

Features :

- Universal AC input with active PFC
- Programmable output Voltage (0% ~ 105%)
- Programmable output Current (0% ~ 105%)
- 1U profile, High power density
- Constant current limiting
- High efficiency up to 93%
- +5V / 0.5A or +8V/0.3A auxiliary output select by user
- Intelligent LED indicators
- Forced current sharing at parallel operation
- Optional RS232 function
- Built-in I²C serial data bus
- Power OK signal (Power good, Logic low)
- Remote ON-OFF, Remote sense function
- Protections : OVP, OLP, OTP, Fan failure
- 3 years warranty

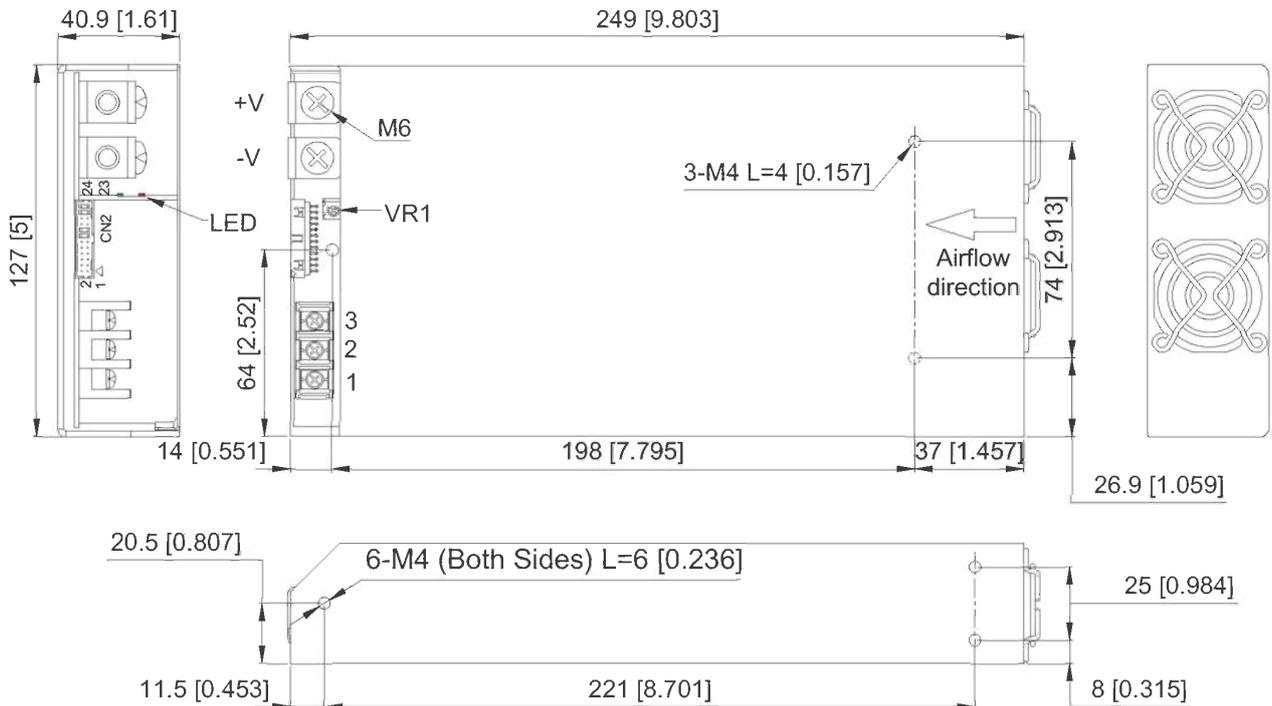


MODEL		AE-800-12	AE-800-15	AE-800-24	AE-800-30	AE-800-36	AE-800-48	AE-800-60
Output	DC Voltage Range	12V	15V	24V	30V	36V	48V	60V
	Rated Current	66.7A	53.4A	33.5A	26.7A	22.3A	16.7A	13.4A
	Current Range	0~66.7A	0~53.4A	0~33.5A	0~26.7A	0~22.3A	0~16.7A	0~13.4A
	Rated Power	800W	801W	804W	801W	802.8W	801.6W	804W
	Ripple & Noise (Max.)	Note.2 120mVp-p	150mVp-p	240mVp-p	300mVp-p	360mVp-p	480mVp-p	600mVp-p
	Voltage Adj. Range	±5.0% Typical adjustment by potentiometer. (VR1)						
	Voltage Tolerance	Note.3 ±2.0%						
	Line Regulation	±1.0%						
	Load Regulation	±1.0%						
	Setup, Rise Time	800ms, 100ms at full load						
Hold Up Time (Typ.)	14ms / 230VAC at full load							
Input	Voltage Range	Note.4 90 ~ 264VAC						
	Frequency Range	47 ~ 63Hz						
	Power Factor (Typ.)	0.95 / 230VAC, 0.98 / 115VAC at full load						
	Efficiency (Typ.)	89%	90%	92%	92%	92%	92%	93%
	AC Current (Typ.)	9.3A / 100VAC, 4.7A / 230VAC						
	Inrush Current (Typ.)	30A / 115VAC, 60A / 230VAC						
Leakage Current	<1.0mA / 240VAC							
Protection	Over Load	105 % rated output power Protection type : Constant current limiting						
	Over Voltage	Variable OVP, 120% ± 7% Vout. Protection type: Latch-style (Recovery after reset AC power ON or inhibit) Refer to VCI VS OVP curve						
	Over Temperature	85°C±5°C detect on heat sink of secondary side Protection type: Shut down o/p voltage (Auto recovery after temperature goes down)						
Function	Auxiliary Power	+5V / 0.5A or +8V / 0.3A auxiliary output select by user						
	Remote ON/OFF Control	External switch or NPN Transistor to turn ON / OFF						
	Power OK Signal	Open drain signal low when PSU turns on, Max. sink current: 20mA, Max. drain voltage: 40V.						
	Output Voltage Trim	Adjustment of output voltage is between 0 ~ 105% of rated output						
	Output Current Trim	Adjustment of output current is between 0 ~ 105% of rated output						
Parallel (Current Sharing)	Note.5	Please refer to function						
Environment	Working Temp.	-20 ~ +60°C (Refer to output load de-rating curve)						
	Working Humidity	20 ~ 90% R.H non-condensing						
	Storage Temp., Humidity	-40~+85°C, 10 ~95% R.H						
	Temp. Coefficient	±0.02%/°C (0 ~ 50°C)						
	Vibration	10 ~ 500Hz, 2G 10min./1 cycle, period for 60 min each along X,Y,Z axes Compliance to IEC 68-2-6, IEC 68-2-64						
Safety & EMC	Safety Standards	Meet UL 60950-1, 2 nd Edition, TUV EN60950-1 : 2006+A11 Approved						
	Withstand Voltage	I/P-O/P: 3KVAC(4242 DC) I/P-FG: 1.5KVAC(2121 DC) O/P-FG: 0.5KVAC(707DC)						
	Isolation Resistance	I/P-O/P, I/P-FG, O/P-FG: 100MΩ / 500VDC						
	EMI Conduction & Radiation	EN55022: 2006+A1:2007 Class B, EN61204-3:2000, EN61000-6-3:2007						
	Harmonic Current	EN61000-3-2: 2006+A2:2009 Class A, EN6100-3-3:2008						
EMS Immunity	EN55024: 1998+A1: 2001+A2: 2003 light industry level, criteria A, EN61204-3:2000, EN61000-6-1:2007							
Other	Cooling	Controlled by power rating & temperature (Internal ball bearing fan)						
	Dimension (L*W*H)	249x127x41 mm / 9.80x5.00x1.61 inch						
	Packing	1.7 kg ; 8pcs / 14.0kg / 0.7 CUFT						
Note	<p>1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature. 2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1µf & 47µf parallel capacitor. 3. Tolerance: includes set up tolerance, line regulation and load regulation. 4. De-rating may be needed under low input voltages. Please check the de-rating curve for more details. 5. In parallel connection, maybe only one unit operate if the total output load is less than 5% of rated load condition. 6. The power supply is considered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets EMC directives.</p>							



■ Mechanical Specification

Unit: mm / inch



AC Input Terminal
Pin No. Assignment

Pin No.	Assignment
1	ACL
2	ACN
3	⏏

Control pin number assignment

Pin No.	Assignment	Pin No.	Assignment	Pin No.	Assignment	Pin No.	Assignment	Pin No.	Assignment
1	NC.	6	SDA	11	ACI	16	GND	21	VS-
2	NC.	7	AUX	12	GND	17	PAR	22	VO-
3	AUX	8	GND	13	EN+	18	VSET	23	VS+
4	GND	9	VCI	14	AUX	19	POK	24	VO+
5	SCL	10	GND	15	EN-	20	GND		

■ Function Description

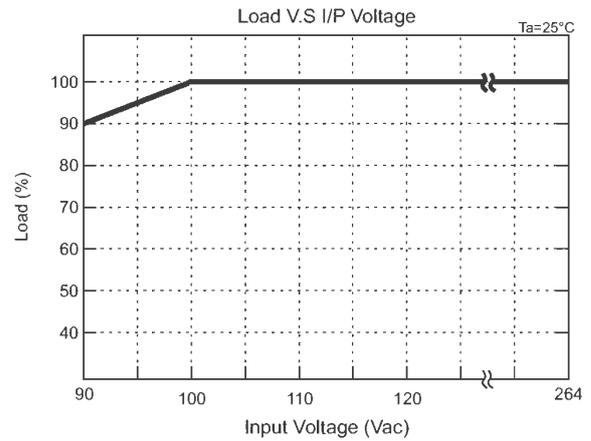
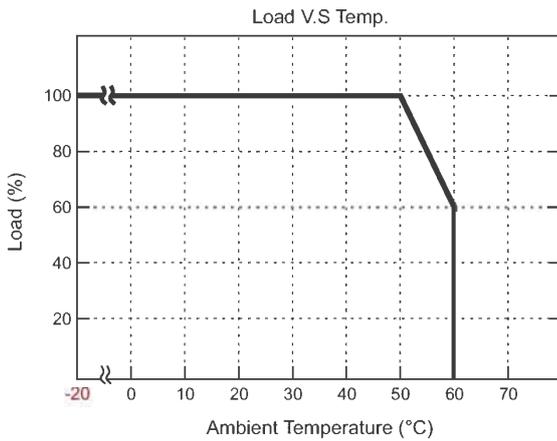
Pin No.	Function	Description	Pin No.	Function	Description
1	NC.	For RS232 Receiver function	13	EN+	Inhibit ON/OFF (+)
2	NC.	For RS232 Transmission function	14	AUX	+5V / 0.5A, +8V / 0.3A Auxiliary power
3	AUX	+5V / 0.5A, +8V / 0.3A Auxiliary power	15	EN-	Inhibit ON/OFF (-)
4	GND	Ground	16	GND	Ground
5	SCL	Serial Data used in the I ² C interface	17	PAR	Parallel operation current share
6	SDA	Serial Data used in the I ² C interface	18	VSET	Aux output set
7	AUX	+5V / 0.5A, +8V / 0.3A Auxiliary power	19	POK	Power OK
8	GND	Ground	20	GND	Ground
9	VCI	V Program	21	VS-	Remote sense (-)
10	GND	Ground	22	VO-	Negative output voltage
11	ACI	I Program	23	VS+	Remote sense (+)
12	GND	Ground	24	VO+	Positive output voltage

LED Status

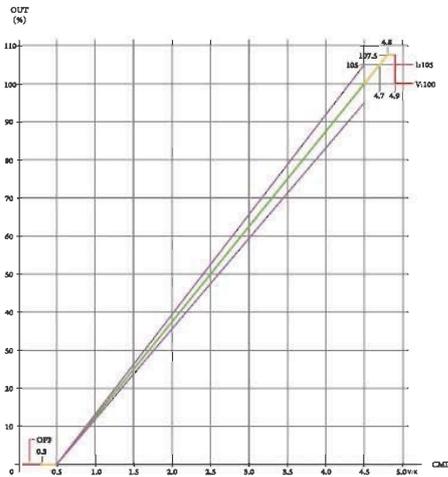
LED	LED Signal	Status
Solid(Green)		Power OK (Local mode)
Solid(Orange)		Power OK (Remote mode)
Slow Blink(Green)		Power Standby
Fast Blink(Red)		Over Voltage Protection (OVP)
Solid(Red)		Over Load Protection (OLP)
Slow Blink(Red)		Over Temperature Protection (OTP)
Intermittent Blink(Red)		Fan Failure
Interlace Blink(Red)		Power Failure

*Local mode : Use ACI/VCI control output current and voltage.
 Remote mode : Use RS-232 or I²C command control output current and voltage.

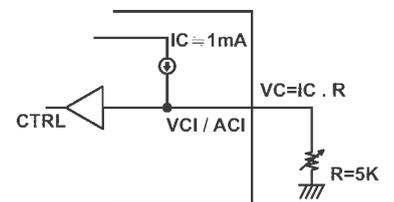
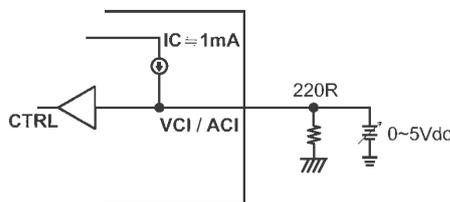
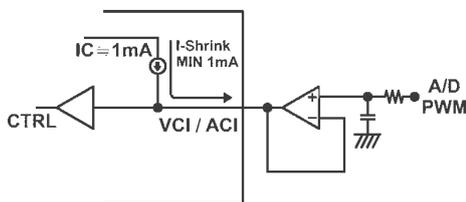
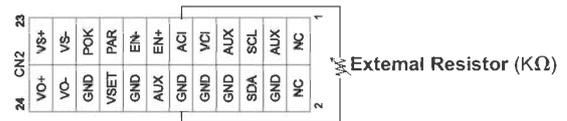
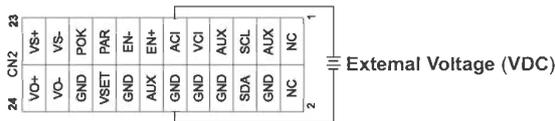
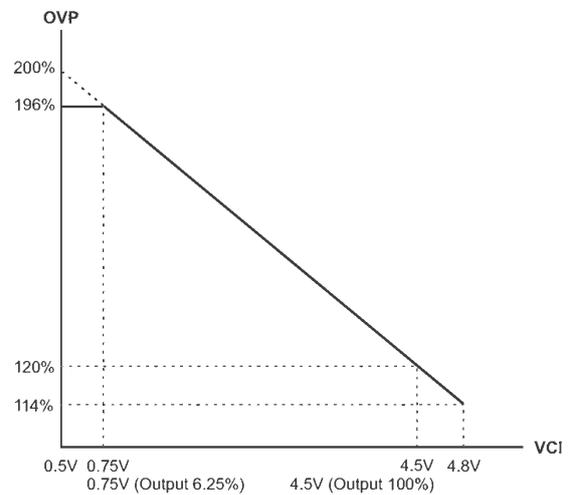
De-rating Curve



CMD VS Output Curve

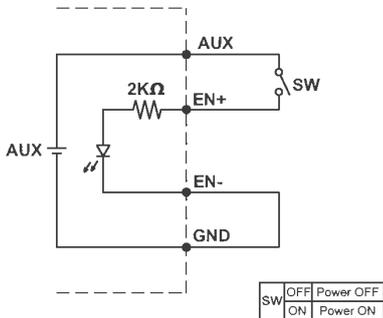


VCI VS OVP Curve



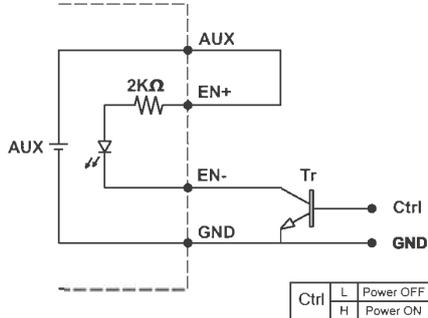
Remote ON/OFF

(A) Default Setting



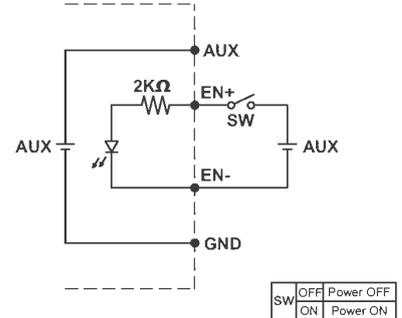
(A) Using internal 5V auxiliary source

(B)



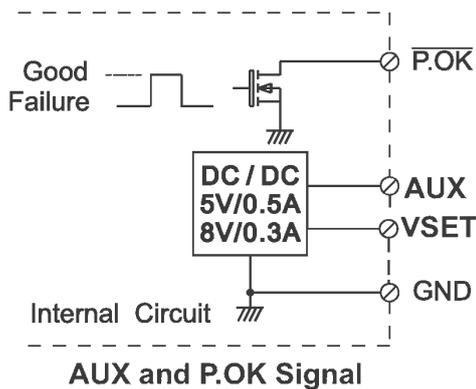
(B) ON / OFF Control by NPN transistor

(C)



(C) Using external voltage source

Power OK Signal

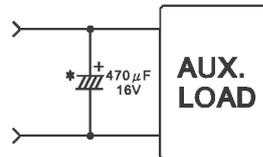


AUX and P. OK Signal

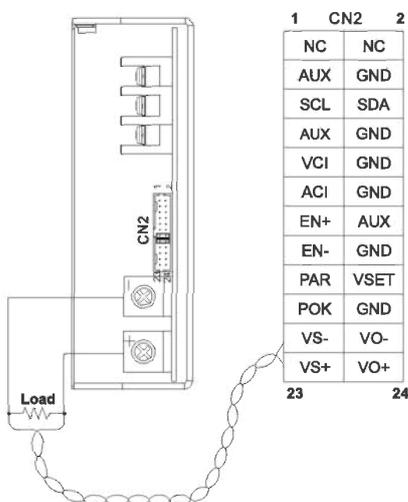
*Place an additional capacitor to have a better performance of auxiliary power operation.

*The grounding of "AUX" power should be connected to "GND" port. If "V-" is connected as Grounding, make sure to short the GND and V- ports.

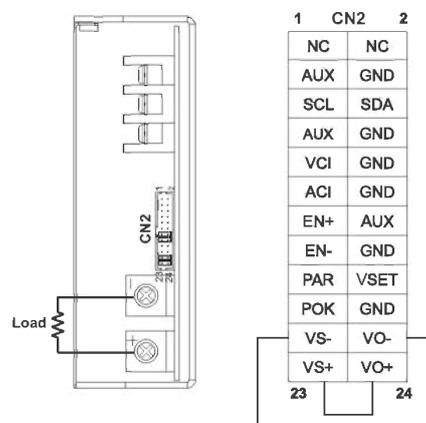
VSET	Open	5V	(Default Setting)
	Short To GND	8V	



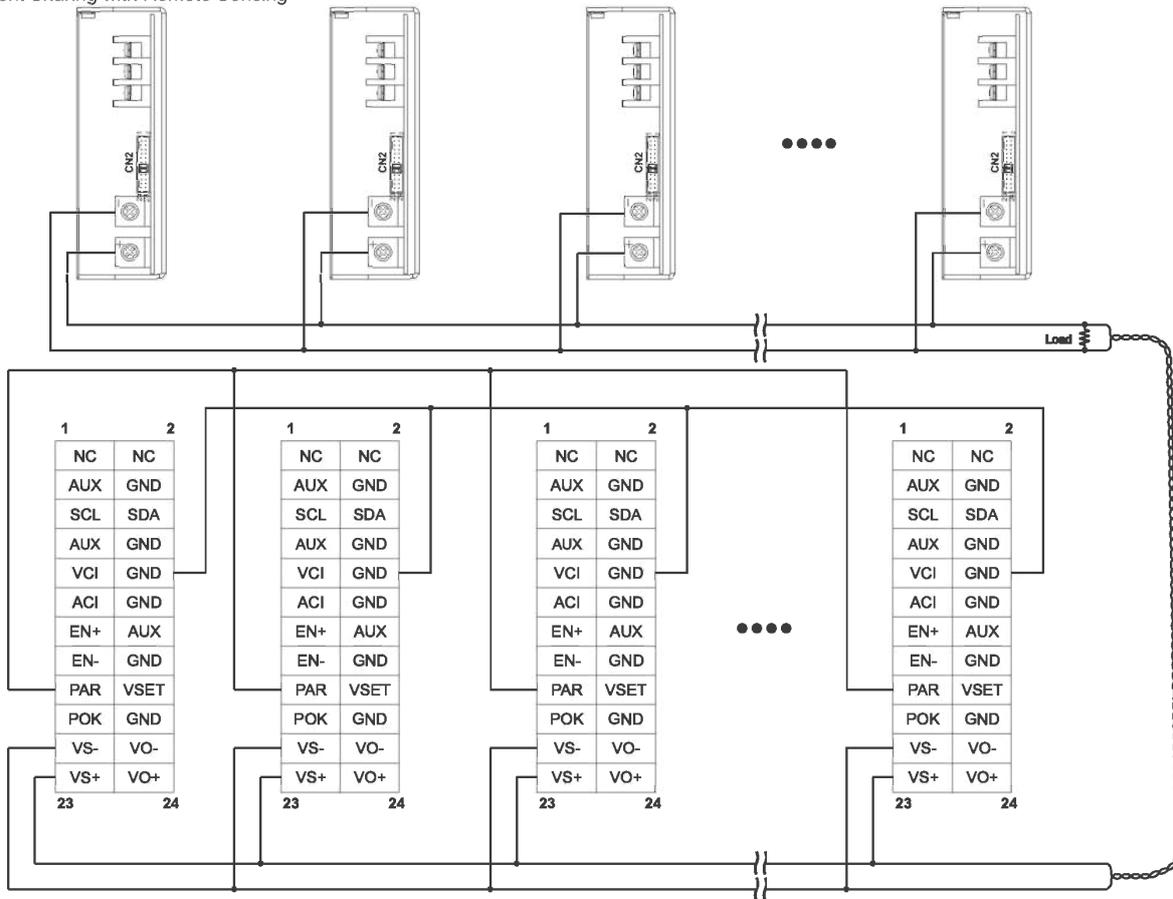
1. Remote Sense



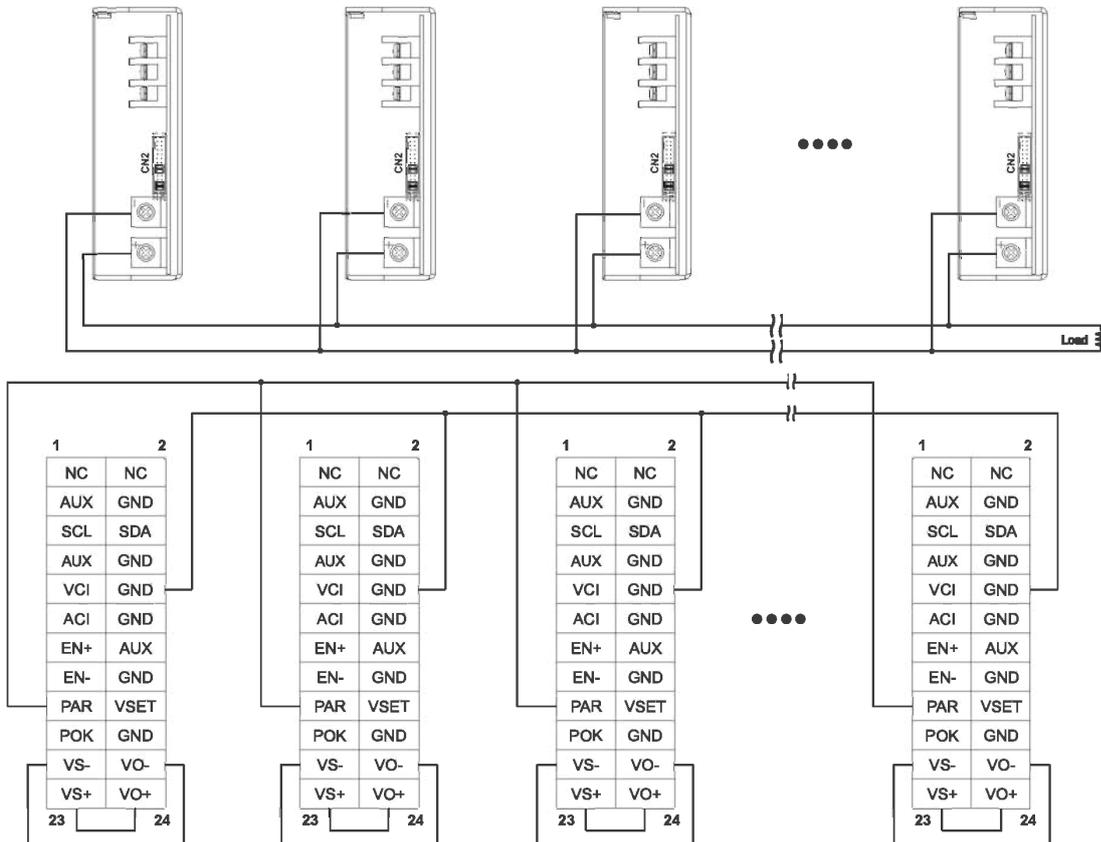
2. Local Sense (Default setting)



3. Current Sharing with Remote Sensing



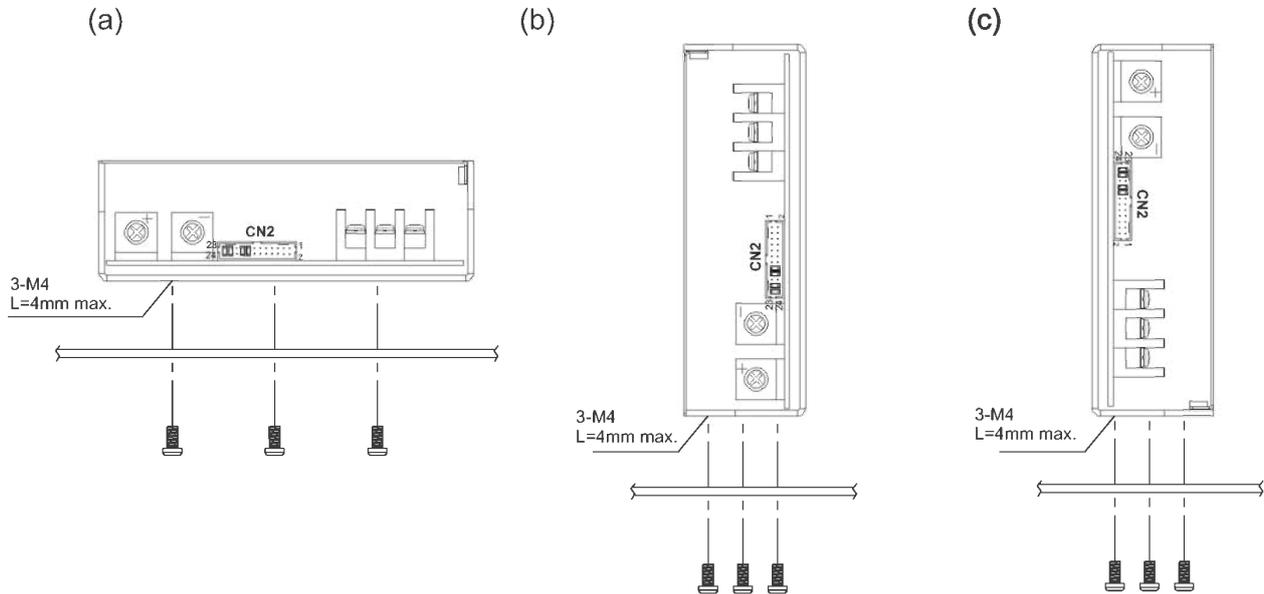
4. Current Sharing with Local Sensing



Installation Instruction

1. Mounting Directions

1-1 Recommended standard mounting methods:



2. Mounting Method

2-1 There are ventilating holes on the front and back side panels, do not obstruct; allow 50mm at least for air flow.

2-2 The Maximum allowable penetration of screw is 4mm. Incomplete threading should not be penetrated.

2-3 Recommended the torque of mounting screw:
 M4 screw: 1.27N • m (13.0kgf • cm)

