

## Datasheet for 76650-0178

### General Information

<b>Part Number:</b>	76650-0178
<b>Manufacturer:</b>	Molex / Waldom
<b>Title:</b>	C-Grid III Connector Kit
<b>Description:</b>	Dual Row Vertical Header and Receptacle
<b>Product Family:</b>	C-Grid III™
<b>Certificates:</b>	(Molex Parts within this kit) - EU RoHS Compliant
<b>Country of Origin:</b>	Kit assembled in U.S.A.

### Specifications

#### Design

<b>Configuration:</b>	Wire-to-Board
<b>Pitch:</b>	2.54mm (.100")
<b>Connector Type:</b>	Receptacles and Headers

#### Mounting

<b>Orientation:</b>	Vertical
<b>Circuit Sizes:</b>	6, 8, 10, 12, 14 and 16
<b>Current Rating:</b>	3 Amps
<b>Voltage:</b>	350 Volts
<b>Wire Size:</b>	(24-22) AWG

### Product Highlights

The 3rd generation C-Grid III 2.54mm (.100") pitch post and receptacle interconnection system offers complete design flexibility and modular components that provide the widest range of electronic packaging alternatives. C-Grid III is a highly-versatile 2.54mm interconnection system offering unique design features: Surface Treatment (platings), Flexibility, Advantage by Design (same mating concept with all termination techniques), Interchangeability (fully compatible with the industry standard DIN41651 as well as the French norm HE-13/14), and Lower Applied Cost.

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Features and Benefits	Applications
<ul style="list-style-type: none"> <li>• Easy breakaway to smaller sizes</li> <li>• High pin retention</li> <li>• Polarized housings</li> <li>• High mechanical stability after soldering</li> <li>• Fully enclosed contact box</li> <li>• Friction Lock housings</li> <li>• Contact and plating orientation according to DIN 41651</li> <li>• North/south contact orientation avoids overstress</li> </ul>	<ul style="list-style-type: none"> <li>• Automotive: Air bag sensors, Steering controls, Sound systems</li> <li>• Computers and Servers</li> <li>• Business Machines: Copiers, Printers, Fax machines</li> <li>• Measuring Analyzing Equipment</li> <li>• Large Industrial Equipment</li> <li>• Medical Instrumentation: Surgical, Dental, Laboratory Devices</li> </ul>

**Bill of Materials for Part No. 76650-0178**

Molex Part No.	Country of Origin	Description	Quantity in Kit
90119-2109	Ireland	C-Grid III™ Female Crimp Terminals 24-22 AWG	100
90142-0006	Ireland	2.54mm (.100") Pitch C-Grid III™ Receptacle Dual Row, 6 Circuit	5
90142-0008	Ireland	2.54mm (.100") Pitch C-Grid III™ Receptacle Dual Row, 8 Circuit	4
90142-0010	Ireland	2.54mm (.100") Pitch C-Grid III™ Receptacle Dual Row, 10 Circuit	4
90142-0012	Ireland	2.54mm (.100") Pitch C-Grid III™ Receptacle Dual Row, 12 Circuit	3
90142-0014	Ireland	2.54mm (.100") Pitch C-Grid III™ Receptacle Dual Row, 14 Circuit	3
90142-0016	Ireland	2.54mm (.100") Pitch C-Grid III™ Receptacle Dual Row, 16 Circuit	2
90131-0123	Ireland	2.54mm (.100") Pitch C-Grid III™ Header, Dual Row, Vertical, 6 Circuit	5
90131-0124	Ireland	2.54mm (.100") Pitch C-Grid III™ Header, Dual Row, Vertical, 8 Circuit	4
90131-0125	Ireland	2.54mm (.100") Pitch C-Grid III™ Header, Dual Row, Vertical, 10 Circuit	4
90131-0126	Ireland	2.54mm (.100") Pitch C-Grid III™ Header, Dual Row, Vertical, 12 Circuit	3
90131-0127	Ireland	2.54mm (.100") Pitch C-Grid III™ Header, Dual Row, Vertical, 14 Circuit	3
90131-0128	Ireland	2.54mm (.100") Pitch C-Grid III™ Header, Dual Row, Vertical, 16 Circuit	2
69008-0140	USA	C-Grid Insertion Tool	1

Not For Use With Molex SL™ Components

**Recommended Molex Tool(s) for Part No. 76650-0178\***

**For additional Molex / Waldom Design and Solution Kits please go to [www.molexkits.com](http://www.molexkits.com)**

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<b>Molex Part No.</b>	<b>Country of Origin</b>	<b>Description</b>
69008-0003 *	Netherlands	Extraction Aid
63819-0200 *	Sweden	Hand Crimp Tool

\*Tool(s) not included in kit. Tool(s) ordered separately.