



# MEIDEN LIQUID COOLED AC Dynamometer

**Liquid Cooled FREC Dynamometer (FCDY)** is an AC electric dynamometer that is compact, has low inertia, with a wide rating range capable of supporting from low-speed to high-speed applications. The standard FCDY has been modified with a totally enclosed liquid cooling system to achieve downsizing and low noise. In comparison liquid cooling provides 1.2-fold improvement in maximum speed and 2-fold improvement in torque over conventional FCDY dynamometers.



## Features

- **Compact, space saving size**  
Smaller dimensions for a given power capability
- **Low Inertia**  
Liquid cooling allows for a smaller rotor for a given torque capability.
- **Low noise**  
Reduced noise [about 9dB(A)] lower than standard FCDY
- **Increased maximum speed**  
Maximum speed is increased by 20%
- **Higher torque ratings**  
Double torque capability over the comparable FCDY.
- **Wider power rating range**  
A wider power range for a given dynamometer provides the capability of running a wider range of applications.

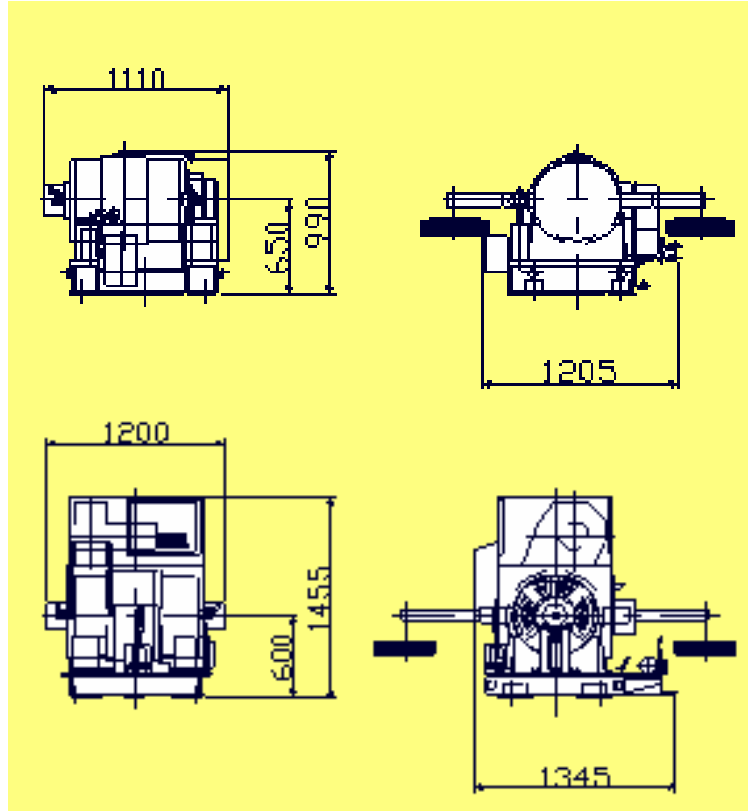
## Ratings

Frame Number	Abs./Mot. Power (kW)	Base/Max. Speed (min-1)	Abs./Mot. Torque (Nm)	Moment of Inertia J(kgm2)
280M	300 / 250	5,000 / 12,000	573 / 477	0.5
280L	300 / 250	4,000 / 9,000	716 / 597	0.65
315L	470 / 350	4,000 / 10,000	1,122 / 836	1.56
315L	300 / 250	2,500 / 10,000	1,146 / 955	1.3
355M	220 / 180	1,000 / 8,000	2,101 / 1,719	3.65
355L	300 / 250	1,000 / 8,000	2,865 / 2,387	4.55

## Comparison of Current FCDY and Liquid Cooled FCDY

Liquid Cooled FCDY rating : Absorption 300kW – 5,000 / 12,000 min-1  
 Standard FCDY rating : Absorption 300kW – 5,000 / 10,000 min-1

**Liquid Cooled FCDY**



**Standard FCDY**

## Noise Comparison

