



ECONOMIZATION SOLUTION

Climatrix ECO

Title 24 Controller

usa.siemens.com/climatix-eco

SIEMENS

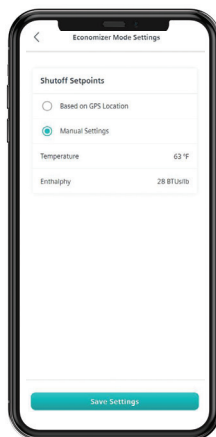
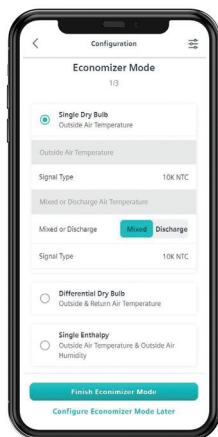
Implement effective free cooling and **increase energy savings**

Are your building's economizer controls and sensors functioning at optimum efficiency?

An estimated 70% of installed economizer dampers and systems function improperly and are in need of replacing. An economizer solution is comprised of a controller, damper actuator, thermostat, and sensors. Over the years, technologies advance and components that were once functioning become inoperable. Phasing out of legacy controllers and changing technology has created many hybrid variations of dampers, actuators, linkages, sensors, and controls. Other conditions that affect system performance and increase operating costs can range from incorrect wiring, installation, and commissioning to faulty control settings, and inaccurate sensors.

Switch to fresh air and reduce energy costs

Eliminate these worries: Siemens Economizer Control Solution allows a cooling system to supply outdoor air to reduce or eliminate mechanical cooling during ideal conditions. A properly functioning economizer reduces energy consumption and increases the lifespan of expensive rooftop unit (RTU) compressors and condensers. It maintains proper functionality of economizer dampers and ensures components are operating at peak performance.



Siemens has a cost effective bundled solution for Rooftop Units

The flexible, easy to commission Climatix ECO Title 24 compliant controller combined with reliable sensors, damper actuators and thermostats provide a cost effective bundle for both retrofit and new rooftop units.

Create healthier indoor environments

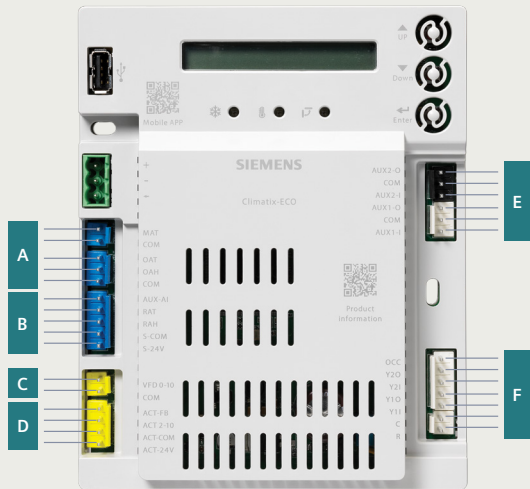
The economizer controller is easily configured with the Climatix mobile app or built-in HMI. The desired control method is managed through connected sensors that monitor temperature, humidity and CO₂ conditions. The economizer controller determines when outdoor air should be allowed to enter the building, and controls the damper actuator accordingly. Indoor air quality can be enhanced via demand control ventilation (DCV) by monitoring CO₂ levels and directing outside air in when CO₂ levels become too high.

Additional advantages

- Ideal replacement for improperly functioning economizer solutions
- Designed to directly replace W7220
- Save energy using unconditioned outside air to cool building
- Improve indoor air quality for healthier and more productive places
- Avoid waste by only conditioning occupied spaces
- Balance comfort and efficiency with a wide range of temperature and BTU settings
- Easily identify maintenance needs with fault detection diagnostics
- Save time by effortlessly commissioning component data points using Climatix mobile app
- Configure shut-off set points automatically by using ASHRAE Climate Table / GPS Coordinates built into the mobile app

Economizer Controller and Devices for RTUs

The Siemens Climatix ECO is an easy, cost effective, direct replacement for most RTU economizer brands. Its small footprint makes mounting to panels or control box quick and easy.



- A) Input for mixed, discharge, outside air temperature, outside air relative humidity and outside air temperature / relative humidity sensor
- B) Inputs for air quality, pressure sensor, return air temperature, return air relative humidity sensors
- C) Variable speed supply fan output
- D) Damper actuator output and feedback
- E) Configurable connections for various applications such as cooling stage 3 output, exhaust fan (1 or 2), VFD On/Off, ERV or system alarm outputs
- F) Occupancy input, mechanical cooling stage 1 & 2 input and output along with common power connections



Damper Actuator



CO₂ Sensor



Combo Temp + Humidity Sensor



Humidity Sensor



Temperature Sensor



Smart Thermostat



Climatix VFD

Product Ordering Information

Product	Description	Specification	Part Number
Climatix ECO	POL224.00 Title24 Economizer Controller	Complies with 2016 Title 24 part 6 Economizer Fault Detection and Diagnostics (FDD)	S55392-C202-A100
	POL224.05 Title24 Econ Cont, no housing		S55392-C203-A100
Damper Actuators	Spring Return, 2 to 10 Vdc Signal, Plenum-rated	20 lb.-in.	GQD151.1P
	Spring Return, 0(2) to 10 Vdc Signal, Plenum-rated	35 lb.-in.	GPC161.1P
	Spring Return, 2 to 10 Vdc Signal, Plenum-rated	62 lb.-in.	GMA151.1P
	Spring Return, 2 to 10 Vdc Signal, Plenum-rated	160 lb.-in.	GCA151.1P
CO ₂ Sensor	QPA2000 Room CO ₂ Sensor	0-10 Vdc	QPA2000
Combo Temp + Humidity Sensor	QFR9530 Duct Surface Mount RH&T Sensor	0-10 Vdc (RH) and 10k Ohm NTC II (Temp)	S55720-S501
Temperature Sensor	QAR9530 Duct Surface Mount Temp Sensor	10k Ohm, NTC II	S55720-S503
Humidity Sensor	QFR9500 Duct Surface Mount RH Sensor	0-10V Vdc	S55720-S502
Thermostats	Programmable Thermostat	24V	RDY2000
	Programmable Thermostat with BACnet	24V	RDY2000BN
	WiFi Thermostat – RDS120	24V	S55772-T101
	WiFi Thermostat with BACnet – RDS120.B	24V	S55772-T106
Climatix VFD	Climatix VFD, Avail. from 100-575V, up to 30HP	Sample Part: 230VAC, 1HP, 3-PH	RT-001X-23N

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