Product Datasheet

Lucy Electric Aegis^{EcoTec} non-SF6 Ring Main Unit

A breath of fresh air for electrical distribution

DS0153 R1 Lucy Electric Aegis^{EcoTec} Datasheet 06/2024

The Aegis^{EcoTec} non-SF6 Ring Main Unit (RMU) 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.

Across the Aegis range, operator safety is paramount with integral interlocking at the forefront of its innovative mechanism design. With a clear, unambiguous mimic and 100% padlockable human-machine interface (HMI), this solution is straightforward and secure.

To ensure the high industrial and operational reliability NZ's networks need, Aegis^{EcoTec} 12kV non-SF6 RMUs use the same core mechanism design as the hugely successful Aegis RMU range which is installed worldwide.

Aegis^{EcoTec} non-SF6 RMU uses synthetic air bringing environmental advantages for medium voltage (MV) switchgear. For load break switching, a new architecture is necessary.

Aegis^{EcoTec} non-SF6 RMU 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.

Range

Aegis^{EcoTec}	Width (mm)	Depth (mm)	Height (mm)
2-way	720	704	1669
3-way	1060	704	1669
4-way	1400	704	1669

Technical Data

Parameters		Specifications	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 1 second	20
	Cable Box	kA 1 second	13.5 / 20
Ingress protection:	Outdoor	IP	54
	Indoor	IP	41
Temperature range		°C	-25 to +40
Maximum relative humidity		%	95

Circuit Breaker Function

Parameters		Specifications	12kV
Rated normal current:	T function	A	250
	V function	A	630
Mechanical endurance		Class	M1
Electrical endurance		Class	E2

Load Break Function

Parameters	Specifications	12kV
Rated normal current	A	630
Mechanical endurance	Class	M1
Electrical endurance	Class	E3

Other literature available on request
Reports, drawings, technical data sheets, installation instructions, O&M guidelines

Lucy Electric

Telarc. Registered Quality ISO 9001
Telarc. Registered Health & Safety ISO 45001
Telarc. Registered Environment ISO 14001
Telarc. Integrated Systems Certification ISO 9001 ISO 14001 ISO 45001