

To our teachers:

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Name *

Date *

Class *



What is an Economizer for a Packaged RTU?

All the following questions are based upon information from the video below.

Select the single best answer for each question.

<https://www.youtube.com/watch?v=hqCBBsFeRMc&list=PL-mtgGdh8bvj2VBzoYogabVeBvG7qtVNp&index=3&t=89s>

1. * Among the following choices, select the one that is not true.
An economizer is part of a packaged rooftop unit that:
 - a. uses cool outdoor air to cool a building
 - b. lowers energy consumption and cost
 - c. automatically opens doors and windows to take advantage of free, cool outdoor air
 - d. can lower indoor temperatures at a lower cost than an air conditioning unit
2. * Among the following choices, select the one that is not true.
A modern, code-compliant economizer:
 - a. requires pneumatic actuators
 - b. requires louver gear placement outside of the air stream
 - c. will have a digital economizer controller
 - d. requires low leak damper louvers with sealed blades
3. * The most basic economizer functionality test:
 - a. uses digital commands to verify the humidity inside the economizer unit
 - b. checks for the full movement of damper louvers
 - c. uses a potentiometer to verify the temperature inside the economizer unit
 - d. requires the operator to manually calibrate damper louver positioning
4. * Many common economizer troubleshooting issues are caused by operators.
Among the following choices, select the one that is not caused by an operator.
 - a. The damper is temporarily blocked open to guarantee air flow and forgotten.
 - b. The controller is programmed to the wrong setpoint(s)
 - c. Ice forms on clogged economizer evaporator coils
 - d. The damper is temporarily sealed shut to prevent air flow in winter and forgotten

5. * Among the following choices, select the one that is not true.
An HVAC economizer system:
- a. will have a mixed air setpoint between approximately 53 °F – 55 °F
 - b. will have an outside air cutoff set to about 62 °F (dry bulb economizer)
 - c. may employ both temperature and humidity sensors
 - d. seldom requires preventative maintenance

TEACHER ANSWER KEY**What is an Economizer for a Packaged RTU?**

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