

Output Module

Preliminary



The Vemcon output modules are compact and stackable modules for distributed control systems

At a glance / USP

- Compact dimensions and robust construction especially for heavy-duty use
- Suitable for safety critical application (ISO13849: PL_c and PL_d)
- 4 analog inputs
- 2 quadrature encoder inputs
- Robust, wide-range power supply
- Optional 6 axis IMU
- 8 current regulated outputs up to 5 A
 - 8 high side switches
 - 4 low side switches

Technical data – electrical ratings

General data	
Supply voltage range	9...35 V
Effective integrated data processor	32 bit 48 MHz ARM Cortex-M0
Input voltage range	0 - 6.6 V
CAN Bus	Up to 1 MBit/s
Quadrature encoder input	Up to 100 kHz
Inverse polarity protection	Yes
Short circuit protection	Yes
Total current per module (sustained)	20 A
Maximum current per stack	2 min 60 A 24 h 35 A
Self current consumption (typical)	70 mA at 12 V
Input delay	5 ms
Accuracy current regulation	2 %
Current measurement range	3.3 A
Current control update rate	5 kHz

High side switches

Pullup	22 kOhm
Pulldown	24 kOhm
On state resistance	< 100 mOhm
Overtemperature protection	Yes

Low side switches

Pulldown	24 kOhm
On state resistance	< 100 mOhm
Overtemperature protection	Yes

Input resistance

Analog	10 kOhm
Quadrature	10 kOhm

Analog Out

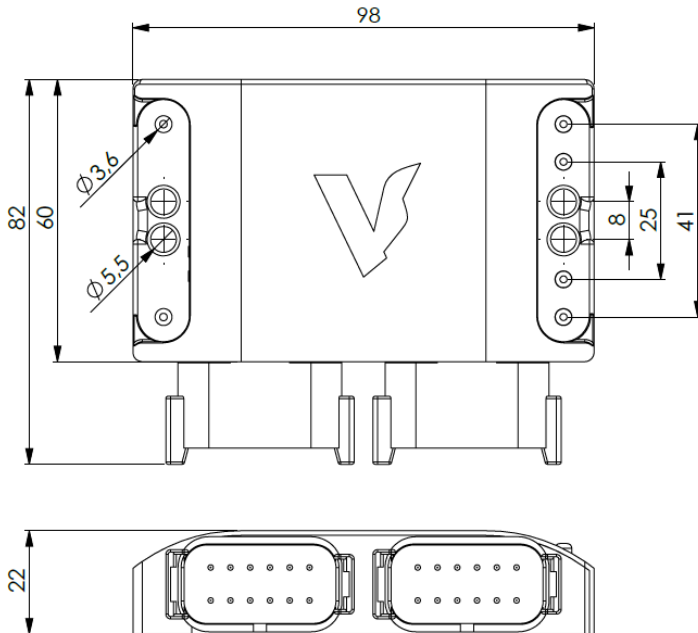
Voltage Range	0-5 V
Output resistance	30 Ohm

Technical data – mechanical ratings

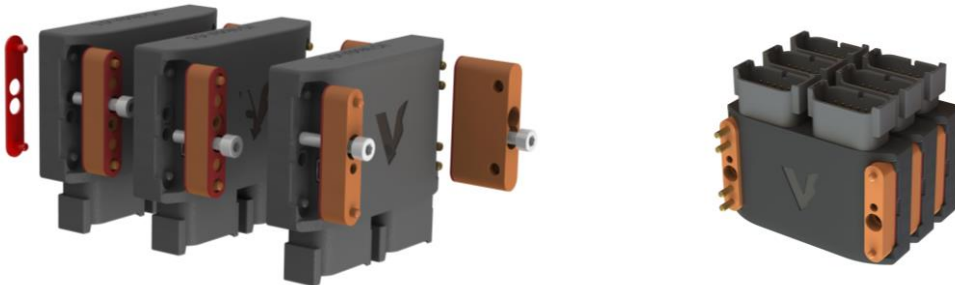
Temperature range	-35 °C - + 80 °C
Dimensions	96x82x23 mm
Weight	
Hermetically sealed (IP67)	
Connector	2x DTM04-12

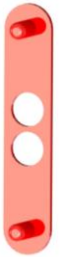
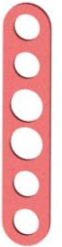



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Can be stacked and combined with more I/O modules.



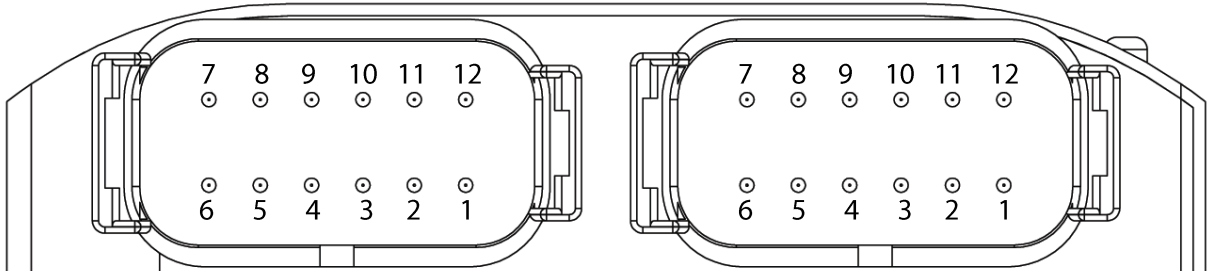
				
Blind seal 80467	Seal 80466	Assembly - end element 80461	Assembly - connection element 80464	Connection element 80465

Design is subject to modifications. Errors and omissions may occur.

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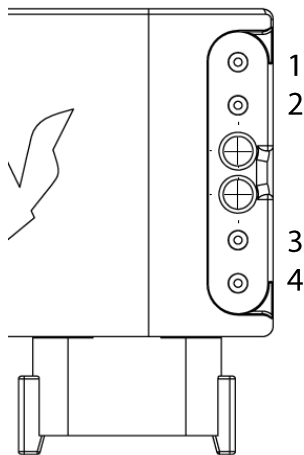
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Key DTM04-12 PB



PIN	Function
1	5V Out max. 200 mA
2	Analog IN6.1 /Quad. 3 A
3	Out High 3.1
4	Out High 3.2
5	Out High 4.1
6	Out High 4.2
7	Out Low 4
8	Out Low 4
9	Out Low 3
10	Out Low 3
11	Analog IN 6.2 /Quad. 3B
12	GND

PIN	Function
1	5 V Out max. 200 mA
2	Analog IN1.1 /Quad. 1 A
3	Out High 1.1
4	Out High 1.2
5	Out High 2.1
6	Out High 2.2
7	Out Low 2
8	Out Low 2
9	Out Low 1
10	Out Low 1
11	Analog IN 1.2 /Quad. 1B
12	GND



PIN	Function
1	+ 9-36 V
2	GND
3	CAN-Low
4	CAN-High