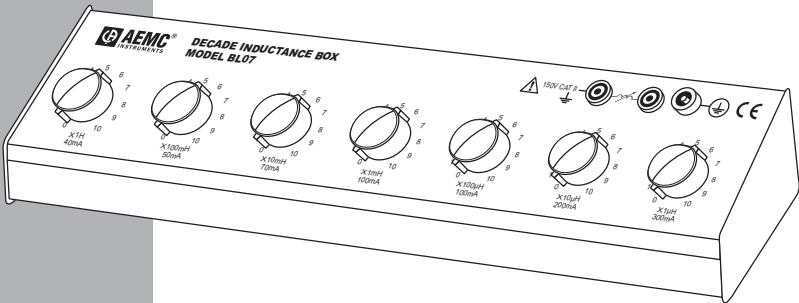


- INDUCTANCE DECADE BOX
- BOÎTES DE INDUCTANCE
- CAJAS DE INDUCTANCIA

# BL07



ENGLISH

FRANÇAIS

ESPAÑOL

**User Manual**

**Notice de fonctionnement**

**Manual de instrucciones**





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**ENGLISH****Warning**

- Only use these decade boxes on Category II installations for voltages that do not exceed 150V in relation to the earth.

**1.1 International Electrical Symbols**

This symbol on the instrument indicates a WARNING and that the operator must refer to the user manual for instructions before operating the instrument. In this manual, the symbol preceding instructions indicates that if the instructions are not followed, bodily injury, installation/sample and product damage may result.



Ground (Earth) Terminal



Protective Ground (Earth)

**1.2 Receiving Your Shipment**

Make sure that the contents shipped are consistent with the packing list. Notify your distributor of any missing items. If the equipment appears to be damaged, file a claim immediately with the carrier and notify your distributor at once, giving a detailed description of any damage. Save the damaged packing container to substantiate your claim.

**1.3 Ordering Information****Decade Inductance Box Model BL07**(7 decades - 1 $\mu$ H to 11.11111H) ..... **Cat. #2131.27****Accessories:**Safety leads with connectors  $\varnothing$  4mm, length 9.8" (25cm)..... **Cat. #2131.35**

## 1.4 Operation

The ground (earth) terminal must be connected to a protective ground (earth) before taking any measurements.

Do not inject any voltage measurements greater than 150V to ground (earth) and comply with the maximum acceptable current for each decade switch.

- Inductance box with 7 decades; 11 position switches.
- Total inductance: as the inductances are specified in accuracy at different frequencies, the sum of the values cannot be considered to represent the total inductance which can be attained.
- The residual inductance is approximately  $<1\mu\text{H}$ .
- Output on safety sockets  $\varnothing$  4mm.

## 1.5 Specifications

|           |                  |                   |                    |       |       |        |       |
|-----------|------------------|-------------------|--------------------|-------|-------|--------|-------|
| Range     | x1 $\mu\text{H}$ | x10 $\mu\text{H}$ | x100 $\mu\text{H}$ | x1mH  | x10mH | x100mH | x1H   |
| Accuracy* | 3%               |                   |                    |       | 5%    |        | 10%   |
| Frequency | 1MHz             | 600KHz            | 300KHz             | 50KHz | 20KHz | 10KHz  | 10KHz |

\*Reference measurements: Frequency = 10KHz; Max DC Current = 10mA

### Additional Information:

|                                   |                  |                   |                    |       |       |        |       |
|-----------------------------------|------------------|-------------------|--------------------|-------|-------|--------|-------|
| Range                             | x1 $\mu\text{H}$ | x10 $\mu\text{H}$ | x100 $\mu\text{H}$ | x1mH  | x10mH | x100mH | x1H   |
| Frequency from 50Hz to...         | 1MHz             | 600KHz            | 300KHz             | 50KHz | 20KHz | 10KHz  | 10KHz |
| Accuracy                          | 5%               |                   |                    |       | 7%    |        | 12%   |
| Max DC Current (mA)               | 300              | 200               | 100                | 100   | 70    | 50     | 40    |
| Max Serie Resistance ( $\Omega$ ) | 3                | 10                | 60                 | 80    | 150   | 650    | 16K   |

**Weight/Dimensions:** 3 lbs (1.4kg); 16 x 3.4 x 3" (410 x 86 x 76mm)

**Operating Temperature:** 14° to 131°F (-10° to + 55°C)

**Storage Temperature:** -40° to 158°F (-40° to + 70°C)

**Relative Humidity:** 20% < RH < 96%

**Altitude:** 2000m

**Watertightness (as per EN 60529 Ed. 92):** Protection index IP 40

**Rated Voltage:** 150V

**Installation:** Category II - Pollution level 2

# FRANÇAIS

**Attention!**

- Ces boîtes à décades peuvent être utilisées sur des installations de Catégorie II, pour des tensions n'excédant pas 150V par rapport à la terre.

## 2.1 Signification du Symbole



ATTENTION! Consulter la notice de fonctionnement avant d'utiliser les boîtes à décades. Dans la présente notice de fonctionnement, les instructions précédées de ce symbole, si elles ne sont pas bien respectées ou réalisées, peuvent occasionner un accident corporel ou endommager les boîtes à décades et les installations.



Borne de terre



Terre de protection

## 2.2 A réception de votre commande

Vérifier que le contenu est consistant avec la liste de colisage. Notifier votre distributeur immédiatement de tout produit manquant. Si le produit semble endommagé, notifier le transporteur immédiatement, décrivant exactement le dommage. Garder l'emballage pour étayer votre plainte.

## 2.3 Pour Commander

Decade Inductance Box Model BL07 ..... **Cat. #2131.27**  
(7 décades - 1 $\mu$ H to 11.11111H )

### Accessoires:

Cordons de sécurité fiches  $\varnothing$  4mm, longueur 25 cm ..... **Cat. #2131.35**

## 2.4 Utilisation - Mode d'emploi

Il faut impérativement raccorder la borne de terre à une terre de protection avant d'effectuer une mesure.

Ne pas injecter de mesure de tension supérieure à 150V par rapport à la terre et respecter le courant max. admis par chaque décade.

- Boîte d'inductances à 7 décades; commutateurs 11 positions
- Inductance total: Les inductances étant spécifiées a des fréquences différentes, la somme des valeurs sur différentes décade n'est pas représentative de l'inductance totale.
- L'inductance résiduelle est  $<1\mu\text{H}$ .
- Sortie sur douilles de sécurité  $\varnothing$  4mm

## 2.5 Caractéristiques

| Gamme       | x1 $\mu\text{H}$ | x10 $\mu\text{H}$ | x100 $\mu\text{H}$ | x1mH  | x10mH | x100mH | x1H   |
|-------------|------------------|-------------------|--------------------|-------|-------|--------|-------|
| Exactitude* | 3%               |                   |                    | 5%    |       |        | 10%   |
| Fréquence   | 1MHz             | 600KHz            | 300KHz             | 50KHz | 20KHz | 10KHz  | 10KHz |

\*Mesures de référence: Frequency = 10KHz; Max DC Current = 10mA

### L'information additionnelle:

| Gamme                                | x1 $\mu\text{H}$ | x10 $\mu\text{H}$ | x100 $\mu\text{H}$ | x1mH  | x10mH | x100mH | x1H   |
|--------------------------------------|------------------|-------------------|--------------------|-------|-------|--------|-------|
| Fréquence de 50Hz à ...              | 1MHz             | 600KHz            | 300KHz             | 50KHz | 20KHz | 10KHz  | 10KHz |
| Exactitude                           | 5%               |                   |                    | 7%    |       |        | 12%   |
| Courant de DC de max (mA)            | 300              | 200               | 100                | 100   | 70    | 50     | 40    |
| Résistance max de Serie ( $\Omega$ ) | 3                | 10                | 60                 | 80    | 150   | 650    | 16K   |

Température d'utilisation :  $-10^{\circ}\text{C}$  à  $+55^{\circ}\text{C}$

Température de stockage :  $-40^{\circ}\text{C}$  à  $+70^{\circ}\text{C}$

Humidité relative : 20 % < HR < 96 %

Utilisation jusqu'à 2000 m d'altitude

Degré d'étanchéité (selon EN 60529 Ed. 92) : indice de protection IP 40

Tension assignée 150 V

Catégorie d'installation II - Degré de pollution 2

Masse / Dimensions: (1.4kg) 410 x 86 x 76mm

## **ESPAÑOL**

**Cuidado!**

- Las cajas de décadas se pueden utilizar en instalaciones de Categoría II, para tensiones que no excedan 150V respecto a la tierra.

### **3.1 Significado del símbolo**



¡CUIDADO! Antes de utilizar las cajas de décadas consultar el manual de instrucciones. En el presente manual de instrucciones, las instrucciones precedidas de este símbolo, si éstas no se respetan o realizan correctamente, pueden ocasionar un accidente corporal o dañar las cajas de décadas y las instalaciones.



Terminal de tierra



Tierra de protección

### **3.2 Recepción del envío**

Verifique que todas las partes mencionadas en la lista de empaque estén dentro de la caja. Notifique a su distribuidor respecto de cualquier artículo que falte. Si el equipo aparenta estar dañado, presente inmediatamente una queja con el despachante y notifique a su distribuidor lo antes posible, dando una descripción detallada de cualquier daño. No descarte el material de embalaje dañado ya que puede ser utilizado para comprobar su queja.

### **3.2 L'information de commande**

**Decade Inductance Box Model BL07** ..... **Cat. #2131.27**  
(7 décadas - 1 $\mu$ H to 11.11111H)

**Accesorios:**

Cables de seguridad enchufes  $\varnothing$  4mm, longitud 25cm..... **Cat. #2131.35**



### 3.4 Utilización - Modo de empleo

Es necesario conectar imperativamente el terminal de tierra a una tierra de protección antes de efectuar una medición.

No inyectar medición de tensión superior a 150V respecto a la tierra y respetar la corriente máx. admitida para cada década.

- Caja de inductancias de 7 décadas
- Inductancia total: Si bien las inductancias se especifican con exactitud en diversas frecuencias, la suma de los valores no se puede considerar para representar la inductancia total que pueda ser lograda
- La inductancia residual es de aproximadamente  $<1\mu\text{H}$
- Interruptores 11 posiciones
- Salida con casquillos de seguridad  $\varnothing 4 \text{ mm}$

### 2.5 Especificaciones

| Rango      | x1 $\mu\text{H}$ | x10 $\mu\text{H}$ | x100 $\mu\text{H}$ | x1mH  | x10mH | x100mH | x1H   |
|------------|------------------|-------------------|--------------------|-------|-------|--------|-------|
| Exactitud* | 3%               |                   |                    |       | 5%    |        | 10%   |
| Frequency  | 1MHz             | 600KHz            | 300KHz             | 50KHz | 20KHz | 10KHz  | 10KHz |

\*Mesures de référence: Frequency = 10KHz; Max DC Current = 10mA

#### Información adicional:

| Rango                             | x1 $\mu\text{H}$ | x10 $\mu\text{H}$ | x100 $\mu\text{H}$ | x1mH  | x10mH | x100mH | x1H   |
|-----------------------------------|------------------|-------------------|--------------------|-------|-------|--------|-------|
| Frequency from 50Hz to...         | 1MHz             | 600KHz            | 300KHz             | 50KHz | 20KHz | 10KHz  | 10KHz |
| Exactitud                         | 5%               |                   |                    |       | 7%    |        | 12%   |
| Max DC Current (mA)               | 300              | 200               | 100                | 100   | 70    | 50     | 40    |
| Max Serie Resistance ( $\Omega$ ) | 3                | 10                | 60                 | 80    | 150   | 650    | 16K   |

Temperatura de utilización: de  $-10^{\circ}\text{C}$  a  $+55^{\circ}\text{C}$

Temperatura de almacenamiento: de  $-40^{\circ}\text{C}$  a  $+70^{\circ}\text{C}$

Humedad relativa:  $20\% < \text{HR} < 96\%$

Utilización hasta 2000 m de altitud

Grado de hermeticidad (según EN 60529 Ed. 92): índice de protección IP 40

Tensión asignada 150 V

Categoría de instalación II - Grado de contaminación 2

Peso / Dimensiones: (1.4kg) 410 x 86 x 76mm

## **Repair and Calibration**

To ensure that your instrument meets factory specifications, we recommend that it be scheduled back to our factory Service Center at one-year intervals for recalibration, or as required by other standards or internal procedures.

### **For instrument repair and calibration:**

You must contact our Service Center for a Customer Service Authorization Number (CSA#). This will ensure that when your instrument arrives, it will be tracked and processed promptly. Please write the CSA# on the outside of the shipping container. If the instrument is returned for calibration, we need to know if you want a standard calibration, or a calibration traceable to N.I.S.T. (Includes calibration certificate plus recorded calibration data).

**Ship To:** Chauvin Arnoux®, Inc. d.b.a. AEMC® Instruments  
15 Faraday Drive  
Dover, NH 03820 USA  
Phone: (800) 945-2362 (Ext. 360)  
(603) 749-6434 (Ext. 360)  
Fax: (603) 742-2346 or (603) 749-6309  
E-mail: [repair@aemc.com](mailto:repair@aemc.com)

(Or contact your authorized distributor)

Costs for repair, standard calibration, and calibration traceable to N.I.S.T. are available.

**NOTE: You must obtain a CSA# before returning any instrument.**

## **Technical and Sales Assistance**

If you are experiencing any technical problems, or require any assistance with the proper operation or application of your instrument, please call, mail, fax or e-mail our technical support team:

Chauvin Arnoux®, Inc. d.b.a. AEMC® Instruments  
200 Foxborough Boulevard  
Foxborough, MA 02035 USA  
Phone: (800) 343-1391  
(508) 698-2115  
Fax: (508) 698-2118  
E-mail: [techsupport@aemc.com](mailto:techsupport@aemc.com)  
[www.aemc.com](http://www.aemc.com)

**NOTE: Do not ship Instruments to our Foxborough, MA address.**

## **Limited Warranty**

The Model BL07 is warranted to the owner for a period of two years from the date of original purchase against defects in manufacture. This limited warranty is given by AEMC® Instruments, not by the distributor from whom it was purchased. This warranty is void if the unit has been tampered with, abused or if the defect is related to service not performed by AEMC® Instruments.

**For full and detailed warranty coverage, please read the Warranty Coverage Information, which is attached to the Warranty Registration Card (if enclosed) or is available at [www.aemc.com](http://www.aemc.com). Please keep the Warranty Coverage Information with your records.**

### **What AEMC® Instruments will do:**

If a malfunction occurs within the warranty period, you may return the instrument to us for repair, provided we have your warranty registration information on file or a proof of purchase. AEMC® Instruments will, at its option, repair or replace the faulty material.

**REGISTER ONLINE AT:  
[www.aemc.com](http://www.aemc.com)**

## **Warranty Repairs**

### **What you must do to return an Instrument for Warranty Repair:**

First, request a Customer Service Authorization Number (CSA#) by phone or by fax from our Service Department (see address below), then return the instrument along with the signed CSA Form. Please write the CSA# on the outside of the shipping container. Return the instrument, postage or shipment pre-paid to:

**Ship To:** Chauvin Arnoux®, Inc. d.b.a. AEMC® Instruments  
15 Faraday Drive • Dover, NH 03820 USA  
Phone: (800) 945-2362 (Ext. 360)  
(603) 749-6434 (Ext. 360)  
Fax: (603) 742-2346 or (603) 749-6309  
E-mail: [repair@aemc.com](mailto:repair@aemc.com)

**Caution:** To protect yourself against in-transit loss, we recommend you insure your returned material.

**NOTE:** You must obtain a CSA# before returning any instrument.



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**Chauvin Arnoux®, Inc. d.b.a. AEMC® Instruments**  
15 Faraday Drive • Dover, NH 03820 USA • Phone: (603) 749-6434 • Fax: (603) 742-2346  
[www.aemc.com](http://www.aemc.com)