



2.54mm (.100") Pitch C-Grid III™ Glow-Wire-Compliant Crimp Housings

Molex offers dual- and single-row Glow-Wire-compliant C-Grid III™ crimp housings that meet safety and environmental requirements in both attended and unattended household and other electrical appliances

Under faulty or current overload conditions, electronic components can attain temperatures that cause fire hazards. This is of particular concern over household appliances left operating but unattended in the home.

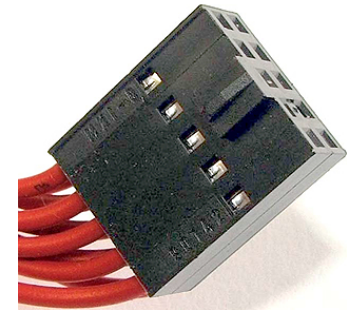
In 2001, Glow-Wire became a mandatory test required by the International Safety Standard (IEC/EN 60335-1 4th Edition: Household and Similar Appliances - Safety), and was issued by the International Electrotechnical Commission. To pass the test, a connector housing must withstand 30 seconds of an applied glowing wire at 750°C and not ignite; or, if it does, must self-extinguish within 2 seconds. A connector that is only rated UL94 V-0 or V-2 does not necessarily meet Glow-Wire requirements.

Molex has developed the new 90142 and 90156 series of dual- and single-row C-Grid III™ Glow-Wire-compliant crimp housings that satisfy this requirement. These conform to both the IEC 60335 Glow-Wire Ignition Temperature (GWIT) and the IEC Glow-Wire Flammability Index (GWFI) standards. They also meet the IEC 60695-2-11 standard for use in unattended household and electronics appliances that carry a current higher than 0.2 Amperes.

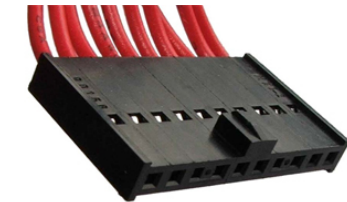
The 90142 series of dual-row crimp housing is used with 90119 crimp terminals. It provides a complete interconnection system by mating with the 90122 dual-row right angle header, the dual-row 90131 vertical header, or the 90130 and 91814 series of dual-row shrouded headers in right angle and vertical configurations respectively. The 90156 series of single-row crimp housing mates with the 90120 single-row vertical headers, the 90121 single-row right angle version headers, and the 90136 single-row shrouded vertical headers.

For more information on C-Grid III™ Glow-Wire or other Glow-Wire products, visit the Molex's [Glow-Wire](#) website.

90142 Dual-Row Housing



90156 Single-Row Housing



FEATURES

- Meets European IEC 60335 Glow-Wire Ignition Temperature requirements
- A wide range of circuit sizes
- Polarization features on housing
- Friction-lock on housing
- Stackable design

BENEFITS

- Ensures safety and reliability of Molex products
- To suit and support diverse customer applications
- Prevent mis-mating
- Prevents mating part from disconnecting
- Provides space-saving and design-flexibility advantages

SPECIFICATIONS

Reference Information

Packaging: Bag

Mates With (90142):

- 90122 dual-row right angle header
- 90131 dual-row vertical header
- 90130 dual-row shrouded right angle headers
- 91814 vertical configurations respectively

Mates With (90156):

- 90120 single-row vertical headers
- 90121 single-row right angle headers
- 90136 single-row shrouded vertical headers

Use With: Crimp Terminal Series 90119

Designed In: mm

RoHS: Yes

Halogen Free: No

Glow-Wire-Compliant: Yes (Refer Ordering Information)

Electrical

Voltage (max.): ≤ 350V DC/AC

Current (max.): ≤ 3A

Contact Resistance: ≤ 20 milliohms initial

Dielectric Withstanding Voltage: ≥ 1000V

Insulation Resistance: ≥ 1000 Megaohms

Mechanical

Contact Insertion Force: ≤ 1N (Gold), ≤ 3N (Tin)

Contact Retention to Housing: ≥ 15N

Physical

Housing: Polyester (PBT)

Operating Temperature: -55 to +105°C

MARKETS AND APPLICATIONS



2.54mm (.100") Pitch C-Grid III™ Glow-Wire-Compliant Crimp Housings

Worldwide Markets, Applications and Typical Customers

Worldwide Markets

- Homes
- Institutions
- Hospitals
- Service apartments
- Hotels
- Restaurants
- Food centers
- Food outlets
- Commercial and industrial buildings

Applications

Attended electrical appliances

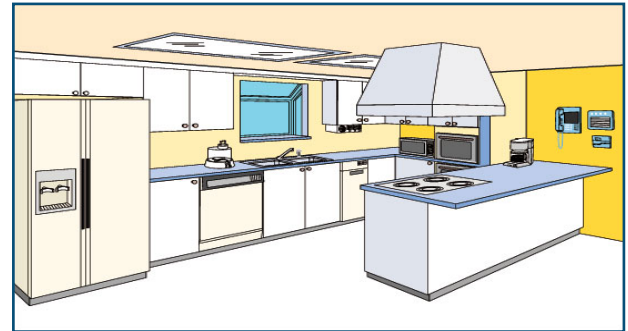
- Vacuum cleaners
- Floor Polisher
- Blenders
- Coffee machines

Unattended electrical appliances

- Washing machines and dryers
- Dishwashers
- Ovens and Microwave ovens
- Hobs and hoods
- Cookers
- Cooking fans
- Refrigerators and freezers
- Water-heaters and boilers
- Air-conditioners and coolers
- Vending machines

Typical Customers

- Manufacturers of both attended and unattended electrical appliances



Applications in the home and kitchen



Vacuum cleaner



Floor Polisher



Blender



Washing machine



Microwave oven



Hob and Hood



Water-heater



Dishwasher



Air-conditioner



Coffee machine



Refrigerator



Vending Machine

Electrical and Electronic Appliances

ORDERING INFORMATION

Crimp Housings

Order No.	Resin Material	Number of Rows	Long Description
90142-10xx	PBT (Polyester)	2	2.54mm (.100") Pitch C-Grid III™ Crimp Housing - Dual Row, xx Circuits, Glow-Wire-Compliant
90156-10xx	PBT (Polyester)	1	2.54mm (.100") Pitch C-Grid III™ Crimp Housing - Single Row, xx Circuits, Glow-Wire-Compliant

Note: xx is the circuit size of crimp housing. Search the first seven digits of the order number on www.molex.com to view the full range of circuit sizes available, or contact molex sales for other circuit size requirements.

