

Sabre^{EcoTec} Pure & Simple.

Issue 01



Focus on Continual Investment



Innovation. Excellence. Lucy Electric.

With over 100 people dedicated to research and innovation, across two international engineering centres of excellence, Lucy Electric is at the cutting edge of the switchgear industry.

We never stand still. We are always working toward the next breakthrough.

This commitment to progress makes us an international leader in switching, protection and automation solutions for electrical distribution systems. We are a specialist in secondary power distribution, engineering high-performance medium voltage (MV) switchgear for utility, industrial and commercial applications, as well as overhead line equipment, and providing retrofit and automation solutions to customers internationally.

Our excellence, expertise, and experience mean we can deliver truly bespoke solutions to our customers, even when the requirements are highly demanding. We can manufacture units for any location, climate or situation and offer dedicated after-sales support through the product lifecycle.



100
people dedicated to
research and innovation



2
international research centres



SabreEcoTec: A breath of fresh air for electrical distribution



Sabre^{EcoTec}: A breath of fresh air for electrical distribution

Building on our extremely successful existing range of ring main units (RMUs), our new Sabre^{EcoTec} not only meets the world's needs today but also the needs of tomorrow. We have combined our international experience, insights, and customer feedback with the latest technology and manufacturing techniques.

Reflecting our established product family, the EcoTec range uses the same innovative design and core technology as our international RMU applications and installations, with transformer mounted and free standing versions available.

In short, Sabre^{EcoTec} offers the same outstanding performance and applications as our existing Sabre range of MV RMUs but with greatly improved environmental credentials.

EcoTec uses synthetic air as the insulating medium, which means a global warming potential (GWP) of zero. We're not just protecting your network; we're protecting our planet for tomorrow.



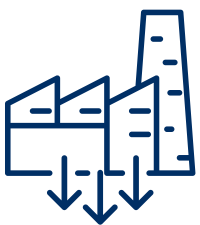
Our commitment to sustainability



Our commitment to sustainability

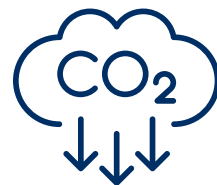
At Lucy Electric, we believe we must balance our pursuit of market opportunities with a dedication to sustainability and decarbonisation.

We are creating and delivering a sustainability culture across our business and the communities in which we operate, with a focus on education, training and wellbeing for everyone.



4.2%

We are committed to reducing our greenhouse gas emissions by 4.2% annually.



2050

As a business, we are driving toward net-zero by 2050.



Our commitment to sustainability

We have adopted the United Nations' Sustainable Development Goals as a framework for progress toward the best possible future, and planet, for everyone.

We are committed to contributing positively to the needs of society, the environment and the economy in all locations we are present.

EcoTec reflects our dedication to sustainable business perfectly. We are taking our market-leading MV RMUs and making those products even better – for you, for the planet, for everyone.



Corporate Social Responsibility



From People to Planet: Our CSR Vision

In an industry racing to meet Net Zero targets, sustainability needs to transcend mere words on a page. At Lucy Electric, we believe in harnessing our business as a force for good. That's why our Corporate Social Responsibility (CSR) approach centres around three core pillars: Planet, Progress, and People. It's more than just a checkbox; it's our guiding philosophy.

CSR at Lucy Electric embodies our commitment to responsible and sustainable business practices. Our mission is clear: to deliver practical, meaningful, and impactful assistance and support to communities across the world. Each project we undertake is carefully selected for its tangible impact.

People

Under our 'People' sustainability pillar, we go beyond the traditional boundaries to make a positive impact in communities worldwide. From supporting education initiatives and donating to schools and orphanages to providing assistance for disabled children, our focus on community support, well-being, and education reflects our belief that actions speak louder than words. With a CSR champion in every country we operate in, we empower our employees to actively engage in making positive changes in their communities, ensuring that our efforts are impactful and sustainable.



From People to Planet: Our CSR Vision



Planet

In line with our commitment to environmental stewardship, our 'Planet' sustainability pillar drives us to tread carefully on the planet and leave a positive legacy for future generations. Through initiatives such as tree planting, beach clean-ups, recycling programmes, and efforts to reduce plastic pollution, we strive to improve our environment and preserve biodiversity. By prioritising sustainability in all aspects of our operations, we aim to minimise our ecological footprint and contribute to a healthier planet for all.



Progress

Lastly, under our 'Progress' sustainability pillar, we focus on delivering impactful products that benefit people and the planet while creating lasting value for generations to come. Whether through scholarships, donations to schools, or engagement with youth organisations, we invest in projects that educate the next generation and empower them to drive positive change.

At Lucy Electric, CSR is not just a commitment; it's a promise to make a difference, year after year. By partnering with us, you're not just investing in products; you're investing in a brighter, more sustainable future for all.



Synthetic air, pure and simple

With a GWP of zero, synthetic air is the ideal choice for dielectric for the 12kV EcoTec range. This manufactured air is even purer than the air we breathe.



Obtainable globally, synthetic air is 79.1% nitrogen and 20.9% oxygen, with a purity of 5.0 (99.9990% pure).

The EcoTec range is designed intelligently to make the product smaller, while optimising electrical performance at low gas pressure.

Smart load break switching

Sabre^{EcoTec} uses synthetic air bringing environmental advantages for medium voltage (MV) switchgear. For load break switching, a new architecture is necessary.

Sabre^{EcoTec} uses a small load break vacuum interrupter (VI) shunted across the main current-carrying contacts. This shunt VI breaks the load current, ensuring there is no arcing of the main current-carrying contacts.



Simple, safe operation

Across the Sabre^{EcoTec} range, we have placed operator safety with integral interlocking at the forefront of our innovative mechanism design. With a clear, unambiguous mimic and 100% padlockable human-machine interface (HMI), our solution is straightforward and secure.

To ensure the high industrial and operational reliability our customers need, Sabre^{EcoTec} 12kV RMUs use the same core mechanism design as our hugely successful Aegis RMU range which is installed worldwide.



100%

padlockable human-machine
interface (HMI)



SabreEcoTec: Technical details



Small and perfectly formed

The Sabre^{EcoTec} range is designed to be smaller and more efficient, while maintaining compatibility with standard installation requirements. As a result, the EcoTec range provides the same set of solutions for substations as conventional equivalents, but in a more compact and optimised package.

Sabre ^{EcoTec}	Width (mm)	Depth (mm)	Height (mm)
3 way	1081	1100	1610

The numbers

Lucy Electric Sabre ^{EcoTec}			12kV
Rated Voltage		kV	12
Rated Frequency		Hz	50
Rated impulse withstand Voltage		kV	95
Rated power frequency withstand Voltage		kV	38
Short time withstand current		kA	20
Rated Duration of short circuit		seconds	3
Short peak withstand current		kA	52.5
Internal Arc classification		-	AF/AFL/AFLR
Internal Arc rating	Tank	kA 1second	20
	CableBox	kA 1second	13.5 / 20
Ingress protection: Outdoor	Outdoor	IP	54
	Indoor	IP	41
Temperature Range		°C	-25 to +55
Maximum relative humidity		%	95
Circuit Breaker Function			
Rated Normal Current	VRN2e	A	250
	VRN6e	A	630
Mechanical Endurance		Class	M1
Electrical Endurance		Class	E2
Load Break Switches			
Rated Normal Current		A	630
Mechanical Endurance		Class	M1
Electrical Endurance		Class	E3

Smart efficiency, outstanding results

With the automation of secondary distribution networks becoming an international requirement, automation is embedded as standard in the Sabre^{EcoTec} range. From behind-the-fascia solutions for motors to behind-the-door solutions for the remote terminal unit (RTU), Sabre^{EcoTec} delivers efficient and compact solutions.

Combined with our GridKey range of sensors, monitoring and analytics, Sabre^{EcoTec} brings you the automation of the future... today.



Lucy Electric operates internationally.
For more information on our Sabre^{EcoTec}
range, or any of our products and services,
contact your local office or visit our website:

lucyelectric.com

Our international offices:

Lucy Electric UK Ltd
Howland Road, Thame,
Oxfordshire
OX9 3UJ
United Kingdom

t: +44 (0)1844 267 267
e: salesuk@lucyelectric.com

Lucy Electric GridKey Ltd
8 Argent Court, Sylvan Way
Southfields Business Park
Basildon, Essex
SS15 6TH
United Kingdom

t: +44 (0) 1268 850000
e: sales@gridkey.co.uk

Lucy Electric GridKey Swindon
607 Delta,
Welton Road
Swindon
SN5 7XF
United Kingdom

e: sales@gridkey.co.uk

Lucy Middle East FZE
PO Box 17335, Jebel Ali
Dubai
PO Box 17335
United Arab Emirates

t: +97 148 129 999
e: salesme@lucyelectric.com

Lucy Electric (Thailand) Ltd
388 Exchange Tower,
37th Flr Unit 3702,
Sukhumvit Road
Klongtoey Sub district
Klongtoey District, Bangkok
10110
Thailand

t: +66 (02) 663 4290
e: salesThailand@lucyelectric.com

Lucy Electric (South Africa)
Unit 12 & 13, Block C,
Honeydew Business Park,
1503 Citrus Street, Laser Park
Honeydew
P.O. Box 1078, 2040
South Africa

t: +27 11 025 7490
e: salesza@lucyelectric.com

Lucy Asia Pacific Sdn Bhd
L17-05-06, PJX-HM Shah Tower,
No16A Jalan Persiaran Barat
Petaling Jaya,
Selangor, Malaysia
46050
Malaysia

t: +603 74910700
e: salesmalaysia@lucyelectric.com

Lucy Equipamentos Elétricos Ltda
Av. das Araucárias 2558 Thomaz
Coelho, CEP 83707-067
Thomaz Coelho, Araucária,
State of Paraná, Brazil
83707-065
Brazil

t: +55 (41) 2106 2801
e: salesbrazil@lucyelectric.com

Lucy Electric Manufacturing &
Technologies India (Private) Ltd
Village Noorpura,
Baska besides Polycab
Halol Baroda Toll road, Taluka Halol
Panchmahal, Gujarat
389350
India

t: +91 2676 304912

Lucy Electric India Private Ltd
2B-46 & 47, 2nd Floor
Kurla West
Mumbai
400070
India

t: +91 22 62366616

Lucy Electric East Africa
13th Floor Landmark Plaza
Argwings Khodhek Road
Nairobi
P.O Box-00606 - 00400
Kenya

t: +254 (0) 203 673 927

Lucy Switchgear Arabia Co. Ltd
Novotel Business Centre
Dammam
P.O. Box 35340, Dammam 31488
Saudi Arabia

t: +966 138 147 910
e: salesksa@lucyelectric.com

Lucy Switchgear Arabia Ltd
Tahlia St, Andlus Dist.
Jameel Square Center,
Office No 118
Jeddah
21533
Saudi Arabia

t: +966 02 6648573

Lucy Electric Australasia Pty Ltd
t: +61 467 237 879
e: salesaustralia@lucyelectric.com

