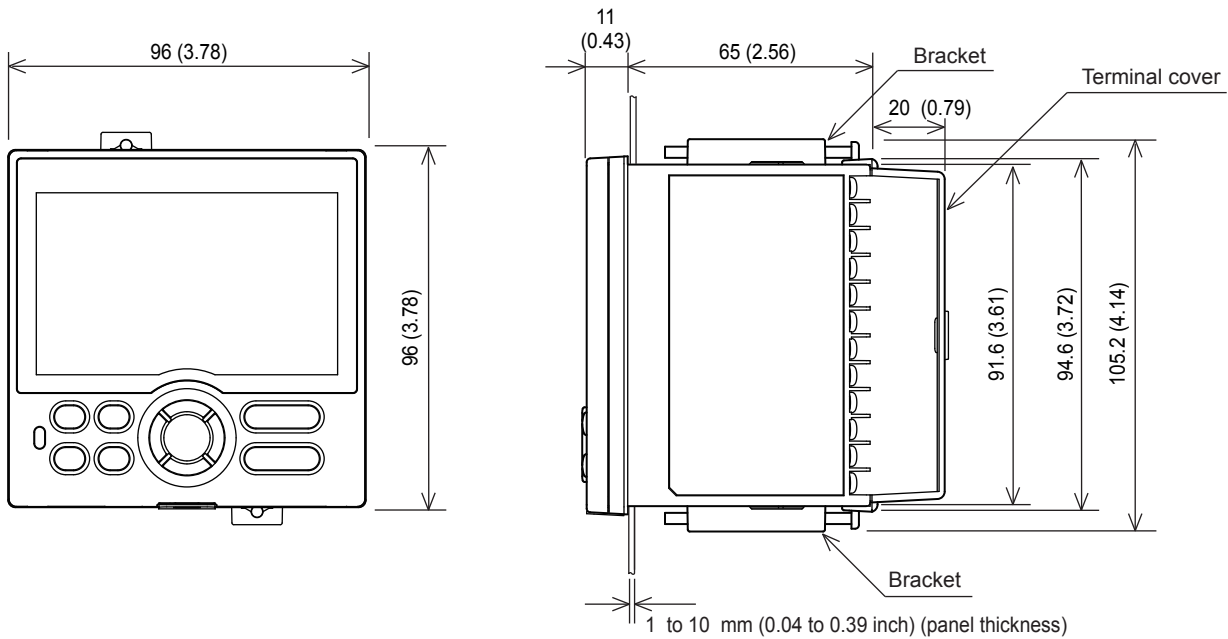


SD 05P02D41-01EN

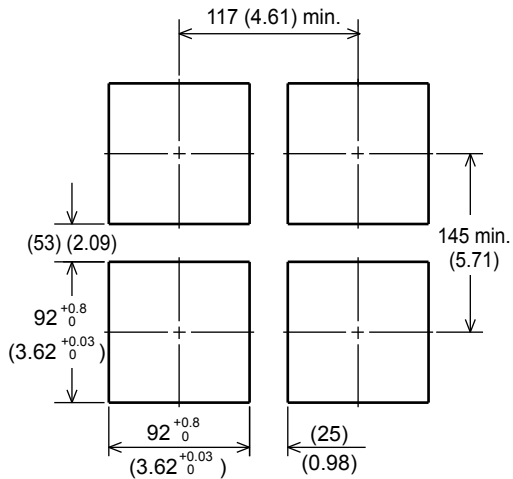
### External Dimensions

Unit: mm  
(approx. inch)



### Panel Cutout Dimensions

#### General mounting



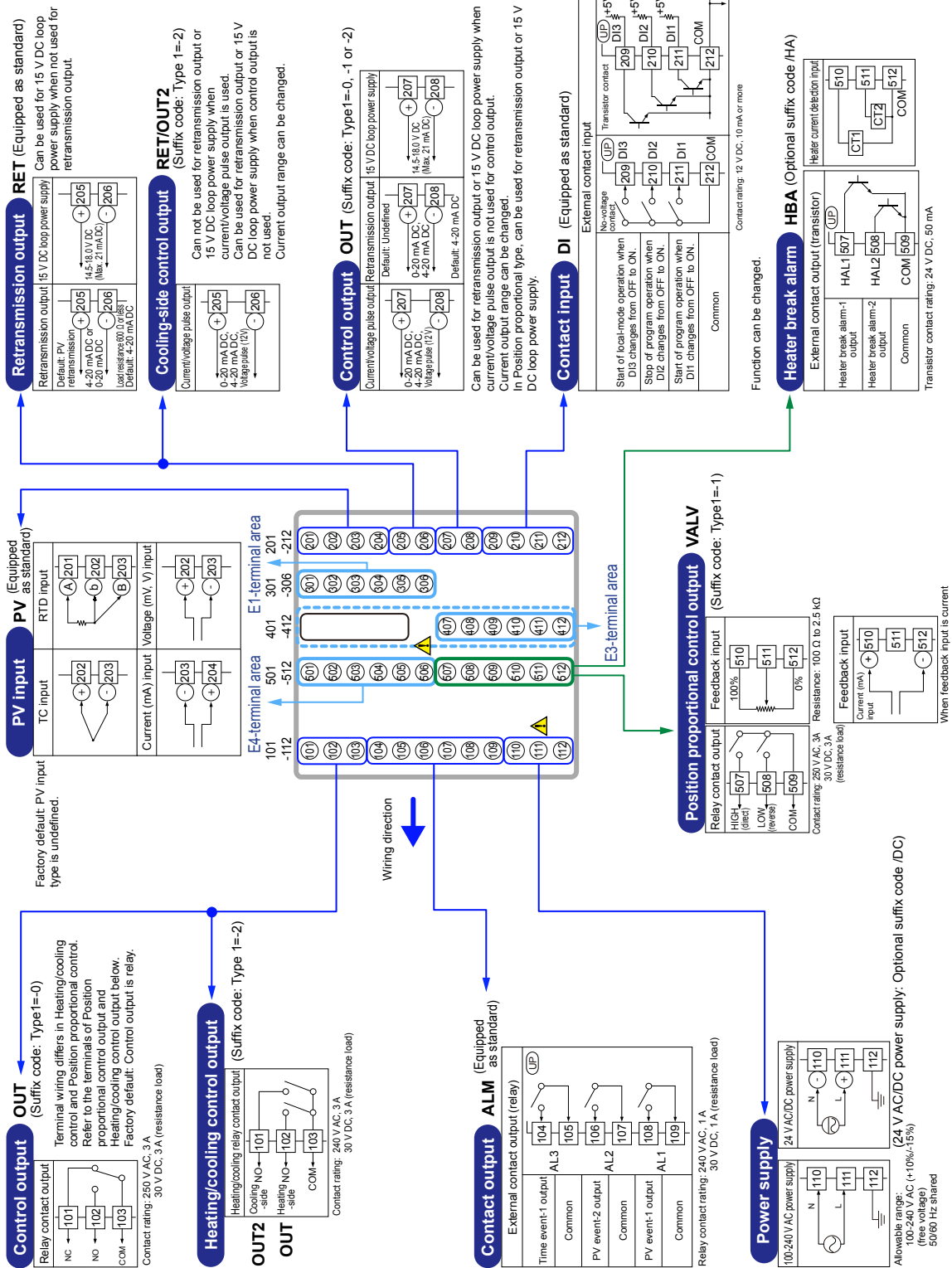
#### Side-by-side close mounting



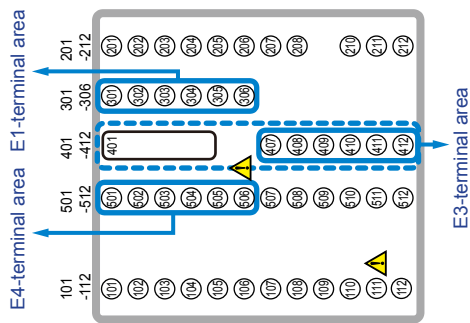
"N" stands for the number of controllers to be installed.  
However, the measured value applies if N ≥ 5.

Normal tolerance: ±(value of JIS B 0401-1998 tolerance grade IT18) / 2

# Terminal Wiring Diagrams

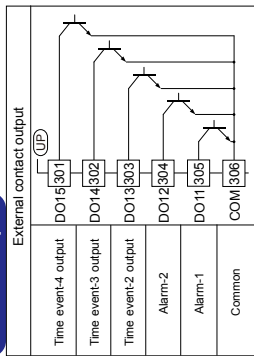


### Terminal Wiring Diagrams (E1-Terminal Area and E4-Terminal Area)



#### 301-306 E1-Terminal Area

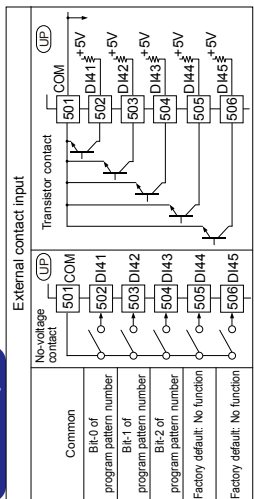
##### Contact output DO (Suffix code: Type 2=1)



Transistor contact rating: 24 V.DC, 50 mA  
Function can be changed.

#### 501-506 E4-Terminal Area

##### Contact input DI (Suffix code: Type 2=1)



Contact rating: 12 V.DC, 10 mA or more  
Function can be assigned to the terminals with no function.

Program patterns can be selected according to the combination of ON and OFF contact inputs.

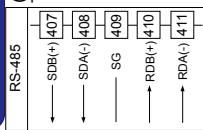
Program pattern no.	1	2	3	4
DI41	ON	OFF	ON	OFF
DI42	OFF	ON	ON	OFF
DI43	OFF	OFF	OFF	ON

# Terminal Wiring Diagrams (E3-Terminal Area)

401-412 E3-Terminal Area

## RS-485 communication

(Suffix code: Type 3=1)

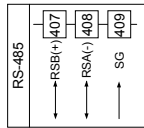


## Ethernet communication (with gateway function)

10BASE-T/100BASE-TX RJ45 connector  
**ETHER**  
 (Suffix code: Type 3=2)



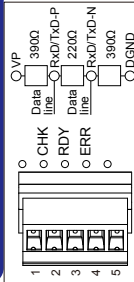
Upper side LED (baud rate)
Color Amber
Lit 100M bps
Unit 10M bps
Lower side LED (link activity)
Color Green
Lit Linked
Blink Active
Unit Link failure



## PROFIBUS-DP communication (with Modbus master)

(Suffix code: Type 3=4)

If the UT is located at the end of a segment for the PROFIBUS-DP communication wiring, terminating resistors are separately needed. These 120 Ω resistors are prepared by users. (90 Ω, 2 pins, 220 Ω, 1 pin., or an active terminator.)



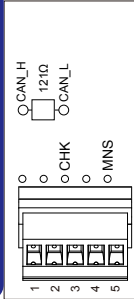
Pin	Signal name	Description
1	V+	+5V bus power
2	RxD/TxD-P	Data signal (positive data receiver/transmit)
3	RxD/TxD-N	Data signal (negative data receiver/transmit)
4	D/GND	Signal ground
5	SHIELD	Shield ground

LED	Lit	Unit
CHK (red)	User profile error	Normal
RDY (green)	Normal	No electricity, or Communication failure
ERR (red)	Not connected or Communication failure (flashing)	Normal

## DeviceNet communication (with Modbus master)

(Suffix code: Type 3=5)

If the UT is located at the end of a segment for the DeviceNet communication wiring, terminating resistors are separately needed. These are to be prepared by users. (12 Ω, 1 pin.)



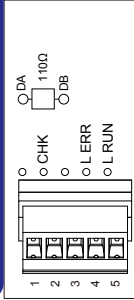
Pin	Signal name	Description
1	V+	DeviceNet power supply 24V
2	CAN_H	RX/TX + signal
3	DRAIN	Shield/drain wire
4	CAN_L	RX/TX - signal
5	V-	DeviceNet power supply common

LED	Lit	Unit
CHK (red)	User profile error	Normal
MNS (green/red)	Normal, communicating successfully (green, lit), Not connected (green, flashing), Critical link failure (red, lit), Connection timeout (red, flashing)	No electricity
ERR (red)	At power on/Communication faulted (greened, flashing)	

## CC-Link communication (with Modbus master)

(Suffix code: Type 3=3)

If the UT is located at the end of a segment for the CC-Link communication wiring, terminating resistors are separately needed. These are to be prepared by users. (110 Ω, 1 pin.)



Pin	Signal name	Description
1	FG	Flame ground
2	SLD	Shield
3	DG	RX/TX signal ground
4	DB	RX/TX - signal
5	DA	RX/TX + signal

LED	Lit	Unit
CHK (red)	User profile error/Address error	Normal
L ERR (red)	Communication failure (CRC error)	Normal
L RUN (green)	Normal	No carrier detected/Communication timeout