

Electronic specifications		
Fire alarm connection	Yes	
Opening movement protection	Yes	
Emergency Stop	Yes	
Obstacle Detection	Yes	
Monitored fail-safe battery	Yes	
Safety photocell connection	Yes, maximum 2	
Safety sensors monitoring	Yes	
Movement sensors monitoring	Yes	
Manusa communication bus	Yes	
Current loop connection	Yes	
Lock status monitoring	NO	
IoT module	Yes	
Radio-frequency antenna	European Frequency:868 MHz	



# 3. Technical specifications of chassis

Manusa's Hermetic VISIO + operators offer many different assembly versions depending on the type of building and construction requirements:

Operator chassis specifications	
Operator dimensions (height x depth) [mm]	175 ×218
Maximum operator length [mm]	5810
Single-slide operator (Minimum/maximum clear width) [mm]	495 / 1800*
Bi-parting operator (Minimum/maximum clear width) [mm]	1070 / 2610*
Recommended maximum clear height [mm]	2400**
Allowable fastening types	Front

\* The clear widths indicated correspond to the recommended minimum and maximum width of passage possible for the length and type of operator. The maximum width of passage will always depend on the carpentry used and the maximum weight of the sliding leaf recommended for the operator. The recommended minimum assumes that the operator includes a lock.

\*\* The maximum clear height will always depend on the carpentry used and the maximum weight of the sliding door recommended for the operator.

# 4. Carpentry

The Manusa Hermetic VISIO+ operator is compatible with the following door leaves and frames:

Comp	patibility with door leaves	Sliding leaf	Fixed leaf	Frame
	A44-H4 Clearview frame	Yes	Yes	MK40-J
	Panelled P50	Yes	NO	MK40

# 5. Applicable norms

Electromagnetic Compatibility Directive	2014/30/EU
Machinery Directive	2006/42/CE
Automatic pedestrian doors. Safety in use	EN 16005
Household and Similar Electrical Appliances. Safety. Door drives	IEC 60335-2-103
Detection Devices	EN 12978



# 6. Finishes

The product is designed and manufactured in aluminium, which allows for all the finishes available for this material.

# Anodised:

The anodised finish consists of a protective covering, created through an electrolyte process.

The nominal anodised thickness is 15 microns. Entire Qualanod approved anodised range available.

## Lacquered:

The lacquered finish is a protective covering made from plastic paint polymerised in an oven. The nominal lacquered thickness is 60 microns. Available in the entire RAL and Pantone range and any other colour or texture possible in this finish. Qualicoat or Qualicoat SeaSide certification possible at the client's request.









# 7. Safety features

Earthing	The operator has electrostatic discharge for the leaf, both in open and closed position. There is the option to install the DC earthing complement along the entire route of the moving door.
Connection for a fire alarm	In the event of fire and to facilitate evacuation, the alarm signal can cause the door to open.
Emergency stop (optional)	Although there are no regulatory stipulations given that it is a low- risk machine, it is possible to stop the door's movement immediately of the stop the door's movement immediately of the stop the door's movement immediately of the stop the stop the door's movement immediately of the stop
Opening movement protection (optional)	The operator is able to manage the presence sensor signal in the opening area. An intermittent acoustic signal warns the pedestrian when they are in the middle of the area where the sliding leaves are opening. If the door is opening, this process will slow down.

# 8. Accessories

# DDS-A and DDS-B Hybrid Sensor

Range of dual-technology sensors with activation and safety detection functions in the leaves' closing area.

## DDS-S sensor

Infra-red technology sensor for detecting the lateral safety of the leaf opening area or in the closing area in doors with buttons or other opening systems.

## Planar Radar

# Safety Photocells



# OpeningÓptima+ proximity sensorPush button: Wired or wireless.Elbow push button: Wired or wireless.Outside key switch: Wired or wireless.Numeric code keypad: Wired or wireless.RFiD access control systemGRF wireless range for wireless installationRemote control

Handsfree system: Personal access identification.

## Access control

Card reader / RFID

Remote management for smartphones (Android / iOS)

Biometric readers

## Safety

Electromechanical lock

Electromagnetic fail-safe lock (ERP)

Cover lock

Control and communications

I/O Interface: Module for airlocks and special functions.

Openlinx: Separate module for integrating doors in SCADA system.

Manulink: Exclusive software for centralised control of a door system from a PC.

## Switches

Óptima+ switch: with LED segments screen. Manusa Bus connection via cable. Surface mounted.

Óptima Pocket+ switch: wireless via radio-frequency.

DoorWifi switch app: mobile app. Available for Android and iOS.

Óptima switch: with illuminated segment screen and connection via cable. Embedded or surface mounted.

## Smart door

Self-dimming glass

Glass with integrated Venetian blind

Ledglass® Leaf Lighting

People counting system

eSAT 2.0 technical support console: Available for Android.

The characteristics indicated in this manual are purely informative and are in no way binding. The manufacturer reserves the right to make modifications without prior notice.



Technical service and manufacturer contact: Via Augusta, 85-87, 6ª Planta 08174 Sant Cugat del Vallès · Barcelona · España manusa@manusa.com +34 902 321 400 I +34 935 915 700 www.manusa.com