



Card Access Installation: Request-to-exit using “authorized exit” feature of mortise locks, cylinder locks, and panic-hardware doors

By CHARLIE BROWN Diversified Automation, Buena Park, Calif.

www.DiversifiedAutomation.com

A standard feature of a card access controller is the “request-to-exit” input. When a controlled door is opened from the secured side (inside), the card access system detects the open door condition with no corresponding access event from the card reader. The request-to-exit (REX) input is activated to inform the card access system that the event is an authorized egress rather than a forced entry condition. Traditionally, this is accomplished by installing a passive infrared motion detector (PIR) in the ceiling on the inside of the door.

An alternative approach is to specify request-to-exit contacts (often called “authorized exit” by lock manufacturers) be included in the lock body when purchased. The advantages are these:

- *Eliminating* the PIR will eliminate (1) the need to wire power the PIR; (2) the need to provide a separate mounting location in wall or ceiling; (3) start-up labor to adjust the PIR; and (4) will simplify and streamline maintenance over the life of the project.
- *Adding* authorized exit means all wires at the door will pass through the transfer hinge and terminate at the lock body with the exception of the door switch. There is no adjustment.

In obtaining these advantages, the only penalty incurred is increased cost of the lock body. For the installer, this is offset by reduced labor in installation and commissioning. For the client, the advantage is a cleaner installation that will be more maintainable over the project life.

Authorized exit is available on mortise locks, cylinder locks, and panic hardware as an option. All these mechanisms share the common feature that their mechanism offers egress through the secured door. In the case of magnetic locks, this feature does not exist. Thus for magnetic lock applications, a PIR will still be required to request-to-exit functionality.

Charlie Brown is the lead Engineer and Operations Manager of Diversified Automation (714-522-3303), a building automation system integrator. Charlie has been involved in the building controls industry for more than 30 years and has published numerous articles and technical papers on building controls. He can be reached at Charlie@diversifiedautomation.com.