

SPECIFICATION

FOR

EUROPEAN POWER SUPPLY CORDSET (PB FR)

CORD : H05VV-F 3X1.00mm² PVC LEAD FREE

CUSTOMER : VPE/RS COMPONENTS

CUSTOMER'S PART No. : 1469120(V-NOVUS SCHUKO-C13 5M)

VOLEX'S SPEC. REF. No. : 172907/19

ISSUE No. : 008

DATE : 02ND DECEMBER 2019

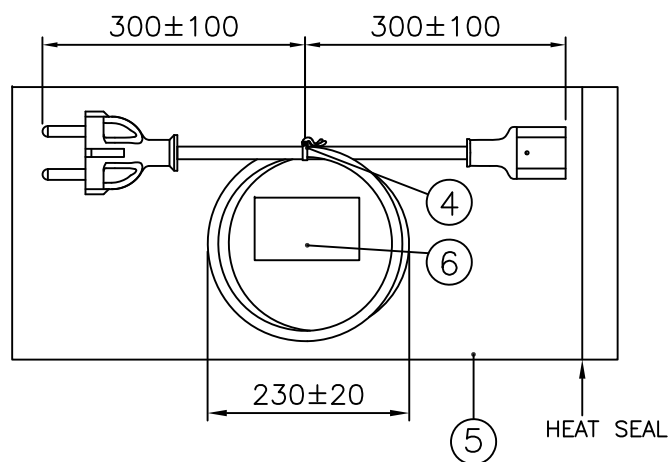
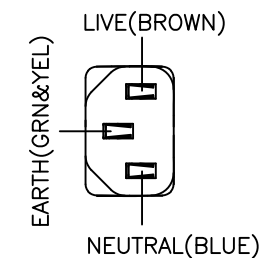
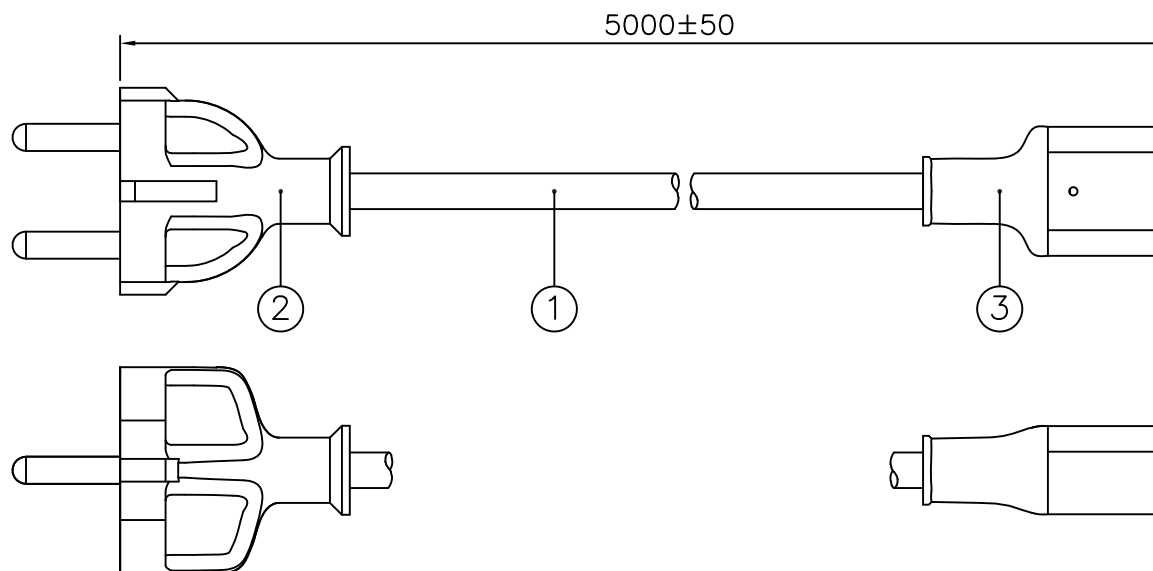
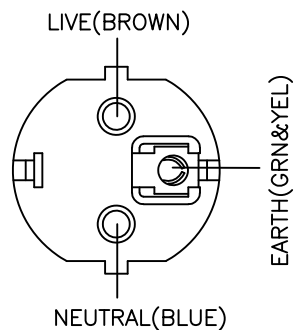
CUSTOMER APPROVED :

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



AMENDMENT RECORD

| REF. No. | DESCRIPTION OF CHANGES | DATE |
|-----------------|---|----------|
| 172907/19 | (1) FIRST SUBMISSION. | 11/09/17 |
| (VPE09-033-17) | | |
| ISSUE : 001 | | |
| | | |
| 172907/19 | (1) CHANGE CUSTOMER P/N FM. 'VNEU16S3-VNC13S-5.0M' TO | 25/10/17 |
| (VPE10-066-17) | '1469120(V-NOVUS SCHUKO-C13 5M)' ON COVER PAGE & | |
| ISSUE : 002 | ASSEMBLY DWG. PAGE. | |
| | (2) UPDATE CONNECTOR SPEC PAGES. | |
| | | |
| 172907/19 | (1) CHANGE CABLE MARKING FM. 'INK MARK' TO 'INDENTED' | 27/11/17 |
| (EVPE11-075-17) | & REMOVE ITEM No. '1210365' FM. ASSEMBLY DWG. PAGE. | |
| ISSUE : 003 | (2) UPDATE PLUG SPEC PAGES. | |
| | | |
| 172907/19 | (1) ADD IN PE BAG '904036' & LABEL 'VL-0538' | 24/01/18 |
| (VPE01-073-18) | AS SHOWN ON ASSEMBLY DWG. PAGE | |
| ISSUE : 004 | (2) ADD IN NOTE 5 AS SHOWN ON ASSEMBLY DWG. PAGE. | |
| | (3) ADD IN LABEL DWG. PAGE. | |
| | | |
| 172907/19 | (1) CHANGE LABEL FM. 'VL-0538' TO 'L-T383' & REMOVE | 14/02/18 |
| (EVPE02-104-18) | NOTE 5 FROM ASSEMBLY DWG. PAGE. | |
| ISSUE : 005 | (2) CHANGE LABEL DWG. PAGE. | |
| | | |
| 172907/19 | (1) CHANGE LABEL FM. 'L-T383' TO 'L-T430' ON ASSEMBLY | 31/01/19 |
| (EVPE01-077-19) | DWG. PAGE. | |
| ISSUE : 006 | (2) ADD CABLE ITEM NO. '1211311' | |
| | ON ASSEMBLY DWG. PAGE. | |
| | (3) UPDATE LABEL DWG. PAGES. | |
| | (4) UPDATE CONNECTOR SPEC PAGES. | |
| | | |
| 172907/19 | (1) CHANGE LABEL FM. 'L-T383' TO '6103460' ON | 14/03/19 |
| (VPE03-015-19) | ASSEMBLY DWG PAGE. | |
| ISSUE : 007 | (2) CHANGE LABEL DWG. PAGES. | |
| | | |
| 172907/19 | (1) CHANGE LABEL FM. '6103460' TO 'L-0654(6103460)' & | 02/12/19 |
| (VPE11-133-19) | UPDATE DESCRIPTION FOR S/N 6 ON ASSEMBLY DWG PAGE. | |
| ISSUE : 008 | (2) CHANGE LABEL DWG. PAGES. | |
| | (3) UPDATE PLUG & CONN. SPEC PAGES. | |
| | | |
| | | |
| | | |



APPROVED SOURCE FOR CABLE

1. BAO HING(SHENZHEN).

NOTE :

1. ALL DIMENSIONS IN mm.
2. THE CORD SHALL COMPLY WITH EN 50525-2-11.
3. THE MOLDED PLUG SHALL COMPLY WITH VARIOUS EUROPEAN COUNTRIES' CONFIGURATION (NATIONAL STANDARD) AND TESTED TO IEC 60884-1.
4. THE MOLDED CONNECTOR SHALL COMPLY WITH IEC 60320-1 OR EN 60320-1.
5. THIS PART CAN BE MANUFACTURED AT ANY LOCATION WHICH HAS SAFETY APPROVAL.

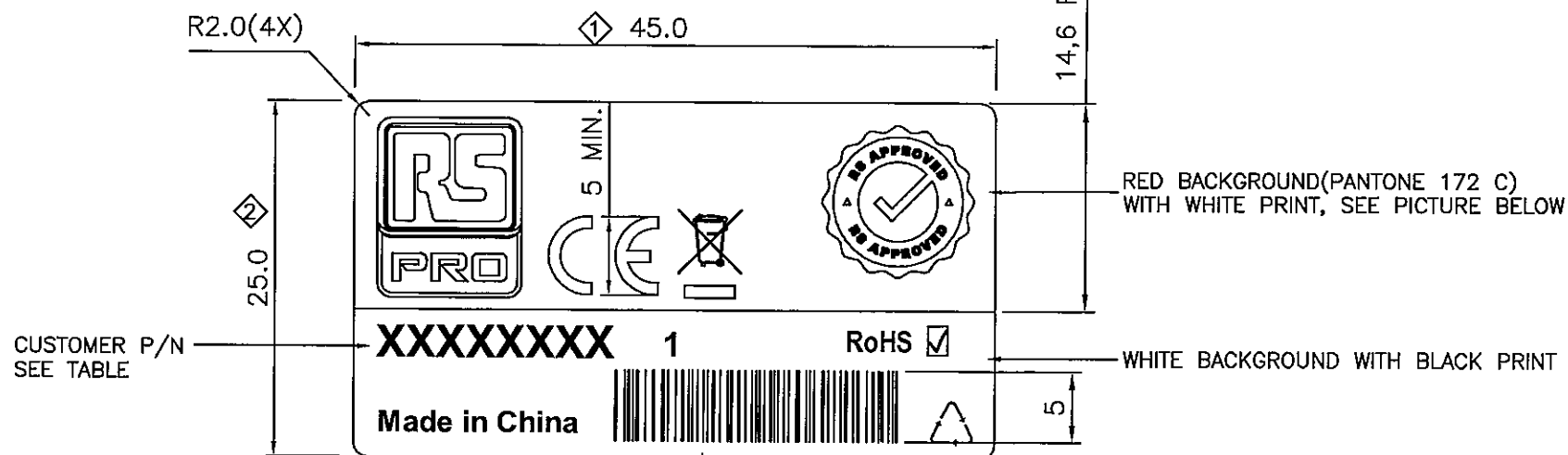
| | | | |
|-----|---|-------------|-----|
| 6 | LABEL RS 45X25MM 1469120 WITH CE & WEEE | 6103460 | 1 |
| 5 | BAG PE 356X508X0.05 | 904036 | 1 |
| 4 | 8" PE TIE BLK | 6310062 | 1 |
| 3 | IP40G NL792B BLK | 4100017 | — |
| | MOLDED CONNECTOR VNC13S (10A 250V) | VNC13S—V | 1 |
| 2 | IP60G NL7976B BLK | 4100115 | — |
| | MOLDED PLUG VNEU16S3 (16A 250V) | VNEU16S3—V | 1 |
| 1 | H05VV—F 3X1.00 BLK LF (INDENT) | 1211311 | 1 |
| S/N | DESCRIPTION | ITEM NUMBER | QTY |

| | | | | | |
|---|--------|----------------|--------------|------------|--|
| TITLE : EUROPEAN POWER SUPPLY CORDSET (PB FR) | | SCALE : N.T.S. | | | |
| CUSTOMER : VPE/RS COMPONENTS | | PAGE : 1/1 | | | |
| CUSTOMER PART NUMBER : 1469120(V—NOVUS SCHUKO—C13 5M) | | ISSUE | | | |
| Reference Number : 172907/19 (VPE11—133—19) | | 008 | | | |
| SALES : | QA : | ENGRG : | CHECKED BY : | DRAWN BY : | |
| | | ROBIN | Allie | ALLIE | |
| Date : | Date : | Date : | Date : | Date : | |
| | | 02/12/19 | 02/12/19 | 02/12/19 | |

DRAWING NUMBER : REVISION :

L-0654

B



SPECIFICATION:

| | |
|--------------------------|---------------------------|
| PRODUCT NO | AW32C9 WITH PP COATING |
| FACESTOCK MATERIAL | ART PAPER |
| FACESTOCK THICKNESS | 72 $\mu\text{m} \pm 10\%$ |
| FACESTOCK COLOUR | WHITE |
| FACESTOCK SURFACE FINISH | GLOSSY |
| ADHESIVE BASE | ACRYLIC EMULSION |
| SHELF LIFE | 1 YEAR |

BARCODE: CODE 128A, SCAN SHOW CUSTOMER P/N



PICTURE FOR COLOUR PRINT

NOTES:

1. ALL DIMENSION IN MM.
2. GENERAL TOLERANCE $\pm 1\text{MM}$, UNLESS OTHERWISE SPECIFIED.
3. \diamond CRITICAL DIMENSIONS, WHERE Y IS IN NUMERICAL DIGITS.
4. WHITE BACKGROUND WITH BLACK PRINT.
5. FONT: ARIAL, BOLD.

| | | | | | | | | | | | | | | |
|-----------|--------------|----------|---------|--------|----------|----------|---------|----|------|-----------|--------------------------------------|--------|-------------|-------|
| DRAWN: | ALICE | REV | IMM/ECR | BY | DATE | REV | IMM/ECR | BY | DATE | TITLE: | RS LABEL 45X25MM WITH CE & WEEE LOGO | | | |
| RELEASED: | 22/01/19 | A | 190190 | ALICE | 04/04/19 | | | | | ITEM NO.: | FILENAME: | SCALE: | PROJ.: | PAGE: |
| | SIGN | DATE | B | 190589 | ALICE | 11/11/19 | | | | SEE TABLE | .\LABEL\PREPRINTED\L-0654 | 2 : 1 | THIRD ANGLE | 1/2 |
| CHECKED: | <i>ALICE</i> | 11/11/19 | | | | | | | | | | | | |
| APPROVED: | <i>ALICE</i> | 11/11/19 | | | | | | | | | | | | |


DRAWING NUMBER : REVISION :

L-0654

B

TABLE \triangle B

| CUSTOMER P/N | ITEM NO. | CUSTOMER P/N | ITEM NO. | CUSTOMER P/N | ITEM NO. | CUSTOMER P/N | ITEM NO. |
|--------------|--------------|--------------|--------------|---------------|--------------|---------------|--------------|
| 1247409 | 6103431-XXXX | 321203 | 6103475-XXXX | 7440929 | 6103502-XXXX | 262 1154 0001 | 6103536-XXXX |
| 1468803 | 6103441-XXXX | 321219 | 6103476-XXXX | 7440931 | 6103503-XXXX | 262 1160 0001 | 6103537-XXXX |
| 1468804 | 6103442-XXXX | 426424 | 6103478-XXXX | 7440935 | 6103504-XXXX | 262 1176 0001 | 6103538-XXXX |
| 1469102 | 6103443-XXXX | 531100 | 6103479-XXXX | 7440941 | 6103505-XXXX | 262 1182 0001 | 6103539-XXXX |
| 1469103 | 6103444-XXXX | 531116 | 6103480-XXXX | 8188903 | 6103507-XXXX | 680 3798 0001 | 6103540-XXXX |
| 1469104 | 6103445-XXXX | 6151154 | 6103481-XXXX | 8188909 | 6103508-XXXX | 426 373 0001 | 6103541-XXXX |
| 1469105 | 6103446-XXXX | 6151176 | 6103482-XXXX | 8188912 | 6103509-XXXX | 426 389 0001 | 6103542-XXXX |
| 1469106 | 6103447-XXXX | 6151182 | 6103483-XXXX | 8188915 | 6103510-XXXX | 426 395 0001 | 6103543-XXXX |
| 1469107 | 6103448-XXXX | 6266593 | 6103484-XXXX | 8188919 | 6103511-XXXX | 426 402 0001 | 6103544-XXXX |
| 1469108 | 6103449-XXXX | 6266600 | 6103485-XXXX | 9010753 | 6103512-XXXX | 426 418 0001 | 6103545-XXXX |
| 1469109 | 6103450-XXXX | 6266616 | 6103486-XXXX | 9092156 | 6103513-XXXX | 452 669 0001 | 6103546-XXXX |
| 1469110 | 6103451-XXXX | 6266688 | 6103489-XXXX | 9092168 | 6103516-XXXX | 487 277 0001 | 6103547-XXXX |
| 1469111 | 6103452-XXXX | 6266694 | 6103490-XXXX | 9092171 | 6103517-XXXX | 487 277 0010 | 6103548-XXXX |
| 1469112 | 6103453-XXXX | 6266701 | 6103491-XXXX | 9092174 | 6103518-XXXX | 489 201 0001 | 6103549-XXXX |
| 1469114 | 6103454-XXXX | 6266717 | 6103492-XXXX | 9092178 | 6103519-XXXX | 489 217 0001 | 6103550-XXXX |
| 1469115 | 6103455-XXXX | 6266723 | 6103493-XXXX | 9092184 | 6103521-XXXX | 489 346 0001 | 6103551-XXXX |
| 1469116 | 6103456-XXXX | 6266745 | 6103494-XXXX | 9092193 | 6103524-XXXX | 489 352 0001 | 6103552-XXXX |
| 1469117 | 6103457-XXXX | 7316157 | 6103495-XXXX | 445 740 | 6103528-XXXX | 490 217 0001 | 6103553-XXXX |
| 1469118 | 6103458-XXXX | 7316166 | 6103497-XXXX | 449 297 | 6103529-XXXX | 490 223 0001 | 6103554-XXXX |
| 1469119 | 6103459-XXXX | 7316175 | 6103498-XXXX | 449 326 | 6103530-XXXX | 490 239 0001 | 6103555-XXXX |
| 1469120 | 6103460-XXXX | 7316201 | 6103499-XXXX | 815 846 | 6103531-XXXX | 490 245 0001 | 6103556-XXXX |
| 321180 | 6103473-XXXX | 7316208 | 6103500-XXXX | 268 2610 | 6103532-XXXX | 311-9321-0000 | 6103557-XXXX |
| 321196 | 6103474-XXXX | 7440925 | 6103501-XXXX | 311 9315 | 6103533-XXXX | 311-9337-0000 | 6103558-XXXX |
| | | | | 262 1126 0001 | 6103535-XXXX | 311-9359-0000 | 6103559-XXXX |

| | | | | | | | | | | | | | | |
|------------|-------------|----------|---------|--------|----------|----------|---------|----|------|--|---------------------------|---------|---|--------|
| DRAWN : | ALICE | REV | IMM/ECR | BY | DATE | REV | IMM/ECR | BY | DATE | TITLE : RS LABEL 45X25MM WITH CE & WEEE LOGO | | | | |
| RELEASED : | 22/01/19 | A | 190190 | ALICE | 04/04/19 | | | | | | | | | |
| | SIGN | DATE | B | 190589 | ALICE | 11/11/19 | | | | | | | | |
| CHECKED : | <i>Alce</i> | 11/11/19 | | | | | | | | ITEM NO.: | FILENAME : | SCALE : | PROJ. : | PAGE : |
| APPROVED : | <i>Bme</i> | 11/11/19 | | | | | | | | SEE TABLE | \\LABEL\PREPRINTED\L-0654 | 2 : 1 |  | 2/2 |

| REV. | DESCRIPTION | DATE |
|------|---|----------|
| I | REMOVE INSULATION COLOR 'BLUE, BROWN, BLACK' | 01/09/06 |
| | FM. REV. H PER HD STANDARD. | |
| J | CHANGE THE COMPLIANCE STANDARD PER SAFETY. | 23/12/13 |
| | UPDATE FORMAT AS SHOWN. | |

1. PVC FLEXIBLE CORD

1.1 SCOPE

This specification shall be in accordance with EN 50525-2-11. Δ

1.2 CONSTRUCTION



| | |
|------------|---------------------------------|
| CONDUCTOR | ANNEALED COPPER WIRE |
| INSULATION | PVC (BLUE, BROWN, 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 | 1.00 |
| MIN. AVE. THICKNESS OF INSULATION | | mm | 0.60 |
| MIN. THICKNESS AT ANY POINT OF INSULATION | | mm | 0.44 |
| MIN. AVE. THICKNESS OF JACKET | | mm | 0.80 |
| MIN. THICKNESS AT ANY POINT OF JACKET | | mm | 0.58 |
| OVERALL DIAMETER OF JACKET | | mm | 6.3~8.0 |
| DIELECTRIC-STRENGTH TEST IMMERSSED IN WATER, 20±5°C FOR MINIMUM 1HR | ON COMPLETED CABLE | — | 2000 V FOR 15 MINS (MINIMUM) |
| | ON CORES | — | 1500 V FOR 5 MINS (MINIMUM) |
| VOLTAGE TEST (D.C) | | — | 2000 V _{a.c} FOR 5 MINS (MINIMUM) OR 5000 V _{d.c} FOR 5 MINS (MINIMUM) |
| INSULATION RESISTANCE TEST (70°C) | | MΩ km | > 0.01 |
| CONDUCTOR RESISTANCE TEST (20°C) | | Ω /km | <= 19.5 |

TITLE : CABLE SPECIFICATION

EUROPEAN APPROVED POWER SUPPLY CABLE

H05VV-F 3X1.00mm²

| | | | | | |
|----------------------------|--|---|-----------------------|-----------------|--|
| SPEC NO. : CS-048EU | APPROVED BY :  | CHECKED BY :  | DRAWN BY : HONGYAN | REVISION : J | |
| | DATE : 30/12/13 | DATE : 27/12/13 | DATE : 23/12/13 | PAGE : 1/1 | |

| REV. | DESCRIPTION | DATE |
|------|---|----------|
| A | INITIAL RELEASE. | 12/10/02 |
| B | UPDATE MARKING DETAILS. | 19/01/05 |
| | UPDATE THE FORMAT AS SHOWN. | |
| | ADD IN '(EU/SAA/SAB/IEC)' ON THE TITLE. | |

CABLE MARKING

BAO HING (SHENZHEN)

△ :- H05W-F 3G1.0mm² <VDE> KEMA-KEUR +s+s+s
 <ÖVE> CEBEC IEMMEQU SABS 1574 (S) (N) (D) (FI)
 BAOHING GTSA-3 N14586 CE LF

| | | | | |
|---------------------------------|-----------|----------|---------------------------------|--|
| DRAWN | LI XF | 19/01/05 | FILENAME : | TITLE : CABLE MARKING (EU/SAA/SAB/IEC) △ |
| CHECK | Wet 2 | 19/1/05 | CABLE MARKING/ BH/H05/H05W-F | |
| APPR | Changshun | 19/01/05 | 3X1.0 LF- BH | |
| SCALE | N.T.S. | REV. | B | |
| REFERENCE : | | | | |
| H05W--F 3X1.0mm ² LF | | | | |

2. PLUG

| REV | DESCRIPTION | DATE |
|-----|-------------------------------|----------|
| AD | ADD IN CATALOGUE 'VNBEU16S3'. | 15/07/19 |
| AE | ADD IN CATALOGUE 'VNBEU16A3'. | 28/08/19 |

2.1. SCOPE

The plug shall be in accordance with various European countries' configuration (national standard) and tested to IEC 60884-1 "Plugs and socket-outlets for household and similar purposes - Part 1: General requirements.

2.2. CONSTRUCTION

The plug construction shall comply with our catalogue No: M3204, EUH16S2, MP2210,EUC6, M2511, M2511A, EU10SC3, EU16VS2 , EU16VJS2, EU16CS3, PH16CS3,PH16HA3, EU16CA3, EU16DS2, EU16DJS2, EU16JS2, VPEU16S3, GPEU16S3,VPEU16S2, DS16CS2, APEU16S3 , APEU16BS3G, DS16ES2, APEU16CS3, APEU16CS3G, DLEU16S3, LSEU16THA3, VNEU16S3, VNEU16A3,CSEU16S3,VNBEU16S3 & **VNBEU16A3**

2.3. CHARACTERISTICS

| NO. | TEST ITEM | DESCRIPTION | ACCEPTANCE CRITERIA |
|-----|----------------------------|--|---|
| 1. | Moisture resistance test | Samples are kept in a humidity cabinet containing air with a relative humidity between 91 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. | No flashover and breakdown |
| 3. | Insulation resistance test | This test is measured after 1 min. application of D.C 500V after the moisture resistance test. | Min. 5 M Ohm |
| 4 | Pressure test | The plug is pressed with a force of 150N for 5 minutes. | The plug shall not have been deformed. |
| 5. | Temperature rise test | An alternating current of 10A (0.75mm ²), 12A (1mm ²) or 16A (1.5mm ²) is passed through poles for 1 hour. | The temperature rise at any points shall not exceed 45°C. |
| 6. | Bending test | The sample shall be loaded with a weight of 10N for 0.75mm ² or 20N for 1.00mm ² and bigger 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.A current of 10A (0.75mm ²) or 16A (1.0mm ² and above) is passed through the conductors. | No damage and the voltage drop shall not exceed 10mV. |
| 7 | Pin pull test | A pull force of 50N is applied on the pins (in turn) after the plug has been aged for 1 hour at 70°C. | The displacement of the pin shall not be more than 1 mm. |

| | | | |
|------------|---------|----------|---|
| DRAWN: | PEIYUAN | 28/08/19 | TITLE : EUROPEAN PLUG (IEC 60884-1) |
| CHECK: | Peiyuan | 28/08/19 | |
| APPR: | ROBIN | 28/08/19 | |
| REV: | AE | | |
| REFERENCE: | | | |

| NO. | TEST ITEM | DESCRIPTION | ACCEPTANCE CRITERIA |
|-----|-----------------------|---|--|
| 8 | Tumbling test | The samples are dropped from a height of 50cm onto a steel plate (3mm thick) for a total of 1000 times. A torque of 0.4Nm is applied in one direction for 1 min. first then follow by the other direction for another min. on the pins. | No damage and the pins shall not turn. |
| 9 | Cold impact test | The samples are kept in a refrigerator at a temperature of $-15\pm 2^{\circ}\text{C}$ for at least 16 hours. The samples are then allowed to fall by the hammer (1000g) from a height of 10cm. | No damage |
| 10 | Heat deformation test | The samples are kept for 1 hour in a heating cabinet at temperature of $100\pm 5^{\circ}\text{C}$. | No damage |
| 11 | Heat pressure test | The samples are applied 20N (2.04kg) at a temperature of $80\pm 2^{\circ}\text{C}$ for 1 hour. | No damage |
| 12 | Ageing test | The samples are kept for 168 hours in a heating cabinet at temperature of $70\pm 2^{\circ}\text{C}$. | No damage |
| 13 | Pressure test II | The samples are applied 300N (30.6kg) at a temperature of $20\pm 2^{\circ}\text{C}$ for 1 min. | No damage |
| 14 | Cord-anchorage test | The cord is subjected to pulls of 50N (2.5A) or 60N (10/16A) force 100 times without jerk each lasting 1 sec. Thereafter the cord is subjected to a torque of 0.15Nm (2 core 0.75mm^2) or 0.25Nm (others) for 1 min. | The cord shall not be damaged and shall not been displaced by more than 2mm. |
| 15 | Ball pressure test | A steel ball of 5mm in diameter is applied with 20N force on the sample at a temperature of $125\pm 5^{\circ}\text{C}$ for 1 hour on the insert.. The sample is than cooled by cold water. | The diameter of the impression shall not exceed 2mm. |
| 16 | Glow wire test | The tip of the glow wire heated electrically to $750\pm 10^{\circ}\text{C}$ shall be applied at the portion between the current-carrying pins and for a period of 30s. For all other parts, the wire is heated to $650\pm 10^{\circ}\text{C}$. | Any flame and glowing shall extinguish within 30s after the removal of the glow-wire. There shall be no ignition of the tissue papernor sorching of the board. |

| | | | |
|------------|---------|----------|---|
| DRAWN: | PEIYUAN | 28/08/19 | TITLE : EUROPEAN PLUG (IEC 60884-1) |
| CHECK: | Peiyuan | 28/08/19 | |
| APPR: | ROBIN | 28/08/19 | |
| REV: | AE | | |
| REFERENCE: | | | |
| | | | |

3. CONNECTOR

| REV | DESCRIPTION | DATE |
|-----|-------------------------------|----------|
| BC | ADD IN CATALOGUE NO. VSCC21. | 21/06/19 |
| BD | ADD IN CATALOGUE NO. VNBC13S. | 03/07/19 |

3.1. SCOPE

The connector shall be in accordance with IEC 60320-1 or EN 60320-1, Test specification - appliance couplers.

3.2. CONSTRUCTION

The connector construction shall comply with our catalogue No: VAC5S, APC5A, APC5S, APC5M, VAC5AR, APC5SM, DLC5A3, V1625, V1625A, VAC19, VAC17S, VSCC13, AVL13, APC13, APC13S, VSC19, V1625LA, VAC19A, VSCC15, APC5SP, APC13F, V1625BS, APC13G, VAC13A, VAC13S, PIC17S, VIC13A, DLC5U3, VAC13KS, SOC5S, V1625H, VAC19KS, DLC5E3, HPC13A, V1625AT, VAC17A, APC5SF, VCC13, VCC5S, APC13H, VCC17S, VAC19H, APC13FH, APC13HC, VAC17KS, DLC5CS3, VNC13S, HWC13U, VNC5S, VNC13A, VAC19LA, VAC13AD, MS225A, VNC21S, VAC5ALS, VSCC21A, VSCC21 & **VNBC13S**.

"All connectors complying to Standard Sheet C5, C13, C15, C15A, C17, C19 and C21"

3.3. CHARACTERISTICS

| NO. | TEST ITEM | DESCRIPTION | ACCEPTANCE CRITERIA |
|-----|----------------------------|--|--|
| 1. | Moisture resistance test | Samples are kept in a humidity cabinet containing air with a relative humidity between 91 to 95% and a temperature of 20°C-30°C for a duration of 48 hours. | No damage |
| 2. | Electric strength test | Voltages of 3000V \pm 60V and 1500V \pm 60V, with min. trip current of 100mA is applied for 60s \pm 5s between current-carrying contacts and body and between each contacts respectively after the moisture resistance tests. | No flashover and breakdown |
| 3. | Insulation resistance test | This test is measured with a D.C 500V after the moisture resistance test. Readings are taken after 60s \pm 5s of application of voltage. | Min. 5 M Ohm |
| 4. | Withdrawal force test | i) Min. 1.5N (2N for 16A) - A single pin made to the minimum dimension is inserted into the connector. The pin, together with the weight should exert a force of 1.5N (2N for 16A connector). Each individual pole of the connector is tested separately. ii) Max. 50N (60N for 16A) - Insert and withdraw the connector from a socket having pin dimension to the maximum and shroud dimension to the minimum for 10 times. The connector is then inserted again into the socket hang with a total weight of 50N(60N for 16A). The weight consist of a principal weight which is 90% of the total weight and a supplementary weight of 10%. The test is repeated for hot connector with temperature of 120°C \pm 2°C on the pins. | i) The pin with the weight should not be withdrawn from the connector for more than 3 seconds. ii) The connector shall be withdrawn from the socket. If not the supplementary weight is lifted from a height of 5cm and drop. The connector must be withdrawn. The test is repeated after temperature rise test. |

| | | | |
|------------|--------------|----------|--|
| DRAWN: | WANGHUI | 03/07/19 | TITLE: EUROPEAN & BRITISH APPLIANCE COUPLERS |
| CHECK: | <i>Hui</i> | 03/07/19 | |
| APPR: | <i>Keith</i> | 03/07/19 | |
| REV: | BD | | |
| REFERENCE: | | | |

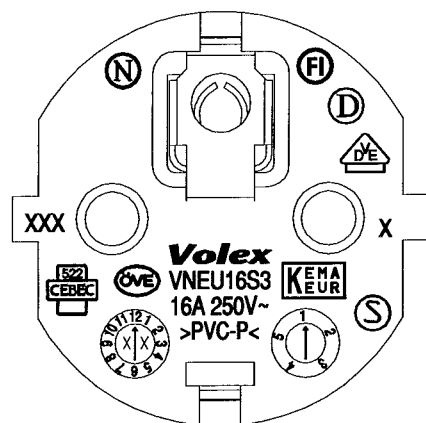
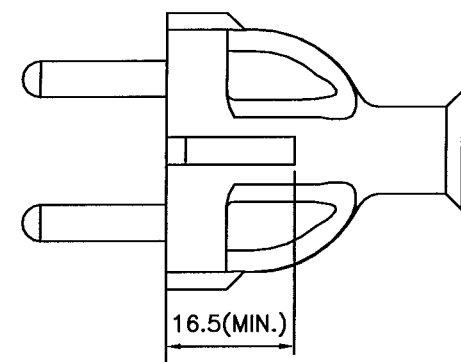
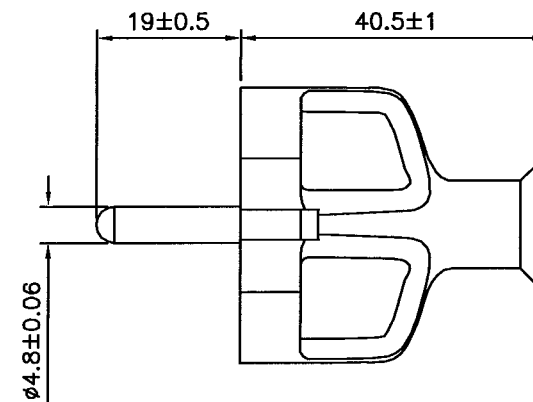
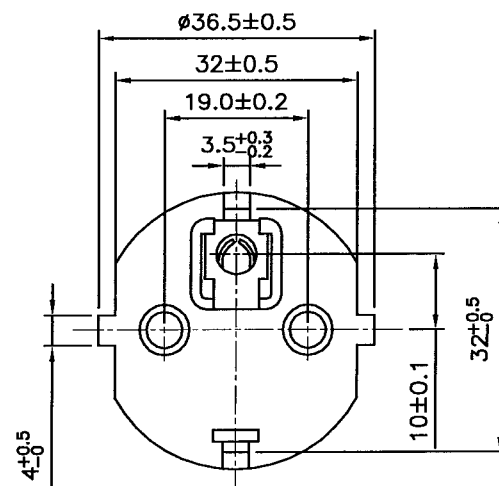
| NO. | TEST ITEM | DESCRIPTION | ACCEPTANCE CRITERIA |
|-----|------------------------|---|--|
| 5. | Glow wire test | Glow wire is applied for 30s with temperature of 750°C on inserts and housings retaining contacts and 650°C on elsewhere. | Flame (if any) shall be self-extinguished within 30s . upon the removal of the glow wire and molten droplets shall not ignite paper. |
| 6. | Bending test | The sample shall be loaded with a weight of 10N for 0.75mm ² or 20N for 1.00mm ² or bigger 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 20,000.A rated current is applied. For round cord, the sample is turned 90 degree around the axis of cable after 10,000 cycles. The flexing is further completed in this axis. Flat cable is flexed only along the bigger axis of the cable. | There shall be no complete breakage of any of the conductor. Broken conductor shall not have pierced the insulation. |
| 7. | Tumbling test | The sample is dropped from a height of 50cm onto a steel plate(3mm thick) for a total of 500 times. | No damage to impair further use of connector. |
| 8. | Breaking capacity test | The connector is connected and disconnected 50 times (100 strokes) with the inlet at a rate of 30 strokes per minute with 275V and 1.25 times of rated current. | No flashover or sustained arcing during the test and no damage to impair further use of connector. |
| 9. | Normal operation test | Test is similar to breaking capacity except that the test voltage is 250V with the connector connected and disconnected with the inlet for 1000 times (2000 strokes) with rated current and 3000 times (6000 strokes) without current. | Withstand electric strength at 1500V for 1 min, and show no damage. |
| 10. | Temperature rise test | An alternating current at 1.25 times rated current is passed through the current carrying contacts for 1 hour.This is repeated for connector with earth contact passing current between earth and each of the current carrying contacts. | The temperature rise shall not exceed 45K. |
| 11. | Cord-anchorage test | The cord is subjected to pulls of 50N(2.5A) or 60N(others) for 100 times each time for 1 sec. without jerk.Thereafter the cord is subjected for 1 min. to a torque of 0.15Nm(0.75mm ²) or 0.25Nm(others). | The cord shall not be damaged and shall not been displaced by more than 2mm. |
| 12. | Heat deformation test | Samples are kept for 1 hour in a heating cabinet at temperature of 100±2°C. | No damage to impair further use of connector. |
| 13. | Heat pressure test | A pressure of 20N is applied at a temperature of 100°C ± 2°C for 1 hour. | No damage to impair further use of connector. |

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| DRAWN: | WANGHUI | 03/07/19 | TITLE: EUROPEAN & BRITISH APPLIANCE COUPLERS |
| CHECK: | Hui | 03/07/19 | |
| APPR: | heith | 03/07/19 | |
| REV: | BD | | |
| REFERENCE: | | | |
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| NO. | TEST ITEM | DESCRIPTION | ACCEPTANCE CRITERIA |
|-----|--------------------|---|--|
| 14. | Aging test | The samples are kept for 168 hours in a heating cabinet at a temperature of $80\pm 2^{\circ}\text{C}$. | No damage & marking shall be legible. |
| 15. | Ball pressure test | <p>A ball of 5mm in diameter is applied on the connector with the following temperature with 20N force for 1 hour.</p> <p>i) 125°C for hot connectors.</p> <p>ii) 125°C for parts retaining current carrying parts and earth circuit.</p> <p>iii) 75°C for other parts for cold connector.</p> <p>The connector is then cooled down to room temperature with cold water.</p> | The diameter of the impression shall not exceed 2mm. |

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| DRAWN: | WANGHUI | 03/07/19 | TITLE: EUROPEAN & BRITISH APPLIANCE COUPLERS |
| CHECK: | <i>Hui</i> | <i>03/07/19</i> | |
| APPR: | <i>Keith</i> | <i>03/07/19</i> | |
| REV: | BD | | |
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| REV. | DESCRIPTION | DATE |
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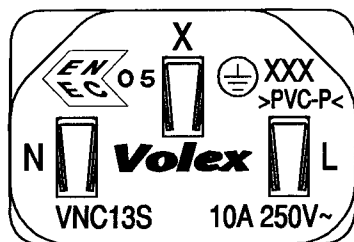
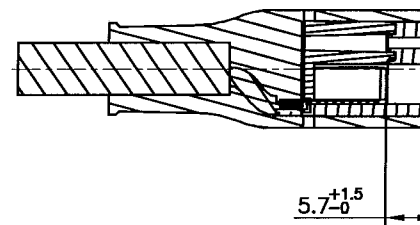
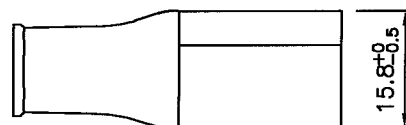
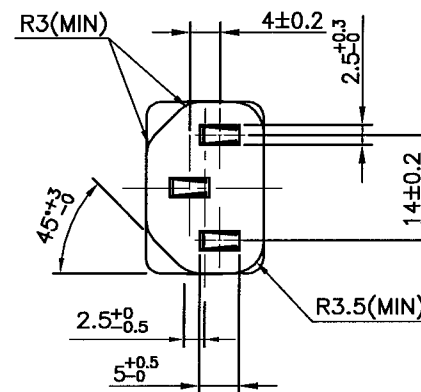
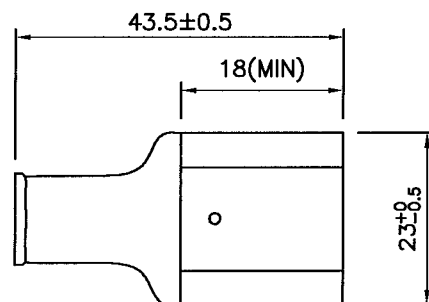
MARKING DETAILS :

NOTE :

- 1.) ALL DIMENSIONS IN mm.
- 2.) X - CAVITY NO. (OPTIONAL)
- 3.) XXX - MANUFACTURING LOCATION.

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|--|-------------------|---|-------------------|-----------|----------|----------------------------------|-------------|
| HG | HENG GANG (CHINA) | | DRAWN | TIAN SHUO | 20/05/15 | FILE NAME : | TITLE : |
| SM1/SMI | ZHONGSHAN (CHINA) | X | CHECK | Tian Shuo | 20/05/15 | A-PLUG/EURO/ GENERAL/VNEU16S3 | MOLDED PLUG |
| VH | HANOI (VIETNAM) | | APPR | Feng | 20/05/15 | -EURO | VNEU16S3 |
| B | BATAM (INDONESIA) | | REV. | A | SCALE | N.T.S. | |
| VC | CHENNAI (INDIA) | | REFERENCE : | | | | |
| MANUFACTURE LOCATION MARK (' X ' IS APPLICABLE ONLY) | | | EUROPEAN APPROVAL | | | | |

| REV. | DESCRIPTION | DATE |
|------|------------------|----------|
| A | INITIAL RELEASE. | 13/04/15 |



MARKING DETAILS :

NOTES :

- 1.) ALL DIMENSIONS IN mm.
- 2.) X - CAVITY NO. (OPTIONAL)
- 3.) XXX - MANUFACTURING LOCATION

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|--|-------------------|---|-----------------------------|--------|----------|---|----------------------------|
| HG | HENG GANG (CHINA) | | DRAWN | LI XIA | 13/04/15 | FILE NAME : | TITLE : |
| SM1/SMI | ZHONGSHAN (CHINA) | X | CHECK | LI XIA | 13/04/15 | A-CONN/EURO/ GENERAL/ VNC13S-ENEC | MOLDED CONNECTOR VNC13S |
| VH | HANOI (VIETNAM) | | APPR | LI XIA | 13/04/15 | | |
| B | BATAM (INDONESIA) | | REV. | A | SCALE | N.T.S. | |
| VC | CHENNAI (INDIA) | | REFERENCE : | | | | |
| MANUFACTURE LOCATION MARK (' X ' IS APPLICABLE ONLY) | | | EUROPEAN APPROVAL (ENEC) | | | | |