

Azimuth Rotator RC5-x Series

Advanced Driving Mechanism and Gear Structure in Use of Incomparable Quality Gear Materials Makes Large Rotating with Minimum Backlash.



1. GENERAL

CD rotator model RC5-x series is a rotator set for amateur radio antennas sizing range from medium to ultra-large type. The RC5-x series is modeled after the CD medium-size antenna rotator used by professionals of which its durability is unequalled, and is incorporates a number of novel mechanism with incomparable reliability and durability.

ROTATOR UNIT As in the medium-size rotators used by professionals, the reduction gear of the model RC5-x series can withstand an external torque that provides a powerful braking force, making gear protection and braking torque via a separate mechanism unnecessary. RC5's reduction gear mechanism counters pressure exerted by strong impacts from wind and the antenna's inertia during rotation and braking. The reducer mechanism consists of spur gears of large diameter and thickness, a worm gear and a powerful motor. These low-backlash components offer quiet rotating features. Much care has been taken into consideration in other details, such as a mast guide, which permits centering of the mast guide, which permits centering of the mast merely by setting it in the guide during insertion.

CONTROL UNIT The RC5 control unit is designed and to be able to give user for ease of use and easy readability. The direction indicator permits reading of two beam bearings and free section of the reference bearing point by overlay (subscale plate). All the models are equipped with speed control circuits for ease of operation.

2. CHARACTERISTIC OF EACH MODEL

RC5-1, RC5-3 This series is for medium-size antenna and uses low-cost gears and a small motor. RC5-1 is an economy set, with simplified control circuits in the control unit and a simplified display on the indicator unit though outer-looks of both model RC5-1 and RC5-3 are the same. RC5-3 provides standard with the P.SET function and RDC circuit.

**RC5A-2, RC5A-3
RC5B-3** This series was produced for large-size antennas, high-yield materials are used for gears and other rotary parts in the rotor and a high-output motor is used to guarantee rotating torque of at least 16kg·m for RC5A and 22kg·m for RC5B type which is designed for rotating an extra large-size antenna offering powerful braking and rotating torque, and retarding torque of at least 200 and 250 respectively. With respect to the control unit, RC5A-x and RC5B are provided standard with the RDC circuit.

For Super Heavy-Duty Rotator

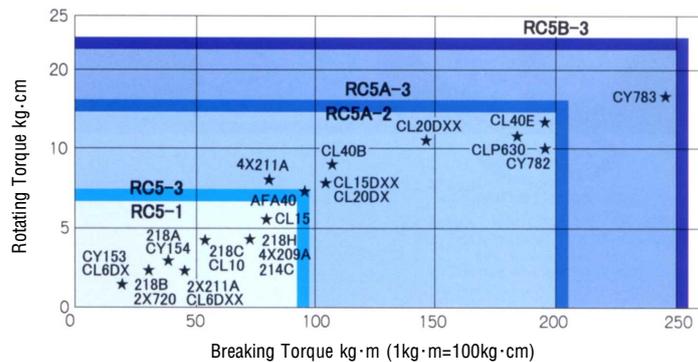
RC10S This CD extra large rotator model RC10S is originally designed for rotating a big commercial use log-periodic antenna. It has a high reliability and durability, applicable to use even under these strict conditions, such as a large torque applications are required, with an icy snowy strong wind are imposed. The unique speed reduction system by use of large torque of driving motor, high impact chains and steel housing make it possible to rotate a big antenna that requires a high braking torque and vertical load.

3. SELECTION OF ROTATOR

The most important criteria in the selection of a rotator are retarding torque and rotating torque. Because different antenna have different weights and slenderness ratios, the rotator's characteristics vary to a large extent. Even among antennas of the same weight, large braking torque is required for an antenna of long boom length. The list below indicates the required performances of representative CD antenna rotator models, that these performances were calculated based on a wind velocity of about 30m/s. These performances are applicable to one antenna only, so a sufficient margin should be considered for the rotators to be used for more than two antennas. If the rotator is in use at reduced speed, the tolerance for braking torque increases by 20~30%.

4. OVERLAY/CONTROL UNIT

Great Circle map printed overlay is available as an optional parts. This option is provided standard in all the models above type RC5x. Contact your local dealer for the details in obtaining this option.



SPECIFICATION

Model	RC5-1	RC5-3 RC5-3P	RC5A-2	RC5A-3 RC5A-3P	RC5B-3 RC5B-3P	RC5B-4 RC5B-4P	RC5-1DC	RC10S
Rotating Torque (kg/m)	6		16		22		5	30
Brake Torque (kg/m)	80	90	200		250		90	400
Mast Diameter (mm)	48-63							60-77
Vertical Load (kg)	400		700				400	1,000
Horizontal Load (kg)	800		1,000				800	1,500
Speed Sec.	50Hz/360°		75~110			95~150	60~160	75~110
	60Hz/360°		60~95			80~125	60~160	60~95
Reversal Time (sec.)	0	1	2	3		0	3	
Preset Function	—	Provided	—	Provided		—	Provided	
Preset Accuracy	—	± 8°	—	± 8°		—	± 8°	
Power Requirement	90VA		150VA		200VA		12~15VDC	170VA
Indicator Accuracy	Less than ± 4°						Less than ± 3°	
Weight (kg)	5.0		7.0		8.5		5.0	29.5

- Notes: 1) RC5x-P is PC tracker connectable type.
 2) Those models which attaches 25m long cable are also available.
 3) Power Requirement is 100VAC, Control cable requires 7-core. (*RC5-1DC: 12VDC, 5-core)