



Dixell Universal-XR Controller User Manual

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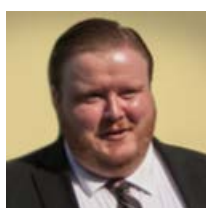
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Dixell™ Universal-XR Controller

The Only Replacement Controller You'll Ever Need

Simplify repair of refrigeration and heating controllers



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from reach-in coolers to deli prep tables to bread proofers, the foodservice industry uses literally thousands of different refrigeration and heating units. It simply isn't practical for contractors and wholesalers to keep every possible controller model on hand. But when a controller fails, waiting on a specific replacement can cause costly delays for both the repair service and the customer.

Emerson responded to this common problem by creating the Dixell™ Universal-XR controller. This dual-supply voltage controller is capable of replacing thousands of SKUs, including more than 150 of the most common 32×74 mm format controllers. The most typical applications can be back up and running quickly — often in just a few minutes — regardless of the original make or manufacturer.

The Universal-XR controller is a boon to repair contractors. The unit is stocked at thousands of authorized Emerson wholesalers nationwide, usually at a very competitive cost compared to the controllers it can replace. With Universal-XR units on their trucks, contractors won't have to waste as much time selecting a specific controller. This saves time for themselves and eliminates downtime for their customers, enabling contractors to get to their next jobs quicker.

Wholesalers also stand to benefit from our controller. The unit can significantly reduce the number of SKUs they need to keep in stock. They can keep inventories lower — yet still have the right controller for the job available.

Key benefits of the Universal-XR controller

Quick installation and programming — The Universal-XR controller gives repair contractors a “drop-in” solution that can be configured rapidly in just three simple steps (see “Rapid setup in three simple steps” sidebar).

- Dimensional footprint matches more than 80 percent of the most common controllers on the market.
- Simple wiring setup supports four to eight connections.
- Hot key enables fast and simple programming.

Dual-voltage power supply — The unit is versatile enough to replace commonly used low- and high-voltage controllers.

- Two different terminal blocks give direct connections to 12VAC/DC or 230VAC power supplies. One unit covers

both standard voltages.

- Power supply isn't needed to change voltage in 230VAC configurations.
- 12VAC/DC configurations typically don't need an electrician to sign off on the installation.

“Plug and play” functionality — Dixell's common five-pin connector, which is similar to a USB device, enables a wide variety of useful applications, including:

- Easy connectivity for downloading parameters, fault history logs and other data.
- Enables custom parameters to be uploaded into the controller.
- Factory reset to default configuration.
- Offers CTL serial connections.
- Allows connections to the cloud or BMS, including the Emerson XWEB300D and XWEB500D EVO web servers for control and alarm management.

Complete system management — The controller manages every aspect of the cooling or heating system.

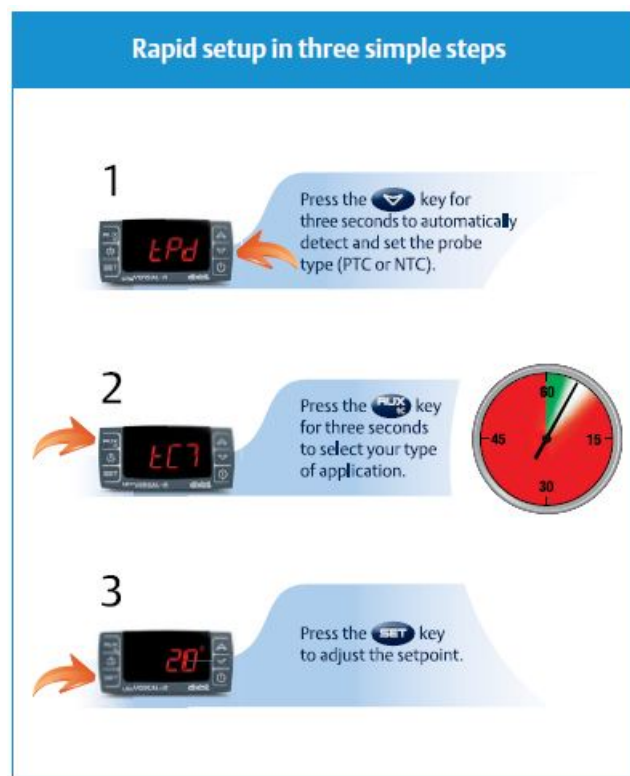
- Activates and deactivates the compressor, defroster, fan and motors.
- Senses the difference between readings caused by the controlled devices versus issues with wiring.

Seven pre-configured applications — Support quick and easy startup. (See the “Save time with pre-configured applications” sidebar.)

- Seven different maps are selectable from the intuitive interface, allowing the most common applications to be set up in just a few minutes.
- Automatically configure up to three probes, four relays and two digital inputs.

Self-learning automatic probe detection — Other controllers are typically limited to just one type of sensor: NTC or PTC. The Universal-XR controller automatically detects which type of sensor is in use and configures itself appropriately.

- Single controller can manage both common types of probes.
- One-touch smart sensing: just press a single button for three seconds and wait for the controller to detect the probes.
- Contractors don't have to worry that the controller won't work because of a sensor mismatch or faulty reading.



Simple two-zone/twin evaporator defrost support — Two evaporator probes and specific parameters allow the unit to easily control two different defrost terminations.

- The display alternates between the temperatures of each zone.
- Users can monitor two zones (e.g., produce and ice cream) at a glance.

User-friendly front display — Easily allows users to see what's going on in the system.

- Intuitive design enables customers to see and understand compressor, defroster, fan and motor activities in a single glance.
- Popular with many users.

By providing easy service replacement for most major controllers, the Universal-XR controller offers an instant replacement solution for nearly every application.

Why keep trying to manage more than 150 separate products when a single controller can take their place?

Save time with pre-configured applications

Many typical jobs can be set up in minutes simply by selecting one of seven pre-configured applications from the easy-to-use interface. Choosing the controller that best fits the required application will automatically adjust all relevant settings.

Pre-programmed applications include:

1. On/Off Thermostat (cooling)
2. Thermostat With Off-cycle Defrost (timed)
3. Thermostat With Electric/Hot Gas Defrost, Time Initiated/Time Terminated
4. Thermostat With Electric/Hot Gas Defrost, Time Initiated/Temperature Terminated
5. Thermostat With Electric/Hot Gas Defrost, Time Initiated/Temperature Terminated Plus Evaporator Fan Delay
6. Thermostat for Twin Evaporator Defrost Applications
7. On/Off Thermostat (heating)



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