

# Samsung SD162H-L1U2 Compressor, Rscr, 1/5 Hp, 6.99Cc,MANUFACTURERS, FACTORY, SUPPLIERS FROM CHINA

Category: Technologie,Tester ok

written by [www.mbsm.pro](http://www.mbsm.pro) | 1 April 2020



PictureS Mbsm Dot Pro : [www.mbsm.pro](http://www.mbsm.pro)

HP 1/5 HP Samsung SD162C-L1U2

2. Function Specifications Temp Range  $\square$  32 $\square$  ~ 40 $\square$  Capacity Cubic Feet 7 Climate Class N Max Ambient Temp  $\square$  89.6 $\square$  Min Ambient Temp  $\square$  59 $\square$  Castors 5" 4EA Shelves 2EA Doors 1EA Exterior Finish Stainless Steel Inte ...

## **MK 1 62 Q - L 1 U A**

① ② ③ ④ ⑤ ⑥ ⑦ ⑧

### 1) Compressor model identification

| NUMBER                        | MEANING                                                                                                                                                                                                                                                                |
|-------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ① Series                      | CD, SD, MD, SK, MK, HK, MSS, MSA, MSE, ENV, MKV, MSV                                                                                                                                                                                                                   |
| ② Refrigerant                 | 1 : R 134a (LBP) 4 : R 600a (LBP) 6 : R 134a (HBP)                                                                                                                                                                                                                     |
| ③ Displacement (cc/Rev.) x 10 | 24 : 2.40cc, 30 : 2.93cc, 37 : 3.71cc, 43 : 4.38cc, 50 : 5.21cc, 51 : 5.12cc, 52 : 5.21cc, 60 : 6.16cc, 62 : 6.16cc, 70 : 6.99cc, 72 : 7.21cc, 80 : 8.19cc, 82 : 8.19cc, 83 : 8.19cc, 88 : 8.80cc, 90 : 9.07cc, A1 : 10.68cc, A2 : 12.13cc, A3 : 12.52cc, A5 : 15.32cc |
| ④ Rated voltage and frequency | B : 220V ~ 60Hz C : 115V ~ 60Hz D : 115-127V ~ 60Hz E : 100V ~ 50/60Hz<br>G : 220-240V ~ 50Hz, 220V ~ 60Hz H : 200-220V ~ 50Hz, 220V ~ 60Hz<br>K : 200-220V ~ 50Hz P : 127V ~ 60Hz Q : 220-240V ~ 50Hz<br>A : variable for BLDC                                        |
| ⑤ Application                 | L/R/S : Low Back Pressure H : High Back Pressure                                                                                                                                                                                                                       |
| ⑥ Cooling type                | 0 : Oil cooling 1 : Static 2 : Fan cooling                                                                                                                                                                                                                             |
| ⑦ Motor type                  | B/C/X : BLDC S : PTC or Current-CSIR<br>U : PTC-RSCR (Optional RSIR) W : PTC-CSR<br>Y : Current-RSIR Z : PTC-RSIR                                                                                                                                                      |
| ⑧ Option                      |                                                                                                                                                                                                                                                                        |

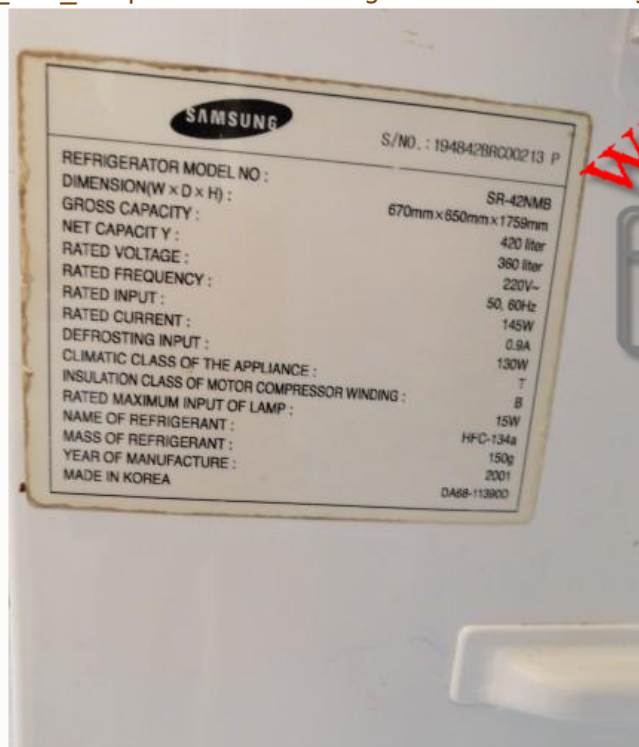
### 2) Serial number

- ① Model code
- ② Production line
- ③ Year : 05 → Y, 06 → L, 07 → P, 08 → Q, 09 → S, 10 → Z, 11 → B, 12 → C, 13 → D, 14 → F
- ④ Month : 1 → Jan, 2 → Feb, ... A → Oct, B → Nov, C → Dec
- ⑤ Serial number

Private Picture Copyright : WWW.MBSM.PRO

Mbsm\_dot\_pro\_private\_PDF\_Sd162h-lluaTélécharger

Mbsm\_dot\_pro\_private\_PDF\_compressor-catalogue-2015Télécharger



Private Picture Copyright : WWW.MBSM.PRO

MODEL:  
SR-42NMB

POWER:  
220V/50,60Hz

COMPRESSOR:  
SD162H-L1U2

BOM NAME:  
S428GCSWHL/ZAM

SERIAL NO:  
194842BRC00213 P



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COMPRESOR ACC GL80AN R134 1/5,

# Cubigel Compressors LBP , Hermetic, Freezing, Tb/Cooling/hmbp

Category: Technologie, Tester ok

written by [www.mbsm.pro](http://www.mbsm.pro) | 1 April 2020





PictureS Mbsm Dot Pro : [www.mbsm.pro](http://www.mbsm.pro)

Type: Hermetic piston compressors  
Producer: ACC

Series: HMBP/tb

Model: GL80AN

#### General data

Refrigerant: R134a  
Discharge element: C  
Cooling: S  
Maximum ambient temperature [°C]: 43

#### Compressor's data

Cylinder capacity [cm<sup>3</sup>]: 8,1  
Displacement [m<sup>3</sup>/h]: 1,4  
Weight [kg]: 10,6  
Oil charge [cm<sup>3</sup>]: 445  
Oil type: ISO VG 19 ESTER

#### Engine's data

Engine type: RSIR  
Power [KM]: 1/5  
Starting element: LST  
Power supply: 220V 50Hz  
Voltage range: 170-242  
Locked rotor current [A]: 18  
Running winding resistance (25°C) [Ω]: 5,81  
Starting winding resistance (25°C) [Ω]: 11,01

#### Electrical data

Relays: 3003  
Shielding element: MRP321LZ, T0683, AF11FI  
Starting capacitor volume [μF]:

#### Connections

|                 | milimeters | inches |
|-----------------|------------|--------|
| Suction tube:   | 6,5        |        |
| Service tube:   | 6,5        |        |
| Discharge tube: | 4,9        |        |

GL80AN (1)Download

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# Mbsm.pro , Rufus Créez une clé USB démarrable de manière facile

Category: Non classé

written by [www.mbsm.pro](http://www.mbsm.pro) | 1 April 2020



## Rufus

Créez une clé USB démarrable de manière facile



Rufus est un utilitaire permettant de formater et de créer des média USB démarrables, tels que clés USB, mémoire flash, etc.

Il est particulièrement utile pour les cas où :

- vous voulez créer un média d'installation USB à partir d'une image ISO démarrable (Windows, Linux, UEFI, etc.)
- vous voulez travailler sur une machine qui n'a pas de système d'exploitation installé
- vous voulez programmer un BIOS ou un autre type de firmware depuis DOS
- vous voulez lancer un utilitaire de bas-niveau

En dépit de sa petite taille, Rufus fournit tout ce dont vous avez besoin !

Oh, et Rufus est **rapide**. Par exemple, il est environ deux fois plus rapide qu'[UNetbootin](#), [Universal USB Installer](#) ou [l'utilitaire Windows 7 USB](#), pour la création d'un média d'installation USB à partir d'une image ISO Windows 7. Il est aussi marginalement plus rapide pour la création de média USB démarrables Linux. <sup>(1)</sup>

Une liste non-exhaustive d'images ISO supportées par Rufus est fournie au bas de cette page. <sup>(2)</sup>

## Téléchargement

Dernière mise à jour 2019.09.16 :

- **Rufus 3.8** (1.1 Mo)
- [Rufus 3.8 Portable](#) (1.1 Mo)
- [Autres versions \(GitHub\)](#)
- [Autres versions \(FossHub\)](#)

## Langues supportées :

*Bahasa Indonesia , Bahasa Malaysia , Български , Čeština , Dansk , Deutsch , Ελληνικά , English , Español , Français , Hrvatski , Italiano , Latviešu , Lietuvių , Magyar , Nederlands , Norsk , Polski , Português , Português do Brasil , Русский , Română , Slovensky , Slovenščina , Srpski ,*

*Suomi , Svenska , Tiếng Việt , Türkçe , Українська , བོད་སྐད་ , བོད་སྐད་ , བོད་སྐད་ , བོད་སྐད་ , བོད་སྐད་ ,*  
فارسی , العربية .

## Configuration minimale :

Windows 7 ou supérieur, 32 ou 64 bit. Une fois téléchargée, l'application est prête à être utilisée.

Je profite de cette occasion pour exprimer ma gratitude aux traducteurs qui permettent à Rufus, ainsi que cette page web, d'être traduits dans plusieurs langues. Si vous pouvez désormais utiliser Rufus dans votre langage, c'est eux qu'il faut remercier !

## Utilisation

Téléchargez le fichier exécutable et lancez-le – aucune installation n'est nécessaire.

Le fichier exécutable est signé de manière digitale, et la signature doit indiquer :

- *"Akeo Consulting"* (v1.3.0 ou supérieure)
- *"Pete Batard – Open Source Developer"* (v1.2.0 ou antérieure)

## Notes sur le support DOS :

Si vous créez un disque démarrable USB avec un clavier non-US, Rufus essaie de sélectionner une disposition de clavier qui correspond à la langue de votre système. Dans ce cas, **FreeDOS**, qui est la sélection par défaut, est recommandé vis-à-vis de MS-DOS, car il supporte plus de dispositions internationales de clavier.

## Notes sur le support d'images ISO :

Toutes les versions de Rufus, depuis la version 1.1.0, permettent la création d'un média USB démarrable à partir d'une **image ISO** (.iso).

Si vous n'avez pas de fichier ISO, la création d'une telle image, à partir d'un disque optique ou depuis un ensemble de fichier, est facile à effectuer. Vous pouvez juste utiliser l'une des nombreuses applications gratuites de gravure CD ou DVD, telles que **CDBurnerXP** ou **ImgBurn**.

## Foire Aux Questions (FAQ)

Un FAQ pour Rufus est disponible **ICI** (en Anglais).

Si vous voulez soumettre un commentaire, un bug ou encore effectuer une demande d'amélioration, veuillez utiliser le **système de gestion d'incidents** de github. Ou bien, vous pouvez aussi **envoyer un e-mail**.

## Licence

**GNU General Public License (GPL) version 3** ou ultérieure.

Vous êtes libres de distribuer, modifier ou encore vendre ce logiciel, tant que vous respectez la licence GPLv3.

Rufus est produit de manière 100% transparente, depuis son **code source public**,

en utilisant un environnement [MinGW32](#).

## Derniers changements (en Anglais)

- **Version 3.8** (2019.09.16) [BUGFIX RELEASE]
  - Fix regression where some ISOs (Debian) would produce a Syslinux error when booting in BIOS mode
  - Fix potential `0xC0030057` errors when trying to create a persistent partitions on a non-FIXED drive
- **Version 3.7** (2019.09.09)
  - Finalize persistent partition support for Debian and Ubuntu [EXPERIMENTAL]:
    - Debian with persistence should work out of the box with any recent [Debian Live](#) ISO.
    - Ubuntu with persistence should also work **IF** using a post 2019.08.01 ISO (such as [daily-live](#)).  
Note that, because of [bug #1489855](#), trying to use persistence with Ubuntu ISOs that were released before August 2019 will only result in rescue mode during boot – You have been warned!
    - Other distros may work with persistence as long as they use a Debian-like or Ubuntu-like method, and, in the case of Ubuntu-like, if they use casper with the #1489855 bugfix.
    - Important: Persistence and `ext` formatting support should still be considered **EXPERIMENTAL** at this stage.
  - Add cheat mode (Alt) to switch between percent/speed/ETA on **some** operations [EXPERIMENTAL]
  - Report SuperSpeed+ devices in the log (Come on [USB-IF](#), just add “*Ludicrous Speed*” already!)
  - Fix UI checkboxes (*Extended label*, *Fixes for old BIOSes*) being cleared on *START*
  - Fix *Can't mount GUID volume* regression when creating Windows To Go drives
  - Fix *Volume label is invalid* error with empty labels on Windows 7
  - Fix stale progress bar during standalone `ext2/ext3` formatting
  - Fix an extraction failure with R-Drive Image bootable ISOs
  - Disable ISO mode for Pop!\_OS
  - Other cosmetic and internal improvements
- **Autres versions**

## Code Source

- **Rufus 3.8** (3.2 Mo)
- Alternativement, vous pouvez cloner le répertoire [git](#) en utilisant `:$ git clone git://github.com/pbatard/rufus`
- Pour plus d'information, veuillez consulter le [projet github](#).

Si vous êtes développeur, vous êtes cordialement invité à modifier Rufus et soumettre un patch.

## Donations

Etant donné qu'on me pose régulièrement la question, vous constaterez qu'il n'y a **pas** de bouton de donation sur cette page.

La raison principale est que j'estime que le système de dons n'aide pas vraiment

le développement logiciel et pire, peut être culpabilisant pour les utilisateurs qui choisissent de ne pas donner.

Si vous insistez vraiment, vous pouvez toujours effectuer une donation à la **Free Software Foundation** (FSF), puisque c'est la principale cause qui permet à des logiciels tels que Rufus d'exister.

Dans tous le cas, je profite de cette opportunité pour vous *remercier* de vos encouragements et surtout de votre enthousiasme vis-à-vis de ce petit programme : Cela reste très apprécié !

Mais s'il vous plait, veuillez continuer à utiliser Rufus sans vous sentir coupable de ne pas participer financièrement – vous ne devriez jamais avoir besoin de le faire !

## (1) Tests de vitesse entre Rufus et autres applications

Les tests suivants ont été conduits depuis une machine Windows 7 x64 Core 2 duo avec 4Go de RAM, en utilisant un contrôleur USB 3.0 ainsi qu'un **périphérique flash 16 Go USB 3.0 ADATA S102**.

- Windows 7 x64 : *en\_windows\_7\_ultimate\_with\_sp1\_x64\_dvd\_618240.iso*

|                                         |                 |
|-----------------------------------------|-----------------|
| Windows 7 USB/DVD Download Tool v1.0.30 | 00:08:10        |
| Universal USB Installer v1.8.7.5        | 00:07:10        |
| UNetbootin v1.1.1.1                     | 00:06:20        |
| RMPrepUSB v2.1.638                      | 00:04:10        |
| WiNToBootic v1.2                        | 00:03:35        |
| <b>Rufus v1.1.1</b>                     | <b>00:03:25</b> |

- Ubuntu 11.10 x86 : *ubuntu-11.10-desktop-i386.iso*

|                                  |                 |
|----------------------------------|-----------------|
| UNetbootin v1.1.1.1              | 00:01:45        |
| RMPrepUSB v2.1.638               | 00:01:35        |
| Universal USB Installer v1.8.7.5 | 00:01:20        |
| <b>Rufus v1.1.1</b>              | <b>00:01:15</b> |

- Slackware 13.37 x86 : *slackware-13.37-install-dvd.iso*

|                                  |                 |
|----------------------------------|-----------------|
| UNetbootin v1.1.1.1              | 01:00:00+       |
| Universal USB Installer v1.8.7.5 | 00:24:35        |
| RMPrepUSB v2.1.638               | 00:22:45        |
| <b>Rufus v1.1.1</b>              | <b>00:20:15</b> |

## (2) Liste non-exhaustive d'images ISO supportées par Rufus

Arch Linux , Archbang , BartPE/pebuilder , CentOS , Damn Small Linux , Debian , Fedora , FreeDOS , FreeNAS , Gentoo , GParted , gNewSense , Hiren's Boot CD , LiveXP , Knoppix , KolibriOS , Kubuntu , Linux Mint , NT Password Registry Editor , Parted Magic , Partition Wizard , Raspbian , ReactOS , Red Hat , rEFInd , Slackware , Super Grub2 Disk , Tails , Trinity Rescue Kit , Ubuntu , Ultimate Boot CD , Windows XP (SP2+) , Windows Vista , Windows Server 2008 , Windows 7 , Windows 8 , Windows 8.1 , Windows Server 2012 , Windows 10 , Windows Server 2016 , ...

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# www.mbsm.pro , 500 Livres Documentaire

Category: Non classé

written by mahdi miled | 1 April 2020

تم إضافة أقسام وكتب جديدة إلى مكتبتي على درايڤ  
يبلغ الآن عدد الكتب لدي أكثر من 500 كتاب يمكنكم تحميل ما تشاؤون منها  
بمجرد الضغط على الرابط سوف ينقلكم مباشرةً إلى الكتاب

<https://drive.google.com/folderview...>

كما يمكنكم تحميل الكتب عن طريق قناة التلكرام من خلال هذا الرابط

<https://t.me/ThurayaElectronics>

ملاحظة : ( تحزير إلى أصحاب النفوس الضعيفة ممن يريدون استغلال رابط مكتبتي على درايڤ  
لكي يقومون بتقصيره واستبداله بروابط مشبوهة أريد أن أقول لكم أنني أقوم بنقل الكتب  
( وتغيري رابط الوصول إليها بشكل مستمر لذلك لن تنجح بهذا الأمر )

[www.mbsm.pro , 500 Livres Documentaire.jpg](#) (44 KB)



[www.mbsm.pro , 500 Livres Documentaire.jpg](#) (54 KB)



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# www.mbsm.pro , Compresseur Cubigel ,Compresseur GL90AA R-134a 1/4HP 230V ,

Category: Non classé

written by mahdi miled | 1 April 2020



**cubigel**  
compressors

**GL90AA**

220-240V~50Hz

**R134a**

PH1

THERMALLY PROTECTED



CE EAC

MADE IN SPAIN



2

7045338569100901

08261



paramètres techniques

numéro de pièce

605185

fréon

R134a

type

GL90AA

voltage

220-240 V

fréquence

50 Hz

domaine d'utilisation

LBP

poids

9.4 kg

puissance

1/4 HP

puissance absorbée

184 W

cyindrée

8.1 cm<sup>3</sup>

système de moteur

RSIR

hauteur

185.6 mm

puissance à -30°C

148 W

puissance à -25°C

200 W

puissance à -20°C

261 W

puissance à -15°C

330 W

puissance à -10°C

407 W

puissance à -5°C

– W

puissance à 0°C

– W

puissance à +5°C

– W

puissance à +10°C

– W

température ambiante max.

43 °C

[www.mbsm.pro-Cubigel-14H-GL90AA.jpg](http://www.mbsm.pro-Cubigel-14H-GL90AA.jpg) (52 KB)



[www.mbsm.pro-Cubigel-14H-GL90AA.jpg](http://www.mbsm.pro-Cubigel-14H-GL90AA.jpg) (54 KB)



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# Mbsm.pro , تأمين الأجهزة , Lockout Tagout , المعدات الكهربائية , نظام السلامة المهنية

Category: Arabe,Développement,Technologie  
written by [www.mbsm.pro](http://www.mbsm.pro) | 1 April 2020





غلق بمشبك قابل للطي ، مما يسمح لسته أقفال لقفل جهاز واحد .  
أو **القفل والعلامة** هو إجراء أمان يستخدم في إعدادات الصناعة والبحث للتأكد من أن  
الآلات الخطرة مغلقة بشكل صحيح ولا يمكن تشغيلها مرة أخرى قبل الانتهاء من أعمال  
الصيانة أو الإصلاح. يتطلب الأمر عزل " **مصادر الطاقة الخطرة** وجعلها غير صالحة للعمل"  
قبل بدء العمل في المعدات المعنية. يتم بعد ذلك قفل مصادر الطاقة المعزولة ووضع  
علامة على القفل تحدد العامل الذي وضعه. عندها يمسك العامل بمفتاح القفل ، مما يضمن  
أنه فقط هو أو هي قادر على إزالة القفل وبدء تشغيل الجهاز. هذا يمنع بدء التشغيل  
العرضي لجهاز ما عندما يكون في حالة خطرة أو عندما يكون العامل على اتصال مباشر  
به. <sup>1]</sup>

في مختلف الصناعات كوسيلة آمنة للعمل على المعدات الخطرة Lockout-tagout يستخدم  
، ويفوضه القانون في بعض البلدان

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**mbsm.pro , Compresseur Aspera ,  
Embraco ,NEK2168GK , R404a/R507 , LBP  
,3/4 HP,nominal output: 707 W**

Category: Technologie,Tester ok

written by www.mbsm.pro | 1 April 2020

EMBRACO is a company specialized in cooling solutions and  
world leader in the hermetic compressor market. Our mission:  
provide innovative solutions for a better quality of life, always  
attentive to technological excellence and sustainability.  
Technological leadership, operational excellence and sustainability are some of  
the pillars  
which ensure the EMBRACO differential over other companies in the world market.  
Its  
products are now considered the favorite leading home appliance manufacturers by  
major  
automakers and are spotlighted by manufacturers of commercial refrigeration  
equipment.  
With global operations and production capacity exceeding 34 million units a  
year, the  
company offers solutions that are differentiated for their innovation and low  
energy  
consumption. Its 11.500 employees work in factories and offices located in

Brazil

(headquarters), China, Italy, Slovakia, Mexico, the United States and Russia. Energy efficiency is constantly sought in the processes, products and relationships with

the communities where it operates. Our company is the absolute leader in this segment,

being able to offer products that meet the most restrictive international standards

regarding energy consumption.

As a worldwide leader, EMBRACO tries to anticipate market changes, and in doing so, our

company is in a state of permanent transformation. We continuously assess our processes

in order to maintain our leadership within the industry and promote growth, without

forgetting the pillars of our organization.

#### **Compressor ASPERA NEK2168GK | NEK 2168 GK**

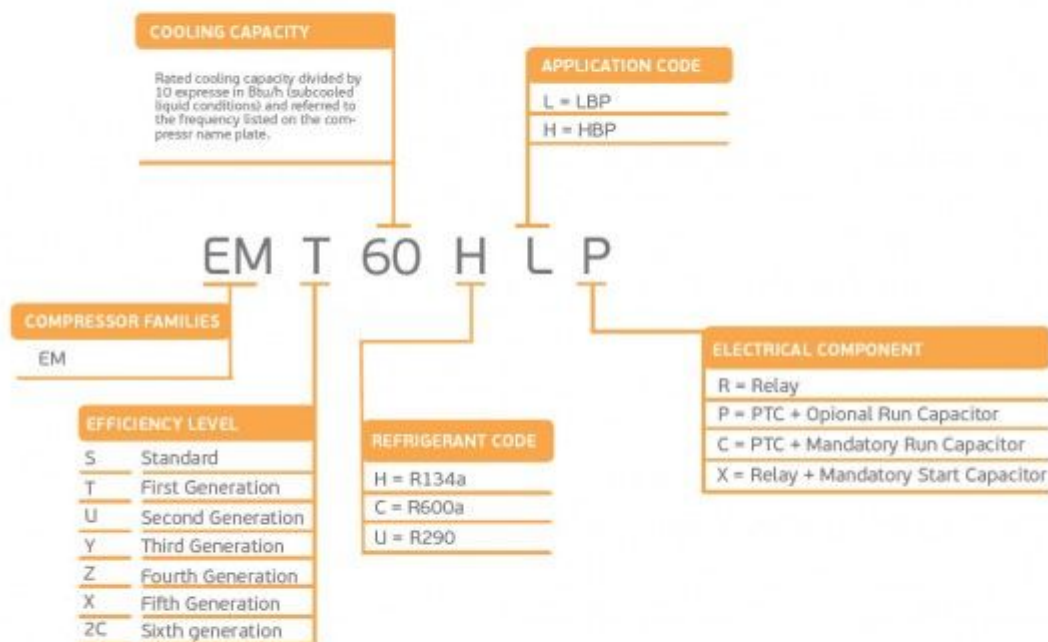
|                                                                                     |               |
|-------------------------------------------------------------------------------------|---------------|
| Refrigerant                                                                         | R404/R507     |
| Working range[stC] <b>LBP</b>                                                       | -40 to -10    |
| Nominal capacity [W] (evaporating temperature -23,3C, Condensing temperatur +54,4C) | 688           |
| Power supply                                                                        | 220-240V 50Hz |
| Engine type                                                                         | CSIR          |
| Displacement [cm <sup>3</sup> ]                                                     | 14,28         |
| Weight [kg]                                                                         | 11,6          |

Evaporating temperature +55 C

| <b>Evaporating Temperature</b> | <b>Cooling Capacity +/-5%</b> | <b>Power Consumption +/-5%</b> | <b>Current Consumption +/-5%</b> | <b>Gas Flow Rate +/-5%</b> | <b>Efficiency +/-7%</b> |        |           |       |
|--------------------------------|-------------------------------|--------------------------------|----------------------------------|----------------------------|-------------------------|--------|-----------|-------|
| °C                             | (kcal/h)                      | (W)                            | (Btu/h)                          | (W)                        | (A)                     | (kg/h) | (kcal/Wh) | (W/W) |
| -40                            | 226                           | 263                            | 897                              | 370                        | 3,46                    | 6,01   | 0,61      | 0,71  |
| -35                            | 309                           | 359                            | 1.224                            | 435                        | 3,57                    | 8,22   | 0,71      | 0,82  |
| -30                            | 413                           | 481                            | 1.640                            | 506                        | 3,73                    | 11,06  | 0,82      | 0,95  |
| -25                            | 541                           | 629                            | 2.146                            | 584                        | 3,95                    | 14,52  | 0,93      | 1,08  |
| -20                            | 691                           | 803                            | 2.740                            | 668                        | 4,21                    | 18,64  | 1,03      | 1,20  |
| -15                            | 863                           | 1.004                          | 3.424                            | 759                        | 4,53                    | 23,43  | 1,14      | 1,32  |
| -10                            | 1.058                         | 1.230                          | 4.197                            | 856                        | 4,90                    | 28,92  | 1,24      | 1,44  |

Refrigerant: R404A, R507

|           | R404A / R507 |                |                      |                |           |                |                      |                |
|-----------|--------------|----------------|----------------------|----------------|-----------|----------------|----------------------|----------------|
|           | LBP          | VOLT.<br>FREQ. | COOL.<br>CAP.<br>[W] | DISPL.<br>[cc] | MBP       | VOLT.<br>FREQ. | COOL.<br>CAP.<br>[W] | DISPL.<br>[cc] |
| NE<br>NEK | NEK2117GK    | A              | 125                  | 4,51           | NEK6144GK | A              | 550                  | 4,51           |
|           | NEK2121GK    | A              | 151                  | 5,44           | NEK6165GK | A              | 743                  | 6,20           |
|           | NEK2125GK    | A              | 182                  | 6,20           | NEK6181GK | A              | 841                  | 7,28           |
|           | NEK2130GK    | A              | 213                  | 7,37           | NEK6210GK | A / N          | 1.005                | 8,77           |
|           | NEK2134GK    | A / N          | 248                  | 8,77           | NEK6213GK | A              | 1.337                | 12,11          |
|           | NEK2150GK    | A              | 329                  | 12,11          | NEK6217GK | A / N          | 1.164                | 14,28          |
|           | NEK2168GK    | A              | 378                  | 14,28          |           |                |                      |                |
|           | NEK2172GK    | C              | 819                  | 16,80          |           |                |                      |                |



embraco **NEK**



**R404A** **LBP**

PictureS Mbsm Dot Pro : [www.mbsm.pro](http://www.mbsm.pro)



PictureS Mbsm Dot Pro : [www.mbsm.pro](http://www.mbsm.pro)

mbsm.pro , Compresseur Aspera , Embraco NEK2168GK , R404A , LBP ,3/4 HP  
Compresseur hermetique de Aspera – Embraco NEK2168GK – R404A  
3/4 HP  
220-240V 50 Hz  
Cylindrée = 14.3 CM3  
APPLICATIONS = LBP  
Moteur type: CSR

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## www.mbsm.pro , when capacitor explodes , Pictures

Category: Pictures,Technologie,Tester ok

written by [www.mbsm.pro](http://www.mbsm.pro) | 1 April 2020

A capacitor is a device used to store an electric charge, consisting of one or more pairs of conductors separated by an insulator.

Unexpectedly the electrolytic capacitors explodes with huge sound and sometime it smoke.

Get started , how to explode a capacitor ???

All capacitors have a maximum voltage and their destruction depends upon the internal construction. Explosions are understood only by delving into the internal construction of electrolytic capacitors – the primary culprit.

Most small value capacitors are simple sandwiches of conductor and insulator and

when the voltage exceeds the dielectric strength of the insulation, they short out and burn, crack, pop, open, or smoke. Explosions are rare for these. Popping open is more likely. Their failure is self evident either visually or by failure to function in the circuit.

Most large value capacitors in order to be as small in physical size as possible, have to get the conductive plates of the capacitor as close together as possible and at the same time not so small that the voltage rating is impractical.

It is for this reason that the family of electrolytic capacitors was developed. The trick they use to get high capacity with small separations and reasonable voltage is that they use the "anodizing" of chemical electrolysis on one surface and a water based electrolyte for the other surface. Take one apart and see. Notice that when a conductive metal is "anodized" by electrochemical process it turns into a dull film that is rather tough and is an insulator. This means that the actual conductive plate of the capacitor has this film entirely between itself and the other plate.

Then the other plate uses a trick too. There's a water base solution soaked into a paper separator. Now if there was no water, the paper would be the dielectric of a normal capacitor separating the plates. But not here. Here the water has an alkali added to become a fair conductor. And as a liquid it soaks right into the surface structures of the capacitor. So it's not the paper thickness at all – and not even the insulating surface on the other plate, but the inner recesses of the anodized surface that determine the dielectric distances.

So the operating voltage that a capacitor can tolerate depends upon how thick this anodized film is. And that is a function of it's manufacture. Now there is a most useful characteristic that tells us we are nearing the max voltage, called leakage.

Here is a way you can check this out. Put in series, a test electrolytic capacitor (polarize it correctly), a variable power supply, a microammeter, and a 1 meg resistor (to limit and protect the meter). From zero as you increase the voltage there will be no current initially, then as you approach the spec op voltage, there will start a small leakage current. Since you have a limiting resistor here, you can increase the voltage without damage. continuing to increase the voltage discovers an increasing leakage current. It is a matter of practice how much safety you apply between the rating and the actual voltage of the circuit.

You can now see how it is that an electrolytic capacitor fails, it is not a voltage breakdown of the dielectric material, but the increase of leakage current that is troublesome. A rising leakage means heat which will boil the water and make steam – that's the explosion process.

This is explosion as occasional failure of the few. But there is a more spectacular explosion process – it's explosion by mistake – namely being installed backward. In such a case, the anodizing chemistry is reversed and rather rapidly, the anodized film starts to reverse, and quickly thins out at a weak spot in the rather large effective film area of the capacitor. Then we have short circuit currents and steam generation rather quickly. This sort of explosion usually fills the space (the casing or the whole room if exposed) with little shreds of aluminum foil and alkali soaked paper.

This insightful solution is most successful to achieve capacitors with large values in small spaces, but has a lot of lesser characteristics as the price to

pay.

The worst limit, is storage. Electrolytic capacitors store very poorly, and the voltage rating can reduce substantially as the internal chemistry deteriorates. Some equipment manufacturers recommend that capacitors stored for a few years have their inner anodizing conditions restored by simply putting them to the spec voltage for a day to restore full spec.

At the least, if you replace capacitors with old stock, and it didn't explode when power was restored, be aware that it may not reach it's spec capacity value for a few hours. A capacitor in use will always be maintained by the voltage in the circuit you use it in.

When electrolytics are used without the circuit supplying a maintenance voltage to keep the anodized film that all depends upon, such as in speaker cross over applications that have no sustaining DC, then the values of the capacitor will deteriorate at least at storage rates, and if AC currents are substantial, even faster.

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mbsm-dot-pro-capacitor-explodes- Pictures-B.jpg (1 MB)



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mbsm-dot-pro-capacitor-explodes- Pictures-C.jpg (1 MB)



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mbsm-dot-pro-capacitor-explodes- Pictures-D.jpg (1 MB)



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mbsm-dot-pro-capacitor-explodes- Pictures-E.jpg (1 MB)



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mbsm-dot-pro-capacitor-explodes- Pictures-G.jpg (856 KB)



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جدول بأنواع الزيوت , Mbsm.pro  
المناسبة لوسائط وضواغط التبريد و  
اللدوجة المناسبة لكل نوع من الضواغط  
table of the types of oils suitable  
for the appropriate refrigeration and  
liquefied media and compressors for  
each type of compressor

Category: Arabe,Solutions,Technologie,Tester ok

written by www.mbsm.pro | 1 April 2020

Table of oil types suitable for appropriate refrigeration and liquefied media  
and compressors for each type of compressor

PAO (Polyalphaolefin) Polyamphalene oil

MN (Mineral Naphthenic) Oil

AB (Alkylbenzene) Petrol oil

POE (Polyol Ester) Polyethylene oil

PG (Polyglycol) Polyglycol

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www.mbsm.pro , EJECTEUR DAB, Pompe  
Monobloc Série Pa Double Aspiration  
Autoamorçante

Category: Plomberie,Tester ok

written by mahdi miled | 1 April 2020

Électropompe centrifuge autoamorçante double aspiration du type jet, appropriée  
pour l'aspiration jusqu'à 50m de profondeur. Corps de pompe et support en fonte,  
roue en noryl ou sur demande en laiton. Injecteur type P20 standard de 4" et  
2". Température maxi. du liquide pompé : 50°C. Pression maxi. de fonctionnement  
: 8 bars.

Descriptif produit

Pompe pour aspirations profondes

Plage de fonctionnement: jusqu'à 4,3 m³/h

Plage de température du liquide: de -0°C à 40°C pour autres applications. de 0°C à +35°C pour usage domestique  
Liquide pompé: propre, ne contenant pas de corps solides ou abrasifs, non visqueux, non agressif, non cristallisé et chimiquement neutre.

Température ambiante maximum: + 40°C

Pression de service maximum: 6 bar (600 kPa) pour DP 82 DP 102 8 bar (800 kPa) pour DP 151 – DP 251

Indice de protection: IP 44 (IP 55 au bornier)

Classe d'isolement: F

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