



The **X-TYPE** Series

POWER FROM WITHIN



Performance in ***4 DIMENSIONS***

The **X-TYPE** Series



POWER FROM WITHIN



The **X-TYPE** Series

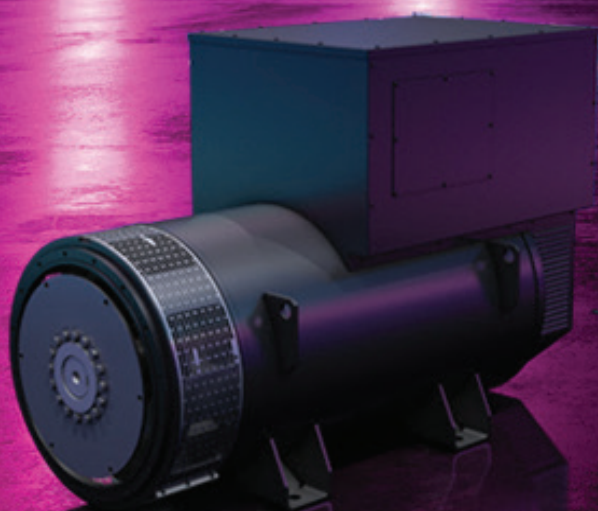
The new X-Type Series delivers high voltage dynamic performance with class-leading durability and efficiency in a flexible product range.

With a complete focus on high power products, our specialist Power Products division develops world-class alternators for Medium to High Voltage power classes.

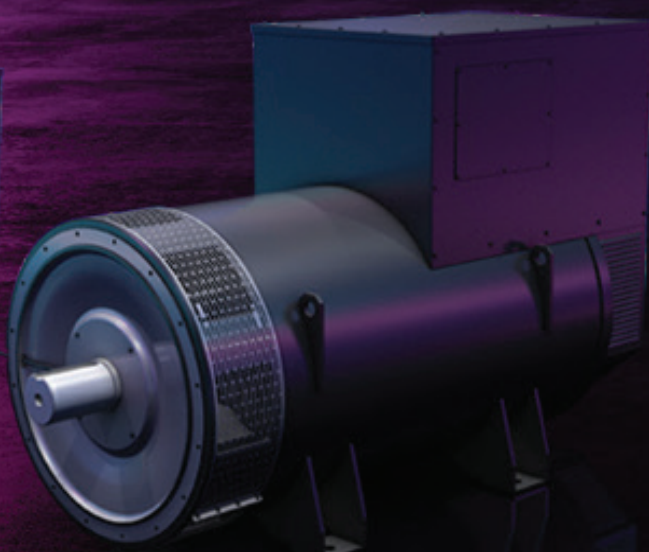
Working along side our customers, we provide extensive support and cross-industry experience to create customised power solutions.

We guarantee peace of mind through proven reliability and consistent performance.

THE RANGE



X-TYPE ECO43

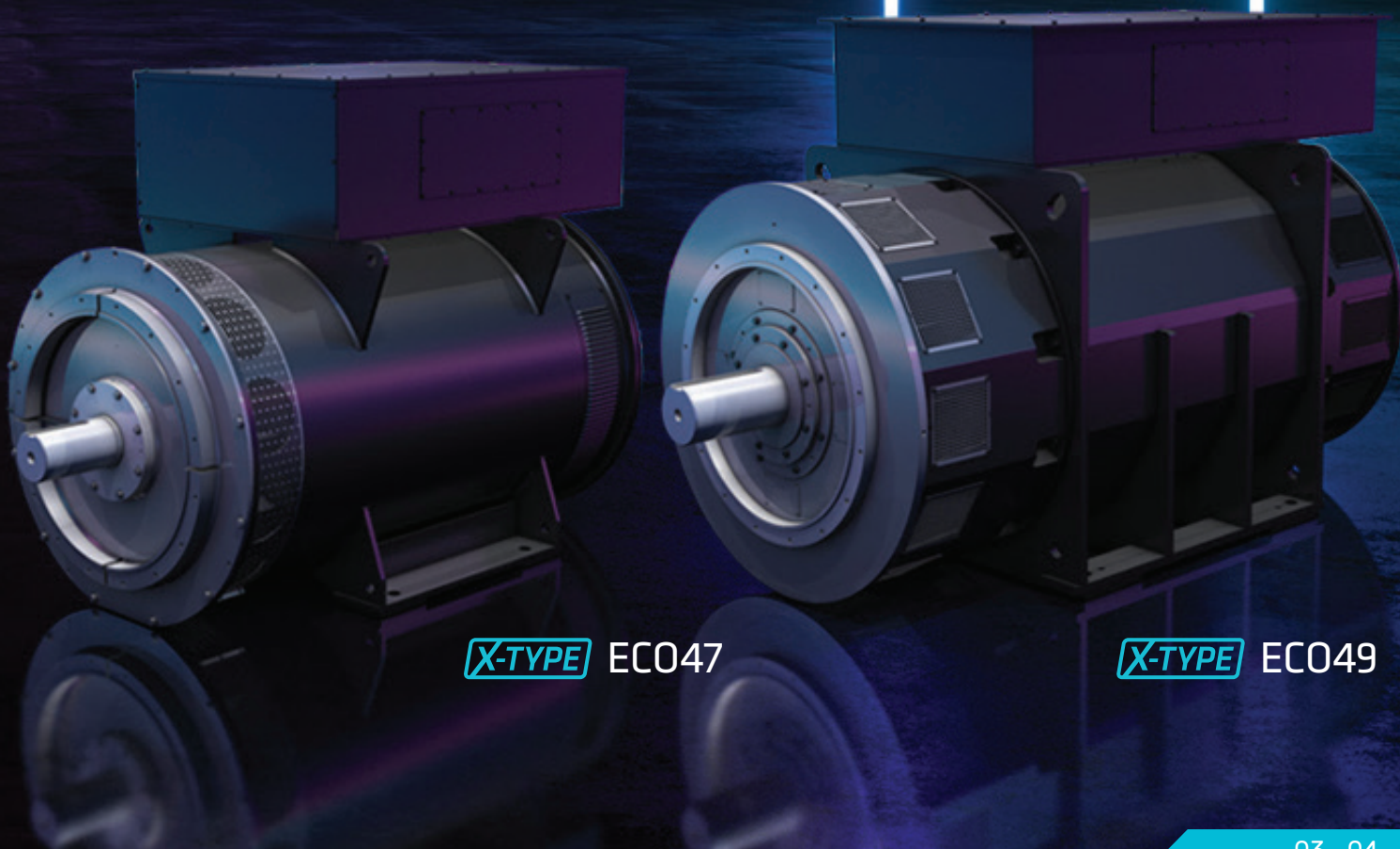


X-TYPE ECO46

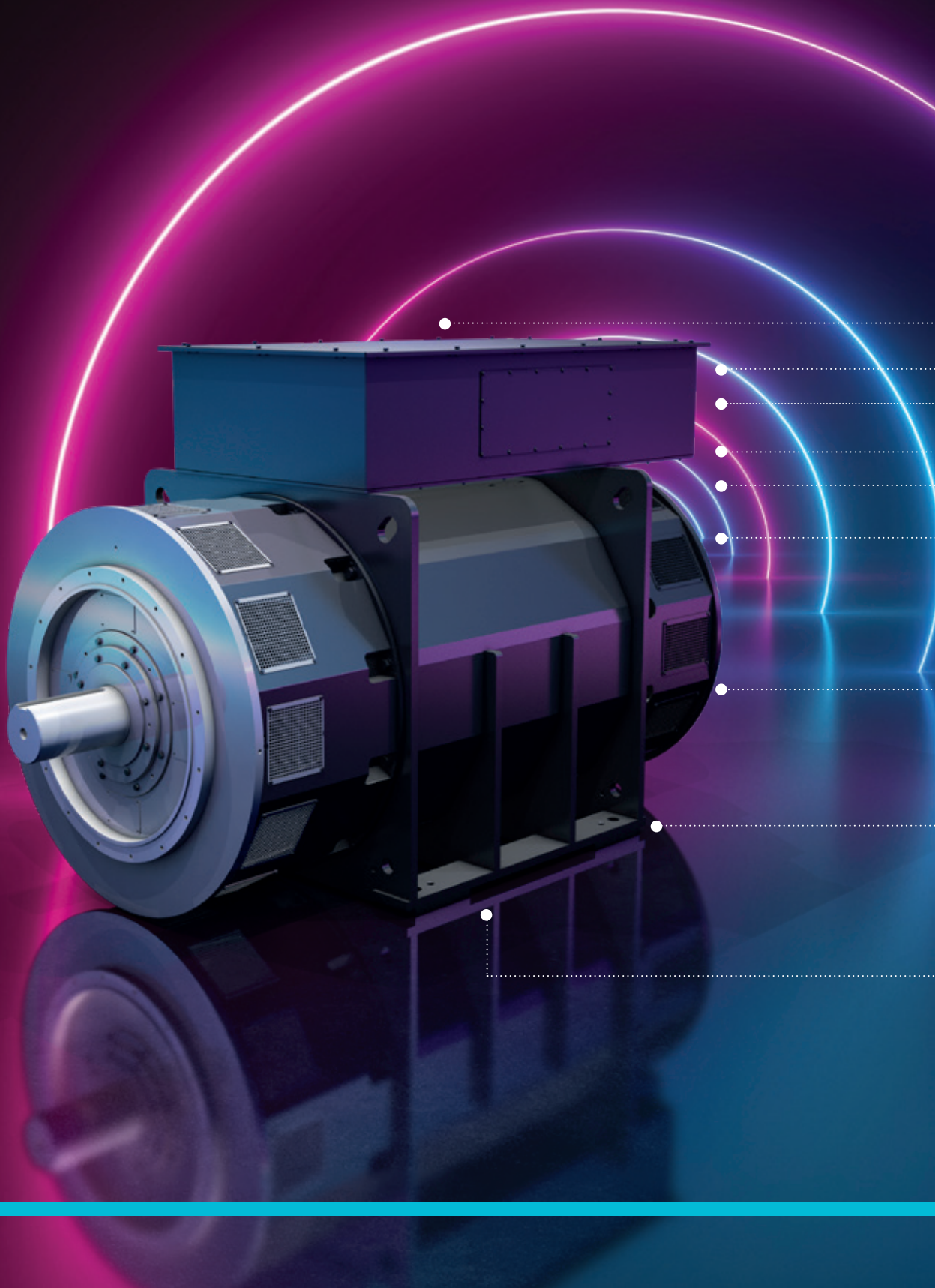


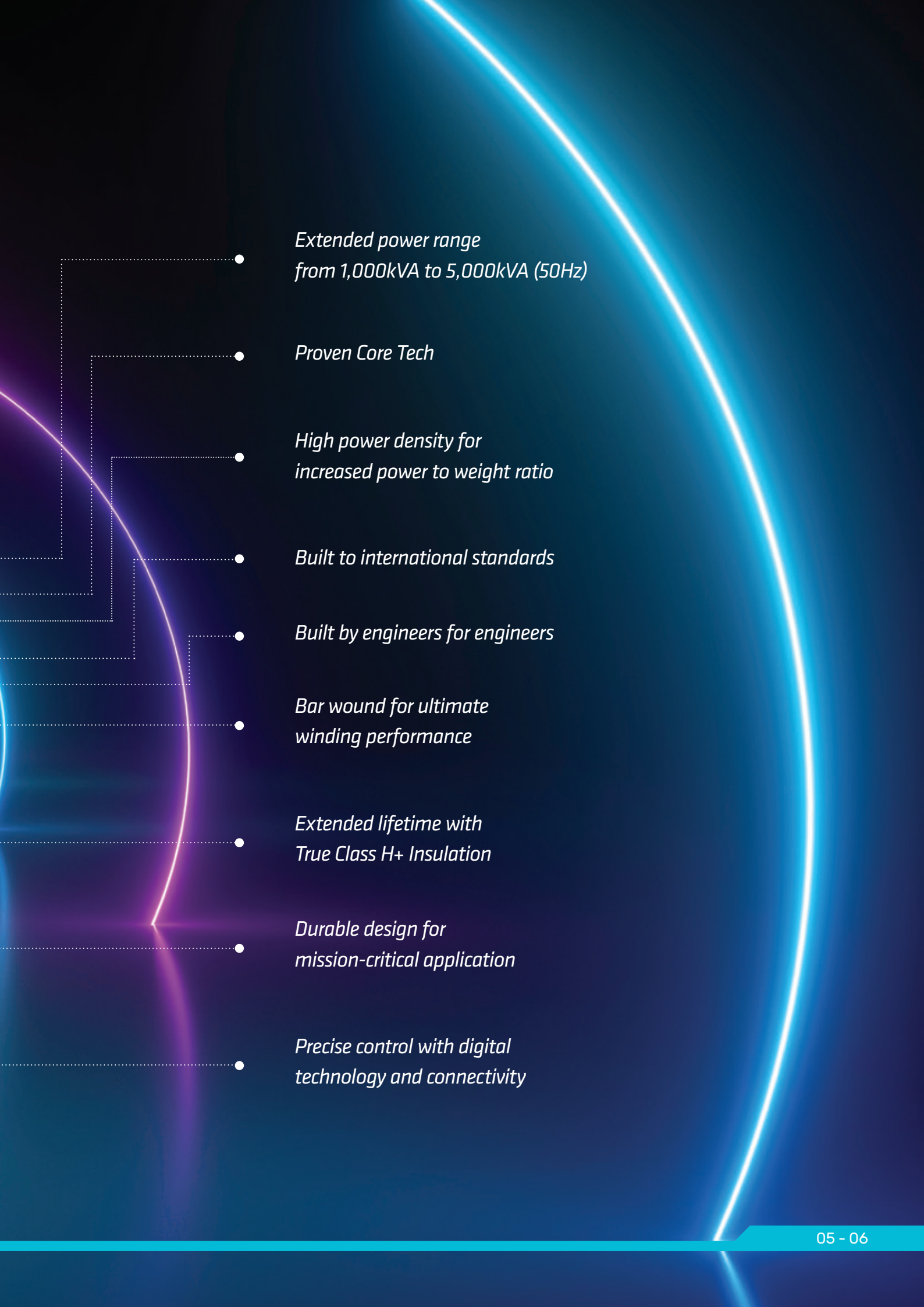
Continuous Power / Class H / 40°C / PF0.8 / 50Hz

■ MV ■ HV



IT'S ALL IN THE PERFORMANCE





- *Extended power range
from 1,000kVA to 5,000kVA (50Hz)*

- *Proven Core Tech*

- *High power density for
increased power to weight ratio*

- *Built to international standards*

- *Built by engineers for engineers*

- *Bar wound for ultimate
winding performance*

- *Extended lifetime with
True Class H+ Insulation*

- *Durable design for
mission-critical application*

- *Precise control with digital
technology and connectivity*

FOUR TIMES THE STRENGTH HIGH VOLTAGE PROTECTION

We design powerful Medium to High Voltage solutions using the latest materials, technologies and processes.

Built today, designed for life.

CAPABILITY

We design, engineer and build alternators in-house. So you get all the information you need direct from the manufacturer and those who know your product best.

SUSTAINABILITY

Enhancing performance efficiencies, to maximise total life cost, focused on providing highly efficient solutions which enable our customers to drive down energy consumption.

RELIABILITY

Using our pedigree and knowledge at component level, we offer a proven and robust design combined with efficient installation and enhanced production. Our global network provides local support to ensure peace of mind where your product is in service.

ACCOUNTABILITY

Dedicated sales and technical teams help you choose and specify the right product and are available with at every stage, from design to production through to testing, installation and operation.

PROTE^XPLUS

Mecc Alte's Power Products division combines its electromechanical experience and close customer relationships, to offer the latest technologies and materials within its Medium and High Voltage product range.

As pioneers of the True Class H+ Insulation system, we're very proud that this is now accepted as an industry standard.

ProteX Plus includes, as standard:

- PMG
- Digital AVR
- Epoxy resin True Class H Insulation system offering enhanced protection against particle and environmental corrosion
- Stator winding temperature detectors 6xPT100s
- IP23 Ingress Protection
- Anti-condensation heaters
- Regreasable bearings for smooth operating characteristics

vonRoll



energy API



Approved and trusted by the industry, our alternators use Class H, VOC-free (volatile organic compound), low viscosity Epoxy resin with glass and mica tapes. This delivers outstanding performance at high temperature, excellent flexibility, thermal, electrical and mechanical properties.

PROTECTION AGAINST THE ELEMENTS

IP23



**Protective Red Epoxy
Enamel on Rotor
and Stator**



**4 YEAR
WARRANTY**



PMG





Dust | Humidity | Corrosion | Chemical | Lifecycle | Water

Epoxy Resin Class H Insulation



Stator Winding Temperature Detector



TEST AND RIGOUR

It's all in our details

Our in-house testing facilities ensure the integrity and reliability of every product in the X-Type Series.

Every alternator we produce is subjected to a routine test including Static and Dynamic Testing and are recorded and documented by certificates. All our tests are conducted in accordance with IEC EN 60034-1: 2004 Section 9.1 'Routine Tests' and we ensure compliance with all major IEC standards and ISO accreditations for specialist application on land and sea.

Routine static tests include:

- Surge test
- Resistances at cold condition / Insulation resistance + D.A.R.
- Polarization Index (PI)
- High-voltage test

Routine dynamic tests include:

- Overspeed for 2 minutes (120%)
- Phase sequence rotation viewed from DE side
- Radial vibration measurement during no load test – NDE only for SAE single bearing configuration
- No load losses at unity power factor
- AVR setting and functional test, if standard DER solution, or presetting of Basler DECS

Additional tests are available on request.

WITH YOU AT EVERY STAGE

Our Medium and High Voltage X-Type Series offers a full range of products and enables customers to select the right product for their power demand. Mecc Alte lifecycle services provide flexible options across the lifetime of the product along with upgrade specifications according to the individual application.

This focused ability allows us to design alternators which deliver maximum performance, high efficiencies and improved cost advantages.



**Installation and commissioning
with site surveys and overhaul**



Preventive maintenance



Diagnosis



Technical support and consulting



**Expert advice and machine
selection for tenders**



Service contracts



Spare parts



Repair and refurbishment



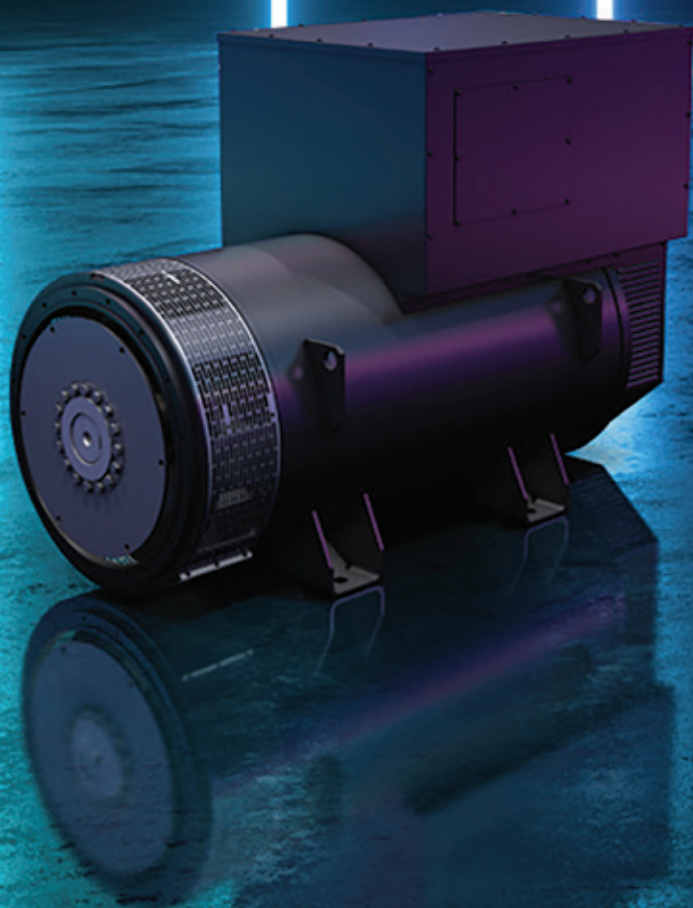
**Replacement motors and
generators**



Training

ECO43 4A

MV/HV



The core DNA of every machine has evolved from over 70 years' technical experience and knowledge. From this proven core, our modular design systems for High Voltage products have been made more compact but the ECO43 MV/HV is packed with high specifications and performance features.

ECO43MV-1VL

900kVA

900kVA

ECO43MV-2VL

1,000kVA

1,000kVA

ECO43MV-1XL

1,100kVA

1,100kVA

ECO43MV-2XL

1,300kVA

1,300kVA

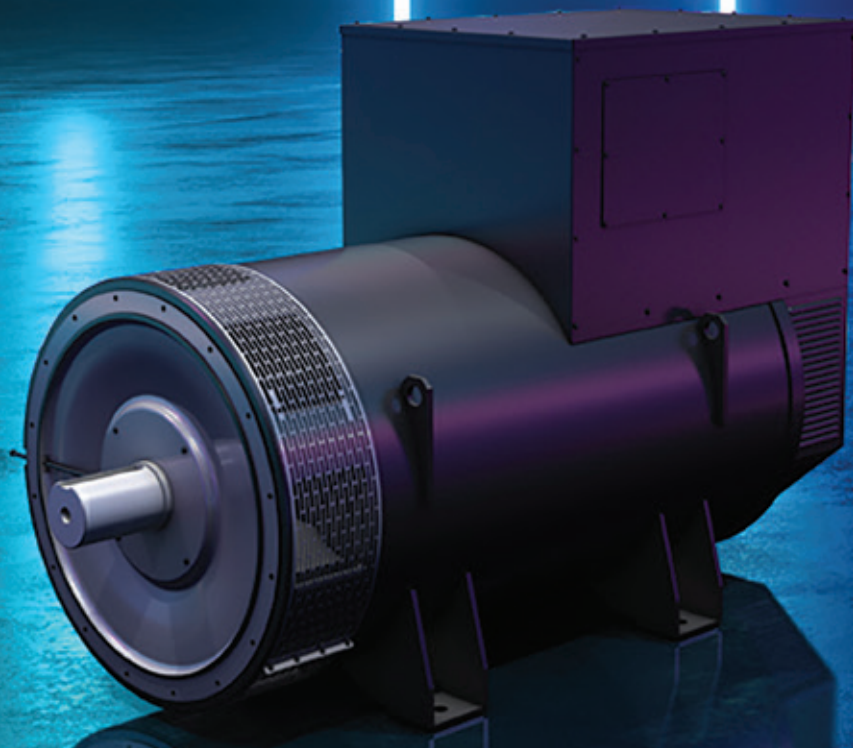
■ MV ■ HV

Continuous Power / Class H / 40°C / PF0.8 / 50Hz

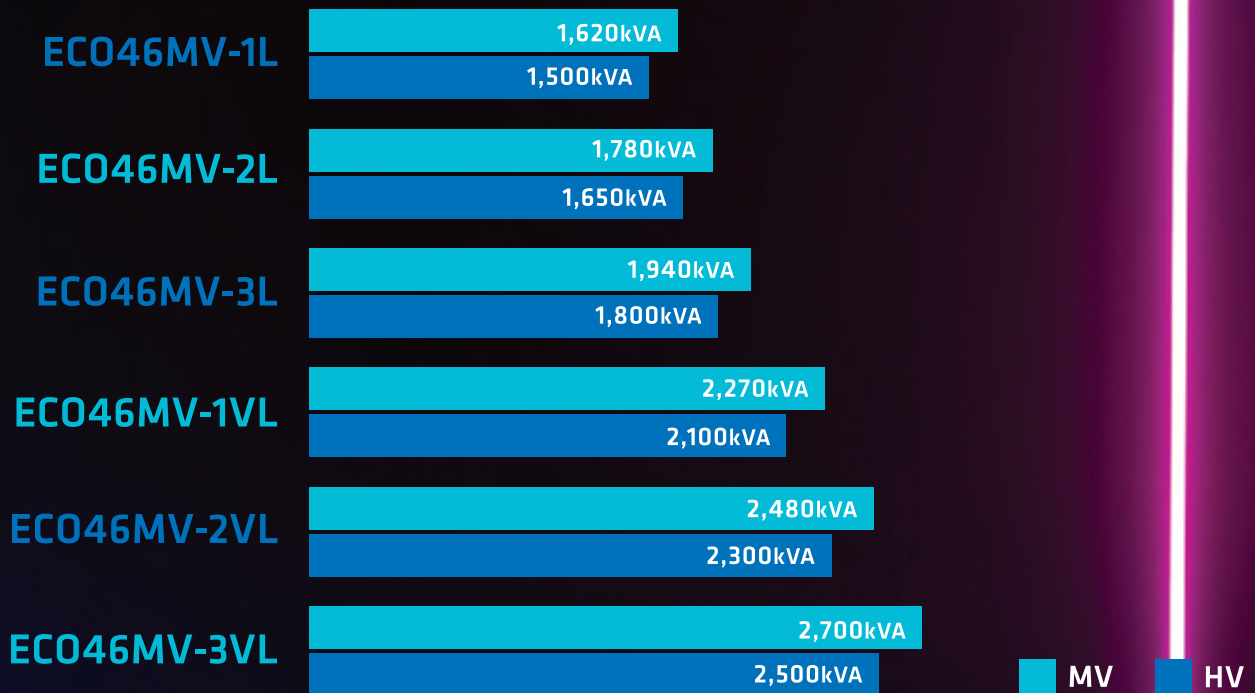
- 4 pole 1,500-1,800rpm
- 2 x 150W anti-condensation replaceable heaters
- Standard IP23
- Single bearing, flange SAE 1-0-00
Double bearings, flange SAE 0
- Shaft height 400mm
- Single bearing flywheel disc, SAE 14-18-21
Double bearings shaft end Ø 110mm
- Standard configuration 1 C.T. + 1 V.T.
- Large terminal box up to
3 C.T.(phase) + 1 C.T.(neutral) + 3 V.T.
- Amagnetic side panels
- Auxiliary box
- Automatic Digital Voltage Regulator type
DER2 with option for Basler DECS150
- USB connectivity
- PMG excitation
- Regreasable bearings
- Compact design

ECO46 4A

MV/HV



Taking our proven technology and design, it means our customers can easily change up to High Voltage products and gain competitive advantage.

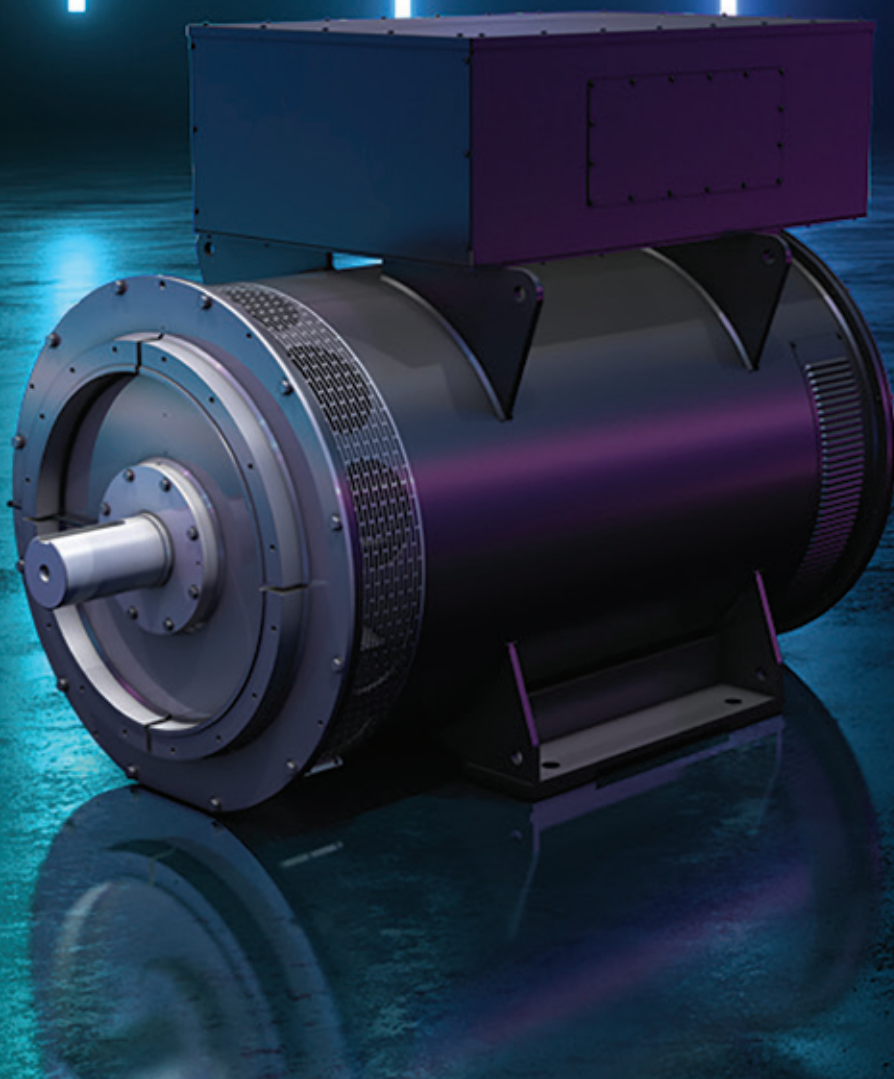


Continuous Power / Class H / 40°C / PF0.8 / 50Hz

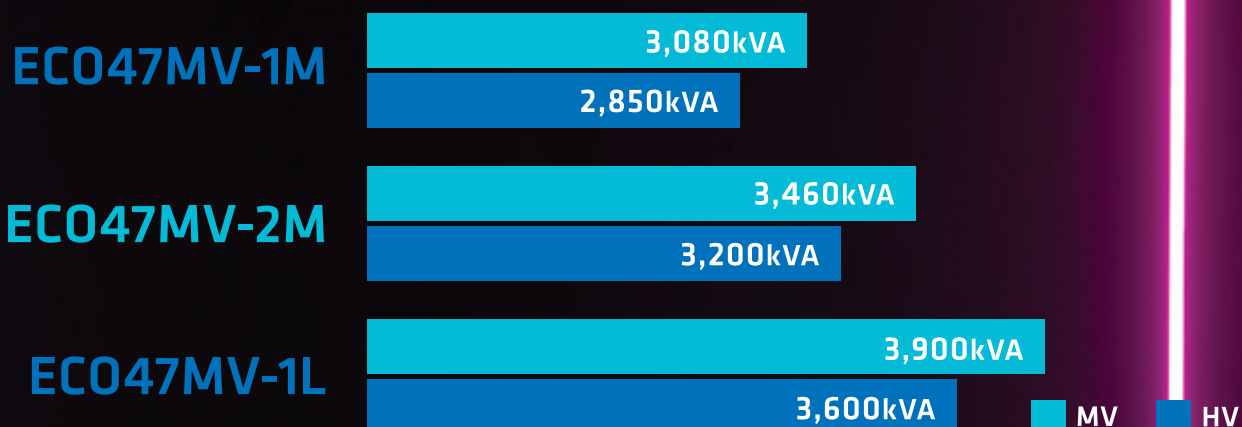
- 4 pole 1,500-1,800rpm
- 2 x 150W anti-condensation replaceable heaters
- Standard IP23
- Single bearing, flange SAE 0-00
Double bearings, flange SAE 00
- Shaft height 500mm
- Single bearing flywheel disc, SAE 18-21
Double bearings, shaft end Ø 140mm
- Standard configuration 1 C.T. + 1 V.T.
- Large terminal box up to 3 C.T.(phase) + 1 C.T.(neutral) + 3 V.T.
- Amagnetic side panels
- Auxiliary box
- Automatic Digital Voltage Regulator type DER2 with option for Basler DECS150
- USB connectivity
- PMG excitation
- Regreasable bearings
- Compact design

ECO47 4A

MV/HV



Sporting a new design and configuration, the ECO47 MV/HV product offers a maximum performance per cost ratio.

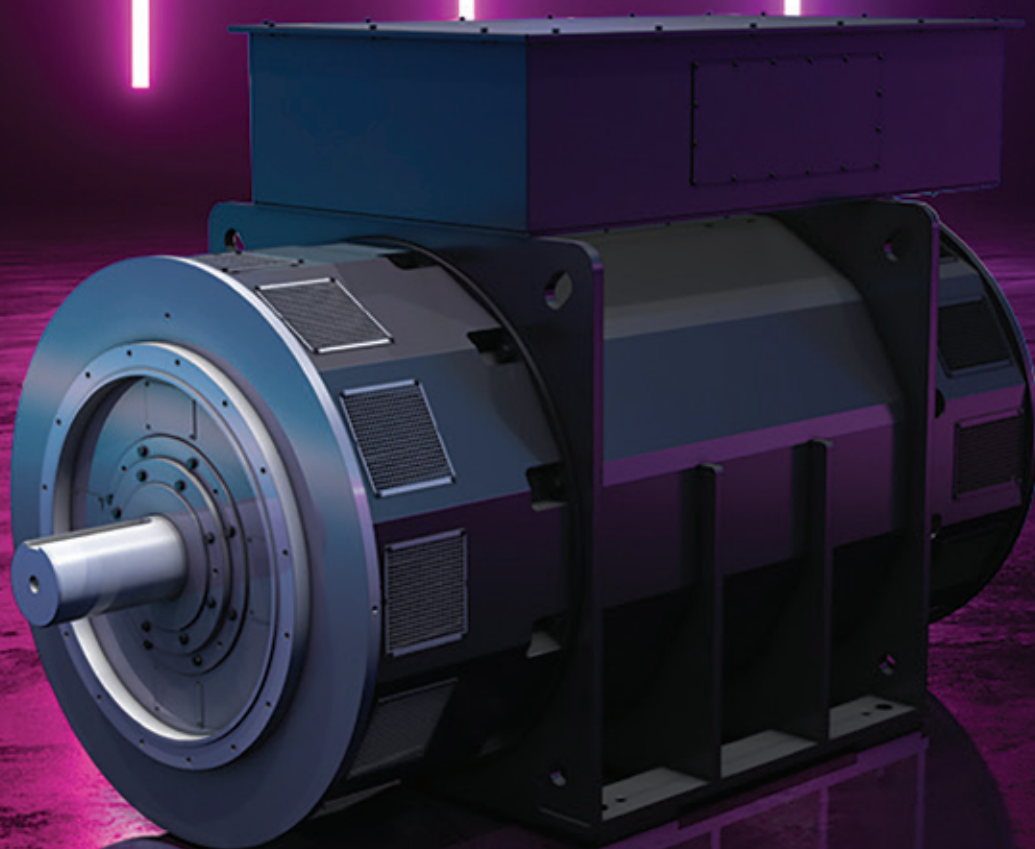


Continuous Power / Class H / 40°C / PF0.8 / 50Hz

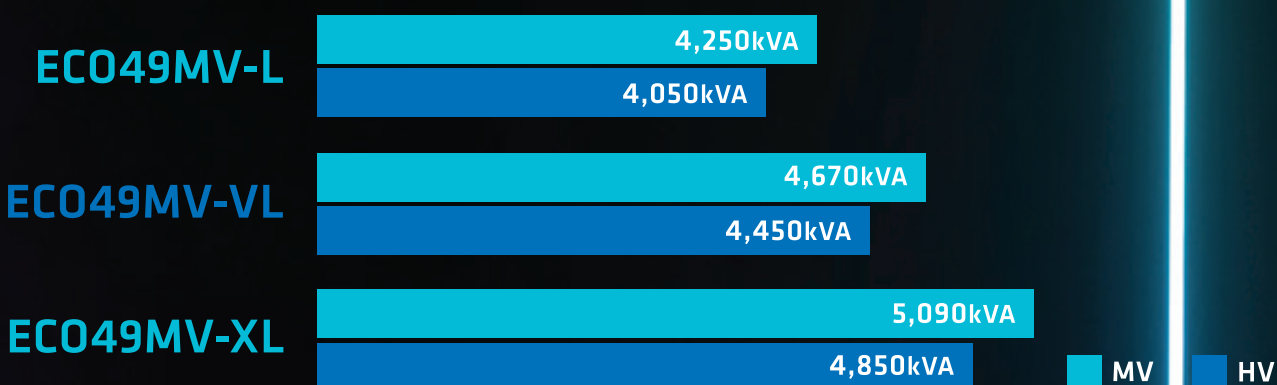
- Standard configuration 1 C.T. + 1 V.T.
- Large terminal box up to 6 C.T.(phase) + 1 C.T.(neutral) + 3 V.T. Possibility of doubling the output side and the star centre side
- 4 pole 1,500-1,800rpm
- Single bearing, flange SAE 00
Double bearings, flange SAE 00
- Standard IP23
- Single bearing flywheel disc – SAE 18-21
Double bearings, shaft end Ø 150mm
- Shaft height 560mm
- Auxiliary box
- USB connectivity
- Compact design
- Amagnetic side panels
- PMG excitation
- Automatic Digital Voltage Regulator type DER2 with option for Basler DECS150

EC049 4A

MV/HV



Offering our largest capacity MV and HV product. Suitable for Oil & Gas sectors along with high capacity utility scale power. Durable. Hard Working. Powerful.



Continuous Power / Class H / 40°C / PF0.8 / 50Hz

- Standard configuration 1 C.T. + 1 V.T.
- Large terminal box up to 6 C.T.(phase) + 1 C.T.(neutral) + 3 V.T. Possibility of doubling the output side and the star centre side
- 4 pole 1,500-1,800rpm
- Standard IP23
- Double bearing, flange 00
- Shaft height 630mm
- Double bearings, shaft end Ø 175mm
- Antideflagrant diaphragm on terminal box
- Auxiliary box
- USB connectivity
- Amagnetic side panels
- PMG excitation
- Automatic Digital Voltage Regulator type DER2 with option for Basler DECS150
- Regreasable bearings
- 4 x 150W anti-condensation replaceable heaters
- Diode bridge at end of the shaft with redundant diodes and varistors able to absorb a complete loss of step

The logo features a large, stylized white number '4' on the left. To its right, the words 'YEAR' and 'WARRANTY' are stacked vertically in a bold, white, sans-serif font. Below 'WARRANTY', the words 'HV PARTS' are written in a smaller, white, sans-serif font. The entire text is contained within a white rectangular box that has a slight 3D effect with a shadow on its right side.

4 YEAR **WARRANTY** HV PARTS

All Mecc Alte warranties are supported by our global network of local service and sales centres.

The Power Products division assures its quality and drives excellence across every aspect from design to production.

The division boasts flexible and state-of-the-art production facilities and dedicated technicians striving for excellence in our in-house R&D design centre.

This commitment to excellence brings us ever closer to our customers and enables us to extend complete peace of mind to them with our four-year warranty solution.



The **X-TYPE** Series

La Promessa di Prestazione Potente

The promise of powerful performance

Mecc Alte SpA (HQ)

Via Roma
20 – 36051 Creazzo
Vicenza – ITALY
T: +39 0444 396111
F: +39 0444 396166
E: info@meccalte.it
aftersales@meccalte.it

Mecc Alte Portable

Via A. Volta
1 37038 Soave
Verona – ITALY
T: +39 0456 173411
F: +39 0456 101880
E: info@meccalte.it
aftersales@meccalte.it

Mecc Alte Power Products

Via Melaro
2 – 36075 Montecchio
Maggiore (VI) – ITALY
T: +39 0444 1831295
F: +39 0444 1831306
E: info@meccalte.it
aftersales@meccalte.it

Zanardi Alternatori

Via Dei Laghi
48/B – 36077 Altavilla
Vicenza – ITALY
T: +39 0444 370799
F: +39 0444 370330
E: info@zanardialternatori.it

United Kingdom

Mecc Alte U.K. LTD
6 Lands' End Way
Oakham
Rutland LE15 6RF
T: +44 (0) 1572 771160
F: +44 (0) 1572 771161
E: info@meccalte.co.uk
aftersales@meccalte.co.uk

Spain

Mecc Alte España S.A.
C/ Rio Taibilla, 2
Polig. Ind. Los Valeros
03178 Benijofar (Alicante)
T: +34 (0) 96 6702152
F: +34 (0) 96 6700103
E: info@meccalte.es
aftersales@meccalte.es

China

Mecc Alte Alternator Haimen LTD
755 Nanhai East Rd
Jiangsu HEDZ 226100 PRC
T: +86 (0) 513 82325758
F: +86 (0) 513 82325768
E: info@meccalte.cn
aftersales@meccalte.cn

India

Mecc Alte India PVT LTD
Plot NO: 1, Sanaswadi
Talegaon
Dhamdhare Road Taluka:
Shirur, District:
Pune - 412208
Maharashtra, India
T: +91 2137 619600
F: +91 2137 619699
E: info@meccalte.in
aftersales@meccalte.in

U.S.A. and Canada

Mecc Alte Inc.
1229 Adams Drive
McHenry, IL, 60051
T: +1 815 344 0530
F: +1 815 344 0535
E: info@meccalte.us
aftersales@meccalte.us

Germany

Mecc Alte Generatoren GmbH
Ensener Weg 21
D-51149 Köln
T: +49 (0) 2203 60541-0
F: +49 (0) 2203 60541-49
E: info@meccalte.de
aftersales@meccalte.de

Australia

Mecc Alte Alternators PTY LTD
10 Duncan Road, PO Box 1046
Dry Creek, 5094, South
Australia
T: +61 (0) 8 8349 8422
F: +61 (0) 8 8349 8455
E: info@meccalte.com.au
aftersales@meccalte.com.au

France

Mecc Alte International S.A.
Z.E. la Gagnerie
16330 St. Amant de Boixe
T: +33 (0) 545 397562
F: +33 (0) 545 398820
E: info@meccalte.fr
aftersales@meccalte.fr

Far East

Mecc Alte (F.E.) PTE LTD
10V Enterprise Road, Enterprise 10
Singapore 627679
T: +65 62 657122
F: +65 62 653991
E: info@meccalte.com.sg
aftersales@meccalte.com.sg

+39 0444 396111

www.X-TYPE.meccalte.com

x-type@meccalte.com



www.meccalte.com



ALTERNATORS 1 – 5,000kVA

LOW VOLTAGE | MEDIUM VOLTAGE | HIGH VOLTAGE

POWER
FROM WITHIN

www.meccalte.com