

HDL

Half DIN Dimension Line



COMES
ELECTRONIC CLIMATE CONTROL

HDL

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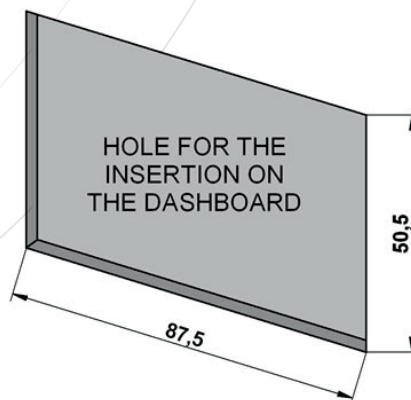
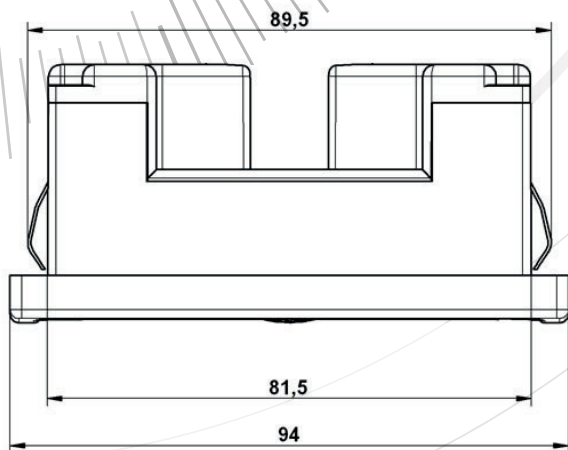
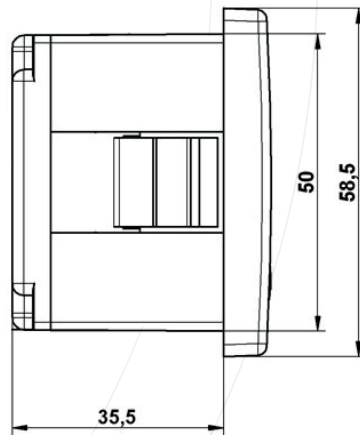
This fully equipped automatic line is able to meet most of the requirements in the climate control automotive field. The mechanical dimensions are half the size of the standard car radio (half DIN).

COMES control units are developed to get the maximum flexibility. If you are interested in different functions or other modifications, please do not hesitate to contact our sales team who will provide you with 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:	IP54
Electromagnetic Compatibility according to UNECE Regulation No.10	
Over Voltage Protection	
Reverse Polarity Protection	
Short-Circuit Protection	

MECHANICAL DIMENSIONS





FUNCTIONAL OVERVIEW

The control unit features eight push buttons and an LCD display, as below:

- Two push buttons for temperature adjustment
- Two push buttons for air flow
- A/C push button
- AUTO push button for full auto mode
- Recirculation push button
- External air temperature
- LCD: customised icons, TN, Transflective Positive, 12:00 or 6:00 o'clock viewing direction

When activating a function, the relevant icon becomes visible on the LCD display.

The control unit is fully backlit (all functions of the control unit are backlit to allow the user to easily find them in the hours of darkness) and available for both 12V and 24V systems.

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

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

Outputs for n°2 PWM (maximum 4 evaporator blowers and maximum 2 condenser fans).
On-board diagnosis with error code on display.

Available on demand:

- Interface for diagnosis
- Pressure switch failures (low/high pressure)
- LCD display with amber backlight (instead of the standard white backlight)

All versions are available with LIN-bus upon request.



Cooling Version Relay Blower Speed Recirculation Push Button

PART NUMBER	P/N 12V	P/N 24V
Control Unit	V02.55.027	V02.55.027
Anti-icing Sensor Kit	61.01.279	61.01.279
External Temperature Sensor	24.01.019	24.01.019
Internal Temperature Sensor	24.01.020	24.01.020
Connector and Pin Kit	61.01.309	61.01.309
Complete Kit (Relays not included)	Z01.55.050	Z01.55.051



Cooling Version Electronic Blower Speed Regulator Recirculation Push Button

PART NUMBER	P/N 12V	P/N 24V
Control Unit	V02.55.028	V02.55.028
Anti-icing Sensor Kit	61.01.279	61.01.279
Electronic Blower Speed Regulator 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	61.01.309	61.01.309
Complete Kit (Relay not included)	Z01.55.052	Z01.55.053



Climate Version Solenoid Water Valve Relay Blower Speed Recirculation Push Button

PART NUMBER	P/N 12V	P/N 24V
Control Unit	V02.55.029	V02.55.029
Solenoid Water Valve Kit	61.01.048	61.01.048
Anti-icing Sensor Kit	61.01.279	61.01.279
External Temperature Sensor	24.01.019	24.01.019
Internal Temperature Sensor	24.01.020	24.01.020
Connector and Pin Kit	61.01.309	61.01.314
Complete Kit (Relays not included)	Z01.55.054	Z01.55.055



Climate Version Solenoid Water Valve Electronic Blower Speed Regulator Recirculation Push Button

PART NUMBER	P/N 12V	P/N 24V
Control Unit	V02.55.025	V02.55.025
Solenoid Water Valve Kit	61.01.048	61.01.048
Electronic Blower Speed Regulator Kit	Z19.01.135	Z19.01.142
Anti-icing Sensor Kit	61.01.279	61.01.279
External Temperature Sensor	24.01.019	24.01.019
Internal Temperature Sensor	24.01.020	24.01.020
Connector and Pin Kit	61.01.309	61.01.314
Complete Kit (Relay not included)	Z01.55.056	Z01.55.057



Climate Version DC Motor Water Valve Relay Blower Speed Recirculation Push Button

PART NUMBER	P/N 12V	P/N 24V
Control Unit	V02.55.030	V02.55.030
DC Motor Water Valve Kit	61.01.297	61.01.298
Anti-icing Sensor Kit	61.01.279	61.01.279
External Temperature Sensor	24.01.019	24.01.019
Internal Temperature Sensor	24.01.020	24.01.020
Connector and Pin Kit	61.01.309	61.01.309
Complete Kit (Relays not included)	Z01.55.058	Z01.55.059



Climate Version DC Motor Water Valve Electronic Blower Speed Regulator Recirculation Push Button

PART NUMBER	P/N 12V	P/N 24V
Control Unit	V02.55.031	V02.55.031
DC Motor Water Valve Kit	61.01.297	61.01.298
Electronic Blower Speed Regulator Kit	Z19.01.135	Z19.01.142
Anti-icing Sensor Kit	61.01.279	61.01.279
External Temperature Sensor	24.01.019	24.01.019
Internal Temperature Sensor	24.01.020	24.01.020
Connector and Pin Kit	61.01.309	61.01.309
Complete Kit (Relay not included)	Z01.55.060	Z01.55.061

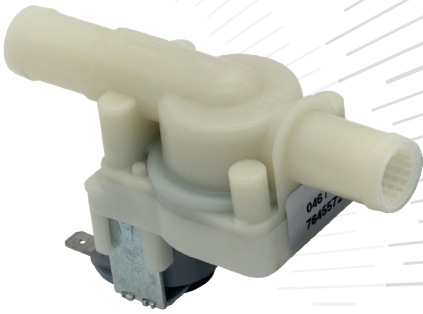
ACCESSORIES



Electronic Blower Speed Regulator



DC Motor Water Valve



Solenoid Water Valve



Internal Temperature Sensor



External Temperature Sensor



Anti-icing Sensor



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