





### **DKL Plus**

### Double Knob Line Plus

The Double Knob Line Plus can carry out several functions, 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.

The control units are supplied with a DC motor water valve and their design resembles the DKL Line, with the addition of a third push button in the middle, for a total of two control knobs and three push buttons.

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

The control unit is fully backlit (all functions of the control unit, including the knobs, are backlit) and available for 12V and 24V systems.

All versions are available with CAN-bus upon request.

COMES control units are developed to get the maximum flexibility. If you are interested in different functions or configurations, please contact our sales team for professional assistance.

#### GENERAL PERFORMANCE, ELECTRONICAL AND ENVIRONMENTAL TESTS

Operating Voltage Range: 10.5÷16V/18÷32V

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

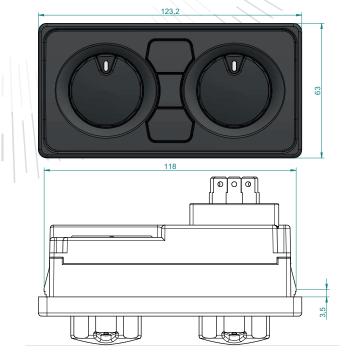
Operating Temperature Range: from -40°C to 85°C Storage Temperature Range: from -40°C to 90°C

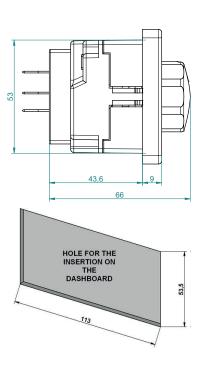
Dust/Water Resistance on the Front Panel: IP43

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

PART NUMBER	P/N 12V	P/N 24V
Control Unit	V02.66.001	V02.66.001
DC Motor Water Valve Kit	61.01.297	61.01.298
Connector and Pin Kit	61.01.318	61.01.318
Complete Kit (Relay not included)	Z01.66.001	Z01.66.002

#### **FUNCTIONAL OVERVIEW**

The control unit manages 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 Push Buttons

PART NUMBER	P/N 12V	P/N 24V
Control Unit	V02.66.003	V02.66.003
DC Motor Water Valve Kit	61.01.297	61.01.298
Connector and Pin Kit	61.01.318	61.01.318
Complete Kit (Relay not included)	Z01.66.005	Z01.66.006
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#### **FUNCTIONAL OVERVIEW**

The control unit manages 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 DC Motor Water Valve Kit	V02.66.002 61.01.297	V02.66.002 61.01.298
Electronic Blower Speed Kit	Z19.01.135	Z19.01.142
Anti-icing Sensor	61.01.279	61.01.279
Connector and Pin Kit	61.01.318	61.01.318
Complete Kit (Relay not included)	Z01.66.003	Z01.66.004

#### **FUNCTIONAL OVERVIEW**

The control unit manages 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)



# Automatic Control Unit Electronic Blower Speed Regulator A/C, Recirculation and Defrost Push Buttons

P/N 12V	P/N 24V
V02.66.004 61.01.297	V02.66.004 61.01.298 Z19.01.142
61.01.279 24.01.019	61.01.279 24.01.019
24.01.020 61.01.318 Z01.66.007	24.01.020 61.01.318 Z01.66.008
	V02.66.004 61.01.297 Z19.01.135 61.01.279 24.01.019 24.01.020 61.01.318

#### **FUNCTIONAL OVERVIEW**

The control unit manages the following functions:

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

The software mathematical model receives information from 3 different temperature sensors:

- Cabin air sensor (internal)
- Outside air sensor (external)
- Anti-icing temperature sensor

#### **ACCESSORIES**











External Temperature Sensor



