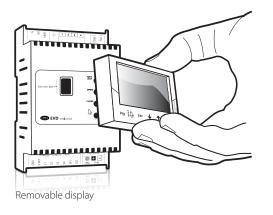
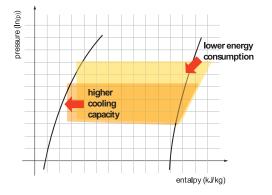


# **EVD evolution** Drive the power easily





The extended operating range of the E<sup>x</sup>V means the refrigeration unit can work with floating condensing pressure, and consequently at the minimum allowed for the ambient temperature. This brings significant energy savings in all refer applications.

The EVD evolution series of controllers for electronic valves is the latest step in the development of the famous CAREL drivers for superheat control. Compared to the standard EVD, this instrument adds advanced functions and a new user interface that makes it even easier to use and configure. The new TWIN version can independently control two electronic expansion valves, and represents the ideal solution for two circuit units or different control functions (i.e. superheat and hot gas bypass).

A new graphic display and a simple programming procedure allow the controller to be started by selecting just 4 parameters: refrigerant used, model of valve, type of pressure probe and application (chiller, display cabinet, etc.), selected from the multiple choice menus.

EVD evolution is complete with LEDs for controlling the main functions, and can house a removable LCD display for the configuration and monitoring of all the variables.

EVD evolution can be connected to the pCO series controllers or a PlantVisorPRO supervisor for integrated management of the driver via tLAN, pLAN or RS485/Modbus®; it can also operate independently (stand alone) using a digital input to switch the device on/off. EVD evolution can work as a simple positioner, using a 4 to 20 mA or 0 to 10 V analogue input signal.

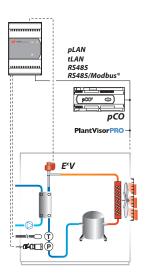
The new EVD evolution series can manage other functions in addition to superheat control, such as hot gas bypass, evaporator pressure control (EPR), and transcritical  $CO_2$  circuits. Connected to a pCO series controller, EVD Evolution can manage superheat on units fitted with Digital Scroll<sup>®</sup> compressors, using a specific algorithm patented by CAREL and approved by Emerson Climate Technology.

### Main functions:

- superheat control with auxiliary protectors MOP, LOP, low superheat
- assisted start-up procedure (just 4 parameters)
- connection diagram visible on the display
- multilanguage graphic display, with "help" on the various parameters
- management of multiple units of measure
- user management with passwords to access different levels of configuration
- copy parameters to other EVDs using the display
- LEDs for monitoring the main parameters
- use of ratiometric or 4-20mA transducers (the latter shared between several drivers)
- second digital input for defrost management
- possibility to use backup probes
- new battery module
- TWIN version to control two valves
- algorithm for Digital Scroll® applications
- self-adaptive algorithm

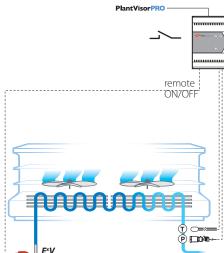
Combined with the CAREL E<sup>x</sup>V series electronic expansion valves, the EVD evolution driver forms an integrated control system for the evaporator that optimises operation and achieves high levels of energy saving. The CAREL electronic expansion valves are currently available for cooling capacities up to 2000 kW.

#### Example of application on a chiller



ccessories

Example of application on a display cabinet



Code	Description
EVD0000T00	EVD Evolution TWIN universal (tLAN)
EVD0000E00	EVD Evolution universal (tLAN)
EVD0000T10	EVD Evolution TWIN universal (pLAN)
EVD0000E10	EVD Evolution universal (pLAN)
EVD0000T20	EVD Evolution TWIN universal (RS485/Modbus®)
EVD0000E20	EVD Evolution universal (RS485/Modbus®)
EVD0000T30	EVD Evolution TWIN for CAREL valve (tLAN)
EVD0000E30	EVD Evolution for CAREL valve (tLAN)
EVD0000T40	EVD Evolution TWIN for CAREL valve (pLAN)
EVD0000E40	EVD Evolution for CAREL valve (pLAN)
EVD0000T50	EVD Evolution TWIN for CAREL valve (RS485/Modbus®)
EVD0000E50	EVD Evolution for CAREL valve (RS485/Modbus®)
EVDIS00EN0	Display for EVD Evolution, English
EVDIS00DE0	Display for EVD Evolution, German
EVDIS00ES0	Display for EVD Evolution, Spanish
EVDIS00FR0	Display for EVD Evolution, French
EVDIS00PT0	Display for EVD Evolution, Portuguese
EVDIS00IT0	Display for EVD Evolution, Italian
EVDISOORUO	Display for EVD Evolution, Russian
EVDIS00CN0	Display for EVD Evolution, Chinese
EVDIS00CZ0	Display for EVD Evolution, Czech
EVDIS00SE0	Display for EVD Evolution, Swedish
EVDCON0021	EVD Evolution connectors, multiple package (10 pz.)
EVDCNV00E0	Converter USB-tLAN for EVD Evolution
EVBAT00400	Rechargeable battery module for EVD Evolution (no battery)
EVBAT00500	Battery for EVDBAT00200/300/400
EVBATBOX10	Battery case for battery EVBAT*3*/*5*

\*: multiple packs are available for each EVD evolution code, contact CAREL sales for further information.

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