

ModICE

Modular Integrated Connector Enclosures



CINCH

Cinch's Modular Integrated Connector Enclosures offer high quality sealed packaging solutions for rugged electronic control module applications. The Cinch 1.5mm SHS system is the base interconnect technology.

The ModICE product line consists of two distinct enclosure sizes and 6 header configurations allowing 18, 30, 48 and 60 I/O. Snap-in header simplifies module assembly. Integrated ferrite filtering, integrated heat sink and vented enclosures are available options.



Product Specification

Operating Temperature
-40°C to +85°C

Contact Resistance
< 10 mΩ

Insulation Resistance
>1000 MΩ

Sealing
IP65, IP66, IP67, IP69K

Temperature Life
1008 Hrs @ 125°C

Current Cycling
500 Hrs @ 10 Amp
500 cycles 45 min ON – 15 min OFF

Vibration
10 to 2000 to 10 Hz with 15 g's peak level

Shock
50 g's – 20 pulses

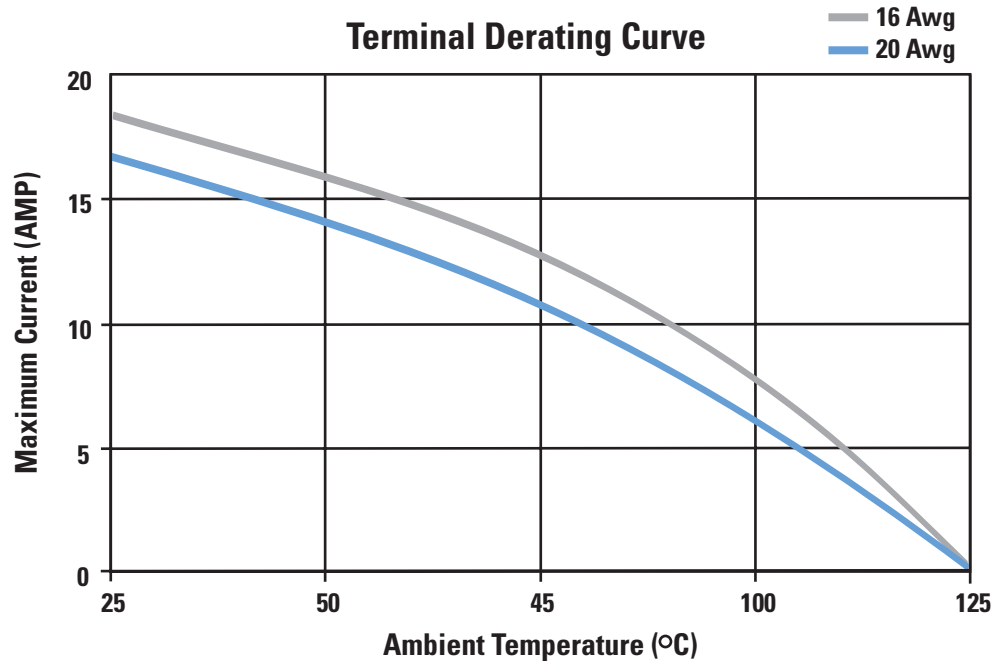
Salt Spray
96 Hrs

Temperature Humidity Cycling
320 Hrs
40 – 8 Hrs cycles -40°C to +85°C @ 85%RH to +125°C

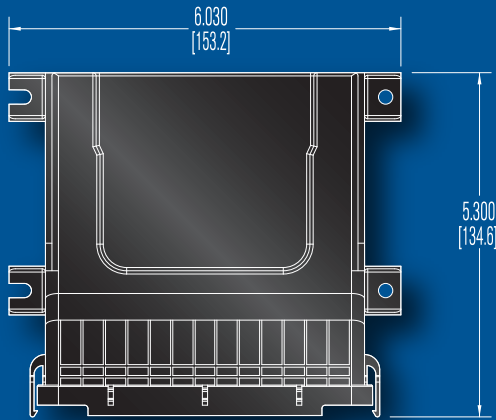
Fluid Resistance
Resists to most fluids used in industrial applications

RoHs Compliant

Consult factory for options



Enclosure - SE



Without heat sink P/N: **581 01 30 043**

With 1 heat sink P/N: **581 01 30 042**

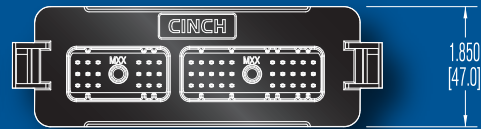
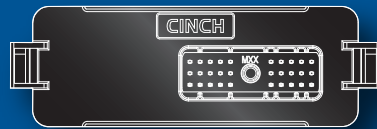
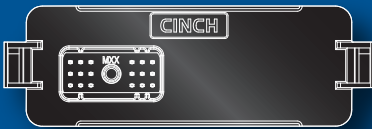
Use with spring plate P/N: **581 00 00 021**

With 2 heat sink P/N: **581 01 30 041**

Use with spring plate P/N: **581 00 00 021**

P/N: **581 00 00 020**

Header - SE



18 I/O P/N: **581 01 18 032**

30 I/O P/N: **581 01 30 044**

48 I/O P/N: **581 01 48 005**

Without Ferrites

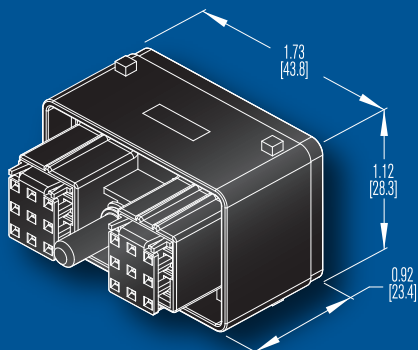
18 I/O P/N: **581 01 18 033**

30 I/O P/N: **581 01 30 046**

48 I/O P/N: **581 01 48 007**

With Ferrites

Mating SHS Harness Connectors



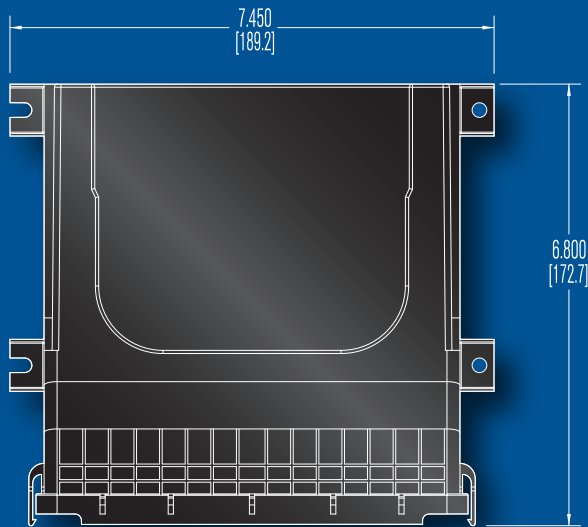
48 I/O P/N: **581 01 18 023**

P/N: **581 01 30 029**

30 I/O P/N: **581 01 30 029**

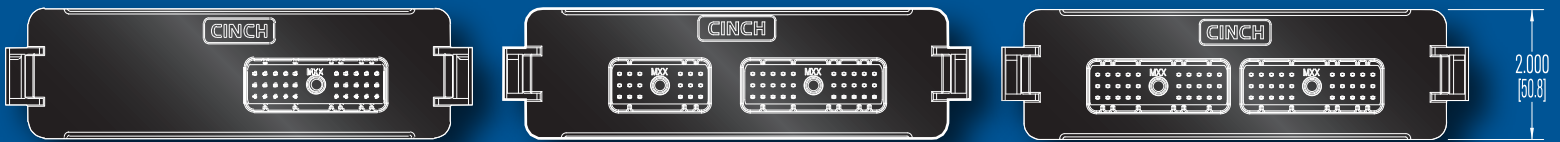
18 I/O P/N: **581 01 18 023**

Enclosure - LE



| | |
|-----------------------|---------------------------|
| Without heat sink | P/N: 581 01 60 033 |
| With 1 heat sink | P/N: 581 01 60 032 |
| Use with spring plate | P/N: 581 00 00 021 |
| With 2 heat sink | P/N: 581 01 60 031 |
| Use with spring plate | P/N: 581 00 00 021 |
| | P/N: 581 00 00 020 |

Header - LE



30 I/O P/N: **581 01 30 045**

48 I/O P/N: **581 01 48 006**

60 I/O P/N: **581 01 60 005**

Without Ferrites

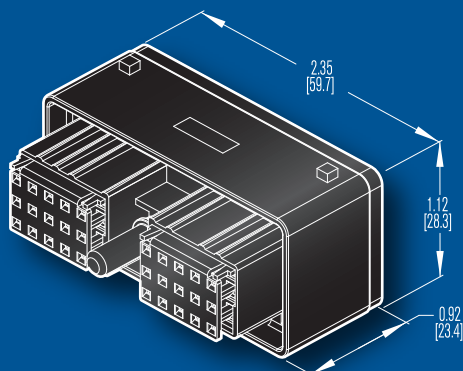
30 I/O P/N: **581 01 30 051**

48 I/O P/N: **581 01 48 008**

60 I/O P/N: **581 01 60 006**

With Ferrites

Mating SHS Harness Connectors



60 I/O P/N: **581 01 30 028**

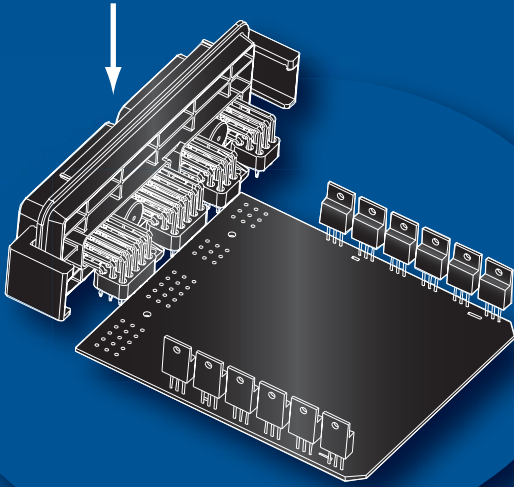
P/N: **581 01 30 029**

48 I/O P/N: **581 01 30 029**

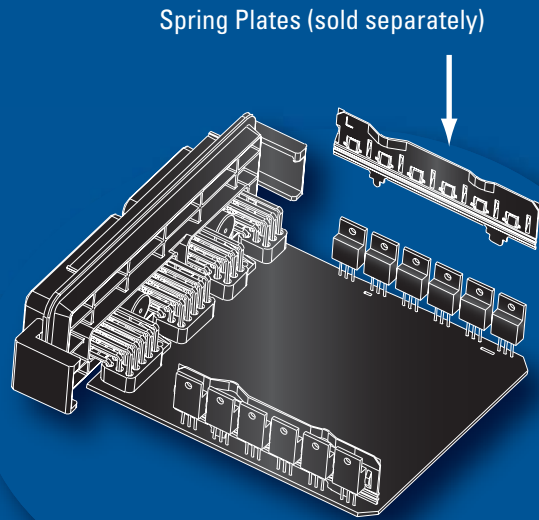
P/N: **581 01 18 023**

30 I/O P/N: **581 01 30 029**

Enclosure Assembly



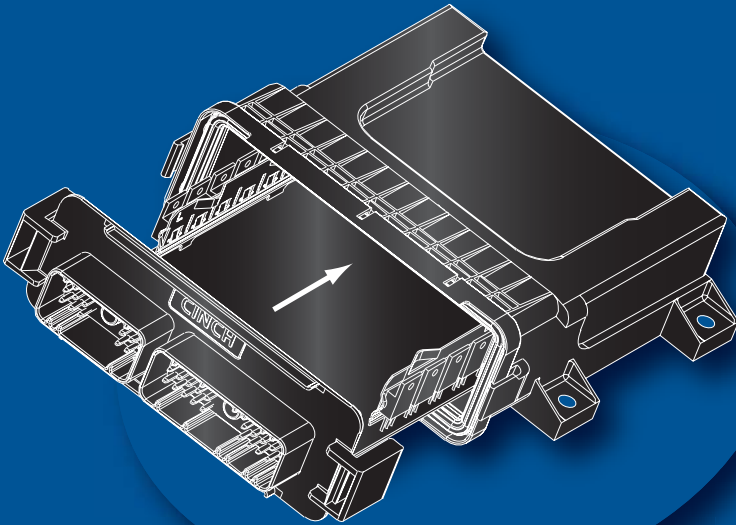
Mount header to PCB



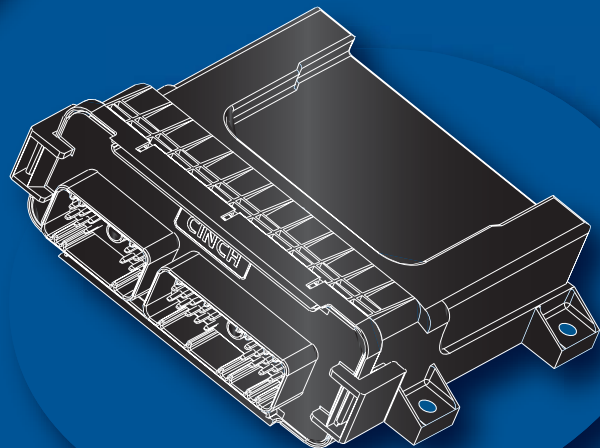
Spring Plates (sold separately)

Soldering Process

- Process PCB
- For heat sink options:
 - Install heat sink spring plates
 - Apply conductive medium to mosfets



Assemble header/board into enclosure
Push to lock and seal





Proven Excellence

For over 70 years, Cinch has been a reliable supplier of a variety of quality connector products to various industries. We are a multi-national manufacturer with manufacturing facilities in the U.S., U.K. and Mexico.

Cinch has applied its extensive expertise in interconnection technology to engineer and manufacture connectors of various complexities using state-of-the-art technology and tooling. Mechanical design is accomplished using Pro/E® 3D solid modeling and AutoCAD® supported by nonlinear and linear Finite Element Analysis, and Mold Flow software.

Our engineers utilize in-house capabilities in high frequency interconnect simulation, SPICE model generation and high frequency testing to develop the optimum product.

All products are validated in Cinch's First Article, mechanical, electrical, and environmental test facilities ensuring the finished products meet our customers' most stringent specifications.

Simply, your connectors are manufactured in state-of-the-art facilities that are committed to customer satisfaction and continuous improvement.



1700 Finley Road
Lombard, IL 60148

Phone: 630.705.6000
1.800.323.9612
Fax: 630.705.6060
E-mail: info@cinch.com
www.cinch.com

© 2006 Cinch Connectors Inc.
TR-205/02.06

1.5 mm Sealed Header System

The SHS product family is designed to perform on electronic control modules that must function in extreme environmental conditions commonly found on commercial and off-road vehicles and equipment. SHS headers and harness connectors were developed on a highly reliable 1.5mm terminal platform.



For More Information

Contact the Cinch Transportation Marketing department at 1.800.323.9612 or e-mail directly to transportation@cinch.com