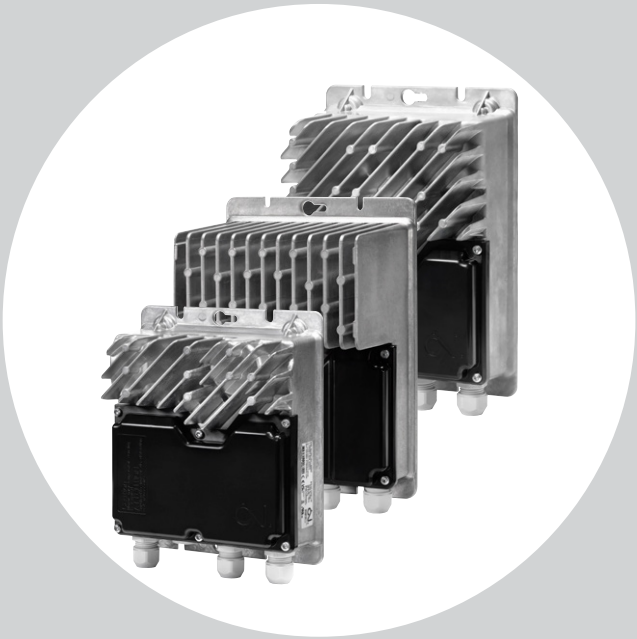
OJ Drives™



OJ Drives - Brilliant for Agricultural Ventilation

- Sealing grade of IP 65/NEMA 4x
- Self-cooling
- -40˚C to +50˚C/-40°F to +122°F
- IM, PMSM, PMsynRM motor
- Ignition-protected
- CE, UL, CSA

Reliable agricultural ventilation with OJ ventilation drives. The single-phase ventilation drive is ideal for agricultural applications. It allows for manual phase load sharing, ensuring continuous ventilation even in the event of a grid fallout.

Manual load sharing between supply phases
The single-phase OJ DV units are perfect for handling manual phase load sharing, which is widely used in applications for agriculture. You benefit from flexible supply distribution and continuous ventilation – even in the event of a grid/supply phase fallout. These are key features when designing a new agricultural building.

Self-cooling
The OJ-DV product range from 0.55 - 2.4 kW (0.7 - 3.2 Hp) is self-cooling thanks to the built-in cooling ribs. This means that you can place the unit outside the airflow, allowing for flexible installation. The self-cooling feature dispenses the need for a fan, prolonging the lifetime of your system and enabling the unit to handle harsh environments (e.g. IP 65/ NEMA 4x). These features are highly rated when designing a building for agricultural use.

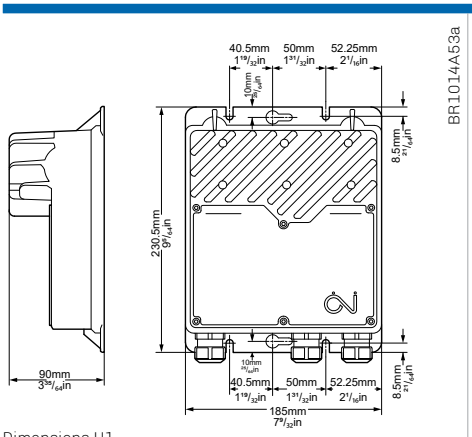
Wide supply voltage range
The wide supply voltage range – especially at the lower end – is another very useful feature for any agricultural building. This makes single-phase drives with higher shaft power a very attractive solution. The OJ DV single-phase versions can deliver full power down to a supply voltage of 190 V and will continue to spin the motor down to a supply voltage of 160 V. Three-phase versions are also available.

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 EN 61800-3 (C1 and C2) and FCC §47 part 15 B. and ICES-003.

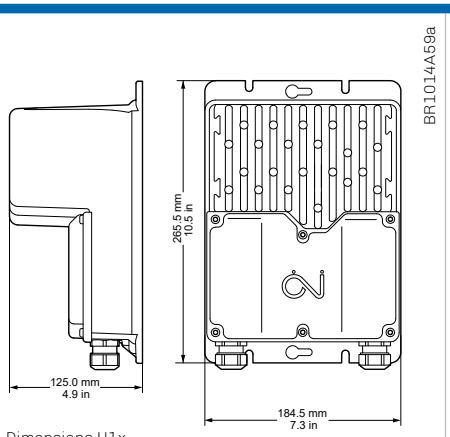
OJ ELECTRONICS A/S
STENAGER 13B
DK-6400 SØNDERBORG
DENMARK

T. +45 73 12 13 14
F. +45 73 12 13 13
OJ@OJELECTRONICS.COM
WWW.OJELECTRONICS.COM

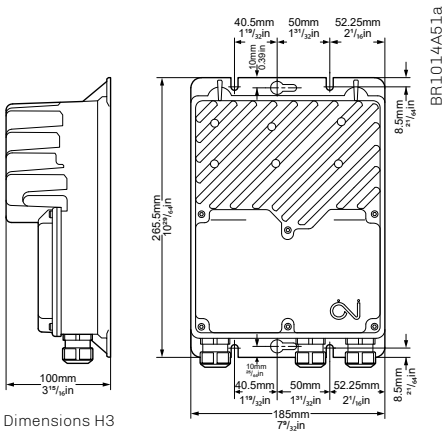
OJ ELECTRONICS
BY BITZER GROUP



Dimensions H1



Dimensions H1x



Dimensions H3

	Type	DV-1005	DV-1007	DV-1013	DV-3015	DV-3024
Frame size		H1		H1x	H3	
Power size	kW	0.5	0.75	1.3	1.5	2.4
Horsepower	Hp	0.7	1.0	1.7	2.0	3.2
Efficiency	%	> 94%			> 96.5%	
Power supply						
Voltage	VAC	1 x 208-240 VAC 50/60 Hz +/-10%		1 x 240 VAC 50/60 Hz +/-10%	3 x 400 VAC 50/60 Hz +/-10%	
Supply current at max. load at nominel supply voltage	A	3.6	5.4	9.3	3.2	5.0
Power factor (cos-phi) at max. load		> 0.99 (Active PFC)			> 0.9	
Motor output						
Nominal motor power (on shaft) *1	kW	0.5	0.8	1.3	1.5	2.4
Frequency	Hz	AC motor: 0-120 | PM motor: 0-595				
Max. output voltage	Vrms	3 x 0 - 250 VAC			3 x 0 - 0.9 x Vin	
Max. output current	Arms	2	3.2	5.2	4.0	5.6
Protection						
Max. fuse	A	16				
Motor output		Short-circuit protected between phases				
Motor		Protected by current limit				
Impulse protection		Transient protected by VDR				
Over-voltage protection		<400V (NTC)			<565 V	
Overload protection		Current and temperature overload protection				
Environment						
Operating 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		Plastic (Black front cover is UV resistent)				
Weight	kg/lbs	2.0 kg /4.4 lbs		3.6 kg / 7.94 lbs	3.0 kg /6.6 lbs	
Humidity	% rh	10-95 % rh, non-condensing				
Surface		Corrosion resistant according to EN/ISO 9223 Class 4				
Cooling		Self-cooling				
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		EN/BS 61800-3 (C1 & C2) / FCC §47 part 15 B. and ICES-003				
LVD		EN/BS 61800-5-1 / UL 61800-5-1				
Product standard		IEC/BS 61800 Part 2				
North America *2		UL -61800-5-1 / CS22.2 No. 274				
Ignition-protected components		IEC/UL60335-2-40, cl.22.116 & cl.22.117 / UL 121201 Class1, Div2				
Overvoltage category		III				
Pollution degree		2				
Altitude		1000 m / 3280 ft: Without derating and 2000 m / 6560 ft: With 1% derating per 100 meter/328 ft. above 1000 meter / 3280 ft.				
Supply earthing system		TN / TT / IT				
RoHS Directive		Yes				
Product approvals		CE / cULus				

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: Only available with black front cover