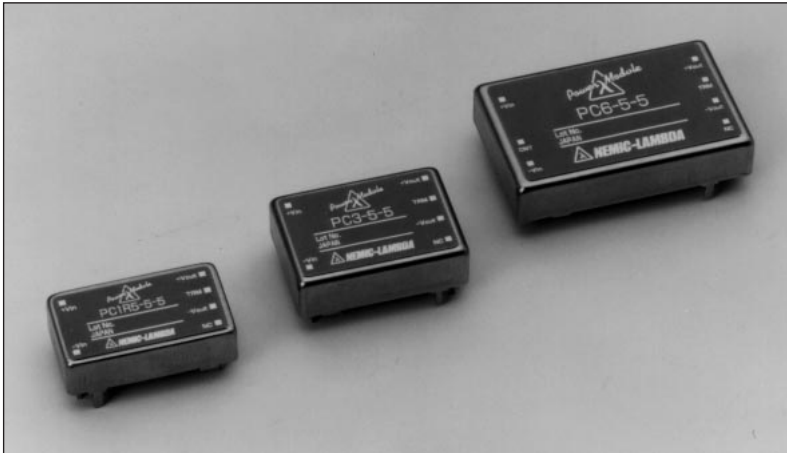


PC-SERIES

Single output DC-DC converter 1.5W ~ 6W

LAMBDA
DENSEI-LAMBDA



Model name

P C 6 - 24 - 5

Series name Output power Input voltage Output voltage

Features

- Input/Output isolation
- 5 dimensions shield metal case
- Over current protection
- Adjustable output voltage
- Remote ON/OFF control (6W type)

PC1R5 (1.5W type) Specifications

Model		PC1R5 -5-3.3	PC1R5 -5-5	PC1R5 -5-12	PC1R5 -12-3.3	PC1R5 -12-5	PC1R5 -12-12	PC1R5 -24-3.3	PC1R5 -24-5	PC1R5 -24-12	PC1R5 -48-3.3	PC1R5 -48-5	PC1R5 -48-12
Input Voltage	Vdc	5VDC (4.5 ~ 9.0V)			12VDC (9 ~ 18V)			24VDC (18 ~ 36V)			48VDC (36 ~ 72V)		
Output Voltage (*1)	Vdc	3.3V±5%	5V±5%	12V±5% (15V±5%)	3.3V±5%	5V±5%	12V±5% (15V±5%)	3.3V±5%	5V±5%	12V±5% (15V±5%)	3.3V±5%	5V±5%	12V±5% (15V±5%)
Output Current	mA	0 ~ 400	0 ~ 300	0 ~ 125 (0 ~ 100)	0 ~ 400	0 ~ 300	0 ~ 125 (0 ~ 100)	0 ~ 400	0 ~ 300	0 ~ 125 (0 ~ 100)	0 ~ 400	0 ~ 300	0 ~ 125 (0 ~ 100)
Output Power (max)	W	1.32	1.5	1.5	1.32	1.5	1.5	1.32	1.5	1.5	1.32	1.5	1.5
Efficiency (typ) (*2)	%	66	69	71 (70)	70	73	75 (73)	70	75	76 (75)	70	73	76 (75)

PC3 (3W type) Specifications

Model		PC3 -5-3.3	PC3 -5-5	PC3 -5-12	PC3 -12-3.3	PC3 -12-5	PC3 -12-12	PC3 -24-3.3	PC3 -24-5	PC3 -24-12	PC3 -48-3.3	PC3 -48-5	PC3 -48-12
Input Voltage	Vdc	5VDC (4.5 ~ 9.0V)			12VDC (9 ~ 18V)			24VDC (18 ~ 36V)			48VDC (36 ~ 72V)		
Output Voltage (*1)	Vdc	3.3V±5%	5V±5%	12V±5% (15V±5%)	3.3V±5%	5V±5%	12V±5% (15V±5%)	3.3V±5%	5V±5%	12V±5% (15V±5%)	3.3V±5%	5V±5%	12V±5% (15V±5%)
Output Current	mA	0 ~ 600	0 ~ 600	0 ~ 250 (0 ~ 200)	0 ~ 600	0 ~ 600	0 ~ 250 (0 ~ 200)	0 ~ 600	0 ~ 600	0 ~ 250 (0 ~ 200)	0 ~ 600	0 ~ 600	0 ~ 250 (0 ~ 200)
Output Power (max)	W	1.98	3.0	3.0	1.98	3.0	3.0	1.98	3.0	3.0	1.98	3.0	3.0
Efficiency (typ) (*2)	%	65	70	72 (72)	70	75	77 (77)	70	75	78 (78)	70	75	79 (79)

PC6 (6W type) Specifications

Model		PC6 -5-3.3	PC6 -5-5	PC6 -5-12	PC6 -12-3.3	PC6 -12-5	PC6 -12-12	PC6 -24-3.3	PC6 -24-5	PC6 -24-12	PC6 -48-3.3	PC6 -48-5	PC6 -48-12
Input Voltage	Vdc	5VDC (4.5 ~ 9.0V)			12VDC (9 ~ 18V)			24VDC (18 ~ 36V)			48VDC (36 ~ 72V)		
Output Voltage (*1)	Vdc	3.3V±5%	5V±5%	12V±5% (15V±5%)	3.3V±5%	5V±5%	12V±5% (15V±5%)	3.3V±5%	5V±5%	12V±5% (15V±5%)	3.3V±5%	5V±5%	12V±5% (15V±5%)
Output Current	mA	0 ~ 1200	0 ~ 1000	0 ~ 500 (0 ~ 400)	0 ~ 1500	0 ~ 1200	0 ~ 500 (0 ~ 400)	0 ~ 1500	0 ~ 1200	0 ~ 500 (0 ~ 400)	0 ~ 1500	0 ~ 1200	0 ~ 500 (0 ~ 400)
Output Power (max)	W	3.96	6.0	6.0	4.95	6.0	6.0	4.95	6.0	6.0	4.95	6.0	6.0
Efficiency (typ) (*2)	%	70	74	78 (78)	73	77	84 (84)	77	82	84 (84)	77	82	85 (85)
Remote ON/OFF control	—	Possible (CNT terminal)											

Common specifications

Withstand Voltage	Input to Output: 500VAC for 1 minute
Cooling	Convection cooling
Operating Temperature	-20 ~ +70°C (-20 ~ +50°C: 100%, +60°C: 70%, +70°C: 40%)
Over Current Protection	Output current limiting, automatic recovery. Avoid to operate overload or dead short for more than 30 seconds.
Input Protection	Built in Fuse on input line

(*1) Measured at the maximum output power with rated input voltage (5VDC, 12VDC, 24VDC, 48VDC)

(*2) At rated input voltage & maximum output power.

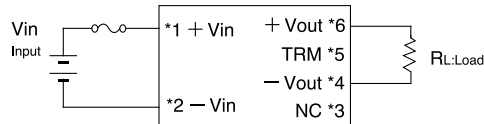
Terminal connection

[PC1R5 (1.5W type) / PC3 (3W type)]

Output voltage can be adjustable by TRM terminal.

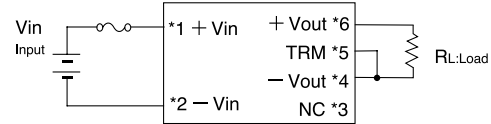
Output power must be within the rating, when increasing the output voltage.

*1 TRM terminal: Open



Type	3.3V type	5V type	12V type
Output voltage	3.3V	5V	12V

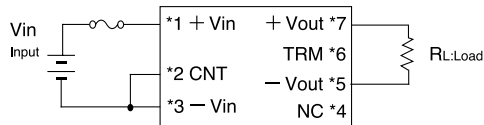
*2 TRM terminal & -Vout terminal: Short



Type	3.3V type	5V type	12V type
Output voltage	3.67V	6V	15V

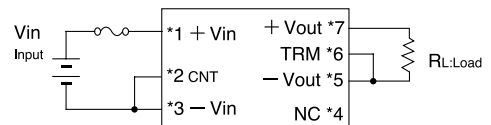
[PC6 (6W type)]

*1 TRM terminal: Open



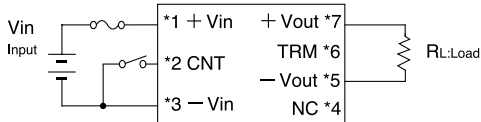
Type	3.3V type	5V type	12V type
Output voltage	3.3V	5V	12V

*2 TRM terminal & -Vout terminal: Short



Type	3.3V type	5V type	12V type
Output voltage	3.67V	6V	15V

*3 CNT terminal: Remote ON/OFF control

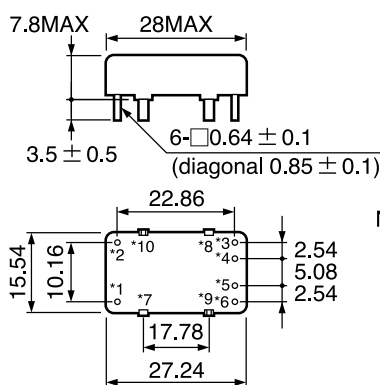


CNT terminal	Output
CNT --Vin: Short or 0 ~ 0.4V	ON
CNT --Vin: Open or 2V ~ Vin	OFF

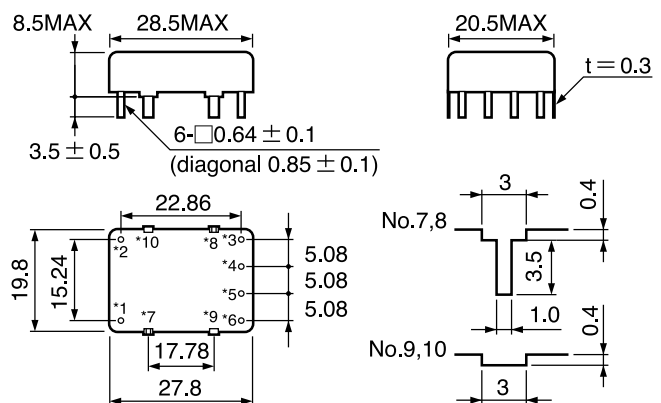
* Output voltage: Refer to TRM terminal connection

Outline drawing

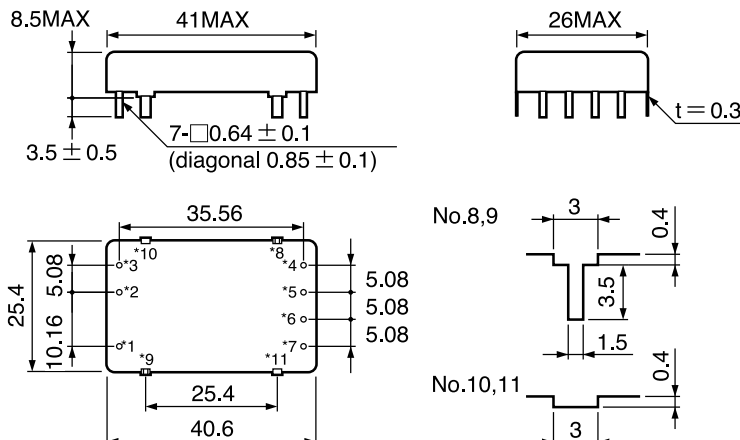
• PC1R5 (1.5W type)



• PC3 (3W type)

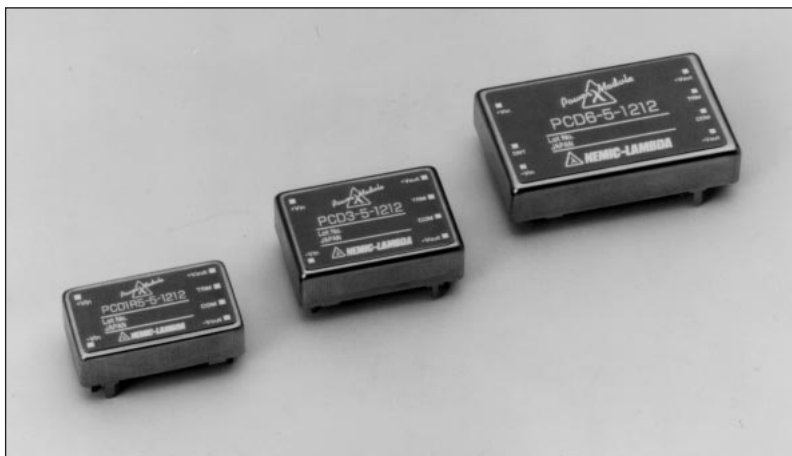


• PC6 (6W type)



(Unit: mm)

Dimension tolerance not designated is ± 0.3 .


Model name
PCD 6 - 24 - 1212

 Series
name

 Output
power

 Input
voltage

 Output
voltage

Features

- Input/Output isolation
- 5 dimensions shield metal case
- Over current protection
- Adjustable output voltage
- Remote ON/OFF control (6W type)

PCD1R5 (1.5W type) Specifications

Model		PCD1R5-5-1212		PCD1R5-12-1212		PCD1R5-24-1212		PCD1R5-48-1212	
Input Voltage	Vdc	5VDC (4.5 ~ 9.0V)		12VDC (9 ~ 18V)		24VDC (18 ~ 36V)		48VDC (36 ~ 72V)	
Output Voltage (*1)	Vdc	±12V±5%	±15V±5%	±12V±5%	±15V±5%	±12V±5%	±15V±5%	±12V±5%	±15V±5%
Output Current	mA	0 ~ ±60	0 ~ ±50	0 ~ ±60	0 ~ ±50	0 ~ ±60	0 ~ ±50	0 ~ ±60	0 ~ ±50
Output Power (max)	W	1.44	1.5	1.44	1.5	1.44	1.5	1.44	1.5
Efficiency (typ) (*2)	%	69	67	73	73	75	75	75	75

PCD3 (3W type) Specifications

Model		PCD3-5-1212		PCD3-12-1212		PCD3-24-1212		PCD3-48-1212	
Input Voltage	Vdc	5VDC (4.5 ~ 9.0V)		12VDC (9 ~ 18V)		24VDC (18 ~ 36V)		48VDC (36 ~ 72V)	
Output Voltage (*1)	Vdc	±12V±5%	±15V±5%	±12V±5%	±15V±5%	±12V±5%	±15V±5%	±12V±5%	±15V±5%
Output Current	mA	0 ~ ±125	0 ~ ±100	0 ~ ±125	0 ~ ±100	0 ~ ±125	0 ~ ±100	0 ~ ±125	0 ~ ±100
Output Power (max)	W	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Efficiency (typ) (*2)	%	72	72	77	77	78	78	78	77

PCD6 (6W type) Specifications

Model		PCD6-5-1212		PCD6-12-1212		PCD6-24-1212		PCD6-48-1212	
Input Voltage	Vdc	5VDC (4.5 ~ 9.0V)		12VDC (9 ~ 18V)		24VDC (18 ~ 36V)		48VDC (36 ~ 72V)	
Output Voltage (*1)	Vdc	±12V±5%	±15V±5%	±12V±5%	±15V±5%	±12V±5%	±15V±5%	±12V±5%	±15V±5%
Output Current	mA	0 ~ ±250	0 ~ ±200	0 ~ ±250	0 ~ ±200	0 ~ ±250	0 ~ ±200	0 ~ ±250	0 ~ ±200
Output Power (max)	W	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Efficiency (typ) (*2)	%	75	75	82	82	84	84	82	82

Common specifications

Withstand Voltage	Input to Output: 500VAC for 1 minute
Cooling	Convection cooling
Operating Temperature	-20 ~ +70°C (-20 ~ +50°C: 100%, +60°C: 70%: 40%)
Over Current Protection	Output current limiting, automatic recovery. Avoid to operate overload or dead short for more than 30 seconds.
Input Protection	Built in fuse on input line

(*1) Output voltage accuracy includes line and load regulation and temperature drift.

(*2) At rated input voltage & maximum output power.

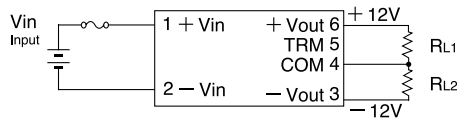
Terminal connection

[PCD1R5 (1.5W type) / PCD3 (3W type)]

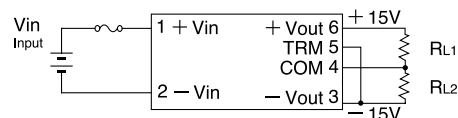
Output voltage can be adjusted by TRM terminals.

Output power must be within the rating, when increasing the output voltage.

***1 TRM terminal: Open**
Output: $\pm 12V$

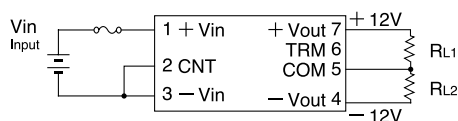


***2 TRM terminal & -Vout terminal: Short**
Output: $\pm 15V$

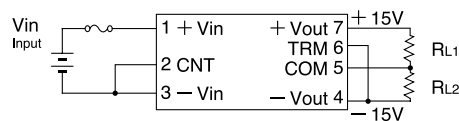


[PCD6 (6W type)]

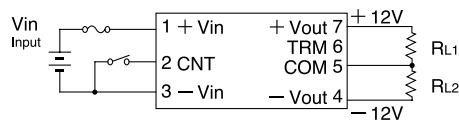
***1 TRM terminal: Open**
Output: $\pm 12V$



***2 TRM terminal & -Vout terminal: Short**
Output: $\pm 15V$



CNT terminal: Remote ON/OFF control

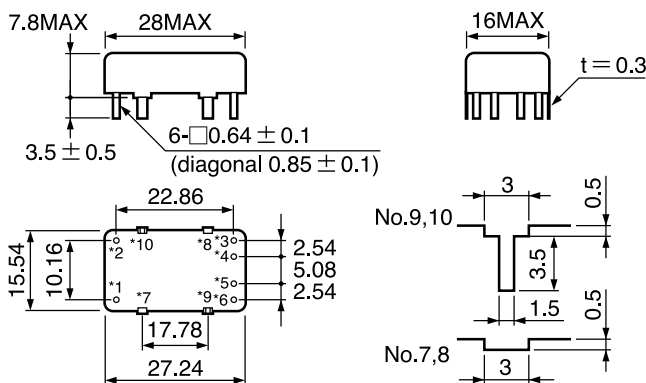


CNT terminal	Output
CNT--Vin: Short or 0 ~ 0.4V	ON
CNT--Vin: Open or 2V ~ Vin	OFF

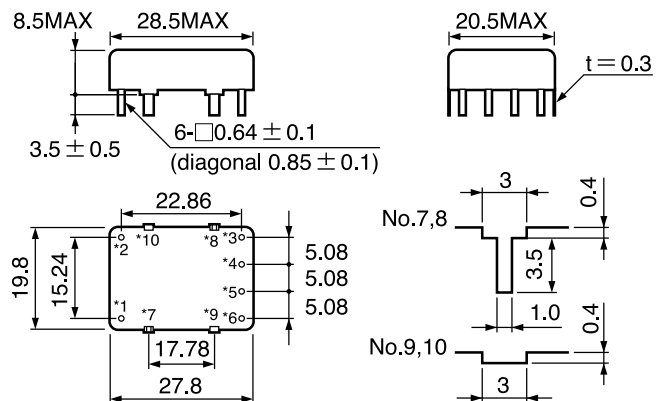
* Output voltage: Refer to TRM terminal connection

Outline drawing

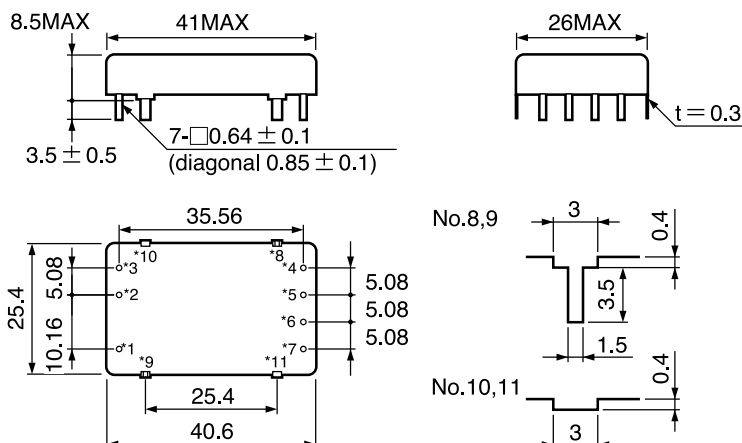
• PCD1R5 (1.5W type)



• PCD3 (3W type)



• PCD6 (6W type)



(Unit: mm)

Dimension tolerance not designated is ± 0.3 .