

Fact Sheet

VACON® 100 Wall Mounted Drive



The VACON® 100 Wall Mounted Drive is a compact and comprehensive drive package, with all the necessary components integrated in a single drive.

For a wide range of applications

The VACON® 100 Wall Mounted Drive is easy to install and operate and is well suited for a wide range of variable torque and constant power/torque applications such as:

- Pumps
- Fans
- Compressors
- Conveyors

Enclosure ratings

IP21/UL Type 1 (provided as standard)
IP54/UL Type 12 (provided as option, flange (through-hole) mounting)

Product range

| | |
|---------------------|------------|
| 3 x 208-240 V | 0.55-90 kW |
| 3 x 380-500 V | 1.1-160 kW |
| 3 x 525-600 V | 3.0-200 HP |
| 3 x 525-690 V | 5.5-200 kW |

Available for

- VACON® 100 INDUSTRIAL
- VACON® 100 FLOW

Available from

0.55 to 200 kW

to fit your application

| Feature | Benefit |
|--|---|
| Reliability | |
| Film capacitors | Long life, no reforming |
| Conformal coating | Withstands harsher environments |
| Ease of installation | |
| Flange mounting | Easy and cost-effective installation |
| Side-by-side mounting for IP54/UL Type 12 | |
| Compact IP54/UL Type 12 with same footprint as IP21/UL Type 1 | |
| 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 |
| Versatile | |
| Wide motor support: Induction, PM (permanent magnet) and SynRM (high-efficiency synchronous reluctance) | Only one drive needed |
| Flexible | |
| Drive® Customizer | Flexible programming always available |
| Drive® Programming | 61131 application programming |

Specifications

| Mains connection | |
|-------------------------------|---|
| Input voltage | 208-240 V; 380-500 V; 525-600 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 | IP21/UL Type 1 as standard IP54/UL Type 12 as option |
| EMC | |
| Immunity | IEC 61800-3, first and second environment |
| Emissions | IEC 61800-3, Category C2 |
| 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 |
| +HMPA | PAN-HMPA-MK01 | Panel adapter IP54 (dummy keypad) |
| +SRBT | | Real-time clock battery |
| +IP54 | VACON-ENC-IP54-MR04/05/06 | IP54 enclosure; loose option also available for enclosures MR4, MR5, MR6 |
| +EMC4 | | Change to EMC-level C4 for IT networks |
| +DBIN | | Internal integrated dynamic braking MR7-MR12 |
| +QFLG | ENC-QFLG-MR04/05/06/07 | Flange mounting MR4-MR7. Loose option available for enclosures MR4-MR7 |
| +QDSS | | Drive supply switch for MR4-MR7 (IP54) |
| +QGLC | | Conduit plate with inch holes, MR4-MR9 |
| +EMAR | | Marine construction |

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