Global Motor Systems Network



EMSA Newsletter - Zurich March 2021

Dear Nathalie,

Welcome to the latest edition of the **Electric Motor Systems Annex (EMSA)** Newsletter.

Events

EEMODS 2021: conference moved to 3 -5 May 2022

With the Covid-19 emergency continuing to affect the world the 12th edition of the "International Conference on Energy Efficiency in Motor Driven Systems" is postponed to 3 – 5 May 2022. The conference will be held in Stuttgart, Germany.



The Call for Papers is reopened and extended to 31 August 2021.

More information on the venue here: eemods22

eceee digital Summer Study "A new reality"

The eceee 2021 Summer Study will take place digitally this year from 7 to 11 June and will be focused on the restart after Covid-19: an opportunity to do things smarter, greener and fairer for all where energy efficiency and energy sufficiency are part of the solution. Energy efficiency in the new reality.



More information here: eceee/summerstudy

Motor Summit International 2020

The Motor Summit International, which took place as online event on 18 and 19 November 2020, featured 27 presentations from international experts and counted up to 116 participants from 25 countries. EMSA was the Key Partner of this event and some of its members contributed with the latest updates on their work.



All presentations and videos are available here: motorsummit 2020

News

EMSA New Website

4E's Electric Motor Systems Annex EMSA has launched a new website simultaneously with 4E and its other Annexes. 4E TCP is



an established international platform for information exchange and policy coordination, with 15 government members from major economies.

The new website can found here <u>iea-4e/emsa</u>

New EMSA member: New Zealand

After the European Commission joined the 4E Electric Motor Systems Annex early 2020, New Zealand has also recently joined EMSA to collaborate on policy and technical issues related to electric motor systems. EMSA welcomes her latest new member!



More information here

China regulatory update

The Chinese GB18613-2020 with minimum efficiency requirements for electric motors has been published in June 2020. Compliance is required from July 2021. The regulation covers three-phase asynchronous motors from 0.12 to 1'000 kW rated power, including "general purpose explosion-proof motors" and 8-pole motors. The minimum requirement is set at Grade 3 (equivalent to IE3). Separate efficiency levels are set for very small motors and small single-phase motors.



More information here

EC regulatory update

- **Circulators** (EC 641/2009): Impact Assessment ongoing, Submission to the Regulatory Scrutiny Board expected in Q2 2021.
- Pumps (EC 547/2012): Impact Assessment ongoing, Submission to the Regulatory Scrutiny Board expected in O3 2021.
- **Fans** (EC 327/2011): Interservice Consultation under preparation.
- Air Compressors: Impact Assessment being finalised, Submission to the Regulatory Scrutiny Board in Q4 2020, to be confirmed.



More information here

"Coordination and Alignment of IEC & ISO Standards for Energy Efficient Electric Motor Driven Systems"

The plenary project meeting in November 2020 (digital) on **Coordination and Alignment of IEC & ISO Standards for Energy Efficient Electric Motor Driven Systems** decided to start the preparatory work for the establishment of a Joint Working Group with some Technical Committees from ISO and IEC. The next CAISEMS plenary meeting is planned for on 30 March 2021.



For more information, contact Maarten van Werkhoven: myanwerkhoven@tpabv.nl

Download Project brief

Publications

U.S. Industrial and Commercial Motor System Market Assessment, Volume 1: Characteristics of the Installed Base in the USA

A lack of sufficient data is a major barrier to effective decision making that will help to capture the energy savings potential in motor systems. Prior to the release of this report, there was no information on the current state of motor driven systems in U.S. industrial and commercial facilities. This limited the ability to conduct analysis on energy savings potential, develop technologies to address energy and productivity gaps, and develop programs to promote energy efficiency. The report is prepared by LBNL for the U.S. Department of Energy. Volume 2 and 3, Motors and Drives Supply Chain Review, and Energy Savings Opportunity, are planned to be published by fall 2021.



More information here

Download the Publication here

EMSA Policy Guidelines for Motor Driven Units translated into Turkish

The 4E EMSA Policy Guidelines for Motor Driven Units - Part 2, published in 2018, has been translated into Turkish. The translation was made in cooperation with EMSA by the partners in the TEVMOT project, Promoting Energy Efficient Motors in SMEs in Turkey. It gives a systematic and comprehensive overview including organisational and technical tasks to be performed during a motor system audit, along the stages of an energy audit according to ISO 50002.



Download the Guide here

Report on the EMSA Survey on digitalisation in electric motor driven systems

The report summarises the results of the EMSA Survey on the potential impact of digital technologies on electric motor driven systems in industrial companies.

Industrial companies are currently especially using smart sensors, smart control and continuous monitoring as digital technologies, in conjunction with motor driven systems. These three technologies will also have the greatest impact on potential future energy savings.



Download the Report here

Topmotors Market Report Switzerland 2020

The Topmotors Market Report 2020 provides information on the state of the Swiss market for electric motors, pumps and fans in 2019. This study serves to inform the Swiss Federal Office of Energy (SFOE) as well as all stakeholders about both the number and the fulfilment of the minimum energy requirements of the electric motors, pumps and fans sold. Furthermore, the sales prices of motors and frequency converters, the availability of high-efficiency electric motors and also market data for the European Union were investigated.



Download the Market Report 2020 here

All market reports can be found here

Topmotors Fact Sheet No. 31: Bearing Currents

Using a variable-frequency drive (VFD) can reduce the energy consumption of electric motor driven systems in many cases. Accordingly, VFDs are frequently installed nowadays in electric motor driven systems with variable loads. However, the use of VFDs can generate undesirable bearing currents in electric motors that can lead to bearing damage and premature failure. The latest Topmotors Fact Sheet provides useful information on how to detect and avoid bearing currents.



Download the Fact Sheet here

Best regards,

Maarten van Werkhoven **EMSA Operating Agent**

Rita Werle **EMSA Vice-Operating Agent**

TPA advisors Aerdenhout Netherlands +31 (0)23 536 80 90 mvanwerkhoven@tpabv.nl

Zurich Switzerland +41 (0)44 226 20 10 rita.werle@impact-energy.ch

Impact Energy Inc.

EMSA is the Electric Motor Systems Annex of the International Energy Agency's Technology Collaboration Programme on Energy Efficient End-use Equipment 4E. Currently Australia, Austria, Denmark, European Commission, Netherlands, New Zealand, Sweden, USA and Switzerland participate actively in EMSA. Canada, China, France, Japan, Korea and the United Kingdom participate in Annexes. other

Copyright ©: If you would like to copy or quote one of our items, go ahead. Please send us a proof for the archive.

If you do not want to receive any more messages (to: nathalie.perucchi@impact-energy.ch), you can unsubscribe here.

> IEA 4E Electric Motor Systems Annex (EMSA) Gessnerallee 38a, 8001 Zurich, Switzerland, +41 (0)44 226 20 10 info@motorsystems.org, emsa