

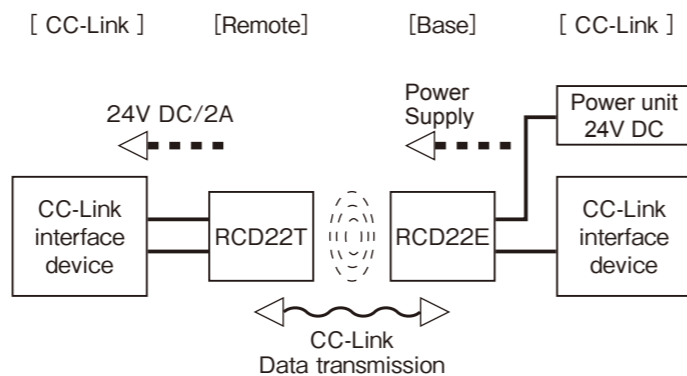
Remote Coupler System CC-Link version	
Remote	: RCD22T-211-CLC
Base	: RCD22E-211-CLC



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]

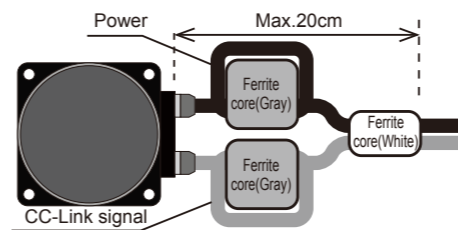
Remote : A unit that is mounted on the moving side. It communicates CC-Link data with a Base and supplies power to connected each CC-Link unit.
It communicates CC-Link data with a Base and supplies power to connected each CC-Link unit.

Base : A unit that is mounted on the fixed side. It communicates CC-Link data with a Remote and supplies power non contact.

*There is no need to set the of channel or number of occupied channels etc. for this unit. It can be used by setting baud rate / built-in terminator by a Dip-switch.

Wiring

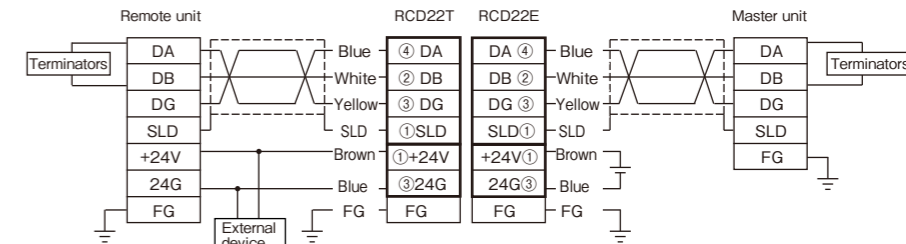
Setting ferrite core clamp



[Notes]

- It is recommended to install RCD22 in metal in order to reduce the influence of self-heating.
- Attach ferrite core clamp to the power and signal line less than 20 cm from a main part according to the above-mentioned Setting ferrite core clamp. Ferrite core clamp (Gray) : Signal line is 2 Turn , Power line is 2 Turn / Ferrite core clamp (White) : Signal line is 1Turn , Power line is 1Turn. In order to attach ferrite core clamps, when you carry out T-junction, the baud-rate should be 625 Kbps or less.
- Connect "Terminators" between DA-DB of the last unit on the CC-Link network.
- When this unit mounted on the both end of CC-Link network, please set the Dip switch SW4 to ON.
- For wiring of external power unit 24V DC to FG, please return to wiring. Connect "+" of power unit +24V DC to a terminal indicated [+24V] , "-" to [24G].
- Please set the cable length to consider the total length of the entire network.
- Connectors and cables are not included in RCD22.
- Ground RCD22T with FG tab and fixing screws.
- Do not face two RCD22E(Base part) when they are powered. There is a possibility of breaking down.
- RCD22 meets the requirements of EMC and indicates the CE-mark on it.
- Please be sure in the withstanding voltage test that a capacitor (50VDC 3.3nF) is built in between the live part and the FG.

Wiring between Master unit and Remote unit



Setting for Switch and LED indication

Baudrate is set with SW1...3, when SW4 is turned on, Terminators can be used.

**Change a Dip-switch after certainly turning off the power.

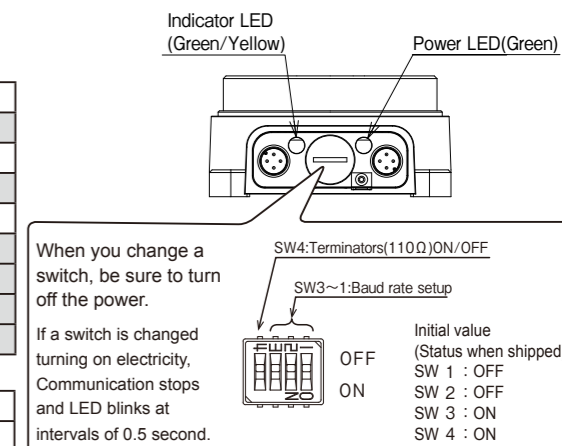
Setting for Switch

Baud rate	SW3	SW2	SW1	LED status	Interval when LED blinks
156kbps	OFF	OFF	OFF	Lighting once every 2 seconds.	ON OFF
625kbps	OFF	OFF	ON	Turning off once every 2 seconds.	ON OFF
2.5Mbps	OFF	ON	OFF	Lighting twice every 2 seconds.	ON OFF
5Mbps	OFF	ON	ON	Turning off twice every 2 seconds.	ON OFF
10Mbps	ON	OFF	OFF	Lighting 3 times every 2 seconds.	ON OFF
---	ON	OFF	ON	LED keeps on when set error	ON OFF
---	ON	ON	OFF	LED keeps on when set error	ON OFF
---	ON	ON	ON	LED keeps on when set error	ON OFF

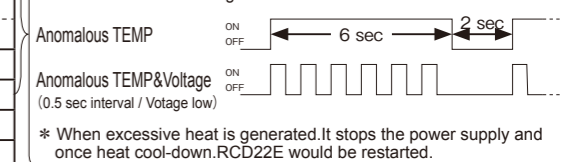
LED indication

LED	Color	LED state	State
Power LED	Green	ON	The power supply* is supplied.
Base & Remote part	Green	OFF	The power supply* is not supplied.
Base part	Green	Blink	Anomalous temperature (turn on : 9s / turn off : 2s)
Remote part	Green	Blink	Supply voltage is low. (turn on : 0.5s / turn off : 0.5s)
Status LED	Yellow	ON	Inzone.
Base & Remote part	Green	ON	Unusual data is received continuously.
		Blink	Interval of blinking varies by the baud rate. (Refer to upper table.)

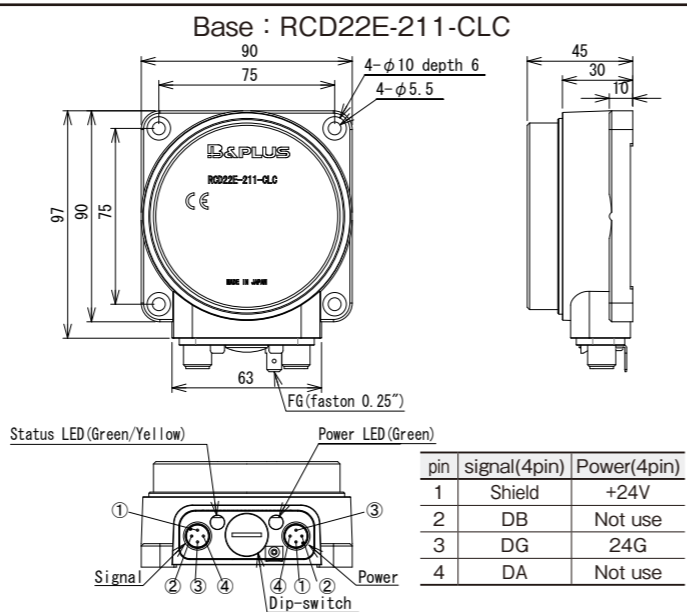
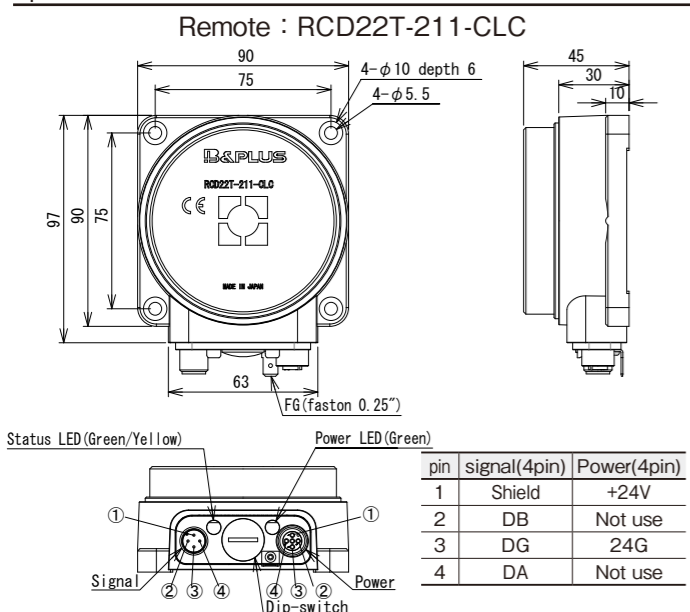
*Indicates External power supply at Base and indicates Base part at Remote.



When temperature and voltage are abnormalities ---



Specification



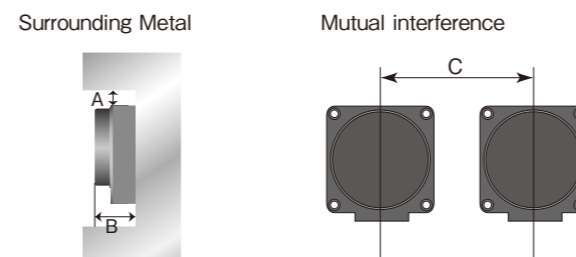
Type number	RCD22T-211-CLC
Drive voltage	24V ± 1.5V DC
Drive current	≤ 2A
Transmitting distance	3...5mm
Center off-set	± 4mm
Operating temperature	0...+50 °C
Degree of protection	IP 67
Connector Signal/ Power	M12/4 pin Male / M12/4 pin Female
Available connector cable Signal/Power	VA-4DSX5CCG4[5m] / TM-4DBX5HG2-1/3[5m]
Material Housing	Aluminum anodized finish
Active surface	ABS + PBT
Bundled items	Ferrite core clamp (Gray x2 / White x1)

Type number	RCD22E-211-CLC
Supply voltage	24 V DC ± 5 % (include ripple)
Current consumption	≤ 3 A
Communication	CC-Link data
Baud rate	156K...10M bps (Changes by Dip switch)
Data delay	max.30bit
Start-up time	≤ 2 sec*
Operating temperature	0...+50 °C
Connector Signal/ PowerSignal	M12/4 pin Male / M12/4 pin Male
Available connector cable Signal/Power	VA-4DSX5CCG4[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 (Gray x2 / 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 CC-Link established.

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)
RCD22T-211-CLC	50	45	300
RCD22E-211-CLC			

Transmitting Area Diagram (Non-flush mounted)

[Example : Supply voltage at 24V DC]

