

Introduction to compressed air applications

All manufacturing activities require compressed air to support production processes. From the automotive industry to plastics, timber and chemical industries. Compressed air is used to operate machine tools, actuators and crimpers, or simply to clean the products.

The "easy Dryer" series is the economical solution that meets the needs for reliability and compliance with the main international regulations.

Major compressed air systems include the compressor, treatment equipment and accessories, and the distribution system.

The compressor is the mechanical device that takes in ambient air and increases its pressure.

The treatment equipment removes





Certifications





Compliance

Compliant with flammable refrigerants (e.g. R290 propane, R600a isobutane)



Compact

Ideal when the space available for housing the controller is limited: the depth occupied is just 58 mm while still featuring a 2Hp relay output for the control of refrigeration compressors without requiring additional intermediate relays.



Front panel IP65

The high index of frontal protection means "easy Dryer" can also be installed in more humid and aggressive environments.



Supply Voltages

High voltage power supply (230Vac,115Vac, 50/60 Hz)or low voltage power supply 12Vac/Vdc are all available for the preferred option.

contaminants and water from the compressed air, and accessories keep the system operating properly.

Humidity along with impurities must be removed from compressed air otherwise it condenses and over time it may cause serious damage to the distribution network, and the machineries which employ the compressed air.

The presence of condensation and impurities might also impair the quality of the final product when compressed air is directly utilized as auxiliary to industrial processes.

Compressed air Dryers are then necessary for a reliable and smooth operation of any plant requiring compressed air.

CAREL proposal

- Management of ON/OFF compressor via NTC input probe;
- Management of condenser fan via NTC input probe;
- Management of condensation drain valve based on intervals;
- ECO mode whenever consitions enable energy saving;
- Hours counter for maintenance purposes





Simple

All basic functions for the management of simple refrigerated air dryer are present.



Cost effective

Compressor, fan and condensation drain valve managed separately in the 3 relay option.

Simplified management with 2 relay for a lower price solution



Reliable

The typical current absorption from the condesation drain valve is 100mA. "easy Dryer" provides for a 8A relay which raiting is much greater than what necessary, hence ensuring prolonged lifetime of the controller.



Temperature probes with NTC thermistor

The precision achieved due to the technical solutions adopted in the development of the sensor and the reliability resulting from the tests performed, make the CAREL NTC probes reliable and affordable transducers for measuring temperature.

Code	Description
NTC008HP00	Sensor NTC HP IP67 0,8M -50+105 ON AIR
NTC030WH01	Sensor NTC WH IP68 -50T105 cable 3m



Visual Parameter Manager (VPM)

Program downloadable from http://ksa.carel.com. This tool can be used to setup the controller from a computer, program the parameters and update the firmware

Code	Power supply
3 digital outputs	
PJS8C0HW00	230 Vac +10 /-15% 50/60 Hz
PJS8C0HA00	115 Vac +10 /-15% 50/60 Hz
PJS8C0HC00	12 Vac +10/-15%, 50/60 Hz, 12 Vdc
2 digital outputs	
PJS8Y0HW00	230 Vac +10 /-15% 50/60 Hz
PJS8Y0HA00	115 Vac +10 /-15% 50/60 Hz
PJS8Y0HC00	12 Vac +10/-15%, 50/60 Hz, 12 Vdc

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RECUPERATOR

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