

Low Voltage Drives

AS3 ASD

Specifications

Toshiba's AS3 adjustable speed drive is designed with an emphasis on built-in communications, allowing end-users to access real-time data and refined controls to maximize system performance.

Product Scope

200 to 230 V at 0.5 to 75 HP HD (1 to 100 HP ND)
380 to 460 V at 0.5 to 450 HP HD (1 to 500 HP ND)

Highlights

- Dual Rating through Parameter Change (Heavy Duty and Normal Duty)
 - Heavy Duty 150% Overload for 60 Seconds
 - Normal Duty 120% Overload for 60 Seconds
- Eight Programmable Digital Inputs
- Three Programmable Digital Outputs: One Form-C Relay & Two Form-A Dry Contact Relays
- Three Programmable Analog Inputs: One 4 to 20mA, One 0 to 10 VDC, & One +10 VDC
- Two Programmable Analog Outputs: Both 4 to 20mA or 0 to 10 VDC
- Embedded STO Safety Terminal Compliant with IEC 61800-5-2 and SIL3 level in IEC 61508
- Two-Wire/Four-Wire RS485
- Built-in Dual Port Ethernet IP
- Embedded Web Server
- Real-Time Clock for Past Trip Monitoring or Calendar Functionality
- QR Code Display for Additional Parameter Information and Fault Troubleshooting

Standard Features

- NEMA 1 up to 100 HP HD (125 HP ND) 460 V
- Ambient Temperature: 14° to 122°F (-10° to +50°C) or 140°F (+60°C) with Derate
- Altitude: Up to 1000 Meters Without Derate
- Humidity: 95% Non-Condensing
- Advanced LCD Keypad with Capacitive Touch Wheel for Navigating and Programming
- Save, Restore & Clone Multiple Drive Settings
- Real Time Clock for Past Trip Monitoring or Calendar Functionality
- Built-Dynamic Braking Drive Circuit Up to 100 HP HD (125 HP ND) 460 V
- All Models Include DC Link Reactor



AS3 ASD

230 V Power Unit

Pricing & Dimensions



AS3/AS1

G9/P9

GX9

Micro Drives

W7/WX9

Plus Pack

LV Options

Reactors & Filters

VAC	HP (HD)	FLA (HD)	Model Number	Frame	H	W	D	Shipping Weight (lbs.)	
					Dimensions (in.)				
Heavy Duty - 150% current overload for 60 seconds (Primarily used for constant torque applications. Examples are conveyors, crushers, extruders and mixers)									
120V Single Phase	DEMO	DEMO	VFAS3-DEMO		A1	13.8	5.7	8.0	9.5
230	0.5	3.3	VFAS3-2004P		A1	13.8	5.7	8.0	9.5
230	1	4.6	VFAS3-2007P		A1	13.8	5.7	8.0	9.5
230	2	8.0	VFAS3-2015P		A1	13.8	5.7	8.0	9.9
230	3	11.2	VFAS3-2022P		A1	13.8	5.7	8.0	10.1
230	5	18.7	VFAS3-2037P		A2	16.2	6.7	9.2	17.0
230	7.5	25.4	VFAS3-2055P		A3	21.8	8.3	9.2	30.4
230	10	32.7	VFAS3-2075P		A3	21.8	8.3	9.2	30.4
230	15	46.8	VFAS3-2110P		A4	27.3	8.9	10.7	60.2
230	20	63.4	VFAS3-2150P		A4	27.3	8.9	10.7	60.2
230	25	78.4	VFAS3-2185P		A4	27.3	8.9	10.7	60.2
230	30	92.6	VFAS3-2220P		A5	36.8	11.5	12.7	127
230	40	123	VFAS3-2300P		A5	36.8	11.5	12.7	127
230	50	149	VFAS3-2370P		A5	36.8	11.5	12.7	127
230	60	176	VFAS3-2450P		A6	33.5	12.7	15.4	181
230	75	211	VFAS3-2550P		A6	33.5	12.7	15.4	181

VAC	HP (ND)	FLA (ND)	Model Number	Frame	H	W	D	Shipping Weight (lbs.)	
					Dimensions (in.)				
Normal Duty - 120% current overload for 60 seconds (Primarily used for variable torque applications. Examples are fans, centrifugal pumps and blowers)									
120V Single Phase	DEMO	DEMO	VFAS3-DEMO		A1	13.8	5.7	8.0	9.5
230	1	4.6	VFAS3-2004P		A1	13.8	5.7	8.0	9.5
230	2	8.0	VFAS3-2007P		A1	13.8	5.7	8.0	9.5
230	3	11.2	VFAS3-2015P		A1	13.8	5.7	8.0	9.9
230	5	18.7	VFAS3-2022P		A1	13.8	5.7	8.0	10.1
230	7.5	25.4	VFAS3-2037P		A2	16.2	6.7	9.2	17.0
230	10	32.7	VFAS3-2055P		A3	21.8	8.3	9.2	30.4
230	15	46.8	VFAS3-2075P		A3	21.8	8.3	9.2	30.4
230	20	63.4	VFAS3-2110P		A4	27.3	8.9	10.7	60.2
230	25	78.4	VFAS3-2150P		A4	27.3	8.9	10.7	60.2
230	30	92.6	VFAS3-2185P		A4	27.3	8.9	10.7	60.2
230	40	123	VFAS3-2220P		A5	36.8	11.5	12.7	127
230	50	149	VFAS3-2300P		A5	36.8	11.5	12.7	127
230	60	176	VFAS3-2370P		A5	36.8	11.5	12.7	127
230	75	211	VFAS3-2450P		A6	33.5	12.7	15.4	181
230	100	282	VFAS3-2550P		A6	33.5	12.7	15.4	181

Notes:
 • Frame A6 and A8 units do not include a dynamic braking circuit. This is available as an option.
 • Frame A6 and larger units are rated IP00. NEMA 1 conduit adapters are available as an option.
 *DC link reactor attaches to top.

AS3 ASD

460 V Power Unit

Pricing & Dimensions



VAC	HP (HD)	FLA (HD)	Model Number	Frame	H	W	D	Shipping Weight (lbs.)
					Dimensions (in.)			
Heavy Duty - 150% current overload for 60 seconds (Primarily used for constant torque applications. Examples are conveyors, crushers, extruders and mixers)								
460	0.5	1.5	VFAS3-4004PC	A1	13.8	5.7	8.0	9.9
460	1	2.2	VFAS3-4007PC	A1	13.8	5.7	8.0	9.9
460	2	4.0	VFAS3-4015PC	A1	13.8	5.7	8.0	9.9
460	3	5.6	VFAS3-4022PC	A1	13.8	5.7	8.0	10.1
460	5	9.3	VFAS3-4037PC	A1	13.8	5.7	8.0	10.4
460	7.5	12.7	VFAS3-4055PC	A2	16.2	6.7	9.2	17.0
460	10	16.5	VFAS3-4075PC	A2	16.2	6.7	9.2	17.0
460	15	23.5	VFAS3-4110PC	A3	21.8	8.3	9.2	30.0
460	20	31.7	VFAS3-4150PC	A3	21.8	8.3	9.2	31.3
460	25	39.2	VFAS3-4185PC	A3	21.8	8.3	9.2	31.5
460	30	46.3	VFAS3-4220PC	A4	27.3	8.9	10.7	61.7
460	40	61.5	VFAS3-4300PC	A4	27.3	8.9	10.7	62.2
460	50	74.5	VFAS3-4370PC	A4	27.3	8.9	10.7	63.3
460	60	88.0	VFAS3-4450PC	A5	36.8	11.5	12.7	127
460	75	106	VFAS3-4550PC	A5	36.8	11.5	12.7	130
460	100	145	VFAS3-4750PC	A5	36.8	11.5	12.7	131
460	125	173	VFAS3-4900PC	A6	33.5	12.7	15.4	181
460	150	211	VFAS3-4110KPC	A6	33.5	12.7	15.4	181
460	200	250	VFAS3-4132KPC	A6	33.5	12.7	15.4	181
460	250	314	VFAS3-4160KPC	A7	47.0	17.3	14.8	366 (230)*
460	300	387	VFAS3-4200KPC	A8	47.0	23.5	14.8	428 (296)*
460	350	427	VFAS3-4220KPC	A8	47.0	23.5	14.8	450 (230)*
460	450	550	VFAS3-4280KPC	A8	47.0	23.5	14.8	450 (230)*

Notes:

- Frame A6 and A8 units do not include a dynamic braking circuit. This is available as an option.
- Frame A6 and larger units are rated IP00. NEMA 1 conduit adapters are available as an option.
- *DC link reactor attaches to top.

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460 V Power Unit

Pricing & Dimensions



VAC	HP (ND)	FLA (ND)	Model Number	Frame	H	W	D	Shipping Weight (lbs.)
					Dimensions (in.)			
Normal Duty - 120% current overload for 60 seconds (Primarily used for variable torque applications. Examples are fans, centrifugal pumps and blowers)								
460	1	2.2	VFAS3-4004PC	A1	13.8	5.7	8.0	9.9
460	2	4.0	VFAS3-4007PC	A1	13.8	5.7	8.0	9.9
460	3	5.6	VFAS3-4015PC	A1	13.8	5.7	8.0	9.9
460	5	9.3	VFAS3-4022PC	A1	13.8	5.7	8.0	10.1
460	7.5	12.7	VFAS3-4037PC	A1	13.8	5.7	8.0	10.4
460	10	16.5	VFAS3-4055PC	A2	16.2	6.7	9.2	17.0
460	15	23.5	VFAS3-4075PC	A2	16.2	6.7	9.2	17.0
460	20	31.7	VFAS3-4110PC	A3	21.8	8.3	9.2	30.0
460	25	39.2	VFAS3-4150PC	A3	21.8	8.3	9.2	31.3
460	30	46.3	VFAS3-4185PC	A3	21.8	8.3	9.2	31.5
460	40	61.5	VFAS3-4220PC	A4	27.3	8.9	10.7	61.7
460	50	74.5	VFAS3-4300PC	A4	27.3	8.9	10.7	62.2
460	60	88.0	VFAS3-4370PC	A4	27.3	8.9	10.7	63.3
460	75	106	VFAS3-4450PC	A5	36.8	11.5	12.7	127
460	100	145	VFAS3-4550PC	A5	36.8	11.5	12.7	130
460	125	173	VFAS3-4750PC	A5	36.8	11.5	12.7	131
460	150	211	VFAS3-4900PC	A6	33.5	12.7	15.4	181
460	200	250	VFAS3-4110KPC	A6	33.5	12.7	15.4	181
460	250	302	VFAS3-4132KPC	A6	33.5	12.7	15.4	181
460	350	427	VFAS3-4160KPC	A7	47.0	17.3	14.8	366 (230)*
460	400	481	VFAS3-4200KPC	A8	47.0	23.5	14.8	428 (296)*
460	450	550	VFAS3-4220KPC	A8	47.0	23.5	14.8	450 (230)*
460	500	616	VFAS3-4280KPC	A8	47.0	23.5	14.8	450 (230)*

Notes:
 • Frame A6 and A8 units do not include a dynamic braking circuit. This is available as an option.
 • Frame A6 and larger units are rated IP00. NEMA 1 conduit adapters are available as an option.
 *DC link reactor attaches to top.