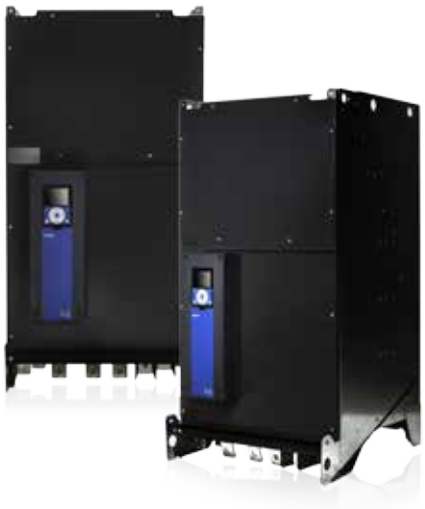
ENGINEERING
TOMORROW

Fact Sheet

VACON® 100 IP00 Drive Module



The VACON® 100 IP00 Drive Module is intended for system integration and installation into any enclosure. Module installation in standard enclosures is easy due to the compact design.

A wide power range up to 800 kW is available using only four enclosure sizes – from MR8 up to MR12.

Easy integration with options

The module contains all necessary components including DC chokes and brake choppers (optional). Module enclosure sizes MR10 and MR12 have an options module that can house optional output filters and brake choppers and the options are integrated in the IP54 main cooling channel. This provides savings on design, assembly and space.

Expanded lifespan

Electrolytic-free DC link technology guarantees users the longest possible lifecycle and availability. The film capacitors last up to 300,000 hours – that's about 30 years of reliable operation ensuring less maintenance and lower energy costs.

Product range

3 x 208-240 V.....37-90 kW
3 x 380-500 V.....75-630 kW
3 x 525-690 V.....75-800 kW

Available for

- VACON® 100 INDUSTRIAL
- VACON® 100 FLOW

Available from
37 to 800 kW
to fit your application

Feature	Benefit
Reliability	
Film capacitors	Long life, no reforming
Conformal coating	Withstands harsher environments
Ease of installation	
IP00/ UL OpenType	Easy installation into cabinets
Easy integration with options	
Options module for brake chopper, common mode filter and dU/dt filter (integrated into the main cooling channel)	Save on design, assembly and space: Thermal design taken care of, Readily assembled at factory, No added footprint
Integrated options	
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
Versatile	
Wide motor support: Induction, PM (permanent magnet) and SynRM (high-efficiency synchronous reluctance)	Only one drive needed
Flexible	
VACON® Customizer software	Flexible programming always available
VACON® Programming software	Application programming tool to optimize drive behavior

Specifications

Mains connection	
Input voltage	208-240 V; 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	IP00
EMC	
Immunity	IEC 61800-3, first and second environment
Emissions	IEC 61800-3, Category C3
Functional safety	
Safe Torque Off	Option board OPT-BJ

Options

Factory option	Loose option	Description
I/O options		
	OPT-F3-V	Standard I/O board: 2 x AI, 6 x DI, 1 x AO, 10 Vref, 24 Vin, 2 x 24 Vout, RS485, 3 x RO
+SBF4	**OPT-F4-V**	Optional I/O board: 2 x AI, 6 x DI, 1 x AO, 10 Vref, 24 Vin, 2 x 24 Vout, RS485, 2 x RO, Thermistor input
+S_B1*	**OPT-B1-V**	6 x DI / DO, programmable
+S_B2*	**OPT-B2-V**	2 x RO, Thermistor input
+S_B4*	**OPT-B4-V**	1 x AI, 2 x AO (isolated)
+S_B5*	**OPT-B5-V**	3 x RO
+S_B9*	**OPT-B9-V**	1 x RO, 5 x DI (42-240 VAC)
+S_BF*	**OPT-BF-V**	1 x AO, 1 x DO, 1 x RO
+S_BH*	**OPT-BH-V**	3 x Temp sensor inputs (PT100, PT1000, KTY84-130, KTY84-150, KTY84-131, NI1000)
Communication options		
+FBIE		Industrial Ethernet protocols: PROFINET IO and EtherNet/IP (software option onboard)
+S_C4*	**OPT-C4-V**	LonWorks
+S_E3*	**OPT-E3-V**	PROFIBUS DPV1
+S_E5*	**OPT-E5-V**	PROFIBUS DPV1 (D9)
+S_E6*	**OPT-E6-V**	CANopen
+S_E7*	**OPT-E7-V**	DeviceNet
+S_E9*	**OPT-E9-V**	Dual Ethernet communication board (Modbus TCP, PROFINET)
+S_EC*	**OPT-EC-V**	EtherCAT
Other options		
+S_BJ*	**OPT-BJ-V**	Safe Torque Off (STO) / Safe Stop 1 (SS1) / ATEX
+HMTX	**VACON-PAN-HMTX-MK01**	Text keypad
+SRBT		Real-time clock battery
+IP00		IP00 available for enclosures MR8-MR12
+EMC4		Change to EMC-level C4 for IT networks
+DBIN		Internal integrated dynamic braking MR8-MR12
+QFLG	**ENC-QFLG-MR04/05/06/07**	Flange mounting MR8 IP00 / MR9 IP00
+QDSS		Drive supply switch for MR8-MR9
+EMAR		Marine construction (MR8-MR9)
+POCM		Integrated common mode filter for IP00 enclosures MR10 and MR12
+PODU	**ENC-QMMF-MM04/05/06**	Integrated dU/dt filter for IP00 enclosures MR10 and MR12
+PCTB		External power connection block for IP00 enclosures MR10 and MR12

** Replace '_' with preferred option slot (Example +SCB5 means option board B5 will installed to option slot C in factory)*