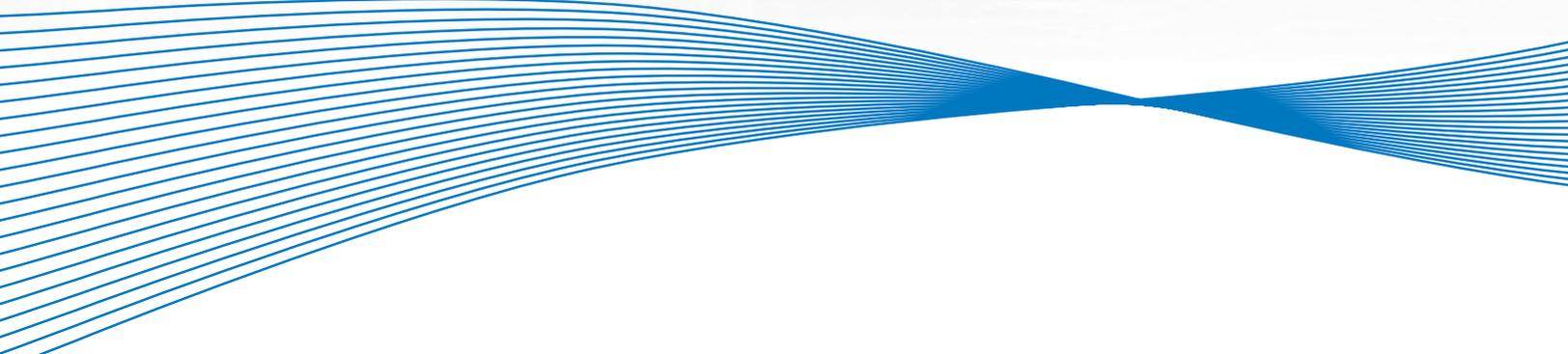




**VACON<sup>®</sup>**  
DRIVEN BY DRIVES



**VACON<sup>®</sup> 3000 MEDIUM VOLTAGE DRIVES**  
**ENSURING HIGHER POWER**  
**AND MAXIMUM VALUE**



## **IT'S TIME TO POWER UP! VACON® 3000 MEDIUM VOLTAGE DRIVES**

Vacon is the largest company worldwide that has a 100% focus on AC drives. For over 20 years, our attitude, competence and courage have kept us at the forefront of drive innovation. Every day, our low voltage AC drives for demanding applications are improving process efficiency and saving energy in, for example, marine and offshore, pulp and paper and renewable energy industries.

With infrastructures around the world developing and heavy industries becoming more important, the need for higher power output is growing. To meet the needs of customers worldwide, Vacon has an R&D team dedicated to the development of medium voltage drive products, and engineers and service staff who are well equipped to provide comprehensive support.

### **MAKING MEDIUM VOLTAGE DRIVES EASY**

VACON 3000 medium voltage drives provide customers with a simple, flexible and economical means of targeting application-specific requirements for motor power, braking power and system control in the 1 to 11 MW range at 3.3 and 4.16 kV.

### **HERE ARE JUST A FEW OF THE BENEFITS**

#### **Compact size**

VACON 3000 medium voltage drives make efficient use of space, and have a high power density to maximise performance. The high power density makes installation and servicing easier.

#### **Easy to use**

An intuitive control interface and user-friendly PC tools make it easy to tune drive characteristics for specific applications.

#### **Efficient cooling**

A compact, liquid-cooled aluminium heat sink is used for safe, efficient and reliable temperature control. A glycol/water solution circulates within the heat sink through a simple inlet-outlet piping arrangement for connection to a heat exchanger. Couplings can be easily exchanged from the outside of each power converter.

#### **Commonality**

Commonality with Vacon low voltage drives provides years of built-in knowhow. The drive controller features the same application layer found in Vacon low voltage drives. And a removable keypad can be used to monitor and supervise drive functions from multiple locations, and to quickly transfer operating parameters between drives.

#### **Choice of front end**

VACON 3000 medium voltage drives are available with an Active Front End for continuous power regeneration and IEEE 519 grid harmonic compatibility or with a Diode Front End rectifier.



## VACON® 3000 MEDIUM VOLTAGE DRIVE SPECIFICATIONS

ITEM	Specification
Topology	3-level neutral point clamped (NPC)
Inverter capacity	L20-HLx3: 425A, 3300V, 2.4MVA L20-HLx3: 340A, 4160V, 2.4MVA L30-HLx3: 640A, 3300V, 3.7MVA L30-HLx3: 510A, 4160V, 3.7MVA Higher power capacities are achieved by paralleling up to four inverters
Input voltage	3300V, 3 phase, -10%/+5% 4160V, 3 phase, -10%/+5%
Input frequency	50Hz, ±5%, 60Hz, ±5%
Input transformer	Common mode input filter (option) required if dedicated input isolation transformer not used
Rectifier	AFE (active front end) 6-pulse DFE (diode front end) 12-pulse DFE, external input transformer with 2 secondary windings required 24-pulse DFE, external input transformer with 4 secondary windings required
Input current THD	THD < 5% with AFE THD < 40% with 6-pulse DFE THD < 5% with 24-pulse DFE
Power factor	>0.95
Output voltage levels	3 (5 phase-to-phase)
Output frequency	0Hz...±100Hz
Accel/Decel time	0.1...3600s
Power device	HV IGBT
Standards	IEC, UL
Control method	Closed loop vector control (with pulse encoder feedback) Sensorless vector control (without pulse encoder feedback) Open loop control (without pulse encoder feedback)
Communication	AI/O, DI/O, fieldbuses (e.g. Profibus DPV1, CANopen, DeviceNet), industrial Ethernet protocols (Profinet IO and Ethernet/IP), Vacon PC tool
Main protective functions	Current limit, overcurrent, overvoltage, undervoltage, loss of auxiliary power, loss of communication, ground fault detection
Ambient	0°C...+50°C, <95% relative humidity, no condensation allowed, non-corrosive
Cooling	Liquid cooled, water/glycol (80/20), max. 43°C

### THE BEST IS YET TO COME...

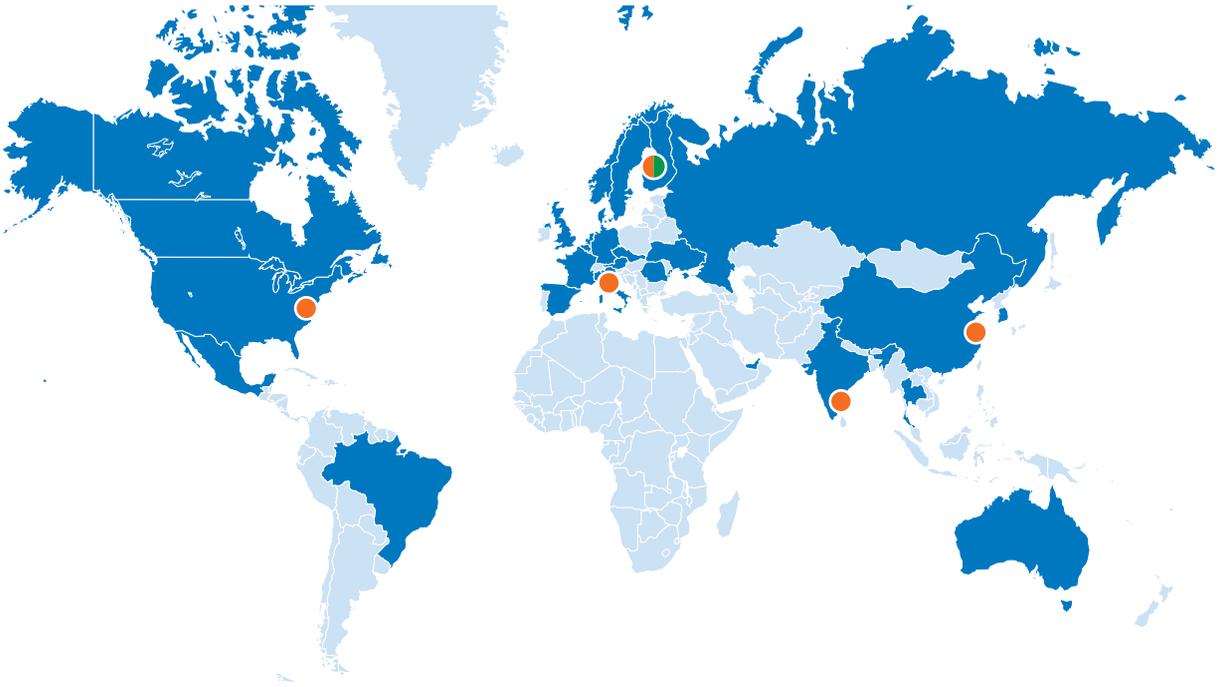
To find out how VACON® 3000 medium voltage drives can help build maximum value into your applications, and to hear about the ground-breaking features that put Vacon's medium voltage drives at the forefront of the medium voltage market, contact your local Vacon sales representative now.

*[The technical information in this leaflet is for pre-release marketing and discussion purposes only. It is based on data currently available and is subject to change without notice.]*

## VACON AT YOUR SERVICE

Vacon is driven by a passion to develop, manufacture and sell the best AC drives and inverters in the world — and to provide customers with efficient product life-cycle services. Our AC drives offer optimum process control and energy efficiency for electric motors. Vacon inverters play a key role when energy is produced from renewable sources. Vacon has production and R&D facilities in Europe, Asia and North America, and sales and service operations in nearly 90 countries.

## VACON - TRULY GLOBAL



● Production and R&D   ● Vacon PLC   ■ Vacon own sales offices   ■ Served by Vacon partner

**MANUFACTURING**  
and R&D on 3 continents

**VACON SALES AND SERVICE**  
in nearly 30 countries

**SALES AND SERVICE PARTNERS**  
in 90 countries



Vacon partner

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