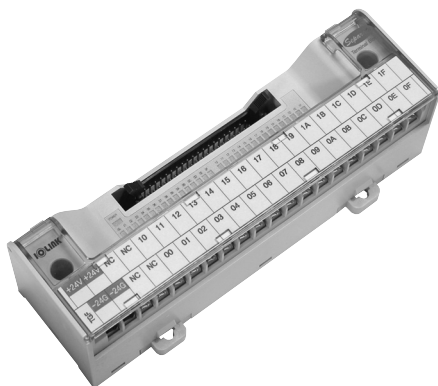


TGF Series Detachable I/O Interface Terminal Block with LED Indicator

User's Guide



Thank you for purchasing product of SAMWON ACT.
Please check model of product that you purchase first, and read this manual prior to use it.

• Caution for Safety

⚠ Caution Case that results in serious damage in human body or equipment, and fire if user handles this equipment wrongly

⚠ Warning Case that results in slight damage in human body or equipment, and fire if user handles this equipment wrongly

⚠ Caution

1. When machining and wiring the mounting hole, do not allow foreign matter such as dust or wire covering to enter the connection terminal. Failure to do so may result in damage to the unit, heat, or ignition.
2. Be sure to shut off the power supply from the outside before mounting and wiring.

※ The connection cable for PLC of various makers is provided by us. Please refer to the catalogue or contact Head or branch office if you need more detail models and specifications.

⚠ Warning

1. Use within the specified temperature range. (−10℃ ~ +50℃) Damage to the outer case may occur.
2. Use within the specified rated voltage and rated current range.
This may result in fire or damage to the product.
3. Read this user's guide which is attached to product, and check product's nominal, characteristics, specification, wiring diagram and how to handle prior to use.
4. Please make sure to check the internal wiring diagram of the terminal block and the arrangement of the controller PIN (terminal) when making the connection cable between the controller (PLC etc.). It may be the cause of malfunction or damage of this equipment and user's.

• Model Configuration

TGF – 1H40L – □

① ② ③ ④

- ① TGF series terminal block detachable type
- ② Applicable connector specifications and No. of terminal Poles
- ③ IO display LED mounted type
- ④ Input side common polarity

• Model Selection

Model	I/O Point(s)	Common	Mounted connector Model	Cable connector Model	Dimensions	Mounting method
TGF-1H40L-N	32Point	NPN	HIF3BA-40PA-2, 54DSA	HIF3BA-40D-2, 54R	163 × 49.5	Screw mounting/ DIN Rail (Channel)
			XG4A-4031	XG4A-4030		
TGF-1H40L-P		PNP	HIF3BA-40D-2.54R	HIF3BA-40D-2.54R		
			XG4A-4031	XG4A-4030		

※ Mounted connector can be changed into a compatible product without advance notice.

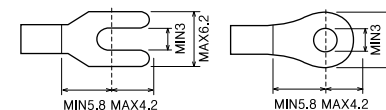
• Characteristics

Rated voltage	12~24V DC
Rated current	1A
Indication	IO : LED(Red) / Power : LED(Green)
LED rating	24V DC : 100mA max. / Point
Insulation resistance	100MΩ or above (DC 500V)
Dielectric strength	AC500V 1min
Applicable wire	AWG22~16 (1.5mm ² / MAX)
Terminal Screw	M3 × 6L
Screw torque	7~8Kgf · cm (0.68~0.78N · m)
Ambient temperature	−10℃ ~ +50℃ (No condensation)

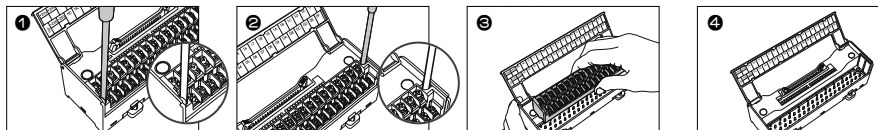
• Material

Terminal	Modified PPO
Protective cover	Polycarbonate
P,C,B	Epoxy 1.6t

• Applicable crimp terminal



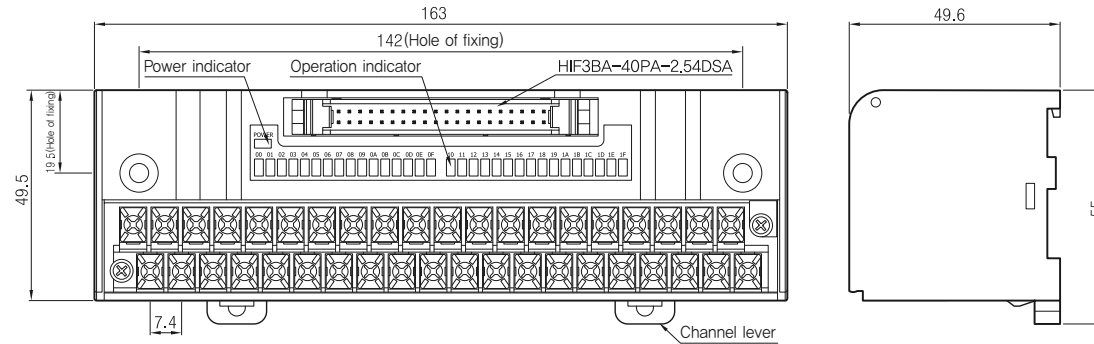
• How to replace the terminal block




How to separate : Loosen the left and right bolts to the left with a screwdriver, grab the terminal block, and pull it out to separate it.
How to install : In the reverse order of separation, insert the terminal block into the pocket and tighten the left and right bolts to the right with a screwdriver to complete the installation.

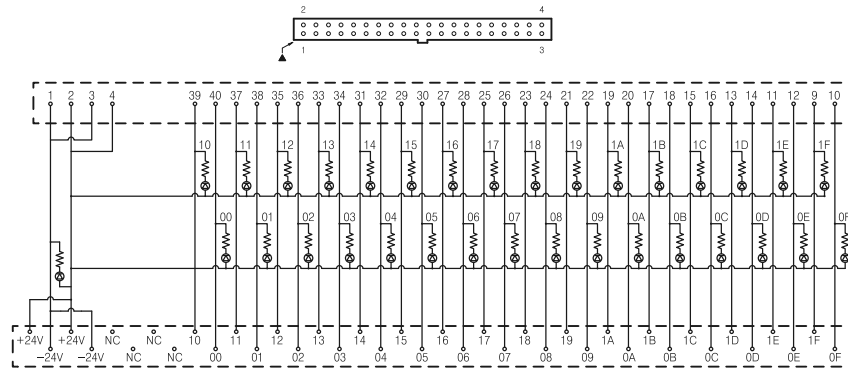
※ Caution) If the bolts are not fully tightened during installation, contact failure may occur.


• Dimension

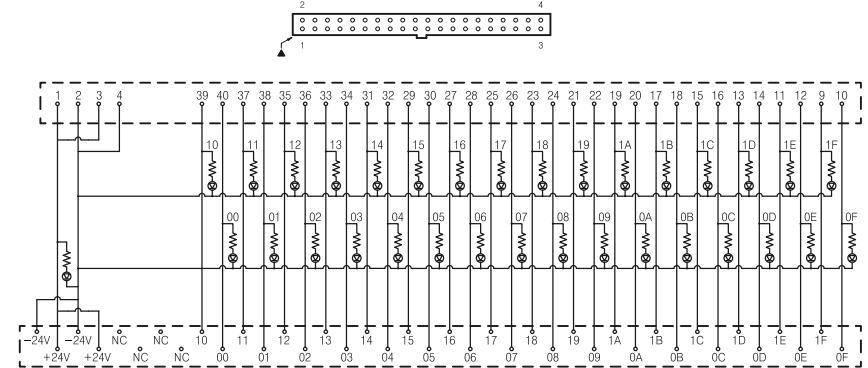


• Wiring Diagram

• TGF-1H40L-N (NPN) 



• TGF-1H40L-P (PNP) 



※ The above specifications are subject to change without notice.

※ Please contact HQ or branch office where you purchased product for A/S of this product or technique.

Major products

- Relay terminal 1, 2, 4, 6, 8, 16, 32point
- Interface terminal 20, 24, 26, 34, 40, 50, 57, 40 x 2pole
- PLC I/O Connecting cables MITSUBISHI, LSIS, CIMON, OMRON, FUJI, YOKOGAWA, HITACHI, SIEMENS, AB, etc.
- Servo Connecting cables Encoder cable, Power cable, Motion cable / MITSUBISHI, YASKAWA, OMRON, PANASONIC, , LSIS, SAMSUNG, etc.
- Wiring harness / Special cable assembly