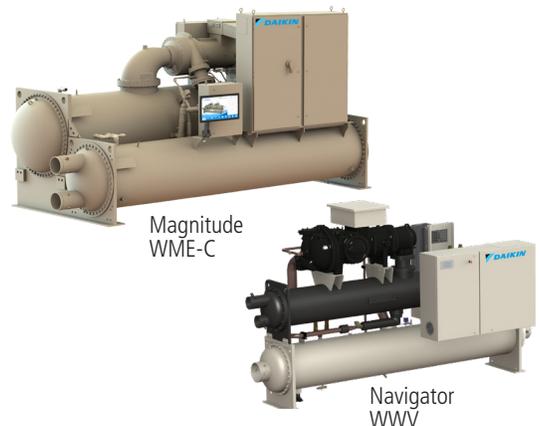**DAIKIN**

Water-cooled Chillers with RapidRestore®

When your facility calls for certainty

A power loss could turn into a critical loss of cooling in mission critical facilities such as health care buildings, data centers, or manufacturing processes. A short-term power loss can happen during power interruptions, brown-outs, or utility switching operations. The low inrush current of the Daikin water-cooled chiller at startup is ideal for operation with backup or emergency power systems.
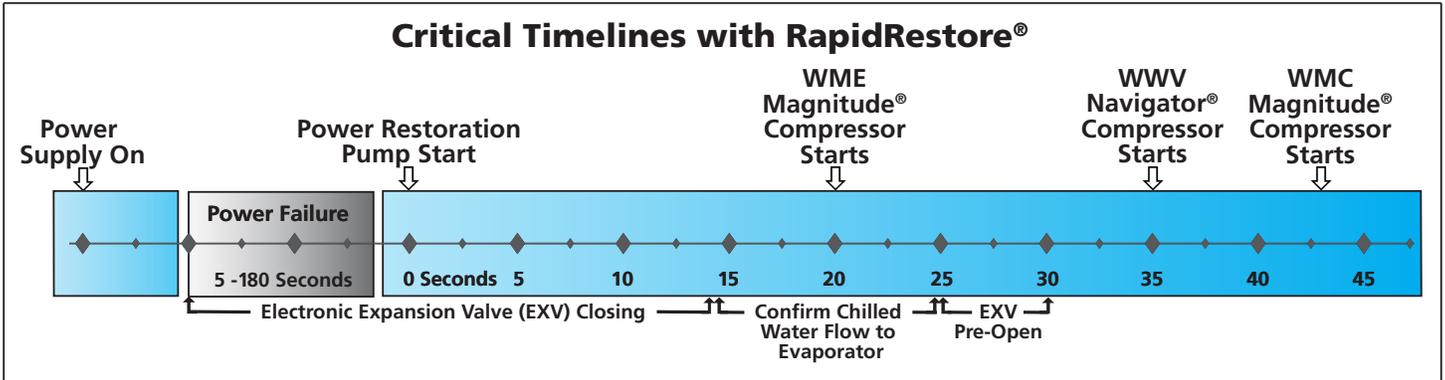
With RapidRestore® and Fast Loading technology, Daikin goes beyond "quick start." WME Magnitude® chillers restart in 20 seconds. WMC models restart in less than 43 seconds after power is restored and WWV Navigator® chillers in less than 35 seconds. Daikin's Fast Loading option can restore 80% load cooling capacity in less than 75 seconds for WME models, or less than 120 seconds for WMC models.

WME models with Daikin's unique RideThrough® technology, maintain operation during momentary power loss events up to 5 seconds. When RideThrough is enabled during a power loss, the compressor motor maintains rotation, the VFD catches, and resynchronizes with the spinning rotor.

- **Faster return to necessary cooling levels**
- **Maintain patient comfort in critical care areas**
- **Keep heat-sensitive servers in data centers online**
- **Eliminate downtime in manufacturing processes**

Magnitude
WME-C

Navigator
WWV

Cooling you can count on

Critical Timelines with RapidRestore®

Power Supply On	**Power Restoration Pump Start**	**WME Magnitude® Compressor Starts**	**WWV Navigator® Compressor Starts**	**WMC Magnitude® Compressor Starts**	

Power Failure

5 -180 Seconds

0 Seconds 5   10   15   20   25   30   35   40   45

Electronic Expansion Valve (EXV) Closing ⟶ **Confirm Chilled Water Flow to Evaporator** ⟶ **EXV Pre-Open**

Fast Loading to 100% cooling capacity

Once power has been restored and the chiller is back online, the next critical step is reaching 100% cooling capacity as fast as possible. That's when the Fast Loading ability of a Daikin chiller with RapidRestore proves its worth. With Fast Loading, a Daikin water-cooled chiller can reach 100% cooling capacity in just 4-5 minutes—while other comparable chillers need as long as 10 minutes to achieve full load.

From reliability to redundancy, mission critical facilities need an HVAC solution that they can rely on for safety, security, and energy savings. In data centers there's no time for downed systems, server rooms need 24/7 climate control. Staying cool cannot be compromised—even if the power fails. RideThrough and RapidRestore technologies ease uptime concerns by delivering uninterrupted cooling you can count on to protect your customers' data.

Fast Loading Timeline Comparison

WME/WMC Magnitude®

WWV Navigator®

Other Water-cooled Chillers

0   1   2   3   4   5   6   7   8   9   10

Minutes required to reach 100% load capacity

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