

SPECIFICATION

FOR

BRITISH POWER SUPPLY CORDSET (PB FR)

CORD : H05VV-F 3X1.50mm² PVC LEAD FREE

CUSTOMER : VPE/FARNELL

CUSTOMER'S PART No. : 1124398

VOLEX'S SPEC. REF. No. : 112523

ISSUE No. : 001

DATE : 23RD MAY 2011

CUSTOMER APPROVED :

APPROVED BY :	
SIGNATURE :	
APPROVED DATE :	
No. OF PAGES :	



Volex (Asia) Pte Ltd

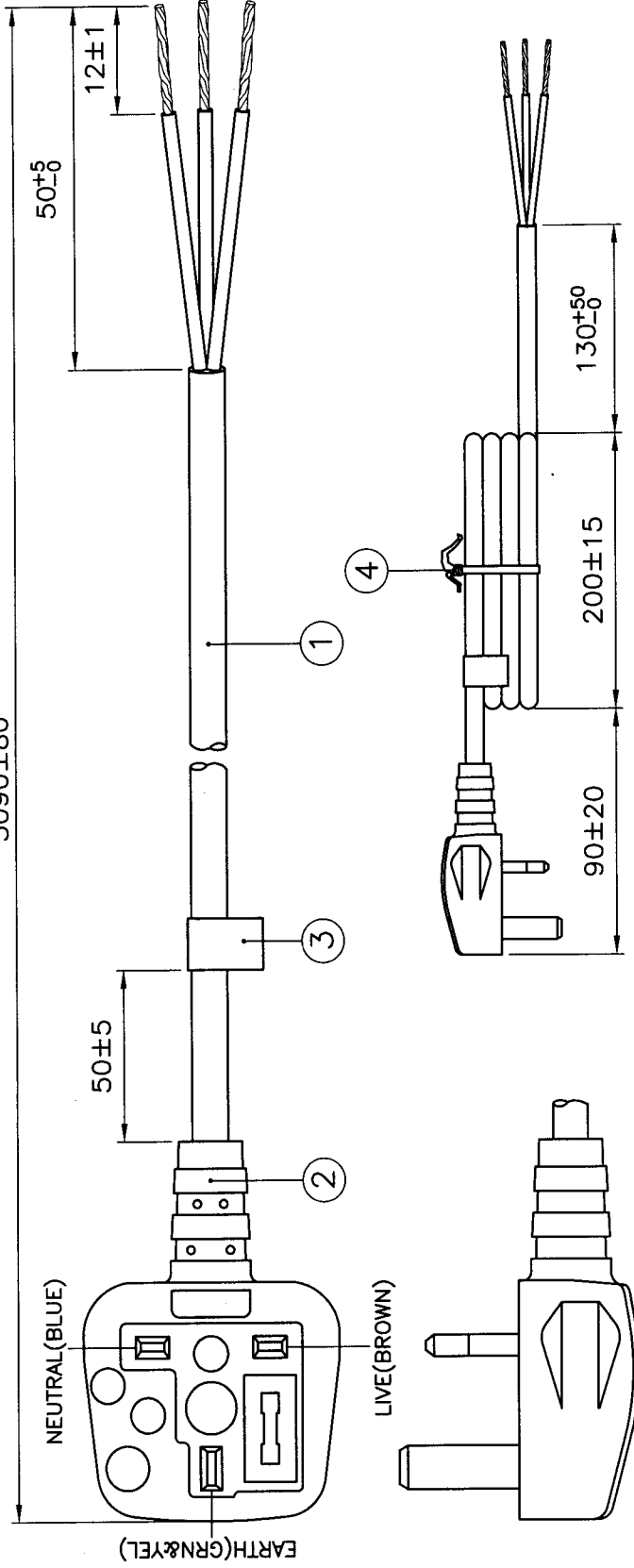
35 Tampines St. 92

Singapore 528880

Tel : (65) 6788 7833

Fax : (65) 6788 7822

3090±80



APPROVED SOURCE FOR CABLE

1. BAO HING(SHENZHEN).
2. TONG YUAN(SHENZHEN).

NOTE:

1. ALL DIMENSIONS IN mm.
2. THE CORD SHALL COMPLY WITH HD21.
3. THE MOLDED PLUG SHALL COMPLY WITH BS 1363-1.
4. THIS PART CAN BE MANUFACTURED AT ANY LOCATION WHICH HAS SAFETY APPROVAL.

4	8" PE TIE WHT	6310063	1
3	LABEL PE WARNING 3C 728641 YEL	6100095	1
	FUSE 13A (CAP WITH NICKEL PLATING)	6210014	OR
	FUSE 13A	6210002	1
	IP60G NL7976B BLK	4100115	-
2	MOLDED PLUG MP5004 (13A 250V)	MP5004-B	1
1	H05VV-F 3X1.50 BLK PVC LEAD FREE	1210523	1
S/N	DESCRIPTION	ITEM NUMBER	QTY
TITLE : BRITISH POWER SUPPLY CORDSET (PB FR)		SCALE : N.T.S.	
CUSTOMER : VPE/FARNELL		PAGE : 1/1	
CUSTOMER PART NUMBER : 1124398		ISSUE	001
Reference Number : 112523 (HG05-201-11)			
SALES :	QA : <i>Kim</i>	ENGRG :	CHECKED BY : <i>YANG</i>
Date :	Date : <i>25/5/11</i>	Date :	Date : <i>23/05/11</i>

Voilex

REV.	DESCRIPTION	DATE
E	UPDATE THE FORMAT AS SHOWN.	02/02/05
F	REVERT THE FORMAT.	24/02/05

1. PVC FLEXIBLE CORD

1.1 SCOPE

This specification shall be in accordance with HD21.

1.2 CONSTRUCTION

CONDUCTOR	ANNEALED COPPER WIRE
INSULATION	PVC (BLUE, BROWN AND GREEN&YELLOW)
JACKET	PVC

ITEM	UNIT	SPEC. VALUE	
TEMPERATURE RATING	°C	70	
RATED VOLTAGE	V	300/500	
NO. OF CORE	NO.	3	
CONDUCTOR NOMINAL AREA	mm ²	1.50	
MIN. AVE. THICKNESS OF INSULATION	mm	0.70	
MIN. THICKNESS AT ANY POINT OF INSULATION	mm	0.53	
MIN. AVE. THICKNESS OF JACKET	mm	0.90	
MIN. THICKNESS AT ANY POINT OF JACKET	mm	0.665	
OVERALL DIAMETER OF JACKET	mm	7.4~9.4	
DIELECTRIC-STRENGTH TEST IMMERSED IN WATER 20±5°C FOR MINIMUM 1 HOUR	ON COMPLETED CABLE	-	2000V for 15 mins.(minimum)
	ON CORES	-	2000V for 5 mins.(minimum)
VOLTAGE TEST (D.C)	-	-	5000V d.c. for 5 mins.(minimum)
	-	-	2000V a.c. for 5 mins.(minimum)
INSULATION RESISTANCE TEST (70°C)	M Ω/km	>0.01	
CONDUCTOR RESISTANCE TEST (20°C)	Ω/km	≤13.3	

TITLE : CABLE SPECIFICATION
EUROPEAN APPROVED POWER SUPPLY CABLE
H05VV-F 3X1.50mm²

CS-041EU

APPROVED BY :	CHECKED BY :	DRAWN BY :	REVISION :
<i>Hung</i>	<i>Wito</i>	LI XIA	F
DATE :	DATE :	DATE :	PAGE :
24/2/05	24/2/05	24/02/05	1/1



Volex



REV.	DESCRIPTION	DATE
A	INITIAL RELEASE.	26/03/03
	UPDATE THE FORMAT AS SHOWN.	
B	ADD IN '(EU/SAA/SAB/IEC)' ON THE TITLE.	21/01/05

CABLE MARKING

BAO HING (SHENZHEN)

:- H05W-F 3G1.5mm² <VDE> KEMA-KEUR IEMMEQU SABS 1574

BAOHING GTSA-3 N14586 **CE** LF

DRAWN	QIAN SM	21/01/05	FILENAME :	TITLE :
CHECK	<i>W. J. S.</i>	21/01/05	CABLE MARKING	CABLE MARKING (EU/SAB/SAA/IEC) 
APPR	<i>Chunhua</i>	21/01/05	H05W-F 3X1.50	
SCALE	N.T.S.	REV.	B	
REFERENCE :				<i>Volex (Asia) Pte Ltd</i>
H05W-F 3X1.50mm ² LF				<small>Confidential property of Volex Information contained herein shall not be disclosed to others reproduced or used for any other purposes except as authorized in writing by an authorized official of Volex Asia</small> 



REV.	DESCRIPTION	DATE
B	REMOVE "-0476" ON FRENCH MARK.	06/01/03
C	UPDATE THE FORMAT AS SHOWN.	21/01/05
	ADD IN '(EU/SAA/SAB/IEC)' ON THE TITLE.	

CABLE MARKING

TONG YUAN (SHENZHEN)

: - H05W-F 3G1.5mm² <VDE> KEMA-KEUR CEBEC +s+s+s <ÖVE>

ⓓ Ⓢ Ⓝ ⓕ IEMMEQU S/370 SABS 1574 NF-USE TONGYUAN LF

DRAWN	QIAN SM	21/01/05	FILENAME :	TITLE :
CHECK	<i>Weiz</i>	21/1/05	C-MARKING/H05/ NEW MARKING/H05	CABLE MARKING (EU/SAB/SAA/IEC) 
APPR	<i>Changhua</i>	21/1/05	W-F 3X1.5 LF-TY	
SCALE	N.S.	REV.	C	
REFERENCE :				<i>Volex (Asia) Pte Ltd</i>
H05W-F 3X1.5mm ² LF				<small>Confidential property of Volex.</small> <small>Information contained herein shall not be disclosed to others.</small> <small>reproduced or used for any other purposes except as</small> <small>authorized in writing by an authorized official of volex asia</small> 

2. PLUG

REV	DESCRIPTION	DATE
T	REMOVE CATALOG NO. 'MP5005, MP5005SC' PER ECN011-09.	12/08/09
U	ADD IN CATALOG NO. 'DS13CA2'.	14/12/09

2.1. SCOPE


The plug shall be in accordance with BS 1363 Part 1,
(Specification for up to 13A fused plugs,switched and unswitched socket-outlets)

2.2. CONSTRUCTION

The plug construction shall comply with our catalogue No: MP5004, MP5004A, MP5004AW, MP5004H, MP5004SC, UK13A2,UK13CBA2,UK10SC3, MP5004BS, MP5004V, UK13A3 , MP5004DBS , MP5004D , VPUK13A3, VPUK13A2 & DS13CA2.

2.3. CHARACTERISTICS

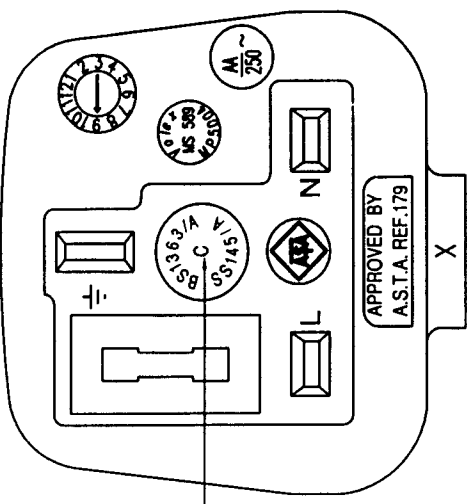
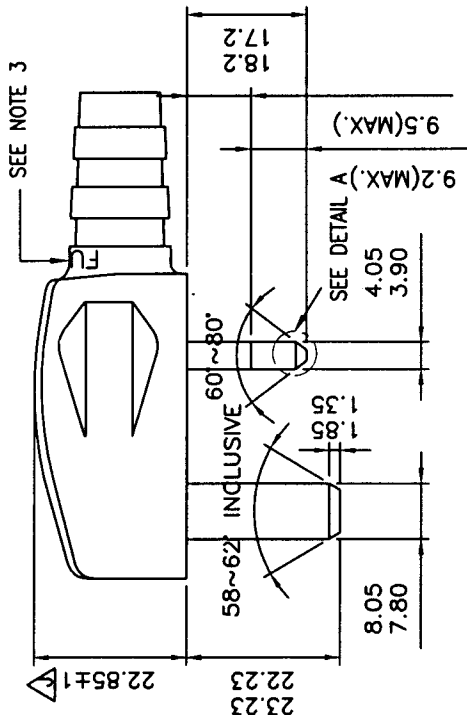
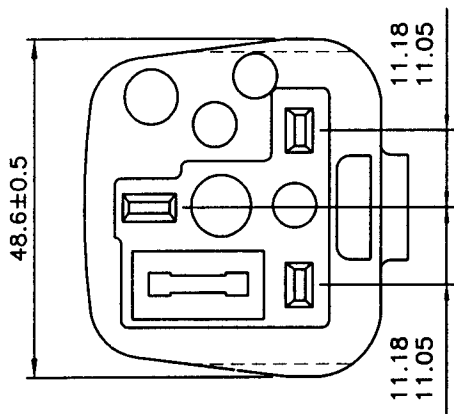
NO.	TEST ITEM	DESCRIPTION	TEST RESULT
1.	Moisture resistance test	Samples are kept in a humidity cabinet containing air with a relative humidity between 85 to 95% and a temperature of 20°C-30°C for a duration of 48 hours.	No damage
2.	Electric strength test	A voltage of A.C 2000V with a trip current of min. 100mA is applied for 1 min after the moisture resistance test. A voltage of A.C 6000V is also applied between current carrying parts and body for 1 min.	No flashover and breakdown
3.	Insulation resistance test	This test is measured with a D.C 500V for 1 min. after the moisture resistance test.	Min. 5 M Ohm
4.	Flexing test	The sample shall be loaded with a weight of 1kg for 0.75mm ² or 2kg for 1.00mm ² and above and the oscillating member shall be moved backward and forward through an angle of 90° (45° on either side of the vertical) the number of flexing being 10,000. Rated current of the plug is passed.	No damage to the insulation and the breakage of conductor of each core shall not exceed 10%.
5.	Tumbling test	The samples are dropped from a height of 50cm onto a plywood base(10mm thick) for a total of 5000 times.	No damage
6.	Abrasion test	The pin of sample slopes downwards at angle of 10° to the horizontal. The sample is loaded with a force of 4N on the sleeve of the pin. The number of movement is 20,000 and the length of pin subjected to abrasion is approx. 7mm over the insulating sleeve.	No damage

DRAWN:	CONGFANG	14/12/09	TITLE : BRITISH PLUG
CHECK:	<i>[Signature]</i>	15/12/09	
APPR:	<i>[Signature]</i>	15/12/09	
REV:	U		
REFERENCE:			

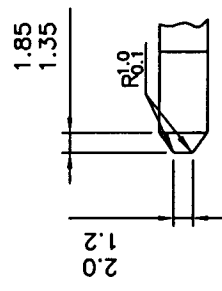
NO.	TEST ITEM	DESCRIPTION	TEST RESULT
7.	Heat deformation test	The samples are kept for 1 hour in a heating cabinet at temperature of 70±5°C.	no damage and withstand electric strength test.
8.	Ageing test	The samples are kept for 7 days in a heating cabinet at temperature of 70±5°C. It is then put in room temperature for 4 hours.	no damage
9.	Temperature rise test	Rated current of the plug is passed for at least 4 hours. This test is repeated on the same sample after tumbling barrel test.	Rise in temperature for joints shall not exceed 52K while the rest shall not exceed 37K.
10.	Cord-anchorage test	The cord is subjected to a load of 3kg for (1.0mm ² or smaller) or 6kg (the rest) 25 times without jerk. The cord is then subjected to a torque of 0.15Nm (0.5mm ²), 0.2Nm (0.75mm ²), 0.25Nm (1.0mm ²), 0.3Nm (1.25mm ²), 0.35Nm (1.5mm ²) for 1 min.	Shall withstand a voltage of 3750±75V for 1 min., between each conductor and cord shall not be displaced by more than 2mm.
11.	Pressure test	A force of 20N is applied on the sample for 1 hour at a temperature of 70±5°C.	No damage and shall withstand electric strength and insulation resistance test. The sample must also fit into fig. 5 jig of BS1363.
12.	Ball pressure test	A steel ball of 5mm in diameter is applied with 20N force on the sample at a temperature of 75±5°C for 1 hour. The sample is then cooled by cold water.	The diameter of the impression shall not exceed 2mm.
13	Glow wire test	The tip of the glow wire heated electrically to 750±10°C shall be applied at the portion between the current-carrying pins for a period of 30s.	Any flame and glowing shall extinguish within 30s after the removal of the glow-wire. There shall be no ignition of the tissue paper or scorching of the board.

DRAWN:	CONGFANG	14/12/09	TITLE : BRITISH PLUG
CHECK:	<i>[Signature]</i>	15/12/09	
APPR:	<i>[Signature]</i>	15/12/09	
REV:	U		
REFERENCE:			Volex

REV.	DESCRIPTION	DATE
I	REMOVE THE CLOSED FACTORY FROM MANU.	17/07/09
J	LOCATION MARK. CHANGE DIM. FM. '22.85±1' TO '22.85±1' PER ECRI00291.	30/03/10



SEE NOTE 5



MARKING DETAILS:

TABLE :

FUSE RATING (AA)	3	5	10	13	V

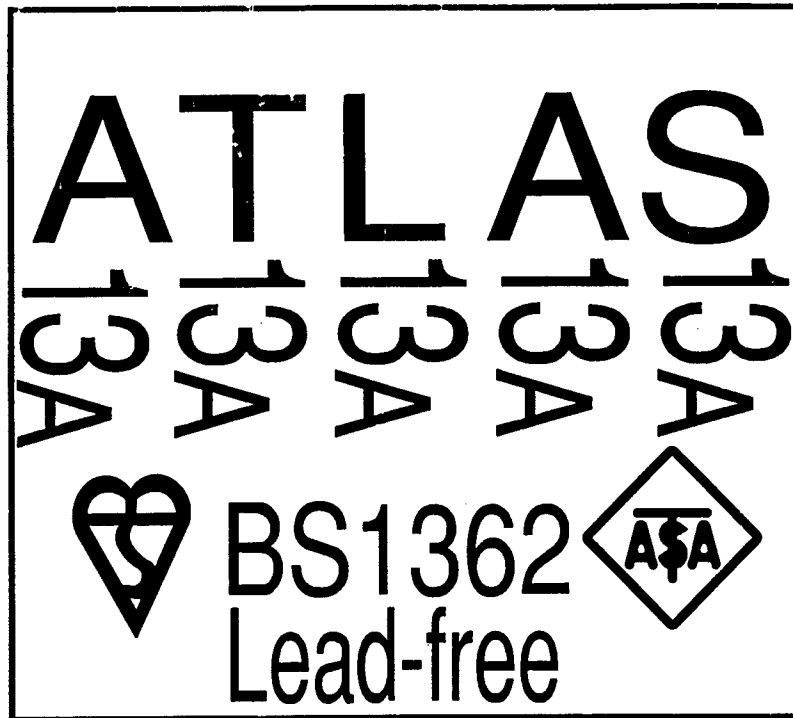
HG	HENG GANG (CHINA)	X	DRAWN	HONGYAN	30/03/10	FILE NAME :	TITLE :	
SM1	ZHONGSHAN (CHINA)	X	CHECK	Amak	30/03/10	A-PLUG/UK/ GENERAL/MP5004	MOLDED PLUG MP5004	
VH	HANOI (VIETNAM)	X	APPR	wat	30/3/10	-ASTA		
B	BATAM (INDONESIA)	X	REV.	J		N.T.S.		
VC	CHENNAI (INDIA)	X	REFERENCE :					
MANUFACTURE LOCATION MARK (' X ' IS APPLICABLE ONLY)			BRITISH APPROVAL					
			Volet (Asia) Pte Ltd					

NOTE :

- 1.) ALL DIMENSIONS IN mm.
- 2.) X - CAVITY NO. (OPTIONAL)
- 3.) THE WORD IS ' FUSED '
- 4.) AA - RATING : (REFER TO THE TABLE)
- 5.) MARKING 'C' FOR CABLE 1.25mm² & ABOVE.
WITHOUT 'C' FOR CABLE 1.0mm² & BELOW.

Confidential property of Volet.
Information contained herein shall not be disclosed to others, reproduced or used for any other purposes except as authorized in writing by an authorized official of Volet Asia.

REV.	DESCRIPTION	DATE
B	ADD II: 'Lead-free' IN MARKING & TITLE.	29/11/04
C	ADD IN 'REFERENCE E07.013-C'	31/07/08
	IN REFERENCE COLUMN.	

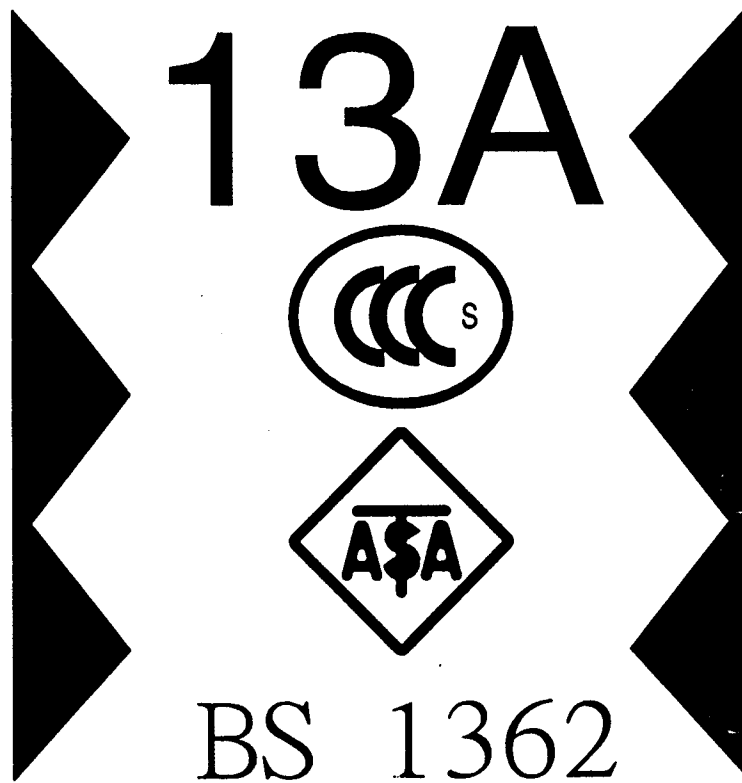


DRAWN	QIAN SM	31/07/08	REVISION: c	TITLE : LEAD FREE FUSE (13A)
CHECK	<i>hong</i>	31/07/08		
APPR	<i>sm</i>	31/07/08		
SCALE	N.T.S.			
REFERENCE :			△	Volex
6210002 (REFERENCE E07.013-C)				

REV.	DESCRIPTION	DATE
	ADD IN 'TYPE REFERENCE TDC 180	
E	-13A' IN REFERENCE COLUMN.	14/07/08
F	AMEND NOTE FOR ADD IN ITEM b.	29/08/08

*PRINT BLOCK TOPS WITH MACHINE NUMBERS

Bussmann



NOTE:

- (1) *PRINT BLOCK TOP (DOT LINE) = BUSSMANN INTERNAL IDENTIFICATION ON MACHINERY.
 a: DIFFERENT LOCATION/NUMBER OF DOT LINE INDICATE DIFFERENT MACHINE NUMBER USED.
 ⚠ b: THE FUSE PRODUCE ON THE MACHINE #20 IS WITHOUT THE PRINT BLOCK TOP (DOT LINE).

DRAWN	QUN SM	29/08/08	REVISION:	TITLE : LEAD FREE
CHECK	<i>Wets</i>	29/08/08		FUSE (13A)
APPR	<i>Bussmann</i>	29/08/08	F	
SCALE	N.T.S.			
REFERENCE :				Volex
6210014 (TYPE REFERENCE TDC 180-13A)				

Demko Certificate

Product: Ordinary PVC-sheathed cord
Manufacturer: Shenzhen Baohing Electric Wire&Cable Mfr. Co., Ltd.
Buchong Tongfuyu Industry Area, Shajing Street, Baoan District, Shenzhen 518104
CHINA
Production site: Same as manufacturer
Certified by request of: Same as manufacturer
Trademark: BAOHING
Model/Type ref.: See appendix
Rated current or power: -
Rated voltage: 300/500V
Insulation Class: -
Degree of protection: -
Additional information: See appendix

Variants covered by this certificate are specified in the attached appendix.
Detailed specification of the certified product(s) is listed in the appendix.

A sample of the product has been tested and found in conformity with HD 21.1 S4:2002 + HD 21.2 S3:1997 + A1:2002 + HD 21.5S3:1994 + A1:1999 + A2:2001

Date of expiry: 2011-11-27

Furthermore, the product complies with the national deviations in Denmark.

UL International Demko AIS is a body notified to the Member States and Commission of the European Communities according to the provisions of Article 8 of the Low Voltage Directive.

The Manufacturer complies with the Production Surveillance Requirements. Products included in this certificate are allowed to carry the registered approval marks of UL International Demko AIS, or for cables <DEMKO>. The name of UL International Demko AIS can be used in the marketing of the products. This Statement is only valid for products, which are identical to the tested product, and manufactured at the above-mentioned production site(s). UL International Demko AIS has to be informed in writing about any changes, in accordance with the "UL International Demko AIS Standard Terms and Conditions" for UL International Demko AIS services. The validity of this certificate is shortened if the EU legislation requires re-testing and re-certification, due to new standards or amendments coming into force, before the expiry date.

Herlev, 2006-12-04


Karina Christiansen
Certification Manager

UL International Demko A/S

Lyskaer 8, P.O. Box 514
DK-2730 Herlev, Denmark
Telephone: +45 44856565
Fax: +45 44856500



An Affiliate of
**Underwriters
Laboratories Inc.®**

Appendix to Demko Certificate No. 314097-01

The Certificate covers the following:

01; H05VVH2-F; 2x0,75-1,0 mm²

02; H05VV-F; 2x0,75-1,0 mm²

03; H05VV-F; 3G0,75-1,0 mm²

The certificate has been issued on the basis of Nordic certification Service, certificate No. 612411, issued by Intertek ETL SEMKO, dated 2006-11-27.

Herlev, 2006-12-04


Karina Christiansen
Certification Manager

UL International Demko A/S

Lyskaer 8, P.O. Box 514
DK-2730 Herlev, Denmark
Telephone: +45 44856565
Fax: +45 44856500



An Affiliate of
**Underwriters
Laboratories Inc.®**



CERTIFICATE

No. P06206868

Order No. 71152

Applicant	Shenzhen Baohing Electric Wire and Cable Manuf. Co. Ltd. Buchong Tongfuyu Industry Area, Shajing Rd, Shajing Str Baoan Distri, Shenzhen 518104 518101 Shenzhen City CHINA
Manufacturer	Shenzhen Baohing Electric Wire and Cable Manuf. Co. Ltd. Buchong Tongfuyu Industry Area, Shajing Rd, Shajing Str Baoan Distri, Shenzhen 518104 518101 Shenzhen City CHINA
Factory	Shenzhen Baohing Electric Wire and Cable Manuf. Co. Ltd. Buchong Tongfuyu Industry Area, Shajing Rd, Shajing Str Baoan Distri, Shenzhen 518104 518101 Shenzhen City CHINA
Trade mark	BAOHING
Product	Cables; PVC-insulated
Model/type	H05VV-F
Ratings and principal characteristics	2x0.75-1.0mm ²
Additional information	Ordinary polyvinyl chloride sheathed cord (round) , 300/500V. All colours.
Standard(s)	Safety std.: HD 21.5 S3:1994; A1; A2 HD 21.1 S4:2002 HD 21.2 S3:1997; A1
Validity	This certificate documents conformity with the standards shown, and also applies as license for use of Nemko's name and certification mark. The certificate and license is valid as long as the applicable conditions are complied with, and provided that any changes to the product are notified to Nemko for acceptance prior to implementation. New standards or amendments to the standards may imply that the product design must be updated and/or that re-testing and re-certification is necessary.
Variants	This Certificate also covers variants with Position No. from 001 to 004 See next page(s)

Date of issue 29 August 2006

signature

Pål Pedersen

Certification Department

Nemko AS
P.O. Box 73, Blindern
N-0314 Oslo, Norway

Office address
Gaustadalléen 30
Oslo

Telephone
+47 22 96 03 30
Enterprise number:

Fax
+47 22 96 05 50
NO 974404532

No. P06206868

Order No. 71152

Product Cables; PVC-insulated
Position No 004
Model/type H05VVH2-F
Rating and principal characteristics 2x0.75-1.0mm²
Additional information Ordinary polyvinyl chloride sheathed cord (flat) , 300/500V. All colours.

Product Cables; PVC-insulated
Position No 001
Model/type H05VV-F
Rating and principal characteristics 3G0.75-1.0mm²
Additional information Ordinary polyvinyl chloride sheathed cord (round) , 300/500V. All colours.

Product Cables; PVC-insulated
Position No 002
Model/type H05VVH2-F
Rating and principal characteristics 2x0.75-1.0mm²
Additional information Ordinary polyvinyl chloride sheathed cord (flat) , 300/500V. All colours.
Copper conductors equipped with nylon fibre.

Product Cables; PVC-insulated
Position No 003
Model/type H05VV-F
Rating and principal characteristics 3G0.75-1.0mm²
Additional information Ordinary polyvinyl chloride sheathed cord (round) , 300/500V. All colours.
Copper conductors equipped with nylon fibre.

Date of issue 29 August 2006



signature

Pål Pedersen

Certification Department

Nemko AS
P.O. Box 73, Blindern
N-0314 Oslo, Norway

Office address
Gaustadalléen 30
Oslo

Telephone
+47 22 96 03 30
Enterprise number:

Fax
+47 22 96 05 50
NO 974404532

VDE Prüf- und Zertifizierungsinstitut

ZEICHENGENEHMIGUNG MARKS APPROVAL

Shenzhen Baohing Electric Wire
& Cable Manufacture Co., Ltd.
Buchong Tongfuyu Industry Area
Shajing Road, Shajing Street
518104 BAOAN DISTRICT, SHENZHEN CITY
CHINA

ist berechtigt, für ihr Produkt /
is authorized to use for their product

Flexible Leitung
Flexible cable (cord)

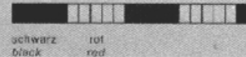
die hier abgebildeten markenrechtlich geschützten Zeichen
für die ab Blatt 2 aufgeführten Typen zu benutzen /
the legally protected Marks as shown below for the types referred to on page 2 ff.



oder/or



oder/or

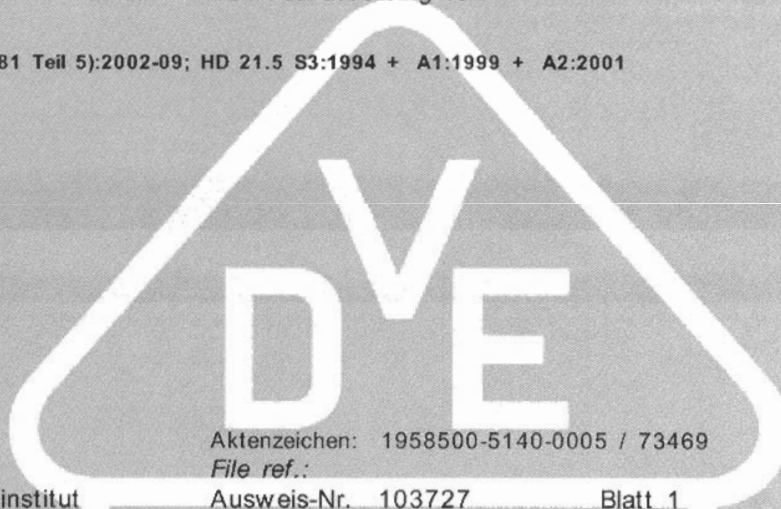


schwarz
black

rot
red

Geprüft und zertifiziert nach /
Tested and certified according to

DIN VDE 0281-5 (VDE 0281 Teil 5):2002-09; HD 21.5 S3:1994 + A1:1999 + A2:2001



VDE Prüf- und Zertifizierungsinstitut
VDE Testing and Certification Institute
Zertifizierungsstelle / Certification

VDE Zertifikate sind nur gültig bei Veröffentlichung unter:
VDE certificates are valid only when published on:

Aktenzeichen: 1958500-5140-0005 / 73469
File ref.:

Ausweis-Nr. 103727
Certificate No.

Blatt 1
Page

Weitere Bedingungen siehe Rückseite und Folgeblätter /
further conditions see overleaf and following pages

Offenbach, 1997-10-02
(letzte Änderung/updated 2007-02-21)

<http://www.vde.com/zertifikat>
<http://www.vde.com/certificate>

VDE VERBAND DER ELEKTROTECHNIK
ELEKTRONIK INFORMATIONSTECHNIK e.V.



VDE Prüf- und Zertifizierungsinstitut Zeichengenehmigung

Ausweis-Nr. / Blatt /
Certificate No. page
103727 2

Name und Sitz des Genehmigungs-Inhabers / Name and registered seat of the Certificate holder

Shenzhen Baohing Electric Wire & Cable Manufacture Co., Ltd., Buchong Tongfuyu Industry Area,
Shajing Road, Shajing Street, 518104 BAOAN DISTRICT, SHENZHEN CITY, Guangdong, CHINA

Aktenzeichen / File ref.

1958500-5140-0005 / 73469 / FG42 / STR

letzte Änderung / updated Datum / Date
2007-02-21 1997-10-02

Dieses Blatt gilt nur in Verbindung mit Blatt 1 des Zeichengenehmigungsausweises Nr. 103727.
This supplement is only valid in conjunction with page 1 of the Certificate No. 103727.

Flexible Leitung Flexible cable (cord)

Typ(en) / Type(s):

H03VV-F 2...3 x 0,5...0,75 mm²
H03VVH2-F 2 x 0,5...0,75 mm²
H05VV-F 2...5 x 0,75...4 mm²
H05VVH2-F 2 x 0,75...1,0 mm²

+
+
+
+

Firmenzeichen
Trademark

BAOHING

Dieser Zeichengenehmigungs-Ausweis bildet die Grundlage für die EG-Konformitätserklärung und CE-Kennzeichnung durch den Hersteller oder dessen Bevollmächtigten und bescheinigt die Konformität mit den genannten Normen im Sinne der **EG-Niederspannungsrichtlinie 2006/95/EG**.

*This Marks Approval is the basis for the EC Declaration of Conformity and the CE Marking by the manufacturer or his agent and shows the conformity with the said standards as defined by the **EC Low-Voltage Directive 2006/95/EC**.*

VDE Prüf- und Zertifizierungsinstitut
VDE Testing and Certification Institute
Fachgebiet FG42
Section FG42

VDE Prüf- und Zertifizierungsinstitut Zeichengenehmigung

Ausweis-Nr. / Beiblatt /
Certificate No. Supplement
103727

Name und Sitz des Genehmigungs-Inhabers / *Name and registered seat of the Certificate holder*

Shenzhen Baohing Electric Wire & Cable Manufacture Co., Ltd., Buchong Tongfuyu Industry Area,
Shajing Road, Shajing Street, 518104 BAOAN DISTRICT, SHENZHEN CITY, Guangdong, CHINA

Aktenzeichen / *File ref.*

1958500-5140-0005 / 73469 / FG42 / STR

letzte Änderung / *updated* Datum / *Date*

2007-02-21

1997-10-02

Dieses Beiblatt ist Bestandteil des Zeichengenehmigungsausweises Nr. 103727.

This supplement is part of the Certificate No. 103727.

Flexible Leitung ***Flexible cable (cord)***

Fertigungsstätte(n) ***Place(s) of manufacture***

Referenz/*Reference*
30005087

Shenzhen Baohing Electric Wire
& Cable Manufacture Co., Ltd.
Buchong Tongfuyu Industry Area
Shajing Road, Shajing Street
518104 BAOAN DISTRICT, SHENZHEN CITY
Guangdong
CHINA

VDE Prüf- und Zertifizierungsinstitut
VDE Testing and Certification Institute
Fachgebiet FG42
Section FG42



LICENCE

No. 9557 - Issue No 2

Issued to:

Applicant:

Shenzhen Baohing Electric Wire & Cable Mfr. Co. Ltd.

Buchong Tongfuyu Industry Area

Shajing Rd., Shajing Street, Baoan District

518104 SHENZHEN City

China

Licensee:

Shenzhen Baohing Electric Wire & Cable Mfr. Co. Ltd.

Buchong Tongfuyu Industry Area

Shajing Rd., Shajing Street, Baoan District

518104 SHENZHEN City

China

Product : flexible cables and cords

Trade name(s) : BAO HING

Type(s)/model(s) : H03 VV-F, H03 VVH2-F, H05 VV-F, H05 VVH2-F

The product and any acceptable variation thereto is specified in the annex to this licence and the documents therein referred to.

SGS CEBEC hereby declares that the above-mentioned product has been certified on the basis of:

- a type test according to the standard specified in annex
- an inspection of the production location according to CCA Group Operational Document CIG 021
- a certification agreement with the number 1101

SGS CEBEC hereby grants the right to use the CEBEC certification mark



The CEBEC certification mark may be applied to the product as specified in this licence for the duration of the CEBEC certification agreement and under the conditions of the CEBEC certification agreement.

This licence is issued on: 30/05/2006


Mr. R. Maquestiau,
Managing Director

© Only integral publication of this certificate, including the annex, is allowed

SPECIFICATION OF THE CERTIFIED PRODUCT**Product data**

Product : flexible cables and cords
Trade name(s) : BAO HING
Type(s)/Model(s) : H03 VV-F, H03 VVH2-F, H05 VV-F, H05 VVH2-F

Product data - type H03 VV-F

description : light PVC-sheathed cord
rated voltage Uo/U : 300/300 V
number of conductors : 2-3
cross-sectional area(s) : 0.75 mm²

Product data - type H03 VVH2-F

description : light PVC-sheathed cord
rated voltage Uo/U : 300/300 V
number of conductors : 2
cross-sectional area(s) : 0.75 mm²

Product data - type H05 VV-F

description : ordinary PVC-sheathed cord
rated voltage Uo/U : 300/500 V
number of conductors : 2-3
cross-sectional area(s) : 0.75-1 mm²

Product data - type H05 VVH2-F

description : ordinary PVC-sheathed cord
rated voltage Uo/U : 300/500 V
number of conductors : 2
cross-sectional area(s) : 0.75 mm²

TESTS

Test requirements

NBN HD 21.5:1995

Test results

The test results are laid down in certification file ref. 571243/01

Remarks

This certificate is based on test report(s) ref. 95.8809.01 and 95.8809.02

Conclusion

The examination proved that all test requirements were met.

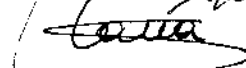
Checked by, project leader :

Jules Polart



2006-05-20

Department Manager,
Product Certification :



2006-06-02

Certification Manager :



2006-06-02

FACTORY LOCATION(S)

Shenzhen Baohing Electric Wire & Cable Mfr. Co. Ltd.
Buchong Tongfuyu Industry Area
Shajing Rd., Shajing Street, Baoan District
518104 SHENZHEN City
China

PID:
01021400
CID:
C.1998.6391

Certificato di approvazione *Approval certificate*

IMQ, ente di certificazione accreditato, autorizza la ditta *IMQ, accredited certification body, grants to*

**SHENZHEN BAOHING EL.WIRE & CABLE MFR. CO.
LTD.
BUCHONG TONGFUYU I.A., SHAJING RD., SHAJING
STR.
518104 BAOAN D., SHENZHEN
CN - China**

all'uso del marchio

the licence to use the mark

IMQ

Il presente certificato è
soggetto alle condizioni
previste nel "Regolamento
IMQ - Certificazione
prodotto" ed è relativo ai
prodotti descritti
nell'Allegato al presente
certificato.



per i seguenti prodotti

**Cavi isolati con pvc
(H05VV-F H05VVH2-F)**

for the following products

**PVC insulated cables
(H05VV-F H05VVH2-F)**

*This certificate is subjected to
the conditions foreseen by "IMQ
Rules - Product Certification"
and is relevant to the products
listed in the annex to this
certificate.*

Emesso il / Issued on:

1998-10-22

Data di aggiornamento / Updated on

2006-10-17

Sostituisce / Replaces

2001-06-07


IMQ S.p.A.

Allegato - Certificato di approvazione
Annex - Approval certificate

Emesso il / Issued on 1998-10-22
Data di aggiornamento / Updated on 2006-10-17
Sostituisce / Replaces 2001-06-07

Prodotto | Product

Cavi isolati con pvc
PVC insulated cables

Concessionario | Licence Holder

SHENZHEN BAOHING EL.WIRE & CABLE MFR. CO. LTD.
BUCHONG TONGFUYU I.A., SHAJING RD., SHAJING STR.
518104 BAOAN D., SHENZHEN
CN - China

Marchio | Mark



IMQ

Costruito a | Manufactured at

PL.B00020 CLSHEB.C01LC2
PL.G000E4 CLSHEB.C01LCSHEB+1 518104

SUZHOU IND. PARK, SUZHOU CITY, JIANGSU PROVINCE
BAOAN D., SHENZHEN

China
China

Copia del presente certificato deve essere conservata presso i luoghi di produzione sopra elencati.

Copy of this certificate must be available at the manufacturing places listed above

Norme

HD 21.5 S3 1994 + A1:1999 + A2: 2001
CEI 20-20/5 Ed. 1996 + V1:2002 + V2:2002
Prodotti conformi ai requisiti essenziali della Direttiva B.T. 73/23/CEE e successive modifiche.

Standards

HD 21.5 S3 1994 + A1:1999 + A2: 2001
CEI 20-20/5 Ed. 1996 + V1:2002 + V2:2002
Products meeting the essential requirements of L.V.D. 73/23/EEC and further amendments.

Rapporti | Test Reports

26AG00086

Caratteristiche tecniche | Technical characteristics

Tipo di cavo | Type of cable **Cavo flessibile sotto guaina media di PVC / Ordinary PVC sheathed cord**
Sigla di designazione | Type designation **H05VV-F H05VVH2-F**
Tensione nominale | Rated voltage **300/500V**

Articoli (con dettagli) | Articles (with details)

DAT98002361.1

Contrassegni del fabbricante | Manufacturer's identification **Stabilimento di Jangsu Province / Factory of Jangsu Province**
- filo distintivo | - identification thread -
- stampigliatura | - printing **BAOHING 1**

AR.G008US

Contrassegni del fabbricante | Manufacturer's identification **Stabilimento di Shenzhen / Factory of Shenzhen**
- filo distintivo | - identification thread -
- stampigliatura | - printing **BAOHING**



INSIEME PER LA QUALITA' E LA SICUREZZA

IMQ S.p.A.
I-20138 Milano - via Quintiliano, 43
tel. 0250731(r.a.) - fax 0250991500
e-mail: info@imq.it - www.imq.it

Rea Milano 1595884
Registro Imprese MI 12898410159
C.F./P.I. 12898410159
Capitale Sociale € 4.000.000

A2708
DAT98002361

Diritti di concessione | Annual Fees

DAT98002361 BTG.010200.DA19

Diritti modelli IMQ - 0102 - Cavi isolati con PVC | IMQ models - 0102 - PVC insulated cables

0


IMQ S.p.A.

AUSTRIAN ELECTROTECHNICAL ASSOCIATION

1010 Wien, Eschenbachgasse 9

ZVR: 327279890 DVR: 1055887

Testing & Certification

Kahienberger Str. 2A

1190 Wien, Austria

Phone: +43 1 370 58 06

Fax: +43 1 370 58 06-199



Page 1 of 2

ÖVE-CERTIFICATE

including the entitlement to use the Austrian Safety Mark



Certificate No.: **14219-000-09**

Valid from: 2010 11 06
until: 2012 11 06

The Austrian Electrotechnical Association (ÖVE) hereby grants the right to the company mentioned below to label the listed products with the Austrian Safety Mark.

Company: **Shenzhen Baohing Electric
Wire & Cable Manufacture Co., Ltd**
Buchong Tongfuyu Industry Area,
Shajing Rd, Shajing Street, Baoan Distr.
518104 Shenzhen City
China

Product: **Cables with thermoplastic insulation**

Basis for this given right is the conformity of the products with the requirements of the technical standards listed in this certificate as stated in the file(s) Ref.-No(s) TGM-VA EE 30898, VAE 24285.

This certificate establishes the conformity of the tested specimen and of all products manufactured strictly identical to the submitted one.

Österreichischer Verband für Elektrotechnik
Head of Testing & Certification

ÖVE

Vienna, 2010 06 09

Digitally signed by W. Martin
Email=w.martin@ove.at

Dipl.-Ing. W. Martin

ÖVE – Testing & Certification

Accredited by the Austrian Ministry of Economy, Family and Youth as Certification Body for products and processes in the field of electrical and electronic engineering, including safety and EMC



Manufacturer:

Shenzhen Baohing Electric
Wire & Cable Manufacture Co., Ltd
Buchong Tongfuyu Industry Area,
Shajing Rd, Shajing Street, Baoan Distr.
518104 Shenzhen City
China

Factory location(s):

Shenzhen Baohing Electric
Wire & Cable Manufacture Co., Ltd
Buchong Tongfuyu Industry Area,
Shajing Rd, Shajing Street, Baoan Distr.
518104 Shenzhen City
China

Factory ID: Volex

Suzhou Baohing Electric Wire&Cable Co., Ltd
No. 9 Yanghua Road, Suzhou Industrial Park
Suzhou City, Jiangsu Province
China

Tested and certified according to:

ÖVE/ÖNORM E 8241-1:2003-11-01
ÖVE/ÖNORM E 8241-5:2002-11-01
ÖVE/ÖNORM EN 50395:2006-09-01
ÖVE/ÖNORM EN 50396:2006-09-01

This certificate is the basis for the EC Declaration of Conformity and the CE Marking by the manufacturer or his agent and shows the conformity with the listed standards as defined by the EC Low-Voltage Directive 2006/95/EC.

Product: Cables with thermoplastic insulation

Type designation:

Rating:

Trademark:

H05VVH2-F 2 X 0,75

BAOHING

H05VVH2-F 2 X 1

BAOHING

H05VV-F 2 X 0,75

BAOHING

H05VV-F 2 X 1

BAOHING

H05VV-F 3 G 0,75

BAOHING

H05VV-F 3 G 1

BAOHING

OVE – Testing & Certification

Accredited by the Austrian Ministry of Economy, Family and Youth as Certification Body for products and processes in the field of electrical and electronic engineering, including safety and EMC





**Shenzhen BaoHing Electric
Wire & Cable Manufact. Co. Ltd.
Buchong Tongfuyu Industry Area
Shajing Rd, Shajing Str,
Baoan Distr.
CN-Shenzhen 518104
P.R. China**

Client No.	Your ref.	Our Ref.	Date
1452	Yu Yanqiang	MC	2009/03/23

Authorization

Number: **09.0271**
valid until: **2012/03/22**

Marking:  company logo

Based on the documents contained in file **09-BS-0118** the Federal Inspectorate for Heavy Current Installations grants the firm named above the right, to put the equipment listed below on the market marked with the safety mark in accordance with the NEV.

Equipment: **Ordinary PVC-sheathed cord**
Tradename: **BAOHING**

Type designation:	Nominal values:
H05VV-F	60227 IEC 53, 300/500V, round, 2...3x0.75...1.00mm ²
H05VVH2-F	60227 IEC 53, 300/500V, flat, 2x0.75...1.00mm ²

Protection class:
Protection degree:
Basis: **CB / Intertek ETL SEMKO / SE-47876 dated 2006/11/27**

Remark:

Test standards: **IEC 60227-1:1993 + A1:95 + A2:98
IEC 60227-2:1997 + A1:03
IEC 60227-5:1997 + A1:97 + A2:03**

**Federal Inspectorate for Heavy Current Installations
Authorization Safety Mark**

P. Schoch
Head



**Shenzhen BaoHing Electric
Wire & Cable Manufact. Co. Ltd.
Buchong Tongfuyu Industry Area
Shajing Rd, Shajing Str,
Baoan Distr.
CN-Shenzhen 518104
P.R. China**

Client No.	Your ref.	Our Ref.	Date
1452	Yu Yanqiang	MC	2009/03/23

Authorization

Number: **09.0273**
valid until: **2012/03/22**

Marking:  company logo

Based on the documents contained in file **06-BS-0071** the Federal Inspectorate for Heavy Current Installations grants the firm named above the right, to put the equipment listed below on the market marked with the safety mark in accordance with the NEV.

Equipment: **Ordinary polyvinyl chloride sheathed cable**
Tradename: **BAOHING**

Type designation: Nominal values:

H05VVH2-F 300 / 500V 2x 0.75mm² 60227 IEC 53
Flat Black sheath

H05VV-F 300 / 500V 3G 0.75mm² 60227 IEC 53
Round Black sheath

Protection class:

Protection degree:

Basis: Test Report / Nemko / 58586a dated 2006/01/19
Test Report / Nemko / 58586b dated 2005/08/09

Remark:

Test standards: IEC 60227-2:1997 + A1:03
IEC 60227-1:1993 + A1:95 + A2:98
IEC 60227-5:1997 + A1:97 + A2:03

Federal Inspectorate for Heavy Current Installations
Authorization Safety Mark

P. Schoch
Head



**Shenzhen BaoHing Electric
Wire & Cable Manufact. Co. Ltd.
Buchong Tongfuyu Industry Area
Shajing Rd, Shajing Str,
Baoan Distr.
CN-Shenzhen 518104
P.R. China**

Client No.	Your ref.	Our Ref.	Date
1452	Sarah Xiao	MC	2010/09/03

Authorization

Number: **10.0853**
valid until: **2013/09/02**

Marking:  company logo

Based on the documents contained in file **10-BS-0285** the Federal Inspectorate for Heavy Current Installations grants the firm named above the right, to put the equipment listed below on the market marked with the safety mark in accordance with the NEV.

Equipment: **Ordinary PVC-sheathed flexible cord**
Tradename: **BAOHING**

Type designation: Nominal values:
H05VV-F 60227 IEC 53 300/500V 2...5x 0.75...2.50mm²

Protection class:
Protection degree:
Basis: CB / Intertek Semko / SE-60919 dated 2010/05/27

Remark:

Test standards: IEC 60227-5(ed.2):1997 + A1:97 + A2:03

**Federal Inspectorate for Heavy Current Installations
Authorization Safety Mark**

P. Fluri
Head

SGS



CERTIFICATE FI 23064

Order Ref: 245138

Product Ordinary PVC-sheathed flexible cord

Type H05VVH2-F
H05VV-F

Trade mark BAOHING

Contract holder Shenzhen Baohing Electric Wire & Cable Mfr. Co., Ltd.
Buchong Tongfuyu Industrial Area, Shajing Street, Baoan District, Shenzhen 518104,
CHINA

Manufacturer Shenzhen Baohing Electric Wire & Cable Mfr. Co., Ltd.
Buchong Tongfuyu Industrial Area, Shajing Street, Baoan District, Shenzhen 518104,
CHINA

Technical information H05VVH2-F 2 x 0,75-1
H05VV-F 2 x 3G0,75-1

Other information Rated voltage 300V/500V

The product is certified according to the following standard(s) HD 21.5 S3:1994 + A1:1999 + A2:2001
HD 21.1 S4:2004

Validity This certificate is valid until 31 December 2011 unless the standard in question has been amended or superseded with significant changes in requirements, in which case, SGS Fimko has the right to shorten the validity of the certificate based on the legislation of the European Union. This certificate includes the right to use the FI mark under the condition that changes (if any) will be checked at SGS Fimko before the product is brought onto market and that the conditions for FI certification are met.

Essential information The product(s) fulfils the essential safety requirements for CE conformity marking according to the Low Voltage Directive (73/23/EEC and 93/68/EEC) at the date of issue of the certificate.

Date of issue 21 December 2006

Signature SGS Fimko Ltd

Signature 
Timo Peltonen
Specialist, Product Certification

This certificate has 1 appendix



This document is issued by SGS Fimko, a member of the SGS Group. The issuance of this certificate does not constitute a warranty or guarantee by SGS Fimko. The responsibility for the accuracy of the information provided in this certificate is limited to proven negligence and will in no case be more than the amount of the fee. Subject to special arrangement, samples, if drawn, will not be returned by SGS Fimko for more than three months. Any unauthorized alteration, forgery or falsification of the content or appearance of this certificate is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS Fimko Ltd.

Särkinmientie 3 P.O. Box 30 FI-00211 Helsinki, Finland
t. +358 9 886 361 f. +358 9 882 5474 www.fi.sgs.com

Business ID 0978538-5

Member of the SGS Group (SGS SA)

public design and/or paper used printed by and held under copyright by SGS Fimko



Appendix to Certificate: 23064

Manufacturing sites

Shenzhen Baohing Electric Wire & Cable Mfr. Co., Ltd.
Buchong Tongfuyu Industrial Area, Shajing Street, Baoan District,
Shenzhen 518104, CHINA

Additional information

The product has certificate 612411 issued by Intertek Semko AB in accordance
with the Nordic Certification Service system.

Our ref. no.

245136

The issuing of this certificate does not exonerate buyers or sellers from exercising all their rights and discharging all their obligations under the applicable laws and regulations. The SGS Group's liability under this certificate is limited to proven negligence and will in no case be more than the amount of the fee or contribution. The SGS Group is not liable for any loss or damage caused by the use of the certificate in violation of its conditions or for any other reasons. The SGS Group is not liable for any loss or damage caused by the use of the certificate in violation of its conditions or for any other reasons.

CERTIFICATE

KEMA No.: 2094348.02



Issued to:

Applicant:

Shenzhen Bao Hing Electric Wire & Cable Mfr. Co. Ltd.
Buchong Tongfuyu Industry Area, Shajing Road, Shajing Street
Bao An District
51804, Shenzhen City, China

Manufacturer/Licensee:

Shenzhen Bao Hing Electric Wire & Cable Mfr. Co. Ltd.
Buchong Tongfuyu Industry Area, Shajing Road, Shajing Street
Bao An District
51804, Shenzhen City, China

Product : ordinary PVC sheathed flexible cords
Trade name : BAO HING
Types/models : H05VV-F and H05VVH2-F

The product and any acceptable variation thereto is specified in the Annex to this certificate and the documents therein referred to.

KEMA hereby declares that the above-mentioned product has been certified on the basis of:

- a type test according to the standard HD 21.5 S3:1994;
- an inspection of the production location according to CENELEC Operational Document CIG 021
- a certification agreement with the number 958809

KEMA hereby grants the right to use the KEMA-KEUR certification mark.

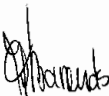
The KEMA-KEUR certification mark may be applied to the product as specified in this certificate for the duration of the KEMA-KEUR certification agreement and under the conditions of the KEMA-KEUR certification agreement.

This certificate is issued on: August 21, 2006 and expires upon withdrawal of one of the above mentioned standards.

KEMA Quality B.V.



P. Nabuurs
Managing director



H.R.M. Barends
Certification Manager

ACCREDITED BY
THE DUTCH COUNCIL
FOR ACCREDITATION



© Integral publication of this certificate is allowed

SPECIFICATION OF THE CERTIFIED PRODUCT**Product data**

product	: ordinary PVC sheathed flexible cords
trade name	: BAO HING
types	: H05VV-F and H05VVH2-F
rated voltage	: 300/500 V
conductors	: copper class 5
insulation	: PVC compound type T1 1
sheath	: PVC compound type TM 2

Product data – type H05VV-F

tested cords	: 3x0,75mm ² , 2x1,5mm ² and 3G1,5mm ²
certified cords	: 2-3 x 0,75-1,5mm ²

Product data – type H05VVH2-F

tested cords	: 2x0,75mm ²
certified cords	: 2x0,75-1,0mm ²

TESTS**Test requirements**

HD 21 5 S3:1994, clause 5 including A1:1999 and A2:2001
IEC 60227-5:1997, clause 6 including A1:1997 and A2:2003

Test result

The test results are laid down in KEMA test file 2094348.02.

Remarks

This report is also based on and supercedes report 999000.02 of July 26,2000 and 2006173.02 of September 29, 2000 and 2070053 .01 of March 11, 2004

Conclusion

The examination proved that all test requirements were met.

Tested by : R. van Daalen

Checked by : A.A. Mackenbach

Factory-Locations

Suzhou Bao Hing Electric Wire & Cable, Manufacture Co. Ltd.
1 Factory No. 6 Yangnan Road, 215000, Suzhou City, Jiangsu Province
China

Shenzhen Bao Hing Electric Wire & Cable, Mfg. Co. Ltd.
Buchong Tongluyu Industry Area, Shajing Road, Shajing Street
51804, Shenzhen City
China

KEMA Quality B.V. Utrechtseweg 310, 6812 AR Arnhem P.O. Box 5185, 6802 ED Arnhem The Netherlands
T +31 26 3 56 20 00 F +31 26 3 52 58 00 customer@kema.com www.kema.com Registered Arnhem 09085396

Certificate



for European Product Safety

Reference No. 612411

Thermoplastic insulated cord and flexible cable acc. to HD 21

Type designation H05VVH2-F, H05VV-F

Certificate holder **Shenzhen Baohing Electric Wire&Cable Mfr. Co., Ltd.**
Buchong Tongfuyu Industry Area
Shajing Street, Baoan District
Shenzhen 518104
CHINA

The product complies with the standard(s) HD 21.1 S4:2002
HD 21.2 S3:1997 and A1
HD 21.5 S3:1994 and A1+A2


Date of expiry 27 November 2011

EU Directive information *The product satisfies the provisions for CE marking according to the Low Voltage Directive 73/23/EEC and 93/68/EEC.*

Terms in Intertek Semko's Agreement on certification. Additional information in Appendix.

Certification Body Intertek Semko AB, Product Certification Place Kista - Stockholm

Signed



Niklas Larsson

Date 27 November 2006



Appendix

Reference No. 612411

Technical data

Type designation	H05VVH2-F	H05VV-F
Rated voltage (V)	300/500	300/500
Number of conductors	2	2-3
Conductor area	0,75-1,0 mm ²	0,75-1,0 mm ²
Brand name:	BAOHING	
Product information	Ordinary PVC-sheathed cord	

Manufacturing site(s) Shenzhen Baohing Electric Wire&Cable Mfr. Co., Ltd.
Buchong Tongfuyu Industry Area
Shajing Street, Baoan District
Shenzhen 518104
CHINA

This certificate, which includes production control, is considered to constitute sufficient support for an EC Declaration of Conformity and CE marking of the product according to the Low Voltage Directive 73/23/EEC and 93/68/EEC.

Certification Body Intertek Semko AB, Product Certification **Place** Kista - Stockholm

Signed



Niklas Larsson

Date 27 November 2006

AUSTRIAN ELECTROTECHNICAL ASSOCIATION
1010 Wien, Eschenbachgasse 9
ZVR: 327279890 DVR: 1055887

Testing & Certification
Kahlenberger Str. 2A
1190 Wien, Austria
Phone: +43 1 370 58 06
Fax: +43 1 370 58 06-199



Page 1 of 3

ÖVE-CERTIFICATE

including the entitlement to use the Austrian Safety Mark



Certificate No.: **20814-002-02**

Valid from: 2011 03 04
until: 2013 03 04

The Austrian Electrotechnical Association (OVE) hereby grants the right to the company mentioned below to label the listed products with the Austrian Safety Mark.

Company: **Shenzhen Tongyuan Industrial Co., Ltd.**
Tongyuan Ind.Zone,Xikang New VillageFumin, Guanlan Township
518110 Baoan District,Shenzhen,Guangdong Province
China

Product: **Cables with thermoplastic insulation**

Basis for this given right is the conformity of the products with the requirements of the technical standards listed in this certificate as stated in the file(s) Ref.-No(s). **VAE 25192.**

This certificate establishes the conformity of the tested specimen and of all products manufactured strictly identical to the submitted one.

Österreichischer Verband für Elektrotechnik
Head of Testing & Certification



Vienna, 2011 03 15

Digitally signed by W. Martin
Email=w.martin@ove.at

Dipl.-Ing. W. Martin

OVE – Testing & Certification

Accredited by the Austrian Ministry of Economy, Family and Youth as Certification Body for products and processes in the field of electrical and electronic engineering, including safety and EMC





Österreichischer Verband
für Elektrotechnik

Certificate No.: 20814-002-02
Date: 2011 03 15
Page 2 of 3

Manufacturer:

Shenzhen Tongyuan Industrial Co., Ltd.
Tongyuan Ind.Zone,Xikang New VillageFumin, Guanlan Township
518110 Baoan District,Shenzhen,Guangdong Province
China

Factory location(s):

Shenzhen Tongyuan Industrial Co., Ltd.
Tongyuan Ind.Zone,Xikang New VillageFumin, Guanlan Township
518110 Baoan District,Shenzhen,Guangdong Province
China

Factory ID: Volex 1.

Tested and certified according to:

ÖVE/ÖNORM E 8241-1:2003-11-01
ÖVE/ÖNORM E 8241-5:2002-11-01
ÖVE/ÖNORM EN 50395:2006-09-01
ÖVE/ÖNORM EN 50396:2006-09-01

This certificate is the basis for the EC Declaration of Conformity and the CE Marking by the manufacturer or his agent and shows the conformity with the listed standards as defined by the **EC Low-Voltage Directive 2006/95/EC**.

Product: Cables with thermoplastic insulation

Type designation:
Rating:

Trademark:

H05VVH2-F 2 X 0,75	TONGYUAN
H05VV-F 2 X 0,75	TONGYUAN
H05VV-F 2 X 1	TONGYUAN
H05VV-F 2 X 1,5	TONGYUAN
H05VV-F 2 X 2,5	TONGYUAN
H05VV-F 3 G 0,75	TONGYUAN
H05VV-F 3 G 1	TONGYUAN
H05VV-F 3 G 1,5	TONGYUAN
H05VV-F 3 G 2,5	TONGYUAN

OVE – Testing & Certification

Accredited by the Austrian Ministry of Economy, Family and Youth as Certification Body for products and processes in the field of electrical and electronic engineering, including safety and EMC





Österreichischer Verband
für Elektrotechnik

Certificate No.: 20814-002-02
Date: 2011 03 15
Page 3 of 3

H05VV-F 4 G 0,75	TONGYUAN
H05VV-F 4 G 1	TONGYUAN
H05VV-F 4 G 1,5	TONGYUAN
H05VV-F 4 G 2,5	TONGYUAN
H05VV-F 5 G 0,75	TONGYUAN
H05VV-F 5 G 1	TONGYUAN
H05VV-F 5 G 1,5	TONGYUAN
H05VV-F 5 G 2,5	TONGYUAN

OVE – Testing & Certification

Accredited by the Austrian Ministry of Economy, Family and Youth as Certification Body for products and processes in the field of electrical and electronic engineering, including safety and EMC

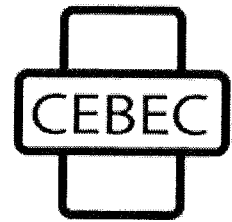




LICENCE

No. 12283 - Issue No 3 replaces No.11720

Issued to:
Applicant:
Shenzhen Tongyuan Industrial Co., Ltd.
Tongyuan Industry Zone Xikeng New village
Fumin Guanlan. Bao'an District
518110 SHENZHEN
China



Licensee:
Shenzhen Tongyuan Industrial Co., Ltd.
Tongyuan Industry Zone Xikeng New village
Fumin Guanlan. Bao'an District
518110 SHENZHEN
China

Product : flexible cables and cords
Trade name(s) : TONGYUAN
Type(s)/model(s) : H03 VV-F, H03 VVH2-F, H05 VV-F, H05 VVH2-F

The product and any acceptable variation thereto is specified in the annex to this licence and the documents therein referred to.

SGS CEBEC hereby declares that the above-mentioned product has been certified on the basis of:

- a type test according to the standard specified in annex
- an inspection of the production location
- a certification agreement with the number 1130

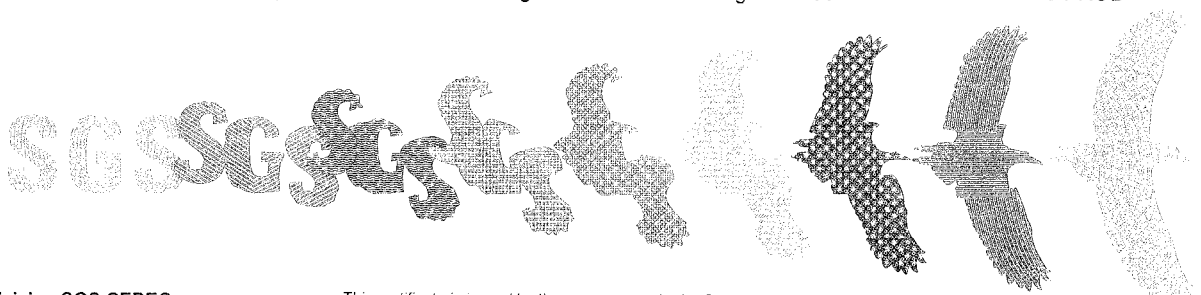
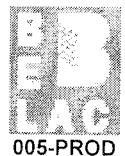
SGS CEBEC hereby grants the right to use the CEBEC certification mark

The CEBEC certification mark may be applied to the product as specified in this licence for the duration of the CEBEC certification agreement and under the conditions of the CEBEC certification agreement.

This licence is issued on: 30/11/2009

ir. C. Lana,
Certification Manager

© Only integral publication of this certificate, including the annex, is allowed
This certificate is only valid combined with the publication on the following web address: www.sgs.com/ee



SGS Belgium NV-Division SGS CEBEC
Business Riverside Park
Bid Internationalelaan 55 Build. D
B-1070 Brussels
Tel.+32(0)2 556 00 20 Fax.+32(0)2 556 00 36

This certificate is issued by the company under its General Conditions for Certification Services accessible at http://www.sgs.com/terms_and_conditions.htm. Attention is drawn to the limitations of liability defined therein and in the Test Report herein mentioned which findings are reflected in this Certificate. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SPECIFICATION OF THE CERTIFIED PRODUCT

Product data

Product : flexible cables and cords
Trade name(s) : TONGYUAN
Type(s)/Model(s) : H03 VV-F, H03 VVH2-F, H05 VV-F, H05 VVH2-F

Product data - type H03 VV-F

rated voltage Uo/U : 300/300 V
range covered : 2-3 x 0.5-0.75 mm²
description : light PVC-sheathed cord

Product data - type H03 VVH2-F

rated voltage Uo/U : 300/300 V
range covered : 2 x 0.5-0.75 mm²
description : light PVC-sheathed cord

Product data - type H05 VV-F

rated voltage Uo/U : 300/500 V
range covered : 2-3 x 0.75-2.5 mm²
description : ordinary PVC-sheathed cord

Product data - type H05 VVH2-F

rated voltage Uo/U : 300/500 V
range covered : 2 x 0.75 mm²
description : ordinary PVC-sheathed cord

TESTS

Test requirements

NBN HD 21.5:1995 + A1:1999 + A2:2001

Test results

The test results are laid down in certification file ref.574543/01

Remarks

This certificate is based on certificate ref. CB DE 1-19913 and DE 1-29212 and test report(s) ref. 4091600-5140-0005/21654_1, _2 and 4091600-5140-0005/27998-a and -b.
This certificate replaces the certificates Nos. 10089 and 11720.

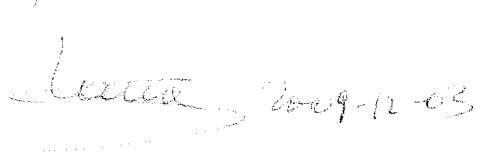
Conclusion

The examination proved that all test requirements were met.

Checked by, project leader : Zanutto Luigi - 30/11/2009

Department Manager,
Product Certification :

Certification Manager :



A handwritten signature in black ink, followed by the date '2009-12-03' written in a similar cursive style.

FACTORY LOCATION(S)

Shenzhen Tongyuan Industrial Co. Ltd.
Tongyuan Industry Zone, Xikeng New Village,
Fumin, Guanlan Township, Bao'an District
518110 SHENZHEN
China

Demko Certificate

Product: Ordinary polyvinyl chloride sheathed cords
Manufacturer: Shenzhen Tongyuan Industrial Co., Ltd.
Tongyuan Industry Zone, Xikeng New Village
Fumin, Guanlan Township, 518110 Bao'an District, Shenzhen P.R. Chin
Production site: Same as manufacturer
Certified by request of: Shenzhen Tongyuan Industrial Co., Ltd.
13th Floor, Block F, Jingfeng Building
Shangbu Road South Shenzhen, 518031, P.R. Chin
Trademark: SHENZHEN TONGYUAN INDUSTRIAL CO., LTD.
Model/Type ref.: H05VVH2-F
Rated current or power: -
Rated voltage: 300/500V
Insulation Class: -
Degree of protection: -
Additional information: all colours

Variants covered by this certificate are specified in the attached appendix.
Detailed specification of the certified product(s) is listed in the appendix.

A sample of the product has been tested and found in conformity with HD 21.1 S4:2002,
HD 21.2 S3:1997 + A1:2002 and HD 21.5 S3:1994 + A1:1999 + A2:2001

Date of expiry: 2013-10-27.

Furthermore, the product complies with the national deviations in Denmark.

UL International Demko A/S is a body notified to the Member States and Commission of the European Communities according to the provisions of Article 8 of the Low Voltage Directive.

The Manufacturer complies with the Production Surveillance Requirements.

Products included in this certificate are allowed to carry the registered approval marks of UL International Demko A/S, ® or for cables «DEMKO». The name of UL International Demko A/S can be used in the marketing of the products as well.

This certificate is only valid for products, which are identical to the certified product, and manufactured at the above mentioned production site(s). UL International Demko A/S has to be informed in writing about any changes, in accordance with the "UL International Demko A/S Standard Terms and Conditions" for UL International Demko A/S services.

Herlev, 2003-12-30


Karina Christiansen
Certification Manager

UL International Demko A/S

Lyskaer 8, P.O. Box 514
DK-2730 Herlev, Denmark
Telephone: +45 44856565
Fax: +45 44856500



An Affiliate of
**Underwriters
Laboratories Inc.**

Appendix to Demko Certificate No. 312564-01

The Certificate covers the following:

01; H05VVH2-F, (flat)	2x0.75mm ²
02; H05VV-F, (round)	2x0.75-2.5mm ²
03; H05VV-F, (round)	3G0.75-2.5mm ²

The certificate has been issued on the basis of Nordic certification Service, certificate No. P03201076, issued by NEMKO, dated 2003-10-27

Herlev, 2003-12-30


Karina Christiansen
Certification Manager

UL International Demko A/S

Lyskaer 8, P.O. Box 514
DK-2730 Herlev, Denmark
Telephone: +45 44856565
Fax: +45 44856500



An Affiliate of
**Underwriters
Laboratories Inc.**



CERTIFICATE FI 16675 A2

Our Ref. 194288

Product Ordinary PVC-sheathed flexible cord
Type H05VVH2-F
H05VV-F
Trade mark TONGYUAN
Certificate Holder Shenzhen Tongyuan Industrial Co., Ltd.,
Tongyuan Industry Zone, Xikang New Village, Fumin, Guanlan Township, 518110,
Bao' an District, SHENZHEN, CHINA
Manufacturer Shenzhen Tongyuan Industrial Co., Ltd.,
Tongyuan Industry Zone, Xikang New Village, Fumin, Guanlan Township, 518110,
Bao' an District, SHENZHEN, CHINA
Technical information H05VVH2-F 2x0,75
H05VV-F 2x3G0,75-1-1,5-2,5
Other information All colours
Rated voltage 300 / 500 V

The product is certified according to the following standard(s) HD 21.5 S3:1994 + A1:1999 + A2:2001

Validity This certificate is valid until 27 October 2013 unless the standard in question has been amended or superseded with significant changes in requirements, in which case, SGS Fimko has the right to shorten the validity of the certificate based on the legislation of the European Union. This certificate includes the right to use the FI mark under the condition that changes (if any) will be checked at SGS Fimko before the product is brought onto market and that the conditions for FI certification are met.

Directive information The product(s) fulfils the essential safety requirements for CE conformity marking according to the Low Voltage Directive (2006/95/EC) at the date of issue of the certificate.

Date of issue 27 October 2008

SGS Fimko Ltd

Signature


Osmo Väyrynen
Certification Manager



This certificate has 1 appendix



This certificate is issued by the company under its General Conditions for Certification Services accessible at www.sgs.com/terms_and_conditions.htm. Attention is drawn to the limitations of liability defined therein and in the Test Report here above mentioned which findings are reflected in this certificate. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS Fimko Ltd. | Särkiniementie 3 P.O.Box 30 FI-00211 Helsinki, Finland
t. +358 9 696 361 f. +358 9 692 5474 www.fi.sgs.com
Business ID 0978538-5

Member of the SGS Group (SGS SA)



Appendix to Certificate: 16675 A2

Manufacturing sites

Shenzhen Tongyuan Industrial Co., Ltd.,
Tongyuan Industry Zone, Xikang New Village, Fumin,
Guanlan Township 518110, Bao' an District,
SHENZHEN, CHINA

Additional information

The product has certificate P03201076 issued by Nemko AS in accordance with the Nordic Certification Service system.

This certificate replaces previous certificate no. FI 16675 A1 dated 25 November 2003. Validity of this certificate is renewal to 27 October 2013.

Our ref.

194288, 253205

This certificate is issued by the company under its General Conditions for Certification Services accessible at www.sgs.com/terms_and_conditions.htm. Attention is drawn to the limitations of liability defined therein and in the Test Report here above mentioned which findings are reflected in this certificate. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

PID:

01021400

CID:

C.1997.1389

Certificato di approvazione

Approval certificate

IMQ, ente di certificazione accreditato, autorizza la ditta *IMQ, accredited certification body, grants to*

SHENZHEN TONGYUAN INDUSTR.CO.LTD
13th FLOOR,BLOCK F,JINFENG BLDG, SHANGBU
RD. SOUTH
518031 SHENZHEN
CN - China

all'uso del marchio*the licence to use the mark***IMQ**

Il presente certificato è soggetto alle condizioni previste nel "Regolamento IMQ - Certificazione prodotto" ed è relativo ai prodotti descritti nell'Allegato al presente certificato.

**per i seguenti prodotti****Cavi isolati con pvc**
(H05VV-F H05VVH2-F)*for the following products**PVC insulated cables*
(H05VV-F H05VVH2-F)

This certificate is subjected to the conditions foreseen by "IMQ Rules - Product Certification" and is relevant to the products listed in the annex to this certificate.

*Emesso il / Issued on:***1997-05-27***Data di aggiornamento / Updated on***2001-07-19***Sostituisce / Replaces***2001-02-21****IMQ S.p.A.**

Allegato - Certificato di approvazione
Annex - Approval certificate

Emesso il / Issued on 1997-05-27
Data di aggiornamento / Updated on 2001-07-19
Sostituisce / Replace 2001-02-21

Prodotto | Product

Cavi isolati con pvc **PVC insulated cables**

Concessionario | Licence Holder

SHENZHEN TONGYUAN INDUSTRIAL CO.LTD
13th FLOOR,BLOCK F,JINFENG BLDG, SHANGBU RD. SOUTH
518031 SHENZHEN
CN - China

Marchio | Mark



IMQ

Costruito a | Manufactured at

97000930 CLSHEN.CO1LCSHEN+1 518110 SHENZHEN BAO'AN DISTR.

China

Copia del presente certificato deve essere conservata presso i luoghi di produzione sopra elencati.

Copy of this certificate must be available at the manufacturing places listed above

Norme

CEI 20-20/1 IV Ed. 1996 - CEI 20-20/2 IV Ed. 1996
HD 21.1 S3 1997
HD 21.2 S3 1997
CEI 20-20/5 IV Ed. 1996 - HD 21.5 S3 1994 + A1 (1999)
e quindi ai requisiti essenziali della Direttiva B.T. 73/23 CEE e 93/68 CEE

Standards

CEI 20-20/1 IV Ed. 1996 - CEI 20-20/2 IV Ed. 1996
HD 21.1 S3 1997
HD 21.2 S3 1997
CEI 20-20/5 IV Ed. 1996 - HD 21.5 S3 1994 + A1 (1999)
therefore according to essential requirements of the L.V.D. 73/23 and 93/68 EEC

Rapporti | Test Reports

01RB00027

Caratteristiche tecniche | Technical characteristics

Tipo di cavo / Type of cable **Cavo flessibile sotto guaina media di PVC / Ordinary PVC sheathed cord**
Sigla di designazione / Type designation **H05VV-F H05VVH2-F**
Tensione nominale / Rated voltage **300/500V**

Articoli (con dettagli) | Articles (with details)

DAT97000930.2

Contrassegni del fabbricante / Manufacturer's identification **Stabilimento di Shenzhen/Factory of Shenzhen**
- stampigliatura / - printing **TONGYUAN**

Ulteriori informazioni | Additional Information

Stabilimento di Shenzhen/Factory of Shenzhen

SHENZHEN TONGYUAN INDUSTRIAL CO. LTD
Tongyuan Industry Zone Xikang New Village Fumin Guanlan Township
518110 Bao'an District, Shenzhen (CHINA)



IMQ S.p.A.
I-20138 Milano - via Quintiliano, 43
tel. 0250731(r.a.) - fax 0250991500
E-mail: info@imq.it - www.imq.it

Rea Milano 1595884
Registro Imprese MI 211895/1999
C.F./P.I.: 12898410159
Capitale sociale L.7.600.000.000

A2540
DAT97000930

Diritti di concessione | Annual Fees

DAT97000930 BTB.010200.DA19

Diritti modelli IMQ - 0102 - Cavi isolati con PVC | IMQ models - 0102 - PVC insulated cables

0

Massimo Ranzani

IMQ S.p.A.



INSIEME PER LA QUALITÀ E LA SICUREZZA

2/2



LCIE N° 60027237

LICENCE

Délivrée à: <i>Delivered to:</i>	SHENZHEN TONGYUAN INDUSTRIAL CO.LTD 13th Floor, Block F, Jinfeng Building, Shangbu Road South - SHENZHEN - CHINE
Site de fabrication: <i>Factory:</i>	SHENZHEN TONGYUAN INDUSTRIAL Co.Ltd (1321FC) Tongyuan Industry Zone, Xikang New Village, Fumin, - 518110 Guanlan Township, Bao'an District SHENZHEN - CHINE
Produit: <i>Product:</i>	Câble souple sous gaine ordinaire en polychlorure de vinyle <i>Ordinary polyvinyl chloride sheathed cord</i>
Marque commerciale (s'il y a lieu): <i>Trade mark (if any):</i>	TONGYUAN
Modèle, type, référence: <i>Model, type, reference:</i>	H05VV-F
Caractéristiques nominales et principales: <i>Rating and principal characteristics:</i>	(2 - 3) x (0.75 -1.5) mm ²
Informations complémentaires: <i>Additional informations:</i>	Numéro attribué par LCIE / <i>Number attributed by LCIE</i> : 1321 Fil fabricant portant les couleurs / <i>Thread colors</i> : vert-jaune-bleu / <i>green-yellow-blue</i> Ajout d'une marque commerciale / <i>Added trade mark</i>
Le produit est conforme à: <i>The product is in conformity with:</i>	NF C 32-201- 5:98 +A1:00 +A2:01 (HD 21. 5 S3 :94 +A1:99 +A2:01)
Documents pris en compte: <i>Relevant documents:</i>	Rapport d'essais / <i>Test report</i> LCIE n° 35787020 et/and 37931020
Annule et remplace (s'il y a lieu): <i>Cancel and replaces (if necessary):</i>	Licence n° 37931010 du 2002.03.22

Cette licence autorise l'usage de la marque NF pour le produit dans les conditions du règlement de la marque NF, pour autant que les contrôles réguliers de la fabrication et les vérifications par tierce partie soient satisfaisants.

This licence permits the use of the Mark NF for the product in compliance with the Regulation of the NF Mark, as far as the regular checking and third party verifications of the production are satisfactory.

Fontenay-aux-Roses, 2004-09-14

Par mandatement de AFNOR Certification et pour le LCIE
By mandate from AFNOR Certification and for LCIE

Date limite de validité : Néant
Limit expired date : Nil

Isabelle HELLER
Responsable de la Certification
Certification manager



LCIE	siège - Fontenay-aux-Roses	Tel : (33) 1 40 95 00 00	Société Anonyme
Laboratoire Central	BP 5	Tax : (33) 1 40 95 30 50	au capital de 15 745 984 €
des Industries Electriques	4200 Fontenay-aux-Roses cedex	compta@lcie.fr	RCS Nanterre B 808 303 171



Accréditation
N° 5-0014



LICENCE



LCIE N° 60027238

Délivrée à:
Delivered to: SHENZHEN TONGYUAN INDUSTRIAL CO.LTD
13th Floor, Block F, Jinfeng Building, Shangbu Road South - SHENZHEN - CHINE

Site de fabrication:
Factory: SHENZHEN TONGYUAN INDUSTRIAL Co.Ltd (1321FC)
Tongyuan Industry Zone, Xikang New Village, Fumin, - 518110 Guanlan Township, Bao'an District SHENZHEN - CHINE

Produit:
Product: Câble souple sous gaine ordinaire en polychlorure de vinyle
Ordinary polyvinyl chloride sheathed cord

Marque commerciale (s'il y a lieu):
Trade mark (if any): TONGYUAN

Modèle, type, référence:
Model, type, reference: H05VVH2-F

Caractéristiques nominales et principales:
Rating and principal characteristics: 2 x 0,75 mm²

Informations complémentaires:
Additional informations: Numéro attribué par LCIE / Number attributed by LCIE : 1321
Fil fabricant portant les couleurs / Thread colors : vert-jaune-bleu / green-yellow-blue
Ajout d'une marque commerciale / Added trade mark

Le produit est conforme à:
The product is in conformity with: NF C 32-201- 5.98 +A1:00 +A2:01 (HD 21. 5 S3 :94 +A1:99 +A2:01)

Documents pris en compte:
Relevant documents: Rapport d'essais / Test report LCIE n° 35785020

Annule et remplace (s'il y a lieu):
Cancel and replaces (if necessary): Licence n° 35785010 du 2001.12.10

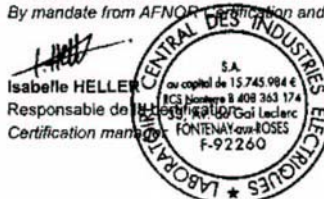
Cette licence autorise l'usage de la marque NF pour le produit dans les conditions du règlement de la marque NF, pour autant que les contrôles réguliers de la fabrication et les vérifications par tierce partie soient satisfaisants.

This licence permits the use of the Mark NF for the product in compliance with the Regulation of the NF Mark, as far as the regular checking and third party verifications of the production are satisfactory.

Fontenay-aux-Roses, 2004-09-14

Par mandatement de AFNOR Certification et pour le LCIE
By mandate from AFNOR Certification and for LCIE

Date limite de validité : Néant
Limit expired date : Nil



Twa

LCIE	11, rue de Valenciennes	92100 Fontenay-aux-Roses	Tel : +33 (0)1 40 95 09 00	28, rue de Valenciennes	92100 Fontenay-aux-Roses
Laboratoire Central	BP 25		Taxi : +33 (0)1 40 95 26 50	au capital de 15 745 084 €	
des Industries Electriques	92250 Fontenay-aux-Roses cedex		0033(0)140950900	RCS Nanterre B 408 383 174	
Une société de Bureau Veritas				93918 RP 597C-Gail Laclaire	

Shenzhen Tongyuan Industrial Co., Ltd.
13th Floor, Block F, Jingfeng Building
Shangbu Road South
Shenzhen, 518031
P.R. CHINA
Att.: Mr. Marvin Tu

27 October 2003

Your ref.: Mr. Marvin Tu
Our ref.: 14390
Mr. Ragnar Kältzow

COVERING LETTER

Please find enclosed our Certificate as a result of the above-mentioned order.

Additional information:

The certification is based on CB Test Certificate from VDE, No. DE 1 - 19913, dated 2003-02-19, and associated Test Report No. 4091600-5140-0005/21654-1,-2, dated 2003-02-18. The design is presupposed to be identical to the sample tested.

Payment:

For payment of the enclosed invoice, we refer to the account no. etc. quoted in the invoice heading, and suggest use of SWIFT transfer address DNBANOKK through: Den norske Bank, P.O.Box 1171 Sentrum, N-0107 OSLO, Norway.

Kindly quote our given order no. on the payment.

CE-marking:

Regarding the manufacturer's EC/EEA Declaration of Conformity and CE-marking, Nemko may in addition possibly issue a separate Attestation on Conformity with relevant Directives.

We may also prepare the actual Declaration, provide CE-stickers, and otherwise assist with necessary documentation.

If any of this is desired, kindly contact us.

We thank you for this assignment, and are looking forward to our continued cooperation.

Yours sincerely

Nemko AS

Nemko AS
P.O. Box 73, Blindern
N-0314 Oslo, Norway

Office address
Gaustadalléen 30
Oslo

Telephone
+47 22 96 03 30
Enterprise number:
Fax
+47 22 96 05 50
NO 974404532

No. P03201076

Order No. 14391

Applicant Shenzhen Tongyuan Industrial Co., Ltd.
13th Floor, Block F, Jingfeng Building
Shangbu Road South
Shenzhen, 518031
P.R. CHINA

Manufacturer Shenzhen Tongyuan Industrial Co., Ltd.
Tongyuan Industry Zone, Xikeng New Village
Fumin, Guanlan Township, 518110
Bao'an District, Shenzhen
P. R. CHINA

Factory Shenzhen Tongyuan Industrial Co., Ltd.
Tongyuan Industry Zone, Xikeng New Village
Fumin, Guanlan Township, 518110
Bao'an District, Shenzhen
P. R. CHINA

Group 19 53110 H05VVH2-F. Ordinary polyvinyl chloride sheathed cords (flat), 300/500V.

Model/type H05VVH2-F

Data 2x0.75 mm²

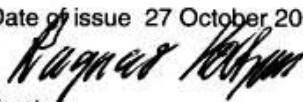
Other specification All colours.

The above product is certified according to the following standard(s) Safety std.: HD 21.5 S3:1994 + A1 :1999 + A2:2001 in conjunction with HD 21.1 S4 :2002 and HD 21.2 S3 :1997 + A1:2002

Validity This certificate documents conformity with the standards shown, and also applies as license for use of Nemko's name and certification mark. The certificate and license is valid as long as the applicable conditions are complied with, and provided that any changes to the product are notified to Nemko for acceptance prior to implementation.
New standards or amendments to the standards may imply that the product design must be updated and/or that re-testing and re-certification is necessary.

Variants This Certificate also covers variants with Position No. from 001 to 002
See next page(s)

Additional Information: This Certificate replaces our Nemko-Certificate P01100867, order no. 200119330 and 200119330001-002, dated 2001-05-16, due to an extension of cross sectional areas.

Date of issue 27 October 2003

signature
Ragnar Koltzow
Certification Department

Nemko AS
P.O. Box 73, Blindern
N-0314 Oslo, Norway

Office address
Gaustadalléen 30
Oslo

Telephone
+47 22 96 03 30
Enterprise number:

Fax
+47 22 96 05 50
NO 974404532



CERTIFICATE

No. P03201076

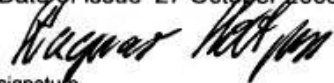
Order No. 14391

Group 18 53130 H05VV-F/A05VV-F. Ordinary polyvinyl chloride sheathed cords (round), 300/500V.

Position No. 001
Model/type H05VV-F
Data 2x0.75-2.5 mm²
Other specification All colours.

Position No. 002
Model/type H05VV-F
Data 3G0.75-2.5 mm²
Other specification All colours.

Date of issue 27 October 2003



signature

Ragnar Keltzow
Certification Department

Nemko AS
P.O. Box 73, Blindern
N-0314 Oslo, Norway

Office address
Gaustadalléen 30
Oslo

Telephone
+47 22 96 03 30
Enterprise number:

Fax
+47 22 96 05 50
NO 974404532

SHENZHEN TONGYUAN INDUSTRIAL
CO., LTD.
Tongyuan Ind. Zone, Xikang New
Village, Fumin, Guanlan Township
Bao'an District, SHENZHEN, 518110
KINA

Handled by
Daniel Malmqvist
Direct telephone
+46 8 750 00 00
Reference
811392
E-mail
daniel.malmqvist@intertek.com
Your Reference
080809 / Mr. Tu

11 September 2008

Intertek S Mark Certificate with No. 811392

We are pleased to enclose the Intertek S Mark Certificate you have applied for.

The S Mark – a marketing resource

S Mark Certification is a way of making sure that your brand's equity will not be put at risk by a safety failure of the product. The use of the S Mark in your marketing is also a way of adding value to your brand and promoting trust among your customers.

The S Mark is a European safety mark offered by Intertek ETL SEMKO. The letter 'S' tells 450 million people in Europe that your product is safe. The word for safety starts with an 'S' in most of the languages in Europe, e.g. Safety, Sicherheit, Seguridad, Sécurité, Sicurezza, and Säkerhet.

As products become increasingly interchangeable, trust counts more than ever. This is why the S Mark is a key selling point. It is a well known symbol for safety and shows that Intertek has independently tested and certified the product's compliance to applicable European safety requirements. Critical consumers and retailers look for third-party validation to complement their CE marking, as it helps retailers to meet their product liability requirements, and make the consumers' buying process simpler.



Read more about the S Mark and how other companies use it to gain competitive advantage: www.etlsemko.com/s-mark

Mandatory factory inspections

In addition to your product certification, it is mandatory for inspections to be performed at your manufacturing site/s. The inspections are carried out by our inspectors or subcontractors. For details of the technical requirements for these inspections, please contact inspection.etlsemko@intertek.com.



Yours sincerely



Intertek Semko AB
Certification

Enclosure: Intertek S Mark Certificate



Intertek Semko AB

Torshamnsgatan 43, Box 1103, SE-164 22 Kista, Sweden
Telephone +46 8 750 00 00, Fax +46 8 750 60 30, www.sweden.intertek-etlsemko.com
Registered in Sweden; No SE556024059901, Registered office: As address

1(1)

Certificate



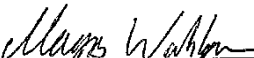
for European Product Safety

Reference No. 811392

Thermoplastic insulated cord and flexible cable

Type designation	H05VVH2-F, H05VV-F
Certificate holder	SHENZHEN TONGYUAN INDUSTRIAL CO., LTD. Tongyuan Ind. Zone, Xikang New Village, Fumin, Guanlan Township Bao'an District, SHENZHEN, 518110 CHINA
The product complies with the standard(s)	HD 21.1 S4:2002 HD 21.2 S3:1997 and A1 HD 21.5 S3:1994 and A1+A2
Date of expiry	19 November 2013
EU Directive information	The product satisfies the provisions for CE marking according to the Low Voltage Directive 2006/95/EC.

Additional information in Appendix.

Certification Body	Intertek Semko AB, Product Certification	Place	Kista - Stockholm
Signed	 Magnus Wahlgren	Date	11 September 2008 Page 1 of 2

This certificate is issued in accordance with the terms and conditions set out in the Appendix.



Appendix

Reference No. 811392

Technical data

Type of Cord	H05VVH2-F
Number of Conductors	2
Conductor Area	0,75mm ²
Product information	Ordinary polyvinyl chloride sheathed cable (flat), 300/500V.
Type of Cord	H05VV-F
Number of Conductors	2-3
Conductor Area	0,75-2,5mm ²
Product information	Ordinary polyvinyl chloride sheathed cable (round), 300/500V.

This certificate, which includes production control, is considered to constitute sufficient support for an EC Declaration of Conformity and CE marking of the product according to the Low Voltage Directive 2006/95/EC.

This certificate replaces previously issued ref. No. 508029 dated 8 June 2005.

Manufacturing site(s) SHENZHEN TONGYUAN INDUSTRIAL
CO., LTD.
Tongyuan Ind. Zone, Xikang New
Village, Fumin, Guanlan Township
Bao'an District, SHENZHEN, 518110
CHINA

Certification Body Intertek Semko AB, Product Certification **Place** Kista - Stockholm

Signed



Magnus Wahlgren

Date 11 September 2008

This Certificate is for the exclusive use of Intertek's Client and is provided pursuant to the Certification agreement between Intertek and its Client. Intertek's responsibility and liability are limited to the terms and conditions of the agreement. Intertek assumes no liability to any party, other than to the Client in accordance with the agreement, for any loss, expense or damage occasioned by the use of this certificate. Only the Client is authorized to permit copying or distribution of this certificate and then only in its entirety. Use of Intertek's Certification mark is restricted to the conditions laid out in the agreement. Any further use of the Intertek name for the sale or advertisement of the tested material, product or service must first be approved in writing by Intertek. Initial Factory Assessments and Follow up Services are for the purpose of assuring appropriate usage of the Certification mark in accordance with the agreement, they are not for the purposes of production quality control and do not relieve the Client of their obligations in this respect.





Eidgenössisches Starkstrominspektorat
Inspection fédérale des installations à courant fort
Ispettorato federale degli impianti a corrente forte
Federal Inspectorate for Heavy Current Installations



SCES 033

Z Zertifizierungsstelle
B Bewilligung
S Sicherheitszeichen

Shenzhen Tongyuan Industrial Co. Ltd.
Tongyuan Industry Zone
Xikang New Village, Fumin
Guanlan Township, 518110, Bao'an Distr.
CN-Shenzhen
P.R. China

Client No.	Your ref.	Our Ref.	Date
107340	Marvin Tu	Gn	2008/08/05

Authorization

Number: **08.0620**
valid until: **2011/08/04**

Marking:  Company logo

Based on the documents contained in file **97.7 70184** the Federal Inspectorate for Heavy Current Installations grants the firm named above the right, to put the equipment listed below on the market marked with the safety mark in accordance with the NEV.

Equipment: **Ordinary PVC Sheathed Cord**
Tradename: **TONGYUAN**

Type designation: Nominal values:
227 IEC 53 2-3x0.75...2.50mm² round
2x0.75mm² flat

Protection class:
Protection degree:
Basis: **CB / VDE / DE1-29212 dated 2003/05/09**

Remark:

Test standards: **IEC 60227-1(ed.2):93+A1:95+A2:98**
IEC 60227-2(ed.2):97
IEC 60227-5(ed.2):97+A1:97

CABLE-TY-SZ 1 / 2

Federal Inspectorate for Heavy Current Installations

Authorization Safety Mark



P. Schoch

Head

CABLE-TY-SZ 2 / 2

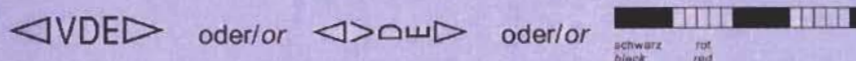
ZEICHENGENEHMIGUNG MARKS APPROVAL

Shenzhen Tongyuan
Industrial Co., Ltd.
Tongyuan Industrial Zone
Xikeng New Village Fumin
518110 GUANLAN TOWN, BAOAN, SHENZHEN
CHINA

ist berechtigt, für ihr Produkt /
is authorized to use for their product

Flexible Leitung
Flexible cable (cord)

die hier abgebildeten markenrechtlich geschützten Zeichen
für die ab Blatt 2 aufgeführten Typen zu benutzen /
the legally protected Marks as shown below for the types referred to on page 2 ff.



Geprüft und zertifiziert nach /
Tested and certified according to

DIN VDE 0281-5 (VDE 0281 Teil 5):2002-09; HD 21.5 S3:1994 + A1:1999 + A2:2001



VDE Prüf- und Zertifizierungsinstitut GmbH
Testing and Certification Institute
Zertifizierungsstelle / *Certification*

Aktenzeichen: 4091600-5140-0005 / 115897
File ref.:

Ausweis-Nr. 101980 Blatt 1
Certificate No. Page

Weitere Bedingungen siehe Rückseite und Folgeblätter /
further conditions see overleaf and following pages

Offenbach, 1997-09-17
(letzte Änderung/updated 2009-08-10)

VDE Zertifikate sind nur gültig bei Veröffentlichung unter:
VDE certificates are valid only when published on:

<http://www.vde.com/zertifikat>
<http://www.vde.com/certificate>

VDE Prüf- und Zertifizierungsinstitut Zeichengenehmigung

Ausweis-Nr. / Blatt /
Certificate No. page
101980 2

Name und Sitz des Genehmigungs-Inhabers / *Name and registered seat of the Certificate holder*
Shenzhen Tongyuan Industrial Co., Ltd., Tongyuan Industrial Zone, Xikeng New Village Fumin,
518110 GUANLAN TOWN, BAOAN, SHENZHEN, Guangdong, CHINA

Aktenzeichen / *File ref.*
4091600-5140-0005 / 115897 / FG42 / STR

letzte Änderung / *updated* Datum / *Date*
2009-08-10 1997-09-17

Dieses Blatt gilt nur in Verbindung mit Blatt 1 des Zeichengenehmigungsausweises Nr. 101980.
This supplement is only valid in conjunction with page 1 of the Certificate No. 101980.

Flexible Leitung *Flexible cable (cord)*

Typ(en) / *Type(s)*:

H03VV-F 2...3 x 0,5...0,75 mm²
H03VVH2-F 2 x 0,5...0,75 mm²
H05VV-F 2...3 x 0,75...2,5 mm²
H05VVH2-F 2 x 0,75 mm²

+
+
+
+

Firmenzeichen
Trademark

TONGYUAN

Dieser Zeichengenehmigungs-Ausweis bildet die Grundlage für die EG-Konformitätserklärung und CE-Kennzeichnung durch den Hersteller oder dessen Bevollmächtigten und bescheinigt die Konformität mit den genannten Normen im Sinne der **EG-Niederspannungsrichtlinie 2006/95/EG**.

This Marks Approval is the basis for the EC Declaration of Conformity and the CE Marking by the manufacturer or his agent and shows the conformity with the said standards as defined by the EC Low-Voltage Directive 2006/95/EC.

VDE Prüf- und Zertifizierungsinstitut GmbH
Testing and Certification Institute
Fachgebiet FG42
Section FG42

VDE Prüf- und Zertifizierungsinstitut
Zeichengenehmigung

Ausweis-Nr. / Beiblatt /
Certificate No. Supplement
101980

Name und Sitz des Genehmigungs-Inhabers / *Name and registered seat of the Certificate holder*
Shenzhen Tongyuan Industrial Co., Ltd., Tongyuan Industrial Zone, Xikeng New Village Fumin,
518110 GUANLAN TOWN, BAOAN, SHENZHEN, Guangdong, CHINA

Aktenzeichen / *File ref.*
4091600-5140-0005 / 115897 / FG42 / STR

letzte Änderung / *updated* Datum / *Date*
2009-08-10 1997-09-17

Dieses Beiblatt ist Bestandteil des Zeichengenehmigungsausweises Nr. 101980.
This supplement is part of the Certificate No. 101980.

Flexible Leitung
Flexible cable (cord)

Fertigungsstätte(n)
Place(s) of manufacture

Referenz/*Reference* Shenzhen Tongyuan
30006198 Industrial Co., Ltd.
 Tongyuan Industrial Zone
 Xikeng New Village Fumin
 518110 GUANLAN TOWN, BAOAN, SHENZHEN
 Guangdong
 CHINA

VDE Prüf- und Zertifizierungsinstitut GmbH
Testing and Certification Institute
Fachgebiet FG42
Section FG42

VDE Prüf- und Zertifizierungsinstitut Zeichengenehmigung

Ausweis-Nr. / Infoblatt /
Certificate No. Info sheet
101980

Name und Sitz des Genehmigungs-Inhabers / *Name and registered seat of the Certificate holder*
Shenzhen Tongyuan Industrial Co., Ltd., Tongyuan Industrial Zone, Xikeng New Village Fumin,
518110 GUANLAN TOWN, BAOAN, SHENZHEN, Guangdong, CHINA

Aktenzeichen / *File ref.*
4091600-5140-0005 / 115897 / FG42 / STR

letzte Änderung / *updated* Datum / *Date*
2009-08-10 1997-09-17

Dieses Blatt gilt nur in Verbindung mit Blatt 1 des Zeichengenehmigungsausweises Nr. 101980.
This supplement is only valid in conjunction with page 1 of the Certificate No. 101980.

Genehmigung zum Benutzen des auf Seite 1 abgebildeten markenrechtlich geschützten Zeichens des VDE:

Grundlage für die Benutzung sind die Allgemeinen Geschäftsbedingungen (AGB) des VDE Prüf- und Zertifizierungsinstitut GmbH. Das Recht zur Benutzung erstreckt sich nur auf die bezeichnete Firma mit den genannten Fertigungsstätten und die oben aufgeführten Produkte mit den zugeordneten Bezeichnungen. Die Fertigungsstätte muss so eingerichtet sein, dass eine gleichmäßige Herstellung der geprüften und zertifizierten Ausführung gewährleistet ist.

Die Genehmigung ist so lange gültig wie die VDE-Bestimmungen gelten, die der Zertifizierung zugrunde gelegen haben, sofern sie nicht auf Grund anderer Bedingungen aus der Prüf- und Zertifizierungsordnung (PM102) zurückgezogen werden muss.

Der Gültigkeitszeitraum einer VDE-GS-Zeichengenehmigung kann auf Antrag verlängert werden. Bei gesetzlichen und / oder normativen Änderungen kann die VDE-GS-Zeichengenehmigung ihre Gültigkeit zu einem früheren als dem angegebenen Datum verlieren.

Der VDE-Zeichengenehmigungsausweis wird ausschließlich auf der ersten Seite unterzeichnet.

Approval to use the legally protected Mark of the VDE as shown on the first page:

Basis for the use are the general terms and conditions of the VDE Testing and Certification Institute. The right to use the mark is granted only to the mentioned company with the named places of manufacture and the listed products with the related type references. The place of manufacture shall be equipped in a way that a constant manufacturing of the certified construction is assured.

The approval is valid as long as the VDE specifications are in force, on which the certification is based on, unless it is withdrawn according to other provisions of the Testing and Certification Procedure (PM102).

The validity period of a VDE-GS-Mark Approval may be prolonged on request. In case of changes in legal and / or normative requirements, the validity period of a VDE-GS-Mark Approval may be shortened.

The approval is solely signed on the first page

EC Declaration of Conformity

Issuer's name and address:

Shenzhen Tongyuan
Industrial Co., Ltd.
Tongyuan Industrial Zone
Xikeng New Village Fumin
518110 GUANLAN TOWN, BAOAN, SHENZHEN
Guangdong
CHINA

Product: Flexible cable (cord)

Type designation: H03VV-F 2...3 x 0,5...0,75 mm²; H03VVH2-F 2 x 0,5...0,75 mm²; H05VV-F 2...3 x 0,75...2,5 mm²; H05VVH2-F 2 x 0,75 mm²

The designated product is in conformity with the European Directive:

2006/95/EC

"Council Directive on the harmonization of the laws of the Member States relating to electrical equipment designed for use within certain voltage limits".

Full compliance with the standards listed below proves the conformity of the designated product with the provisions of the above-mentioned EC Directive:

DIN VDE 0281-5 (VDE 0281 Teil 5):2002-09; HD 21.5 S3:1994 + A1:1999 + A2:2001

The VDE Testing and Certification Institute GmbH (EU Identification No.0366), Merianstr. 28, D-63069 Offenbach, has tested and certified the product granting the VDE Approval for the mark(s) as displayed.



oder/or



oder/or



Certificate No.
File Reference

101980
4091600-5140-0005 / 115897 FG42 / STR

(Place, Date)

(Legally binding signature of the issuer)

CERTIFICATE

KEMA No.: 2022085.02

Issued to:
Applicant:
Shenzhou Tongyuan Industrial Co., Ltd.
Tongyuan Industry Zone
SHENZHEN
CHINA

Manufacturer/Licensee:
Shenzhou Tongyuan Industrial Co., Ltd.
Tongyuan Industry Zone
SHENZHEN
CHINA

Product : ordinary PVC sheathed flexible cords

Trade name : TONGYUAN
Types : H05VV-F and H05VVH2-F

The product and any acceptable variation thereto is specified in the Annex to this certificate and the documents therein referred to.

KEMA hereby declares that the above-mentioned product has been certified on the basis of:

- a type test according to the standard HD 21.5 S3:1994
- an inspection of the production location according to CENELEC Operational Document CIG 021
- a certification agreement with the number 964365.

KEMA hereby grants the right to use the KEMA-KEUR certification mark



The KEMA-KEUR certification mark may be applied to the product as specified in this certificate for the duration of the KEMA-KEUR certification agreement and under the conditions of the KEMA-KEUR certification agreement.

This certificate is issued on: July 2, 2002

H.R.M. Barends
Certification Manager

© Integral publication of this certificate is allowed



SPECIFICATION OF THE CERTIFIED PRODUCT**Product data**

product : ordinary PVC sheathed flexible cords
trade name : TONGYUAN
types : H05VV-F,
H05VVH2-F

Product data – type H05VV-F

rated voltage : 300/500 V
tested cords : 2 x 0,75/3 x 0,75 and 3 x 1,0 mm²
certified cords : 2-5 x 0,75-2,5 mm²

Product data – type H05VVH2-F

rated voltage : 300/500 V
tested cord : 2 x 0,75 mm²
certified cords : 2 x 0,75-1,0 mm²

TESTS**Test requirements**

- HD 21.5 S3:1994 including A1:1999 and A2:2001.

Test result

The test results are laid down in KEMA test file no. 2022085.02.

Remarks

This certificate is based on and supersedes certificate no. 2014042.02, dated August 15, 2001.

Conclusion

The examination proved that all test requirements were met.

Tested by : A.A. Mackenbach

Checked by : H.R.M. Barends

Factory-Location

Shenzhen Tongyuan Industrial Co. Ltd.
Tongyuan Industry Zone
Bao'an District Shenzhen
China

KEMA Quality B.V.

Utrechtseweg 310, 6812 AR Arnhem, The Netherlands
P.O. Box 5185, 6802 ED Arnhem, The Netherlands
Telephone +31 26 3 56 20 00, Telefax +31 26 3 52 58 00



ASTA Licence



Intertek

The **ASTA Diamond Mark** is a symbol of electrical safety. It provides evidence for customers and authorities that Intertek has independently tested and certified the product's compliance to applicable safety standards, also that Intertek monitors production and testing to ensure subsequent production continues to comply with stated standards.

This Licence is valid until the review date or earlier if preceded by the withdrawal of the Approval Standard or otherwise withdrawn by the Certification Body. Current validity status can be confirmed by contacting:
Intertek
Hilton House,
Corporation Street,
Rugby, CV21 2DN
United Kingdom
Tel: +44 (0)1788 578435
asta@intertek.com

Details of Approved variants, components and sites are given on Endorsements to this Licence (10 pages)



010

www.intertek.com

This Licence authorises use of the
ASTA Diamond Mark
Licence No. 179

Organisation:
Volex (Asia) Pte Limited
35 Tampines Street 92, Singapore 528880

Product:	Fused Plug
Designation:	MP5004, MP5004A & MP5004H
Colour(s):	Any Colour
250 Volts a.c. 50 Hz	13 Amperes
Non-rewirable	Rough use (BS1363/A)
Solid brass pins	Solid moulded-on construction
Approval Standard:	BS 1363-1: 1995
	Incorporating Amendment Nos. 1, 2 & 3

Issue number:	11
Review date:	30 th September 2014
Factory Reference:	LQ- See attached Endorsements

R W Hayward

Name

Signature

15th November 2010

Date

Approved sites for manufacture/production:

Components & Assembly –

Volex Cable Assembly (Vietnam) Co., Ltd
Plot D-5B, Thanglong Industrial Park
Dong Anh District
Hanoi, Vietnam

**Product Identification 137, 138, 139, 140,
165, 166, 167, 168, 169, 170, 171, 172,
173, 174, 175, 176, 197, 198, 199, 200,
201, 202, 203 or 204**

Factory Reference LQ-489

PT Volex Indonesia
Kawasan Industri Sekupang
Batam 29422
Indonesia

**Product Identification 5, 6, 7, 8, 109, 110,
111, 112, 153, 154, 155, 156, 221, 222, 223,
224, 269, 270, 271, 272, 273, 274, 275, 276,
277, 278, 279, 280, 281, 282, 283, 284, 285,
286, 287, 288, 289, 290, 291 or 292**

Factory Reference LQ-331

Volex Cable Assembly (Shenzhen) Co., Ltd
Volex Building
1173 Shenhui Road
Bao'an, Henggang
Shenzhen 518115
China

**Product Identification 13, 14, 15, 16, 17,
18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 30,
31, 32, 33, 34, 35, 36, 37, 42, 43, 44, 45, 50,
51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62,
63, 64, 65, 101, 102, 103, 104, 105, 106,
107, 108, 113, 114, 115, 116, 121, 122, 123,
124, 125, 126, 127, 128, 141, 142, 143, 144,
145, 146, 147, 148, 149, 150, 151, 152, 181,
182, 183, 184, 185, 186, 187, 188, 189, 190,
191, 192, 193, 194, 195 or 196**

Factory Reference LQ-224

Volex Cable Assembly (Zhongshan) Co., Ltd
No. 2 Xin Da Bei Road
Zhongshan Torch Hi-Tech Industry
Development Zone
Zhongshan, Guangdong 528437
China

**Product Identification 129, 130, 131, 132,
209, 210, 211, 212, 213, 214, 215, 216, 217,
218, 219, 220, 225, 226, 227, 228, 233, 234,
235, 236, 237, 238, 239, 240, 241, 242, 243,
244, 245, 246, 247, 248, 249, 250, 251, 252,
253, 254, 255, 256, 257, 258, 259 or 260**

Factory Reference LQ-467

Volex Interconnect (India) Pvt Ltd
22/1-A, First Street, Kazura Gardens
Neelankarai

Chennai 600041, India
**Product Identification 83, 84, 85, 86, 264,
266, 267 or 268**

Factory Reference LQ-463

Conditions for maintenance of Licence:

- 1) Compliance with Certification Regulations.
- 2) Inspection of manufacturing facilities each year with satisfactory outcome.
- 3) Surveillance testing of production samples at required intervals with satisfactory outcome.
- 4) Satisfactory actions in the event of any compliance and/or safety issues becoming known after product has been supplied.
- 5) Prompt payment of invoices.

Licence Renewal:

Licence fee will be invoiced annually during the month of June.

The Licence document will be reissued following any changes advised or variants tested.

A fee may be charged for reissue.

Surveillance samples:

Samples are required to be tested in accordance with Intertek surveillance testing programmes.

Samples should preferably be selected during scheduled Factory inspection visits.

The fee for testing will be invoiced at the time of testing. A summary of testing will be provided.

Use of the ASTA Mark:

The ASTA Mark may be used on the product and in marketing material relating to the product, as permitted by the Certification Regulations.

The Licence number should be marked on the product (mandatory on BS 1363 plugs, where feasible on other products) in a form agreed by Intertek, such as "Approved by ASTA Licence no. 179".

Marketing of product with alternative designation(s) or brand name(s):

This Licence relates only to products specifically described herein. Any alternative designations and/or brand names should be advised to Intertek. The Licence will then be reissued accordingly. Alternative brand names (if applicable) are shown on an Annex to this Licence.

Compliance Testing:

Reason for test	ASTA Certificate
Complete compliance (7-year retest)	14211
Modification – alternative manufacturing site + designation	S14253
Modification – alternative material	S14292
Modification – alternative design feature	S14293
Modification – alternative manufacturing site	S14294
Modification – alternative manufacturing sites and cords	S14299
Modification – alternative cords	S14325
Modification – alternative cord	S14326
Modification – alternative cord	S14327
Modification – alternative manufacturing site	S14504
Modification – alternative manufacturing site	S14510
Modification – alternative components	S14593
Modification – alternative manufacturing site	S14617
Modification – alternative components	S15027
Modification – alternative cords	S15056
Modification – alternative cords	S15102
Modification – alternative cords	S15172
Modification – alternative cords	S15343
Modification – alternative cord	S15362
Modification – alternative cords	S15376
Modification – alternative manufacturing site	S15434
Modification – alternative manufacturing site	S15730
Modification – alternative manufacturing site	S15731
Modification – alternative cord	S15764
Modification – alternative manufacturing site	S15765
Modification – alternative cords	S15766
Modification – alternative cords	S15767
Modification – alternative cord	S15768
Modification – alternative cords	S15769
Modification – alternative cords	S16050
Modification – alternative cords	S16256
Modification – alternative components	S16300
Modification – alternative cords	S16357
Modification – alternative cord	S16444
Modification – alternative components	S16484
Modification – alternative components	S16557
Modification – alternative cord	S16838
Modification – alternative cords	S16845
Modification – alternative materials and suppliers	S16893
Modification – alternative cords	S16918
Modification – alternative materials and suppliers	S17008
Modification – alternative cords & upgrade to Amendment. No. 3 of BS 1363-1	S17468
Modification – alternative rivet fuse clip (Shine Top, alternatively Jian Hui)	S17514
Modification – alternative material and suppliers	S17721
Modification – alternative cords	S17925

Endorsement to ASTA Licence 179 issue number: 11 dated 15th November 2010Contact: asta@intertek.comWebsite: www.intertek.com

Approved components and cords:
Fuse Links:

The Plugs must be fitted with ASTA Approved BS 1362: 1973 fuse-links having a rating appropriate to the cord fitted in accordance with Table 2 of BS 1363-1: 1995 incorporating Amendment Nos. 1, 2 and 3.

Flexible cords, MP5004:

Maximum Rating Amperes	Cores		Code	Cable Manufacturer	ASTA Certificate	Remarks
	No	CSA mm ²				
6	2	0.75	H05VV-F	Bao Hing	S13710	K64C-5A (HD21.5 S3, 1994 & IEC 227) & NBN HD021.5 (1995)
6	2	1.00	H05VV-F	Bao Hing	S13259	S15731, 15765
10	2	1.00	H05VV-F	Bao Hing	S13329	
6	3	0.75	H05VV-F	Bao Hing	S15731	
10	3	1.00	H05VV-F	Bao Hing	S13259	S14504, S15731
10	3	1.25	H05VV-F	Bao Hing	S13259	S14325, S14510, S14504, S15731, S15765
13	2	1.50	H05VV-F	Bao Hing	S16357	
13	3	1.50	H05VV-F	Bao Hing		S14504, S14510
13	2	0.75	H05VV-F	Bao Hing	S13258	S14294, S15434, S15731, S15765
6	2	0.75	H05V2V2-F	Bao Hing		3328-1 HG only
10	2	1.00	H05V2V2-F	Bao Hing		3328-2
6	2	0.75	H05VV-F	Cablerie	S11883	
10	2	1.00	H05VV-F	Cablerie	S11883	
10	3	1.00	H05VV-F	Cablerie	S11883	
6	2	0.75	H05RR-F	Cablerie / Nexans	S12113	
10	2	1.00	H05VV-F	Concordia	S12862	
6	3	0.75	H05VV-F	Concordia	S12862	
10	3	1.00	H05VV-F	Concordia	S12862	14211
6	3	0.75	H03RT-F	Del Cinca	S12253	Braided
10	3	1.00	H03RT-F	Del Cinca	S12253	Braided
6	2	0.75	H05VV-F	Ericsson	S12612	Extra flexible
6	3	0.75	H05VV-F	Ericsson	S11788	
10	3	1.00	H05VV-F	Ericsson	S13471	HD 21.5.S2
10	3	1.00	H05VV-F	Ericsson	S11650	

Flexible cords, MP5004 (continued):

Maximum Rating Amperes	Cores		Code	Cable Manufacturer	ASTA Certificate	Remarks
	No	CSA mm ²				
6	2	0.75	H05VVH2-F	Eurelectric		2628 H359+359.2
10	2	1.00	H05VV-F	Eurelectric	S13469	HD 21.5.S2
10	2	1.00	H05VV-F	Eurelectric	S13260	
6	3	0.75	H05VV-F	Eurelectric	S13260	
10	3	1.00	H05VV-F	Eurelectric	S12946	
6	3	0.75	H05VV-F	Furas	S15767	
10	2	1.00	H05RN-F	Furas	S13710	21 027 (HD 22)
10	2	1.00	H05RR-F	Furas	S13058	
6	3	0.75	H05RR-F	Furas	S13058	
6	3	0.75	H03VVH2-F	Furas	S15767	
6	3	0.75	H05V2V2-F	Furas	S15768	
10	3	1.00	H05RR-F	Furas	S13058	
10	2	1.00	H05RN-F	Huasheng	S16845	
10	3	1.00	H05RR-F	Huasheng	S16845	
6	2	0.75	H05VV-F	Kordes	S16121	
13	3	1.50	H05VV-F	Kordes	S16121	
10	3	0.75	H03RT-H	NanXiang	S17468	
10	3	1.00	H03RT-H	NanXiang	S17468	
10	2	1.00	H05VV-F	Nexans	S13768	HD21.5.S3
6	3	0.75	H05VV-F	Nexans	S13801	VDE 0281-5 (VDE0281 Teils): 1995 -07, HD 21.5.S3
10	3	1.00	H05VV-F	Nexans	S16121	HD21.5.S3
13	3	1.50	H05VV-F	Nexans	S16121	HD21.5 S3
10	2	1.00	H05RR-F	Nexans	S12820	S16121 HD22.4 S2
10	2	1.00	H05RN-F	Nexans	S13451	HD 22.S2
6	3	0.75	H05RN-F	Nexans	S16121	HD22.4 S2
6	3	0.75	H05VV-F	Nexans	S13801	S16121 HD21.5 S3
10	3	1.00	H05RR-F	Nexans	S13329	S16121 HD22.4 S2
10	3	1.00	H05RN-F	Nexans	S16121	HD22.4 S2
13	3	1.50	H05VV-F	Nexans	S16121	HD21.5 S3
6	2	0.75	H05RR-F	Nexans	S12439	
10	2	1.00	H05VV-F	NKT	S12969	
13	3	1.50	H05VV-F	NKT	S12948	
6	3	0.75	H03RT-F	Patelec	S11919	Braided
6	3	0.75	H05RN-F	Patelec	S12441	

 Endorsement to ASTA Licence 179 issue number: 11 dated 15th November 2010

 Contact: asta@intertek.com

 Website: www.intertek.com

Flexible cords, MP5004 (continued):

Maximum Rating Amperes	Cores		Code	Cable Manufacturer	ASTA Certificate	Remarks
	No	CSA mm ²				
6	2	0.75	H05VV-F	Phino	S1326	
10	2	1.00	H05VV-F	Phino	S13261	
6	3	0.75	H05VV-F	Phino	S13261	
10	3	1.00	H05VV-F	Phino	S13261	
6	2	0.75	H05VV-F	Pope	S12314	
6	3	0.75	H05VV-F	Pope	S12406	
10	3	1.00	H05VV-F	Pope	S12406	
6	3	1.00	H05VV-F	Raydex		Designated RD7056
6	3	0.75	-	Rists	S11639	Extensible
10	3	1.00	H05VV-F	Rists	S11788	
6	3	0.75	H03RT-H	Kunshan Shi	S16050	
10	3	1.00	H03RT-H	Kunshan Shi	S16050	
6	2	0.75	H05VVH2-F	Salcavi SRL	S13832	HD 21.1.S2 HD 21.2.S2 HD 21.5.S2
6	3	0.75	H03RT-F	Shanghai Nanyang	S15343	
10	3	1.00	H03RT-F	Shanghai Nanyang	S15343	
6	3	0.75	H05VV-F	Sino Fame	S16845	
10	3	1.00	H05VV-F	Sino Fame	S16838	
6	2	0.75	H05VV-F	Ta Hsing	S13261	
10	2	1.00	H05VV-F	Ta Hsing	S13261	
13	2	1.50	H05VV-F	Ta Hsing	S13329	
10	3	0.75	H05VV-F	Ta Hsing	S16918	
6	3	0.75	H05VV-F	Ta Hsing	S13261	
10	3	1.00	H05VV-F	Ta Hsing	S13261	S14292
10	3	1.00	H05VV-F	Ta Hsing	S16918	
13	3	1.50	H05VV-F	Ta Hsing	S13258	S14325

Flexible cords, MP5004 (continued):

Maximum Rating Amperes	Cores		Code	Cable Manufacturer	ASTA Certificate	Remarks
	No	CSA mm ²				
6	2	0.75	H05RN-F	Ta Tun	S16256	
10	2	1.00	H05RN-F	Ta Tun		(2131)
10	2	1.00	H05RR-F	Ta Tun		(2131)
13	2	1.50	H05RR-F	Ta Tun	S16444	
6	3	0.75	H05RN-F	Ta Tun		(2113)
10	3	1.00	H05RN-F	Ta Tun		(2113) S14325
6	3	0.75	H03RT-F	Ta Tun	S15766	
10	3	1.00	H03RT-F	Ta Tun	S15766	
6	3	0.75	H05RR-F	Ta Tun	S15376	
10	3	1.00	H05RR-F	Ta Tun	S15376	
6	3	0.75	H05RT-H	Ta Tun	S15769	
10	3	1.00	H05RT-H	Ta Tun	S15769	
13	3	1.50	H03RT-H	Ta Tun	S17468	
6	2	0.75	H03VVH2-F	Thomas Bolton-BICC	S12778	
6	2	0.75	H05VVH2-F	Thomas Bolton-BICC	S12945	
6	2	0.75	H05VV-F	Thomas Bolton-BICC	S12612	
10	2	1.00	H05VV-F	Thomas Bolton-BICC	S13134	S13306, S11650
6	3	0.75	H05VV-F	Thomas Bolton-BICC	S15102	
6	3	0.75	H03VV-F	Thomas Bolton-BICC	11555	S11629
6	3	0.75	(BS6141)	Thomas Bolton-BICC	11555	High Temp 85°C
10	3	1.00	(BS 6141)	Thomas Bolton-BICC	S11650	High Temp 85°C
10	3	1.00	H05VV-F	Thomas Bolton-BICC	S11650	S14253
13	3	1.25		Thomas Bolton-BICC	11555	S12948, S12973, S14253, 14211, S14325, S14617 & S15730
13	3	1.25	(Nat Std)	Thomas Bolton-BICC	S12948	S15434
13	3	1.50	H05VV-F	Thomas Bolton-BICC	S12948	
6	2	0.75	H05VV-F	Tong Yuan	S14299	
10	2	1.00	H05VV-F	Tong Yuan	S14299	
13	2	1.50	H05VV-F	Tong Yuan	S16357	
6	3	0.75	H05VV-F	Tong Yuan	S14299	
10	3	1.00	05VV-F	Tong Yuan	S15362	
10	3	1.00	H05VV-F	Tong Yuan	S14299	
13	3	1.50	H05VV-F	Tong Yuan	S14299	

Flexible cords, MP5004A:

Maximum Rating	Cores		Code	Cable Manufacturer	ASTA Certificate	Remarks
	No	CSA mm ²				
6	2	0.50	H03VVH2-F	Bao Hing	S15765	
6	2	0.75	H03VVH2-F	Bao Hing	S15056	
6	2	0.75	H05VV-F	Bao Hing	S13259	
6	2	0.75	H05VVH2-F	Bao Hing	S13259	K64C-5A [HD21.5 S3, 1994 & IEC 227] & NBN HD21.5 (1995)
10	2	1.00	H05VVH2-F	Bao Hing	S15764	
6	2	0.50	H03VV-F	Bao Hing	S15765	
6	3	0.75	H03VV-F	Bao Hing	S13259	
6	3	0.75	H03VV-F	Cablerie	S11883	
3	2	0.50	H03VVH2-F	Concordia	S11937	
3	2	0.50	H05VV-F	Concordia	S13449	
6	2	0.75	H03VVH2-F	Concordia	S12862	
6	2	0.75	H05VVH2-F	Concordia	S12862	
6	2	0.75	H05VV-F	Concordia	S12862	
3	2	0.50	H03VVH2-F	Delta	S11625	
3	2	0.50	H03VV-F	Delta	S11640	
3	2	0.50	H05VV-F	Delta	S12407	
6	2	0.75	H03VVH2-F	Delta	S11625	
6	2	0.75	H05VVH2-F	Delta	S11625	
6	2	0.75	H05VV-F	Delta	S11638	
10	2	1.00	H05VVH2-F	Delta	S11650	
10	2	1.00	H05VV-F	Delta	S11650	
3	3	0.50	H03VV-F	Delta	S11788	
6	3	0.75	H03VV-F	Delta	S11629	
6	2	0.75	H05VV-F	Eurelectric	S13469	HD 21.5.S2
6	2	0.75	H05VV-F	Eurelectric	S13260	Extra Flex
3	3	0.50	H03VV-F	Eurelectric	S13260	
6	2	0.75	H05VV-F	Ericsson	S11639	Extra Flex
6	2	0.75	H05VV-F	Ericsson	S11638	14211
10	2	1.00	H05VV-F	Ericsson	S11650	
10	3	1.00	H05VV-F	Ericsson	S13471	HD 21.5.S2
6	2	0.75	H05VVH2-F	Ericsson	S11833	
6	2	0.75	H03VVH2-F	Furas	15767	
6	3	0.75	H05VV-F	Furas	15767	

Flexible cords, MP5004A (continued):

Maximum Rating	Cores		Code	Cable Manufacturer	ASTA Certificate	Remarks
	No	CSA mm ²				
6	2	0.75	H03VVH2-F	Hitachi	S12113	2
6	2	0.75	H05RN-F	Kabelmetal	S12111	2
6	2	0.75	H03VV-F	Kabelmetal	S13768	HD21.5.S3
6	2	0.75	H05VV-F	Kabelmetal	S13768	HD21.5.S3
3	3	0.50	H03VV-F	Kabelmetal	S13768	HD21.5.S3
	3	0.75	H05VV-F	Kabelmetal	14211	
6	2	0.75	H03VVH2-F	Mayor	S13261	
6	2	0.75	H03VVH2-F	Mayor 1	S13261	
6	2	0.75	H05RN-F	Nexans	S12949	EM2 Sheath
6	2	0.75	H05VV-F	NKT	S13450	HD 21.1.S2, HD 21.2.S2, HD 21.5.S2
6	3	0.75	H03VV-F	NKT	S12969	
6	3	0.75	H03VV-F	North West Cables	S12947	
6	2	0.75	H05VV-F	Permanoid	S13450	
3	3	0.50	H03VV-F	Permanoid	S13450	
6	3	0.75	H03VV-F	Permanoid	S13450	
6	2	0.75	H05VVH2-F	Phino	S13261	
6	3	0.75	H03VV-F	Phino	S13261	
6	2	0.75	H05VVH2-F	Pirelli	S12754	
6	2	0.75	H03VVH2-F	Pope	S12406	S12634
6	2	0.75	H05VVH2-F	Pope	S12406	
6	3	0.75	H03VV-F	Pope	S12970	
6	2	0.75	H03VVH2-F	Sino Fame	S16845	
6	3	0.75	H03VV-F	Sino Fame	S16845	
6	2	0.75	H03VVH2-F	Ta Hsing	S14326	S15056
6	2	0.75	H05VVH2-F	Ta Hsing	S13261	
6	3	0.75	H03VV-F	Ta Hsing	S13261	S17925
10	2	0.75	H03VVH2-F	Ta Hsing	S16918	

Flexible cords, MP5004A (continued):

Maximum Rating Amperes	Cores		Code	Cable Manufacturer	ASTA Certificate	Remarks
	No	CSA mm ²				
3	2	0.50	H03VVH2-F	Thomas Bolton-BICC	S11628	S14325
3	2	0.50	H03VV-F	Thomas Bolton-BICC	S11788	S12442
3	2	0.50	H05VV-F	Thomas Bolton-BICC	S12754	
6	2	0.75	H03VVH2-F	Thomas Bolton-BICC	S11627	S12442, S14325
6	2	0.75	H05VVH2-F	Thomas Bolton-BICC	14211	S15731
6	2	0.75	H05VV-F	Thomas Bolton-BICC	S11788	
6	2	0.75	H05VV-F	Thomas Bolton-BICC	S12407	Ex Flex
10	2	1.00	H05VV-F	Thomas Bolton-BICC	S11650	
3	3	0.50	H03VV-F	Thomas Bolton-BICC	S11626	S11788
6	3	0.75	H03VV-F	Thomas Bolton-BICC	S11629	
6	3	0.75	H05VV-F	Thomas Bolton-BICC	S12756	
6	2	0.75	H05VVH2-F	Tong Yuan	S14299	
6	3	0.75	H03VV-F	Tong Yuan	S14299	
6	2	0.75	H03VVH2-F	Volex	S13261	S15731
6	2	0.75	H03VVH2-F	Volex 1	S13261	

Flexible cords, MP5004H:

Maximum Rating Amperes	Cores		Code	Cable Manufacturer	ASTA Certificate	Remarks
	No	CSA mm ²				
10	2	1.00	H07RN-F	Huasheng	S16845	
10	2	1.00	H07RN-F	Nexans	S14327	
13	2	1.50	H07RN-F	Nexans	S14327	
10	2	1.00	H07RN-F	Furas	S14293	
13	2	1.50	H07RN-F	Furas	S14293	S15731, S15765
10	2	1.00	H07RN-F	Ta Tun	S16050	
13	2	1.50	H07RN-F	Ta Tun	S16050	

TRADE MARKS & BRAND NAMES USED WITH THE PRODUCT

The following alternative trade marks have been notified to Intertek

Dyson

Flymo

Black and Decker

This Annex is confidential between the Licence holder and Intertek.