

OJ Drives®



OJ DV GEN II with Local User Interface

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

OJ DV GEN II series

OJ DV GEN II is the upgraded version of our series of dedicated drives for ventilation applications. GEN II drives are fully backwards compatible with the corresponding power variants, which have the exact same mechanical dimensions and the same Modbus and BACnet protocols. GEN II drives offer excellent possibilities for customization.

Design

The flexible installation design lets you mount the drive 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 further expands the drives' potential.

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

Local User Interface

The built-in 2" touchscreen with color display lets users carry out basic set-up and local operation. The intuitive interface also gives access to readouts of a wide range of information. All this facilitates easy troubleshooting and swift responses to alarms.

Control

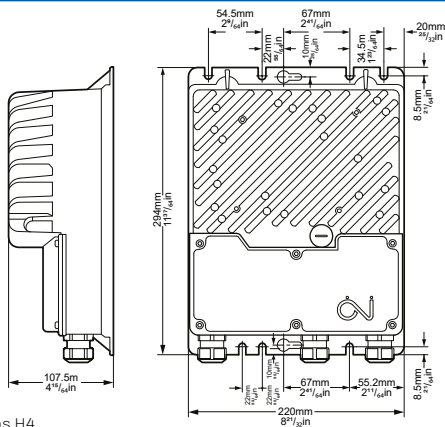
The OJ DV GEN II can be controlled using a 0–10V or a 4–20mA signal and through Modbus RTU or BACnet MS/TP. In addition, the digital input and output interfaces can be used to configure the control method.

Grid immunity

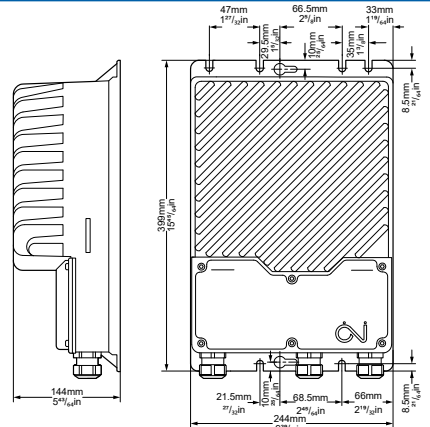
Over Voltage Detection enables these robust drives to cope with most types of grids worldwide, handling disturbances such as notches, spikes and transients.

Built-in EMC filter


The OJ DV GEN II series comes with a fully integrated EMC filter, meeting the emissions and immunity norms for industrial and residential areas according to EN 61800-3 (C1 and C2) and FCC §47 part 15 B. and ICES-003.



BR1014A52a



BR1014A50a

	Type	DV-6024-xxLx	DV-6030-xxLx	DV-6040-xxLx	DV-6055-xxLx	DV-6075-xxLx	DV-6110-xxLx	DV-6150-xxLx	
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	5.0	6.0	8.5	11.50	16.0	22.5	30.0	
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	-20°C to +50°C / -4°F to +122°F							
Starting temperature	°C/°F	-20°C to +50°C / -4°F to +122°F							
Storage temperature	°C/°F	-20°C to +70°C / -4°F to +158°F							
Protection rating		IP 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					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							
User interface		2 inch color resistive touch							
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							
High over See		2000m / 6.560ft							
Supply earthing system		TN / TT / IT							
Product approvals									

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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