

### CD60B-1

### +65°C

# **AC Motor Start Capacitors Optional Metal Case**

#### Features-

- Metal Case, Moisture and Oil Resistant
- Voltages from 110 VAC-330 VAC
- SEB-1 Meets EIA Type 1 Specifications
- SEB-2 Meets EIA Type 2 Specifications



### **General Specifications-**

#### Operating Temperature:

-40 to +65°C

#### Voltage Range:

110 - 330 VAC

#### Capacitance Range:

 $21 - 1280 \mu F$ 

#### Capacitance Tolerance:

 $-0\% \sim +20\%$ 

#### Operating Frequency:

50 - 60Hz

#### Case Size:

17 Standard Sizes from
1.875" x 2.175" - 3.030" x 5.175"
(Others Sizes Available Upon Request.)

#### Termination:

1/4" Quick Disconnect Terminals (Std.)

#### Performance Specifications:

Meets Requirements of EIA-463-A SEB-1 Meets Type 1, Heavy Duty, Specifications SEB-2 Meets Type 2, Standard Duty, Specifications.



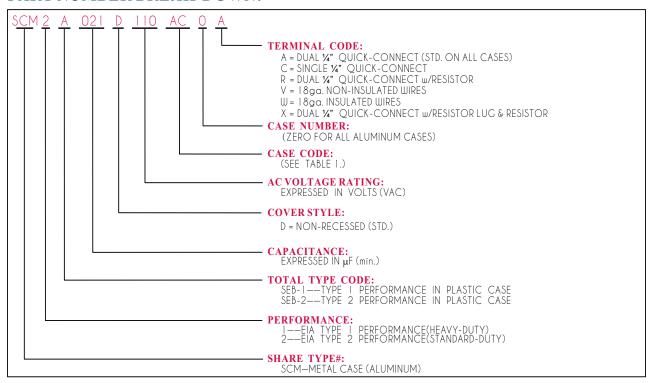
#### **Product Description:**

SHARE's type SEB-1 and SEB-2 AC Motor Start units are non-polarized aluminum electrolytic capacitors designed for intermittent AC duty. These capacitors are used in starting fractional horsepower, single-phase electric motors, as well as in gear motor applications. The capacitors are housed in metal cans, with plastic insulation. Units can be supplied with bleeder resistors and lead wires if required.

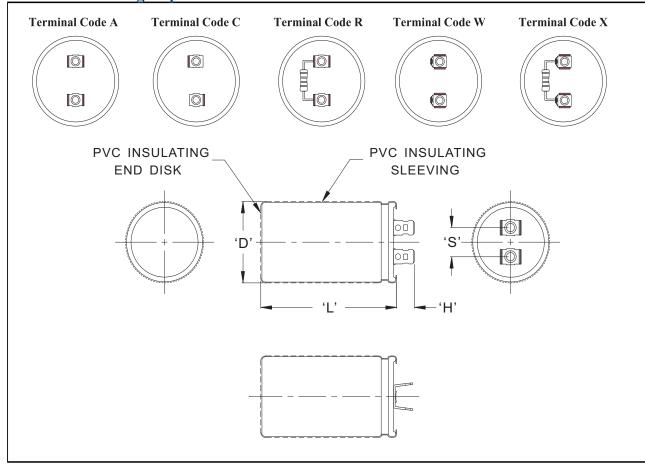


## CD60B-2

#### **PART NUMBER BREAK-DOWN:**



**AC Motor Starting Capacitor Dimensions** 





## CD60B-3

#### **CONTRUSCTION DATA**

The manufacturing process begins with the anode foil being electrochemically etched to increase the surface area and then "formed" to produce the aluminum oxide layer. Both the anode and cathode foils are then interleaved with absorbent paper and wound into a cylinder. During the winding process, aluminum tabs are attached to each foil to provide the electrical contact.

The deck, complete with terminals, is attached to the tabs and then folded down to rest on top of the winding. The complete winding is impregnated with electrolyte before being housed in a suitable container, usually an aluminum can, and sealed. Throughout the process, all materials inside the housing must be maintained at the highest purity and be compatible with the electrolyte.

Anode foil

Electrolytic paper

Anode foil

Each capacitor is aged and tested before being sleeved and packed. The purpose of aging is to repair any damage in the oxide layer and thus reduce the leakage current to a very low level. Aging is normally carried out at the rated temperature of the capacitor and is accomplished by applying voltage to the device while carefully controlling the supply current. The process may take several hours to complete.

Damage to the oxide layer can occur due to variety of reasons:

- Slitting of the anode foil after forming
- Attaching the tabs to the anode foil
- Minor mechanical damage caused during winding

A sample from each batch is taken by the quality department after completion of the production process.

The following tests are applied and may be varied at the request of the customer. In this case the batch, or special procedure, will determine the course of action.

#### Electrical:

- Leakage current
- Capacitance
- ESR
- Impedance
- Tan Delta

#### Mechanical/Visual:

- Overall dimensions
- Torque test of mounting stud
- Print detail
- Box labels
- Packaging, including packed quantity

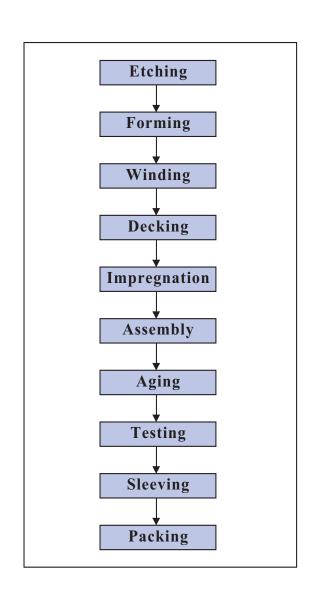




Table 1. Case Dimensions (in.)

CASE CODE	CASE NUMBER	'D' ± 0.020	'L' ± 0.020	<b>'L'</b>	'Н'
JL*	0	1.030	1.875	0.375 nom	0.400 max
JM	0	1.030	2.175	0.375 nom	0.400 max
JR	0	1.030	2.675	0.375 nom	0.400 max
MP	0	1.405	2.375	0.500 nom	0.400 max
MR	0	1.405	2.675	0.500 nom	0.400 max
MS	0	1.405	3.175	0.500 nom	0.400 max
MT	0	1.405	4.175	0.500 nom	0.400 max
NT	0	1.530	4.175	0.500 nom	0.400 max
PR	0	1.780	2.675	0.625 nom	0.400 max
PS	0	1.780	3.175	0.625 nom	0.400 max
PT	0	1.780	4.175	0.625 nom	0.400 max
RS	0	2.030	3.175	0.875 nom	0.400 max
RT	0	2.030	4.175	0.875 nom	0.400 max
ST	0	2.530	4.175	0.875 nom	0.400 max
SV	0	2.530	5.175	0.875 nom	0.400 max
TT	0	3.030	4.175	1.000 nom	0.400 max
TV	0	3.030	5.175	1.000 nom	0.400 max

Diameter Tolerance:  $\pm 0.032$ , Length Tilerance:  $\pm 0.063$ 

\*Not listed as Standard EIA Case Sizes

Metal can AC Motor Start capacitors are custom designed. Inquire with the factory for availability.