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Online tool for temperature examination and sustainable climate management in the control cabinet

Automation specialist LÜTZE has revamped its free, web-based simulation application AirTEMP. With AirTEMP 2.0, practical heat forecasts can be generated for control cabinets equipped with LÜTZE AirSTREAM wiring systems. Thanks to this online tool, the most effective measures for demand-based cooling can be swiftly and easily identified.

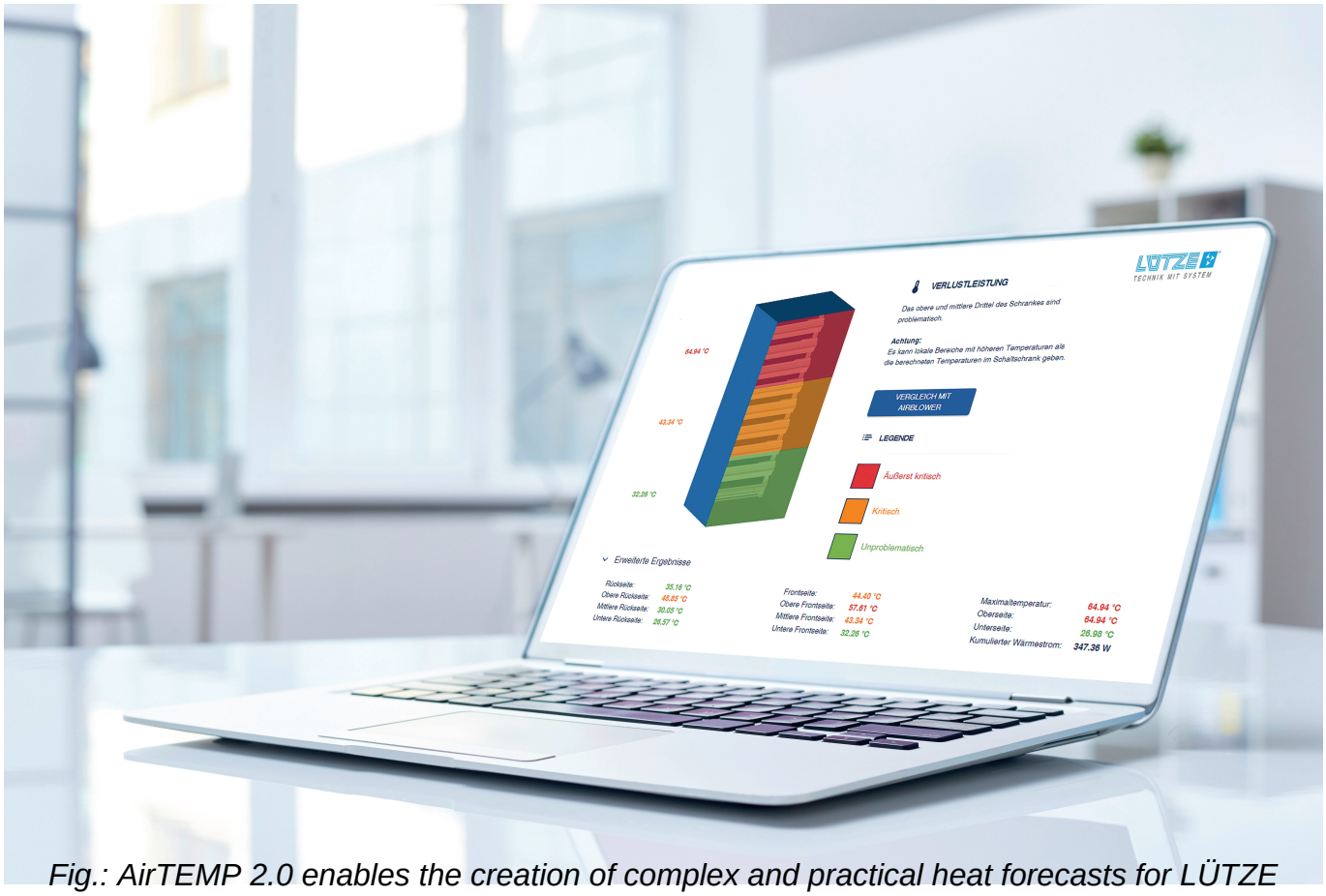

Fig.: AirTEMP 2.0 enables the creation of complex and practical heat forecasts for LÜTZE AirSTREAM control cabinets

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Using the entirely new AirTEMP, users can calculate temperatures and temperature stratification within a control cabinet, thereby accurately assessing the thermal impact of parameter changes in control cabinet construction and configuration. For instance, during a critical situation due to hotspots, the effect of an AirBLOWER fan, active cooling, or a cooler installation location can be simulated. The AirTEMP splits the control cabinet into three virtual zones. Temperature is individually calculated for each of these three zones.

For simulations with the revised AirTEMP, all relevant control cabinet parameters are queried in structured steps. This includes geometries, installation and environmental parameters, as well as all installed components, modules, fans, and active cooling media. The new AirTEMP also takes into account a simultaneity factor. This factor considers the extent to which components operate simultaneously, emit power, and consequently increase or decrease maximum heat generation.

All control cabinet parameters can be documented in compliance with EN 61439 (Chapter 10.10 | Temperature Rise) for the purpose of proof of design. With the new AirTEMP, simulations can be produced for control cabinets with LÜTZE AirSTREAM wiring frames, as well as for AirSTREAM Compact wiring frames. Calculations are also possible for cabinets with mounting plates, although with the limitation that thermal simulation can only be conducted with natural cooling.

The use of AirTEMP is free of charge and available to all control cabinet manufacturers at: https://airtemp.luetze.com

Characters: 2,386 incl. spaces