

Autonics ACS Series Common Terminal Block



# Autonics ACS Series Common Terminal Block User Manual

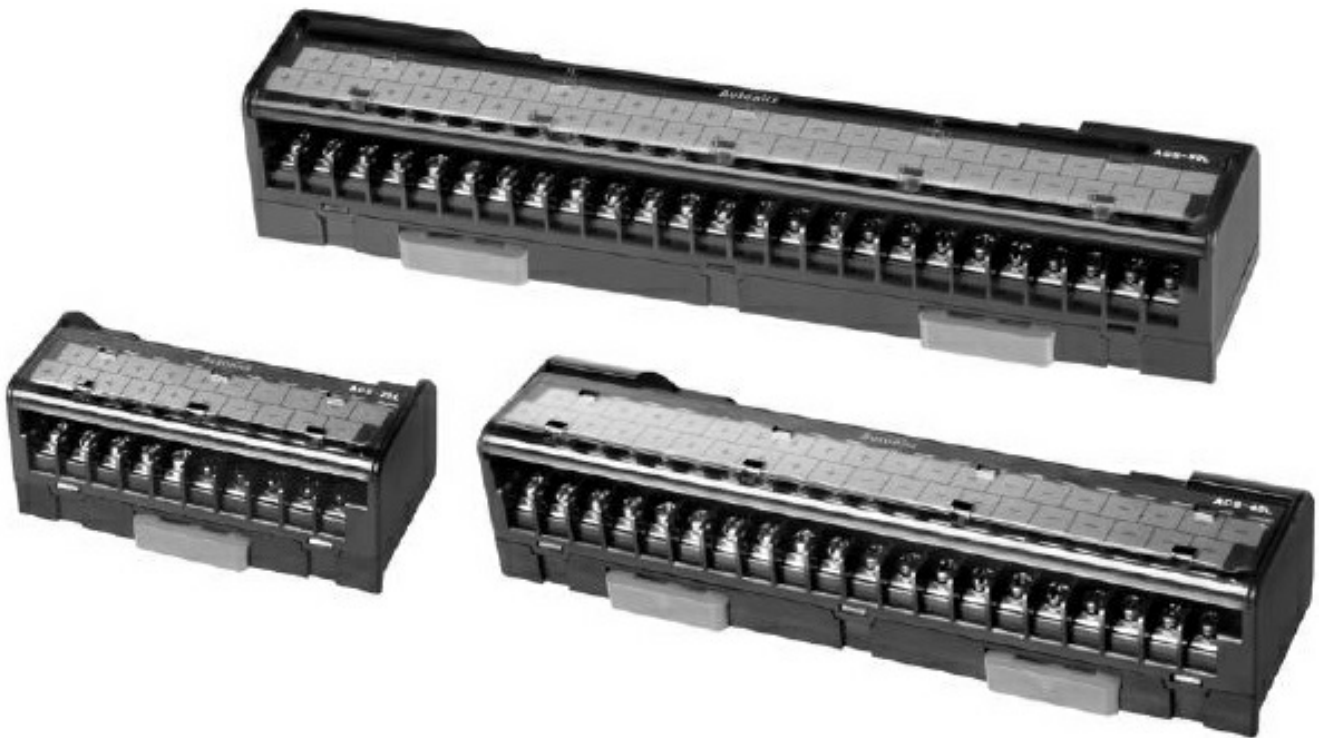
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# Autonics

Autonics ACS Series Common Terminal Block



## Product Information

### Specifications

- **Model:** ACS-20L, ACS-20T, ACS-40L, ACS-40T, ACS-50L, ACS-50T
- **Item:** Common terminal block
- **Terminal Type:** Screw
- **Number of Terminals:** 20EA, 40EA, 50EA
- **Applicable Crimp Terminal:**
  - ACS-20L and ACS-20T: B, A
  - ACS-40L and ACS-40T: C, D
  - ACS-50L and ACS-50T: C, D

### Caution for Your Safety

Please keep these instructions and review them before using this unit. Observe the following for safety:

- **Warning:** Serious injury may result if instructions are not followed.
- **Caution:** Product may be damaged or injury may result if instructions are not followed.

### Symbols Used in the Operation Manual

- **Caution:** Injury or danger may occur under special conditions.
- **Warning:**

### Usage Instructions

### Installation

1. In case of using this unit with machinery (Ex: nuclear power control, medical equipment, ship, vehicle, train, airplane, combustion apparatus, safety device, crime/disaster prevention equipment, etc) which may cause damages to human life or property, it is required to install fail-safe device. It may cause a fire, human injury or damage to property.
2. Do not repair or check units during power on. It may cause a fire or electric shock.
3. Do not use this unit in a place where there are flammable or explosive gas, humidity, direct ray of the sun, radiant heat, vibration, impact, etc. It may cause a fire or explosion.
4. Do not disassemble and modify this unit. Please contact us if it is required. It may cause a fire, electric shock, or damage to the product.

## Usage Precautions

1. This unit shall not be used outdoors. It may shorten the life cycle of the product or cause electric shock.
2. Please observe the rated specifications. It may shorten the life cycle of the product and cause a fire.
3. In cleaning the unit, do not use water or organic solvents. Use a dry cloth. It may cause electric shock or damage to the product.
4. Do not inflow dust or wire dregs into the unit. It may cause a fire or malfunction.

## FAQ

- **Q: Can I use this product outdoors?**

- A: No, this unit shall not be used outdoors as it may shorten the life cycle of the product or cause electric shock.

- **Q: What are the applicable wires for this terminal block?**

- A: The applicable wires are AWG 22-16 (0.30 to 1.25mm<sup>2</sup>).

- **Q: What is the insulation resistance of this terminal block?**

- A: The insulation resistance is a minimum of 1,000 (at 500 megger).

- **Q: What is the tightening torque for the terminal pin?**

- A: The tightening torque for the terminal pin is 0.5 to 0.6 N.m.

Thank you very much for selecting Autonics products. For your safety, please read the following before using.

## Caution for your safety

- Please keep these instructions and review them before using this unit.
- Please observe the following for safety.
- **Warning** Serious injury may result if instructions are not followed.
- **Caution** Product may be damaged, or injury may result if instructions are not followed.
- The following is an explanation of the symbols used in the operation manual.
- **Caution:** Injury or danger may occur under special conditions.

## Warning

1. In case of using this unit with machinery (Ex: nuclear power control, medical equipment, ship, vehicle, train,

airplane, combustion apparatus, safety device, crime/disaster prevention equipment, etc) which may cause damages to human life or property, it is required to install fail-safe device. It may cause a fire, human injury or damage to property.

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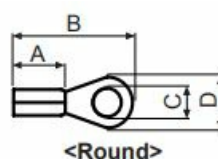
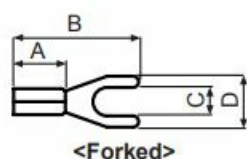
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2. Please observe the rated specifications. It may shorten the life cycle of the product and cause a fire.
3. In cleaning the unit, do not use water or organic solvents. And use dry cloth. It may cause electric shock or damage to the product.
4. Do not inflow dust or wire dregs into the unit. It may cause a fire or malfunction.

## Ordering information

Model	Item	Terminal type	Number of terminals	Common type
ACS-20L	Common terminal block	Screw	20EA	Left-Right Common
ACS-20T				Top-Bottom Common
ACS-40L			40EA	Left-Right Common
ACS-40T				Top-Bottom Common
ACS-50L			50EA	Left-Right Common
ACS-50T				Top-Bottom Common

## Applicable crimp terminal





(unit: mm)

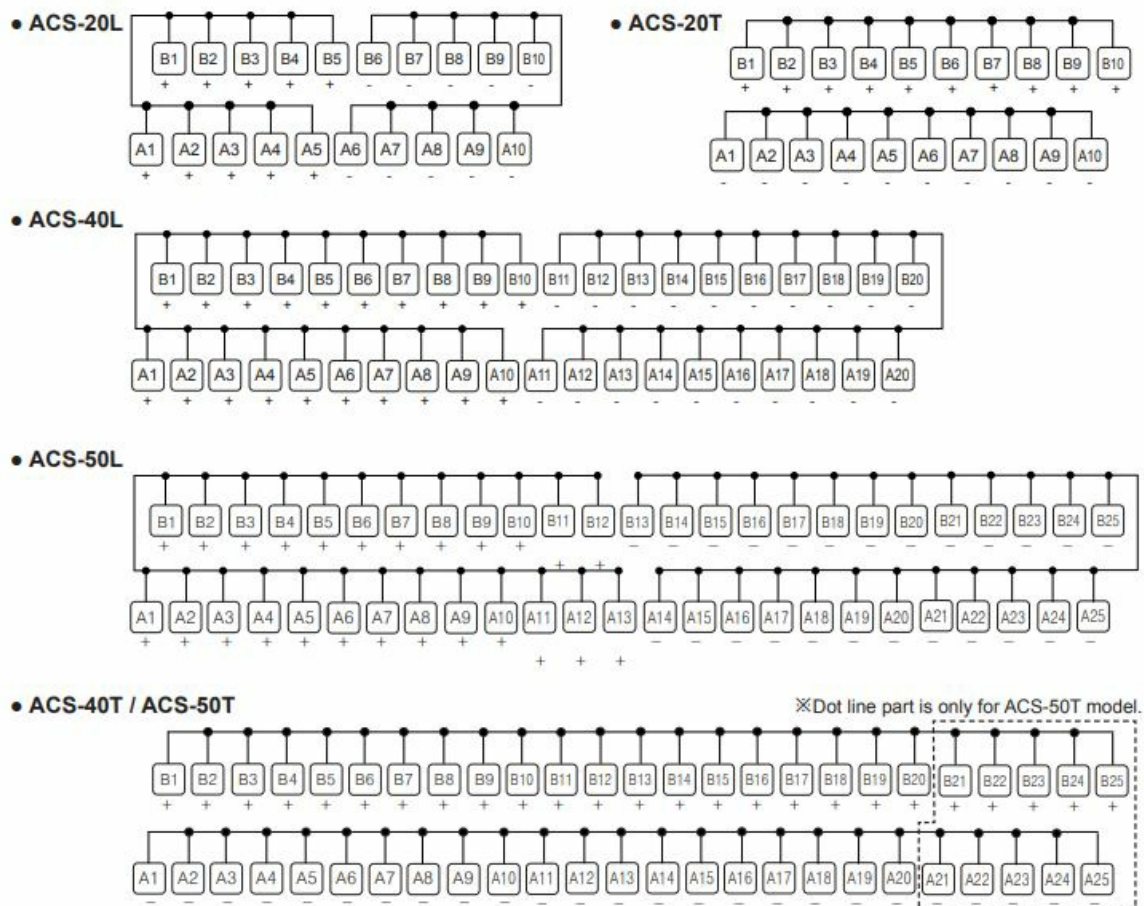
	A	B	C	D	Applicable wires
Forked	Min. 4.1	Max. 16.0	Min. 3.0	Max. 5.9	AWG 22-16 (0.30 to 1.25mm <sup>2</sup> )
Round	Min. 4.1	Max. 16.0	Min. 3.0	Max. 5.9	

※ Use the UL certified crimp terminal.

## Specifications

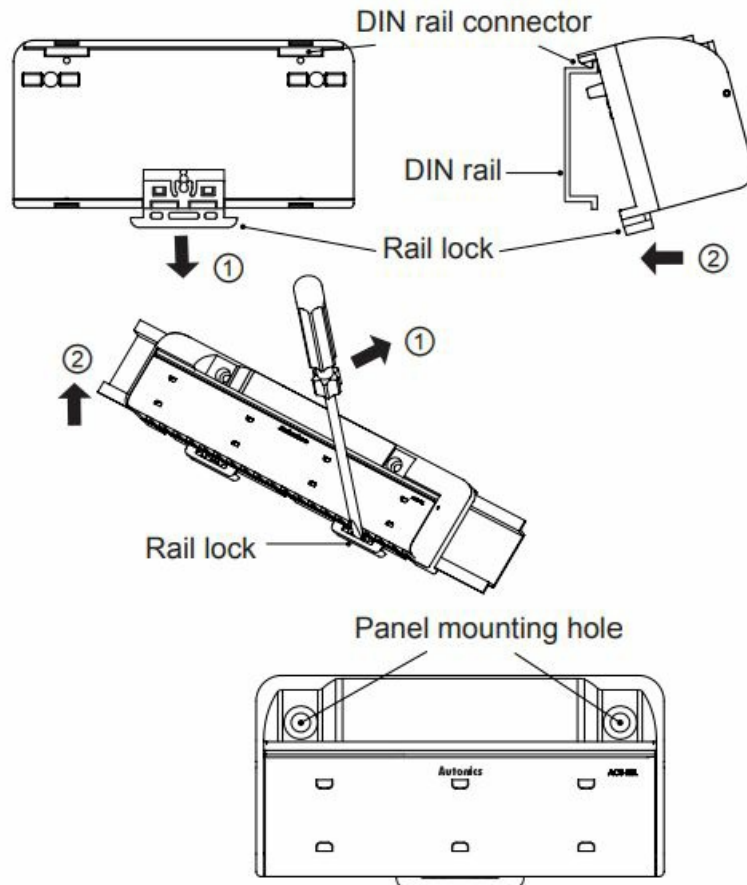
Model	ACS-20L	ACS-20T	ACS-40L	ACS-40T	ACS-50L	ACS-50T
Rated voltage	Max. 125VDC, 125VAC 50/60Hz					
Rated current	Max. 10A					
Common type	Left +COM, Right -COM	Top +COM, Bottom -COM	Left +COM, Right -COM	Top +COM, Bottom -COM	Left +COM, Right -COM	Top +COM, Bottom -COM
Number of terminals	20EA		40EA		50EA	
Terminal pitch	7.0mm					
Applicable wires	AWG22-16 (0.30 to 1.25mm <sup>2</sup> )					
Insulation resistance	Min. 1,000MΩ (at 500VDC megger)					
Dielectric strength	600VAC 50/60Hz for 1 minute					
Vibration	0.75mm amplitude at frequency of 10 to 55Hz(for 1 min.) in each of X,Y,Z directions for 2 hours					
Shock	150m/s <sup>2</sup> (15G) in each of X, Y, Z directions for 3 times					
Environ -ment	Ambient temp.	-15 to 55°C, Storage: -25 to 65°C				
	Ambient humi.	35 to 85%RH, Storage: 35 to 85%RH				
Material	CASE: MPPO, TERMINAL PIN: Brass					
Tightening torque	0.5 to 0.6 N·m					
Approval	 					
Weight※ <sup>1</sup>	Approx. 92g (Approx. 61g)		Approx. 157g (Approx. 115g)		Approx. 189g (Approx. 141g)	

## Wire connections



The above specifications are subject to change without notice.

## Installation



## • 1. Mounting to and Removing from DIN rail.

### • Mounting

- 1) Push rail lock to the direction “①”.
- 2) Hook DIN rail connector onto DIN rail.
- 3) Push the unit down to the direction “②” and then push up the rail lock to the unit body.

### • Removing

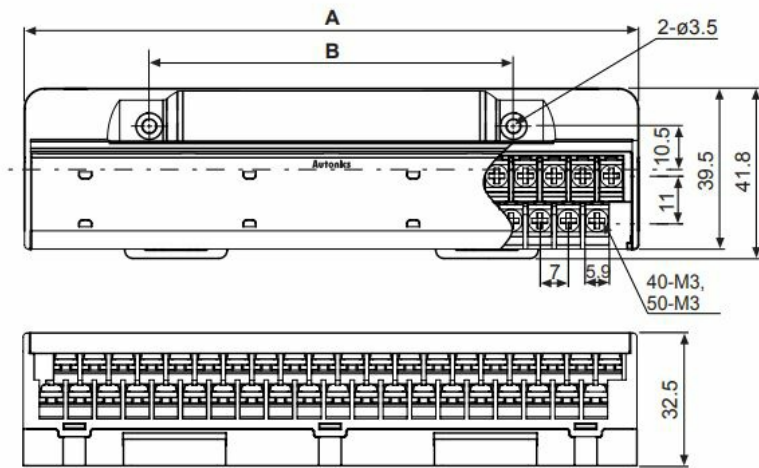
- 1) Insert a screwdriver into hole of rail lock and pull the lock out to the direction “①”.
- 2) Removing the unit by pulling to the direction “②”.

## 2. Mounting to panel

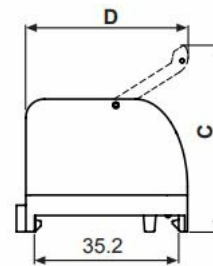
- 1) This unit is able to mount on the panel with mounting holes.
- 2) It is recommended to use M3×30mm of spring washer screws and to use flat washers which are diameter  $\phi 6$ .

The tightening torque should be 0.5 to 0.7N·m.

## Dimensions



	ACS-40L(T)	ACS-50L(T)
A	150	184
B	89	104
C	45.8	48.9
D	39.7	34.8



### Caution for using

1. This unit shall not be used beyond specified temperature or humidity range.
2. Maintain voltage fluctuations in the power supply within specified range.
3. When connecting PLC or other controllers, check the polarity of power and COMMON before wiring.
4. Use AWG 16(1.25mm<sup>2</sup>) wire and applicable crimp terminals to the terminal block.
5. Turn OFF the power supply before wiring.
6. Do not use this unit at below places.
  - ①Place where there is severe vibration or impact.
  - ②Place where strong alkalis or acids are used.
  - ③Place where there are direct ray of the sun.
  - ④Place where strong magnetic field or electric noise are generated.
7. Installation environment.
  - ①It shall be used indoor
  - ②Altitude Max. 2,000m
  - ③Pollution Degree 2
  - ④Installation Category II

**It may cause malfunction if above instructions are not followed.**

### Major products

- Photoelectric sensors
- I Fiber optic sensors
- I Door sensors
- Door side sensors
- Area sensors
- I Proximity sensors
- I Pressure sensors
- I Rotary encoders
- 1 Connector/Sockets
- Switching mode power supplies



- Control switches/Lamps/Buzzers
- I/O Terminal Blocks & Cables
- Stepper motors/drivers/motion controllers
- Graphic/Logic panels
- Field network devices
- Laser marking system(Fiber, CO<sub>2</sub>, Nd: YAG)
- Laser welding/soldering system
- Temperature controllers
- Temperature/Humidity transducer
- SSR/Power controllers
- Counters
- Timers
- Panel meters
- Tachometer/Pulse(Rate) meters
- Display units
- Sensor controllers

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#### **HEAD QUARTERS:**

- 116, Ungbigongdan-gil, Yangsan-si, Gyeongsangnam-do, Korea

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- **TEL:** 82-32-610-2730 / **FAX:** 82-32-329-0728
- **E.mail:** [calac@alitone.com](mailto:calac@alitone.com)



The proposal of a product improvement and development.

- [nproduct@autonice.com](mailto:nproduct@autonice.com)

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#### **Documents / Resources**



	<a href="#">Autonics ACS Series Common Terminal Block</a> [pdf] User Manual ACS-20L, ACS Series Common Terminal Block, Common Terminal Block, Terminal Block, ACS-20T, ACS-40L, ACS-40T, ACS-50L, ACS-50T
	<a href="#">Autonics ACS Series Common Terminal Block</a> [pdf] Instruction Manual ACS-20L, ACS Series Common Terminal Block, Common Terminal Block, Terminal Block, ACS-20T, ACS-40L, ACS-40T, ACS-50L, ACS-50T

References

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