ETC Application Note



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ETC Application Notes are designed to provide specific helpful information regarding ETC's technology or about solving a problem using ETC equipment.

If you need further assistance or information on this subject or any other, please contact ETC at 1-800-688-4116 or visit our web site at <u>www.etcconnect.com</u>.

Fluorescent Battery Module Series Technical Information

D20FB Module:

A single 20 amp fluorescent dimmer module with battery backup support

In some architectural applications a need arises for a battery backed up fluorescent ballast as an inexpensive small system egress lighting solution. When these 2-wire or 4-wire ballasts are part of a dimming system, ETC has had difficulty providing a reasonable wiring option in the Unison and Sensor product lines. The D20FB series of modules was developed to meet these needs.

Most electrical codes require that the dimmable ballast and the battery be fed from the same phase and often from the same breaker. The D20FB series provides a constant hot output on the top load lug for the battery sense/charge wire and a dimmed output on the bottom lug for the 2-wire fluorescent ballast. When set for supporting 4-wire ballasts, the top lug is still a constant hot but the bottom is a switched hot.

The modules are available for Unison DR and DRd, 120V and 277V racks under the models D20FB, D15FB, AD20FB, and AD15FB. For Sensor and Sensor+, only the D15FB and D20FB are supported. They are all single density modules so effective planning, such as what is done for 3-wire fluorescents, should be accomplished as there can only be one supported circuit per dimmer module.

Selection in dimmer rack programming is the actual model name for DRd and Sensor+ but for DR and Sensor you must use the D20F/AD20F selection. Operation is still the same and all the options normally afforded for configuration of a 2-wire fluorescent is present.

The modules are UL listed for their application. The D20FB and D15FB have 100k SCCR and the AD20FB and AD15FB have 65k SCCR. The components consist of one circuit breaker, one class G fuse and a new power cube design.