

# MEIDEN VT330DY AC Dynamometer Drives

**Meiden VT330DY AC Dynamometer Drives** are the newest series of AC dynamometer drives. Meiden has utilized the latest technology in converter and inverter design in the development of this new high performance series of AC drives. Our customers can now have the benefits high performance, low noise, and space efficiency with liquid cooled IGBT power devices, and all digital sine wave PWM control with the latest inverter control techniques.

## Features

- **Utilizes the latest IGBT devices**  
Allowing the VT330DY takes advantage of the latest in converter and inverter technology. (IGBT can run up to 6kHz)
- **Liquid Cooled IGBT devices (In high current models)**  
A new internal liquid cooling circuit and easy to service modular design provides a space savings of up to 25%
- **All VT330DY provide high accuracy and fast current response**  
Utilizes the latest AC converter and inverter control techniques.
- **Low electrical noise**  
Reduced electromagnetic noise [approximately 9dB(A) lower than the former model]
- **High speed digital control interface (Option)**  
Fully digitalized test system is available
- **High harmonic suppression (Option)**  
Sine wave PWM converter control



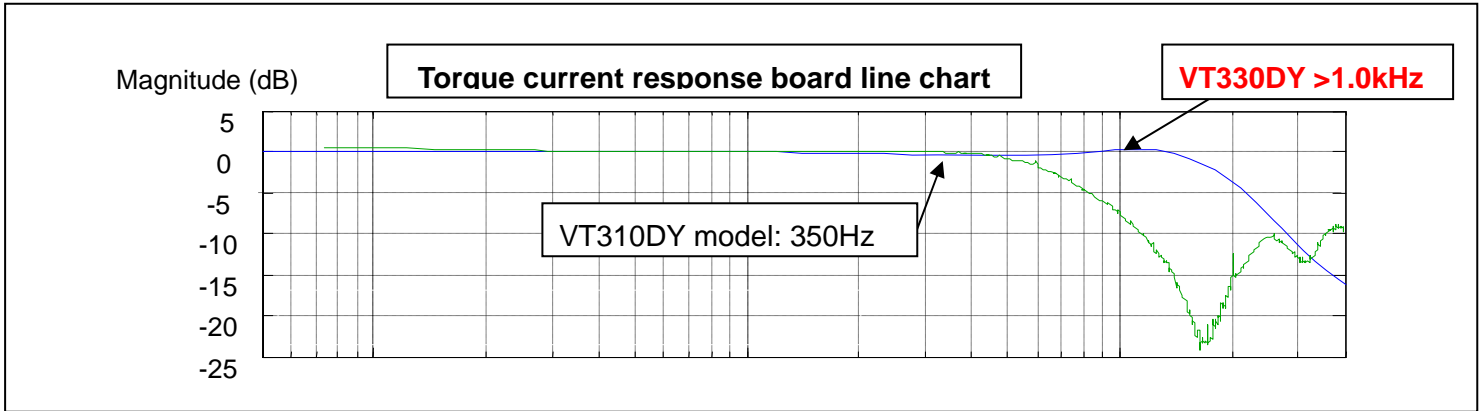
## Control Performance

Item		Standard	Option
Capacity		90 to 550 kW	Small Capacity : 10 to 90 kW Large Capacity : 600 to 1100 kW
Rated Input Voltage		440VAC ±10%, 50/60Hz, 3Φ (Standard)	
Rated Output Voltage		360V Standard (Actual voltage dependent on application)	
Output Rating		Class A0 (Continuous 100%)	
Circuit system	Converter	IGBT 120° current carrying control	Sine wave PWM current control
	Inverter	IGBT voltage type current control	
Control system		All digital sine wave PWM control	
Speed control * (ASR)	Set resolution	Analog and digital : 0.01%	
	Setting method	Analog : 0 to 10 V	Digital : Serial communication
	Accuracy	±0.1% F.S. (25°C ± 10°C)	
	Max. Speed	20,000 rpm (controller)	
Torque control * (ATR)	Set resolution	Analog and digital : 0.01%	
	Setting method	Analog : -10 to 10 V	Digital : Serial communication
	Accuracy	±0.5% F.S. + accuracy of detector (25°C ± 10°C)	
Current control (ACR)	Set resolution	Analog and digital : 0.01%	
	Setting method	Analog : -10 to 10 V	Digital : Serial communication
	Response	1.5kHz	
Source power factor		0.9	1.0

\* Control specifications are based on standard controls and speed and torque sensors used on Meiden dynamometers



### Response Graph



### Standard Rating

Type	Capacity (kVA)	Output Current (A)	Output Voltage (V)	Dynamometer Drive Range	Figure	Width (mm)			Height (mm)			Depth (mm)	Weight (kg)
						W1	W2	W3	Base	Panel	Air Inlet		
H1600	160	250	360	90/90	1	1200	700	X	50	1900	150	600	900
H2450	245	390	360	180/180	1	1200	900	X	50	1900	150	600	1000
H3200	320	510	360	180/220	1	1200	900	X	50	1900	150	600	1000
H4000	400	640	360	280/300	2	1200	1300	X	50	1900	150	600	1250
H4700	470	750	360	330/370	2	1200	1300	X	50	1900	150	600	1250
H5600	560	900	360	330/370	3	1400	900	1100	50	2100	X	600	1800
H7000	700	1120	360	400/470	3	1400	900	1100	50	2100	X	600	1900
H8500	850	1350	360	470/550	3	1400	900	1100	50	2100	X	600	2000

