

Totally Focused. Totally Independent.

TOTALLY COMMITTED TO

SATISFYING YOUR 400Hz REQUIREMENTS

The world's largest independent producer of alternators 1 – 5,000kVA



OUR UNIQUE COMPANY

TOTALLY FOCUSED. TOTALLY INDEPENDENT.

We only make one kind of product. That's why we've been totally focused on producing high quality alternators since we were established in 1947. Today, we have factories or distribution centres in every continent and we're the world's largest independent producer of alternators. Our independence is very important to us... and to our customers because we never compete with any of them in the end market (we don't sell complete generator sets). We believe that we're a totally unique company because of the special combination of qualities that set us apart from our competitors. We offer the highest levels of global support to our customers and we put them at the forefront of every single decision we make, which continually spurs us on in terms of our continuous development, product innovation and constantly evolving product ranges.

TOTALLY COMMITTED TO GLOBAL PRODUCTION

We manufacture the world's widest range of low voltage alternators 1 – 5,000kVA via our 'made for manufacturing' product design in Italy, the UK, China and India. Our network of factories is supported by wholly-owned subsidiaries across the globe who specialise locally in the sales, distribution and aftersales for all Mecc Alte products. This global support ensures that our customers get the assistance they need... wherever they are.

TOTALLY COMMITTED TO QUALITY

We've reached the highest possible quality standards in every area of design, production and sales. At Mecc Alte, our constant pursuit of quality begins well before the actual production process with careful checks on semi-processed parts and sample testing of electrical components. We build over 1,400 alternators every day, over 450,000 a year. We have a complete range of products and our production process is totally integrated. This ensures that every production phase, from the design and selection of materials right through to manufacture and aftersales assistance, complies with the strictest international and organisational standards.

OUR UNIQUE PEOPLE

We employ over 1,200 unique people throughout the world. Every one of them is totally committed to the global support that we offer to our customers... and to ensuring that every single alternator we produce meets the world-class standards that Mecc Alte is renowned for.

MECC ALTE 400Hz IN DEPTH

PROVEN CAPABILITY

Our standard alternators have high levels of performance and are designed with product-enhancing features. Unique special machines to suit individual applications are available, with innovative design to assure the lowest possible losses that is so critical in 400Hz machines. Supported through an experienced and computer-assisted FEM design, our professional team is able to ensure exceptional support both pre and post order.

EXCEPTIONAL EXCITATION

The 'MAUX' (Mecc Alte Auxiliary Winding) is used throughout the range of alternators, and has been a proven standard for Mecc Alte in all market sectors. It is a brushless excitation system deriving power from a dedicated auxiliary winding within the main stator. This winding is protected by four layers of polyester in addition to the clear varnish and EG43 environment protection used in the most demanding applications. Fitted within the main stator, it minimizes overall dimensions of the alternator and ensures a compact machine.

This system ensures a high level of motor start ability, and surpasses the industry requirements giving >300% forced current (short circuit maintenance) for 20 seconds.

RADIO INTERFERENCE SUPPRESSION

The standard generators comply with the specification VDE 0875, degree "N" and with the basic safety requirements of the European regulation on electromagnetic compatibility; by applying the EN 60034-1 and aviation rules, we comply with the above-mentioned regulation. Other standards can be achieved by adding filter sets supplied by Mecc Alte. Military grade suppression levels are available upon request.

400

UVR6-H400B

The UVR6-H400B regulator is an advanced compact electronic regulator used for 400Hz machines.

This regulator is equipped with low speed and overload protection with an adjustable intervention threshold, it has adjustable voltage stability and offers the possibility for a remote voltage regulation with three phase sensing capability. It can work with a Mecc Alte Line Drop Compensator (LDC) used to compensate the voltage fall in the longest distribution lines.

INSULATION AND IMPREGNATION

Insulation materials used provide a system insulated to Class H level. Superior processes are employed to add an EG43 compound after insulation over the main and exciter windings to give a very high standard of protection. Higher levels such as TOTAL+, a black severe environment protection, are also available on request.









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CONSTRUCTION

Rigid steel frames (FeP12)

Dynamically balanced rotors with ½ key (ISO 8821), conforms to Class G.2.5 (ISO 1940)

Copper damping cage from 45kVA 20 poles and up, for superior transient load performances

BEARINGS

Sealed-for-life premium bearings as standard, or insulated bearings upon request.

RELIABILITY

Standardized components are used with 'families' of industrial machines to give very high degrees of interchangeability. Lower component count throughout the range, and also within individual machines, has focused efforts to enhance the reliability of the products. In testimony to this, the reliability prediction according to the military standard MIL-HDBK-217F, was a failure rate of 75,82 fpmh (failures per million hours), 13,189 hours mtbf (mean time between failures).

MINIMUM MAINTENANCE

Mecc Alte 400Hz alternators are built with low maintenance in mind. Bearings have up to 30,000 hours' life expectancy and windings have high degrees of protection. Where maintenance is necessary, access is very simple, making servicing an ease. In addition, the commonality of parts ensures worldwide spares availability.

COMPACT DIMENSIONS

The Mecc Alte 400Hz alternators are amongst the most compact and light alternator packages available. This, coupled with market-leading efficiency, highlights the superior ability of Mecc Alte in the design and production of their alternators. DC generators or custom projects on different pole numbers are available on direct request.

ACCESSORIES

A large number of accessories are available on request, including:

Anti-condensation heaters

Temperature detectors (thermistors or PT100), for windings and/or bearings

Higher degrees of mechanical protection (IP23, IP45 or inlet air filters)



Line drop compensator (LDC)

Advanced Winding Protection Systems





POWER RATINGS

115/200-208V 400Hz - 3 Ph. 40° ambient temperature

Туре	RPM	Class H	Class F
HCP3-1S/14	3,428rpm	5,5kVA	5kVA
HCP3-2S/14	3,428rpm	7kVA	6.5kVA
HCP3-3S/14	3,428rpm	9kVA	8.5kVA
HCP3-2L/14	3,428rpm	11kVA	10kVA
HCP3-3L/14	3,428rpm	13kVA	12kVA

Туре	RPM	Class H	Class F
HCP28-M/24 A	2000rpm	10kVA	9kVA
HCP28-2L/24 A	2000rpm	15kVA	13.5kVA
HCP28-VL/24 A	2000rpm	20kVA	18kVA

Туре	RPM	Class H	Class F
HCP32-1S/20	2,400rpm	45kVA	40kVA
HCP32-2S/20	2,400rpm	50kVA	45kVA
HCP32-2L/20	2,400rpm	60kVA	55kVA
HCP32-3L/20	2,400rpm	70kVA	65kVA

Туре	RPM	Class H	Class F
HCP34-1S/20	2,400rpm	75kVA	70kVA
HCP34-2S/20	2,400rpm	95kVA	85kVA
HCP34-3S/20	2,400rpm	125kVA	115kVA
HCP34-1L/20	2,400rpm	150kVA	135kVA

Туре	RPM	Class H	Class F	
HCP34-1SN/24	2,000rpm	60kVA	55kVA	N
HCP34-2SN/24	2,000rpm	90kVA	80kVA	- EN229
HCP34-2LN/24	2,000rpm	125kVA	110kVA	3 219
HC038-2S26 A	1848rpm	90kVA	85kVA	BS 2G
HC038-3S26 A	1848rpm	120kVA	110kVA	
HC038-1L26 A	1848rpm	150kVA	140kVA	According
HC038-2L26 A	1848rpm	180kVA	165kVA	

OUR QUALITY, SERVICE AND AFTERSALES

We have reached the highest possible quality standards in every area of design, production and sales. With us, the pursuit of quality begins long before actual production, with checks on semi-processed parts and sample tests on electronic components.

These tests are performed with rapid aging methods by means of alternating exposure to extreme temperatures. Our quality is enhanced during the production process with computerised equipment making checks on electronic and electrical circuits. The high quality of our finished products is due to a perfect combination – high performance and maximum reliability. That quality is certified by international bodies such as the Canadian Standards Association (CSA), the Underwriters Laboratories (UL) and Det Norske Veritas (DNV) and Bureau Veritas, further supported by our ISO 9001 accreditation from Registro Italiano Navale (RINA).

Every quality mark is a guarantee of the rigorous assessment of prototypes and a commitment to continuous audits by external inspectors to monitor product consistency – and product quality. This quality assurance allows us to be proud of our products. Our products are now globally recognised. This high market acceptance has originated from a combination of effective marketing through our sales and distribution facilities, established training plans for our many customers, and consistently great aftersales service. We are a professional and responsible company and understand that a good reputation breeds success.

We recognise that our reputation depends on continually delivering high standards of support – whenever and wherever it is required. With an extensive global service and aftersales network, you can be assured that your product will be supported anywhere in the world.

Our quality is certified by international bodies and is supported by our ISO 9001 accreditation across the whole group. This quality assurance allows us to be proud of our products and gives you peace of mind knowing our alternators are built with the highest possible quality standards.





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