

Fact Sheet

# VACON® 100 Enclosed Drive



**The VACON® 100 Enclosed Drive is designed to meet the most demanding requirements for flexibility, compactness and service-friendliness and is tested to meet harsh operating conditions in a wide range of applications.**

### Increase process output

An innovative air-cooling channel ensures reliable thermal handling of the enclosure and extends the lifetime of the drive with trouble-free operation in tough environments. Approved EMC solutions minimize electromagnetic interference on other equipment.

### Integrated options ready to use

The VACON® 100 Enclosed Drive is configurable with power, control and enclosure options to meet the needs of the application.

Output filter options, input disconnects and brake choppers are integrated into the cabinet solution eliminating the need for additional equipment outside of the enclosure. Power options, such as output filters, are integrated into the air-cooling solution ensuring a thermally proven cabinet design.

### Save access to control section

The innovative, door-mounted control compartment, which is separated from the main power section, allows easy and safe access to the control section of the drive. There is no need to open the main door or disconnect the main power.

### Product range

3 x 380-500 V.....75-630 kW  
3 x 525-690 V.....75-800 kW

Available from  
**75 to  
800 kW**  
to fit your application

### Available for

- VACON® 100 INDUSTRIAL
- VACON® 100 FLOW

Feature	Benefit
<b>Reliable</b>	
Film capacitors	Long life, no reforming
Conformal coating	Withstands harsh environments
<b>Robust</b>	
Enclosed cabinet with IP21, IP54 for more demanding environments	Ingress protection properly managed
All options designed into the enclosed drive	Output filter dimensioning and cooling properly managed
<b>Easy integration with options</b>	
Standardized options built-in such as dU/dt and common mode output filters	Easy ordering, simple commissioning, no need for special engineering
<b>Integrated options</b>	
Safe Torque Off option	Built-in safety
Integrated RFI filter and DC chokes	No additional filters required
Built-in Ethernet	Immediately connected, no additional hardware needed
<b>Innovative</b>	
Door-mounted control compartment separated from the main drive	Safe access to controls
All auxiliary options are pre-wired to control terminal blocks	Easy and safe fault tracing
Separated cooling channel	Improved reliability by separating the main cooling air flow from the rest of the drive electronics
<b>Versatile</b>	
Wide motor support: Induction, PM (permanent magnet) and SynRM (high-efficiency synchronous reluctance)	Only one drive needed

## Specifications

Mains connection	
Input voltage	380-500 V; 525-690 V
Input frequency	50-60 Hz
Motor connection	
Output voltage	0-Input voltage
Output frequency	0-320 Hz
Control connection	
I/O	2 x AI, 6 x DI, 1 x AO, 10 Vref, 24 Vin, 2 x 24 Vout, 3 x RO or 2 x RO + TI
Ethernet	Modbus TCP/IP, BACnet IP, PROFINET, EtherNet/IP
RS485	Modbus RTU, Metasys N2, BACnet MSTP
Ambient conditions	
Ambient operating temperature	-10 °C-50 °C (-14 °F-122 °F), derating 1.5%/1 °C above 40 °C (104 °F)
Protection rating	IP54/UL Type 12 as option IP21/UL Type 1 as standard
EMC	
Immunity	IEC 61800-3, first and second environment
Emissions	IEC 61800-3, Category C3
Functional safety	
Safe Torque Off	Option board OPT-BJ

## Cabinet options

Factory option	Enclosed drive option description	Group
+CAMH	Motor heater control	Auxiliary equipment
+CACH	Cabinet heater	
+CACL	Cabinet light	
+CAPT	Auxiliary voltage transformer	Cabinet power supply for accessories
+CAPD	24 V DC power supply	
+CAPS	AC customer socket	
+CDLP	Signal lights and reset button	Door-mounted options
+CTID	Extended I/O terminals	Control terminals
+CAPU	Auxiliary AC supply terminals	
+CPS0	STO with emergency stop push button on door	Protection devices
+CPS1	SS1 with emergency stop push button on door	
+CPSB	Emergency switch off	
+CPIF	Insulation monitoring	Input devices
+CIFD	AC fuses and fuse switch	
+CICO	Input contactor	Cabling options
+CHIT	Input cabling from top	
+CHOT	Output cabling from top	
+CHCT	Cabling from top	Base plinth options
+CHPH	Base plinth 200 mm	
+CHCB	Back-channel cooling	Cooling options
+GAUL	UL-listed version	Approvals
+IP54	IP54 enclosure	Cabinet construction
+EMAR	Marine construction	
+POCM	Integrated common mode filter	Filters
+PODU	Integrated dU/dt filter	

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