APPLICATION FOR TARIFF
CONCESSION ORDER (TCO)

Are you aware that substitutable goods are produced in Australia in the ordinary course of business?

(a) If you are aware, based on information and your inquiries that substitutable goods are being produced in Australia in the ordinary course of business then you should not lodge an application for a TCO.

Do you need to apply for new TCO?

(b) Before lodging this application for a TCO, the applicant should determine whether a suitable TCO already exists. Information on existing TCOs is contained in the Schedule of Concessional Instruments (SCI), which is available on the Internet at www.customs.gov.au.

Have you verified that there are no substitutable goods produced in Australia (refer to questions 5, 6 and 7 of the form)?

(c) Section 269FA of the Customs Act 1901 states "It is the responsibility of an applicant for a TCO to establish, to the satisfaction of the Chief Executive Officer (CEO), that, on the basis of:

(i) all information that the applicant has, or can reasonably be expected to have; and

(ii) all inquiries that the applicant has made, or can reasonably be expected to make; there are reasonable grounds for asserting that the application meets the core criteria."

The application is taken to meet the core criteria if, on the day of lodgement of the application, no substitutable goods were produced in Australia in the ordinary course of business.

Completing the application

(d) Section 269F of the Customs Act 1901 requires that a TCO application be in writing, be in an "approved form", contain such information as the form requires, and be signed in the manner indicated in the form. This is the approved form for the purposes of that section.

(e) Section 269F(3) states that a TCO application must contain:

(a) a full description of the goods to which the application relates; and

(b) a statement of the tariff classification that, in the opinion of the applicant, applies to the goods; and

(c) if the applicant is not proposing to make use of the TCO to import the goods to which the application relates into Australia on the applicant's own behalf - the identity of the importer for whom the applicant is acting; and

(d) particulars of all inquiries made by the applicant (including inquiries made of prescribed organisations) to assist in establishing that there were reasonable grounds for believing that on the day on which the application was lodged, there were no producers in Australia of substitutable goods.

Question 1 to 8 must be answered

(f) Failure to supply the information required by this form will result in rejection of the application (and in the loss of operative date.)

(g) Customs and Border Protection may require an applicant to substantiate, with documentary evidence, any information provided in the application form. Customs and Border Protection may also undertake its own inquiries as allowed under section 269M.

(h) Receipt of your application will be acknowledged. Any resultant TCO will operate from the date of receipt.

(i) Where an application is accepted as being a valid application, the identity of the applicant and of the importer for whom the applicant is acting will be published in the Commonwealth of Australia Tariff Concessions Gazette (the Gazette).

(j) Further Information on the Tariff Concession System is available in Part XVA of the Customs Act 1901; in relevant Australian Customs Notices (ACNs), Practice Statements and related Instructions and Guidelines on the Internet at www.customs.gov.au; by e-mailing tarcon@customs.gov.au; or by phoning the Customs and Border Protection Information Centre 1300 353 263.

(k) Attached to this form are extracts from relevant legislation. Also please refer to Australian Customs Notice 2010/03 containing advice as to what Customs and Border Protection considers to be 'reasonable inquiries', advice on conducting searches on national and international search engines and a suggested format letter that you might choose to use when contacting potential local manufacturers to determine if it produces substitutable goods.
269E Interpretation - the ordinary course of business

(1) For the purposes of this Part, other than section 269Q, goods (other than made-to-order capital equipment) that are substitutable goods in relation to goods the subject of a TCO application are taken to be produced in Australia in the ordinary course of business if:

(a) they have been produced in Australia in the 2 years before the application was lodged; or
(b) they have been produced, and are held in stock, in Australia; or
(c) they are produced in Australia on an intermittent basis and have been so produced in the 5 years before the application was lodged;

and a producer in Australia is prepared to accept an order to supply them.

(2) For the purposes of this Part, goods that:

(a) are substitutable goods in relation to goods the subject of a TCO application; and
(b) are made to order capital equipment;

are taken to be produced in Australia in the ordinary course of business if:

(c) a producer in Australia:

(i) has made goods requiring the same labour skills, technology and design expertise as the substitutable goods in the 2 years before the application was lodged; and
(ii) could produce the substitutable goods with existing facilities; and

(d) the producer is prepared to accept an order to supply the substitutable goods.

(3) In this section:

made-to-order capital equipment means a particular item of capital equipment:

(a) that is made in Australia on a one-off basis to meet a specific order rather than being the subject of regular or intermittent production; and

(b) that is not produced in quantities indicative of a production run.
### Applicant Details

<table>
<thead>
<tr>
<th>Applicant’s Name:</th>
<th>Australian Business Number (A.B.N):</th>
</tr>
</thead>
<tbody>
<tr>
<td>LG Electronics Australia Pty Ltd</td>
<td>98 064 531 264</td>
</tr>
</tbody>
</table>

| Postal Address: | 2 Wonderland Drive, Eastern Creek, NSW 2766 |

<table>
<thead>
<tr>
<th>Applicant’s Reference:</th>
<th>Company Contact:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Y Branch TCO</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Telephone Number:</th>
<th>Mobile Telephone Number:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Facsimile Number: | 02 8805 4201 |

If the applicant (as named above) does not intend to use the TCO to import into Australia the goods the subject of the application, you must provide, in the section below, the identity of the importer for whom you are acting (refer to paragraph 266F(3)(c) of the Customs Act 1901).

### Importer Details

<table>
<thead>
<tr>
<th>If same as applicant write “as above”</th>
<th>Australian Business Number (A.B.N):</th>
</tr>
</thead>
<tbody>
<tr>
<td>“as above”</td>
<td></td>
</tr>
</tbody>
</table>

<table>
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<tr>
<th>Postal Address:</th>
</tr>
</thead>
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<tr>
<td></td>
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</table>

<table>
<thead>
<tr>
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<th>Company Contact:</th>
</tr>
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<td>Y Branch TCO</td>
<td></td>
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<table>
<thead>
<tr>
<th>Telephone Number:</th>
<th>Mobile Telephone Number:</th>
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<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Facsimile Number: | |
|-------------------| 02 8805 4201 |

### Agent/Broker Details (if applicable)

<table>
<thead>
<tr>
<th>Agent’s Name:</th>
<th>Australian Business Number (A.B.N).</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>65 328 562 064</td>
</tr>
</tbody>
</table>

| Postal Address: | PO Box 243 Elsternwick Vic 3185 |

<table>
<thead>
<tr>
<th>Agent’s Reference:</th>
<th>Agency Contact:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Y Branch TCO</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Facsimile Number: | 03 9555 4551 |

Is this application intended to support an application for a concession under the Enhanced Project By-law Scheme?  
[ ] YES  
[ ] NO
5. Information that the applicant and importer has regarding Australian manufacturers of substitutable goods or potentially substitutable goods.

The following questions require the applicant and the importer (if a different party to the applicant) to provide details of all information that they have with regard to the presence of Australian manufacturers of substitutable goods or potentially substitutable goods.

5A APPLICANT:

In considering the goods which are the subject of this TCO application, is the applicant aware of any Australian manufacturers or producers of substitutable goods, or of potentially substitutable goods?

☐ YES ☑ NO  If YES, please provide the names of these Australian manufacturers or producers.

5B - IMPORTER:

In considering the goods which are the subject of this TCO application, is the importer (as listed on page 2) aware of any Australian manufacturers or producers of substitutable goods or potentially substitutable goods?

☐ YES ☑ NO  If YES, please provide the names of these Australian manufacturers or producers.

5C. Please provide details of other information that the applicant and/or importer may have to assist in locating any local manufacturers.

(i) Is the applicant and/or importer a member of a relevant industry association and, if so, what is the name of the association?

☑ YES ☐ NO

If YES, what is the name of association/s: Air Conditioning and Refrigeration Equipment Manufacturers Association of Australia

(ii) Has the applicant and/or importer attended, in the past year, any trade fairs or industry events where Australian manufacturers and producers of goods that may be substitutable have been exhibitors?

☐ YES ☑ NO

If YES, what is/are the name/s of relevant Australian manufacturers of potentially substitutable goods that may have exhibited?

(iii) In the past two years, has the applicant and/or importer participated in government and/or trade procurement processes (for example, tenders for made-to-order capital equipment) which might indicate the existence of Australian manufacturers or producers of goods that are substitutable, or potentially substitutable, for the goods that are the subject of this TCO application?

☐ YES ☑ NO

If YES, describe each procurement process, and type of goods, including made-to-order capital goods, that were the subject of each procurement process and any Australian manufacturers or producers known to have participated in each procurement process?
1. DESCRIPTION OF GOODS

(a) The description of the goods in the application may be used as the description of the goods in the TCO (if made).

(b) The application must provide a full description of the goods, including the physical features of the various components of the goods. It must not describe the goods in terms of what they do.

(c) In accordance with section 269SJ of the Customs Act 1901, the CEO must not make a TCO in respect of goods:
   (i) described in terms other than in generic terms; or
   (ii) described in terms of their intended end use; or
   (iii) declared by the regulations to be goods to which a TCO should not be extended.

   Goods will be taken to be described in terms other than in generic terms if, for example, their description, either directly or by implication, indicates that they are goods of a particular brand or model, or that a particular part number applies to the goods.

(d) Guidance on the drafting of the description of goods is contained in relevant Practice Statements and/or Instructions and Guidelines on the Internet at www.customs.gov.au. Failure to comply with Customs and Border Protection requirements may result in rejection of the application.

Describe the goods as you would propose the wording to appear if the Tariff Concession Order is granted.

Y-Branch, kits, consists of:

(a) Two Y-Branches

(b) Reducer fittings

(c) Moulded clam-shell type insulation covers

2. ILLUSTRATIVE MATERIAL

Attach technical and illustrative descriptive material (IDM) as well as any extracts from the relevant industry standard (if referred to in the description of the goods) and/or a sample to enable full and accurate identification of the goods the subject of the application. This application will be rejected if insufficient or inadequate IDM is provided.

Please note that simply supplying a reference to a website is not acceptable.

3. TARIFF CLASSIFICATION

(a) Identify the tariff classification (to 8 figure subheading level) 7412.20.00

(b) Identify the General Duty rate 5.4%

(c) If a Tariff Advice for the goods has been sought or obtained, please provide the TA No or attach a copy.

4. USES OF THE IMPORTED GOODS

Describe ALL uses (including design uses) to which the goods can be put.

Air conditioner refrigerant branch joint.
6. INQUIRIES THAT THE APPLICANT AND/OR IMPORTER HAS MADE REGARDING LOCAL MANUFACTURERS OF SUBSTITUTEABLE GOODS, OR OF POTENTIALLY SUBSTITUTEABLE GOODS?

The following questions require you to provide details of all inquiries that the applicant and/or importer have made to assist the CEO in establishing that there are reasonable grounds for believing that, on the day on which the application was lodged, there were no producers or manufacturers in Australia of substitutable goods, or potentially substitutable goods.

6A - PRESCRIBED ORGANISATIONS - Prescribed organisations, such as the Industry Capability Network, are listed in Regulation 179A of Customs Regulations 1926.

Have you asked a prescribed organisation to obtain advice about whether there are manufacturers or producers in Australia of substitutable goods, or of potentially substitutable goods?

☐ YES Please attach a copy of the terms of the request and all advice received. If you have obtained a report from a prescribed organisation, you are not required to answer 6B.

☑ NO If you have not obtained a report from a prescribed organisation, you are required to answer 6B.

6B. SEARCHES OF THREE DIFFERENT DATABASES CONTAINED IN TRADE DIRECTORIES, PUBLIC SEARCH ENGINES OR WEBSITES LISTING AUSTRALIAN PRODUCTS

If you have not obtained a report from a prescribed organisation, you must make inquiries in at least three databases to locate the possible existence of Australian manufacturers or producers of goods that may be substitutable for the goods the subject of the TCO application. Examples of these databases may include trade directories such as Kompass, search engines such as Google, and websites listing Australian products such as www.australianmade.com.au. Please refer to ACN 2010/03 for guidance as to what Customs and Border Protection considers to be a reasonable search.

1 - Name of database: www.google.com.au

Search terms used in database: "y branch air conditioning australian manufacturer"

Please attach printouts of the search results. For search engines such as Google, please supply only the first three pages.

2 - Name of database: www.australianmade.com.au

Search terms used in database: "Y-Branch air conditioning"

Please attach printouts of the search results. For search engines such as Google, please supply only the first three pages.

3 - Name of database: www.jpmmedia.com.au

Search terms used in database: "Y-Branch air conditioning"

Please attach printouts of the search results. For search engines such as Google, please supply only the first three pages.

6C. INDUSTRY ASSOCIATIONS

Has the applicant and/or importer made inquiries of industry associations in Australia representing suppliers, manufacturers of the goods that may be substitutable to those the subject of the TCO?

☑ YES Please attach a copy of the terms of the request and any response received.

☐ NO Please explain why you have not made enquiries.

AREMA - Air Conditioning and Refrigeration Equipment Manufacturers Association of Australia
AIRAH - Australian Institute of Refrigeration, Airconditioning and Heating

Please refer to section 7 for all correspondence sent to potential manufacturers and industry associations.
7. NOTIFICATION OF POTENTIAL AUSTRALIAN MANUFACTURERS

If any of the answers to questions 5 or 6 identified any potential local manufacturers of substitutable goods, please provide details of the inquiries that you undertook to notify those local manufacturers of your application and to seek advice as to whether they believe they manufacture any substitutable goods. Please refer to Australian Customs Notice 2010/03 for a suggested format of a letter to a potential local manufacturer of substitutable goods.

Please provide a copy of your request to each business. Please provide the business names, details of the contact that you made and all responses received at the time of lodging this application.

1 - Name and address of business: Westaflex/Uniflex (Aust) Pty Ltd, 140-160 Bamfield Road, Heidelberg West, VIC 3081

Please provide a copy of your request to each business. Is the copy attached? ☑ YES ☐ NO

Please provide a copy of the response provided, if any. Is their response attached? ☑ YES ☐ NO

2 - Name and address of business: Sullair Australia, Via email

Please provide a copy of your request to each business. Is the copy attached? ☑ YES ☐ NO

Please provide a copy of the response provided, if any. Is their response attached? ☑ YES ☐ NO

3 - Name and address of business: Aussie Air Suspension, Via email

Please provide a copy of your request to each business. Is the copy attached? ☑ YES ☐ NO

Please provide a copy of the response provided, if any. Is their response attached? ☑ YES ☐ NO

4 - Name and address of business: NHP Electrical Engineering Products, Via email

Please provide a copy of your request to each business. Is the copy attached? ☑ YES ☐ NO

Please provide a copy of the response provided, if any. Is their response attached? ☑ YES ☐ NO

8. JUSTIFICATION FOR APPLICATION

Where potential Australian producers or manufacturers have been identified in questions 5, 6 or 7, please provide details as to why you believe that they do not produce substitutable goods in Australia in the ordinary course of business.

Please refer to the attached definitions for the legislative definitions of 'core criteria', 'substitutable goods'; 'goods produced in Australia' and 'the ordinary course of business'.

Our client 'LG Electronics Australia Pty Ltd' are leading specialists of air conditioning products in Australia. 'LG Electronics Australia Pty Ltd' advised us that they are not aware of any Australian manufacturers or producers of substitutable goods, or of potentially substitutable goods. However they did advise us to contact the Air Conditioning and Refrigeration Equipment Manufacturers Association of Australia (AREMA). Please see their response attached. As a result of sending out letters to local manufacturers, we received a phone call from 'Westaflex' who asked to see an IDM of the product. An IDM was sent on 08/02/2013 (please see attached). No further communication was made by 'Westaflex'. We received a reply via email from 'Sullair' who advised us that they do not manufacture the product but advised us to contact 'Industrial Fittings'. An email was sent to 'Industrial Fittings' but no reply was received. A response was received from 'Aussie Air Suspension' who advised us that they do not manufacture the product. A response was received from 'NHP Electrical Engineering Products' who also advised us that they do not manufacture the product.
APPLICATION FOR A TCO
www.customs.gov.au

Position Held

Company: (if applicable)

declare that:

1. I have the authority to act on behalf of the company/applicant;

2. To the best of my knowledge and belief the information contained in this form including any attachments is correct:

3. I have ensured that questions 1 to 8 are completed and supporting documents are provided; and

4. I agree, in submitting this form by electronic means (including facsimile) that, for the purposes of Sub-section 14(3) of the Electronic Transactions Act 1999, this application will be taken to have been lodged when it is first received by an officer of Customs and Border Protection, or if by e-mail to tarcon@customs.gov.au, when it is first accessed by an officer of Customs and Border Protection, as specified in Sub-Section 269F(4) of the Customs Act 1901.

5. I have read the relevant Australian Customs Notice headed Applicant's Obligations in Making a TCO application and the definitions attached to this form and understand my obligations under Section 269FA with regard to the making and processing of Tariff Concession Order applications.

6. I acknowledge that I understand that under Section 269M(6) of the Customs Act 1901 that at any time during the period of 150 days from the gazettal day, the CEO may, for the purpose of dealing with a TOO application, and despite section 16 of the Customs Administration Act 1985, give a copy of all, or of a part, of the application to a prescribed organisation with a view to obtaining the advice of the organisation in relation to the question whether there are any producers in Australia of substitutable goods.

Signature of Applicant/Agent/Broker: __________________________

Date: 26/02/2013

NOTE:

Section 234 of the Customs Act 1901 provides that it is an offence to make a statement to an officer that is false or misleading in a material particular.

Before lodging your form please ensure that you have attached the following:

☑ Attached IDM/Samples?
☑ Attached Local Manufacturer search results?
☑ Application signed & dated?
☑ Questions 1-8 answered?
☑ All enquiries requested undertaken?

When this form has been completed please lodge it with Customs and Border Protection by:

• posting it by prepaid post to:
  Director
  Tariff Concession Section
  Trade Services Branch
  Australian Customs and Border Protection Service,
  Customs House
  5 Constitution Avenue
  CANBERRA ACT 2601

• delivering it to the ACT Regional Office located at:
  Customs House, Canberra

  OR

• sending it by facsimile to: (02) 6275 6376

  OR

• e-mailing it to: tarcon@customs.gov.au
Information for applicants - some useful definitions from the Customs Act 1901

substitutable goods, in respect of goods the subject of a TCO application or of a TCO, means goods produced in Australia that are put, or are capable of being put, to a use that corresponds with a use (including a design use) to which the goods the subject of the application or of the TCO can be put.

(3) In determining whether goods produced in Australia are put, or are capable of being put, to a use corresponding to a use to which goods the subject of a TCO, or of an application for a TCO, can be put, it is irrelevant whether or not the first mentioned goods compete with the second mentioned goods in any market.

269C Interpretation - core criteria

For the purposes of this Part, a TCO application is taken to meet the core criteria, on the day on which the application was lodged, no substitutable goods were produced in Australia in the ordinary course of business.

269D Interpretation - goods produced in Australia

(1) For the purposes of this Part, goods, other than unmanufactured raw products, are taken to be produced in Australia if:

(a) the goods are wholly or partly manufactured in Australia; and

(b) not less than 1/4 of the factory or works costs of the goods is represented by the sum of:

(i) the value of Australian labour; and

(ii) the value of Australian materials; and

(iii) the factory overhead expenses incurred in Australia in respect of the goods.

(2) For the purposes of this Part, goods are to be taken to have been partly manufactured in Australia if at least one substantial process in the manufacture of the goods was carried out in Australia.

(3) Without limiting the meaning of the expression substantial process in the manufacture of the goods, any of the following operations or any combination of those operations does not constitute such a process:

(a) operations to preserve goods during transportation or storage;

(b) operations to improve the packing or labelling or marketable quality of goods;

(c) operations to prepare goods for shipment;

(d) simple assembly operations;

(e) operations to mix goods where the resulting product does not have different properties from those of the goods that have been mixed.

(4) For the purposes of this section, the CEO may, by instrument in writing published in the Gazette:

(a) direct that the factory or works cost of goods is to be determined in a specified manner; and

(b) direct that the value of Australian labour, the value of Australian materials or the factory overhead expenses incurred in Australia in respect of goods is to be determined in a specified manner; and

those directions have effect accordingly.

(5) The provisions of sections 48 (other than paragraphs (1)(a) and (b) and subsection (2)), 48A, 48B, 48A and 50 of the Acts Interpretation Act 1901 apply in relation to directions given under subsection (4) as if:

(a) references in those provisions to regulations were references to directions; and

(b) references in those provisions to the repeal of a regulation were references to the revocation of a direction.
Note 1. Apply insulation to all refrigerant piping (field supply). When using the insulation materials being marketed, employ heat resistant insulation material (heat resistant temperature: 120°C or more)  

Note 2. As the pipe cover contracts slightly conduct taping in the field securely by providing tapped parts as shown in so that no gap will exit on the piping cover and field supply insulation material.
**BRANCH JOINT INSTALLATION MANUAL**

**Selection of refrigerant piping size and use of Branch Joint**

1. Prepare the pipe to be connected in the field.
2. Determine the piping sizes of each part from table 3, 4, 5.
3. Determine the branch joint from table 1.
4. When pipe is cut with a pipe cutter or the like remove burr, dust and foreign materials inside the pipe and connect the pipe.
5. Always weld while flowing nitrogen, otherwise, the product may not operate due to sludge within the pipe.

<table>
<thead>
<tr>
<th>Models</th>
<th>Gas pipe</th>
<th>Liquid pipe</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARBLN01621</td>
<td>[Diagram]</td>
<td>[Diagram]</td>
</tr>
<tr>
<td>ARBLN03321</td>
<td>[Diagram]</td>
<td>[Diagram]</td>
</tr>
<tr>
<td>ARBLN07121</td>
<td>[Diagram]</td>
<td>[Diagram]</td>
</tr>
<tr>
<td>ARBLN14521</td>
<td>[Diagram]</td>
<td>[Diagram]</td>
</tr>
</tbody>
</table>

*For example, indicated 09.52 is the outer diameter (O.D.) of field jointed piping.

**Table 1. Branch Join Kit**

<table>
<thead>
<tr>
<th>Models</th>
<th>Gas side: 1EA</th>
<th>Liquid side: 1EA</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARBLN01621</td>
<td>[Diagram]</td>
<td>[Diagram]</td>
</tr>
<tr>
<td>ARBLN03321</td>
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<td>ARBLN07121</td>
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<tr>
<td>ARBLN14521</td>
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<td>[Diagram]</td>
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</tbody>
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**Table 2. Contents of branch joint kit**

<table>
<thead>
<tr>
<th>Contents</th>
<th>Branch Joint</th>
<th>Insulation</th>
<th>Manual</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gas side: 1EA</td>
<td>Gas side: 1EA</td>
<td>Liquid side: 1EA</td>
<td>1EA</td>
</tr>
</tbody>
</table>

**Table 3. Branch pipe for connection between Outdoor Units**

<table>
<thead>
<tr>
<th>Outdoor Units</th>
<th>Branch Joint pipe</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>ARCNN20</td>
</tr>
<tr>
<td>3</td>
<td>ARCNN20,ARCNN30</td>
</tr>
</tbody>
</table>

**Table 4. Refrigerant pipe diameter from branch to branch (Fig1-a,B,C,D)**

<table>
<thead>
<tr>
<th>Downward Indoor Unit total capacity [kW(Btu/h)]</th>
<th>Liquid pipe [mm(inch)]</th>
<th>Gas pipe [mm(inch)]</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 5.6 (19,100)</td>
<td>Ø6.35(1/4)</td>
<td>Ø12.7(1/2)</td>
</tr>
<tr>
<td>&lt; 16 (54,600)</td>
<td>Ø9.52(3/8)</td>
<td>Ø15.88(5/8)</td>
</tr>
<tr>
<td>&lt; 22.4 (76,400)</td>
<td>Ø9.52(3/8)</td>
<td>Ø22.2(7/8)</td>
</tr>
<tr>
<td>&lt; 33 (112,600)</td>
<td>Ø12.7(1/2)</td>
<td>Ø28.58(9/8)</td>
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<tr>
<td>&lt; 47 (160,400)</td>
<td>Ø15.88(5/8)</td>
<td>Ø28.58(9/8)</td>
</tr>
<tr>
<td>&lt; 71 (242,300)</td>
<td>Ø19.05(3/4)</td>
<td>Ø34.9(1 1/4)</td>
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<tr>
<td>104 (354,900)</td>
<td>Ø19.05(3/4)</td>
<td>Ø41.3(1 1/4)</td>
</tr>
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</table>

**Table 5. Between branching and Indoor Unit (Fig1-a,b,c,d,e)**

<table>
<thead>
<tr>
<th>Indoor Unit capacity [kW(Btu/h)]</th>
<th>Liquid pipe [mm(inch)]</th>
<th>Gas pipe [mm(inch)]</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 5.6 (19,100)</td>
<td>Ø6.35(1/4)</td>
<td>Ø12.7(1/2)</td>
</tr>
<tr>
<td>&lt; 16.0 (54,600)</td>
<td>Ø9.52(3/8)</td>
<td>Ø15.88(5/8)</td>
</tr>
<tr>
<td>&lt; 22.4 (76,400)</td>
<td>Ø9.52(3/8)</td>
<td>Ø19.05(3/4)</td>
</tr>
</tbody>
</table>
The Y-Branch is used to join one pipe segment to two or more segments during air conditioning installation. After connecting the refrigerant pipe with the Y-Branch, the Polyethylene clam shell insulation covers are applied on top of the Y-Branch.

The clam shell insulation does not have any mechanical function, it only acts as an insulation feature.

Please see the attached PDF for additional information.

What I am not sure about is the moulded clam-shell type insulation covers.

I do not understand what they are and how they work with the Y branch.

Is it possible to obtain a picture or diagram of them?
1. Please can you confirm what the Moulded clam-shell type insulation covers are made of? → PE
2. Please can you confirm whether the reducer fittings are also made of Copper? → Copper and Brass
Brass

Copper
Note: Only LG supplied Y-Branch and Header fittings can be used to join one pipe segment to two or more segments.

LG Y-Branch and Header kits are precision engineered devices designed to evenly divide the flow of refrigerant. Third-party or field fabricated Tee’s, Y-fittings, Headers, or other branch fittings are not qualified for use with LG Multi V systems. The only field-provided fittings allowed in a Multi V piping system are 45° and 90° elbows and full-port ball valves.

There is no limitation on the number of Y-Branches that can be installed, but there is a limitation on the number of indoor units connected to a single outdoor unit. See Table 1a on page 14.

Avoid installing Y-Branches backwards as shown in Figure 36. Refrigerant flow cannot make U-turns through Y-Branches.

Y-Branch Kits

The pipe coming from the outdoor unit should always connect to the single port end of the Y-Branch as shown in Figure 37.

Y-Branches may be installed in a horizontal or vertical configuration. When installed in the horizontal configuration, position the fitting so the take-off leg shares the same horizontal plane as the straight-thru leg plus or minus 10° as shown in Figure 38c. When installed in a vertical configuration, position the fitting so the straight-thru leg is plus or minus 3° of plum. See Figure 38 (a and b).

The first Y-Branch kit must be located at least 3 feet from the outdoor unit. Provide a minimum of 20 inches between a branch fitting and any other fitting or indoor unit piped in series to avoid generating refrigerant flow noise into the system.

It is recommended that when a Y-Branch is located in a pipe chase or other concealed space, access doors should be provided for access and inspection.

Y-Branch Insulation

Each Y-Branch kit comes with two clam-shell type peel and stick insulation jackets molded to fit the Y-Branch fittings as shown in Figure 39— one for the liquid line, one for the vapor line.

1. Check the fit of the Y-Branch clam-shell insulation jacket after the Y-Branch is installed.
2. Verify there will be no exposed pipe between the end of the Y-Branch, jacket, and adjacent pipe insulation.
3. Mark the pipe where the insulation jacket ends.
4. Remove the jacket.

Figure 37: Y-Branch Connections

Figure 38: Y-Branch installation alignment specification

a. Vertical Up Configuration
b. Vertical Down Configuration

c. Horizontal Configuration End View

Figure 39: Y-Branch Insulation and Pipe Detail

Due to our policy of continuous product innovation, some specifications may change without notification.