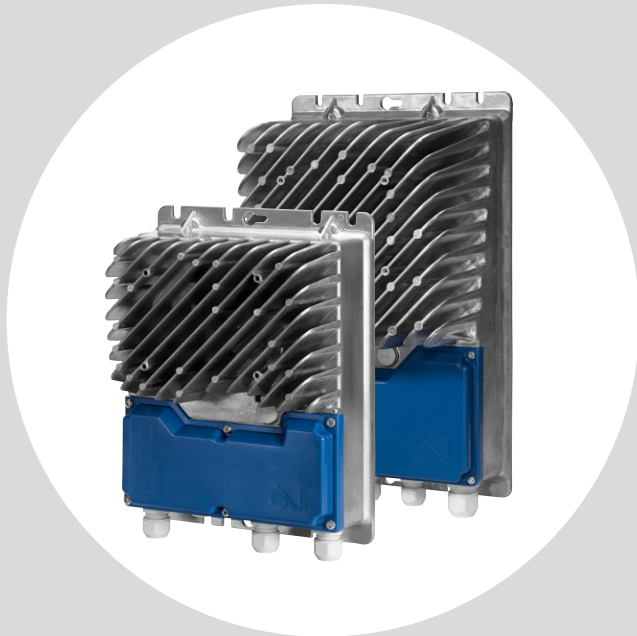


OJ Drives®



OJ DV GEN II

- 2.4 - 15kW
- 460 - 600V three phase supply
- IM, PM motors
- Wide-range operation
- UL, CSA

OJ DV GEN II series

OJ DV GEN II is the upgraded version of our successful series of dedicated drives for ventilation applications.

This new version is fully backwards compatible with the same power variants, which hold the exact mechanical dimensions and comes with the same Modbus and BACnet protocols.

This new generation of drives offers excellent possibilities for customization.

Design

The OJ DV Gen II offers a flexible installation design – they can be mounted inside or outside the airflow.

OJ DV GEN II is suitable for any system, as it can be configured specifically for your application. Adding option modules and mounting a cooling fan on the OJ DV GEN II enlarge the application use.

Moreover, the OJ DV GEN II series has been extended and can now be provided with a local user interface.

The OJ DV GEN II removable front cover design allows easy access to the connection compartment and provides sufficient space for connecting the option module cables. The OJ DV GEN II front cover facilitates safe mounting on the aluminium frame, securing the desired sealing grade.

Controlling

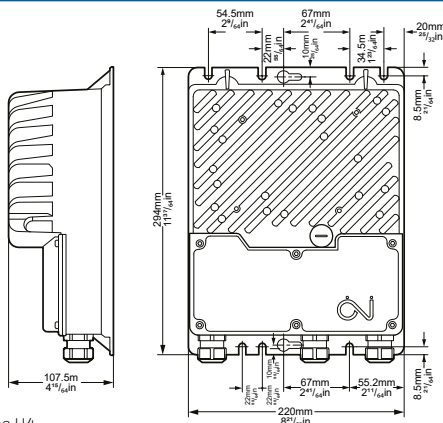
The OJ DV GEN II can be controlled using a 0-10V or a 4-20mA signal and through Modbus RTU or BACnet MS/TP. In addition, the digital input and output interfaces can be used to determine and configure the control method.

Grid immunity

The OJ DV GEN II offers Over Voltage Detection, allowing the drives to survive in most types of grids worldwide. Our drives are robust and handle grid disturbances, such as notches, spikes and transients.

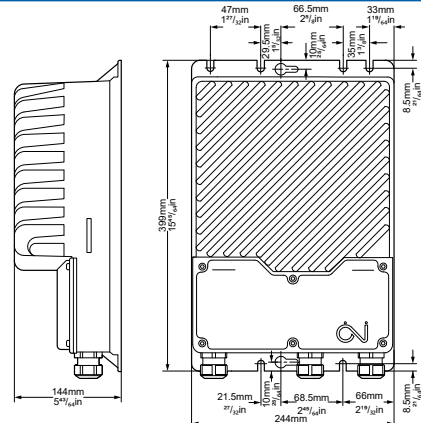
Built-in EMC filter

The OJ DV GEN II series comes with a fully integrated EMC filter and therefore meets the emissions and immunity norms for industrial and residential areas according to FCC §47 part 15 B. and ICES-003.




Dimensions H4

BR1014A52a



Dimensions H5

BR1014A50a

	Type	DV-6024	DV-6030	DV-6040	DV-6055	DV-6075	DV-6110	DV-6150
Frame size		H4					H5	
Power size	kW	2.4	3.0	4.0	5.5	7.5	11	15
Horsepower	Hp	3.2	4.0	5.5	7.5	10.0	15.0	20.0
Efficiency	%	> 96.5%					> 97.5%	
Power supply								
Voltage	VAC	3 x 460 - 600 VAC 50/60 Hz +/-10%						
Supply current at max. load at nominal supply voltage (460V/600V)	A	4.1/3.1	5.1/4.0	7.0/5.2	9.5/7.2	13.0/10.0	19.0/14.5	25.5/20.0
Power factor (cos-phi) at max. load		> 0.9						
Motor output								
Nominal motor power (on shaft) *1	kW	2.4	3.0	4.0	5.5	7.5	11	15
Frequency	Hz	AC motor: 0-120 PM motor: 0-400						
Max. output voltage	Vrms	3 x 0 - 0.9 x Vin						
Max. output current	Arms	6.5	8.0	10.0	12.00	19.0	27.0	35.0
Protection								
Max. fuse	A	16					32	
Short circuit capacity	A	3500	3500	3500	3500	5000	5000	5000
FLA	A	5.2	6.6	8.7	12.0	16.4	23.8	32.5
Motor output		Short-circuit protected between phases and phase to earth						
Motor		Protected by current limit						
Max over-voltage		<700V						
Overload protection		Current and temperature overload protection						
Environment								
Operating temperature	°C/°F	-40°C to +50°C / -40°F to +122°F						
Starting temperature	°C/°F	-40°C to +50°C / -40°F to +122°F						
Storage temperature	°C/°F	-40°C to +70°C / -40°F to +158°F						
Protection rating		IP 54 & 65 / NEMA 4x						
Enclosure material		Aluminium						
Front cover		PBT PP (Black front cover is UV resistant)						
Weight	kg./lbs	3.0 kg / 6.6 lbs			3.9 kg / 8.6 lbs		9.5 kg / 20.9 lbs	
Humidity	% rh	10-95% rh, non-condensing						
Surface		Corrosion resistant according to EN/ISO 9223 Class 4						
Air flow / cooling		Turbulent air speed of min. 3 m/s or 9.84ft/s to achieve max. output power at max. ambient temperature. Turbulent air speed below 3m/s or 9.84ft/s and higher ambient temperature might lead to reduced output power. (3m/s or 9.84ft/s turbulent air speed is equivalent to 6.5m/s or 21.32ft/s laminar air speed)						
Interfaces								
Field bus		Modbus RTU , BACnet MS/TP						
Analogue Inputs		1 input 0-10 VDC 4-20mA PWM						
Analogue Output		1 output +10 VDC or +24 VDC						
Digital Inputs		2 inputs Internal pull-up to +24VDC						
Digital Output		1 output Open collector, Internal pullup to +10 VDC or +24 VDC						
Status LED		Green/yellow/red						
Features								
Technology		Sinusoidal back-EMF signal controlled via FOC (Field Oriented Control)						
Software updating		Yes, via serial interface						
Motor parameters		Preprogrammed by OJ or on-site configuration						
Short-circuit protection		Yes						
Integrated EMC filters		Yes						
Approvals								
EMC		FCC §47 part 15 B. and ICES-003						
Safety		UL 61800-5-1 CS22.2.174						
Product standard		IEC 61800 Part 2						
Overvoltage category		III						
Pollution degree		2						
Height over See		2000m / 6.560ft						
Supply earthing system		TN / TT / IT						
Product approvals		c  us						
Note: Data are valid at: nominal supply voltage, +25°C or +77°F and sufficient air flow *1: Motor Power Factor = 0.8 and efficiency = 90% / * 2: H5 OGF variant is limited to 32A								

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