



New Generation BlokSeT™



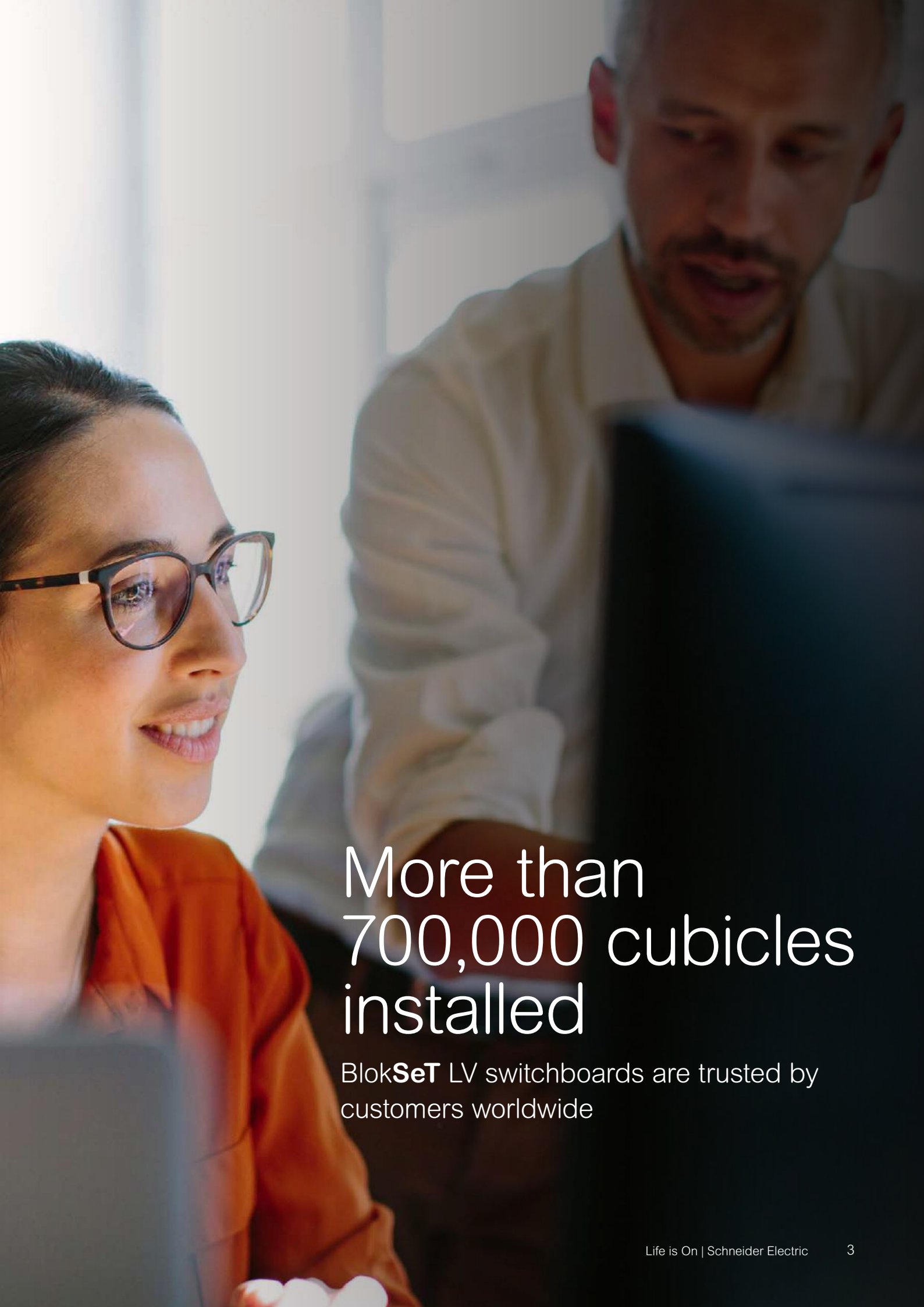
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Life Is On

Schneider
Electric

Table of contents

New Generation Blok SeT	5
From preventive to predictive maintenance	7
Wireless Blok SeT LV thermal monitoring solution	8
EcoStruxure Power – your complete solution	10
iPMCC by Blok SeT : Built-in Intelligence	11
Toss the paper, deliver switchboard project digitally!	12
Ecostruxure Power Build, Not only a Tool...	13
But also provide Schneider best in class technology and design guideline	14
 Blok SeT A Green Premium™ Equipment	 16
Well-being and Circularity	17
Blok SeT ... 100% and more than IEC standard!	18
Blok SeT , a complete certified range	20
Blok SeT switchboard specifications	22



More than
700,000 cubicles
installed

Blok**SeT** LV switchboards are trusted by
customers worldwide

Trusted worldwide for diverse industrial and infrastructural applications, BlokSeT solutions are personalized to fully satisfy different performance and harsh environmental requirements.



New Generation BlokSeT

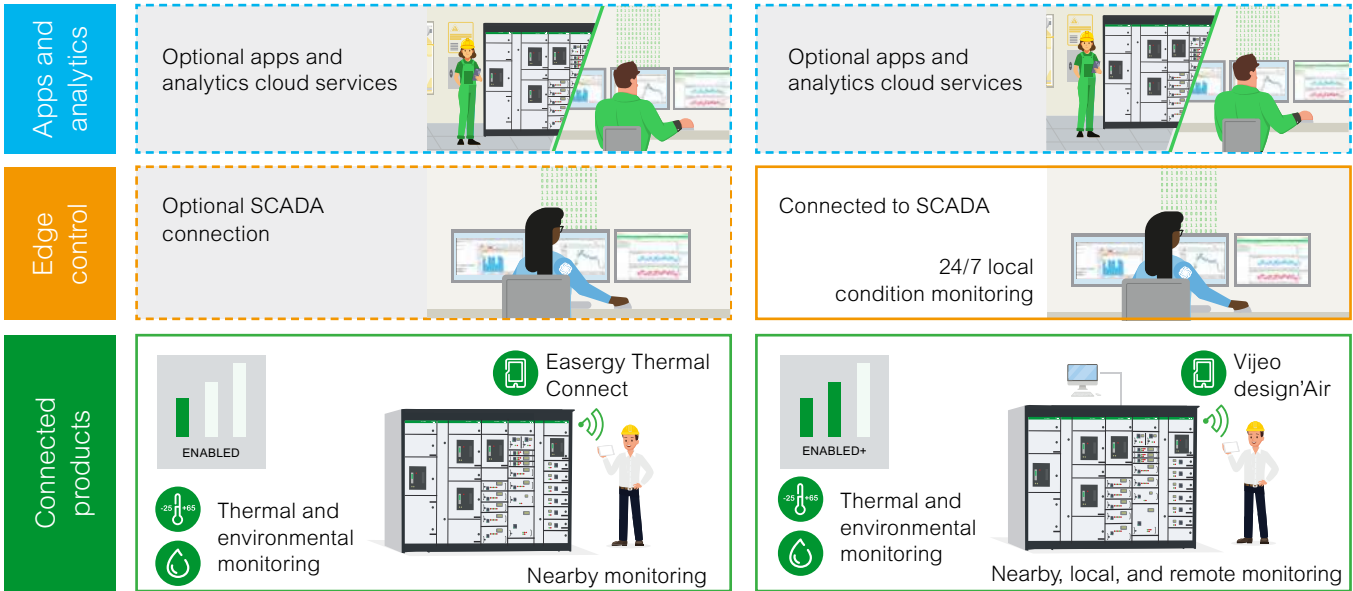
Future-ready digital switchboard



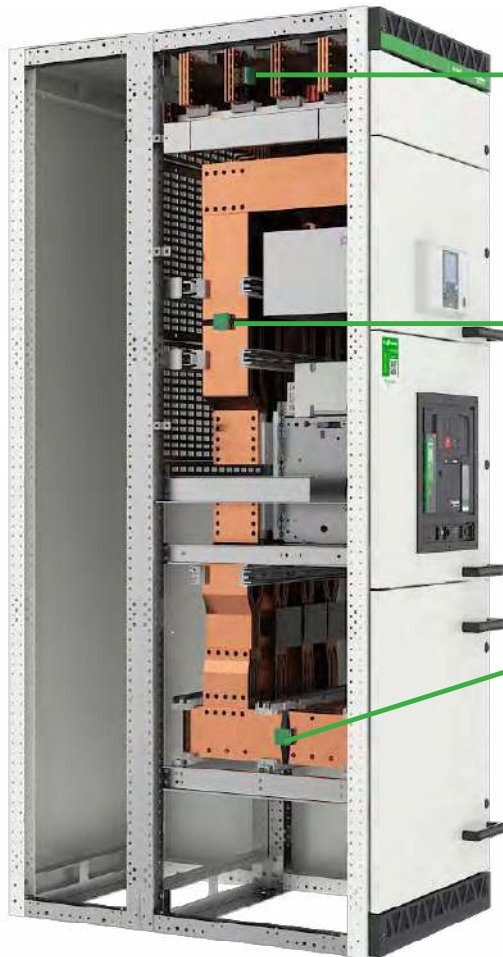
From preventive to predictive maintenance

Minimize downtime, increase safety

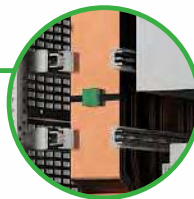
How much does an hour of downtime cost? At a stock exchange, lost transactions total €6 million. A petrochemical plant will forfeit €100,000 in productivity. And for hospitals, the cost is human lives.¹



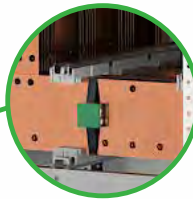
Wireless BlokSeT LV thermal monitoring solution



Main Busbar joint



ACB terminal



Customer
Connection busbar



Function Unit



Easergy TH110 Wireless
Thermal sensor

- Temperature

Easergy CL110 Wireless
Environmental sensor

- Temperature
- Humidity



BlokSeT thermal monitoring minimizes downtime and increases safety while reducing insurance premiums related to fire risks

To keep critical equipment up and running is a priority in buildings and facilities worldwide. The objectives are three-fold:

- Maintain operational uptime and business continuity
- Reduce operational expenses and total cost of ownership
- Protect building occupants and electrical distribution equipment

The BlokSeT Thermal Monitoring design combines a robust and proven architecture, standardized modules, and Schneider Electric devices. Permanently installed sensors on busbar connections, cable compartments, and breaker contacts provide continuous monitoring to perform predictive maintenance. While IR inspections may miss critical conditions that happen between scheduled scans,

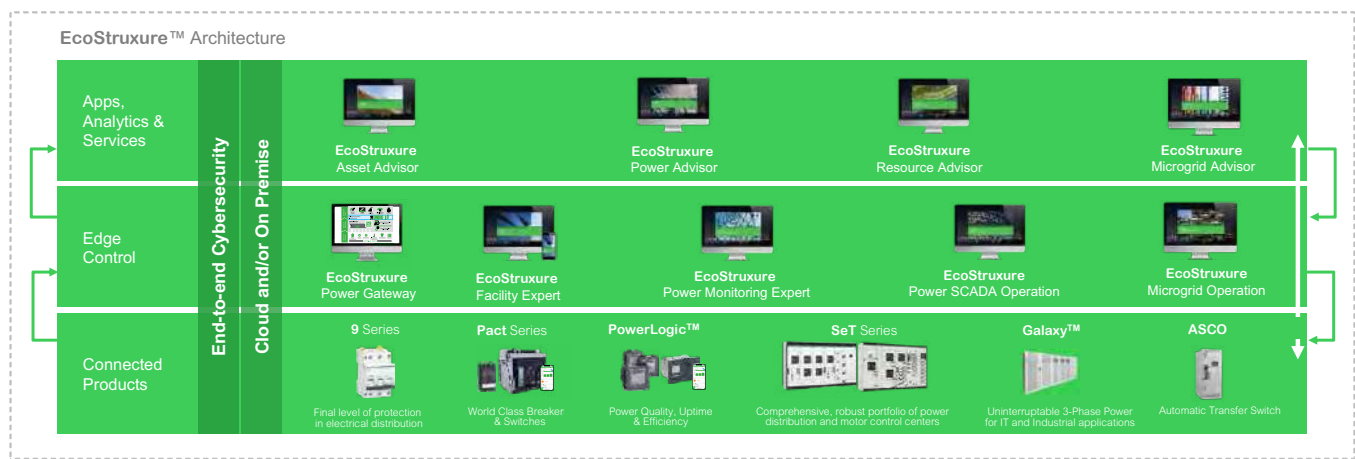
BlokSeT Thermal Monitoring not only detects potential hazards but immediately sends alerts to operations and maintenance teams, allowing them to respond before any unsafe or damaging conditions occur.



EcoStruxure Power – your complete solution

Innovation at every level for a connected, three-tiered system

At the core of all the EcoStruxure Power solutions are three interwoven levels of innovation: connected products, edge control, and apps, analytics, and services. Continuously communicating in real time within a cybersecurity environment, they give you complete visibility to optimize your network.



iPMCC by BlokSeT: Built-in Intelligence



iPMCC by BlokSeT is a highly advanced smart solution. It helps you to boost the productivity and to optimize the energy management and efficiency of your assets while enhancing continuity service and reducing downtime.

iPMCC solution portfolio is a set of communication architectures called the Data System, which embedded in equipment, will make it possible to collect and make available the necessary data to a supervisor client with the level of performance required to drive electro-intensive and electro-sensitive installations.

The Data System is composed of communication devices like gateways, switches and data concentrator to establish the link between supervisor and the connected products and to route data while ensuring availability and reliability of the transmission.

Nowadays you need control systems that deliver full information about the power and motor status (Fault, overheating), statistics on functioning (what occurred in the last hours) and also for an 'intelligent' protection system, which can identify the potential risks and send alarms to the maintenance staff to act before a failure occurs reducing the risk of downtime.

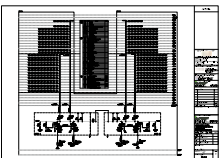
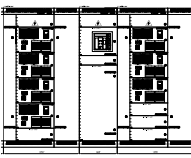
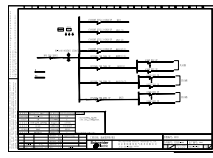
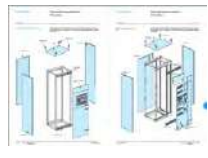
Digital communications dramatically reduce the number of cables needed to transfer information, while reducing the wiring time and limiting the sources of errors.

In addition, the use of intelligent electronic devices allows to gather far more information than before and make possible the modification of the list of loads at a later stage of the project

The implementation of iPMCC solution in the Electrical Distribution Switchboard will make it possible benefit from EcoStruxure Edge Control applications to manage, monitor and control industrial installation.



Toss the paper, deliver switchboard project digitally!

Project location	Design docs	Switchboard docs	Commissioning doc	Commercial docs	Maintenance docs
- Project location - EU customer info - Commissioning date	- Single line diagram - Protection setting	- CAD Drawings - Switchboard photos - User manual - Single line diagram - Bill of material - Device serial number	- Device password - IT network configuration - EPC project report - EPC com test report	- Product & service brochure - Warranty doc	- Maintenance plan - Maintenance guide - Spare part lists
					

Receive digital twin of the switchboard through QR code, information at fingertips!



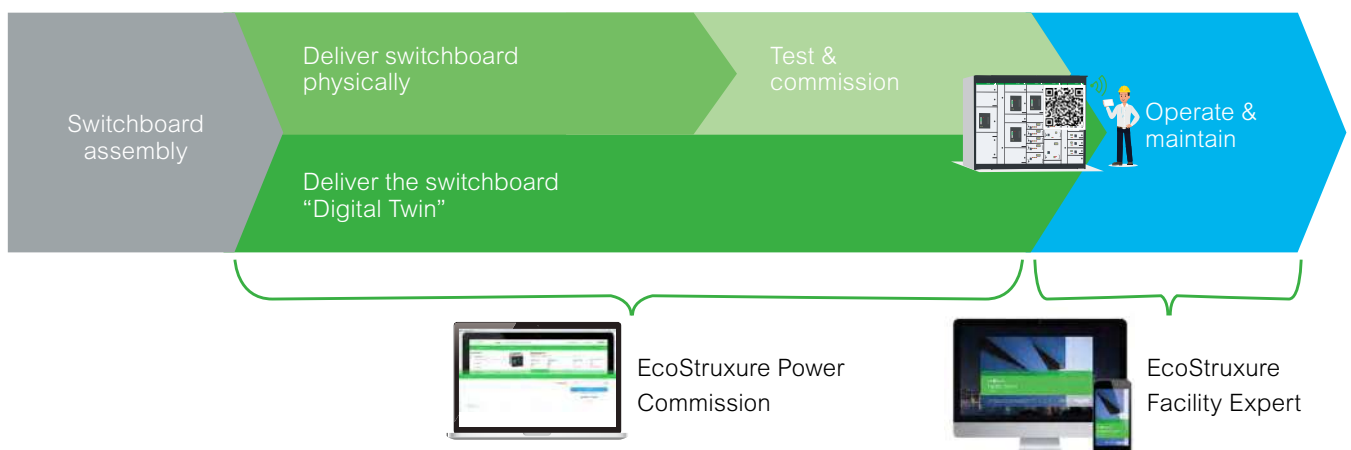
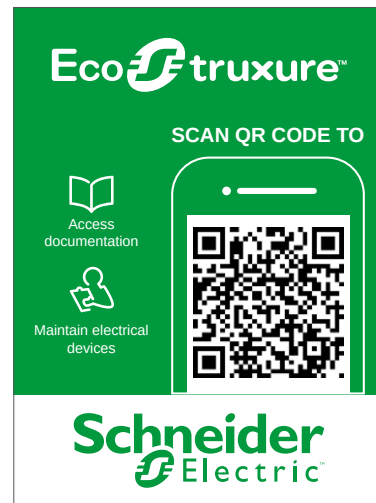
Panel Builder



Contractor



End User



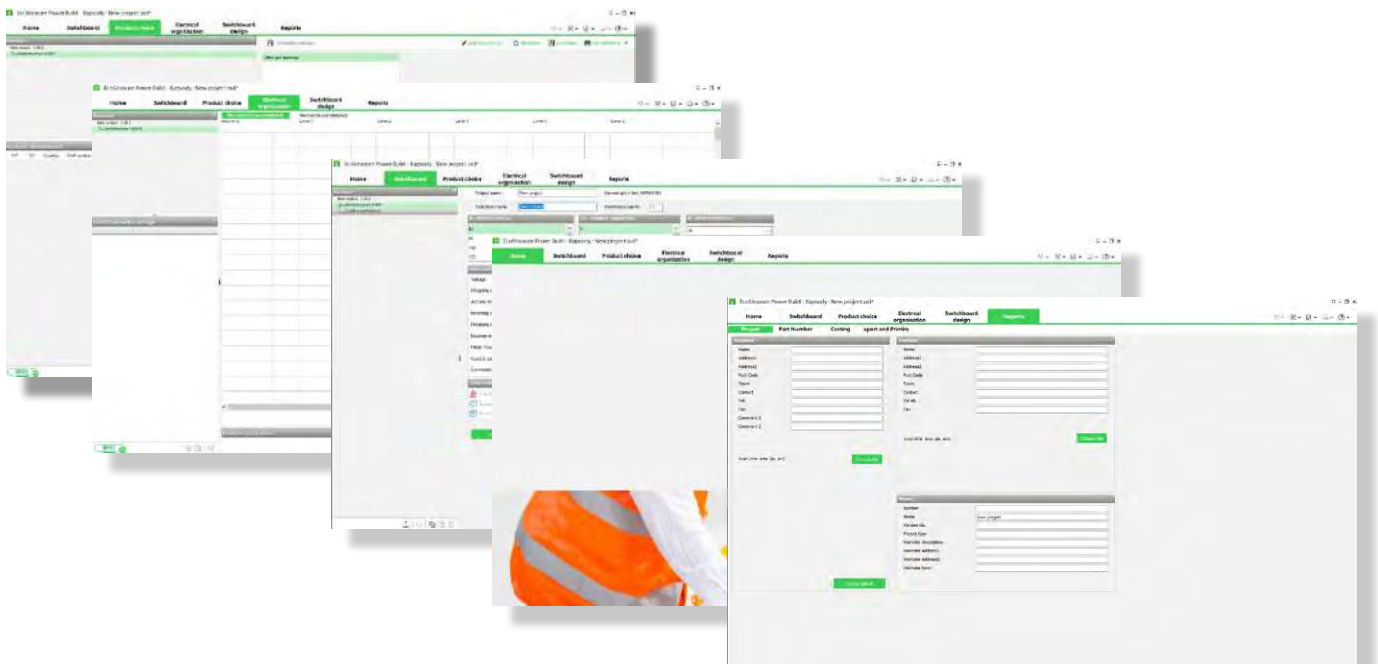
Ecostruxure Power Build, Not only a Tool...

What is EcoStruxure Power Build?



Software for configuration, Bom, quotation, drawing creation and manufacture

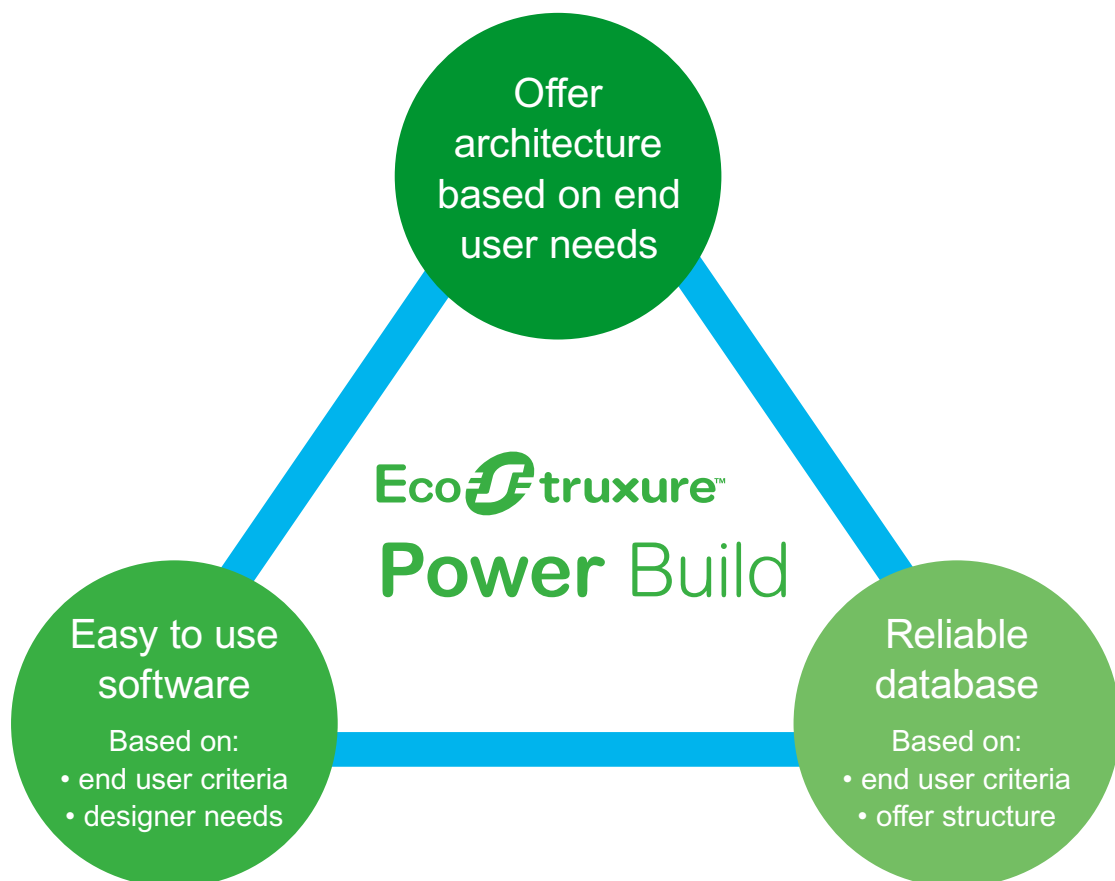
EcoStruxure Power Build screens



But also provide Schneider best in class technology and design guideline

Ecostruxure power build is structured on offer architecture and keeps on:

- Improving user experience based on customer criteria and needs
- Updating the most reliable and advanced solution
- Embedding design rules as per standards and Schneider high requirement guideline, automatically applied during configuration
- Integrating latest best in class technology and device







Green
Premium™



BlokSeT

A Green Premium™ Equipment

Well-being and Circularity

Superior environmental performance with Green Premium

The Blok**SeT** is RoHS and REACH compliant

- Transparent environment information
- Product Environment Profile, compliant with ISO14025
- Circular instructions



Resource

Sustainable packaging

- Complying with sustainable packaging guideline, wood pallet is certified as FSC 100% from DC



Well-Being

Legal compliance

- Ensure full regulation compliance about substances and chemical components

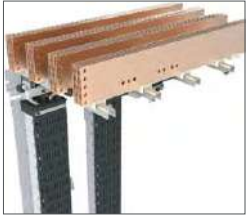


Circular

Upgradeability and recyclability

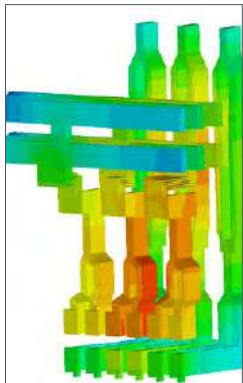
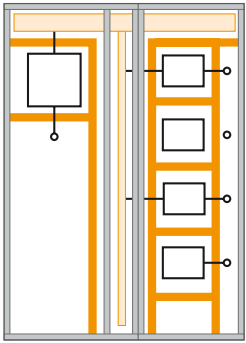
- The function of equipment can be improved when the devices installed in enclosure are updated
- Recycling rate: 94%

BlokSeT... 100% and more than IEC standard!



Protection against electrical shock

- Busbar inside the enclosure is totally encapsulated and make it the most safe distribution busbar of the market.
- Tap off equipped with shutters prevent access to live parts when the functional unit is removed out from the column.
- Live parts are protected by screens guaranteeing an IP20 degree of protection.
- BlokSeT offers safety protection with terminal block covers, and forms of internal separation up to 4b.
- Internal arc containment 100 kA - 0.4 s up to IP54, certified on the 7 criteria as per standard requirement (IEC TR 61641)



Current carrying capability

- BlokSeT offers high safety level and reliability further to verification of temperature rise limits.
- Busbars, connections, functional units have been tested in order to avoid connection damage, reduction of insulation performance, risk of burn and faulty operation of devices.

Protection of the assembly against environmental conditions

- The conductive parts treated for "anti-corrosion" (according to IEC 721-3-3 standard).
- IP54 tightness for the dusty and/or damp environments.
- Earthquake safety version.
- Forced ventilation for environments with ambient temperatures hotter than 45°C or for devices with considerable heat loss.





Maintenance and modification capability

- The modularity of the BlokSeT functional switchboards means you can modify or upgrade them with ease to adapt to your changing processes and increase performance. When maintenance or upgrades are required, the drawout units allow work to be done safely outside the switchboard while it is energized, therefore, ensuring continuity of service throughout the process.
- The switchboard is designed with free slots to add new functions or extra motor feeders, even at the last minute.
- The BlokSeT LV switchboards incorporate the best safety and protection systems, preventing on-load operation to guarantee safer operation and maintenance.



Certified by
independent
certification bodies
ASEFA, ASTA
and Dekra



Capability to operate the electrical installation

- The withdrawable drawers have 3 positions connected, disconnected and testing.
- The operator interfaces for switchboard functional unit configuration and setting are directly accessible on the front face.
- Coordination between devices is granted in order to ensure an optimum operation of the electrical installation. The coordination aims to protect the equipment and people, ensure the continuity of service and reduce the maintenance cost.

BlokSeT offers total coordination for immediate return to operation or coordination type 2 for reduced shutdown time.



BlokSeT, a complete certified range



Mw2

- Power and Motor feeders
- Withdrawable



Ms

- Variable speed-drives and soft starters
- Withdrawable, fixed



D

- High-power incomers and feeders up to 6300A
- Withdrawable, disconnectable, fixed



Dc

- Capacitors/ Harmonic Filters
- Fixed



Mf

- Motor feeders
- Fixed



BlokSeT switchboard specifications

Standards		Low-voltage switchgear and controlgear assemblies	IEC 61439-1/-2 IEC 61921 IEC TR 61641 IEC 60529 IEC 60068-2-11 IEC 60721-3-3 IEC 61000-x-x
Certificate		Certified by recognized certification bodies ASEFA, ASTA, Dekra, and tested by independent laboratories	
Electrical data	Rated voltage	Rated insulation voltage U_i	1000 V 3~
		Rated operating voltage U_e	690 V 3~
		Rated impulse withstand voltage U_{imp}	Up to 12 kV
		Overvoltage category	Up to IV
		Degree of pollution	3
		Rated frequency	50/60 Hz
Mechanical characteristics	Rated current	Main Busbar:	
		Rated current I_e	Up to 7000A
		Rated peak withstand current I_{pk}	Up to 220 kA
		Rated short-time withstand current I_{cw}	Up to 100 kA rms - 1s ⁽¹⁾
	Distribution busbar:	Rated current I_e	Up to 3200A
		Rated peak withstand current I_{pk}	Up to 220 kA
		Rated short-time withstand current I_{cw}	Up to 100 kA rms - 1s ⁽²⁾
	Arc fault containment	Prospective short-circuit current	Up to 100 kA
		Duration	0.4 s
		Criteria (IEC TR 61641)	1 to 7
	Earthing system		TT-IT-TNS-TNC
	Form of separation		Up to Form 4b
	Degree of protection		Up to IP54
	Operating temperature		-5 °C to 50 °C
	Withdrawability		FFF/WWW
	Seismic	UBC 97 IBC 2006 / AC 156 (site class B-C-D, floor level only), IEC 68-3-3 (equivalent to Richter scale up to level 9) / IEEE 693, GOST 17516.1-90 (civil market, all seismic intensity, up to installation level 2)	2G, zone 4
	Vibration	IACS E10	0.7G
	Corrosive atmosphere	H ₂ S and SO ₂ (IEC 60721-3-3)	Up to 3C2
	Installation		Indoor environment type 2 EMC - Type A as per IEC 61439

(1) For Main Busbar I_{cw} =150 kA rms - 1S and 86 kA rms -3s contact Schneider Electric

(2) For VBB I_{cw} =65 kA rms - 3s contact Schneider Electric



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