

SPECIFICATION

FOR

NORTH-AMERICAN JUMPER CORDSET (PB FR)

CORD : SJT 18/3 60°C PVC LEAD FREE

CUSTOMER : VPE/FARNELL

CUSTOMER'S PART No. : 2467621

VOLEX'S SPEC. REF. No. : 143111/2

ISSUE No. : 002

DATE : 30TH JANUARY 2015

CUSTOMER APPROVED :

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



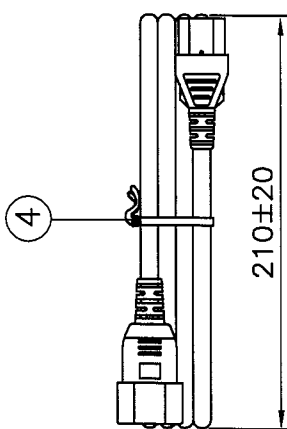
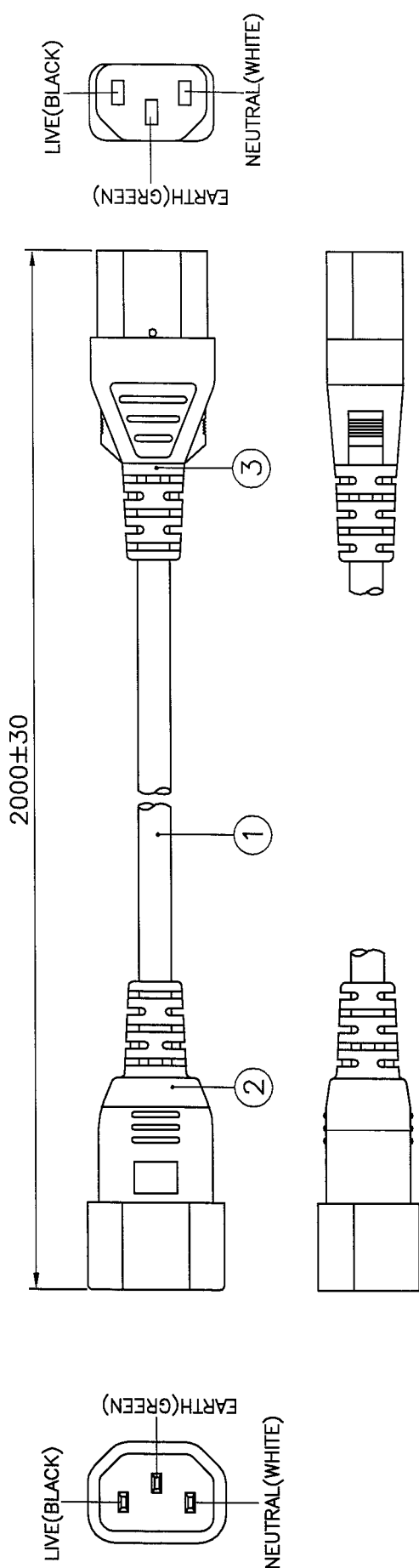
Volex (Asia) Pte Ltd

35 Tampines St. 92

Singapore 528880

Tel : (65) 6788 7833

Fax : (65) 6788 7822



APPROVED SOURCE FOR CABLE

1. BAO HING(SHENZHEN).
2. TA HSING(SHENZHEN).

NOTE :

1. ALL DIMENSIONS IN mm.
2. THE CORD SHALL COMPLY WITH NMX-J-436-ANCE + CSA C22.2 NO.49 + UL 62.
3. THE MOLDED PLUG CONNECTOR SHALL COMPLY WITH UL817, CSA C22.2 NO.21-95 AND C22.2 NO.182.3-M1987.
4. THE MOLDED CONNECTOR SHALL COMPLY WITH UL817, CSA C22.2 NO. 21-95 AND C22.2 NO.182.3-M1987.
5. THIS PART CAN BE MANUFACTURED AT ANY LOCATION WHICH HAS SAFETY APPROVAL.

4	6" PE TIE BLK	6310056	1
	IP60G NL7976B BLK	4100115	-
3	MOLDED CONNECTOR V1625 (10A 125V)	V1625	1
	IP60G NL7976B BLK	4100115	-
2	MOLDED PLUG VAC14S (10A 125V)	VAC14S-BK	1
1	SJT 18/3 60°C BWG BLK PVC LEAD FREE	1910107	1
S/N	DESCRIPTION	ITEM NUMBER	QTY
TITLE : NORTH-AMERICAN JUMPER CORDSET (PB FR)		SCALE : N.T.S.	
CUSTOMER : VPE/FARNELL		PAGE : 1/1	
CUSTOMER PART NUMBER : 2467621		ISSUE	
Reference Number : 143111/2 (HG01-230-15)		002	
SALES :	ENGRG : <i>hondy</i>	CHECKED BY : <i>Ying</i>	DATE : <i>30/01/15</i>
Date :	Date : <i>30/01/15</i>	Date : <i>30/01/15</i>	Date : <i>30/01/15</i>
Voletx (Asia) Pte Ltd			
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REV.	DESCRIPTION	DATE
D	ADD IN INSULATION COLOR 'BWGY' AS SHOWN.	19/05/06
E	CHANGE COMPLIANCE STANDARD & UPDATE VALUES PER PRODUCT SAFETY.	03/07/07

1. PVC FLEXIBLE CORD

1.1 SCOPE

- △ This specification shall be in accordance with NMX-J-436-ANCE + CSA C22.2 NO.49 + UL 62.

1.2 CONSTRUCTION

CONDUCTOR	ANNEALED COPPER WIRE
INSULATION	PVC (BLACK, WHITE & GREEN OR BLUE, BROWN, GREEN&YELLOW OR BLACK, WHITE GREEN&YELLOW)
JACKET	PVC

	ITEM	UNIT	SPEC. VALUE
	TEMPERATURE RATING	°C	60
	MAXIMUM VOLTAGE	V	300
	NO. OF CONDUCTORS	NO.	3
△	SIZE OF CONDUCTORS	mm ² (AWG)	0.824 (18)
△	CONDUCTOR DIAMETER OF INDIVIDUAL WIRES	mm (in)	0.125-0.26 (0.0049-0.010)
△	MIN. AVE. THICKNESS OF INSULATION	mm (mils)	0.76 (30)
△	MIN. THICKNESS AT ANY POINT OF INSULATION	mm (mils)	0.69 (27)
△	MIN. AVE. THICKNESS OF JACKET	mm (mils)	0.76 (30)
△	MIN. THICKNESS AT ANY POINT OF JACKET	mm (mils)	0.61 (24)
△	OVERALL DIAMETER OF JACKET	mm (in)	7.62-8.51 (0.330-0.335)
	DIELECTRIC-STRENGTH TEST- IN THE AIR 20±5°C	-	2000V for 1 min.
	SPARK TEST	V/sec	6000/0.18 (For 50 Hz) 6000/0.15 (For 60 Hz)
△	INSULATION RESISTANCE AT 15°C	-	≥0.76Gohm (2.5 Mohm 1000 ft)

TITLE : CABLE SPECIFICATION
UL/CSA APPROVED POWER SUPPLY CABLE
SJT 18/3 60°C

SPEC NO. :	APPROVED BY :	CHECKED BY :	DRAWN BY :	REVISION :
CS-116UL	<i>hongyan</i>	<i>Walt</i>	QIAN SM	E
	DATE :	DATE :	DATE :	PAGE :
	03/07/07	3/7/07	03/07/07	1/1

Volex

REV.	DESCRIPTION	DATE
C	ADD IN NEW CABLE MARKING.	11/07/07
D	REMOVE OLD MARKING AS SHOWN.	27/11/08

CABLE MARKING

BAO HING(SHENZHEN)



(UL) SJT E159216 VW-1 300V 60°C 3X18AWG BAOHING CSA SJT
 LL112007 VW-1 300V 60°C 3X0.824mm²(18AWG) LF

DRAWN	HONGYAN	27/11/08	FILE NAME :	TITLE : CABLE MARKING (UL/CSA)
CHECK	<i>[Signature]</i>	27/11/08	CABLE MARKING/BH	
APPR	<i>[Signature]</i>	28/11/08	SJT/SJT 18/3 60 LF-BH	
SCALE	N.T.S.	REV.	D	
REFERENCE :				Volex
SJT 18/3 60°C LF				

REV.	DESCRIPTION	DATE
B	ADD IN NEW CABLE MARKING.	12/06/07
C	REMOVE OLD MARKING AS SHOWN.	27/11/08

CABLE MARKING

TA HSING(SHENZHEN)



(UL) E84516 SJT 3X18AWG 60°C 300V VW-1 CSA LL110850
 TYPE SJT 3X0.824mm² (18AWG) 60°C 300V FT2 TA HSING LF

DRAWN	HONGYAN	27/11/08	FILE NAME :	TITLE : CABLE MARKING (UL/CSA)
CHECK	<i>Wu</i>	28/11/08	CABLE MARKING/	
APPR	<i>hongyan</i>	28/11/08	TA HSING/SJT 18X	
SCALE	N.T.S.	REV.	3C 60 LF (UL+CSA)	
REFERENCE :				Volex
SJT 18/3C 60°C LF				

3. CONNECTOR

REV	DESCRIPTION	DATE
	ADD IN CATALOGUE NO. 'VAC14KAL, VAC	
M	& VAC20KAL'.	02/03/10
	CHANGE 'TEST RESULT' TO 'ACCEPTANCE CRITERIA'.	
N	CHANGE FORMAT AS SHOWN.	01/04/13

3.1. SCOPE

The specification applies to plug connector in compliance with UL817, CSA C22.2 No.21-95 and C22.2 No. 182.3-M1987.

The plug connector shall generally complies to IEC 60320-2-2.

3.2. CONSTRUCTION

The plug connector construction shall comply with our catalogue No: PS25, PS25A, VAC14S, VAC14A, VAC20S, VAC14BS, VAC14LS , VAC20A , VAC14KC & VAC20BS, VAC14LA, VAC20AD , VAC20KC & VAC14KAL , VAC14KAR VAC20KAR , VAC20KAL.

3.3. CHARACTERISTICS

NO.	TEST ITEM	DESCRIPTION	ACCEPTANCE CRITERIA
1.	Conductor secureness test	A force of 20lbf (89N) is applied on the connection between the blade and conductor for 1 min.	The connection shall not break.
2.	Strain relief test	A pull of 30lbf (133N) is applied between the cord and fitting for 1 min.	There shall not be any damage to the cord
3.	Insulation resistance test	A D.C 500V is applied between conductors and between current carrying parts and body.	Min. 100 M Ohm
4.	Temperature rise test	A rated current is passed through the cord for 4 hours.	The rise in temperature of the blades shall not exceed 30°C.
5.	Dielectric voltage withstand test	An alternating voltage of 1250V is applied between each conductors for 1 min.	There shall be no arching, breakdown or flashover
6.	Accelerated aging test	The sample is placed in an oven at a temperature of 100±1°C for 96 hours.	There shall be no damage.
7.	Flexing test (applicable only to parallel cord)	The sample is secured on an oscillating member with a weight of 284g(HPN cord) or 113g(others) and moved backward and forward through an angle of 180° (90° on each vertical side) for 2500 cycles. Rate of cycle is 10/min. and each cycle is from the left to the right and back again.	The conductors on each core shall not have been completely broken.

DRAWN:	HONGYAN	01/04/13	TITLE : NORTH-AMERICAN PLUG CONNECTOR
CHECK:	<i>Hongyan</i>	01/04/13	
APPR:	<i>Hongyan</i>	2/16/13	
REV:	N		
REFERENCE:			Volex (Asia) Pte Ltd
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NO.	TEST ITEM	DESCRIPTION	ACCEPTANCE CRITERIA
8.	Jacket retention test	Insulation on each conductor is slitted open at approx. 25mm from it's entry. All strands of conductor are to be severed. A pull of 15lbf (67N) is applied for 2 min. between all blades and free end of cord.	There shall not be any detachment of insulation from the plug or baring of conductors.
9.	Security of blades test	A force of 20lbf (89N) is applied for 2 min. at each blade in succession.	After the removal of the weight, the blades shall not be displaced by more than 2.4mm.

DRAWN:	HONGYAN	01/04/13	TITLE : NORTH-AMERICAN PLUG CONNECTOR
CHECK:	<i>Hongyan</i>	01/04/13	
APPR:	<i>Hongyan</i>	2/4/13	
REV:	N		
REFERENCE:			<i>Volex (Asia) Pte Ltd</i> <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>

3. CONNECTOR

REV	DESCRIPTION	DATE
AQ	ADD IN CATALOGUE NO. 386AL.	18/12/13
AR	ADD IN CATALOGUE NO. VAC17KS.	25/02/14

3.1. SCOPE

The specification applies to connector in compliance with UL817, CSA C22.2 No. 21-95 and C22.2 No. 182.3-M1987.

The connector shall generally complies to IEC 60320-1 with the exception of catalogue no. PS309/P & MS212A.

3.2. CONSTRUCTION

The connector construction shall comply with our catalogue No: VAC5S, VAC5AR, 25AC5, APC5A, APC5M, APC5S, APC5SM, APC5SP, APC7S, APC7Q, APC7M, VAC7S, SZC7S, APC13, APC13S, VSCC13, AVL13, VAC7A, VAC7PS, VIC13A, M1625, V1625, V1625LA, V1625A, V1625BA, V1625BS, VAC15S, VAC15BS, VAC17S, VAC17BS, PIC17BS, PIC17S, VAC19, VAC19A, VSC19, DLC5A3, DLC5SA3, PS625, PS625A, MS225, PS309, PS309P, MS212, MS212A, APC13F, APC13G, DLC7U2, AP7M16, 386A, VAC17A, VAC13KS, DLC5U3, VCC13, VAC19KS, DLC7E2, DLC5E3, HPC13A, V1625AT, CN-4001, SOC7S, APC5SF, VCC5S, VCC7S, APC7H, APC13H, V1625H, VAC19H, APC7K, APC13FH, APC13HC, MFC7S, VAC15A, 386AL & VAC17KS.

3.3. CHARACTERISTICS

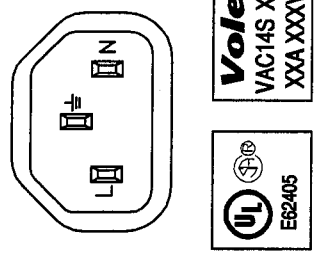
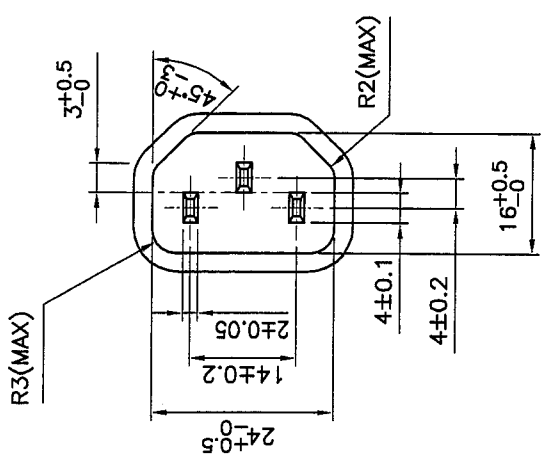
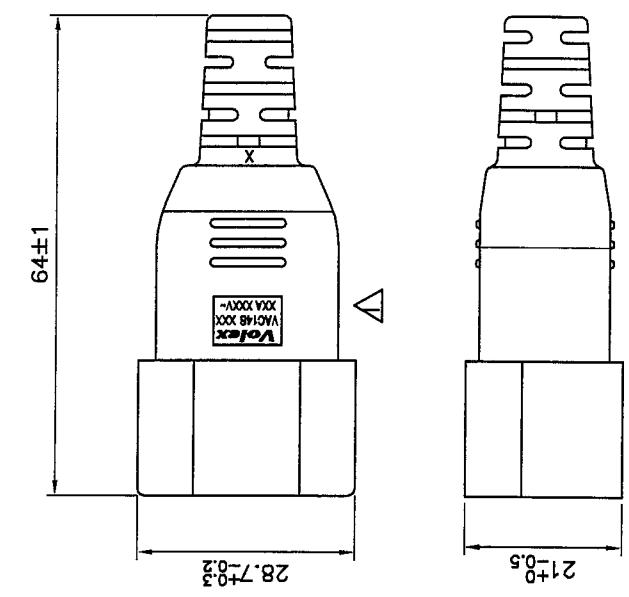
NO.	TEST ITEM	DESCRIPTION	ACCEPTANCE CRITERIA
1.	Conductor secureness test	A force of 20lbf (89N) is applied on the connection between the contact and conductor for 1 min.	The connection shall not break.
2.	Strain relief test	A pull of 30lbf (133N) is applied between the cord and fitting for 1 min.	There shall not be any damage to the cord and fitting.
3.	Insulation resistance test	A D.C 500V is applied between conductors and between current carrying parts and body.	Min. 100 M Ohm
4.	Temperature rise test	A rated current is passed through the cord for 4 hours.	The rise in temperature of the contacts shall not exceed 30°C.
5.	Dielectric voltage withstand test	An alternating voltage of 1250V is applied between each conductors for 1 min.	There shall be no arching breakdown or flashover
6.	Accelerated aging test	The sample is placed in an oven at a temperature of 100±1°C for 96 hours.	There shall be no damage.
7.	Flexing test (applicable only to parallel cord)	The sample is secured on an oscillating member with a weight of 284g(HPN cord) or 113g(others) and moved backward and forward through an angle of 180° (90° on each vertical side) for 2500 cycles. Rate of cycle is 10/min. and each cycle is from the left to the right and back again.	The conductors on each core shall not have been completely broken.

DRAWN:	CARRY HOU	25/02/14	TITLE : NORTH-AMERICAN CONNECTOR
CHECK:	<i>hromath</i>	25/02/14	
APPR:	<i>Wjy</i>	25/2/14	
REV:	AR		
REFERENCE:			<i>Volex (Asia) Pte Ltd</i>
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NO.	TEST ITEM	DESCRIPTION	ACCEPTANCE CRITERIA
8.	Jacket retention test	Insulation on each conductor is slitted open at approx. 25mm from cord entry. All strands of conductor are to be severed. A pull of 15lbf (67N) is applied for 2 min. between fitting and free end of cord.	There shall not be any detachment of insulation from the connector.

DRAWN:	CARRY HOU	25/02/14	TITLE : NORTH-AMERICAN CONNECTOR
CHECK:	<i>hondap</i>	25/02/14	
APPR:	<i>Hug</i>	25/2/14	
REV:	AR		<i>Volex (Asia) Pte Ltd</i>
REFERENCE:			

REV.	DESCRIPTION	DATE
H	CHANGE MARKING PER EGN016-10.	23/02/11
	CHANGE MARKING PER EGN005-14.	
I	UPDATE NOTE 3.	21/11/14

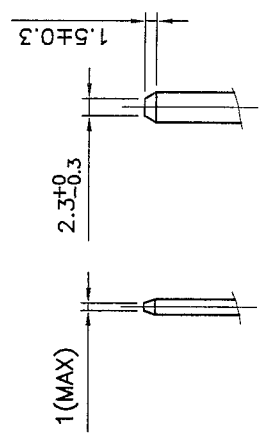
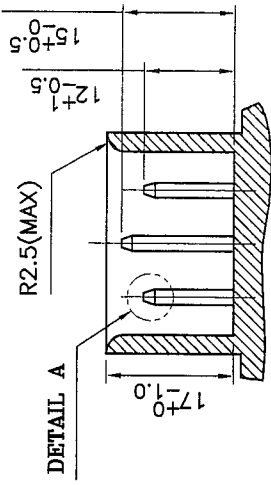


MARKING DETAILS :

- NOTES :**
- 1.) ALL DIMENSIONS IN mm.
 - 2.) X - CAVITY NO. (OPTIONAL)
 - 3.) XXX - MANUFACTURING LOCATION.
 - 4.) XXX XXXV~ - RATING. (REFER TO TABLE)

TABLE :

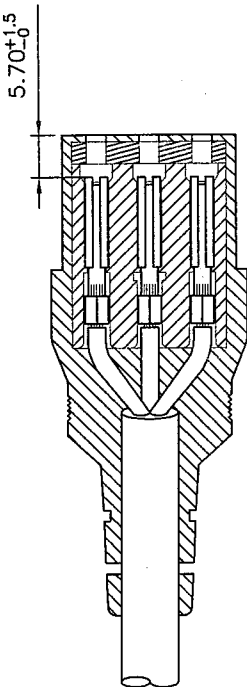
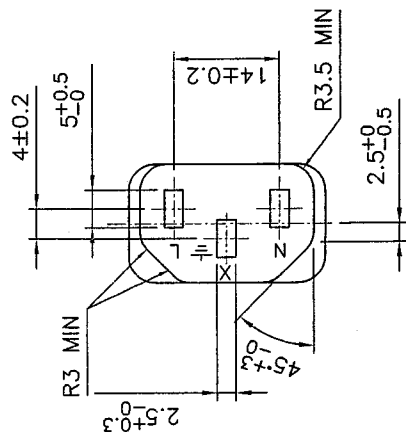
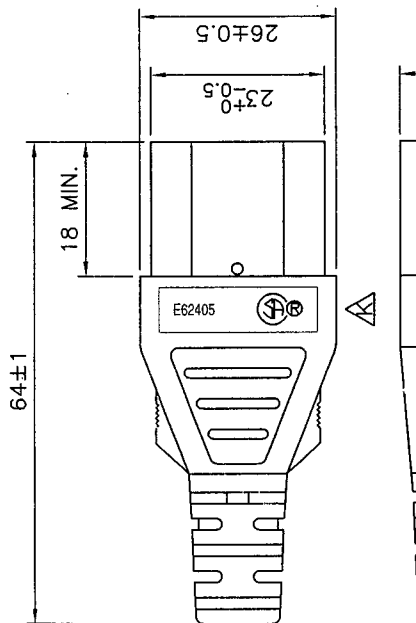
CURRENT (XXA)	10A	✓
VOLTAGE (XXXV~)	125V~	✓
	250V~	



DETAIL A

SM	HENG GANG (CHINA)	X	DRAWN	HONGYAN	21/11/14	FILE NAME :	TITLE :	
SM1/SMI	ZHONGSHAN (CHINA)	X	CHECK	hongyan	21/11/16	A-CONN/ULACSA/GENERAL/VAC14S	MOLDED PLUG CONNECTOR	
VH	HANOI (VIETNAM)	X	APPR		24/11/14		VAC14S	
B	BATAM (INDONESIA)	X	REV.			SCALE	N.T.S.	
VC	CHENNAI (INDIA)	X	REFERENCE :					
MANUFACTURE LOCATION MARK								
(* IS APPLICABLE ONLY)								
NORTH-AMERICAN APPROVAL								
Volex (Asia) Pte Ltd								
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REV.	DESCRIPTION	DATE
J	ADD IN MANU. LOCATION MARK 'SMI'.	13/07/10
K	CHANGE MARKING PER ECN016-10.	22/02/11



E62405

Voilex V1625
XXA XXXV~ XX

MARKING DETAILS

TABLE :

VOLTAGE (XXXV~)	250V~	125V~	<input checked="" type="checkbox"/>
CURRENT (XXA)	10A	13A	<input checked="" type="checkbox"/>

SM	HENG GANG (CHINA)	X	DRAWN	HONGYAN	22/02/11	FILE NAME :	TITLE :	
SM1/SMI	ZHONGSHAN (CHINA)	X	CHECK	<i>hongyan</i>	24/02/11	A-CONNECTOR\UL&CSA\GENERAL\	MOLDED CONNECTOR	
VH	HANOI (VIETNAM)	X	APPR	<i>Leita</i>	24/2/11	V1625-UL-GSA	V1625	
B	BATAM (INDONESIA)	X	REV.	K		N.T.S.		
VC	CHENNAI (INDIA)	X	REFERENCE :					
MANUFACTURE LOCATION MARK (' X ' IS APPLICABLE ONLY)		X	NORTH-AMERICAN APPROVAL					Voilex (Asia) Pte Ltd

NOTES :

- 1.) ALL DIMENSIONS IN mm.
- 2.) X - CAVITY NO.(OPTIONAL)
- 3.) XXA XXXV~ - RATING (REFER TO TABLE).
- 4.) XX - MANUFACTURING LOCATION.

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