

Blocks Pluggable and Fixed Mount





Eurostyle™ ESE PCB Terminal Blocks

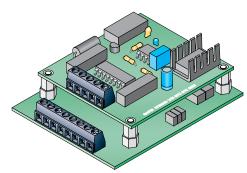
Pluggable and Fixed Mount

Fulfill your terminal block design requirements with a new and extensive range of ESE PCB terminal blocks from Molex.

Choose from a variety of Molex ESE (Eurostyle Extension) PCB terminal blocks. This new product line includes pitch sizes from 3.50 to 5.08mm (.138 to .200") and is rated at 300V, from 8.0 to 15.0A. Select from fixed (single-piece) or pluggable (two-piece) terminal blocks from circuit sizes 2 through 24.

All ESE PCB terminal blocks from Molex are RoHS compliant and UL recognized for use in the U.S. and Canada. These blocks are compatible with Molex Beau® and other industry standard terminal blocks.

ESE terminal blocks provide economic benefits and enhance Molex's existing Eurostyle terminal block offering. For additional specifications on Eurostyle ESE Terminal Blocks, visit our website: www.molex.com/product/ESEtermblocks.html.





Features and Benefits

- Fixed or pluggable product styles allow for maximum design flexibility
- Three different wire entry angles on fixed mount terminal blocks allow you to choose the best fit for your application
- Two optional styles of imprinting make identifying, testing and wiring easier in the field
- Surface Mount Compatible headers available in 5.00 and 5.08mm (.197 and .200") withstand reflow soldering temperatures, eliminating the need for a secondary wave soldering process
- Gold plating available on any part offers increased connectivity and durability in low power applications
- Captive screws in all terminal blocks mean that screws will not back out of housing or mounting ends

Applications

- Power Distribution
- Factory and Process Automation
- HVAC
- Security Systems
- Elevators
- Irrigation Systems
- Measurement and Control Systems

ESE PCB TERMINAL BLOCK SPECIFICATIONS

Reference Information

Packaging: Box UL File No.: E48521 Flammability: UL 94 V-0

Electrical

Voltage: 300V

Insulation Resistance: 500 Megohms min. Withstanding Voltage: 4000V DC

Mechanical

Operating Temperature:
Standard Plugs and Headers
-40 to +105°C
Surface Mount Compatible Headers
-40 to +140°C

Physical

Housing:

Standard Plugs and Headers — Polyamide (Nylon) 6/6 Surface Mount Compatible Header — Polyamide

(Nylon) 4/6

Housing Color: Black (Green or other colors optional) Screw: Steel M2. M2.5. M3

Contact Plating: Tin (Gold optional)
Imprinting:

Standard — 1,2,3 Reverse — 3,2,1



molex 5.00 and 5.08mm (.197 and .200") Pitch ESE **Fixed Mount Terminal Blocks**



| | Dia J. | D | C | W D | C: | Orde | er No. | |
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| | Pitch | Description | Current | Wire Range | Circuits | 9543-30XX 39543-30XX 39543-06XX 39543-31XX 39543-45XX 39543-05XX 39543-43XX | Beau® | |
| | | Vertical with Rising Cage Clamp | 15.0A | 14 to 22 AWG | | 39543-30XX | 39890-01XX | |
| | | Vertical with Pressure Clamp | | 14 to 24 AWG | 2 to 24 | 39543-00XX | 39850-16XX | |
| The state of the s | | Vertical with Pressure Clamp, Low Profile | | 14 to 22 AWG | | 39543-30XX 39543-00XX 39543-06XX 39543-31XX 39543-45XX 39543-05XX 39543-43XX | N/A | |
| | 5.00mm (.197") | Horizontal, Assembled to length | | 16 to 24 AWG | | 39543-06XX 39543-31XX 39543-45XX 39543-02XX | 39890-02XX/ 39850-31XX | |
| | 3.00mm (.197) | Horizontal, Modular* | 10.0A | 10 10 24 AWG | 2 or 3 | 39543-45XX | N/A | |
| | | 45° Wire Entry with Pressure Clamp, Assembled to Length | TU.UA | 14 to 24 AWG | 2 to 24 | 39543-02XX | 39850-01XX | |
| | | 45° Wire Entry with Pressure Clamp, Modular* | | 14 10 24 AWG | 2 or 3 | 39543-00XX 39543-06XX 39543-31XX 39543-45XX 39543-02XX | N/A | |
| 000 | | 45° Wire Entry with Rising Cage Clamp | | 14 to 22 AWG | 2 or 3 2 to 24 | 39543-43XX | N/A | |
| | 5.08mm (.200") | Vertical with Rising Cage Clamp | 15.0A | 12 to 22 AWG | 2 to 24 | 39544-30XX | 39880-01XX | |

Replace XX with circuit sizes 02 to 24.

* Modular terminal blocks available in 2 or 3 circuits. Blocks can be stacked together to create larger circuit sizes.



3.50mm (.138") Pitch ESE Pluggable Terminal Blocks



| | Pitch | Description | Current | Wire Range | Circuits | | r No. |
|-------|-------------------|-----------------------------------------------------|-----------|--------------------------|------------|------------|------------|
| | 11/41 | Description | | · · | CII CUII 3 | ESE | Beav® |
| | | | PCB Heade | ers | | | |
| | 3.50mm (.138") | Vertical | | 39502-10XX 39506-10XX | | 39501-10XX | 39353-00XX |
| | | Vertical with Threaded Retention Inserts | 201 | | | 39505-10XX | 39354-00XX |
| | 3.50mm (.138) | Horizontal | 8.0A | | | 39502-10XX | 39355-00XX |
| | | Horizontal with Threaded Retention Inserts | | | | 39506-10XX | 39356-00XX |
| | | | Plugs | | | | |
| | | Vertical, Rear Wire Entry | | | | 39503-20XX | |
| 80000 | | Vertical with Retention Screws, Rear Wire Entry | | | | 39507-20XX | w/s |
| | 3.50mm (.138") | Vertical, Front Wire Entry | 8.0A | 16 to 24 AWG | | 39503-30XX | N/A |
| | 3.30IIIII (.136) | Vertical with Retention Screws, Front Wire Entry | O.UA | | Z 10 ZV | 39507-30XX | |
| | | Horizontal | | | | 39500-00XX | 39351-00XX |
| | | Horizontal with Retention Screws | | 16 to 30 AWG | | 39504-00XX | 39352-00XX |

Replace XX with circuit sizes 02 to 20.



3.81mm (.150") Pitch **ESE Pluggable Terminal Blocks**



| | Pitch | Docariution | Current | Wire Range | Circuits | | r No. |
|------------------------------------------|----------------|-----------------------------------------------------|----------|--------------|----------|------------|------------|
| | rifth | Description | Current | - | Circuits | ESE | Beau® |
| | | | PCB Head | ers | | | |
| 4444 | | Vertical | | | 2 to 20 | 39511-10XX | 39900-05XX |
| No N | 3.81mm (.150") | Vertical with Threaded Retention Inserts | 201 | N/4 | | 39515-10XX | 39900-11XX |
| | | Horizontal | 8.0A | N/A N/A | | 39512-10XX | 39900-07XX |
| | | Horizontal with Threaded Retention Inserts | | | | 39516-10XX | 39900-12XX |
| | | | Plugs | | | | |
| 0000 | | Vertical, Rear Wire Entry | | 16 to 30 AWG | 2 to 20 | 39513-20XX | 39900-02XX |
| | | Vertical with Retention Screws, Rear Wire Entry | | | | 39517-20XX | 39900-17XX |
| | 2 01 / 150" | Vertical, Front Wire Entry | 0.04 | | | 39513-30XX | 39900-03XX |
| | 3.81mm (.150") | Vertical with Retention Screws, Front Wire Entry | 8.0A | | | 39517-30XX | 39900-18XX |
| | | Horizontal | | 16 to 24 AWG | | 39510-00XX | 39905-01XX |
| 1000 N | | Horizontal with Retention Screws | | 10 IU Z4 AWU | | 39514-00XX | 39905-10XX |

Replace XX with circuit sizes 02 to 20.

| | Pitch | Description | Current | Wire Range | Circuits | Order No. | | |
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| | | | PCB Headers | | | ESE | Beau® | |
| | | Vertical, Open Ends | | | | 39521-00XX | 39870-04XX | |
| The same of the sa | | Vertical, Closed Ends | | | | 39521-10XX | 39870-05XX | |
| E LA | | Vertical, Surface Mount Compatible | | | | 39521-40XX | 39870-13XX | |
| | | Vertical with Threaded Retention Inserts | | | | 39525-00XX | 39870-11XX | |
| The state of the s | | Vertical with Threaded Retention Inserts, Surface Mount Compatible | | | 2 to 24 | 39525-40XX | N/A | |
| | 5.00mm (.197") | Horizontal, Open Ends | 15.0A | N/A | 2 10 24 | 39522-00XX | 39870-06XX | |
| A STATE OF THE STA | | Horizontal, Closed Ends | | | | 39522-10XX | 39870-07XX | |
| AAAA | | Horizontal, Surface Mount Compatible | | | | 39522-40XX | 39870-14XX | |
| | | Horizontal with Threaded Retention Inserts | | | | 39526-00XX | 39870-12XX | |
| | | Horizontal with Threaded Retention Inserts, Surface Mount Compatible | _ | | | 39526-40XX | | |
| | | Dual Level, Open Ends | | | 4 to 48 | 39528-00XX* | N/A | |
| # n fb fb | | | Plugs | | | l | | |
| | | Vertical, Rear Wire Entry | 15.0A | | | 39523-20XX | 39870-02XX | |
| | | Vertical with Retention Screws, Rear Wire Entry | 10.0A | | | 39527-20XX | N/A | |
| | | Vertical, Front Wire Entry | 15.0A | | | 39523-30XX | 39870-03XX | |
| | 5.00mm (.197") | Vertical with Retention Screws, Front Wire Entry | 10.0A | 12 to 26 AWG | 2 to 24 | 39527-30XX | N/A | |
| | | Horizontal | 150 | | | 39520-00XX | 39870-01XX | |
| | | Horizontal with Retention Screws | 15.0A | | | 39524-00XX | N/A | |

Replace XX with circuit sizes 02 to 24.
*Dual level PCB header available in circuit sizes 04 to 48.

| | Pitch | Description | Current | Wire Range | Circuits | | er No. |
|---------------------------------------------------|----------------|-------------------------------------------------------------------------|------------|--------------|----------|-------------|-----------|
| | | • | CB Headers | | | ESE | Beau® |
| | | Vertical, Open Ends | CD Heudels | | | 39531-00XX | 39860-04X |
| | | Vertical, Closed Ends | | | | 39531-10XX | 39860-05X |
| MARA | | Vertical, Surface Mount Compatible | | | | 39531-40XX | 39860-13X |
| | | Vertical with Threaded Retention Inserts | | | | 39535-00XX | 39860-11X |
| AL OF STREET | | Vertical with Threaded Retention Inserts, Surface Mount Compatible | | | 2 to 24 | 39535-40XX | 39860-15X |
| MAN AND MAN AND AND AND AND AND AND AND AND AND A | 5.08mm (.200") | Horizontal, Open Ends | 15.0A | 15.0A N/A | 2 10 24 | 39532-00XX | 39860-06) |
| | | Horizontal, Closed Ends | | | | 39532-10XX | 39860-07) |
| | | Horizontal, Surface Mount Compatible | | | | 39532-40XX | 39860-142 |
| | | Horizontal with Threaded Retention Inserts | | | | 39536-00XX | 39860-12 |
| | | Horizontal with Threaded Retention Inserts, Surface Mount Compatible | | | | 39536-40XX | 39860-16 |
| | | Dual Level, Open Ends | | | 4 to 48 | 39538-00XX* | 39860-08 |
| <u> </u> | | | Plugs | | | | |
| | | Vertical, Rear Wire Entry | 15.0A | - | | 39533-20XX | 39860-02) |
| | | Vertical with Retention Screws, Rear Wire Entry | 10.0A | | | 39537-20XX | N/A |
| | | Vertical, Front Wire Entry | 15.0A | | | 39533-30XX | 39860-032 |
| | 5.08mm (.200") | Vertical with Retention Screws, Front Wire Entry | 10.0A | 12 to 26 AWG | 2 to 24 | 39537-30XX | N/A |
| | | Horizontal | | | | 39530-00XX | 39860-01) |
| | | Horizontal Plug with Retention Screw | 15.0A | | | 39534-00XX | 39860-10) |

Replace XX with circuit sizes 02 to 24. *Dual level PCB header available in circuit sizes 04 to 48.



| | Pitch | D | Current Wire Range | Circuits | Order No. | | | |
|--|----------------|----------------------------------------|--------------------|------------|-----------|------------|------------|-----|
| | PITCH | Description | Current | wire Kange | CIFCUITS | ESE | Beau™ | |
| | | | PCB Headers | | | | | |
| | 5.00mm (.197") | Dual Level, Horizontal, Closed Ends | | N/A | 4 to 48 | 39528-10XX | N/A | |
| | | Dual Level, Vertical, Open Ends | 15.0A | | | 39528-20XX | | |
| | | Dual Level, Vertical, Closed Ends | | | | 39528-30XX | | |
| | | Dual Level, Horizontal, Closed Ends | | N/A | | 39538-10XX | 39860-09XX | |
| | 5.08mm (.200") | Dual Level, Vertical, Open Ends | 15.0A | | 4 to 48 | 39538-20XX | M /A | |
| | | Dual Level, Vertical, Closed Ends | | | | | 39538-30XX | N/A |

Replace XX with circuit sizes 04 to 48.



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