



Paralleling *Switchgear*

Industrial Power Systems

Your job is complex. *We make it easy.*

At Rehlko, we know that the best system is the one that's built to your project's specific requirements.

Your Rehlko power system is customized and built by a dedicated team of Rehlko engineers. Total system integration means that no matter how large or complex, everything works together seamlessly—from generators and transfer switches to paralleling switchgear and controllers.

Benefits

- ✓ **Customized** to fit your exact needs. No compromising required.
- ✓ **Generator onboard paralleling controls** allow for a simple design at a nominal price and a shorter lead time.
- ✓ **Fault-tolerant programming** ensures that your system is always working, even if a part of the system experiences a fault.
- ✓ **No guesswork** operation means you know exactly what the system is doing at all times.
- ✓ **Witness testing** ensures that customers can see that the paralleling switchgear they're getting matches up to their exact specification and works properly before it is shipped to them.
- ✓ **System Simulation** means sequences run "off-line" for system training, testing, and upgrade/changes verification.
- ✓ **Seamless System Integration** means every component—from generator and transfer switch to paralleling switchgear and controller—is designed, built, and trusted to work together seamlessly.
- ✓ **Rehlko's exceptional service network** provides assurance of 24/7 emergency service and responsive aftermarket support.

Rehlko has been a single-source supplier of complex power systems for decades. You know our generators. You know our transfer switches. Now get to know our paralleling switchgear.



Our proven *process*

Customization

Rehlko carefully considers your requirements and develops a solution that meets your needs. Every design starts with our proven, time-tested process that builds your systems to your exact requirements. Our experienced engineering team helps you every step of the way, determining and specifying your requirements, designing the system, and providing easy-to-read drawings and documentation.

Onboard Paralleling

For simple paralleling needs, Rehlko's generator controller with onboard paralleling can be used. This allows you to have a smaller footprint and a shorter lead time due to the reduction in system components. A master control panel can be added for flexibility to monitor and operate the system from a central location.



Fault-Tolerant Programming

If the system is unable to operate as expected, such as when a breaker fails to close, the system will respond to the fault and seek a source to power the load. This programming also allows for transition from manual mode to automatic mode regardless of the state the system is in.

No Guesswork

Rehiko's chart-based sequence of operation allows for a higher performance level of equipment and increased reliability on-site. The documentation allows for eased worries during system failures because the response is already known, eliminating guesswork.

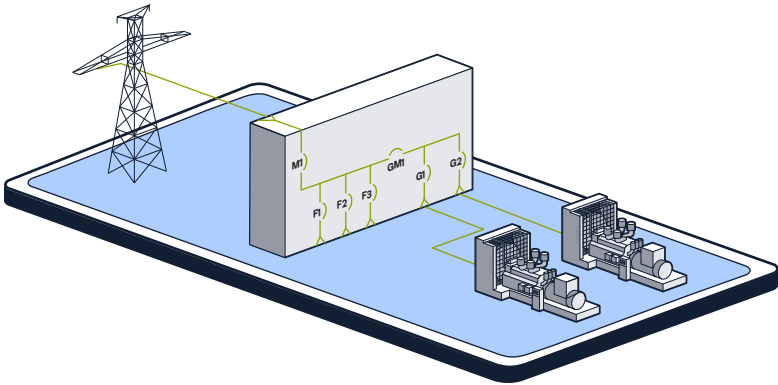
Witness Testing

Want to see it all for yourself? Come visit our factory and see how your power system performs. Or watch it all from the comfort of your office with our virtual/hybrid witness testing option.

Rest assured, our testing simulations are as custom as your power system. We'll simulate the conditions to put your power system through the proper paces before it ships out to you. That's the Rehiko difference.

Simulation and Intuitive User Interface

Rehiko's paralleling switchgear interface is designed to provide the operator the most pertinent information on each screen. This ensures that the operator always knows the reaction to an action.



Sequence chart (example)

1	Initial State	UA	Bus A	GMA	Gen Bus	GMB	Bus B	UB	2	
		X	E	O	D	O	E	X	3	
4	Step	5	Event	6	Response				7	If Fail
1		Utility A and utility B out of tolerance		Utility A failure timer starts					A	
				Utility B failure timer starts					B	
2		Both utility failure timers expire or one timer expires while the other is still timing		Utility breaker UA opens					C	
				Utility breaker UB opens					D	
				All available generators start						
				Required GOL bypass timer starts						
3		Utility breaker UA is open		Bus A open transfer timer starts						
4		Utility breaker UB is open		Startup shed options: Based on the load-management settings, loads on bus A are shed						
				Bus B open-transfer timer starts						
4				Startup shed options: Based on the load-management settings, loads on bus B are shed						
5		The first generator reaches rated voltage and frequency		The first generator breaker closes						
6		The remaining generators independently reach rated voltage and frequency		The remaining generators independently synchronize to the bus and close their respective circuit breakers					E, F	
7		Required generators are online and the bus A open-transfer timer expires		Generator main breaker GMA closes					G	
8		Generator main breaker GMA is closed		Bus A is on generator power						
				Required GOL bypass timer stops						
				Generator stabilization timer starts						
9		Generator stabilization timer expires and bus B open transfer timer expired		Generator main breaker GMB closes					H	
10		Generator main breaker GMB is closed		Bus B is on generator power						
11		Bus A and B on generator power		Startup shed options: Based on the load-management settings, loads are added to the bus A and B					I	
				Generator arrangement option: Become active in auto and all the loads have been added						
8	Final State	UA	Bus A	GMA	Gen Bus	GMB	Bus B	UB	9	
		O	E	X	E	X	E	O	10	

- 1 The initial state shows current status of utility, generator main, and tie breakers as well as availability of utility and generator power.
- 2 Breaker name and power source name.
- 3 Breaker open/close status and power source energized/de-energized status.
X = Closed E = Energized
O = Open D = De-energized
- 4 Step index.

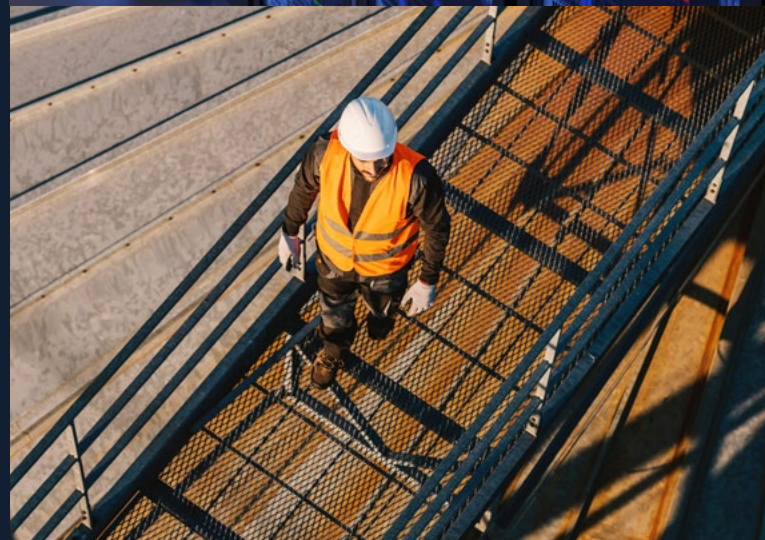
- 5 System event is the input to system that will cause system to react, such as timer expiring or breaker opening or closing.
- 6 System response to event describes how the paralleling switchgear will automatically respond to event. If there are multiple responses to an event, each response is shown on a separate line.
- 7 If fail is a cross-reference to response to normal conditions chart and describes how the system will react if the system's response to an event is not as listed in the sequence chart (such as a breaker failing to close or failing to open).

- 8 Final state shows desired status of utility, generator, and tie breakers as well as the availability of utility and generator power after sequence has completed.
- 9 Breaker name and power source name.
- 10 Breaker open/close status and power source energized/de-energized status.

Total system *integration.*

Everything
works together.
Just as it should.

Rehiko designs modular components that work together flawlessly. Then, we use these building blocks to engineer a system custom-made for your space. After rigorous factory testing and expert installation, **every part will work harmoniously with the entire system—for decades.**



Rehiko supports mission-critical infrastructure during an outage.



Rehiko Remote Annunciator

A monitoring system that provides a user-friendly display of the generator's status.



Rehiko Automatic Transfer Switch

This product automatically switches a building's power source from the main grid to a backup generator during an outage. When normal power is restored, the ATS reconnects to the main supply to ensure continuous power without manual intervention.



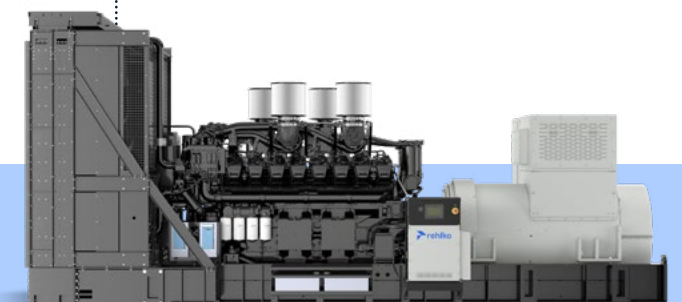
Rehiko Paralleling Switchgear

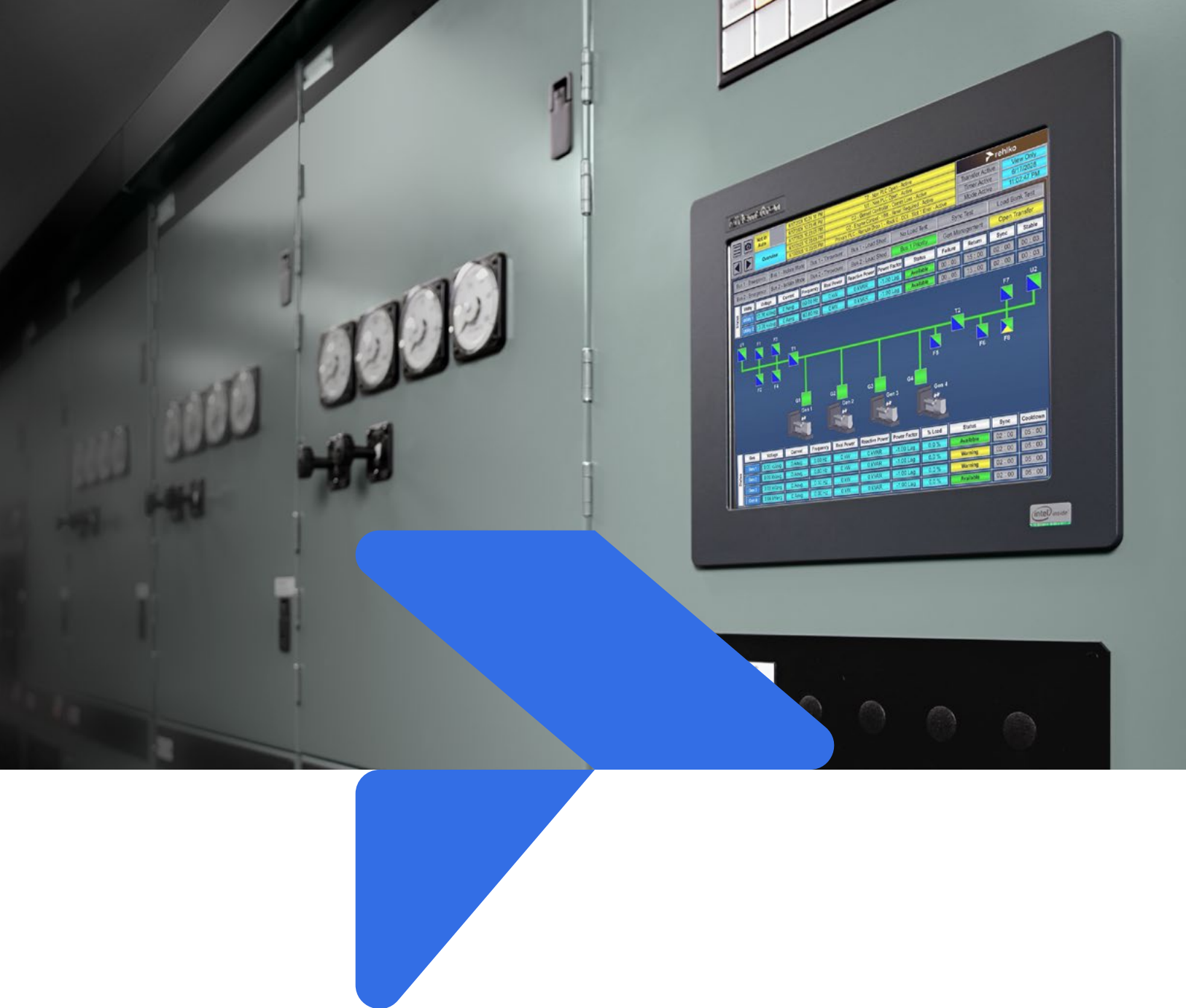
Paralleling switchgear synchronizes multiple generators to work together, sharing the load and ensuring a reliable power supply. It automatically manages the power distribution, balancing the load between sources and allowing seamless transitions.



Rehiko Generators

Rehiko generators come in a range of sizes and can operate in parallel with multiple units. For added protection, Rehiko offers durable enclosures and user-friendly controls with advanced network communications for seamless operation.





For more information, contact your Rehlko source of supply.
Or call toll-free in the U.S. and Canada 800-544-2444

rehlko

powersystems.rehlko.com

PRINTED IN U.S.A G12-358 08/26 © REHLKO CO.