



PCB CONNECTOR THAT MEETS RAST 5 STANDARD WITH VERTICAL THROUGH HOLE TECHNOLOGY, AVAILABLE WITH TIN OR SILVER PLATING, EXTERNAL LOCKING

RAST 5 PCB connectors are designed for flexibility, reliability, and high performance. With a wide range of options, these connectors meet essential industrial and appliance safety standards, including UL94-VO and IEC 60335-1 (GWT 750°C). They are also certified by UL, VDE, and CQC. Ideal for wire-to-board connections and control units in major appliances and other applications, these connectors feature a 5mm pitch and support 2 to 9 positions. Available in three different footprint layouts, they offer an optimized, versatile solution for a variety of design requirements.

ELECTRICAL

- Rated Current: 10A for Tin plated version; 16A for Silver plated version
- Rated Voltage: 250V AC
- Insulation Resistance: 5000M Ω
- Dielectric Strength: 3000V/m
- Current Rating (A): 20
- Voltage Rating (VAC): 250, 400, 600

MECHANICAL

- Positions: 3-17
- Configurations: Wire-To-Board

MATERIAL

- Housing: Meets Thermoplastic UL 94 VO and IEC 60335-1
- Contact: Copper Alloy, Tin or Silver plating over Nickel
- Operating Temperature (°C): -40 to +120

STANDARDS & SPECIFICATIONS

- According to RAST 5 Specification
- Product Specification: 108-106080
- UL94 Rating: V-0 & v-2

KEY FEATURES

- · Designed to the RAST 5 Standard
- Tin / Silver plating
- 2-8 positions
- · Available in multiple colors
- 3 footprint layouts
- Thousands of confi gurations of keying & latching & polarization
- UL/VDE/CQC approval
- Meets UL 94 VO & GWT 750°C w/o flame

APPLICATIONS



Refrigerator



Front-loading washing machine



Dishwasher



Microwave oven

PRODUCT OFFERING

Part Number Ordering: Example for X-1971845-Y

-3

Substitute dash number listed for "Y", therefore a -3 signifi es PN 1971845-3.

1- -3

Substitue fi rst number for "X" and second number listed for "Y", therefore a 1- -3 signifi es PN 1-1971845-3.

* Follow same numbering scheme throughout for other part numbers listed.

EXTERNAL LOCKING - FULLY LOADED

| TIN PLATED | | | | | | | | | |
|--------------|----|----|----|----|----|----|----|--|--|
| No. of Pos. | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | |
| | -2 | -3 | -4 | -5 | -6 | -7 | -8 | | |
| | 12 | 13 | 14 | 15 | 16 | 17 | 18 | | |
| | 22 | 23 | 24 | 25 | 26 | 27 | 28 | | |
| | 32 | 33 | 34 | 35 | 36 | 37 | 38 | | |
| V 10710 45 V | 42 | 43 | 44 | 45 | 46 | 47 | 48 | | |
| X-1971845-Y | 52 | 53 | 54 | 55 | 56 | 57 | 58 | | |
| | 62 | 63 | 64 | 65 | 66 | 67 | | | |
| | 72 | 73 | 74 | 75 | 76 | 77 | | | |
| | 82 | 83 | 84 | 85 | 86 | | | | |
| | 92 | 93 | 94 | 95 | 96 | | | | |
| | -2 | -3 | -4 | | | | | | |
| | 12 | | 14 | | | | | | |
| X-1971895-Y | 22 | | 24 | | | | | | |
| | 32 | | 34 | | | | | | |
| | | | 44 | | | | | | |

EXTERNAL LOCKING - FULLY LOADED

| SILVER PLATED | | | | | | | |
|---------------|----|----|----|----|----|----|----|
| No. of Pos. | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| | -2 | -3 | -4 | -5 | -6 | -7 | -8 |
| | 12 | 13 | 14 | 15 | 16 | 17 | 18 |
| | 22 | 23 | 24 | 25 | 26 | 27 | 28 |
| | 32 | 33 | 34 | 35 | 36 | 37 | 38 |
| V 10710 4C V | 42 | 43 | 44 | 45 | 46 | 47 | 48 |
| X-1971846-Y | 52 | 53 | 54 | 55 | 56 | 57 | 58 |
| | 62 | 63 | 64 | 65 | 66 | 67 | |
| | 72 | 73 | 74 | 75 | 76 | 77 | |
| | 82 | 83 | 84 | 85 | 86 | | |
| | 92 | 93 | 94 | 95 | 96 | | |
| | -2 | -3 | -4 | | | | |
| | 12 | | 14 | | | | |
| X-1971896-Y | 22 | | 24 | | | | |
| | 32 | | 34 | | | | |
| | | | 44 | | | | |

LEARN MORE ▶

| | | RAST 5 Tab Header | | | | | | | |
|----------------|-----------------------|---------------------|--|---|--|-------------------------------------|-------------------------------------|--|--|
| | Series | | | DIN | Style | | | | |
| | Sub-type | Stan | tical dard Illy | Vertical Standard Fully/ Selectively | Vertical Opposite Fully | Vertical Standard Selectively | Vertical Opposite Selectively | | |
| | Base No | 521383 | 1971845 / 1971846 / 1971896 | 2390874 / 2390877 / 2392784 | 2232043 / 2232044 / 2232045 / 2232046 | 2232511 | 2322950 | | |
| Bossels of No. | CD | 521383 | 1971845 | 2390874 | 2232043 | 2232511 | 2322950 | | |
| Drawing No | PD | 521383 | 1971845 | 2390874 | 2232043 | 2232511 | 2322950 | | |
| Counterparts | Mating Part | | AMP multifitting mark II, AMP MONO-SHAPE, AMP Standard Timer | | | | | | |
| | Material Type | PA | PA | PA | PA | PA | PA | | |
| | UL-VO | X | X | X | X | X | X | | |
| Housing | UL-V2 | - | - | - | - | - | - | | |
| | GWEPT 750°C | - | × | X | X | X | X | | |
| Contact | Bulk Material | CuZn | CuZn | CuZn | CuZn | CuZn | CuZn | | |
| Contact | Plating | Tin | Tin / Ag | Tin | Tin / Ag | Tin / Ag | Tin | | |
| | Qty of Pole | 2~9 | 2~8 | 2~5, 7 | 2~8 | 3~8 | 4~7 | | |
| | Wire Range | NA | | | | | | | |
| Application | Current rating (A) | 20A | | | | | | | |
| | Voltage Rating (V) | 250V AC | AC 400V AC (fully loaded) / 600V AC (selectively loaded) | | | | | | |
| | Product Spec | 108-2183 | 3-2183 108-106080 | | | | | | |
| Document | Application spec | | | | | | | | |
| | VDE | 40017532 | | | 40037338 | | | | |
| Document | UL | E28476_ 20040922 | E28476_20121227 | | | | | | |

| | | RAST 5 Tab Header | | | | | | | | |
|--------------|-----------------------|--|--|--------------------------------|---------------------------------------|--------------------------------------|--|--|--|--|
| | Series | | | DIN Style | | | | | | |
| | Sub-type | Vertical Shrouded Standard/ Opposite Fully | Vertical Shrouded Standard/ opposite Selectively | R/A Standard Selectively | R/A Standard - Reverse Fully | R/A Standard Fully/Selectively | | | | |
| | Base No | 521385 | 1969738 | 521386 | 1955660 | 1969352 | | | | |
| Dunisia a Na | CD | 1969740 | 1969738 | 521386 | 1955660 | 1969352 | | | | |
| Drawing No | PD | 1969740 | 1969738 | 521386 | 1955660 | 1969352 | | | | |
| Counterparts | Mating Part | | | | | | | | | |
| | Material Type | PA | PA | PA | PA | PA | | | | |
| Housing | UL-VO | X | X | X | - | - | | | | |
| 110001119 | UL-V2 | - | - | - | × | X | | | | |
| | GWEPT 750°C | × | X | - | × | X | | | | |
| Contact | Bulk Material | CuZn | CuZn | CuZn | CuZn | CuZn | | | | |
| Contact | Plating | Tin / Ag | Tin / Ag | Tin | Tin | Tin | | | | |
| | Qty of Pole | 2~7 | 3~4 | 3~5 | 2~7 | 2~8 | | | | |
| | Wire Range | NA | | | | | | | | |
| Application | Current rating (A) | 20A | | | | | | | | |
| | Voltage Rating (V) | 400V AC (fully lo (selective | | 250V AC | | | | | | |
| | Product Spec | 108-10 | 06080 | 108-2183 | | | | | | |
| Document | Application spec | | | | | | | | | |
| | VDE | 4003 | 7338 | - | 40017532 | - | | | | |
| Document | UL | E28476_ | 20121227 | E28476_20040922 | | | | | | |

| | | RAST 5 Tab Header | | | | | | | |
|-------------------|-----------------------|---|--|-------------------------------|-------------------------------------|---|---|--|--|
| | Series | | | Positive L | ock Style | | | | |
| | Sub-type | Vertical Standard Selectively | Vertical Standard/ Opposite Fully | Vertical Opposite Fully | Vertical Opposite Selectively | Vertical Shrouded Standard w inner wall Fully | Vertical Shrouded Opposite w inner wall Fully | | |
| | Base No | 2232611 | 2232647 | 2372858 | 2385644 | 2371464 | 2371673 | | |
| | CD | 2232611 | 2232647 | 2372858 | 2385644 | 2371466 | 2371673 | | |
| Drawing No | PD | 2232611 | 2232647 | 2372858 | 2385644 | 2371466 | 2371673 | | |
| Counter- parts | Mating Part | Positive Lock RAST 5 Connector System | | | | | | | |
| | Material Type | PA | PA | PA | PA | PA | PA | | |
| | UL-VO | Χ | X | Χ | X | X | X | | |
| Housing | UL-V2 | - | - | - | - | - | - | | |
| | GWEPT 750°C | X | X | X | × | × | × | | |
| Contact | Bulk Material | CuZn | CuZn | CuZn | CuZn | CuZn | CuZn | | |
| Contact | Plating | Tin / Ag | Tin / Ag | Tin | Tin | Tin | Tin | | |
| | Qty of Pole | 3~8 | 2~8 | 2~5 | 5 | 2~4 | 2~5 | | |
| | Wire Range | NA | | | | | | | |
| Application | Current rating (A) | 20A | | | | | | | |
| | Voltage Rating (V) | 400V AC (fully loaded) / 600V AC (selectively loaded) | | | | | | | |
| | Product Spec | 108-106080 | | | | | | | |
| Document | Application spec | | | | | | | | |
| | VDE | | | 4003 | 37338 | | | | |
| Document | UL | | | E284 | 476_20121227 | | | | |

| | | RAST 5 Tab Header | | | | | | |
|-------------------|-----------------------|---|--|---|---|--------------------------|-----------------------------------|--|
| | Series | | | Positive L | ock Style | | | |
| | Sub-type | Vertical Shrounded Standard w Feet Fully | Vertical Shrounded Opposite w Feet Fully | Vertical Shrouded Standard Fully | Vertical Shrouded Opposite Fully | R/A Standard Fully | R/A Standard - GWT Fully | |
| | Base No | 2405963 | 2405966 | 2292457 / 2390868 | 2337101 / 2390869 | 521384 | 1969234 | |
| Durania a Na | CD | 2405963 | 2405966 | 2292457 | 2337101 | 521384 | 1969234 | |
| Drawing No | PD | 2405963 | 2405966 | 2292457 | 2337101 | 521384 | 1969234 | |
| Counter- parts | Mating Part | | | | | | | |
| | Material Type | PA | PA | PA | PA | PA | PA | |
| | UL-V0 | Χ | Χ | Χ | X | X | - | |
| Housing | UL-V2 | - | - | - | - | - | Χ | |
| | GWEPT 750°C | × | X | X | X | - | X | |
| Contact | Bulk Material | CuZn | CuZn | CuZn | CuZn | CuZn | CuZn | |
| Contact | Plating | Tin | Tin | Tin | Tin | Tin | Tin | |
| | Qty of Pole | 2~4 | 2 | 2 ~ 5 | 2 | 2~9 | 2 | |
| | Wire Range | NA | | | | | | |
| Application | Current rating (A) | 20A | | | | | | |
| | Voltage Rating (V) | 400V AC (fully loaded) / 600V AC (selectively loaded) | | | | | | |
| | Product Spec | 108-106080 108-2183 | | | | | | |
| Document | Application spec | | | | | | | |
| | VDE | | 4003 | | 40017532 | | | |
| Document | UL | | E28476_ | | E28476_20040922 | | | |

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