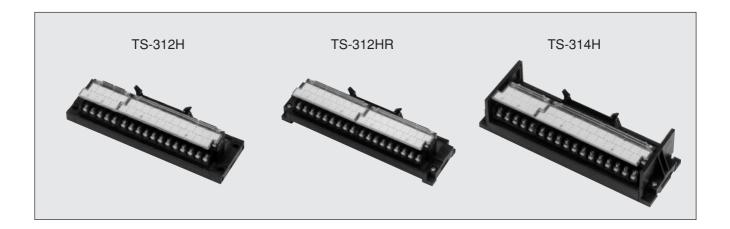
Interface Terminal Blocks

TS-312 / 314



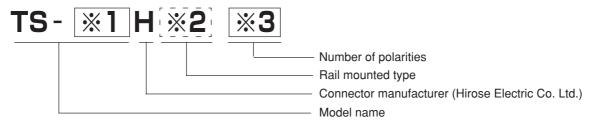
■ Features

- Printed circuit board is used for connections between the terminal side and connector side, and thus, disenables erroneous wiring.
- The high efficiency connector detachable and free from fall-out, promises firm connection and easy handling.
- In combination with the 10P, 18P or 24P terminal blocks, the various multiple polarities can be configured for the connector terminal blocks.
- Both panel mounting type and DIN rail mounted type are available.
- Space saving by using the small-sized 2-deck terminal blocks.
- User friendly designs such as the terminal protection cover that can be opened/closed without being removed from the main body, and the name tags that can be used for its both sides.



- A part of the printed circuit board is exposed. Do not get up with a conductive substance.
- Unless otherwise mentioned, the dimensions are indicated in "mm" in this book.

■ Model Designation



%1

| Code | Pitch between Terminals | Terminal Screw |
|------|-------------------------|----------------|
| 312 | 7.62mm | M3 × 6 |
| 314 | 8.6mm | M3.5 × 8 |



Designate with R when requiring the rail mounting type for TS-312H.

| | Number of | Number of | Model Name by Connector Manufacturer | | |
|-----------------------------|---------------------------------|----------------------------|--------------------------------------|-------------------------|--|
| Manufacturer | Polarities of Terminal Block | Polarities of Connector | Connector on Main Body | Connector on Cable * | |
| | 20P | 20P | HIF3BA-20PA-2.54DSA | HIF3BA-20D-2.54R | |
| | 34P | 34P | HIF3BA-34PA-2.54DSA | HIF3BA-34D-2.54R | |
| Hirose Electric Co. Ltd. | 36P | | NIF3DA-34FA-2.34D3A | HIF3DA-34D-2.34N | |
| HRS | 40P | 40P | HIF3BA-40PA-2.54DSA | HIF3BA-40D-2.54R | |
| IIII | 50P | 50P | HIF3BA-50PA-2.54DSA | HIF3BA-50D-2.54R | |
| | 60P | 60P | HIF3BA-60PA-2.54DSA | HIF3BA-60D-2.54R | |
| | 64P | 64P | HIF3BA-64PA-2.54DSA | HIF3BA-64D-2.54R | |

^{*}Prepare connector for the cable side as it is not attached to the product.

| %3 | |
|-----------|-----------------------------------|
| Model | Number of polarities |
| 312 | 20P, 34P, 36P, 40P, 50P, 60P, 64P |
| 314 | 20P, 34P, 40P, 50P, 60P |

■ Ratings and Specifications

| ltem Model | TS-312 | TS-314 | | | |
|--------------------------|---|---|--|--|--|
| Rated Insulation Voltage | 125V "JIS C 0704 Table 6 and 8: Pollution level 1 in Micro Environment Conditions" Refer to page ???? | | | | |
| Rated Current Capacity | 500mA continuous (at 25°C) | | | | |
| Matching Wire | 1.25mm² for Terminal Block | 2mm² for Terminal Block | | | |
| Matching wife | Flat ribbon cable for Connector | | | | |
| Terminal Screw | M3 × 6 Self-up screw with square interleaf (Recommended torque: 0.6 ~ 0.9N·m) | M3.5 × 8 Self-up screw with square interleaf (Recommended torque: 1.0 ~ 1.3N·m) | | | |
| Pitch between Terminals | 7.62mm | 8.6mm | | | |
| Insulation Resistance | 100MΩ or more (by 500V DC megohmmeter) among Live parts and Live parts-Ground each | | | | |
| Withstand Voltage | 500V AC for 1 minute among terminals, 2000V AC for 1 minute, between Live parts-Ground | | | | |
| Operating Environment | Within the range -10 ~ +40°C, 45 ~ 85%RH (No freezing or condensation) | | | | |
| Standard Conformity | JIS C 2811 Industrial Terminal Blocks | | | | |

■ Materials

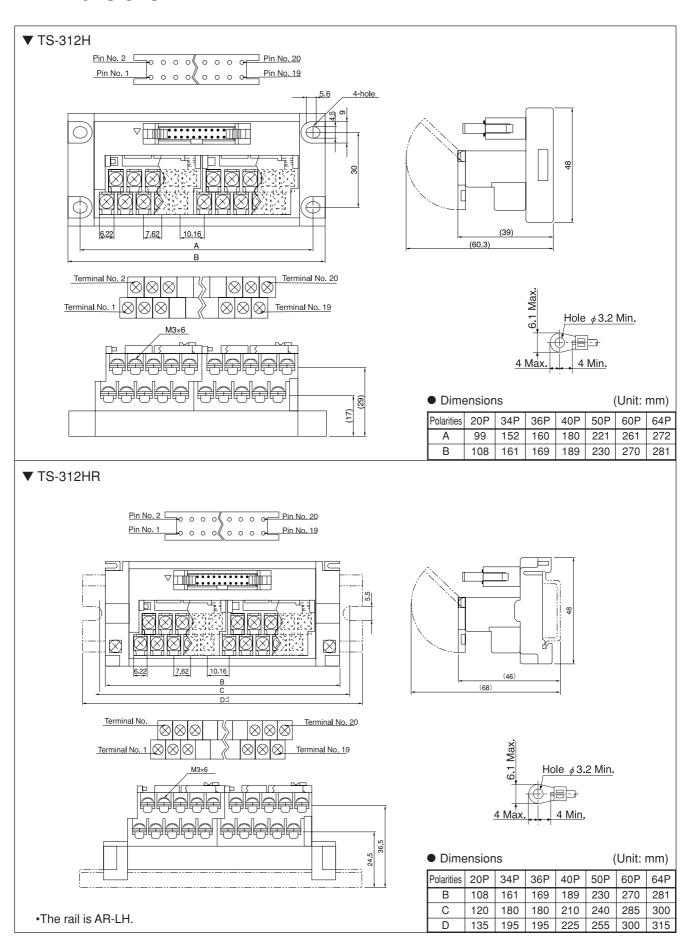
| Model | TS-312 | TS-314 | 4 |
|-------------------------------|-----------------------------------|-----------------------------|-----------------------|
| Insulation of Terminal Blocks | PBT resin | (Black) | UL94V-0 |
| Terminal Protection Cover | Polycarbonate resin | (Transparent) | |
| Base | Denaturized Polyphenylether resin | (Black) | UL94V-0 |
| End Segment | Denaturized Polyphenylether resin | (Black) | UL94V-0 |
| Terminal Screw | Carbon steel (Nickel plated) | Carbon steel (Galvanized an | d chromate treatment) |
| Terminal | Brass | (Tin plated) | |
| PCB (Substrate) | Glass Epoxy plate | | |

Weight (Unit: g)

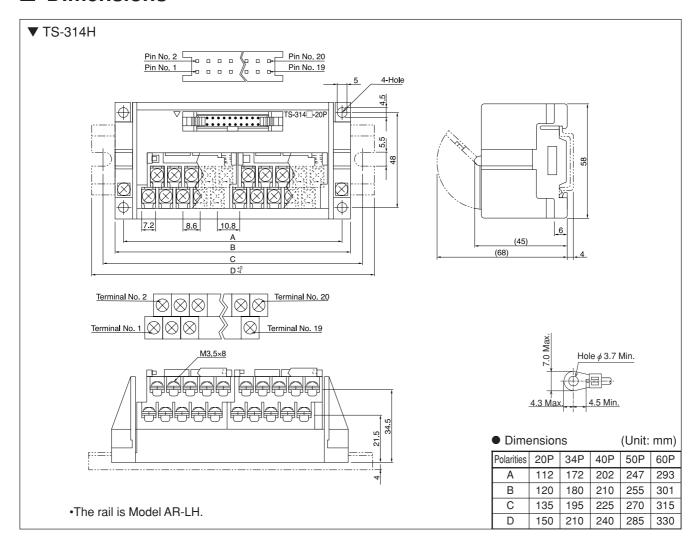
| Polarities Model | 20P | 34P | 36P | 40P | 50P | 60P | 64P |
|---------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| TS-312H | Approx. 98 | Approx. 155 | Approx. 160 | Approx. 183 | Approx. 224 | Approx. 265 | Approx. 281 |
| TS-312HR | Approx. 104 | Approx. 161 | Approx. 166 | Approx. 189 | Approx. 230 | Approx. 271 | Approx. 287 |
| TS-314H | Approx. 150 | Approx. 230 | _ | Approx. 269 | Approx. 330 | Approx. 397 | _ |



Dimensions



■ Dimensions



| Pattern Connection Diagram | | | | |
|----------------------------|---|-------------|---|--|
| TS-312H□-20 | Connector side 1 2 3 4 5 / 16 17 18 19 20 | TS-312H□-64 | Connector side 1 2 3 4 5 60 61 62 63 64 | |
| TS-312H□-34 | Connector side | TS-314H-20 | Connector side | |
| TS-312H□-36 | Connector side 1 2 3 / 30 31 32 33 34 | TS-314H-34 | Connector side | |
| TS-312H□-40 | Connector side | TS-314H-40 | Connector side | |
| TS-312H□-50 | Connector side | TS-314H-50 | Connector side | |
| TS-312H□-60 | Connector side 1 2 3 4 5 5 56 57 58 59 60 1 2 3 4 5 5 56 57 58 59 60 Terminal side 1 2 3 4 5 5 56 57 58 59 60 | TS-314H-60 | Connector side | |