Hybrid-cooling technology

High current, compact Vacuum Capacitors

Combining the most useful features of Comet's Vacuum Capacitors, along with a new special cooling technology, allows the use of high current in a compact size Vacuum Capacitor.

Comet hybrid-cooling technology has been developed as an extension of the well-known Hexa-Con product range. The first hybrid-cooled, small size Vacuum Capacitor series offers users the best of both worlds: the compact size allows the use of higher power and users benefit from not having to increase footprint and hence lower cost of ownership at the same. When comparing diameter versus power density, the Hexa-Con series with hybrid-cooling technology is best in class.

The efficient cooling technology can be adopted to Hexa-Con and Maxi-Con series of Comet Vacuum Capacitors and modified according your needs. Thanks to the use of Comet Ultra Life drive system, trouble free operation and long lifetime is ensured. The new technology can also be combined with Comet integrated drive solutions.

Features

- Hybrid-cooling technology
- High power design
- 40% higher power density than standard product
- Small form factor
- Ultra-life drive system

Benefits

- High current
- Long lifetime
- Low torque
- More than 40% power increase
- Efficient use of matchbox space

Hexa-Con with Hybrid-cooling technology

c•met pct

Led by experience. Driven by curiosity.

Technical features

Capacitance C_{max} (nominal)	250 pF
Capacitance C_{min} (nominal)	7 pF
Voltage (Peak Test U_{pt} / Peak Working U_{pw})	25 kV/15 kV
Max. Current I_{max} at 13.56 MHz with Water Cooling	225 A_{RMS} 0.5 l/min
Self Inductance	≤ 5 nH
Torque	≤ 0.25 Nm

Technical features for the sample of a Hexa-Con CVHE-250BW/25-AAAN-AS

Typical application areas

- Semiconductor
- Flat Panel Display

Customized to your requirements

Comet has developed new Vacuum Capacitors utilizing hybrid-cooling technology for high current applications. Comet's new Hexa-Con Vacuum Capacitor is a new product adopting this technology. Talk to us about your specific requirements.

- Hybrid-cooling technology can be applied to all types of Hexa-Con and Maxi-Con series on demand
- Option: integrated drive solutions

We customize for unique applications. For more information, contact your local Comet experts.

Switzerland (Head Office)
Comet AG
Flamatt

Germany
Comet Yxlon GmbH
Aachen

United States
Comet Technologies USA, Inc.
San Jose/CA

China
Comet Mechanical Equipment (Shanghai) Co. Ltd., Shanghai

Korea
Comet Technologies Korea Co., Ltd., Suwon-si

Malaysia
Comet Technologies Malaysia Sdn Bhd, Penang

Taiwan
Comet Solutions Taiwan Ltd.
Hsinchu

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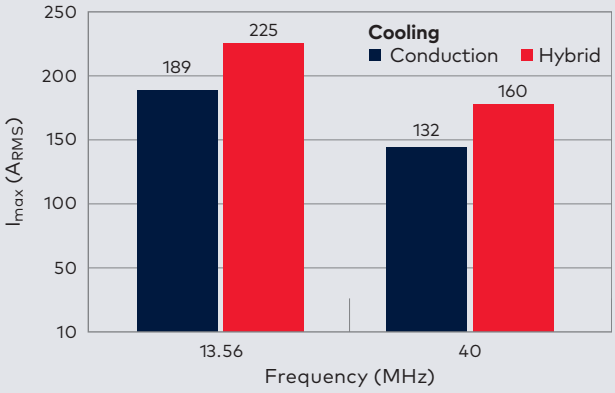
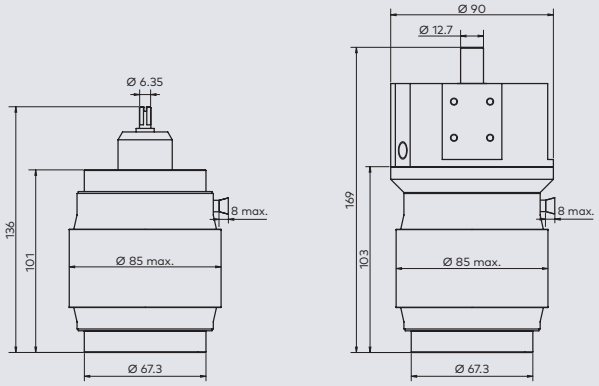
Comparison of cooling types (Hexa-Con series)



Comparison of dimensions

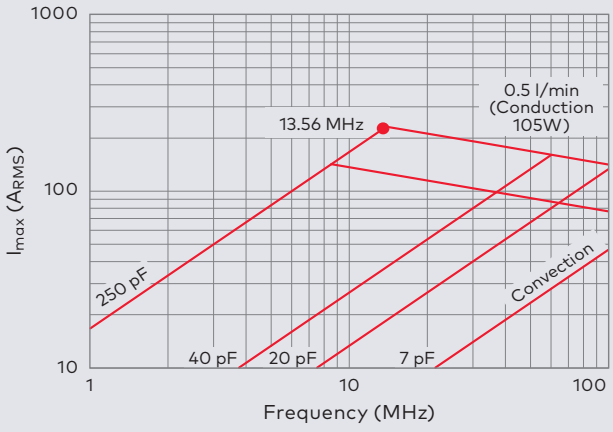


Standard Hexa-Con

Hybrid-cooled Hexa-Con

Current vs. frequency and capacitance

I_{max} for 0.5l/min water cooling, max. temp. of 40° C



Technical information can be found in our data sheets and Service Bulletins:
pct.comet.tech/service-bulletins