



# AK\*

## ACCESSORIES FOR COOLING UNITS

### SERIES A

#### 1 - OPTIONAL THERMISTORS

We provide original Daikin Industries LTD thermistors.

Thermistors are components that detect the oil or water temperature for the unit's operation. They are attached to the machine surface or implanted to the machine body for machine temperature control, or they are installed in the oil / water pipe for return oil temperature control.

##### 1.1 - Identification code

<b>AKZ</b>	-	<b>OP</b>	-		
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Optional thermistors for AKZ, AKJ and AKW cooling units, A series.

**K** = to be implanted to the machine body  
**A** = to be attached to the machine surface  
**Y** = to be installed in the fluid pipe of the machine (not suitable for AKJ cooling unit)

Cable length:  
**5** = 5 mt  
**10** = 10 mt  
**15** = 15 mt (available for K type only)

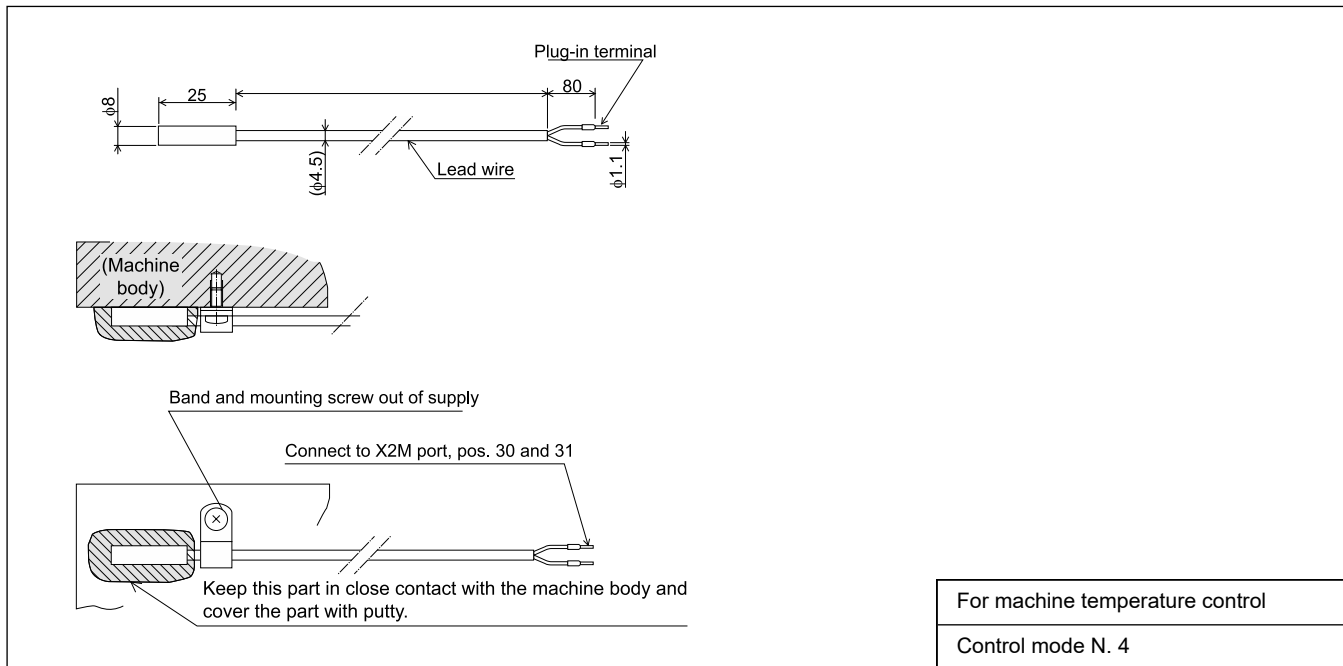
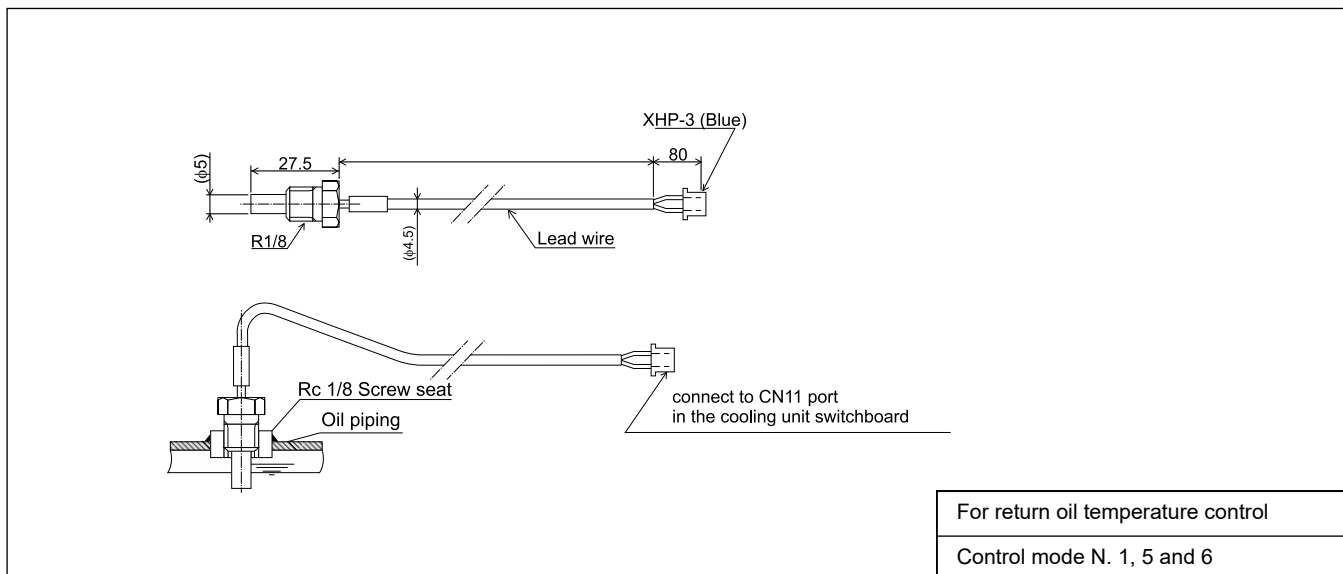
##### 1.2 - Main features

Accuracy of the temperature control	±0.1 °C
Resistance (at 20°C)	20 kohm
Tolerance	3%

##### 1.3 - AKZ-OP-K overall dimensions

Recommended grease: Heat dissipating grease No. KS609 made by Shin-Etsu Chemical Co., Ltd.  
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For machine temperature control
Control mode N. 4

**1.4 - AKZ-OP-A overall dimensions**

**1.5 - AKZ-OP-Y overall dimensions**


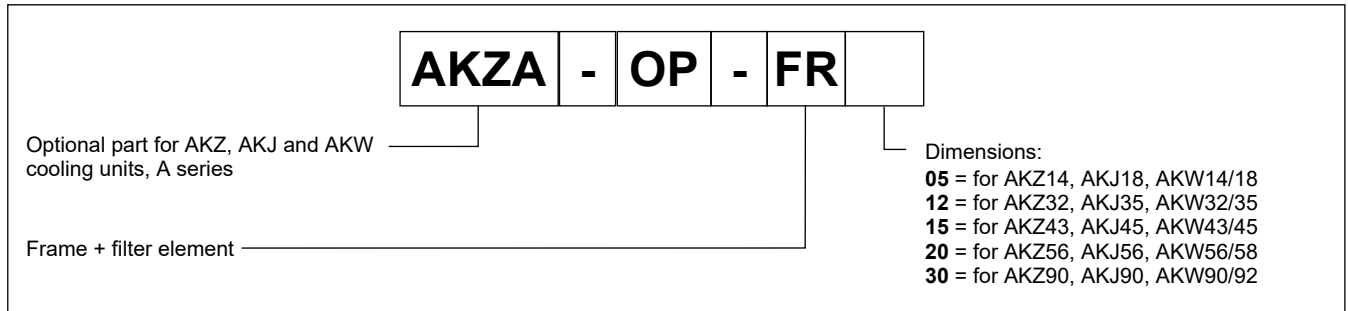
## 2 - AKZA-OP-FR\*\* LONG LIFE FILTERS

(All the data are based on a mist concentration of 0.5 mg/m<sup>3</sup>)

Long Life Filters are innovative accessories that are installed on cooling units to prevent clogging of cooling fins. They are equipped with microfibrres that efficiently collect oil mist and dust, thus keeping the fins unclogged and maintenance-free.

### 2.1 - Identification code

Both the filter and the frame are required when order the first time. Use the code here below.



### 2.2 - Features overview

- For oil-mist environments
- Filter element easy to replace once a year
- Less maintenance work: no need to clean the cooling fins during the year
- New long life filters reduce the chiller cooling capacity by about 5% only
- Power consumption is reduced by 25-30% compared to units with clogged condensers, while high heat exchange efficiency is maintained (see point 2.4)
- Proprietary technology

The service period of the filter is 1 year, maximum. Anyway, the filter must be replaced earlier when the cooling capacity of the cooling unit decreases.

Note that the service period of the filter will be shortened in environments where oil mist is more than 0.5 mg/m<sup>3</sup>. This means that it may be necessary to clean the cooling fins or change the filter more frequently than once a year.

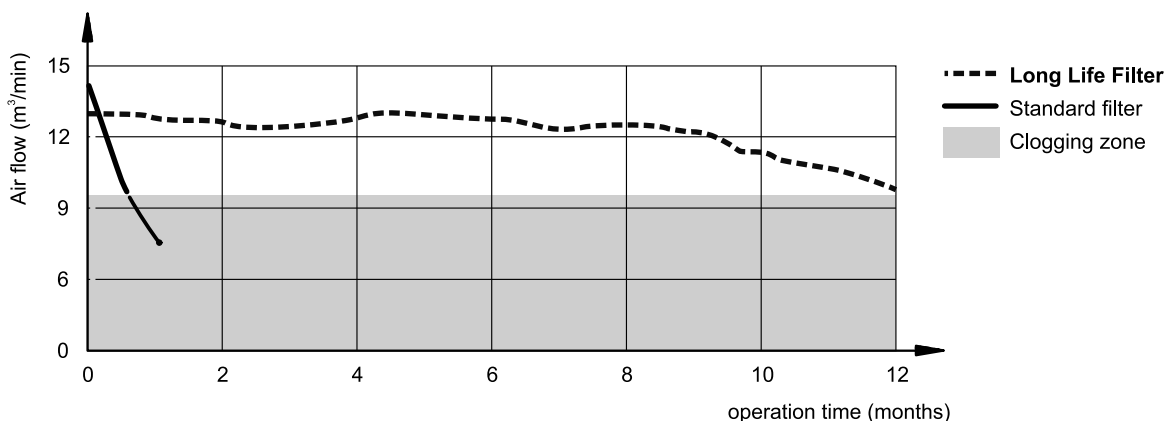
The service period will be significantly reduced in dusty environments.

### 2.3 - Filter element

To order the consumable replacement only, refer to the codes in the table below:

Ordering code	Description
3906610011	AKZA-OP-LF05A - filter element for AKZ14, AKJ18, AKW14/18
3906610012	AKZA-OP-LF12A - filter element for AKZ32, AKJ35, AKW32/35
3906610013	AKZA-OP-LF15A - filter element for AKZ43, AKJ45, AKW43/45
3906610014	AKZA-OP-LF20A - filter element for AKZ56, AKJ56, AKW56/58
3906610015	AKZA-OP-LF30A - filter element for AKZ90, AKJ90, AKW90/92

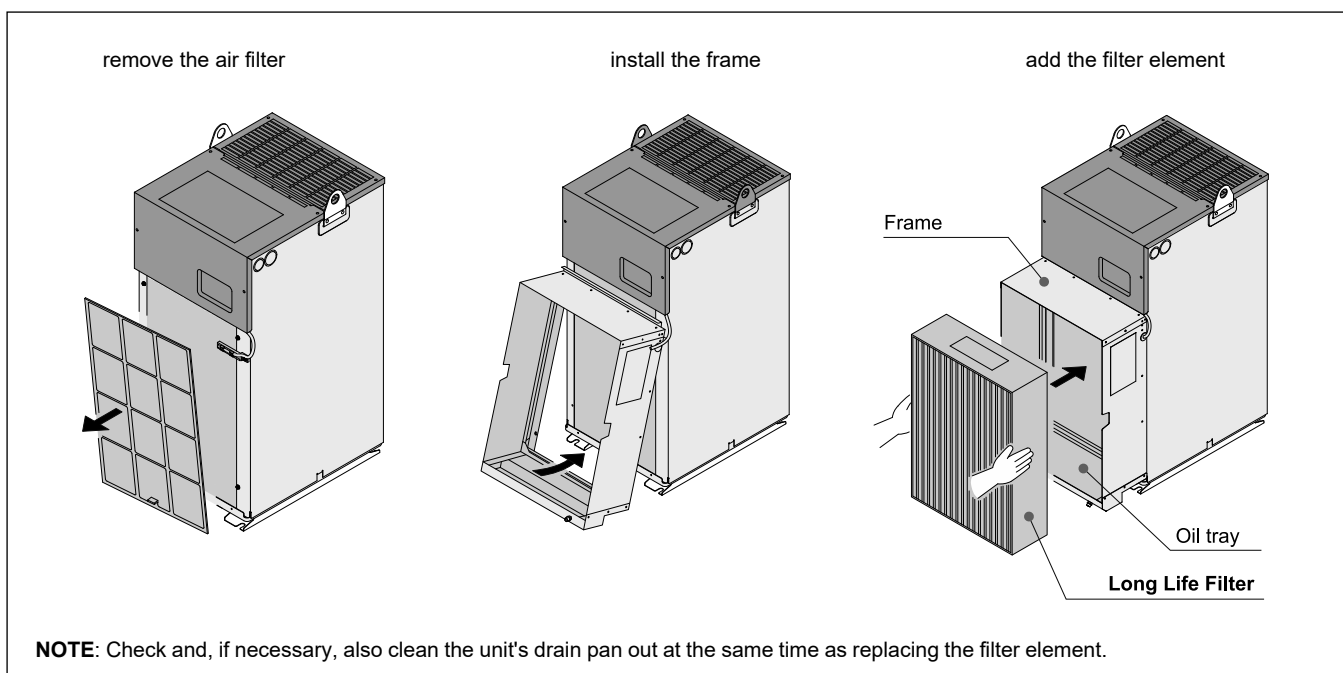
### 2.4 - Clogging comparison



**2.5 - Overall dimensions**

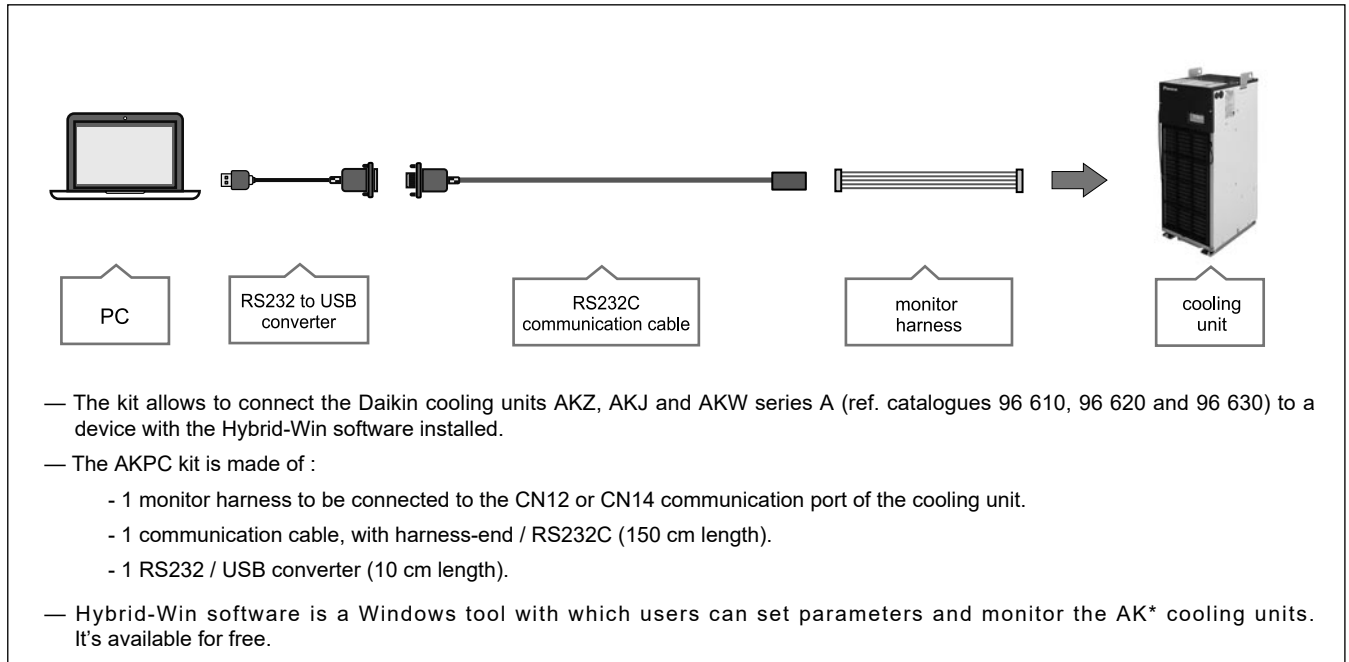
Filter model	Frame outer dimensions (mm)		
	length	height	depth
<b>05</b>	365	395	165
<b>12</b>	365	520	165
<b>15</b>	365	620	165
<b>20</b>	470	620	165
<b>30 (NOTE)</b>	540	710	165

**NOTE:** In case of AKZA-OP-LF30A filter model, the set includes two filters, since the frame requires two filters.

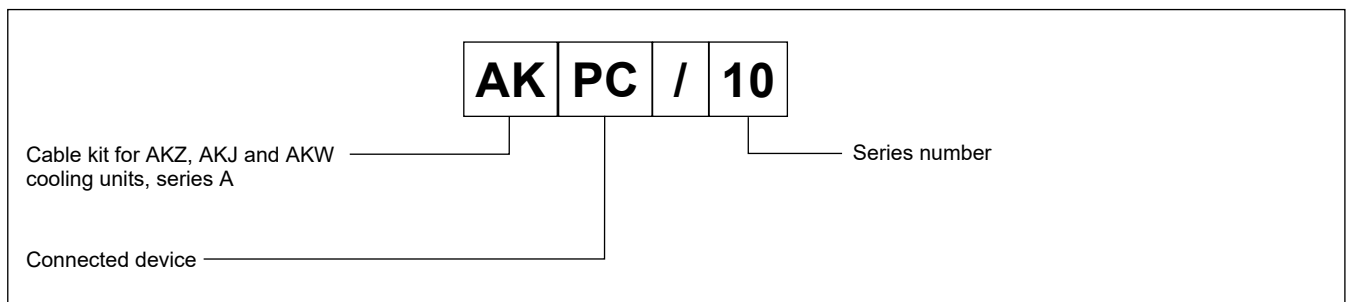
**2.6 - Frame installation and filter replacement scheme**


### 3 - AKPC CABLE KIT FOR HYBRID-WIN

#### 3.1 - Operating principle



#### 3.2 - Identification code



#### 3.3 - Hybrid-Win software

Hybrid-Win software main features include:

##### Creating graphs

Machine temperature, ambient temperature, current consumption and other internal data can be monitored and displayed in graphs. They can also be saved in .csv format.

These key visuals facilitate operation checks during test runs, parameter adjustments and troubleshooting.

##### Editing parameter settings

End users can read and write parameters and easily set them to save time.

Remote setting is also possible.

##### Alarm history

This function quickly identifies parts that require maintenance to reduce downtime.

Troubleshooting information includes a diagnosis of what caused an alarm and actions to resolve the issue.

Moreover, information can be saved in a file to be sent to the service for troubleshooting.

The software is compliant with Microsoft OS Windows for Windows 7, 8 and 10.

**NOTE: The Hybrid-Win tool may not run on some specific PCs. We recommend to install the software and check that it runs properly before buying the AKPC kit.**

The Hybrid-win software can be downloaded from the [product page](#) on our website. The minimum required version to work with the cooling units A series is 2.5.0.

Useful information is also in the 'Hybrid System Maintenance Tool', included in the download.



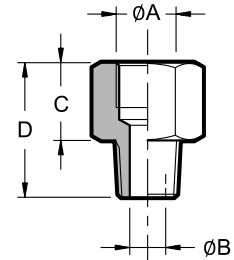
## 4 - FITTINGS

BSP / Rc fittings are available for connecting piping to the basic models of the cooling units. Customized versions are already equipped with fittings.

Material: AISI 304L.

dimensions in mm

Art. code	ØA	ØB	C	D	exagon	for models:
<b>K0534900</b>	1/2" BSPP	12	26	21	32	AKW18, AKW35, AKW45
<b>K0534901</b>	3/4" BSPP	16	29	26.5	36	AKZ14, AKZ32, AKZ43 AKW58, AKW92



## 5 - MODBUS CONNECTOR

The mobile plug for Modbus connection of plug-in socket models is available loose to be assembled by the customer.

**purchasing code: K0600CJS**

5-pin +PE connector, female, plastic, IP 44

standard: DIN EN 175 301-801  
 cable entry: PG11  
 conductor size: from 0.5 mm<sup>2</sup> to 2.5 mm<sup>2</sup>  
 contacts: Han Quick Lock; no tools needed  
 stripping: 10 mm  
 shield arranged: yes

