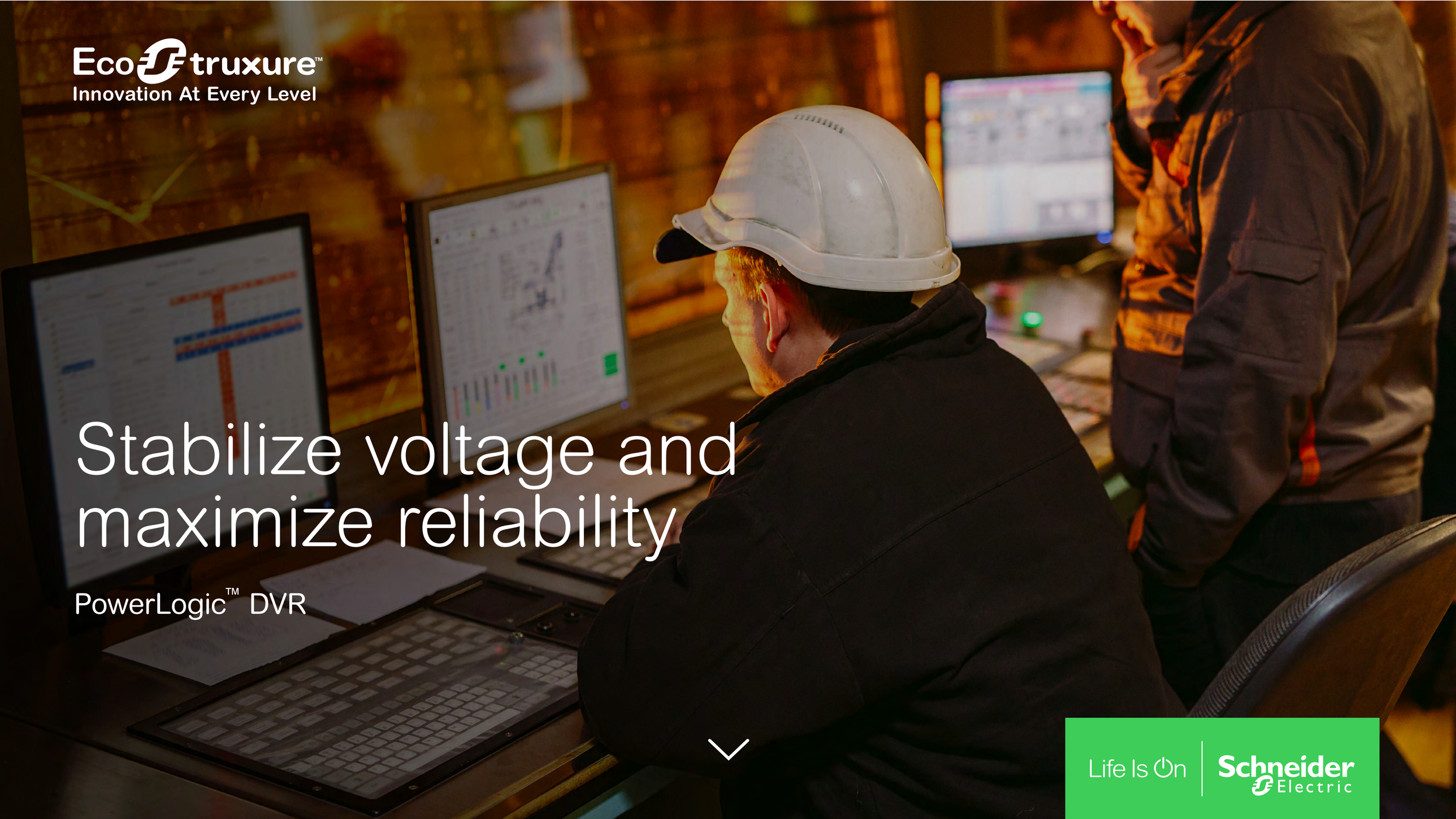
EcoStruxure™
Innovation At Every Level
Stabilize voltage and maximize reliability
PowerLogic™ DVR
Life Is On
Schneider Electric

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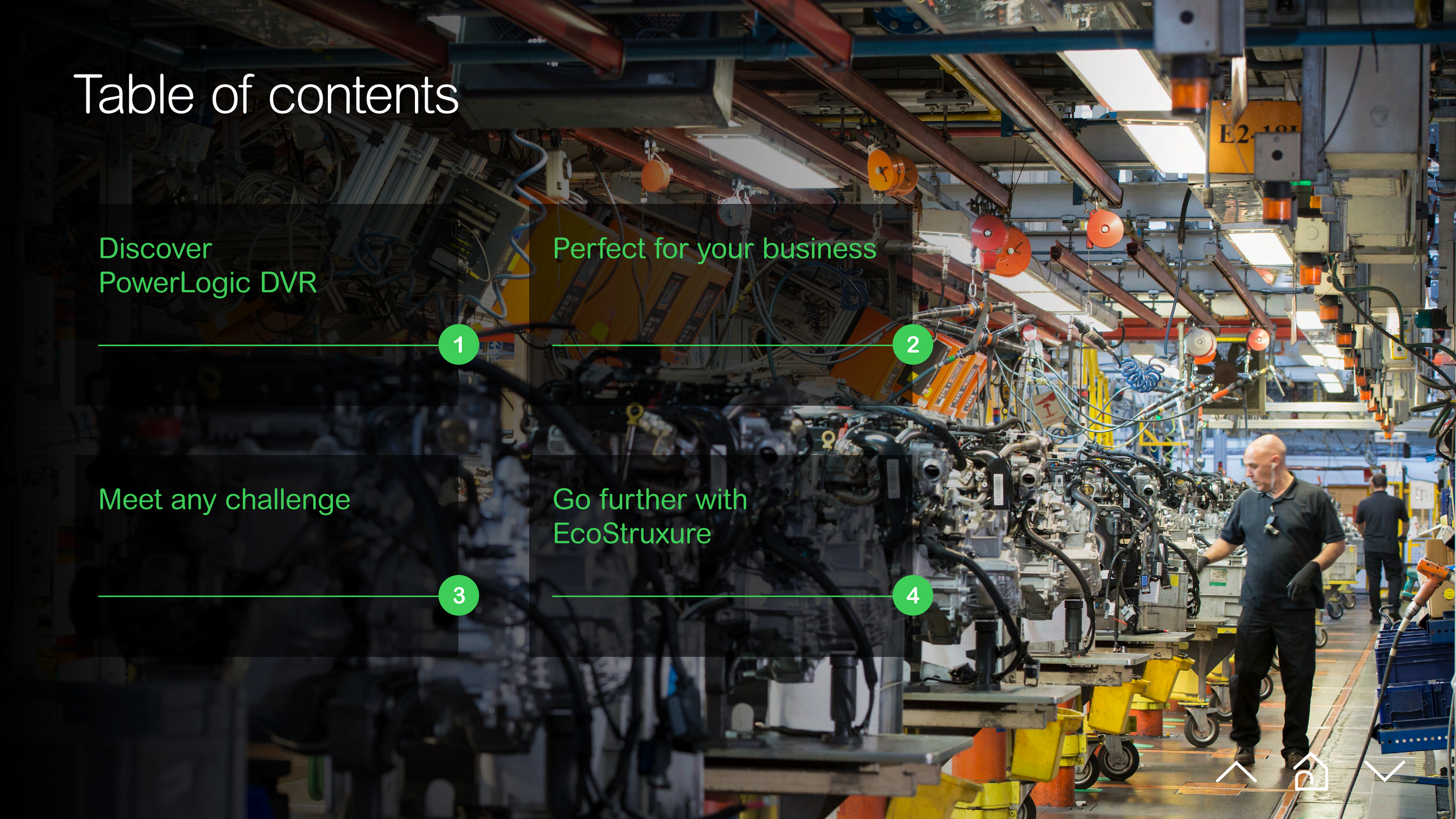


Discover PowerLogic DVR

The impact of voltage sags or dips

Voltage sags (or dips) pose a significant power quality issue. These are drops in voltages of between 10 and 90 percent of nominal – the specified supply of voltage – to which a device is connected. Most sags or dips last between two to 10 cycles – or from 32 to 200 milliseconds.

Typically, sags are considered the costliest and the most common power quality disturbance. They can be caused by a variety of issues such as phenomena resulting from electrical maintenance, damages, small animals, severe climate or even disturbances that originate within a facility. These disruptions affect all industrial processes and services, causing either complete shutdown or equipment damage and significant economic losses.

Installed in a distribution network at a point of common coupling between the critical load and supply feeder, devices like the PowerLogic DVR (dynamic voltage restorer) reduce voltage sags or dips on power lines that serve sensitive commercial and industrial equipment.

Protect your sensitive low voltage loads

The PowerLogic DVR (dynamic voltage restorer) continuously monitors the mains voltage and eliminates voltage sags or dips and electrical noise. Designed to neutralize interference and voltage unbalance, as well as for voltage regulation in case of possible fluctuations and overvoltages, PowerLogic DVR guarantees the quality of the mains voltage, meets the requirements of industrial production processes and maintains a stable and constant output voltage regardless of changes in input voltage.

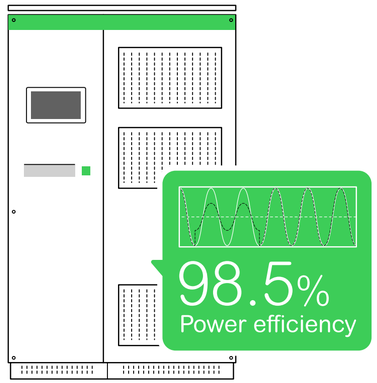
Reliability | Efficiency | Performance

- Reduce downtime by correcting sags and over voltages
- Operational reliability by maintaining desired voltage on critical operations
- Bypass the DVR system during the sags below the operational limits or maintenance period

Watch the Power Quality Infographic Video

Green, efficient and ensures continuity of processes

PowerLogic DVR is a 98.5% efficient dynamic voltage restorer. Composed of a reversible rectifier assembly, inverter and an injection transformer, the device minimizes voltage sags and swells by regulating their occurrences. This sturdy and reliable active voltage conditioner ensures smooth operation for all kinds of low voltage loads, from sensitive electronics to large regenerative motors. Because it works without batteries or moving parts, it's perfect for any business.



Higher efficiency reduces operating expenses, even 1-2% improvement reduces OPEX significantly over time

- **Low maintenance** – DVR doesn't need clean room installation and it needs less maintenance due to battery-free technology
- **Low running cost** – Due to high efficiency, DVR's operating costs (losses) are much lower than UPS which saves electricity costs for customer
- **Green solution** – DVR is a battery-free solution and a green solution since it doesn't require expensive battery replacements or large storage cabinets

Perfect for your business

Perfect for your business

Choose a segment below to see what PowerLogic DVR can do for your facility.

Industry | Data Centers | Healthcare | Buildings | Semiconductor

Whether it's the result of a large induction motor starting up or an issue with electrical supply, voltage sags lead to a loss of productivity and significantly affect industrial processes. Complex, critical assets like adjustable speed drive controls, programmable logic controllers and motor contactors require a steady supply of clean, high-quality power.

PowerLogic DVR continuously monitors incoming voltage and ensures stable voltage to protect critical loads or the entire facility. Because it can compensate for voltage sags as long as 30 seconds, it helps you avoid the complex and costly process of resuming operations after a manufacturing line stops due. Simplify your power quality monitoring to protect your sensitive equipment.

Perfect for your business

Choose a segment below to see what PowerLogic DVR can do for your facility.

Industry | **Data Centers** | Healthcare | Buildings | Semiconductor

Voltage sags and swells are among the most common causes of equipment malfunction in data centers today. Unfortunately, even in the most efficient and modern electrical network these challenges are unavoidable and can even trigger cascading effects throughout an IT network. When supplying data to multiple networks and thousands of computers globally, any voltage issues that result in outages can mean expensive customer demands and a loss of their trust.

PowerLogic DVR is designed to provide equipment immunity from power quality events like voltage sags, with instant voltage correction that ensures maximum productivity and uptime. Provide maximum uptime and improve your data center performance without compromising power availability or reliability.

Perfect for your business

Choose a segment below to see what PowerLogic DVR can do for your facility.

Industry | Data Centers | **Healthcare** | Buildings | Semiconductor

Today the most frequent reason for equipment failure is a deviation from the supply voltage. Sophisticated devices like x-rays, CT scans and magnetic resonance imaging (MRI) are sensitive to supply – and even prone to shutting down – when exposed to voltages outside their nominal range. Voltage issues also cause overheating, decreased efficiency and shorten the effective service life of these machines. Any system shutdown has an immediate impact on treatment programs, occupant comfort and patient safety.

Designed for the always-on power environment in critical care settings, PowerLogic DVR monitors real-time power conditions to ensure steady voltages and help healthcare facilities to operate at their full potential. With a small footprint and high-efficiency rate, its continuous voltage regulation also helps prevent power quality issues while reducing energy use and costs. Embrace a purpose-built power infrastructure that supports your future needs and helps ensure optimized operations.

Perfect for your business

Choose a segment below to see what PowerLogic DVR can do for your facility.

Industry | Data Centers | Healthcare | **Buildings** | Semiconductor

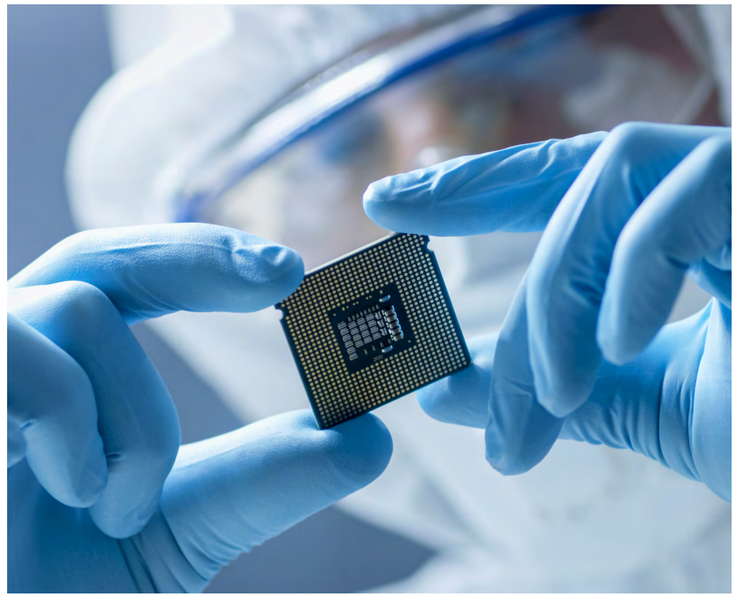
Non-linear loads in commercial structures like hotels, malls and office buildings are continuing to grow. With this increase comes several power quality issues like voltage sags and swells. The consequences can include breaker trips, recloses, faults and problems with inductive electrical loads like elevators, all of which have a negative effect on occupant comfort and operational efficiency.

Installed on the main incomer or on specific loads, the PowerLogic DVR can help you achieve reliable voltage to help ensure better power flows throughout your facility. Easy to install and maintain – no batteries or moving parts – the DVR is modular and designed to fit even in small spaces. Lower your maintenance costs, reduce energy consumption, prolong equipment life and increase productivity with the PowerLogic DVR.

Perfect for your business

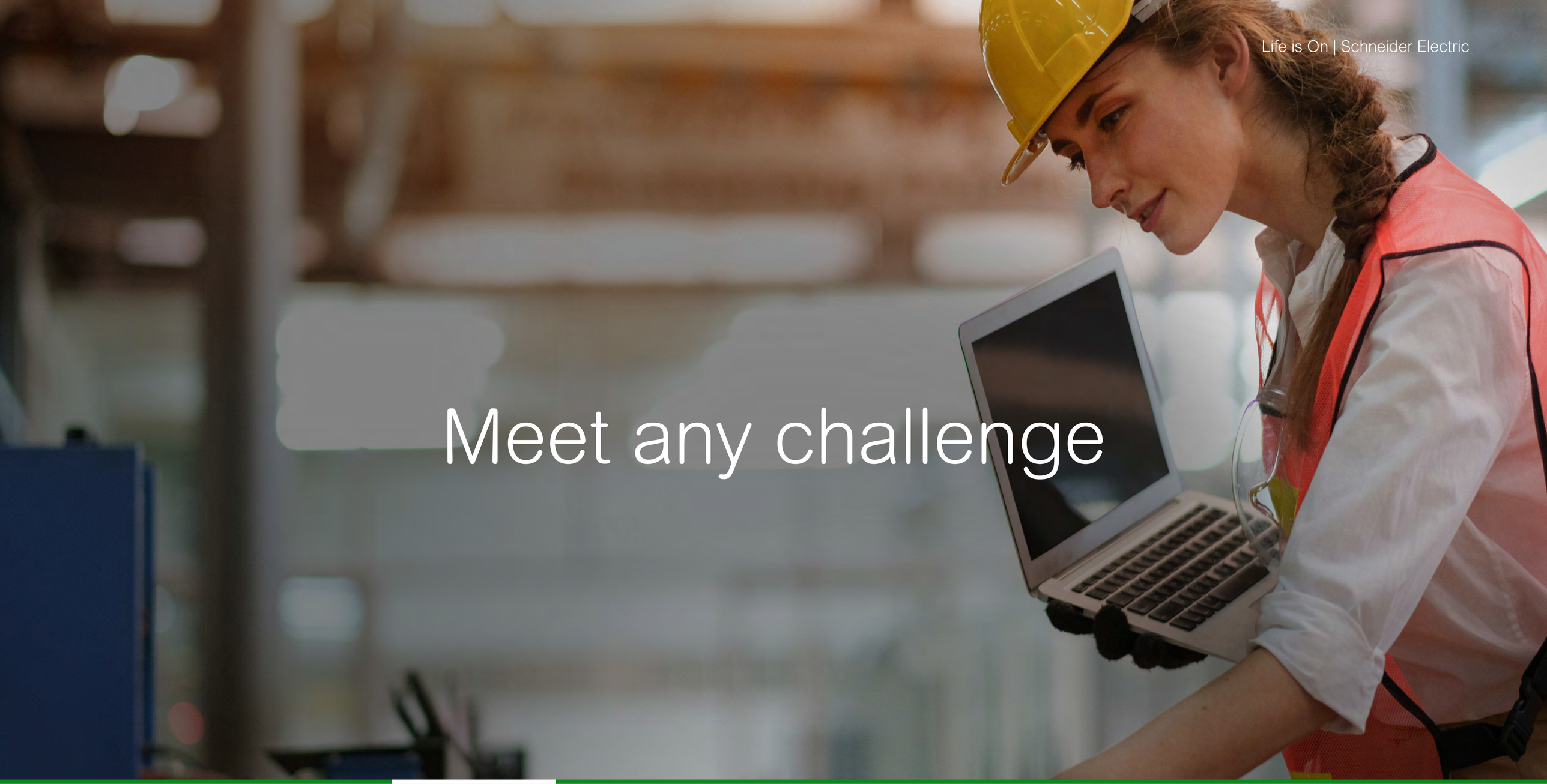
Choose a segment below to see what PowerLogic DVR can do for your facility.

Industry | Data Centers | Healthcare | Buildings | **Semiconductor**



The same megatrends promising significant growth to the semiconductor industry – IoT, energy efficiency targets and machine learning, for example – also require the highest level of energy stability and power quality. All equipment must operate reliably, efficiently and within precise operational parameters.

The PowerLogic DVR helps ensure voltage to connected loads and equipment is maintained at a constant level. Thoroughly tested, it simplifies your voltage challenges and quickly reduces operating costs.

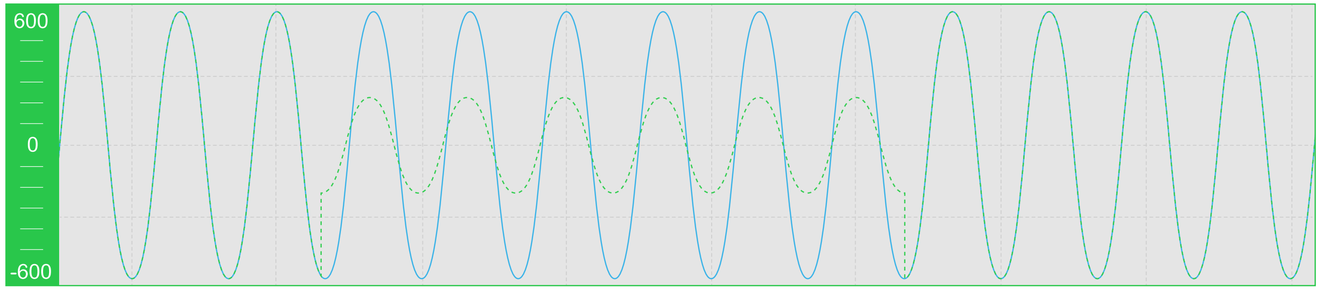


Meet any challenge

High performance

PowerLogic DVR can compensate for voltage dips in both three-phase and single-phase installations and provides independent phase-by-phase compensation. The device reacts quickly to sudden drops in input voltage (green line) and compensates for the failure, ensuring a stable output voltage (blue line).

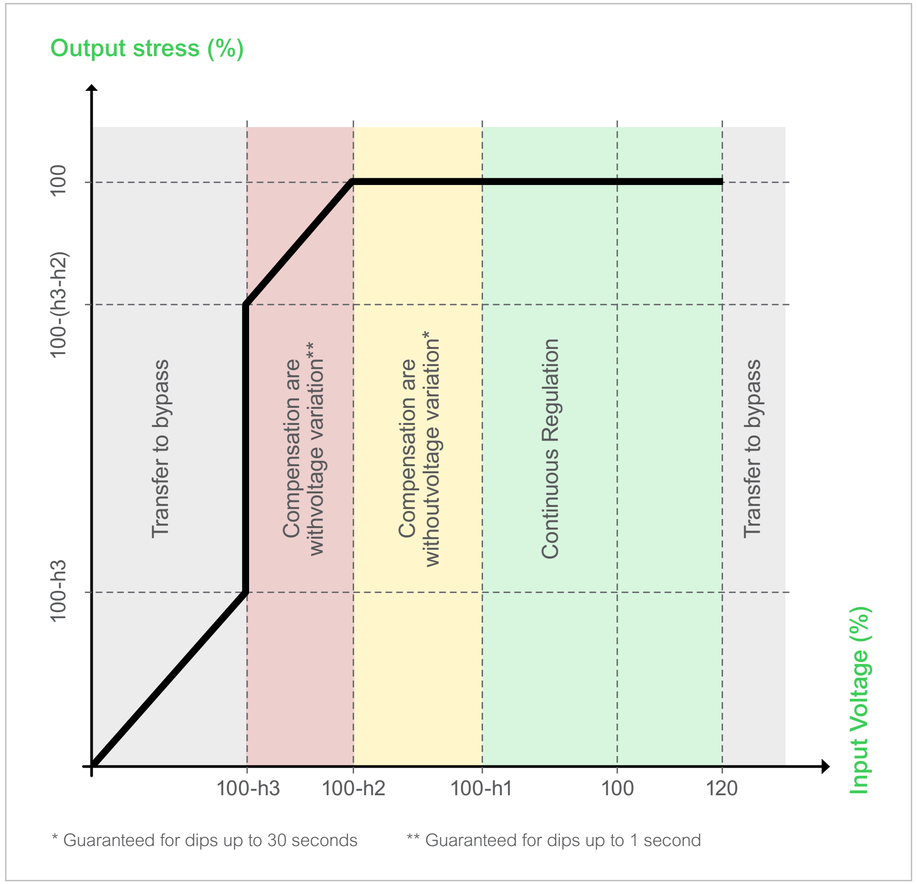
- Continuous regulation to provide a high degree of stabilization (± 0.5%)
- Mitigates three-phase voltage sags up to 70% in depth or single-phase interruptions
- Compensates for voltage dips even for long periods (up to 30 seconds)
- Independent compensation by phase
- Response time less than 3 ms
- Very high-performance power supply system >98.5%



Wide operational limits

The PowerLogic DVR is effective for voltage dips down to as low as 30% of rated voltage before transfer, which is enough for almost all sags or dips, and for durations as long as one second. For protection against voltage sags or dips on sensitive loads that require highly reliable AC input power, these wide parameters help reduce disruptions in production processes and prevent losses in productivity.

Three-phase compensation curve				
System parameters	Value	DVR 150/300/450	DVR 220/440/660	DVR 300/600/900
Max. continuous regulation value	–	20%	20%	20%
Min. continuous regulation value	H1	30%	25%	20%
Max. sag without voltage change	H2	60%	50%	40%
Max. sag without transfer to bypass	H3	70%	70%	70%



Flexible and resilient

In mission-critical facilities, sags or dips can cause enormous disruption in operations and result in substantial losses. PowerLogic DVR helps ensure your power network has the responsiveness required to keep your processes intact.

Adaptable

- Wide range available, from 150KVA to 900KVA in three variants: 40%, 50% and 60% sag
- Adapts to two network ranges with broad voltage spectrum of 208-220V and 380-415V
- Compatible with all existing protection systems
- Turnkey project in accordance with the technical requirements of the client's facilities.
- Easy to connect up to three units in parallel
- Control and monitoring through easy-to-navigate HMI

Resilient

- Automatic bypass to maintain output voltage
- DSP digital control system
- Withstands 150% overloads for one second
- Energy flow in both directions
- ±20% continuous voltage regulation

Easy to install and maintain

PowerLogic DVR is designed to be easy to connect and service, providing reduced operational costs and time savings for your facility. Installing can occur almost anywhere and occupies significantly less space with no adaptation to your existing facility.

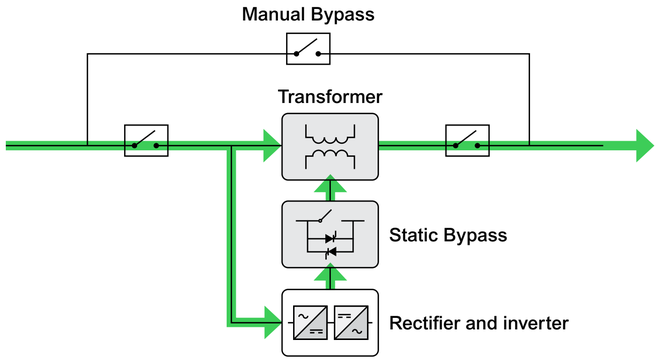
- Adapts easily to existing LV electrical network facilities
- No batteries or other energy storage components required
- Modular design supports easy maintenance and repairs

PowerLogic DVR's three modes of operation

Normal mode

This is the normal operating mode where DVR will:

- Correct the +/- 20% overvoltage or sag
- Correct the momentary, Temporary and Instantaneous sag up to the guaranteed duration

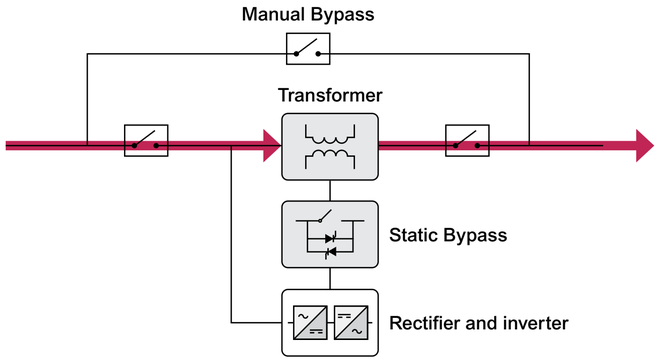


Static bypass mode

In this mode DVR will bypass automatically so that the line supply continues to the load.

This happens during:

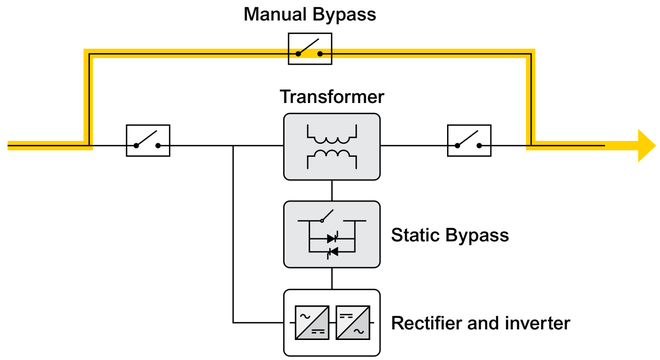
- Above the overvoltage limits (+20%) or if the sag continues over and above the guaranteed sag correction time
- DVR faulty or load is more than inverter operational limit



Manual bypass mode*

The DVR has manual bypass switches that enables maintenance work without interrupting the electrical supply to the load.

In this operating mode, loads cannot be protected against disturbances in the electrical supply.



*The Manual bypass is mandatory to be ordered with DVR for ensuring continuity in operation

Go further with EcoStruxure

Digital Services

Reduce maintenance costs and maximize system uptime with real-time data on infrastructure performance. Get actionable predictive maintenance information that protects your customers, safeguards your reputation and minimizes financial impact.

- Optimize energy efficiency and reduce energy-related costs
- Reduce downtime from network issues or equipment failure
- Improve predictive maintenance and reduce reactive maintenance issues

EcoStruxure Power Advisor

EcoStruxure Asset Advisor

Field Services

Our Field Services professionals ensure minimized downtime while meeting all safety standards, maximizing your ROI. Utilize our extensive experience in asset management, to increase your business value, power reliability and quality.

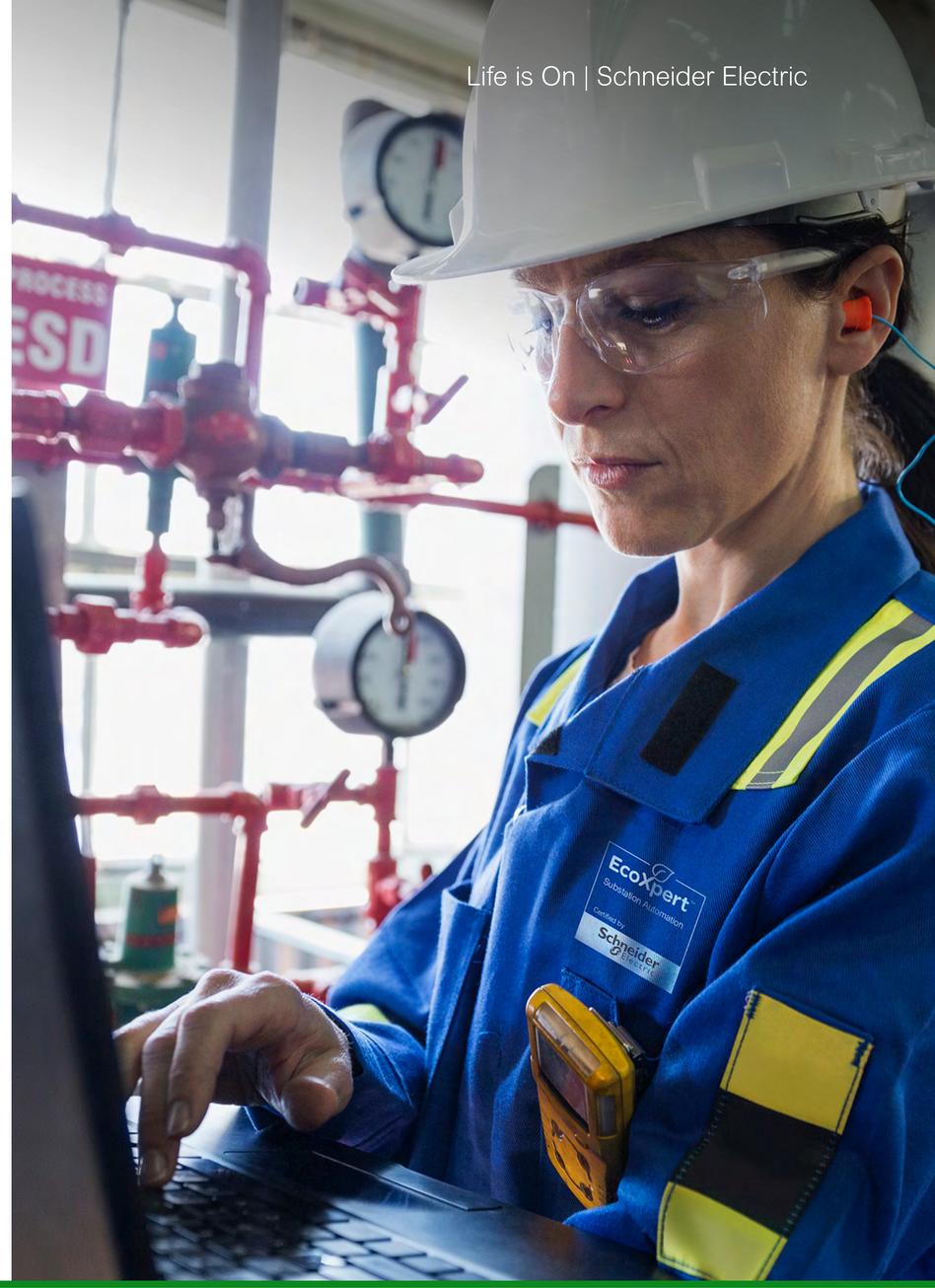
- Asset reliability to optimize day-to-day operations and ensure business continuity.
- Operational efficiency to maximize equipment life and achieve peak performance.
- Trusted partnership so you can rely on our on-site and remote experts to assess and support your installation.

A network of certified innovators

Working with partners we trust is as important to us as it is to our customers. EcoXperts deliver innovative and sustainable solutions, through integrated technology and digitization, to our shared customers. Trained and certified by Schneider Electric, our ecosystem of EcoXpert partners provide best-in-class services and digital solutions that will exceed your expectations.

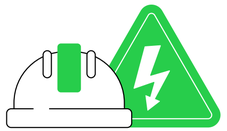
EcoXpert™

Discover more



EcoStruxure innovation at every level

EcoStruxure is Schneider Electric's IoT-enabled, plug-and-play, open, interoperable architecture and platform that unites Power and Building Management with connected devices, edge control software and digital services for enhanced productivity and improved resilience.



Safe

Helps ensure safe delivery and operation of clean, reliable power systems

Efficient

Helps ensure safe delivery and operation of clean, reliable power systems

Available

Enhance electrical asset management and avoid electrical downtime.

Cybersecure

Helps ensure resilience to cyber threats that impact business operations.

Life Is On | Schneider Electric

Schneider Electric
35 rue Joseph Monier
92500 Rueil-Malmaison, France
Tel : +33 (0)1 41 29 70 00

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