





The Double Knob Line is designed to manage several functions in the vehicle air conditioning system, such as heating, ventilation (the speed control ventilation can be supplied either with 3 steps or with electronic speed regulator), air conditioning, air recirculation, defrost function, etc.

Control units in this line have two control knobs plus two push buttons and are fully backlit (all functions of the control unit, including the knobs, are backlit to allow the user to easily find them in the hours of darkness).

This line includes versions with either manual or automatic temperature control.

COMES control units are developed to get the maximum flexibility. If you are interested in functions which are not included above or other modifications, please do not hesitate to contact our technical department who will provide you with professional assistance.

GENERAL PERFORMANCE, ELECTRONICAL AND ENVIRONMENTAL TESTS

Operating Voltage Range: $10.5 \div 16V / 18 \div 32V$

Nominal Power Supply Voltage: 12V / 24V
Output Rated Current, each pin: max 400mA

Operating Temperature Range: from -40°C to 85 °C Storage Temperature Range: from -40°C to 90°C

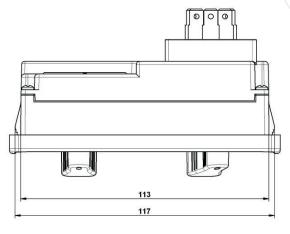
Dust/Water Resistance on the Front Panel: IP54

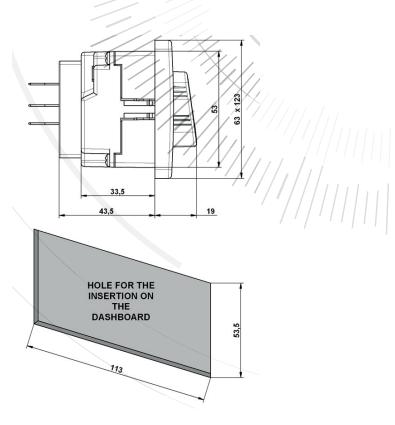
Over Voltage Protection Reverse Polarity Protection Short-Circuit Protection

Electromagnetic Compatibility according to UNECE Regulation No.10

MECHANICAL DIMENSIONS









Manual Control Unit - 3 Blower Speeds - A/C and Recirculation Push Buttons



Manual Control Unit - 3 Blower Speeds - A/C and Defroster Push Buttons



Manual Control Unit - 3 Blower Speeds - A/C Push Button



Manual Control Unit - Electronic Blower Speed - A/C and Recirculation Push Buttons



Manual Control Unit Electronic Blower Speed - A/C Push Button



Automatic Control Unit - A/C and Recirculation Push Buttons



Electronic Thermostat - 3 Blower Speeds



Manual Control Unit 3 Blower Speeds A/C and Recirculation Push Buttons

PART NUMBER	P/N 12V	P/N 24V
Control Unit	V02.65.005	V02.65.005
Water Valve Kit	61.01.297	61.01.298
Connector and Pin Kit	61.01.318	61.01.318
Complete Kit (Relay not included)	Z01.65.009	Z01.65.010

FUNCTIONAL OVERVIEW

This control unit is designed to manage the following functions:

- Heating (by rotating the temperature control knob)
- Ventilation (by rotating the air flow control knob; the speed control ventilation is supplied with 3 steps)
- Air conditioning (by pressing the relevant push button)
- Air recirculation (by pressing the relevant push button)



Manual Control Unit 3 Blower Speeds A/C and Defroster Push Buttons

PART NUMBER	P/N 12V	P/N 24V
Control Unit	V02.65.006	V02.65.006
Water Valve Kit	61.01.297	61.01.298
Connector and Pin Kit	61.01.318	61.01.318
Complete Kit (Relay not included)	Z01.65.011	Z01.65.012

FUNCTIONAL OVERVIEW

This control unit is designed to manage the following functions:

- Heating (by rotating the temperature control knob)
- Ventilation (by rotating the air flow control knob; the speed control ventilation is supplied with 3 steps)
- Air conditioning (by pressing the relevant push button)
- Defrost function (by pressing the relevant push button)



Manual Control Unit - 3 Blower Speeds - A/C Push Button

PART NUMBER	P/N 12V	P/N 24V
Control Unit	V02.65.030	V02.65.030
Water Valve Kit	61.01.297	61.01.298
Connector and Pin Kit	61.01.318	61.01.318
Complete Kit (Relay not included)	Z01.65.055	Z01.65.056

FUNCTIONAL OVERVIEW

This control unit is designed to manage the following functions:

- Heating (by rotating the temperature control knob)
- Ventilation (by rotating the air flow control knob; the speed control ventilation is supplied with 3 steps)
- Air conditioning (by pressing the relevant push button)



Manual Control Unit Electronic Blower Speed Regulator A/C and Recirculation Push Buttons

PART NUMBER	P/N 12V	P/N 24V
Control Unit	V02.65.011	V02.65.011
Water Valve Kit	61.01.297	61.01.298
Electronic Blower Speed Kit	Z19.01.135	Z19.01.142
Connector and Pin Kit	61.01.318	61.01.318
Complete Kit (Relay not included)	Z01.65.021	Z01.65.022

FUNCTIONAL OVERVIEW

This control unit is designed to manage the following functions:

- Heating (by rotating the temperature control knob)
- Ventilation (by rotating the air flow control knob; the ventilation is supplied with electronic blower speed regulator)
- Air conditioning (by pressing the relevant push button)
- Air recirculation (by pressing the relevant push button)



Manual Control Unit Electronic Blower Speed Regulator A/C Push Button

P/N 12V	P/N 24V
V02.65.031	V02.65.031
61.01.297	61.01.298
Z19.01.135	Z19.01.142
61.01.318	61.01.318 \
Z01.65.057	Z01.65.058
	V02.65.031 61.01.297 Z19.01.135 61.01.318

FUNCTIONAL OVERVIEW

This control unit is designed to manage the following functions:

- Heating (by rotating the temperature control knob)
- Ventilation (by rotating the air flow control knob; the ventilation is supplied with Electronic Blower Speed Regulator)
- Air conditioning (by pressing the relevant push button)



Automatic Control Unit A/C and Recirculation Push Buttons

PART NUMBER	P/N 12V	P/N 24V
Control Unit	V02.65.014	V02.65.014
Water Valve Kit	61.01.297	61.01.298
Electronic Blower Speed Kit	Z19.01.135	Z19.01.142
External Temperature Sensor	24.01.019	24.01.019
Internal Temperature Sensor	24.01.020	24.01.020
Connector and Pin Kit	61.01.318	61.01.318
Complete Kit (Relay not included)	Z01.65.027	Z01.65.028

FUNCTIONAL OVERVIEW

This control unit is designed to manage the following functions:

- Heating (by rotating the temperature control knob)
- Ventilation (by rotating the air flow control knob; the ventilation is supplied with electronic blower speed regulator)
- Air conditioning (by pressing the relevant push button)
- Air recirculation (by pressing the relevant push button)

The software mathematical model receives information from 2 different temperature sensors:

- Cabin air sensor (internal)
- Outside air sensor (external)



Electronic Thermostat - 3 Blower Speeds

PART NUMBER	P/N 12V	P/N 24V
Control Unit	V02.65.025	V02.65.025
Anti-icing Temperature Sensor	24.01.052	24.01.052
Connector and Pin Kit	61.01.318	61.01.318
Complete Kit (Relay not included)	701.65.049	701.65.050

FUNCTIONAL OVERVIEW

This control unit is designed to manage the following functions:

- Air conditioning (by rotating the temperature control knob)
- Ventilation (by rotating the air flow control knob; the speed control ventilation is supplied with 3 steps)
- Air conditioning ON/OFF (by pressing the relevant push button)

