

HYDROVAR® HVL

compact frequency controllers for
direct mounting on the pump



Drives

Description

The Hydrovar® HVL is latest generation of Lowara intelligent frequency controllers specially developed for pump motors. They can be easily mounted on any standard IEC motor. Energy savings of up to 50% are possible with the Hydrovar® HVL. The control can be configured in a wide variety of different ways so that your system operates optimally and is properly protected.

Applications

- o pressure regulation for drinking water systems for households, residential districts, apartments and industry
- o pumping liquids in systems where the pressure must be maintained and/or pressure differences can occur due to different pipe lengths
- o water treatment and process engineering for constant flow if the pressure varies

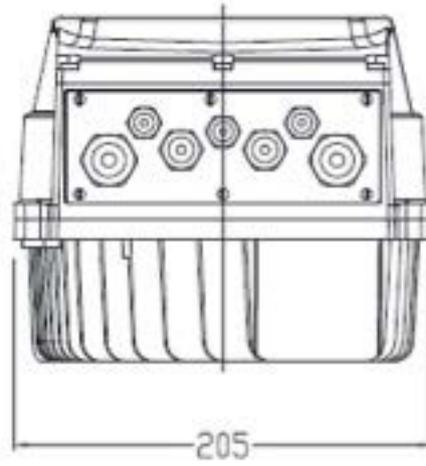
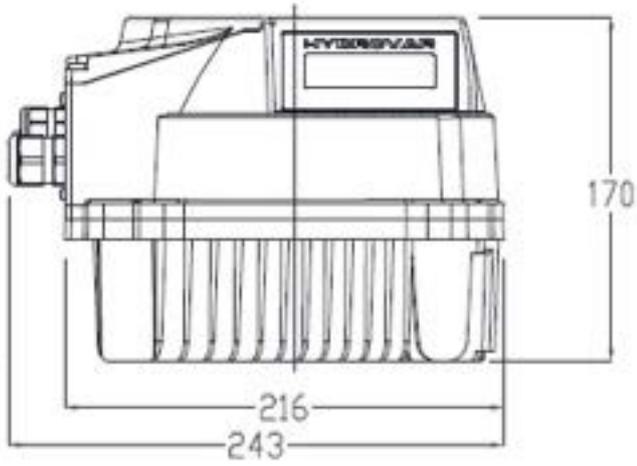
Specifications

- o 1-phase models: Hydrovar® HVL2 series
 - power: up to 4 kW
 - supply voltage: 1 × 208-240 Volt
 - motor voltage: 3 × 0-240 Volt, 15-70 Hz

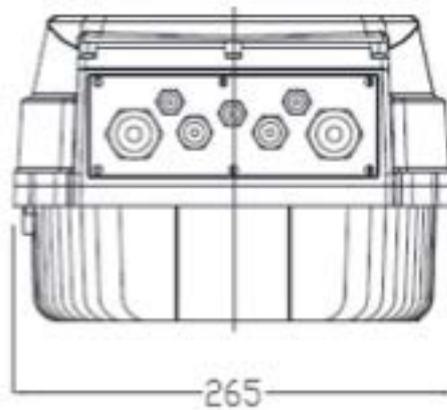
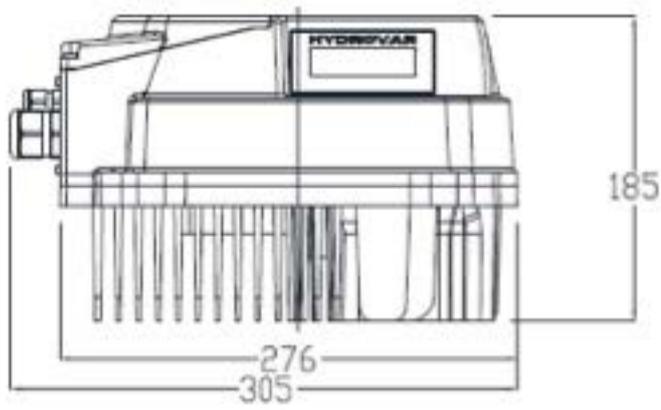
- o Hydrovar® HVL4 series
 - power: up to 22 kW
 - supply voltage: 3 × 380-460 Volt
 - motor voltage: 3 × 0-100% of the supply voltage, 15-70 Hz
- o ambient temperature: -10 °C up to + 55 °C
- o relative humidity: 5%-95% condensation not permitted
- o protection class: IP55
- o certificates: CE, IL, C-Tick, cUL
- o EMC directive: in accordance with EN 61800-3:2004 + A1:2012
- o in-built anti-condensation heating
- o designed to communicate with 7 other Hydrovar® HVLs, 8 in total
- o individual interface for computer communication through an RS485 port
- o equipped as standard with Modbus and BACnet protocols
- o display readout can be rotated 180° and menus in 28 languages
- o suitable for mounting on every standard IEC motor
- o quick and easy installation using the “Quick start-up” wizard
- o CE/ EAC/ C-Tick/ C-US certified



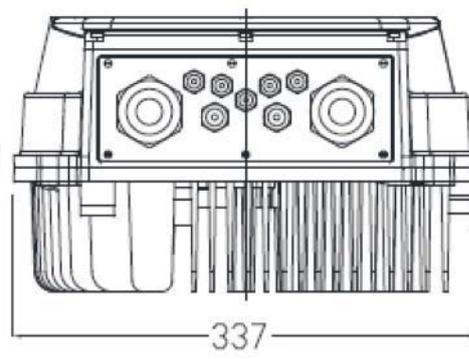
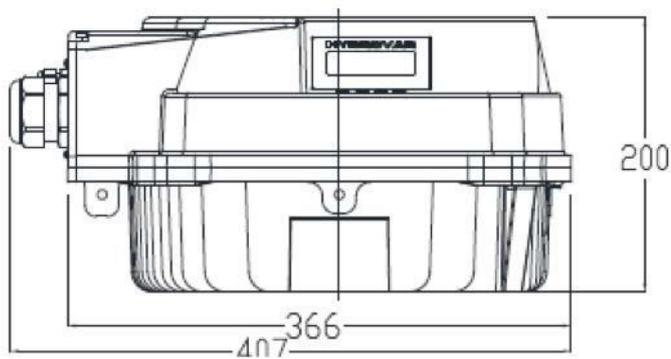
Model A



Model B



Model C





Technical data Hydrovar® HVL

HVL type	Size	Nominal power (kW)	Nominal Supply Voltage (V)	Maximum Input Current (A)	Efficiency (%)	Weight (kg)
2.015	A	1.5	1- 208-240 (±10%*)	11.6	94	5.6
2.022	A	2.2	1- 208-240 (±10%*)	15.1	93.5	5.6
2.030	B	3	1- 208-240 (±10%*)	22.3	93.5	10.5
2.040	B	4	1- 208-240 (±10%*)	27.6	93.5	10.5
4.015	A	1.5	3- 380-460 (±15%*)	3.9	96	5.6
4.022	A	2.2	3- 380-460 (±15%*)	5.3	96.5	5.6
4.030	A	3	3- 380-460 (±15%*)	7.2	96.5	5.6
4.040	A	4	3- 380-460 (±15%*)	10.1	96.5	5.6
4.055	B	5.5	3- 380-460 (±15%*)	12.8	97	10.5
4.075	B	7.5	3- 380-460 (±15%*)	16.9	97	10.5
4.110	B	11	3- 380-460 (±15%*)	24.2	97	10.5
4.150	C	15	3- 380-460 (±15%*)	33.3	97	15.6
4.185	C	18.5	3- 380-460 (±15%*)	38.1	97	15.6
4.220	C	22	3- 380-460 (±15%*)	44.7	97	15.6

* Peak voltage

Technical data Hydrovar® HVL

HVL type	Size	Output Voltage (V)	Maximum Output Current (A)	Output Frequency (Hz)	Supply Cable + PE Cable No. x Max. Copper Cross-Section	Motor Output Cable +PE Cable No. x Max. Copper Cross-Section
2.015	A	3- 0-240	7.5	15-70	3 × 2 mm ²	4 × 2 mm ²
2.022	A	3- 0-240	10	15-70	3 × 2 mm ²	4 × 2 mm ²
2.030	B	3- 0-240	14.3	15-70	3 × 6 mm ²	4 × 6 mm ²
2.040	B	3- 0-240	16.7	15-70	3 × 6 mm ²	4 × 6 mm ²
4.015	A	0 – 100%*	4.1	15-70	4 × 2 mm ²	4 × 2 mm ²
4.022	A	0 – 100%*	5.7	15-70	4 × 2 mm ²	4 × 2 mm ²
4.030	A	0 – 100%*	7.3	15-70	4 × 2 mm ²	4 × 2 mm ²
4.040	A	0 – 100%*	10	15-70	4 × 2 mm ²	4 × 2 mm ²
4.055	B	0 – 100%*	13.5	15-70	4 × 6 mm ²	4 × 6 mm ²
4.075	B	0 – 100%*	17	15-70	4 × 6 mm ²	4 × 6 mm ²
4.110	B	0 – 100%*	24	15-70	4 × 6 mm ²	4 × 6 mm ²
4.150	C	0 – 100%*	32	15-70	4 × 16 mm ²	4 × 16 mm ²
4.185	C	0 – 100%*	38	15-70	4 × 16 mm ²	4 × 16 mm ²
4.220	C	0 – 100%*	44	15-70	4 × 16 mm ²	4 × 16 mm ²

* of the supply voltage