

Scope

This specification applies to built-in DC stabilized power supply, OZP-170-12/15-***-* and OZP-170-24-***-*.
 The unit (OZP-170-24-*B*-* model only) provides DC output with special battery package connected even when supply mains fails. Also, output voltage, 12V or 15V, of OZP-170-12/15-***-* shall be able to be switched between by setting shorting plug. In addition, all items in this specification shall be provided at normal temperature and humidity with battery package disconnected unless otherwise specified.

Model name coding

Example: OZ P - 170 - 12/15 - J 0 0 - C
 ① ② ③ ④ ⑤ ⑥ ⑦ ⑧




- ① Series name 「OZ」 : OZ series
- ② Peak power 「P」 : Corresponding to Peak power
- ③ Continuous output power 「170」 : 170W
- ④ Output voltage 「12/15」 : 12V/15V Changeover system, 「24」 : 24V
- ⑤ Input/Output connector type 「J」 : Nylon connector, 「T」 : Harmonica terminal block, 「E」 : European terminal block
- ⑥ Backup function 「0」 : W/O backup function, 「B」 : With backup function
- ⑦ Modification 「0」 : Standard, 「1~9」 or 「A~Z」 : Modification symbol
- ⑧ Chassis 「C」 : With Chassis, 「K」 : With Chassis and Cover, 「Blank」 : W/O Chassis and Cover

General specification

Items		Specification			Measurement conditions, etc.	
		OZP-170-12/15		OZP-170-24		
AC Input	Rated voltage	AC100—240V			Worldwide range	
	Voltage range	AC 85 to 264V			Load factor shall be 90 to 100% at AC85 to 95V range.	
	Current	at AC 100V	2.1A typical at 168W /2.6A typical at 210W (forced air cooling)		Figures in () show output power.	
		at AC 200V	1.1A typical at 168W /1.4A typical at 210W (forced air cooling)			
	Rated frequency	50/60 Hz			Frequency range: 47 to 63Hz	
	Inrush current	at AC 100V	17A typical			Power thermistor system Continuous rated output power with cold start at 25°C
		at AC 200V	34A typical			
	Efficiency	at AC 100V	82% typ at 12V setting	83% typ at 15V setting	83% typ	with continuous rated output
at AC 200V		85% typ at 12V setting	86% typ at 15V setting	86% typ		
Power factor	at AC 100V	99% typ			with continuous rated output	
	at AC 200V	90% typ				

Note

出図
 (株)ニプロン・技管

Drawn by		Checked		Approved by		Model OZP-170-12/15-***-* OZP-170-24-***-*	Drawing No. 2880-01-4-520	1/11
----------	---	---------	---	-------------	---	--	------------------------------	------




Nipron Co., Ltd.

Due to the technical improvement, the specifications and functions are subject to change without notice.

Items		Specification		Measurement conditions, etc.
		OZP-170-12/15	OZP-170-24	
Environment	Operating temp.	Natural air cooling	-10 to 60°C (Open frame single body) -10 to 55°C (with Chassis and Cover)	Refer to "Output derating specification."
		Forced air cooling	-10 to 70°C (Open frame single body) -10 to 70°C (with Chassis and Cover)	Refer to "Output derating specification." (Note 2)
	Operating humidity	20 to 90%RH		
	Storage temp. /Humidity	-20 to 75°C/10 to 95%RH		There shall be no condensation.
	Vibration	To endure the vibration acceleration of 2G with vibration frequency of 10 to 55Hz for 10 sweep cycles in each X-Y-Z direction.		To follow JIS-C-60068-2-6 at no operation
	Surface dropping	Lift one bottom edge of the unit 50mm high with the opposite edge placed on the test bench, and let it fall. Repeat 3 times for each of four bottom edges, and no malfunction shall be observed		To follow JIS-C-60068-2-31 at no operation
Insulation	Dielectric strength	(1)AC 3kV for one minute between Input and Output/RC/AC_FAIL/BATT_LOW (2)AC 2kV for one minute between Input and FG (3) DC 500V for one minute in between Output/RC/AC_FAIL/BATT_LOW/FG		Cut-off current: 10mA Cut-off current: 10mA
	Insulation resistance	50MΩ min. in between Input/Output/RC/AC_FAIL/BATT_LOW/FG		with DC500V Megger
	Leakage current	0.25mA max. at AC 100V/0.5mA max. at AC 200V		
Others	Electrostatic discharge	IEC61000-4-2 test level 3 compliant (Contact discharge: ±6kV, 10 times)		To apply to FG, Chassis or Cover. There shall be no malfunction
	Line noise immunity	±2000V (pulse width of 100/1000nS, cycle period of 30 to 100Hz, Normal/Common mode with Positive/Negative polarity for 10 minutes)		To be measured with INS-410. There shall be no output voltage fluctuation in DC component nor malfunction
	Impulse voltage immunity	IEC-61000-4-5 (Installation environment Class 3) compliant; apply five times each of Common mode ±2kV and Normal mode ±1kV		There shall be no malfunction.
	Conducted emission	VCCI, FCC, CISPR22, and EN55022 Class B compliant		at Rated Input and 168W output
	Harmonic current regulations	IEC61000-3-2 (Ed. 2.1) Class D, and EN61000-3-2 (A14) Class D compliant		at Rated Input and continuous rated output
	Safety Standard	UL60950-1, CSA60950-1 (c-UL), EN60950-1, and EN50178 acquired CE marking (Low voltage Directive), DENAN (Ordinance item 2) compliant		
	Cooling system	Natural air cooling		
	Dimensions and Weight	73×40×222 (W×H×D) /500g typical 83.8×51×252 (W×H×D) /800g typical		except Chassis and Cover with Chassis and Cover
Warranty	Three years after delivery: if any defects belong to us, the defective unit shall be repaired or replaced at our cost.		The unit shall be operated at normal temperature and humidity.	
<p>Note</p> <p>Note 2: Output derating at startup at the ambient temperature of 0°C or lower is required. The derating rate is 80% at AC 85V, 86.7% at AC 90V and 100% at AC 100V or higher.</p>				

出図

株式会社ニプロン

Drawn by		Checked		Approved by		Model	Drawing No.
						OZP-170-12/15-****-*	2880-01-4-520
						OZP-170-24-****-*	

Output Specification (The output characteristics at backup operation by a special battery package shall follow the specification of battery package).

Items		Specification		Measurement conditions, etc.	
		OZP-170-12/15	OZP-170-24		
Output Rating	Rated Voltage	12V/15V	24V	Refer to Note below for 12V/15V voltage selection.	
	Continuous rating (natural air cooling)	Current	14A/11.2A	7A	at rated input Refer to "Output derating specification."
		Power	168W	168W	
	Continuous rating (forced air cooling)	Current	17.5A/14A	8.8A	
		Power	210W	211.2W	
Peak rating (10 seconds or less)	Current	22.5A/18A	12.5A	Refer to "Peak output specification." Natural cooling and forced cooling.	
	Power	270W	300W		
Output Characteristics	Factory setting	12V±2%/15V±3%	24V±2%	at rated output of 168W	
	Adjustable voltage range	12V±10% /15V - 5%,+10%	24V - 5%,+20%		
	Static input regulation	48mV max.	94mV max.		
	Static load regulation	100mV max.	150mV max.		
	Temperature regulation	0.02%/°C max.			
	Ripple voltage	0~+65°C	120mVp-p max		Connect 150mm max. lead wire to output connectors, and then connect a 10uF electrolytic capacitor with a 0.1uF ceramic capacitor in parallel to the other ends of the wires to measure by an oscilloscope with 100MHz frequency band.
		-10~0°C	160mVp-p max		
Spike noise voltage	0~+65°C	150mVp-p max			
	-10~0°C	180mVp-p max			
Protection circuit	Overcurrent protection	OCP point	101% min. of peak rated current		
		Method	Hold-down current limiting → Blocking oscillation		
		Recovery	Automatic recovery		
	Overvoltage protection	OVP point	13.8 to 16.2V /17.3~20.3V	30 to 35V	
		Method	Output shutdown		
		Recovery	Reclosing of AC input		

Note:

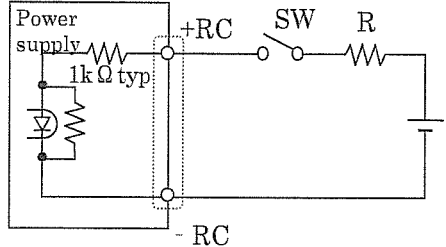
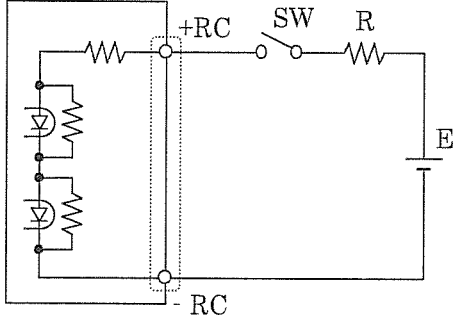
12V/15V voltage selection

For OZP-170-12/15-***-*, remove a **shorting plug (CN9)**, and output voltage goes up to 15V typical (factory setting: ±3%). Also over voltage protection point (OVP point) changes to the range of 17.3 up to 20.3V at the same time. Output voltage at factory setting is 12V. Make sure to shut down the output before setting to 15V.

出図




(株)ニプロン・技管

Drawn by		Checked		Approved by		Model	Drawing No.
						OZP-170-12/15-***-*	2880-01-4-520
						OZP-170-24-***-*	
							3/11

Signal Input/Output specification															
Items	Specification		Signal Input/Output circuit diagram												
	OZP-170-12/15	OZP-170-24													
Output ON/OFF control signal (RC signal)	<p>Operation mode</p> <table border="1"> <tr> <td>between +RC and -RC</td> <td>Output</td> </tr> <tr> <td>SW ON(4.5V 以上)</td> <td>ON</td> </tr> <tr> <td>SW OFF(0.8V 以下)</td> <td>OFF</td> </tr> </table> <p>※With special battery package connected to "OZP-120-24-*B*-*," output also shuts down when SW OFF becomes in effect during backup operation due to AC failure provided that shorting plug CN5 is unplugged.</p> <p>External power supply and Load-limiting resistor</p> <table border="1"> <tr> <td>External power supply : E</td> <td>Load-limiting resistor: R</td> </tr> <tr> <td>4.5 to 12.5Vdc</td> <td>Not required</td> </tr> <tr> <td>12.5 to 30Vdc</td> <td>1.5kΩ</td> </tr> </table> <p>Shorting Plug With shorting plug (CN2) connected, Output starts up when AC input is applied regardless of RC signal. To control Start/Stop of output by RC signal, uncap shorting plug of CN2.</p> <p>Note: Shorting plug (CN2) and radiating fin next to it are primary circuit components. Make sure to operate the plug after the AC input is turned off.</p> <p>In the case that the shorting plug is connected, and special battery package is connected to 「OZP-170-24-*B*-*」 for backup operation, backup operation continues after power failure regardless of RC signal. To stop power failure backup operation by RC signal, uncap the shorting plug of CN5.</p>		between +RC and -RC	Output	SW ON(4.5V 以上)	ON	SW OFF(0.8V 以下)	OFF	External power supply : E	Load-limiting resistor: R	4.5 to 12.5Vdc	Not required	12.5 to 30Vdc	1.5kΩ	<p>※Circuit diagram except "OZP-170-24-*B*-*"</p>  <p>※"OZP-170-24-*B*-*" circuit diagram</p> 
	between +RC and -RC	Output													
SW ON(4.5V 以上)	ON														
SW OFF(0.8V 以下)	OFF														
External power supply : E	Load-limiting resistor: R														
4.5 to 12.5Vdc	Not required														
12.5 to 30Vdc	1.5kΩ														
Input signal															

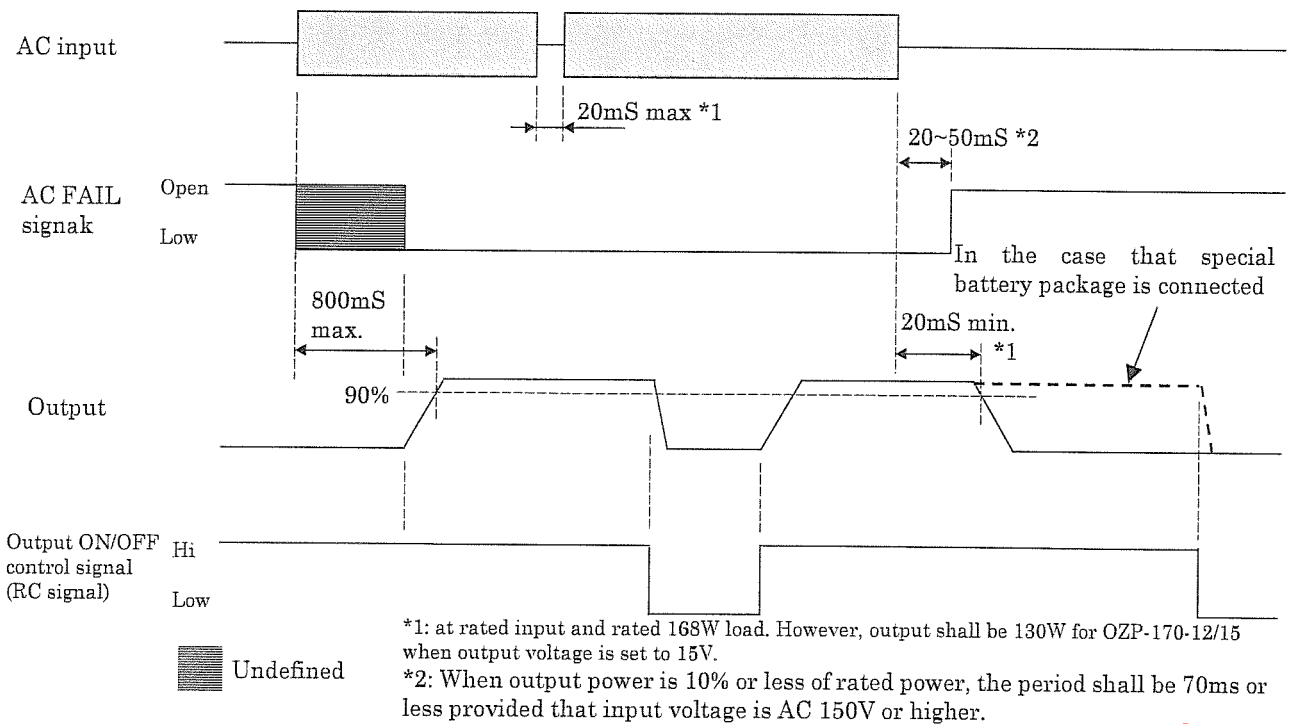
Note

出図
(株)ニプロン・技管

Drawn by 	Checked 	Approved by 	Model OZP-170-12/15-***-* OZP-170-24-***-*	Drawing No. 2880-01-4-520	4/11
---	--	--	--	------------------------------	------

Items	Specification		Signal Input/Output circuit diagram
	OZP-170-12/15	OZP-170-24	
Output signal	Blackout detection signal (AC_FAIL)	To go "OPEN" when AC input goes down and power failure is detected. Detection voltage: AC 80V typical Detection delay time: 20 to 50ms after blackout.	
	Battery voltage low signal (BATT_LOW) * Only for "OZP-170-24-*B*-*"	To be output through insulated photo-coupler upon receipt of battery voltage-low notice signal from the battery package. This signal goes "OPEN" when the battery package is not connected. Details shall depend on individual battery package specification to be connected.	

● Sequence timing diagram



出図

Note

(株)ニプロン・技管

Drawn by		Checked		Approved by		Model	Drawing No.
						OZP-170-12/15-***-* OZP-170-24-***-*	2880-01-4-520
							5/11

● **Peak output current specification**

Peak output current shall meet the specification below.

- Duty ratio of peak current shall be 35% or less. (30% max. for OZP-170-24)
- Energized period of peak current shall be 10 seconds or less.
- In the case that the ambient temperature is 50°C or higher with natural air cooling, the energized period of peak current shall be 5 seconds or less.
- The value resulting from the formula below shall not exceed the continuous rated current, I_o, after derating specified in “Output derating” item.

$$\sqrt{((I_p^2 \times D) + (I_m^2 \times (1-D)))} \leq I_o$$

I_p = Peak current value

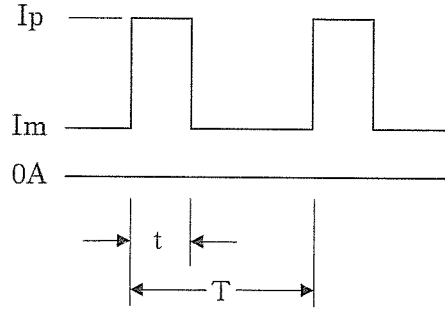
I_m = Min. current value

D = Duty ratio, t/T

t = Pulse width of peak current

T = Cycle

I_o = Continuous rated current specified in “Output derating” item.



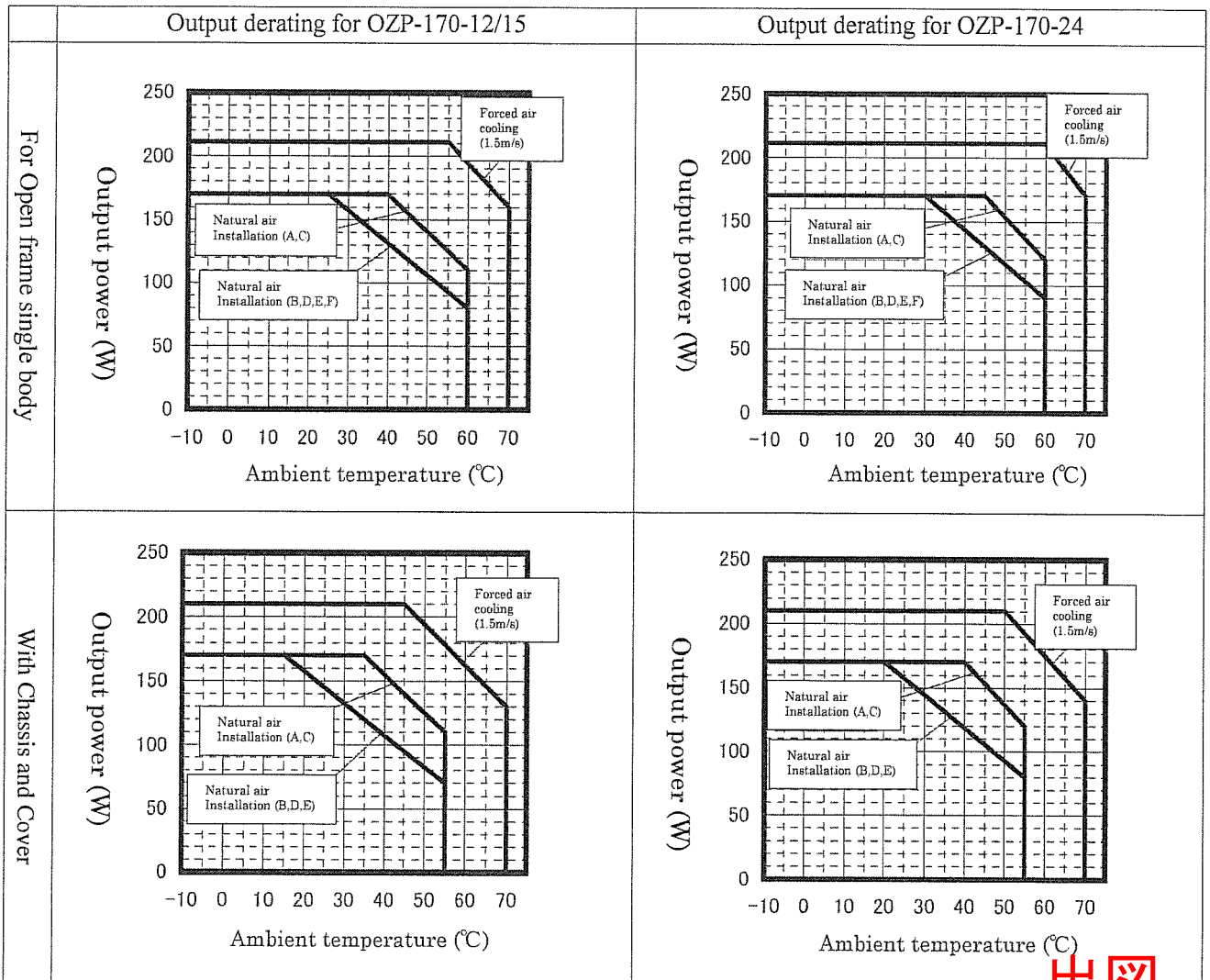
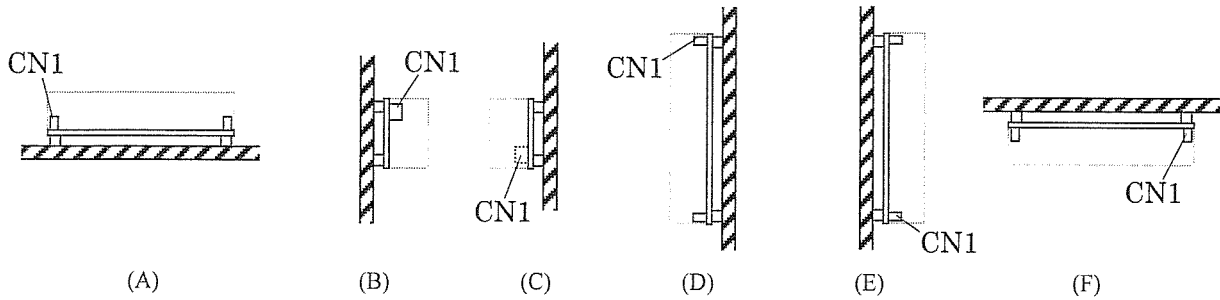
Note

出図
(株)ニプロン・技管

Drawn by		Checked		Approved by		Model OZP-170-12/15-***-* OZP-170-24-***-*	Drawing No. 2880-01-4-520	6/11
----------	--	---------	--	-------------	--	--	------------------------------	------

● Output derating based on ambient temperature, installation direction and cooling condition

Follow the derating diagram below for output according to the ambient temperature and installation direction.
 In addition, for the unit with chassis and cover, input voltage shall be 90V or higher and the direction shown in figure (F) shall not be applied. Also, forced air cooling condition in the diagram shall be provided that the air blow of 1.5m/s is applied from any direction other than solder side of PWB.



出図

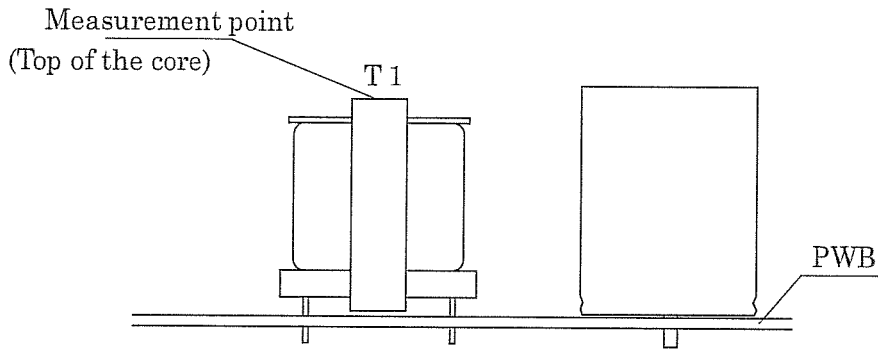
Note

(株)ニプロン・技管

Drawn by		Checked		Approved by		Model	Drawing No.
						OZP-170-12/15-****-*	2880-01-4-520
						OZP-170-24-****-*	7/11

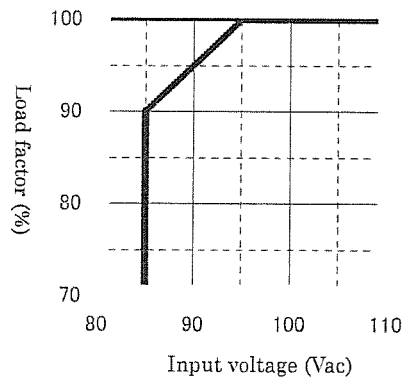
Guideline for forced air cooling

Set the core surface temperature of the transformer (T1) to 80°C or lower.



● Output derating vs. Input voltage

When input voltage is AC95V or lower, follow the derating diagram below to reduce the continuous rated current and power.



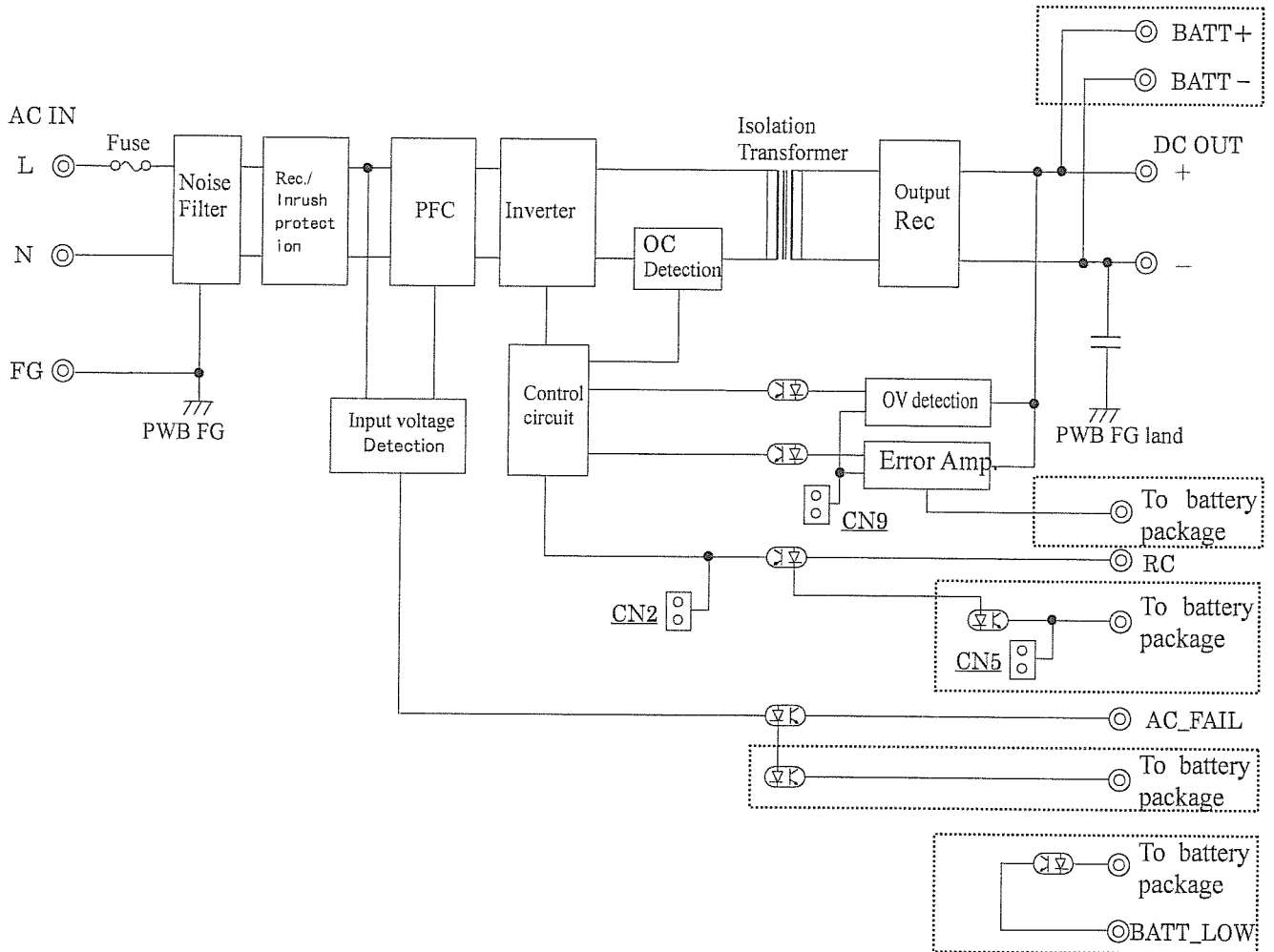
Note

出図
(株)ニプロン・技管

Drawn by	石橋	Checked	()	Approved by	柴	Model 0ZP-170-12/15-***-* 0ZP-170-24-***-*	Drawing No. 2880-01-4-520
							8/11

● **Circuit block diagram**

(is applied to OZP-170-24-*B*-* model only)



Note

出図
(株)ニプロン・技管

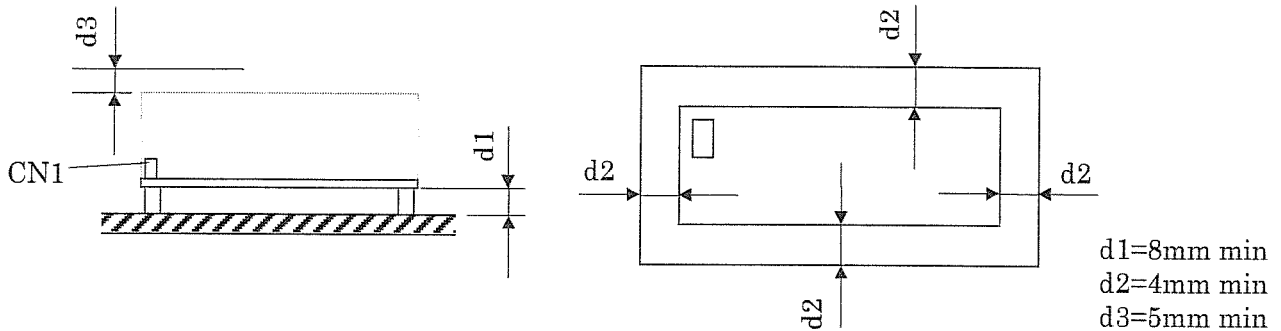
Drawn by	石橋	Checked	Approved by	茶	Model OZP-170-12/15-***-* OZP-170-24-***-*	Drawing No. 2880-01-4-520	9/11
----------	----	---------	-------------	---	--	------------------------------	------

Nipron Co., Ltd.

Due to the technical improvement, the specifications and functions are subject to change without notice.

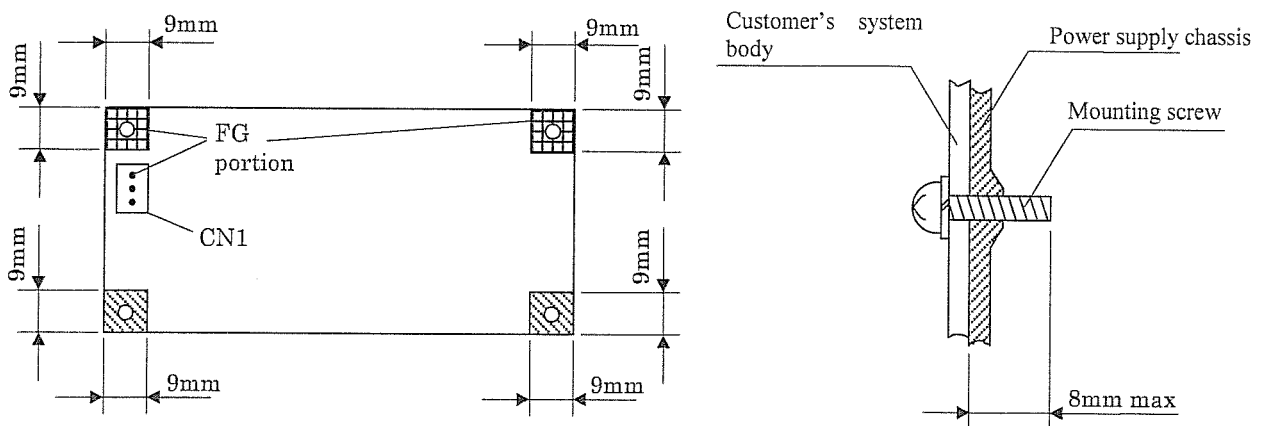
● **Power supply installation**

- To meet the safety standard for Insulation and dielectric withstand, install the power supply to keep the dimensions, d1, d2, and d3, shown in the drawings below.
- Install the power supply so that natural air convection and air ventilation is expected to keep the temperature rise around the power supply low.



● **Mounting screws and grounding of power supply**



- Fix all four screws firmly at power supply mounting holes.
- Use 3mm diameter screws for mounting power supply.
- In mounting, do not use any metal parts that exceed the hatched area shown below.
- In mounting the unit with Chassis and Cover, do not use any screws that exceed the area shown below.
- Make sure to connect FG terminal of CN1 or FG portion of PWB to customer's safety grounding. Also, make sure to connect FG terminal of CN1 to the safety ground of the customer's system in the case of safety standard application.
- Be recommended to connect the FG portion of solder face of PWB to customer's system body with metal parts such as metal spacers to reduce noise.



出図

(株)ニプロン・技管

Note




Drawn by		Checked		Model OZP-170-12/15-***-* OZP-170-24-***-*	Drawing No. 2880-01-4-520	10/11
----------	---	---------	---	--	------------------------------	-------

Precautions before use

1. Grounding - ⚠ Warning
 This unit is designed and produced to meet Class 1 equipment. Make sure to connect the grounding terminal of the unit to grounding in a proper way for safety.
2. Electric shock - ⚠ Warning
 This unit is designed and produced as built-in equipment and has high-voltage part inside. Make sure to securely install in the equipment in a proper way to prevent electric shock. Also, shorting plug (CN2) for RC signal setting and radiating fin next to it are primary circuit components. When the plug is handled, make sure to turn off AC input before the handling of the plug.
3. PWB handling - ⚠ Caution
 In handling, use the edge of the PWB so as not to touch the component sides. Lift the PWB from the equipment with filter pieces in installation. Besides, handle the PWB with care to prevent twisting or bending of the PC board as it has SMT components on it.
4. Output short circuit - ⚠ Caution
 Prevent shorting outputs. When output is shorted, capacitors inside the power supply rapidly discharge leading to fire and/or spark resulting in serious accident. It also shortens the lifetime of the power supply.
5. Inrush current control circuit - ⚠ Caution
 To prevent inrush current into rectifying capacitors when AC input is turned on, a power thermistor is used. When AC input is turned on before the temperature of the thermistor goes low after turning off, huge inrush current may occur. Make sure to keep 60-second period at least before reclosing of AC input.
6. Output energy - ⚠ Caution
 The output energy of this unit is 240VA or more, and regarded as dangerous. Any operators must not touch the unit. Besides, apply necessary measures to prevent service personnel or service tools to touch accidentally the equipment with this unit installed. Make sure that the output voltage of this unit goes down to the safe level before servicing after the input voltage is turned off.

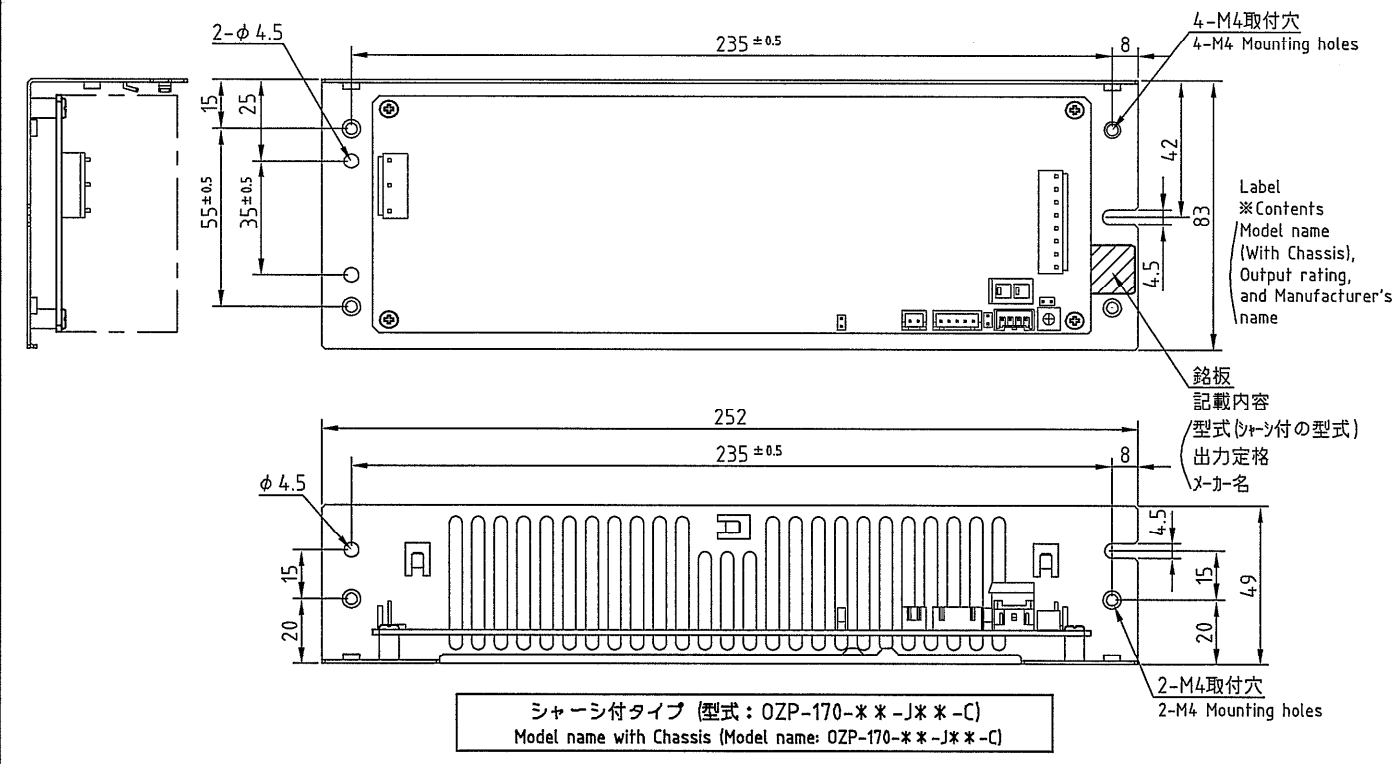
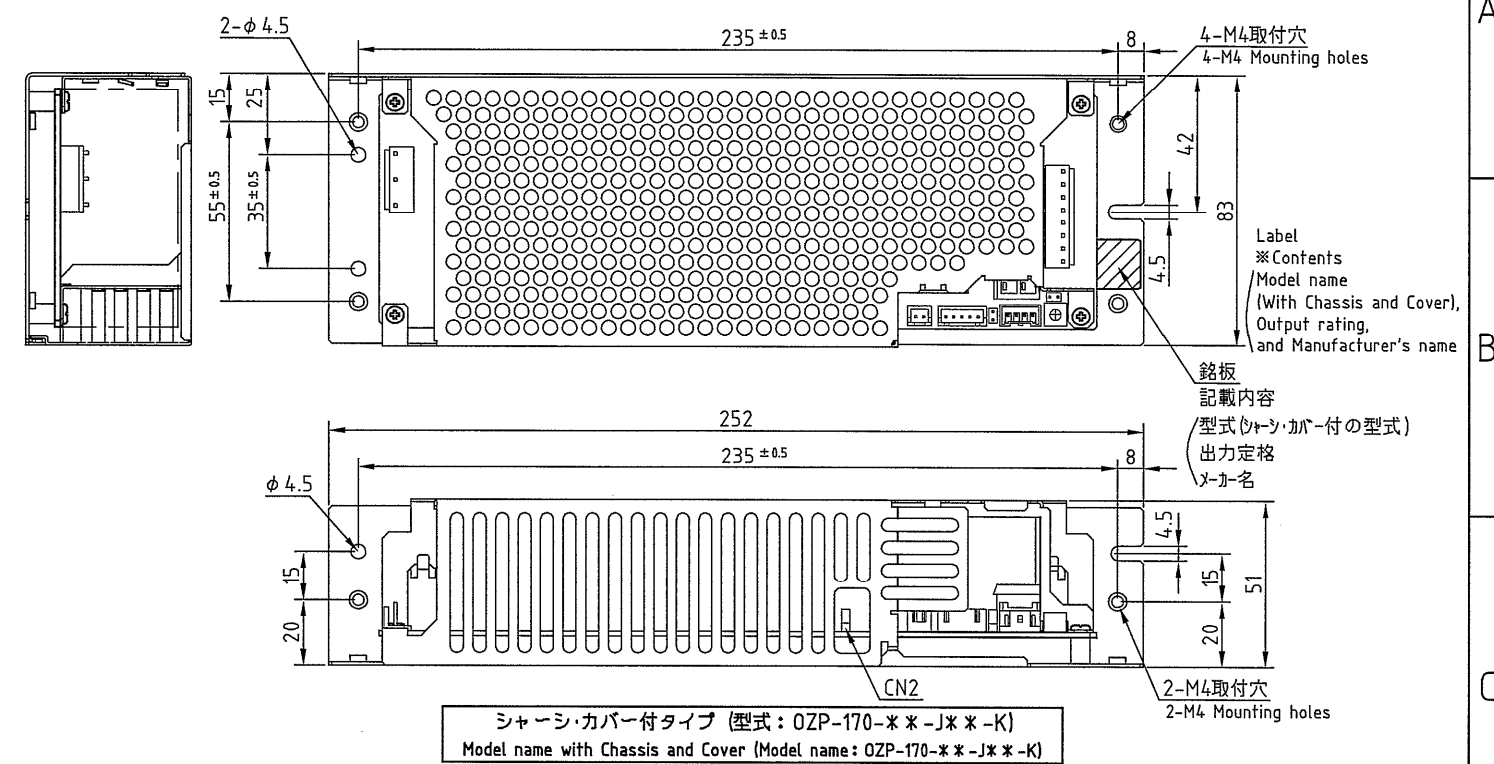
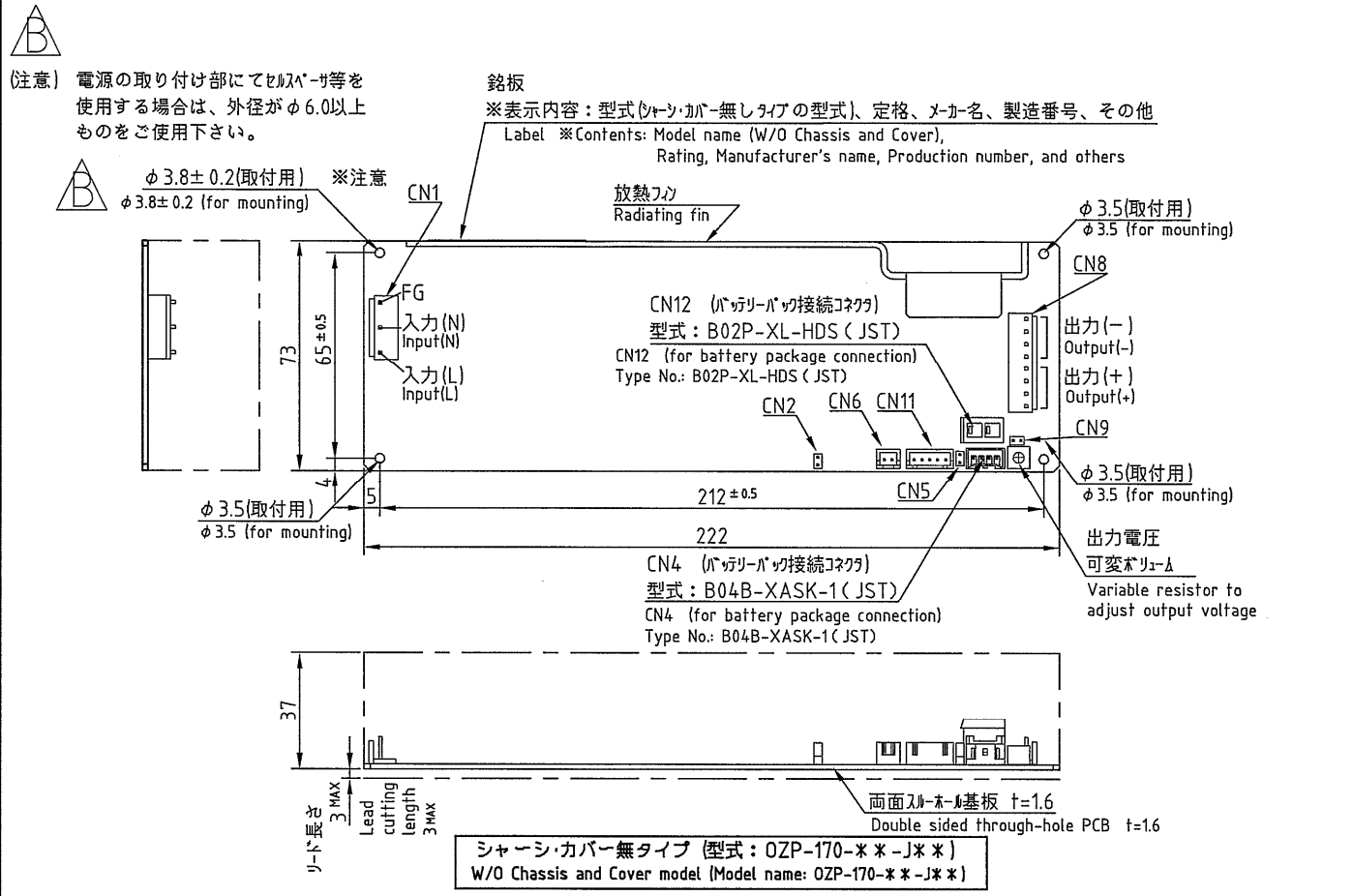
出図

(株)ニプロン・技管

Drawn by		Checked		Approved by		Model OZP-170-12/15-***-* OZP-170-24-***-*	Drawing No. 2880-01-4-520	11/11
----------	---	---------	---	-------------	---	--	------------------------------	-------

Nipron Co., Ltd.

Due to the technical improvement, the specifications and functions are subject to change without notice.



※コネクタピンアサイン ※Connector pinout assignment

CN1 (Input)			CN8 (Output)			CN6 (ON/OFF Control)			CN11 (Output signal)		
PIN No.	FUNCTION	CONNECTOR TYPE	PIN No.	FUNCTION	CONNECTOR TYPE	PIN No.	FUNCTION	CONNECTOR TYPE	PIN No.	FUNCTION	CONNECTOR TYPE
1	AC(L)	B3P5-VH (JST)	1~4	-DC	B8P-VH (JST)	1	+RC	B2B-XH (JST)	1	+BATT_LOW	B5B-XH (JST)
2			5~8	+DC		2	-RC		2	-BATT_LOW	
3	AC(N)					3	+AC_FAIL	3			
4						4	-AC_FAIL	4			
5	FG					5	-AC_FAIL	5			

※CN1 適合ハウジング: VHR-5N (JST)
適合ターミナル: リー#SVH-21T-P1.1 (JST) / 穴#BVH-21T-P1.1 (JST)
※CN1 適用ハウジング: VHR-5N (JST)
適用ターミナル: リー#SVH-21T-P1.1 (JST) / 穴#BVH-21T-P1.1 (JST)
※CN1 適用ハウジング: VHR-5N (JST)
適用ターミナル: リー#SVH-21T-P1.1 (JST) / 穴#BVH-21T-P1.1 (JST)

※CN8 適合ハウジング: VHR-8N (JST)
適合ターミナル: リー#SVH-21T-P1.1 (JST) / 穴#BVH-21T-P1.1 (JST)
※CN8 適用ハウジング: VHR-8N (JST)
適用ターミナル: リー#SVH-21T-P1.1 (JST) / 穴#BVH-21T-P1.1 (JST)

※CN6 適合ハウジング: XHP-2 (JST)
適合ターミナル: リー#SXH-001T-P0.6 (JST) / 穴#BXH-001T-P0.6 (JST)
※CN6 適用ハウジング: XHP-2 (JST)
適用ターミナル: リー#SXH-001T-P0.6 (JST) / 穴#BXH-001T-P0.6 (JST)

※CN11 適合ハウジング: XHP-5 (JST)
適合ターミナル: リー#SXH-001T-P0.6 (JST) / 穴#BXH-001T-P0.6 (JST)
※CN11 適用ハウジング: XHP-5 (JST)
適用ターミナル: リー#SXH-001T-P0.6 (JST) / 穴#BXH-001T-P0.6 (JST)

※各種コネクタの装備について ※Details of connectors attached

コネクタ名 Connector name	機能 Function	製品型式 Model name		
		OZP-170 -12/15-J0*-*	OZP-170 -24-J0*-*	OZP-170 -24-JB*-*
CN4	バッテリーバック制御用信号 Battery package control signal	-	N/A	有 Yes
CN5	バックアップ動作モード設定 Backup operation mode setting	-	N/A	有 Yes
CN9	12V/15V出力電圧切り換え 12V/15V output voltage switching	有 Yes	-	N/A
CN12	バッテリーバック入出力 Battery package Input/Output	-	N/A	有 Yes

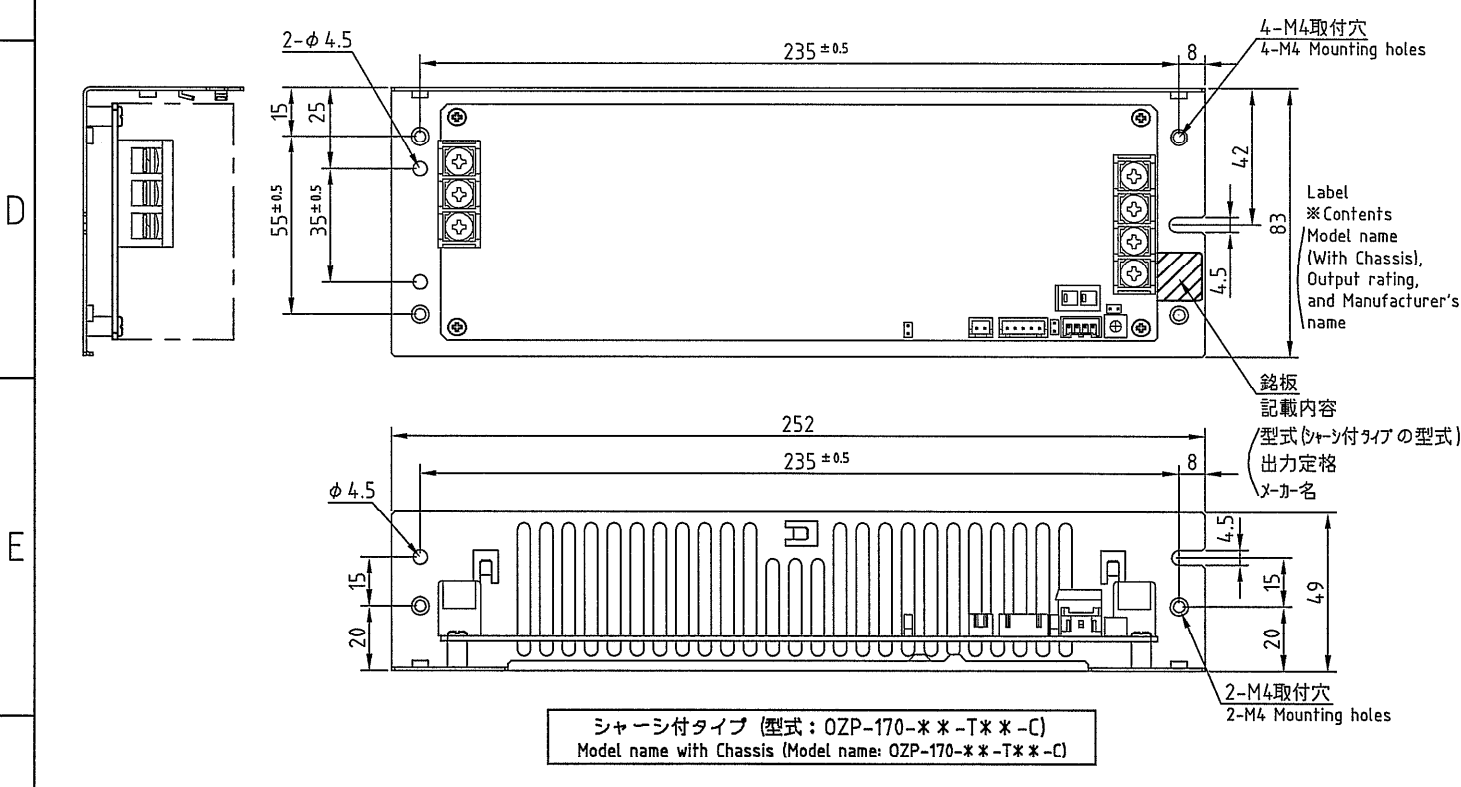
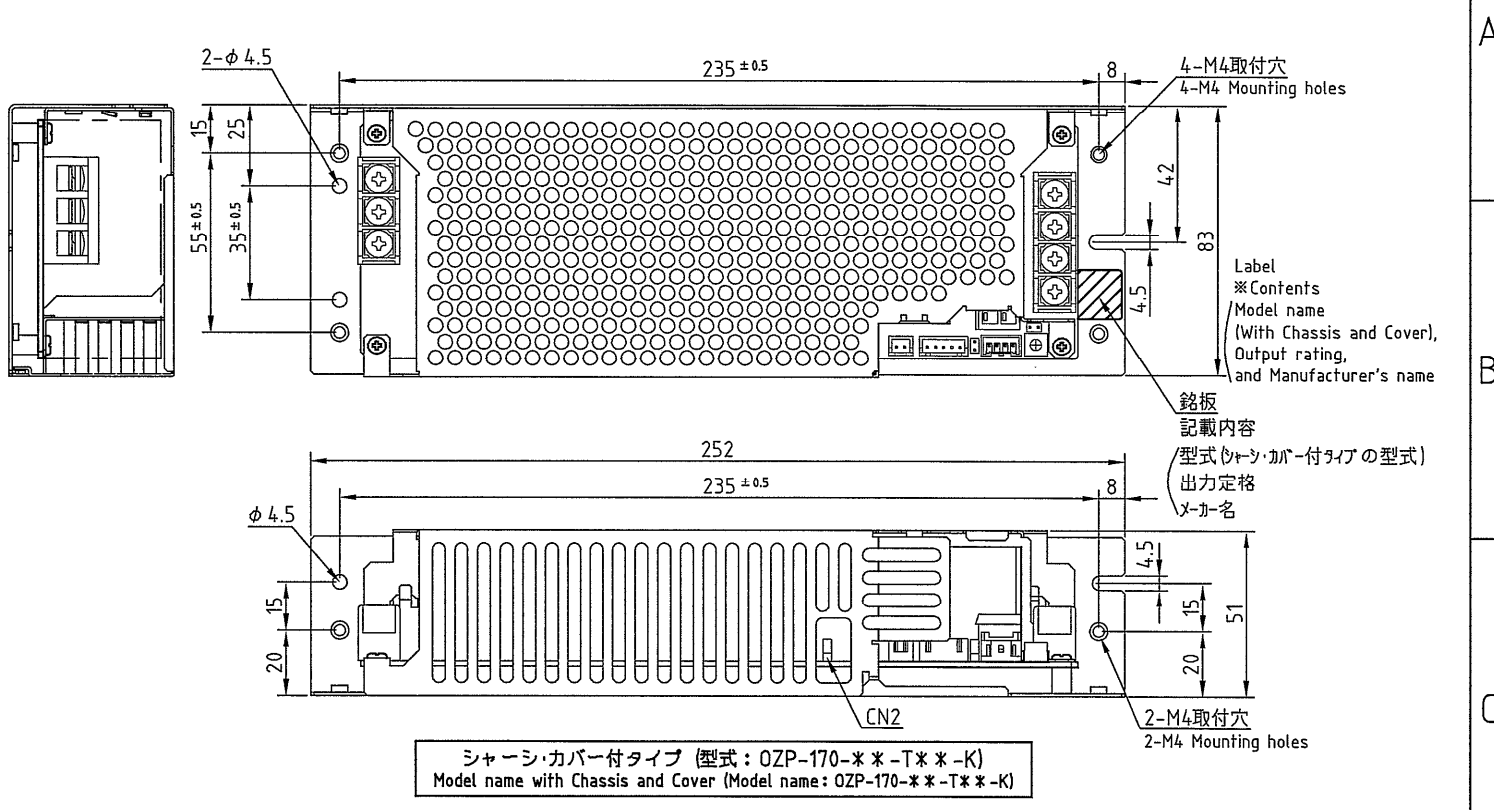
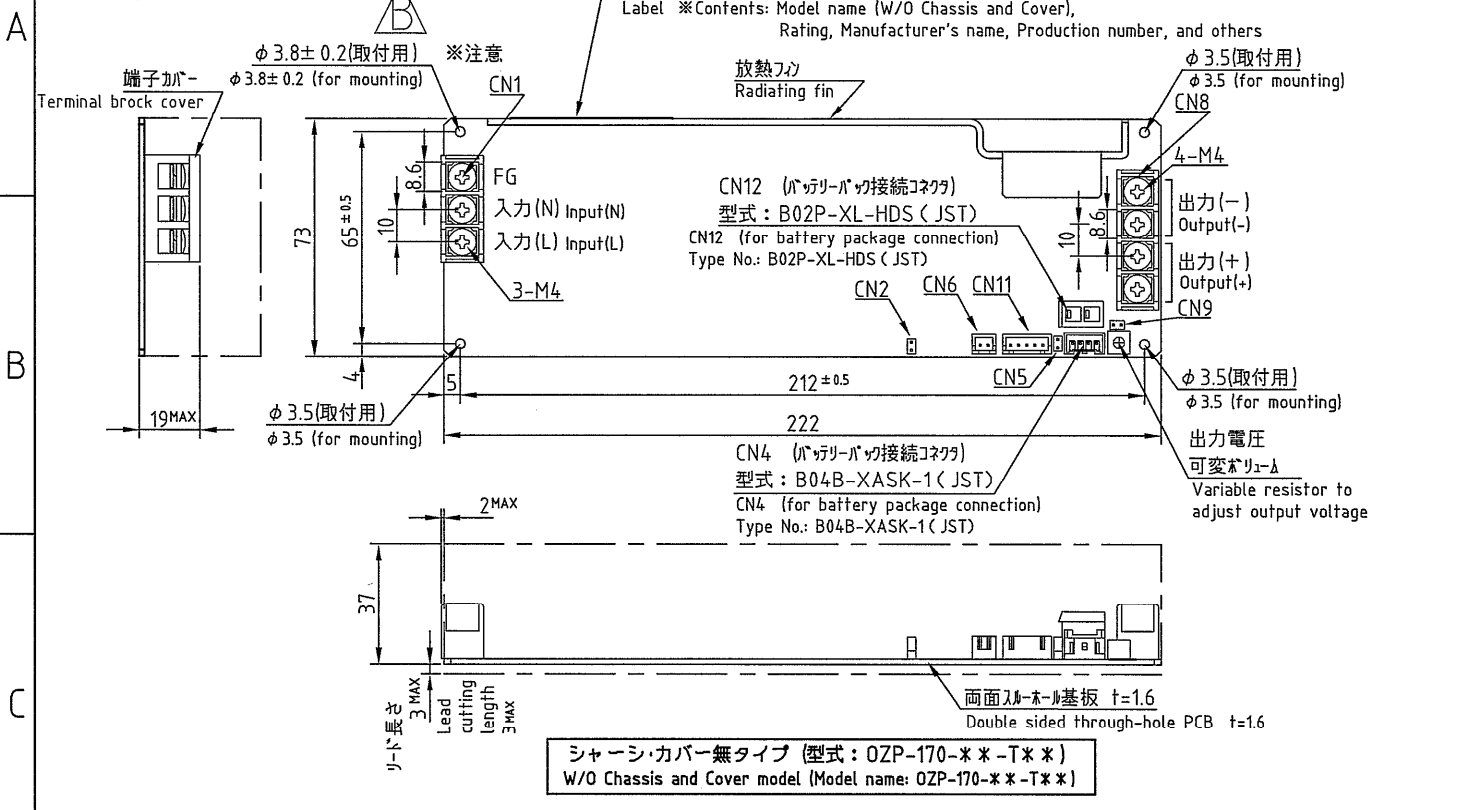
B版 2007.09.03 石橋 1-190901 (寸法指定変更、注記追加)
A版 全面改訂 2007.06.27 片岡 1-190621 (英語併記、注記変更)

- 寸法公差: ±1 (但し取付寸法は±0.5)
- Dimensional tolerance: ±1 (±0.5 for mounting dimension)
- シャシの取付穴 (M4) 締め付けトルク: 1.5N・m MAX
- Tightening torque for chassis mounting hole (M4): 1.5N・m MAX

- CN4、CN5、CN9、CN12は対応品のみ付属。
右記「各種コネクタの装備について」参照のこと。
- CN4, CN5, CN9 and CN12 are attached only to corresponding models.
Refer to "Details of connectors attached" on the right.

DRAWN BY	CHECKED BY	CHECKED BY	APPROVED BY	SCALE	MATERIALS	OZP-170-**-J***)
片岡	栗	山	紫	1/1		
ISSUED	2007. 5. 24			UNITS	m/m	TITLE
				3RD ANGLE PROJECTION		外観図(ナイロンコネクタモデル) Outside drawing (Nylon connector model)
						DRAWING NO.
						2880-01-3-050

(注意) 電源の取り付け部にてM4ネジ等を使用する場合は、外径がφ6.0以上ものをご使用下さい。



※コネクタピンアサイン ※Connector pinout assignment

CN6 (ON/OFF Control)			CN11 (Output signal)		
PIN No.	FUNCTION	CONNECTOR TYPE	PIN No.	FUNCTION	CONNECTOR TYPE
1	+ RC	B2B-XH (JST)	1	+ BATT_LOW	B5B-XH (JST)
2	- RC		2	- BATT_LOW	
※CN6 適合ハウジング: XHP-2 (JST) 適合ターミナル: リール: SXH-001T-P0.6 (JST) / 板: BXH-001T-P0.6 (JST)			3		
※CN6 Applicable housing: XHP-2 (JST) Applicable terminals: Reel: SXH-001T-P0.6 (JST) / Bulk: BXH-001T-P0.6 (JST)			4	+ AC_FAIL	
			5	- AC_FAIL	
			※CN11 適合ハウジング: XHP-5 (JST) 適合ターミナル: リール: SXH-001T-P0.6 (JST) / 板: BXH-001T-P0.6 (JST)		
			※CN11 Applicable housing: XHP-5 (JST) Applicable terminals: Reel: SXH-001T-P0.6 (JST) / Bulk: BXH-001T-P0.6 (JST)		

※各種コネクタの装備について ※Details of connectors attached

コネクタ名 Connector name	機能 Function	製品型式 Model name		
		OZP-170-12/15-T0*-*	OZP-170-24-T0*-*	OZP-170-24-TB*-*
CN4	バッテリーバック制御用信号 Battery package control signal	- N/A	- N/A	有 Yes
CN5	バックアップ動作モード設定 Backup operation mode setting	- N/A	- N/A	有 Yes
CN9	12V/15V出力電圧切り換え 12V/15V output voltage switching	有 Yes	- N/A	- N/A
CN12	バッテリーバック入出力 Battery package Input/Output	- N/A	- N/A	有 Yes

- 寸法公差: ±1 (但し取付寸法は±0.5)
- Dimensional tolerance: ±1 (±0.5 for mounting dimension)
- シャシの取付穴(M4)締め付けトルク: 1.5N・m MAX
- Tightening torque for chassis mounting hole (M4): 1.5N・m MAX

- CN4、CN5、CN9、CN12は対応品のみ付属。右記「各種コネクタの装備について」参照のこと。
- CN4, CN5, CN9 and CN12 are attached only to corresponding models. Refer to "Details of connectors attached" on the right.

B版 2007.09.03 石橋 1-190901 (寸法指定変更、注記追加)
A版 全面改訂 2007.06.27 片岡 1-190621 (英語併記、注記変更)

DRAWN BY	CHECKED BY	CHECKED BY	APPROVED BY	SCALE	MATERIALS	TITLE
片岡	栗	栗	栗	1/1		
ISSUED	2007. 5. 24			UNITS	FINISH	DRAWING NO.
				m/m		
				3RD ANGLE PROJECTION		2880-05-3-050

(注意) 電源の取り付け部にてビス等を
使用する場合は、外径がφ6.0以上
ものをご使用下さい。

A

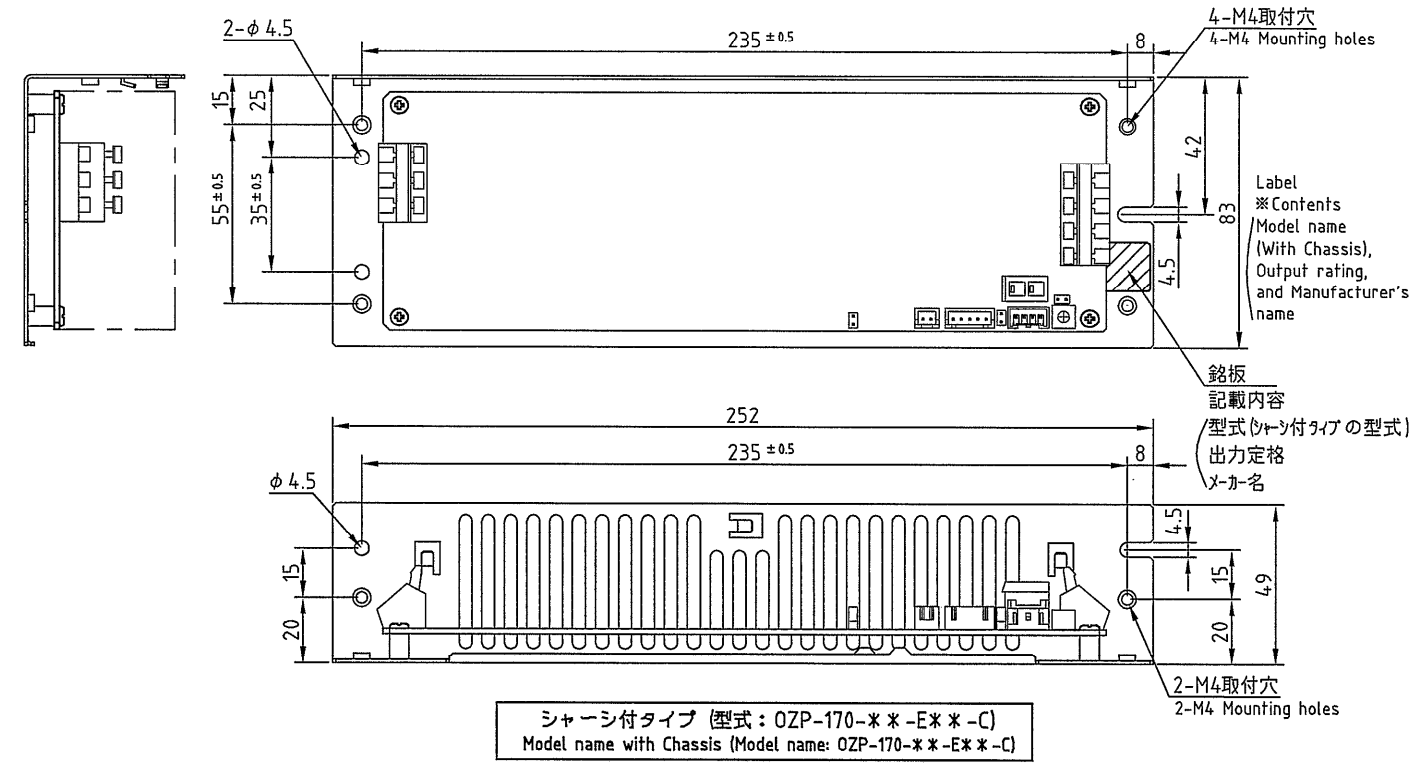
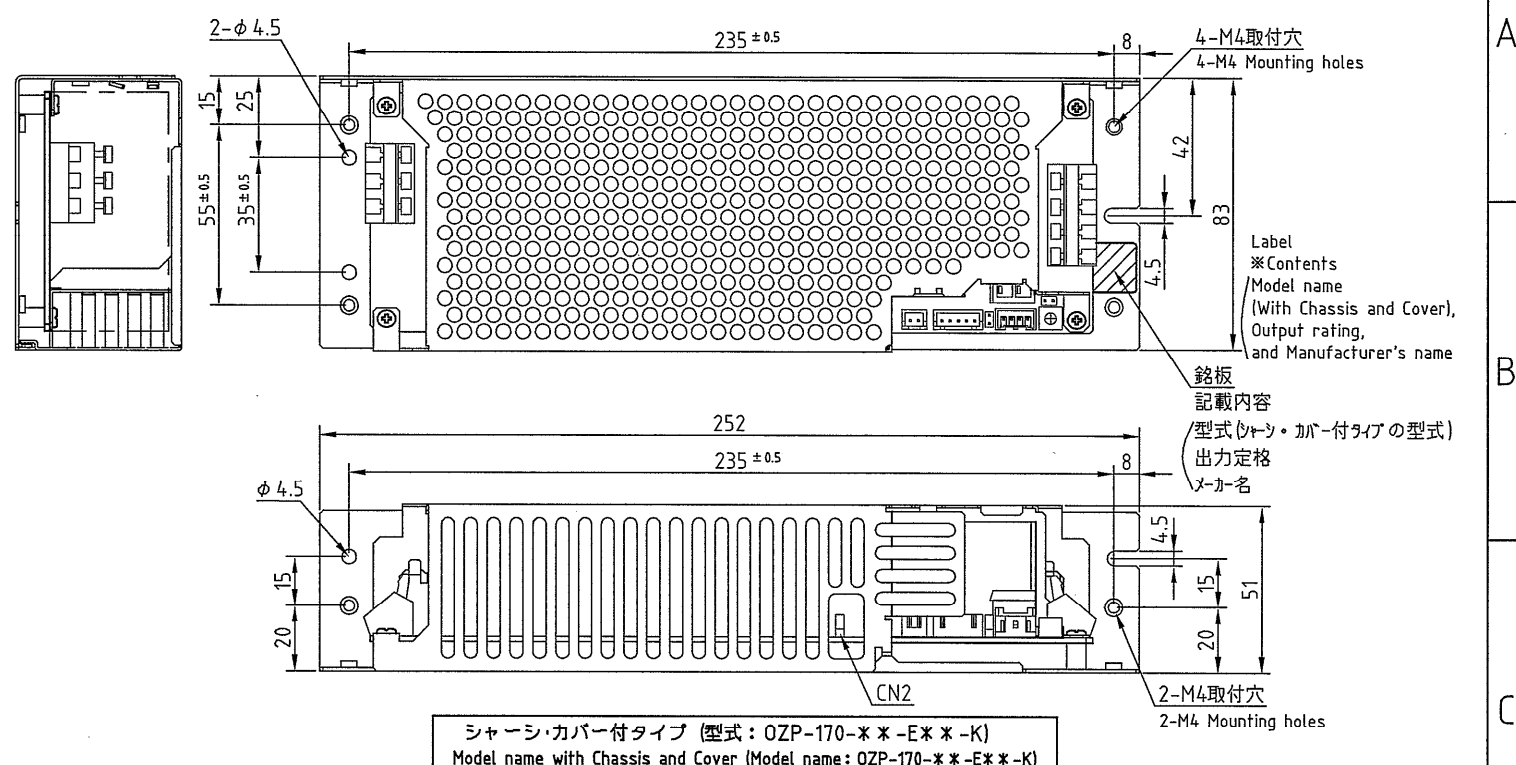
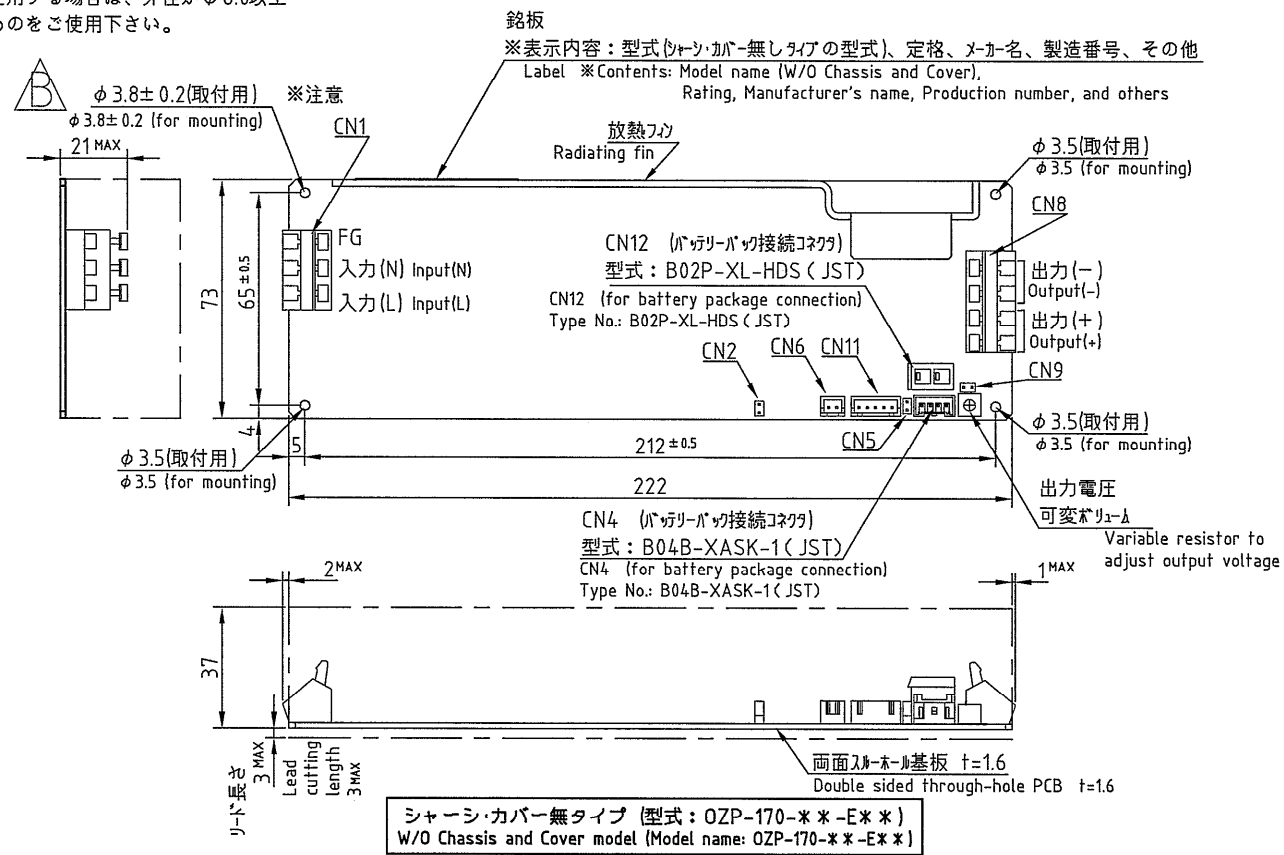
B

C

D

E

F



※コネクタピンアサイン ※Connector pinout assignment

CN1 (Input)			CN8 (Output)			CN6 (ON/OFF control)			CN11 (Output signal)		
PIN No.	FUNCTION	CONNECTOR TYPE	PIN No.	FUNCTION	CONNECTOR TYPE	PIN No.	FUNCTION	CONNECTOR TYPE	PIN No.	FUNCTION	CONNECTOR TYPE
1	AC(L)	256-503 (WAGO)	1, 2	-DC	256-504 (WAGO)	1	+RC	B2B-XH (JST)	1	+BATT_LOW	B5B-XH (JST)
2	AC(N)		3, 4	+DC		2	-RC		2	-BATT_LOW	
3	FG		※CN8 適合電線径: AWG#12~#20 ※CN8 Applicable wires: AWG#12~#20	※CN6 適合ハウジング: XHP-2 (JST) 適合ターミナル: リフ: SXH-001T-P0.6 (JST) リフ: BXH-001T-P0.6 (JST) ※CN6 Applicable housing: XHP-2 (JST) Applicable terminals: Reel: SXH-001T-P0.6 (JST) Bulk: BXH-001T-P0.6 (JST)	3		4	+AC_FAIL			
					4	-AC_FAIL	5	-AC_FAIL			
								※CN11 適合ハウジング: XHP-5 (JST) 適合ターミナル: リフ: SXH-001T-P0.6 (JST) リフ: BXH-001T-P0.6 (JST) ※CN11 Applicable housing: XHP-5 (JST) Applicable terminals: Reel: SXH-001T-P0.6 (JST) Bulk: BXH-001T-P0.6 (JST)			

※各種コネクタの装備について ※Details of connectors attached

コネクタ名 Connector name	機能 Function	製品型式 Model name		
		OZP-170-12/15-E0*-*	OZP-170-24-E0*-*	OZP-170-24-EB*-*
CN4	バッテリーパック制御用信号 Battery package control signal	-	N/A	有 Yes
CN5	バックアップ動作モード設定 Backup operation mode setting	-	N/A	有 Yes
CN9	12V/15V出力電圧切り換え 12V/15V output voltage switching	有 Yes	-	N/A
CN12	バッテリーパック入出力 Battery package Input/Output	-	N/A	有 Yes

出図
(株)ニプロン・技管

B版 △ × 2 2007.09.03 石橋 I-190901 (寸法指定変更、注記追加)
A版 全面改訂 2007.06.27 片岡 I-190621 (英語併記、注記変更)

- 寸法公差: ±1 (但し取付寸法は±0.5)
- Dimensional tolerance: ±1 (±0.5 for mounting dimension)
- シャシの取付穴(M4)締め付けトルク: 1.5N・m MAX
- Tightening torque for chassis mounting hole (M4): 1.5N・m MAX

- CN4、CN5、CN9、CN12は対応品のみ付属。右記「各種コネクタの装備について」参照のこと。
- CN4, CN5, CN9 and CN12 are attached only to corresponding models. Refer to "Details of connectors attached" on the right.

DRAWN BY	CHECKED BY	CHECKED BY	APPROVED BY	SCALE	MATERIALS	TITLE	DRAWING NO.
片岡				1/1			
ISSUED 2007. 5. 24				3RD ANGLE PROJECTION	FINISH	OZP-170-**-E** 外觀図(欧州端子台モデル) Outside drawing (European terminal block model)	2880-09-3-050