

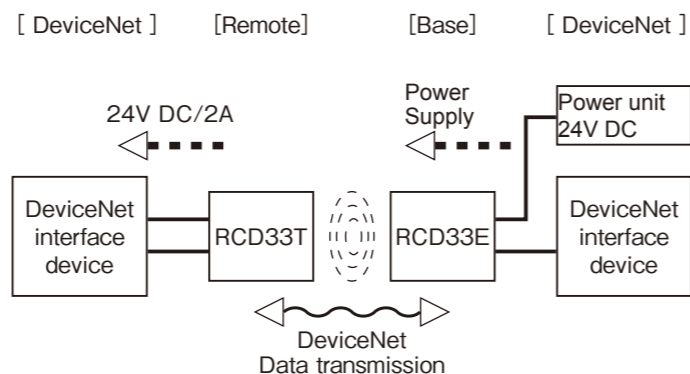
Remote Coupler System DeviceNet version	
Remote	: RCD33T-211-DNC
Base	: RCD33E-211-DNC



Safety Considerations

Please read carefully before using and full attention to Safety Considerations. (See the attached T318501)

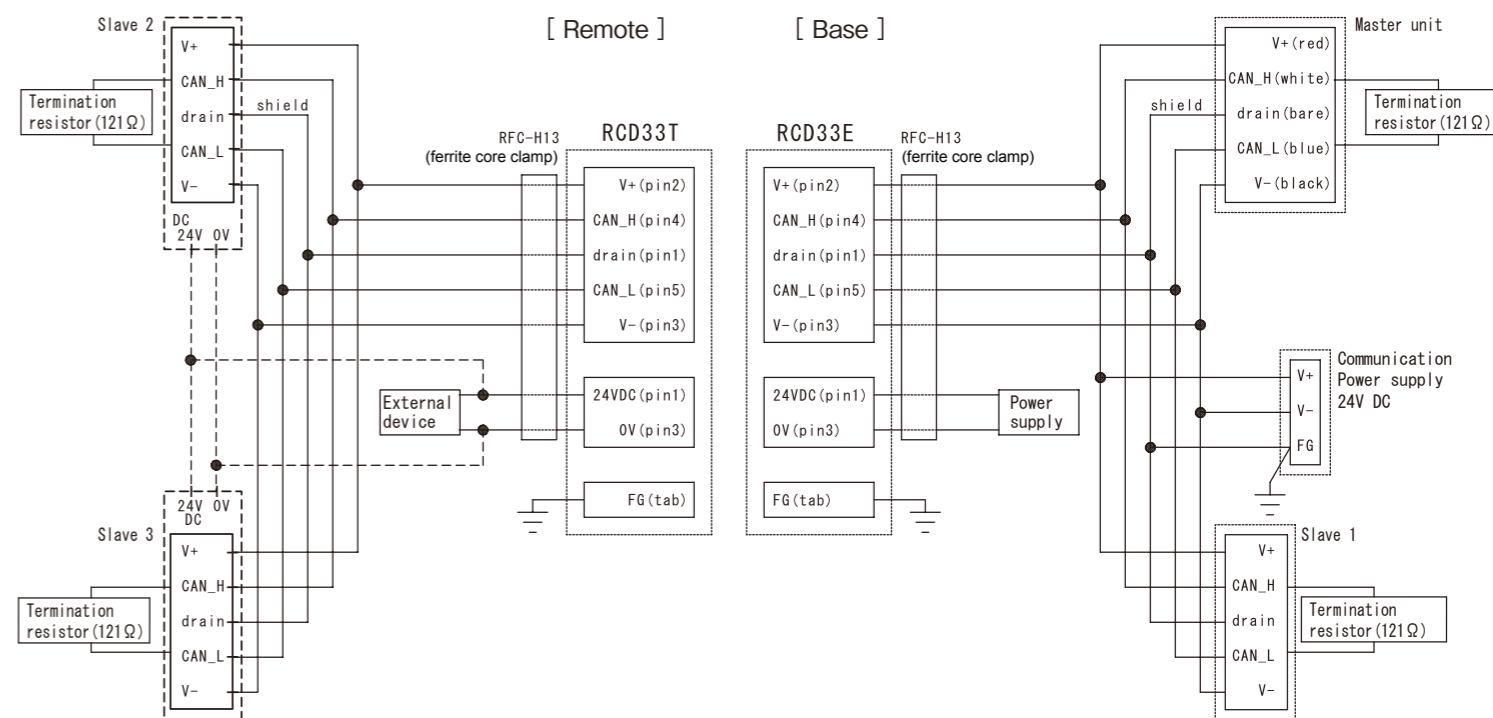
Construction of the System



[Function of each Component]

- Remote** is mounted on a moving side. It transmits DeviceNet data to the Base and supplies power to connected DeviceNet interface device.
- Base** is mounted on the fixed side. It transmits DeviceNet data to the Remote and supplies power to the Remote inductively through air-gap.

Wiring



[Notes]

- Please set the length of the cable in consideration of the total extension of the entire network.
- Connectors and cables are not included in RCD33.
- The termination resistor is not built in RCD33. It is required at each end of the line of RCD33E(Base) side and RCD33T(Remote) side.
- Drain and FG are connected inside of RCD33T(remote part).
- Ground RCD33T with FG tab and fixing screws.
- RFC-H13(a ferrite core clamp) is bundled with each RCD33E and RCD33T. Clamp the signal cable and power cable together by the clamp at a position within 150mm from RCD33.
- Do not face two RCD33E(Base part) when they are powered. There is a possibility of breaking down.
- RCD33 meets the requirements of EMC and indicates the CE-mark on it.
- Please be sure in the withstanding voltage test that a capacitor (630VDC 22nFx4) is built in between the live part and the FG.

LED indication of Base part

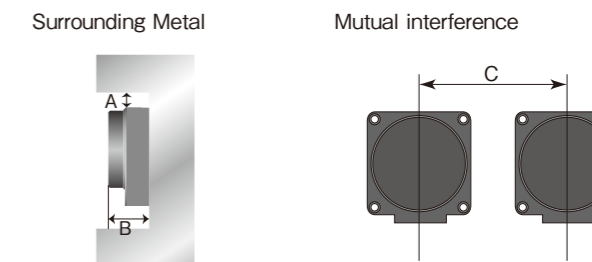
The state of lighting and the situation of LED are as follows.

	LED	interval of blinking	State
POWER LED (Green)	ON	—	The power supply is supplied.
	OFF	—	The power supply is not supplied.
STATUS LED (Yellow)	ON	—	Remote part is in the transmitting area.
	Blink	cycle : 1.5s ON : 0.3s	Remote part is outside of the transmitting area.
	Blink	cycle : 3s ON : 0.1s	Heat is generated in excess because of the overcurrent.*
	OFF	—	V+/V- not connected.

*When heat is generated in excess, it restarts if the supply of the power supply is stopped by Base part, and generation of heat calms down.

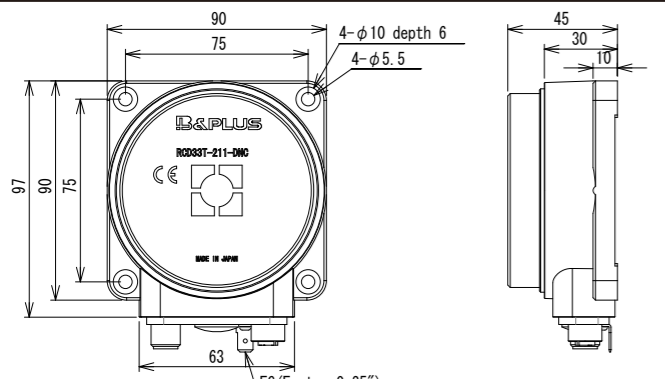
Mutual Interference

In order to avoid influence of surrounding metal and mutual interference, keep the minimum distance as described below.



Type number	A(mm)	B(mm)	C(mm)
RCD33T-211-DNC	50	45	300
RCD33E-211-DNC			

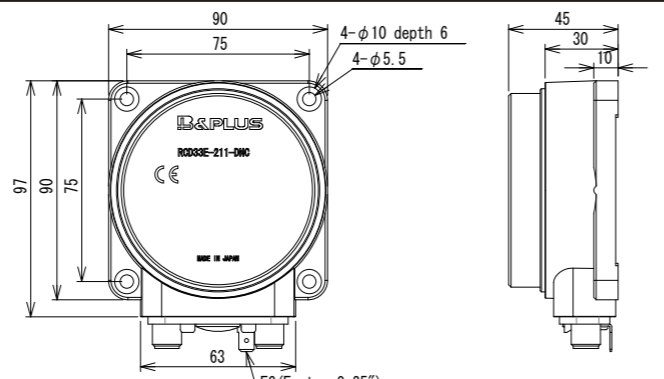
Remote : RCD33T-211-DNC



pin	signal(5pin)	power(4pin)
1	shield	24V DC
2	V +	-
3	V -	0 V
4	CAN H	-
5	CAN L	-

Type number	RCD33T-211-DNC
Drive voltage	24 V DC±1.5 V
Drive current	≤ 2 A
Transmitting distance	3...5 mm
Center off-set	± 4 mm
Drive current	≤ 2 A
Operating temperature	0...+50 °C
Degree of protection	IP 67
Connector Signal/ Power	M12/5 pin Male / M12/4 pin Female
Available connector cable Signal/Power	VA-5DSX5DVG5-BL[5m] / TM-4DBX5HG2-1/3[5m]
Material	Housing Aluminum anodized finish
	Active surface ABS + PBT
Bundled items	Ferrite core clamp (White x1)

Base : RCD33E-211-DNC



pin	signal(5pin)	power(4pin)
1	Shield	24V DC
2	V +	-
3	V -	0 V
4	CAN H	-
5	CAN L	-

Type number	RCD33E-211-DNC
Supply voltage	24 V DC ± 5 % (include ripple)
Current consumption	≤ 3 A
Communication	DeviceNet (CAN-bus) data
Baud rate	125K...500K bps
Transmission delay	≤ 0.5 μsec.
Start-up time	≤ 2 sec*
Operating temperature	0...+50 °C
Connector Signal/ Power	M12/5 pin Male / M12/4 pin Male
Available connector cable Signal/Po	VA-5DSX5DVG5-BL[5m] / TM-4DSX5HG2-1/3[5m]
Degree of protection	IP 67
Material	Housing Aluminum anodized finish
	Active surface ABS + PBT
Bundled items	Ferrite core clamp (White x1)

* This means the time since the timing when a Remote part and a Base part are energized within the transmission area until the timing when the wireless signal transmission starts. It doesn't mean the time until the system as DeviceNet established.

Transmitting Area Diagram (Non-flush mounted)

[Example : Supply voltage at 24V DC]

