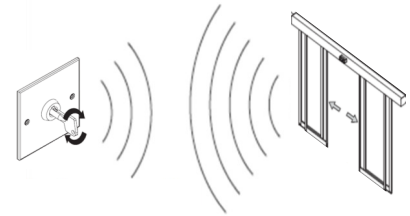


Data Sheet

GRF WIRELESS RANGE**1 - DESCRIPTION****i**

Range of **radiofrequency** wireless accessories used to activate Manusa automatic doors.

They facilitate the installation of various elements without building work and **without the necessity of any cable**.

The **transmitters** and **receiver** communicate each other after a simple programming, and are integrated in a **unique system**.

The wall-mounted transmitter come in **surface-mounted** and **recessed versions**.

The Push-buttons are available in white and silver.

The range includes a **hands-free system** for opening the door by the approximation of the transmitter.

An **RFID** identification system is also available for intelligent access control.

2 - COMPONENTS OF THE SYSTEM

The **manusa** GRF wireless range consists of:

- **Universal receiver GRF-R**, installed inside the operator

- Transmitters:

- **Outside key-switch GRF-K** (recessed or surface-mounted)



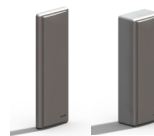
- **Numeric keypad GRF-T** (recessed or surface-mounted)



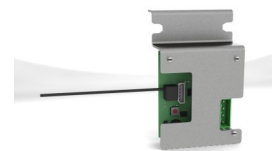
- **Push-button GRF-P** (recessed or surface-mounted)



- **Elbow switch GRF-PC** (recessed or surface-mounted)



- **Remote control GRF-M** (2 or 4 channels)



868MHz - 30 metros

Hands-free system of GRF range consists of:

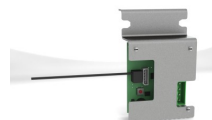
- Trigger GRF-D



- Active Tag GRF-TG



- Receiver GRF-R



125 kHz - 1,5 metros

868MHz - 30 metros

The RFID system of GRF range consists of:

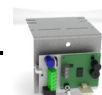
- Passive proximity Tag GRF-TG2



- Proximity reader GRF-D2



- Control central GRF-CC



- Proximity card GRF-C



proximidad
13,56 MHz
3 a 6 cm

3 - ACCESORIES

- Auxiliary Power Supply



Never interrupted power system from the CRF-R receiver, to enable it to operate even in case of power failure.

- Assistant Programmer



Programming tool for facilities management. Lets you set proximity cards and tags and memory from receivers and control units. The associated software includes a database with the ability to manage all elements of an installation.

4 - TECHNICAL FEATURES

GRF-R RECEIVER

Frequency	868,35 MHz
Coding	High security changing code
Memory	30 Codes (other available options under request)
Nominal power supply voltage	12 V DC
Power supply limit voltages	9 a 24 V DC
Relay contacts	1 A
Operating consumption	80 mA
Consumption during stand-by	18 mA
Operating temperature	- 20 a +85 °C
Versions available (operators)	Visio, Bravo/Activa+

GRF TRANSMITTERS

Frequency	868,35 MHz
Nominal power supply voltage	3 V DC
Battery	CR2032
Coded Keyboard Battery	2 x AAA
Operating consumption	12 mA
Consumption during stand-by	0,002 mA
Radiated power	< 25 mW
Range	30 m
Operating temperature	-20 a +55 °C
Watertightness (key-switch and keypad)	IP43
Colours available for push-buttons	White and silver

ACTIVE TAG HANDS-FREE

Frequency	868,35 MHz
Type of transmission	Two-way
Battery	2 x 3 V
Range	30 m
Operating temperature	-20 a +55 °C
Operation indicator	Acoustic

TRIGGER HANDS-FREE

Frequency	125 kHz
Type of transmission	One-way
Power supply	12/24 V DC
Consumption	25 mA
Range	1,5 m
Operating temperature	-20 a +55 °C
Watertight integrity	IP66
Operation indicator	LED

PROXIMITY READER (GRF-D2)

Reading System	Proximity
Operating distance	5 cm. About
Operating frequency	13.56 MHz
Power supply	12 V (9-21V) DC
Consumption	68mA
Compatibility	GRF-C y GRF-TG
Operating temperature	-20 a +55 °C
Operating protocols	Wiegand 26 / BUS-L
Operation indicator	LED
Wiring	6 shielded cables
Wire size up 100/150/200m	0,22/0,35/0,5mm² (category 5 recommended)
Watertight integrity	IP66

PROXIMITY PASSIVE TAG (GRF-TG)

Reading system	Proximity
Operating distance	5 cm. About
Operating frequency	13.56 MHz
Reprogrammable	Yes
Dimensions	32 x 26 x 5 mm

PROXIMITY CARD (GRF-C)

Reading system	Proximity
Operating distance	5 cm. About
Operating frequency	13.56 MHz
Reprogrammable	Yes
Dimensions	55 x 87 x 1 mm

CENTRAL CONTROL (GRF-CC)

Memory	500 codes
Output	Relé NA / NC
Power supply	12/24V DC
Power range	9-23 / 22-35V
Access Control Output	BUS-L
Consumption reposo / func.	30mA / 90mA
Operating temperature	-20°C a +85°C

PROGRAMADOR ASSISTANT

Power supply	USB
Consumption	<100mA
Watertight integrity	IP20
Operating temperature	-20°C a +85°C
Compatible with	GRF-R, M, TG2, CC, C

APPLICATION GUIDELINES AND STANDARDS

Telecommunications	EN 300 220-1 v1.3.1 (2000-09)
	EN 300 220-3 v1.1.1 (2000-09)
	EN 300 330-1 v1.5.1 (2006-04)
	EN 300 330-2 v1.3.1 (2006-04)
Electromagnetic compatibility	EN 301 489-3 v1.3.1 (2001-11)
	EN 301 489-1 v1.3.1 (2001-09)
Low voltage	EN 60730-1:2000

5 - REFERENCES TABLE

ELEMENT	REFERENCE
Receiver GRF-R Visio	A02434
Receiver GRF-R Bravo/Activa	A02435
Outside key-switch GRF-K Surface-mounted	A02442
Outside key-switch GRF-K Recessed	A02441
Numeric keypad GRF-T Surface-mounted	A02440
Numeric keypad GRF-T Recessed	A02439
Push-button GRF-P Surface White	A02430
Push-button GRF-P Surface Silver	A02431
Push-button GRF-P Recessed White	A02426
Push-button GRF-P Recessed Silver	A02427
Elbow switch GRF-PC Superficie White	A02432
Elbow switch GRF-PC Superficie Silver	A02433
Elbow switch GRF-PC Recessed White	A02430
Elbow switch GRF-PC Recessed Silver	A02431
Remote control GRF-M 2 channels	A02443
Remote control GRF-M 4 channels	A02444
Trigger hands-free GRF-D	A02437
Active Tag hands-free GRF-TG	A02438
Proximity reader GRF-D2	A02082
Central control GRF-CC	A02081
Passive proximity Tag GRF-TG2	A02084
Proximity card GRF-C	A02083
Auxiliary Power Supply 12 V Visio	A00145
Auxiliary Power Supply 12 V Bravo/Activa	EAFA01

NOTE: The features included in this document are given for information purposes only, and are not binding.

The manufacturer reserves the right to modify its products without prior notice.

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