

# YU5R Antenna Rotator

by Goran Stankovic dip.ing.el. – YT2FSG – Date: 15.09.2014.

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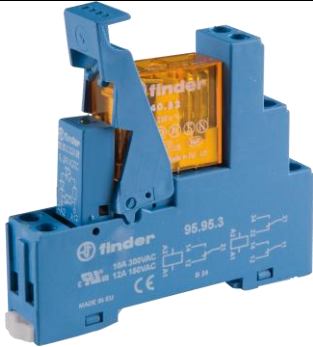


At the steel „U“ profile dimension: 100x50mm, welded two carriers for mast bearing and carrier for double worm gear with the motor. Below the gears are mounted two switches as a end position and potentiometers as a position indicator. For position indicator we use the 10 turns potentiometer and gears 4.5:1. Shaft of potentiometer is 6.35 mm, on gear 10, it is necessary to increase bore at 6.35mm. Gear 15/45 is mounted on the shaft of the pipe for mast antenna.

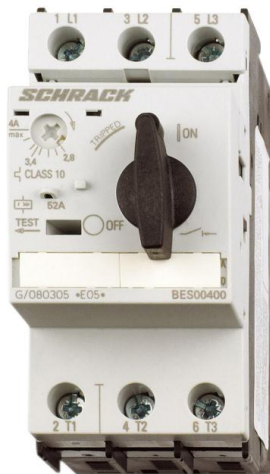
	<p>Double worm gear <b>CHM 040/075 i=1500</b>          CHM40 U PAM71 i=30          CHM75 B14 PAM90 i=50</p> <p>Motor <b>JM 71 A4 B14 KW 0,25</b>          230/400V 1.47/0.85A 0.25kW 1360rpm/min  <math>\cos\varphi=0.65</math> <math>\eta=65\%</math></p> <p><a href="http://www.chiaravalli.com/eng/gear-boxes-electric-motors.php">http://www.chiaravalli.com/eng/gear-boxes-electric-motors.php</a>  <a href="http://elektrolune.co.rs/puzni-reduktori">http://elektrolune.co.rs/puzni-reduktori</a></p>
	<p>Gear 15/45 module 1, <math>\varnothing 47</math>mm, bore 6mm          Conrad Electronic, Item no.: 241989  <a href="http://www.conrad.de/">http://www.conrad.de/</a></p>
	<p>Gear 10, module 1, <math>\varnothing 12</math>mm, bore 6mm,  <b>increase bore at 6.35mm</b>          Conrad Electronic, Item no.: 231754  <a href="http://www.conrad.de/">http://www.conrad.de/</a></p>
	<p>Multi Turn Potentiometer, 10 turns, 1K, Shaft: 6.35 mm          Item no.: 534-1,0K  <a href="http://www.reichelt.de/">http://www.reichelt.de/</a>  <a href="http://www.conrad.de/">http://www.conrad.de/</a></p>



2pcs. Mini-Snap-Action Switches 250V  
 Item no.: MAR 1005.1004  
<http://www.reichelt.de/>



4pcs. Relay socket for FIN 40.51/52/61/41.52, blue  
 Item no.: FIN 95.55.3  
 4pcs. Plug-in relays, 2x switch, 250V/8A, 12V,  
 Item no.: FIN 40.52.9 12V  
<http://www.reichelt.de/>



1pcs. Motor protection switch, size 00  
 Schrack  
 Order No: BESD0100

<http://www.schrack.com/industry/contactors/motor-protection/>

**Set the current to 0.85A**

