OJ Drives®

OJ DV 600V series

- 460–600V supply voltage
- cULus Recognised
- Type 4X sealing grade
- With and without external cooling fan
- BACnet MS/TP

The OJ DV series now includes six new variants for use with 600V supply voltage. They have all the durability, flexibility and features familiar from the original DV series – making its benefits available to a wider range of applications worldwide.

Six power variants – same size
Catering to different needs for power, the 600V DV series comprises six variants from 2.4 to 7.5kW. All six come in the same enclosure size for con-venient planning and mounting.

Suitable for all fan systems – different options available
Designed to be very flexible in use, OJ DV drives are suitable for any fan system. A range of optional modules can be added to suit your particular application. When mounting the drive outside the air flow, the drive can also be equipped with an external cooling fan.

BACnet MS/TP
BACnet ensures that information is exchanged in a stand-ardised way between sensors, actuators, and controls in a building. Equipped with BACnet MS/TP the OJ DV can now be part of the building automization. BACnet MS/TP is running on RS-485.

4X sealing grade – down to -40 degrees
The DV series has a Type 4X sealing rating. The Type 4X rating indicates that the drive is suitable for outdoor installation down to -40°C/F – and UV resistant, too.

For voltages between 460 and 600 VAC
The DV 600V series can be supplied with voltage between 460 and 600 VAC. This, together with the cULus recognition, makes it ideal for North American applications.

Norms and standards
The OJ DV series comes with a fully integrated EMC filter. IE requirements can be easily met using an IM or PM motor together with an OJ-DV.

The OJ DV product series is cULus Recognised according to UL 61800-5-1 and CS22.2.174.

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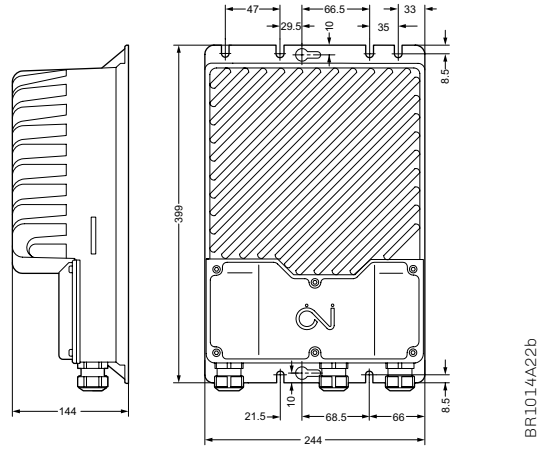

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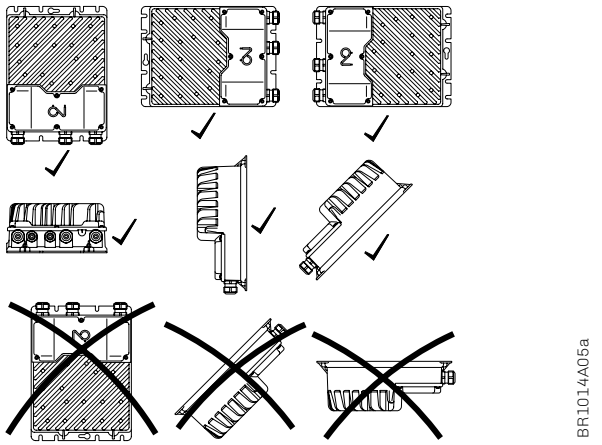

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	Type	DV-6024	DV-6030	DV-6040	DV-6055	DV-6065	DV-6075
Enclosure		H4					
Power size	kW	2.4	3.0	4.0	5.5	6.5	7.5
Horsepower	Hp	3.2	4.0	5.4	7.4	8.7	10.0
Efficiency	%	> 96.5%					
Power supply							
Voltage	VAC	3 x 460 - 600 VAC 50/60 Hz +/-10%					
Supply current at max. load at nominel supply voltage 460/600V	A	3.9/3.0	4.6/3.5	6.2/4.7	8.4/6.5	9.7/7.5	11.5/8.5
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	6.5	7.5
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	4.9	5.8	7.7	10.5	16.2	18.3
Protection							
Short circuit capacity	A	3500	3500	3500	3500	5000	5000
FLA	A	5.2	6.6	8.7	12.0	14.2	16.4
Motor output		Short-circuit protected between phases					
Motor		Protected by current limit					
Overload protection		Current and temperature overload protection					
Environment							
Operating temperature *2	°C/°F	-40°C to +50°C / -40°F to 122°F					-40°C to +45°C / -40°F to +113°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					
Dimensions	W x H x D	220 x 294 x 107 mm / 8.66 x 11.57 x 4.21 inch					
Protection rating		NEMA 4X					
Enclosure material		Aluminium					
Front cover		PBT/PC					
Weight	kg	3.9					
Humidity	% rh	10-95% rh, non-condensing					
Housing		Corrosion resistant to EN/ISO 12944-2:1998 Category C4					
Air flow / cooling		Turbulent air speed of min. 3 m/s to achieve max. output power at max. ambient temperature. Turbulent air speed below 3m/s and higher ambient temperature might lead to reduced output power. (3m/s turbulent air speed is equivalent to 6,5 m/s laminar air speed)					
Interfaces							
Modbus RTU		RS485 (baud rate: 9.6, 19.2, 38.4, 57.6 115.2 Kbaud)					
BACnet MS/TP		Baud rate: 9600, 19200, 38400, 57600, 115200 kbs MAC: 0 - 127, MAX Master: 1 -127, Device object ID: 0 - 4194302					
Digital communication		3 x RJ12 & 2 x spring terminals					
Analogue In1		0-10 VDC, 100% @ 9.5 V DC +/-2%					
Analogue Out1		+10 VDC					
Digital In		2 x with internal pull-up					
Digital Out1		Open collector					
Features							
Technology		Sinusoidal back-EMF signal controlled via FOC (Field Oriented Control)					
Flying start		Yes, < 30% of max. speed					
Ramp-up time	sec.	15-300					
Ramp-down time	sec.	15-300					
Integrated EMC filters		Yes					
Approvals							
EMC		EN/BS 61800-3 (C1 & C2)					
LVD		EN/BS 61800-5-1 / UL 61800-5-1					
Product standard		EN/BS 61800 Part 2					
North America		UL -61800-5-2 / CS22.2.174					
RoHS Directive		Yes					
Product approvals		c UL us / UK CA					

Note: Data are valid at: nominal supply voltage, +25°C and sufficient air flow
*1: Motor Power Factor = 0.8 and efficiency = 90% / *2: OGF variants: -40°C to +40°C / -40°F to +104°F