

CSB Series Broadband Motorized Coaxial Switches

Features

- New and improved motor, drive mechanism, and electronics married to field-proven transfer mechanism
- Broadband – DC to 806 MHz
- 3 or 4 port configurations
- Three port applications require only the addition of a shorting cap
- Nonvolatile position memory
- VSWR <1.05:1 typical
- Isolation > 55 dB typical
- Drive mechanism provides precise position control
- Available with 115 Volt or 230 Volt AC motors
- 12 or 24 volts DC control voltage
- Mount in any orientation
- Can be manually operated by hand, without tools or disassembly



FM, VHF, and UHF Motorized Coaxial Switches

ERI broadband motorized coaxial switches are designed for operation in FM, VHF, and UHF broadcast systems. This new motorized switch is a coplanar design that simplifies interconnecting transmission line requirements and allows for more compact equipment configurations with fewer expensive coaxial elbows. The switches are engineered to provide high capability and long life. The drive mechanism provides precision 90 degree rotation of the contacts. The switches utilize a unique, flat plane, silver plated, dual-contact is designed to provide high power capability and long life. The switch drive can be either 115 VAC or 230 VAC with control voltages of 12 VDC or 24 VDC. The switch can be operated manually without tools or disassembly. If power to the drive is interrupted, the control circuit provides nonvolatile memory so that the switch either holds its position or continues its transition upon re-application of AC power.

The standard configuration provided is a four-port coaxial switch, the standard model can be adapted to three port configurations with the addition of a shorting cap. This allows the switch to be used in future configurations requiring 4 ports, by only removing the shorting cap.

Part Numbers for AM, FM, and VHF TV Motorized Coaxial Switches

Part Number	Size	Impedance	Drive Voltage	Control Voltage
CS203C-112	1 5/8-inch	50 Ohm	115 VAC	12 VDC
CS203C-124	1 5/8-inch	50 Ohm	115 VAC	24 VDC
CS203C-212	1 5/8-inch	50 Ohm	230 VAC	12 VDC
CS203C-224	1 5/8-inch	50 Ohm	230 VAC	24 VDC
CS300C-112	3 1/8-inch	50 Ohm	115 VAC	12 VDC
CS300C-124	3 1/8-inch	50 Ohm	115 VAC	24 VDC
CS300C-212	3 1/8-inch	50 Ohm	230 VAC	12 VDC
CS300C-224	3 1/8-inch	50 Ohm	230 VAC	24 VDC
CS400C-112	4 1/16-inch	50 Ohm	115 VAC	12 VDC
CS400C-124	4 1/16-inch	50 Ohm	115 VAC	24 VDC
CS400C-212	4 1/16-inch	50 Ohm	230 VAC	12 VDC
CS400C-224	4 1/16-inch	50 Ohm	230 VAC	24 VDC

NOTE: Specify AC motor voltage (115 or 230 VAC) and DC control voltage (12 or 24 VDC) at time of order.

CSB Series Motorized Coaxial Switch Specifications

CS203C 1-5/8-inch Motorized Coaxial Switch Specifications

Model:	CS203C
Size:	1 5/8-inch
Impedance:	50 Ohms
Frequency Range:	DC-806 MHz
Power Rating, Peak:	165 kW
Power Rating, Average:	140 kW at 1 MHz
	30 kW at 25 MHz
	15 kW at 108 MHz
	9 kW at 250 MHz
	6 kW at 470 MHz
	4 kW at 806 MHz
Weight:	34 lbm 15.4 kg
Shorting Cap (for 3 port use):	CS008
VSWR:	1:03:1 or better
Insertion Loss:	0.06 dB or less
Isolation:	60 dB or more
Switching Time:	~ 3 sec
RF Connectors:	EIA Flanged*
AC Power Current, 115 VAC:	0.45 A
AC Power Current, 230 VAC:	0.21 A
Control Power Current, 12 VDC:	140 mA
Control Power Current, 24 VDC:	70 mA
*Unflanged available .	

CS300C 3-1/8-inch Motorized Coaxial Switch Specifications

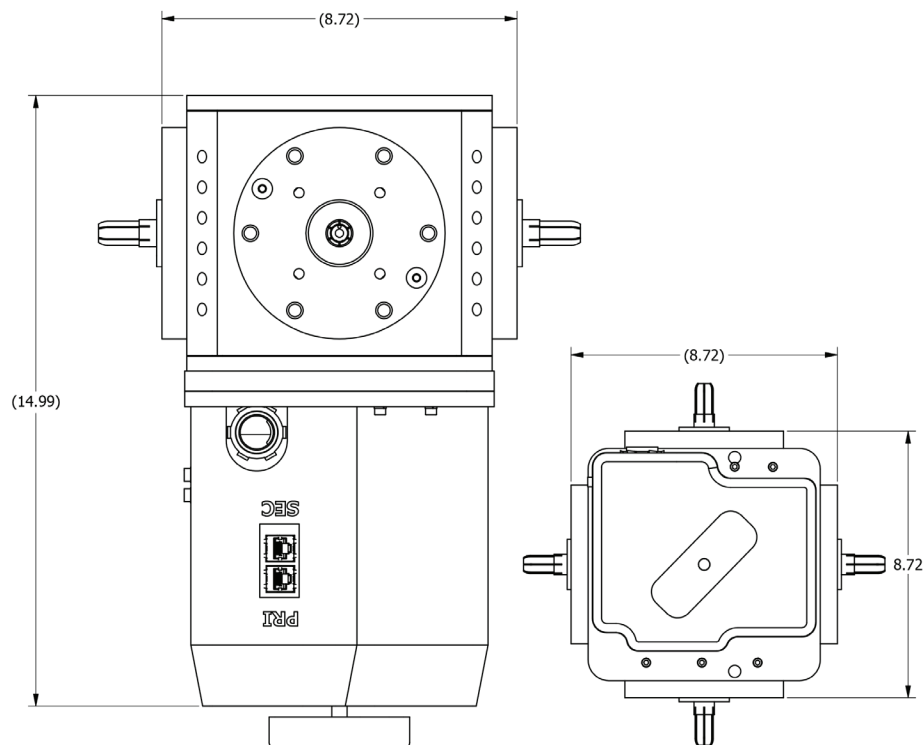
Model:	CS300C
Size:	3 1/8-inch
Impedance:	50 Ohms
Frequency Range:	DC-806 MHz
Power Rating, Peak:	300 kW
Power Rating, Average:	300 kW at 1 MHz
	75 kW at 25 MHz
	40 kW at 108 MHz
	30 kW at 250 MHz
	22 kW at 470 MHz
	17 kW at 806 MHz
Weight:	33 lbm 15.0 kg
Shorting Cap (for 3 port use):	CS009
VSWR:	1:05:1 tuned to channel
Insertion Loss:	0.06 dB or less
Isolation:	60 dB or more
Switching Time:	~ 3 sec
RF Connectors:	EIA Flanged*
AC Power Current, 115 VAC:	0.45 A
AC Power Current, 230 VAC:	0.21 A
Control Power Current, 12 VDC:	140 mA
Control Power Current, 24 VDC:	70 mA
*Unflanged Available.	

CSB Series Motorized Coaxial Switch Specifications

CS400C 4-1/16-inch Motorized Coaxial Switch Specifications

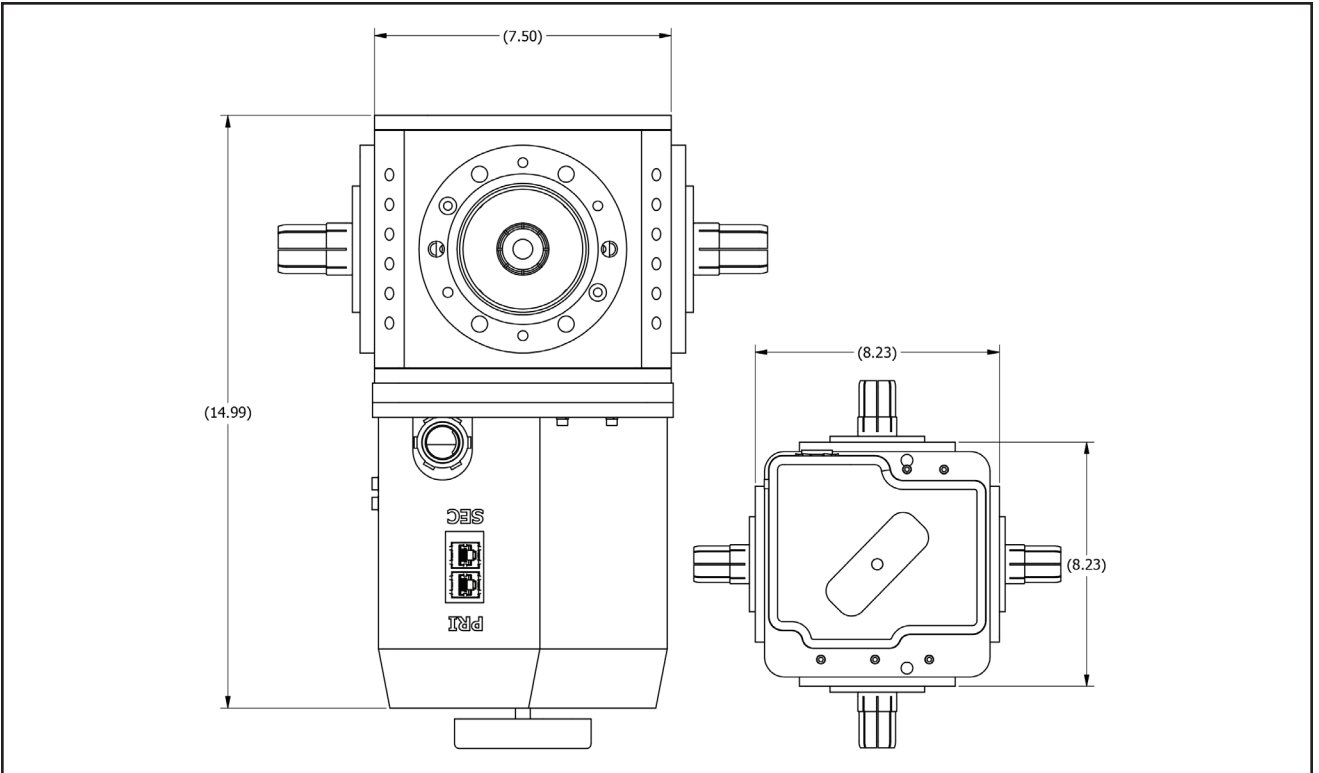
Model:	CS400C
Size:	4 1/16-inch
Impedance:	50 Ohms
Frequency Range:	DC-806 MHz
Power Rating, Peak:	500 kW
Power Rating, Average:	500 kW at 1 MHz
	125 kW at 25 MHz
	70 kW at 108 MHz
	49 kW at 250 MHz
	35 kW at 470 MHz
	26 kW at 806 MHz
Weight:	36 lbm 16.3 kg
Shorting Cap (for 3 port use):	CS011
VSWR:	1:05:1 or better
Insertion Loss:	0.06 dB or less
Isolation:	60 dB or more
Switching Time:	~ 3 sec
RF Connectors:	Flanged*
AC Power Current, 115 VAC:	0.45 A
AC Power Current, 230 VAC:	0.21 A
Control Power Current, 12 VDC:	140 mA
Control Power Current, 24 VDC:	70 mA
*Unflanged available .	

Motorized Coaxial Switch Outline Drawings

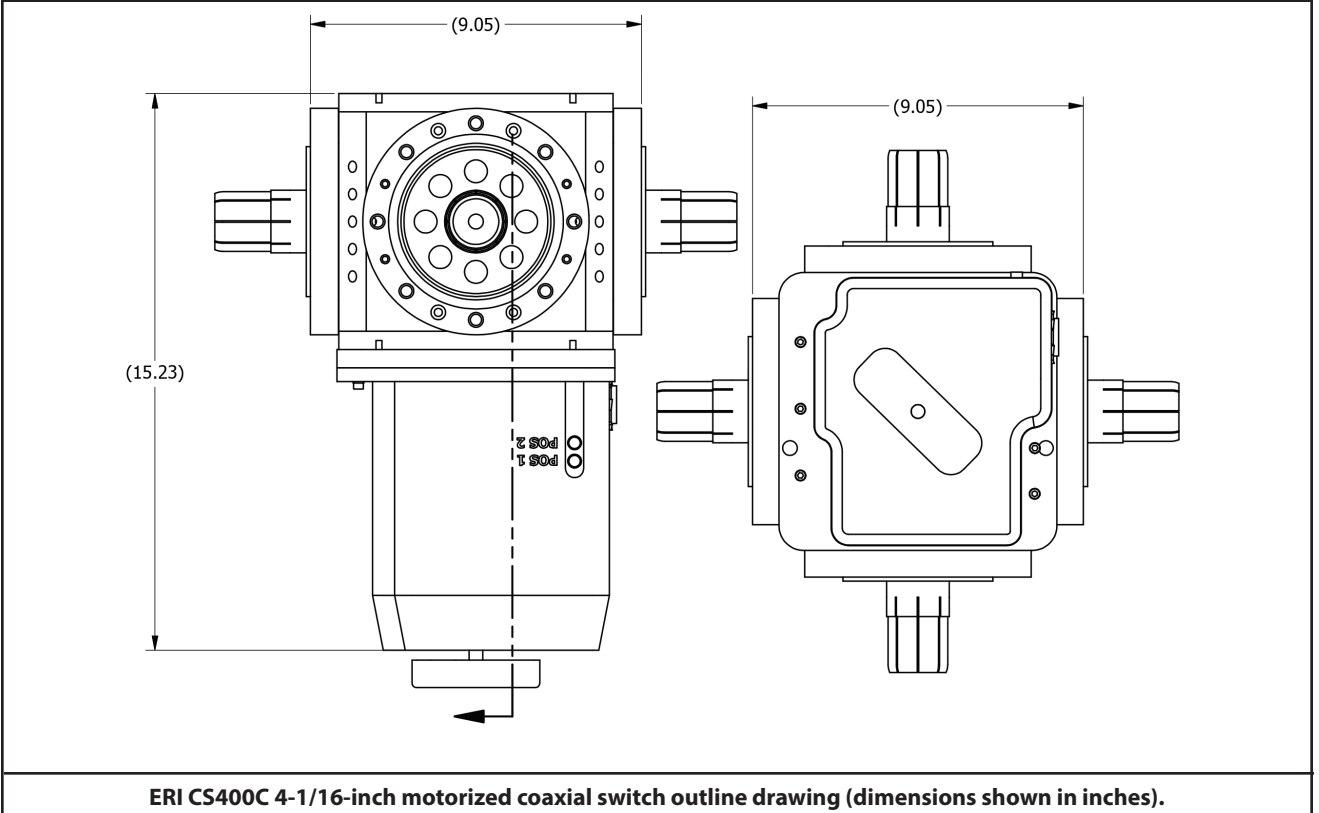


ERI CS203C 1-5/8-inch motorized coaxial switch outline drawing (dimensions shown in inches).

CSB Series Broadband Motorized Coaxial Switches



ERI CS300C 3-1/8-inch motorized coaxial switch outline drawing (dimensions shown in inches).



ERI CS400C 4-1/16-inch motorized coaxial switch outline drawing (dimensions shown in inches).

CSB Series Broadband Motorized Coaxial Switches

Motorized Coaxial Switch Accessories

<p>CS008</p>	<p>1-5/8-inch shorting cap to convert four port coaxial switch to 3 port coaxial switch.</p>		<p>CS011</p>	<p>4-1/16-inch shorting cap to convert four port coaxial switch to 3 port coaxial switch.</p>	
<p>CS009</p>	<p>3-1/8-inch shorting cap to convert four port coaxial switch to 3 port coaxial switch.</p>		<p>CS012</p>	<p>6-1/8-inch shorting cap to convert four port coaxial switch to 3 port coaxial switch.</p>	

Specifications subject to change without notice.