

MEDIUM VOLTAGE DRIVES

T300MV2®



SMALL FOOTPRINT LARGE SAVINGS

Toshiba's T300MV2® medium voltage adjustable speed drive incorporates advanced technology with a simplified design to deliver an innovative solution to maximize productivity and efficiency for industrial and commercial applications.



Three Cables In, Three Cables Out	internally, eliminating the need for secondary power sources and simplifying installation.
Input Control Disconnect	Improves system safety through pad-lockable input disconnect switch interlocked with a vacuum contactor. A viewing window allows verification of switch in disconnect position, helping to ensure safe access.
Integrated Isolation Transformer	Phase shifting transformer reduces overall harmonics to meet or exceed IEEE 519-2014 standards. Integral transformer simplifies design and reduces overall footprint.
Multi-Level Output Waveform	Eliminates the need for additional output filters or specialty VFD rated cables. Additive multi-level Pulse width modulation output eliminates Neutral Point Shift.
Oil Filled Capacitors	Rated for a 20 year life expectancy minimizing overall costs of life cycle replacements.
Pre-Charge Circuit	Reduces inrush current to the transformer and capacitors, which reduces stress on components and prevents a reduction in their life expectancy.
Versatile Control Interface	Offers 10 digital inputs and outputs, 3 analog inputs and outputs. Analog outputs are expandable up to 8 outputs. Inputs and outputs can be programmed for a variety of functions for ultimate flexibility.
Synchronous Motor Transfer	Allows for control of multiple motors with a single drive. Transients due to current and torque are eliminated during transitions between the drive and utility power.

Control and Cooling fan power are derived



2400 V

Dimension (Fit W. N. D)	MODEL RANGE	30	300 to 500 HP			600 to 1000 HP				1250 to 2000 HP			2250 to 3000 HP**				
Mappin	Voltage Rating					240				0 V							
Course Early April Apr		10	03.7 x 48 x 4	8 in.		103.7 x 74 x 43.4 in.				103.7 x 122 x 43.4 in.			٦.	103	.7 x 222 x 49	.5 in.	
Notemark 12400V 200 350 400 450 500 600 700 800 900 1250 1250 1250 1250 2250 2500 3000 20	Weight		4,500 lbs			8,600 lbs.				12,80	0 lbs.			33,000 lbs.			
POWER REQUIREMENTS Notage: +10%; Frequency: +5% Main circuit Three-Phase 2400 V; Integrated 24-Pulse Copper-Wound Isolation Transformer; Multi-Level NPC Medium Voltage (68T Output Control Circuit Control Specifications Integral to Main Transformer; Includes 460 V for Cooling Fans & PT for 120 V Control CONTROL SPECIFICATIONS INPUT Control Method Three-Level Pulse-Width Modulation (PWM) Output Control with Neutral-Point Clamping (NPC) WH& Control V/Hx, Sensoriess Vector Control, Variable Torque, Closed-Loop Vector Control, & Constant Torque Duppar Frequency PMM Carrier Frequency Fixed at 2 kHz Frequency, Setting 4 to 20 mA, 0 to 10 VDC Serial Communication Input, & Rotary Encoder Integrated into EOI Speed Regulation Open Loop; Up to 5,9%; (Cosed Loop) Up to 1,9% Main Protective Functions Current Limit, Overcurrent, Overload, Undervoltage, Overvoltage, Ground Fault, CPU Error, & Soft Stall Control LinterExpect CONTROL INTERFACE Dipital input Three Selectable Inputs with Programmable Functions Dipital Output Three Selectable Inputs Either Currents (0/4 to 20 mA) or Voltage (0 to 10 VDC) Anning Input Three Selectable Inputs Either Currents (0/4 to 20 mA) or Voltage (0 to 10 VDC) Anning Input Three Selectable Inputs Either Currents (0/4 to 20 mA) or Voltage (0 to 10 VDC) Anning Input Three Selectable Inputs Either Currents (0/4 to 20 mA) or Voltage (0 to 10 VDC) Anning Input Three Selectable Inputs Either Currents (0/4 to 20 mA) or Voltage (0 to 10 VDC) Anning Input Three Selectable Inputs Either Currents (0/4 to 20 mA) or Voltage (0 to 10 VDC) Anning Input Three Selectable Inputs Either Currents (0/4 to 20 mA) or Voltage (0 to 10 VDC) Anning Input Three Selectable Inputs Either Currents (0/4 to 20 mA) or Voltage (0 to 10 VDC) Anning Input Three Selectable Inputs Either Currents (0/4 to 20 mA) or Voltage (0 to 10 VDC) Anning Input A "Piglt, 7-Segment LED Display and 4x20 Character Graphical Plain English Back-Lit LCD Display for Programming, Montrolring & Diagnostics Standard					_	_											645
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SAFETY FEATURES Standard Pad-Lockable Input Fuse Disconnect Switch with Vacuum Contactor, Interlocked Doors, & Viewing Window ELECTRONIC OPERATOR INTERFACE (EOI) Display 4-Digit, 7-Segment LED Display and 4x20 Character Graphical Plain English Back-Lit LCD Display for Programming, Monitoring & Diagnostics LED Indicators Run (Red)/Stop (Green) & Local (Green) Keys Local/Remote, Enter, Mon/Prg, Esc, Run, & Stop/Reset Monitoring Frequency Command Screen; Multiple Parameters Displayed: Motor Current, Motor Speed, Motor Voltage, DC Voltage, Input Voltage, Output Voltage, Run Time, Output Power, Motor kWH, Motor kVAH, Motor kVAR, & On-Time Control Power CONSTRUCTION Enclosure ANSI-61 Gray; NEMA 1 Ventilated, & IP20 Per IEC-60529; Gasket & Filter; Free-Standing; Front-Access Only Power Cables Top/Bottom Access for Input/Motor Cables Cooling Forced-Air Cooled (Redundant Fan Option) Standards & Compliances NEC, NEMA, UL, cUL, ANSI, & American Recovery & Reinvestment Act Compliant AMBIENT CONDITIONS Anabient Temperature 0 to 40°C (50°C Option Available) Altitude 3,281 ft. Above Sea Level (Up to 14,764 ft. Option Available With Derate) Humidity	Analog Output																
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### Display ### A-Digit, 7-Segment LED Display and 4x20 Character Graphical Plain English Back-Lit LCD Display for Programming, Monitoring & Diagnostics ### Digit, 7-Segment LED Display and 4x20 Character Graphical Plain English Back-Lit LCD Display for Programming, Monitoring & Diagnostics #### Diagnostics #### Local/Remote, Enter, Mon/Prg, Esc, Run, & Stop/Reset #### Monitoring #### Construction #### Construction #### Enclosure #### ANSI-61 Gray; NEMA 1 Ventilated, & IP20 Per IEC-60529; Gasket & Filter; Free-Standing; Front-Access Only #### Power Cables #### Cooling #### ANSI-61 Gray; NEMA 1 Ventilated, & IP20 Per IEC-60529; Gasket & Filter; Free-Standing; Front-Access Only #### Top/Bottom Access for Input/Motor Cables ##### Cooling ##### Forced-Air Cooled (Redundant Fan Option) #### Standards & Compliances ##### AMBIENT CONDITIONS ###################################	SAFETY FEATURES																
A-Digit, 7-Segment LED Display and 4x20 Character Graphical Plain English Back-Lit LCD Display for Programming, Monitoring & Diagnostics Run (Red)/Stop (Green) & Local (Green) Keys Local/Remote, Enter, Mon/Prg, Esc, Run, & Stop/Reset Monitoring Frequency Command Screen; Multiple Parameters Displayed: Motor Current, Motor Speed, Motor Voltage, Input Voltage, Output Voltage, Run Time, Output Power, Motor kWH, Motor kVAH, Motor kVAR, & On-Time Control Power CONSTRUCTION Enclosure ANSI-61 Gray; NEMA 1 Ventilated, & IP20 Per IEC-60529; Gasket & Filter; Free-Standing; Front-Access Only Power Cables Top/Bottom Access for Input/Motor Cables Cooling Forced-Air Cooled (Redundant Fan Option) Standards & Compliances NEC, NEMA, UL, cUL, ANSI, & American Recovery & Reinvestment Act Compliant AMBIENT CONDITIONS Ambient Temperature 0 to 40°C (50°C Option Available) Altitude 3,281 ft. Above Sea Level (Up to 14,764 ft. Option Available With Derate) Humidity 95% Maximum (Non-Condensing)			Standard	Pad-Lock	able In	iput F	use Dis	sconne	ct Swite	ch with	Vacuum	Contact	or, Interlo	ocked Do	ors, & View	ing Window	
LED Indicators Run (Red)/Stop (Green) & Local (Green) Keys Local/Remote, Enter, Mon/Prg, Esc, Run, & Stop/Reset Frequency Command Screen; Multiple Parameters Displayed: Motor Current, Motor Speed, Motor Voltage, Input Voltage, Output Voltage, Run Time, Output Power, Motor kW, Motor kWH, Motor kVAR, & On-Time Control Power CONSTRUCTION Enclosure ANSI-61 Gray; NEMA 1 Ventilated, & IP20 Per IEC-60529; Gasket & Filter; Free-Standing; Front-Access Only Power Cables Top/Bottom Access for Input/Motor Cables Cooling Forced-Air Cooled (Redundant Fan Option) Standards & Compliances AMBIENT CONDITIONS Ambient Temperature 0 to 40°C (50°C Option Available) Altitude 3,281 ft. Above Sea Level (Up to 14,764 ft. Option Available With Derate) Humidity	ELECTRONIC OPERATOR INTER	RFACE (EOI)															
Local/Remote, Enter, Mon/Prg, Esc, Run, & Stop/Reset Frequency Command Screen; Multiple Parameters Displayed: Motor Current, Motor Speed, Motor Voltage, DC Voltage, Input Voltage, Output Voltage, Run Time, Output Power, Motor kW, Motor kWH, Motor kVAR, & On-Time Control Power CONSTRUCTION Enclosure ANSI-61 Gray; NEMA 1 Ventilated, & IP20 Per IEC-60529; Gasket & Filter; Free-Standing; Front-Access Only Power Cables Top/Bottom Access for Input/Motor Cables Cooling Forced-Air Cooled (Redundant Fan Option) Standards & Compliances NEC, NEMA, UL, cUL, ANSI, & American Recovery & Reinvestment Act Compliant AMBIENT CONDITIONS Ambient Temperature 0 to 40°C (50°C Option Available) Altitude 3,281 ft. Above Sea Level (Up to 14,764 ft. Option Available With Derate) Humidity																	
Frequency Command Screen; Multiple Parameters Displayed: Motor Current, Motor Speed, Motor Voltage, Input Voltage, Output Voltage, Run Time, Output Power, Motor kW, Motor kWH, Motor kVAH, Motor kVAR, & On-Time Control Power CONSTRUCTION Enclosure ANSI-61 Gray; NEMA 1 Ventilated, & IP20 Per IEC-60529; Gasket & Filter; Free-Standing; Front-Access Only Power Cables Top/Bottom Access for Input/Motor Cables Cooling Forced-Air Cooled (Redundant Fan Option) Standards & Compliances NEC, NEMA, UL, cUL, ANSI, & American Recovery & Reinvestment Act Compliant AMBIENT CONDITIONS Ambient Temperature 0 to 40°C (50°C Option Available) Altitude 3,281 ft. Above Sea Level (Up to 14,764 ft. Option Available With Derate) Humidity 95% Maximum (Non-Condensing)	LED Indicators		Run (Red)/Stop (Green) & Local (Green)														
Output Voltage, Run Time, Output Power, Motor kW, Motor kWH, Motor kVAR, & On-Time Control Power CONSTRUCTION Enclosure ANSI-61 Gray; NEMA 1 Ventilated, & IP20 Per IEC-60529; Gasket & Filter; Free-Standing; Front-Access Only Power Cables Top/Bottom Access for Input/Motor Cables Cooling Forced-Air Cooled (Redundant Fan Option) Standards & Compliances NEC, NEMA, UL, cUL, ANSI, & American Recovery & Reinvestment Act Compliant AMBIENT CONDITIONS Ambient Temperature 0 to 40°C (50°C Option Available) Altitude 3,281 ft. Above Sea Level (Up to 14,764 ft. Option Available With Derate) Humidity 95% Maximum (Non-Condensing)			Local/Remote, Enter, Mon/Prg, Esc, Run, & Stop/Reset														
ANSI-61 Gray; NEMA 1 Ventilated, & IP20 Per IEC-60529; Gasket & Filter; Free-Standing; Front-Access Only Power Cables Top/Bottom Access for Input/Motor Cables Cooling Forced-Air Cooled (Redundant Fan Option) Standards & Compliances NEC, NEMA, UL, cUL, ANSI, & American Recovery & Reinvestment Act Compliant AMBIENT CONDITIONS Ambient Temperature 0 to 40°C (50°C Option Available) Altitude 3,281 ft. Above Sea Level (Up to 14,764 ft. Option Available With Derate) Humidity 95% Maximum (Non-Condensing)	Monitoring	Freque															
Power Cables Top/Bottom Access for Input/Motor Cables Forced-Air Cooled (Redundant Fan Option) Standards & Compliances NEC, NEMA, UL, cUL, ANSI, & American Recovery & Reinvestment Act Compliant AMBIENT CONDITIONS Ambient Temperature O to 40°C (50°C Option Available) Altitude 3,281 ft. Above Sea Level (Up to 14,764 ft. Option Available With Derate) Humidity 95% Maximum (Non-Condensing)	CONSTRUCTION																
Forced-Air Cooled (Redundant Fan Option) Standards & Compliances NEC, NEMA, UL, cUL, ANSI, & American Recovery & Reinvestment Act Compliant AMBIENT CONDITIONS Ambient Temperature 0 to 40°C (50°C Option Available) Altitude 3,281 ft. Above Sea Level (Up to 14,764 ft. Option Available With Derate) Humidity 95% Maximum (Non-Condensing)	Enclosure		ANS	SI-61 Gray	NEMA	1 Ve	ntilate	d, & IP2	0 Per II	EC-605	29; Gaske	et & Filte	r; Free-Sta	anding; F	ront-Access	s Only	
Standards & Compliances AMBIENT CONDITIONS Ambient Temperature O to 40°C (50°C Option Available) Altitude 3,281 ft. Above Sea Level (Up to 14,764 ft. Option Available With Derate) Humidity 95% Maximum (Non-Condensing)	Power Cables						Т	Гор/Во	ttom Ac	cess fo	or Input/I	Motor Ca	bles				
AMBIENT CONDITIONS Ambient Temperature 0 to 40°C (50°C Option Available) Altitude 3,281 ft. Above Sea Level (Up to 14,764 ft. Option Available With Derate) Humidity 95% Maximum (Non-Condensing)	Cooling		Forced-Air Cooled (Redundant Fan Option)														
Ambient Temperature 0 to 40°C (50°C Option Available) Altitude 3,281 ft. Above Sea Level (Up to 14,764 ft. Option Available With Derate) Humidity 95% Maximum (Non-Condensing)	Standards & Compliances																
Altitude 3,281 ft. Above Sea Level (Up to 14,764 ft. Option Available With Derate) Humidity 95% Maximum (Non-Condensing)	AMBIENT CONDITIONS																
Humidity 95% Maximum (Non-Condensing)								0 t	o 40°C	(50°C C	ption Av	ailable)					
					3,2	81 ft.	Above	Sea Le	vel (Up	to 14,7	764 ft. Op	tion Ava	ilable Wit	h Derate)			
								959	% Maxir	num (N	Non-Cond	densing)					
	Installation																





4160 V

MODEL RANGE	300 to 700 600 HP 1000		2250 to 3000 3000 HP 4000		7000 to 8000 HP	8000 to 11000 HP**				
Voltage Rating			4160 VA	2	•	'				
	103.7 x 48 103.7 x 48 in. x 48		103.7 x 154 103.7 x 49.5 in. x 49.		103.7 x 307.5 x 60 in.	103.7 x 402.5 x 60 in.				
Weight	6,000 lbs. 7,600	lbs. 11,200 lbs.	18,800 lbs. 23,30		47,000 lbs.	68,500 lbs.				
Current Rating (A):	37 50 62 74 87 99 1	12 124* 155 188 217 248*	279 310 372* 372 43	496* 496 558 620 682 744	868 992*	992 1110 1240 1364				
Nominal HP*** (4160 V)	300 400 500 600 700 800 9	00 1000* 1250 1500 1750 2000*	2250 2500 3000 3000 350	0 4000 4000 4500 5000 5500 6000	7000 8000	8000 9000 10000 11000				
POWER REQUIREMENTS										
Input Tolerance			Voltage: ±10%; Free	uency: ±5%						
Main Circuit	Three-Phase 4	Three-Phase 4160 V; Integrated 24-Pulse Copper-Wound Isolation Transformer; Multi-Level NPC Medium Voltage IGBT Output								
Control Circuit		Integral to Main Transf	ormer; Includes 460 V	or Cooling Fans & PT for 120 \	/ Control					
CONTROL SPECIFICATION	SINPUT									
Control Method				Control with Neutral-Point Cla						
V/Hz Control		V/Hz, Sensorless Vector Cont		osed-Loop Vector Control, & C	onstant Torque					
Output Frequency			0 to 120							
PWM Carrier Frequency		4. 00 4.0. 40.00.0	Fixed at 2							
Frequency Setting		· · · · · · · · · · · · · · · · · · ·		put, & Rotary Encoder Integra	ted into EOI					
Speed Regulation Main Protective Functions	Cu	•	Loop: Up to 0.5%; Clo	rervoltage, Ground Fault, CPU	Error P. Coft Stall					
Overload Current Rating) HP, 3000 HP, 4000 HP, 6000 H		or One Minute)				
CONTROL INTERFACE	100 /0 Continuous, 1	1370 for one minute Every 20	/ Williates (1000 Fil , 2000	7111, 3000 111, 4000 111, 0000 11	1, & 0000 111 110 /01	or one minute)				
Digital Input		Ton D	iscrata Inputs with Pro	trammable Functions						
Digital Output		Ten Discrete Inputs with Programmable Functions Ten Available Digital Programmable Outputs								
Analog Input	Three Selectable Currents (0/4 to 20 mA) or Voltage (0 to 10 VDC) Input Signals									
Analog Output	Three Selectable Outputs Current (0/4 to 20 mA) or Voltage (0 to 10 VDC) (Optional up to Eight Maximum)									
Communication Ports	Pro	fibus, Modbus RTU & TCP, TO	SLINE-S20, TCNet, Ethe	rnet Global Data (EGD), Device	eNet & EtherNet/IP					
SAFETY FEATURES										
	Standard	Pad-Lockable Input Fuse Disc	connect Switch with Va	cuum Contactor, Interlocked D	oors, & Viewing Wir	dow				
ELECTRONIC OPERATOR II	NTERFACE (EOI)									
Display	4-Digit, 7	4-Digit, 7-Segment LED Display and 4x20 Character Graphical Plain English Back-Lit LCD Display for Programming, Monitoring & Diagnostics								
LED Indicators			Run (Red)/Stop (Green)	& Local (Green)						
		Local/Remote, Enter, Mon/Prg, Esc, Run, & Stop/Reset								
		Frequency Command Screen; Multiple Parameters Displayed: Motor Current, Motor Speed, Motor Voltage, DC Voltage, Input Voltage, Output Voltage, Run Time, Output Power, Motor kW, Motor kWH, Motor kVAH, Motor kVAR, & On-Time Control Power								
CONSTRUCTION		, , , , , , , , , , , , , , , , , , , ,		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,						
Enclosure	ANS	il-61 Gray; NEMA 1 Ventilated	, & IP20 Per IEC-60529;	Gasket & Filter; Free-Standing	Front-Access Only					
Power Cables		ANSI-61 Gray; NEMA 1 Ventilated, & IP20 Per IEC-60529; Gasket & Filter; Free-Standing; Front-Access Only Top/Bottom Access for Input/Motor Cables								
Cooling		Forced-Air Cooled (Redundant Fan Option)								
Standards & Compliances	NEC, NEMA, UL, cUL, ANSI, & American Recovery & Reinvestment Act Compliant									
AMBIENT CONDITIONS										
			0 to 40°C (50°C Opti	on Available)						
		3,281 ft. Above Sea Level (Up to 14,764 ft. Option Available With Derate)								
Ambient Temperature Altitude		3,281 ft. Above S	, ,	•	te)					
		3,281 ft. Above S	, ,	ft. Option Available With Dera	te)					

*110% Overload for One Minute Every 20 Minutes





^{**}Models not UL Listed Presently

**Typical HP Rating of a 4-Pole Motor; Contact Factory for Applications on Constant Torque Loads

6600 V

Main protections 103.7 x 108.7 x 108.7 x 138.8 103.7 x 138.8 103.7 x 138.8 103.7 x 138.8 103.7 x 138.5 103.7 x 138.8	MODEL RANGE	300 to 800 HP**	900 to 1500 HP**			3500 to 4500 to 4000 HP 5000 HP		5500 to 7000 HP		8000 to 9000 HP	
Summarison Name N	Voltage Rating			6600 VAC							
Weight Spread S											
Common lamp April Color											
Nominal NPT (0000 V) Set						-	<u> </u>			1	
POWER REQUIREMENTS Notice Power					3500 4000	4500 5000	5500 600	0 7000	8000	9000	
Imput Tolerance Nottage: ±10%; Prequency: ±5% Main Grout Three-Phase 6600 V; Integrated >24-Pulse Copper-Wound Isolation Transformer; Multi-Level NPC Medium Voltage IGBT Output CONTROL SPECIFICATIONS INPUT Control Method Seven -Level Pulse-Width Modulation (PVM) Output Control with Neutral-Point Clamping (NPC) Viris Control Control Viris Cont											
CONTROL Method Seven - Level Pulse-Width Modulation (PWM) Output Control with Neutral-Point Clamping (NPC) Viylaz Control Viyltz, Sensoniess Nector Control, Variable Torque, Closed-Loop Vector Control, & Constant Torque Control Circuit Integral to Main Transformer; Includes 460 V for cooling fans & PT for 120 V Control Frequency Setting A to 20 mA, Do to 10 VDC Serial Communication Input, & Rotary Encoder Integrated into EOI Speed Regulation Open Loop-Up to 10-5%; Closed-Loop-Up to 0.0% Main Protective Functions Current Limit, Overcurrent, Overload, Undervoltage, Overvoltage, Ground Fault, CPU Error, & Soft Stall Overload Current Rating 100% Continuous; 115% for One Minute Every 20 Minutes CONTROL INTEGRACE Digital Input Ten Discrete Inputs with Programmable Functions Digital Output Ten Discrete Inputs with Programmable Functions Digital Output Three Selectable (Dutputs Current (0/4 to 20 mA) or Voltage (0 to 10 VDC) Analog Input Three Selectable (Dutputs Current (0/4 to 20 mA) or Voltage (0 to 10 VDC) Analog output Three Selectable (Dutputs Eurents (0/4 to 20 mA) or Voltage (0 to 10 VDC) Analog output Three Selectable (Dutputs Eurent (0/4 to 20 mA) or Voltage (0 to 10 VDC) Analog output Three Selectable (Dutputs Eurent (0/4 to 20 mA) or Voltage (0 to 10 VDC) Analog output Three Selectable (Dutputs Eurent (0/4 to 20 mA) or Voltage (0 to 10 VDC) (Optional up to Eight Maximum) ELECTRONIC OPERATOR INTERFACE (EOI) Standard Pad-Lockable Input Fuse Disconnect Switch with Vacuum Contactor, Interlocked Doors, & Viewing Window ELECTRONIC OPERATOR INTERFACE (EOI) ELD Indicators ELD Indicators A-Digit, 7-Segment LED Display and 4x20 Character Graphical Plain English Back-Lit LCD Display for Programming, Monitoring & Disponsitics Brown Cables Frequency Command Screen; Multiple Parameters Displayed Motor Current, Motor Speed, Motor Voltage, Output Voltage, Ou				Voltage: ±10%; Frequ	uency: ±5%					,	
Control Method Seven -Level Pulse-Width Modulation (PMM) Output Control with Neutral-Point Clamping (NPC) Virks Control Virks Co	Main Circuit	Three-Phase 6600 V; Ii									
V/Hz, Sensorless Vector Control, Variable Torque, Closed-Loop Vector Control, & Constant Torque Control Circuit Integral to Main Transformer; Includes 460 V for cooling fans & PT for 120 V Control Frequency Setting 4 to 20 mA, 0 to 10 VDC Serial Communication Input, 20 Feor Loop V Control Frequency Setting 4 to 20 mA, 0 to 10 VDC Serial Communication Input, 20 PL cooling (Amort Product Integrated into EOI Speed Regulation Open Loop: Up to 0.5%; Closed Loop: Up to 0.1% Main Protective Functions Current Limit, Overcurrent, Overload, Undervoltage, Overvoltage, Ground Fault, CPU Error, & Soft Stall Overlead Current Rating 100% Continuous; 115% for One Minute Every 20 Minutes CONTROL INTERFACE Digital Input Ten Discrete Inputs with Programmable Functions Digital Programmable Functions Digital Output Ten Available Digital Programmable Functions Digital Output Ten Available Digital Programmable Outputs Analog Input Three Selectable Inputs Either Currents (0/4 to 20 mA) or Voltage (0 to 10 VDC) Analog Output Three Selectable Outputs Current (0/4 to 20 mA) or Voltage (0 to 10 VDC) Communication Ports Profibus, Modbus RTU & TCP, TOSLINE-S20, TCNet, Ethernet Global Data (EGD), DeviceNet & EtherNet/IP SAFETY FEATURES Standard Pad-Lockable Input Fuse Disconnect Switch with Vacuum Contactor, Interlocked Doors, & Viewing Window ELECTRONIC OPERATOR INTERFACE (EOI) Display 4-Digit, 7-Segment LED Display and 4x20 Character Graphical Plain English Back-Lit LCD Display for Programming, Monitoring & Diagnostics EED Indicators Run Ferquency Command Screen; Multiple Parameters Displayed: Motor Current, Motor Speed, Motor Voltage, Dev Voltage, Output Voltage, Run Time, Output Power, Motor KWH, Motor KWH, Motor KWH, Motor KWH, & On-Time Control Power CONSTRUCTION Findosure Ansier Programmable Current Conditions ANSI-61 Gray; NEMA 1 Ventilated, & IP20 Per IEC-60529; Gasket & Filter; Free-Standing; Front-Access Only Power Cables One Programmable Current Conditions And Programmater Conditions And Programma Conditions And Program	CONTROL SPECIFICATIO	NS INPUT									
Control Circuit Integral to Main Transformer; includes 460 V for cooling fans & PT for 120 V Control Frequency Setting 4 to 20 mA, 0 to 10 VDC Serial Communication Input, & Rotary Encoder Integrated into EOI Speed Regulation Open Long: Up to 0.3%; Closed Long: Up to 0.1% (Main Protective Functions Current Limit, Overcurrent, Overload, Undervoltage, Overvoltage, Ground Fault, CPU Error, & Soft Stall Overload Current Rating 100% Continuous; 115% for One Minute Every 20 Minutes CONTROL INTERFACE Digital Input Ten Discrete Inputs with Programmable Functions Digital Output Ten Available Digital Programmable Functions Digital Output Three Selectable Inputs Either Currents (0/4 to 20 mA) or Voltage (0 to 10 VDC) Analog Unput Three Selectable Outputs Current (0/4 to 20 mA) or Voltage (0 to 10 VDC) (Optional up to Eight Maximum) Communication Ports Profibus, Modbus RTU & TCP, TOSLINE-S20, TCNet, Ethernet Global Data (EGD), DeviceNet & EtherNet/IP SAFETY FEATURES Standard Pad-Lockable Input Fuse Disconnect Switch with Vacuum Contactor, Interlocked Doors, & Viewing Window ELECTRONIC OPERATOR INTERFACE (EOI) Display 4-Digit, 7-Segment LED Display and 4x20 Character Graphical Plain English Back-Lit LCD Display for Programming, Monitoring & Displaysostics LED Indicators Run (Red)/Stop (Green) & Local (Green) Keys Local/Remote, Enter, Mon/Prg, Esc, Run, & Stop/Reset Frequency Command Screen; Multiple Parameters Displayed: More Speed, Motor Voltage, Output Voltage, Output Voltage Run Time, Output Power, Motor kWH, Motor KWH, Motor KWAR, & On-Time Control Power CONSTRUCTION Construction Enclosure ANSI-61 Gray; NEMA 1 Ventilated, & IP20 Per IEC-60529; Gasket & Filter; Free-Standing; Front-Access Only Power, Abord Screen, Motor Voltage, Output Vol	Control Method	Seven	-Level Pulse-Width M	Iodulation (PWM) Output	Control with N	Ieutral-Point Cla	mping (NPC	<u>:</u>)			
Frequency Setting 4 to 20 mA, 0 to 10 VDC Serial Communication Input, & Rotary Encoder Integrated into EOI Speed Regulation Open Loop: Up to 0.5% Closed Loop: Up to 0.1% Main Protoctive Functions Overload Current Rating 10% Continuous; 115% for One Minute Every 20 Minutes CONTROL INTERFACE Digital Input Ten Discrete Inputs with Programmable Functions Digital Output Ten Available Digital Programmable Outputs Analog Input Three Selectable Inputs Either Currents (0/4 to 20 mA) or Voltage (0 to 10 VDC) Analog Output Three Selectable Outputs Either Current (0/4 to 20 mA) or Voltage (0 to 10 VDC) Analog Output Three Selectable Outputs Current (0/4 to 20 mA) or Voltage (0 to 10 VDC) Analog Output Three Selectable Outputs Current (0/4 to 20 mA) or Voltage (0 to 10 VDC) Analog Output Three Selectable Outputs Current (0/4 to 20 mA) or Voltage (0 to 10 VDC) Analog Output Three Selectable Outputs Current (0/4 to 20 mA) or Voltage (0 to 10 VDC) Analog Output Standard Pad-Lockable Input Fuse Disconnect Switch with Vacuum Contactor, Interlocked Doors, & Viewing Window ELECTRONIC OPERATOR INTERFACE (EOI) Display 4-Digit, 7-Segment LED Display and 4x20 Character Graphical Plain English Back-Lit LCD Display for Programming, Monitoring & Diagnostics ELED Indicators Run (Red.)/Stop (Green) & Local (Green) Keys Construction Frequency Command Screen; Multiple Parameters Displayed: Motor Current, Motor Speed, Motor Voltage, DC Voltage, Output Voltage Run Time, Output Power, Motor KWH, Motor KWH, Motor KWAR, & On-Time Control Power CONSTRUCTION Enclosure ANSI-61 Gray; NEMA 1 Ventilated, & IP20 Per IEC-60529; Gasket & Filter; Free-Standing; Front-Access Only Power Cables Top/Bottom Access for Input/Motor Cables Cooling Forced-Air Cooled Standard & Compliances NEC, NEMA, UL, CUL, ANSI, & American Recovery & Reinvestment Act Compliant AMBIENT CONDITIONS Ambient Temperature Oto 40°C (50°C Option Available) Humidity 95% Maximum (Non-Condensing)	V/Hz Control	V/Hz, S	ensorless Vector Con	trol, Variable Torque, Clo	sed-Loop Vecto	or Control, & Cor	nstant Torqu	ıe			
Speed Regulation Open Loop: Up to 0.5%; Closed Loop: Up to 0.1% Main Protective Functions Current Limit, Overcurrent, Overload, Undervoltage, Overvoltage, Ground Fault, CPU Error, & Soft Stall Overdoad Current Rating 10% Continuous; 115% for One Minute Every 20 Minutes CONTROL INTERFACE Digital Input Ten Discrete Inputs with Programmable Functions Digital Output Ten Available Digital Programmable Functions Prolipital Output Ten Available Digital Programmable Functions Digital Output Three Selectable Inputs Either Currents (Ord to 20 mA) or Voltage (0 to 10 VDC) Analog Input Three Selectable Outputs Current (Ord to 20 mA) or Voltage (0 to 10 VDC) Analog Output Three Selectable Outputs Current (Ord to 20 mA) or Voltage (0 to 10 VDC) (Optional up to Eight Maximum) Communication Ports Profibus, Modbus RTU & TCP, TOSLINE-S20, TCNet, Ethernet Global Data (EGD), DeviceNet & EtherNet/IP SAFETY FEATURES Standard Pad-Lockable Input Fuse Disconnect Switch with Vacuum Contactor, Interlocked Doors, & Viewing Window ELECTRONIC OPERATOR INTERFACE (EOI) Display 4-Digit, 7-Segment LED Display and 4x20 Character Graphical Plain English Back-Lit LCD Display for Programming, Monitoring & Diagnostics LED Indicators Run (Red)/Stop (Green) & Local (Green) Keys Local/Remote, Enter, Mon/Prg, Esc, Run, & Stop/Reset Monitoring Prequency Command Screen; Multiple Parameters Displayed Motor Current, Motor Speed, Motor Voltage, DC Voltage, Input Voltage, Output Voltage Run Time, Output Power, Motor kW, Motor kWH, Motor kWAH, Motor kWAH, & On-Time Control Power CONSTRUCTION Enclosure ANSI-61 Gray; NEMA 1 Ventilated, & IP20 Per IEC-60529; Gasket & Filter; Free-Standing; Front-Access Only Power Cables Top/Bottom Access for Input/Motor Cables Cooling Forced-Air Cooled Standard & Compliances NEC, NEMA, UL, CUL, ANSI, & American Recovery & Reinvestment Act Compliant AMBIENT CONDITIONS Anbient Temperature 0 to 40°C (50°C Option Available) Altitude 3,281 ft. Above Sea Level (Up to 14,764 ft. Option Available) Humidity	Control Circuit		Integral to Main Tran	sformer; Includes 460 V f	or cooling fans	& PT for 120 V C	ontrol				
Main Protective Functions Overload Current Rating 100% Continuous; 115% for One Minute Every 20 Minutes CONTROL INTERFACE Digital Output Ten Discrete Inputs with Programmable Functions Digital Output Ten Available Digital Programmable Functions Digital Output Three Selectable Inputs Either Currents (0/4 to 20 ma) ro Voltage (0 to 10 VDC) Analog Output Three Selectable Inputs Either Currents (0/4 to 20 ma) ro Voltage (0 to 10 VDC) Analog Output Three Selectable Inputs Either Currents (0/4 to 20 ma) ro Voltage (0 to 10 VDC) Communication Ports Profibus, Modbus RTU & TCP, TOSLINE-S20, TCNet, Ethernet Global Data (EGD), DeviceNet & EtherNet/IP SAFETY FEATURES Standard Pad-Lockable Input Fuse Disconnect Switch with Vacuum Contactor, Interlocked Doors, & Viewing Window ELECTRONIC OPERATOR INTERFACE (EOI) Display 4-Digit, 7-Segment LED Display and 4x20 Character Graphical Plain English Back-Lit LCD Display for Programming, Monitoring & Diagnostics Run (Red)/Stop (Green) & Local (Green) Keys Local/Remote, Enter, Mon/Prg, Esc, Run, & Stop/Reset Monitoring Prequency Command Screen; Multiple Parameters Displayed: Motor Current, Motor Speed, Motor Voltage, Input Voltage, Output Voltage Run Time, Output Power, Motor KW, Motor KWH, Motor	Frequency Setting	4 to	20 mA, 0 to 10 VDC S	Serial Communication Inp	out, & Rotary E	ncoder Integrate	d into EOI				
CONTROL INTERFACE Digital Input Ten Discrete Inputs with Programmable Functions Digital Output Ten Available Digital Programmable Outputs Analog Input Three Selectable Inputs Either Currents (0/4 to 20 mA) or Voltage (0 to 10 VDC) Analog Output Three Selectable Inputs Either Currents (0/4 to 20 mA) or Voltage (0 to 10 VDC) Analog Output Three Selectable Outputs Current (0/4 to 20 mA) or Voltage (0 to 10 VDC) (Optional up to Eight Maximum) Communication Ports Profibus, Modbus RTU & TCP, TOSLINE-S20, TCNet, Ethernet Global Data (EGD), DeviceNet & EtherNet/IP SAFETY FEATURES Standard Pad-Lockable Input Fuse Disconnect Switch with Vacuum Contactor, Interlocked Doors, & Viewing Window ELECTRONIC OPERATOR INTERFACE (EOI) Display 4-Digit, 7-Segment LED Display and 4x20 Character Graphical Plain English Back-Lit LCD Display for Programming, Monitoring & Diagnostics LED Indicators Run (Red)/Stop (Green) & Local (Green) Keys Local/Remote, Enter, Mon/Prg, Esc, Run, & Stop/Reset Monitoring Frequency Command Screen; Multiple Parameters Displayed: Motor Current, Motor Speed, Motor Voltage, Det Voltage, Output Voltage, Run Time, Output Power, Motor kWH, Motor kWH, Motor kWAR, & On-Time Control Power CONSTRUCTION Enclosure ANSI-61 Gray; NEMA 1 Ventilated, & IP20 Per IEC-60529; Gasket & Filter; Free-Standing; Front-Access Only Power Cables Top/Bottom Access for Input/Motor Cables Cooling Forced-Air Cooled ANSI-61 Gray; NEMA, UL, CUL, ANSI, & American Recovery & Reinvestment Act Compliant AMBIENT CONDITIONS Ambient Temperature 0 to 40°C (50°C Option Available) Altitude 3,281 ft. Above Sea Level (Up to 14,764 ft. Option Available With Derate) Humidity 95% Maximum (Non-Condensing)	Speed Regulation		Оре	en Loop: Up to 0.5%; Clos	ed Loop: Up to	0.1%					
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Monitoring & Diagnostics Run (Red)/Stop (Green) & Local (Green) Keys Local/Remote, Enter, Mon/Prg, Esc, Run, & Stop/Reset Frequency Command Screen; Multiple Parameters Displayed: Motor Current, Motor Speed, Motor Voltage, Input Voltage, Output Voltage Run Time, Output Power, Motor kWH, Motor kWAH, Motor kVAR, & On-Time Control Power CONSTRUCTION Enclosure ANSI-61 Gray; NEMA 1 Ventilated, & IP20 Per IEC-60529; Gasket & Filter; Free-Standing; Front-Access Only Power Cables Top/Bottom Access for Input/Motor Cables Cooling Forced-Air Cooled Standards & Compliances NEC, NEMA, UL, cUL, ANSI, & American Recovery & Reinvestment Act Compliant AMBIENT CONDITIONS Ambient Temperature 0 to 40°C (50°C Option Available) Altitude 3,281 ft. Above Sea Level (Up to 14,764 ft. Option Available With Derate) Humidity 95% Maximum (Non-Condensing)	ELECTRONIC OPERATOR		ant LED Display and	4.20 Charantar Cranhinal	Dlain Facilish F	and Lit LCD Disc	alau fau Dua		_		
Keys Local/Remote, Enter, Mon/Prg, Esc, Run, & Stop/Reset Frequency Command Screen; Multiple Parameters Displayed: Motor Current, Motor Speed, Motor Voltage, DC Voltage, Input Voltage Run Time, Output Power, Motor kWH, Motor kVAH, Motor kVAR, & On-Time Control Power CONSTRUCTION Enclosure ANSI-61 Gray; NEMA 1 Ventilated, & IP20 Per IEC-60529; Gasket & Filter; Free-Standing; Front-Access Only Power Cables Top/Bottom Access for Input/Motor Cables Cooling Forced-Air Cooled Standards & Compliances NEC, NEMA, UL, cUL, ANSI, & American Recovery & Reinvestment Act Compliant AMBIENT CONDITIONS Ambient Temperature 0 to 40°C (50°C Option Available) Altitude 3,281 ft. Above Sea Level (Up to 14,764 ft. Option Available With Derate) Humidity 95% Maximum (Non-Condensing)		4-Digit, 7-Segmi									
Frequency Command Screen; Multiple Parameters Displayed: Motor Current, Motor Speed, Motor Voltage, DC Voltage, Input Voltage Run Time, Output Power, Motor kW, Motor kWH, Motor kVAH, & On-Time Control Power CONSTRUCTION Enclosure ANSI-61 Gray; NEMA 1 Ventilated, & IP20 Per IEC-60529; Gasket & Filter; Free-Standing; Front-Access Only Power Cables Top/Bottom Access for Input/Motor Cables Cooling Forced-Air Cooled Standards & Compliances NEC, NEMA, UL, cUL, ANSI, & American Recovery & Reinvestment Act Compliant AMBIENT CONDITIONS Ambient Temperature 0 to 40°C (50°C Option Available) Altitude 3,281 ft. Above Sea Level (Up to 14,764 ft. Option Available With Derate) Humidity 95% Maximum (Non-Condensing)	LED Indicators		Run (Red)/Stop (Green) & Local (Green)								
Run Time, Output Power, Motor kW, Motor kWH, Motor kVAR, & On-Time Control Power CONSTRUCTION Enclosure ANSI-61 Gray; NEMA 1 Ventilated, & IP20 Per IEC-60529; Gasket & Filter; Free-Standing; Front-Access Only Power Cables Top/Bottom Access for Input/Motor Cables Cooling Forced-Air Cooled Standards & Compliances NEC, NEMA, UL, cUL, ANSI, & American Recovery & Reinvestment Act Compliant AMBIENT CONDITIONS Ambient Temperature 0 to 40°C (50°C Option Available) Altitude 3,281 ft. Above Sea Level (Up to 14,764 ft. Option Available With Derate) Humidity 95% Maximum (Non-Condensing)			Local/Remote, Enter, Mon/Prg, Esc, Run, & Stop/Reset								
ANSI-61 Gray; NEMA 1 Ventilated, & IP20 Per IEC-60529; Gasket & Filter; Free-Standing; Front-Access Only Power Cables Top/Bottom Access for Input/Motor Cables Cooling Forced-Air Cooled Standards & Compliances NEC, NEMA, UL, cUL, ANSI, & American Recovery & Reinvestment Act Compliant AMBIENT CONDITIONS Ambient Temperature 0 to 40°C (50°C Option Available) Altitude 3,281 ft. Above Sea Level (Up to 14,764 ft. Option Available With Derate) Humidity 95% Maximum (Non-Condensing)									ge, Output	Voltage	
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Cooling Forced-Air Cooled Standards & Compliances NEC, NEMA, UL, cUL, ANSI, & American Recovery & Reinvestment Act Compliant AMBIENT CONDITIONS Ambient Temperature 0 to 40°C (50°C Option Available) Altitude 3,281 ft. Above Sea Level (Up to 14,764 ft. Option Available With Derate) Humidity 95% Maximum (Non-Condensing)	Enclosure	ANSI-61 Gr	ANSI-61 Gray; NEMA 1 Ventilated, & IP20 Per IEC-60529; Gasket & Filter; Free-Standing; Front-Access Only								
Standards & Compliances AMBIENT CONDITIONS Ambient Temperature O to 40°C (50°C Option Available) Altitude 3,281 ft. Above Sea Level (Up to 14,764 ft. Option Available With Derate) Humidity 95% Maximum (Non-Condensing)	Power Cables		Top/Bottom Access for Input/Motor Cables								
AMBIENT CONDITIONS Ambient Temperature 0 to 40°C (50°C Option Available) Altitude 3,281 ft. Above Sea Level (Up to 14,764 ft. Option Available With Derate) Humidity 95% Maximum (Non-Condensing)	Cooling		Forced-Air Cooled								
Ambient Temperature 0 to 40°C (50°C Option Available) Altitude 3,281 ft. Above Sea Level (Up to 14,764 ft. Option Available With Derate) Humidity 95% Maximum (Non-Condensing)	Standards & Compliances		NEC, NEMA, UL, cUL, ANSI, & American Recovery & Reinvestment Act Compliant								
Altitude 3,281 ft. Above Sea Level (Up to 14,764 ft. Option Available With Derate) Humidity 95% Maximum (Non-Condensing)	AMBIENT CONDITIONS										
Humidity 95% Maximum (Non-Condensing)				0 to 40°C (50°C Optio	n Available)						
			3,281 ft. Above	Sea Level (Up to 14,764 f	t. Option Availa	able With Derate)				
				95% Maximum (Non-	Condensing)						

*Typical HP Rating of a 4-Pole Motor; Contact Factory for Applications on Constant Torque Loads ** Consult Factory for UL Status





6900 V

MODEL RANGE		7000 to 10,000 HP								
Voltage Rating		6900	VAC							
Dimensions (H x W x D)	103.6 x 376.5 x 58.25									
Weight		41,500 lbs								
Current Rating (A):	523	523 598 672 747								
Nominal HP* (6900 V)	7,000	8,000	9,000	10,000						
POWER REQUIREMENTS										
Input Tolerance		Voltage: ±10%; F	requency: ±5%							
Main Circuit	Three-Phase 6600 V; Integrated >36-Pulse Copper-Wound Isolation Transformer; Multi-Level NPC Medium Voltage IGBT Output									
CONTROL SPECIFICATIONS	INPUT									
Control Method	Five-Lev	vel Pulse-Width Modulation (PWM) Outp	out Control with Neutral-Point Clamp	ing (NPC)						
V/Hz Control	V/Hz, Sens	sorless Vector Control, Variable Torque,	Closed-Loop Vector Control, & Const	ant Torque						
Control Circuit	Int	egral to Main Transformer; Includes 460	V for cooling fans & PT for 120 V Cor	ntrol						
Frequency Setting	4 to 20	mA, 0 to 10 VDC Serial Communication	Input, & Rotary Encoder Integrated	into EOI						
Speed Regulation		Open Loop: Up to 0.5%; (Closed Loop: Up to 0.1%							
Main Protective Functions	Current Limi	t, Overcurrent, Overload, Undervoltage	, Overvoltage, Ground Fault, CPU Err	or, & Soft Stall						
Overload Current Rating		100% Continuous; 115% for C	One Minute Every 20 Minutes							
CONTROL INTERFACE										
Digital Input	Ten Discrete Inputs with Programmable Functions									
Digital Output	Ten Available Digital Programmable Outputs									
Analog Input	Three Selectable Inputs Either Currents (0/4 to 20 mA) or Voltage (0 to 10 VDC)									
Analog Output	Three Selecta	ble Outputs Current (0/4 to 20 mA) or V	oltage (0 to 10 VDC) (Optional up to E	ight Maximum)						
Communication Ports	Profibus, Modbus RTU & TCP, TOSLINE-S20, TCNet, Ethernet Global Data (EGD), DeviceNet & EtherNet/IP									
SAFETY FEATURES	Standard Pad-Lock	able Input Fuse Disconnect Switch with	Vacuum Contactor, Interlocked Door	rs, & Viewing Window						
ELECTRONIC OPERATOR IN	TERFACE (EOI)									
	4-Digit, 7-Segment	t LED Display and 4x20 Character Graph Monitoring &		y for Programming,						
LED Indicators		Run (Red)/Stop (Green) & Local (Green)								
		Local/Remote, Enter, Mon/Prg, Esc, Run, & Stop/Reset								
		Frequency Command Screen; Multiple Parameters Displayed: Motor Current, Motor Speed, Motor Voltage, DC Voltage, Input Voltage, Output Voltage, Run Time, Output Power, Motor kW, Motor kWH, Motor kVAH, Motor kVAR, & On-Time Control Power								
CONSTRUCTION										
Enclosure	ANSI-61 Grav:	NEMA 1 Ventilated, & IP20 Per IEC-6052	29; Gasket & Filter; Free-Standing: Fro	ont-Access Only						
Power Cables		Top/Bottom Access for Input/Motor Cables								
Cooling		Forced-Air Cooled								
Standards & Compliances	N	NEC, NEMA, UL, cUL, ANSI, & American Recovery & Reinvestment Act Compliant								
AMBIENT CONDITIONS										
Ambient Temperature		0 to 40°C (50°C O	ption Available)							
Altitude		3,281 ft. Above Sea Level (Up to 14,7								
		95% Maximum (Non-Condensing)								
Installation	Indoor; No Direct Sunlight									

*Typical HP Rating of a 4-Pole Motor; Contact Factory for Applications on Constant Torque Loads



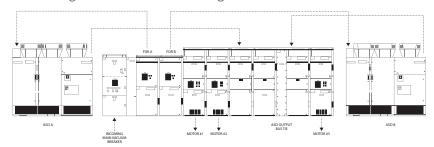


ADVANCED DESIGN TRUSTED RELIABILITY

Sync-Xfer is a solution that combines the proven reliability of a Toshiba medium voltage adjustable speed drive (ASD) with the precision of Toshiba controlgear. With Sync-Xfer, an applicable Toshiba medium voltage ASD can determine characteristics of the utility line and transfer motor supply power from variable speed to utility power via Toshiba vacuum contactors or vacuum circuit breakers. Alternatively, such ASD can capture a motor from utility power and return it to variable speed. Sync-Xfer can therefore have a significant impact by lowering a system's cost with respect to applications in which multiple motors are controlled by one or more ASDs, including those used for starting duty only.

SYNC-XFER CAPABILITIES

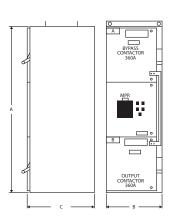
TIC controlgear and their availability of multiple configurations help every TIC customer meet or exceed their project requirements in a timely manner. Whether a project requires one or more motors and/or Toshiba ASDs (including redundant drives), a combination of Toshiba ASDs and controlgear systems can be designed to fit the ever-evolving needs of the customer.

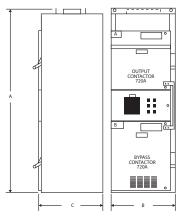


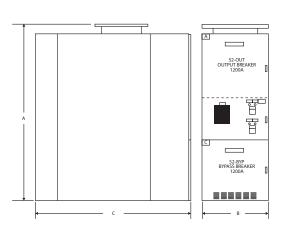
An illustration of the capability of a combined Toshiba T300MV2
ASD and controlgear solution is shown above.

The above illustration shows a dual ASD redundant Sync-Xfer 720 (720A) design. For short circuit protection, utility power is connection to an incoming vacuum circuit breaker. Feeder A (FDR A) provides three-phase power to the first adjustable speed drive (ASD A) and Feeder B (FDR B) provides three-phase power to the second adjustable speed drive (ASD B). During normal operation, ASD A transfers supply power for Motors #1 and #2 from variable speed to utility power and ASD B transfers supply power for Motor #3 from variable speed to utility power. In the event of an emergency or otherwise abnormal circumstances that render either ASD A or ASD B unfit for operation, the ASD OUTPUT BUS TIE vacuum contactor can be closed to allow either ASD A or ASD B to transfer supply power for Motors #1, #2 and #3 from variable speed to utility power, offering redundancy for critical applications.

DIMENSIONS







SYNC-XFER 360

SYNC-XFER 720

SYNC-XFER 1200

MODEL	Height A (in.)	Width B (in.)	Depth C (in.)
Sync-Xfer 360	90	30	36
Sync-Xfer 720	104	36	36
Sync-Xfer 1200	95	36	84

COMMUNICATION OPTIONS

The T300MV2 drive offers a wide array of easily installed option boards. These boards allow the user to communicate with a wide variety of systems. Options include:

- DeviceNET
- TOSLINE-S20
- Ethernet/IP
- TCNet
- Modbus RTU Modbus TCP
- Ethernet Global Data

(EGD)

PROFIBUS

ADDITIONAL OPTIONS

The T300MV2 can be supplied with additional options to expand control, allow greater flexibility, or provide better protection for a user's application. These Options include:

- Redundant Fans
- Door-Mounted Equipment: Meters, Pilot Lights, Speed Potentiometer, and Switches
- dV/dT (2400 V & 4160 V) or Sinewave Output Filters (4160 V)
- Sync-Xfer/Capture (Multiple Motors Synchronize Transfer & Capture)
- High Voltage Input Up to 15 kV (4160 V & 6600 V)

- Common AC Bus (Drives Rated Up to 2000 HP)
- Synchronous Motor Control (AC Brushless/ DC Brush Type)
- Power Metering
- Power I/O Cabinets (Input and Output power termination 4160 V & 6600 V)
- Drive & Motor Space Heater (External Power)

OTHER SPECIAL FEATURES

- Voltage Source Inverter (VSI) with Simple & Reliable V/f Control and PID Control
- Air-Cooled Solutions from 300 to 11,000 HP
- Induction Motor Sensorless Motor Sensorless Vector Control, Closed Loop Vector Control (Using Pulse Generator Encoder or Resolver)



















Adjustable Speed Drives • Motors • Motor Controls



