

# FA1010 SERIES

## 1000VA DC/AC INVERTERS Sine Wave Output



H88×W482×L295.1 (mm)

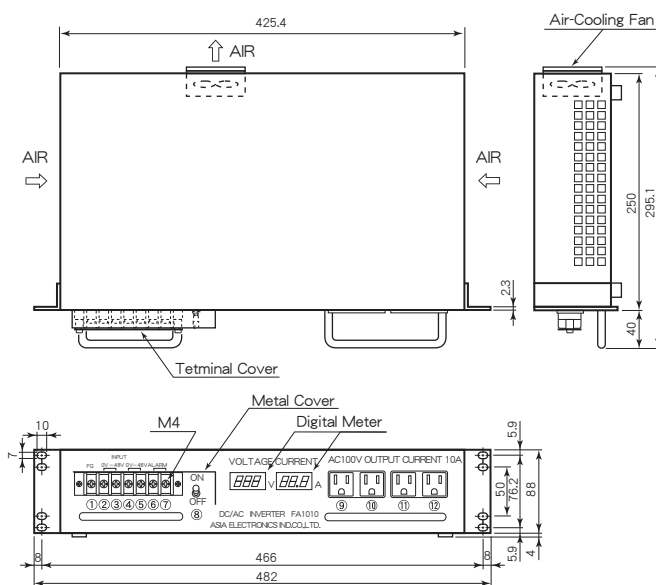
### Features

- Compact and High Power
- 小型、大容量
- Fit to 19" (2U) Rack System
- 19インチラックサイズ (2U)
- High Efficiency 87% typ.
- 高効率 87% typical
- Output Frequency Temp Coefficient 0.01%/°C max.
- 出力周波数温度係数 0.01%/°C 以下
- Input-Output Isolation (AC2000V)
- 入出力間絶縁 (AC2000V)
- Input Low Voltage Protection
- 入力低電圧保護回路内蔵
- Input Over Voltage Protection
- 入力過電圧保護回路内蔵
- Input Rush Current Protection
- 入力突入電流保護回路内蔵
- Thermal Protection +90°C~+110°C
- 過熱保護回路内蔵 +90°C~+110°C
- Built-in Input Fuse
- 入力ヒューズ内蔵
- Built-in Input and Output Noise Filter
- 入出力ノイズフィルタ内蔵
- Conformity to RoHS Directive
- RoHS指令対応

### General Characteristics

- Input Voltage (at Ta : 25°C, Full Load, Nominal Vin) DC24, 36, 48, 96V (See Table 1)
- Output Voltage AC100Vrms, ±1%
- Output Current See Table 1
- Output Frequency 50Hz, 60Hz, ±0.1%
- Output Wave, Distortion Sine Wave, 1.0% max.
- Output Voltage Temperature Coefficient 0.02%/°C max.
- Output Frequency Temperature Coefficient 0.01%/°C max.
- Efficiency 86~87% (See Table 1)
- Line Regulation 0.5% max. (at Vin Range)
- Load Regulation 1% max. (0~100% Load)
- Short Circuit Protection Built-in, Auto-restart (See Fig. 2)
- Output Alarm Signal Normal : Open between terminals  
Abnormal : Short between terminals  
(Output is Shut-down)
- Operating Ambient Temperature -25°C~+60°C (See Fig. 1)
- Storage Temperature -40°C~+85°C
- Isolation Voltage (※注1) AC2000V one minute  
(Input-Output-Case)
- Isolation Impedance (※注1) 100MΩ min. (at DC1000V)  
(Input-Output-Case)
- Weight 9kg max.
- Humidity 20~90% RH
- Shock 196m/s<sup>2</sup> (11msec 3directions)
- Vibration 10~55Hz 29.4m/s<sup>2</sup>  
(30minutes 3directions)
- Surface Structure 6 Sided Metal Case
- MTBF 100,000H  
(Ta : 25°C, 80% Load, Nominal Vin)
- Warranty 5 years

### Terminal Outs & Dimensions (±1.0mm)



### Terminal Outs and Function

	24V Input	36V Input	48V Input	96V Input
①	Frame Ground (FG)	Frame Ground (FG)	Frame Ground (FG)	Frame Ground (FG)
②	+24Vdc in	+36Vdc in	0Vdc in	+96Vdc in
③	+24Vdc in	+36Vdc in	-48Vdc in	+96Vdc in
④	0Vdc in	0Vdc in	0Vdc in	0Vdc in
⑤	0Vdc in	0Vdc in	-48Vdc in	0Vdc in
⑥	Alarm Signal	Alarm Signal	Alarm Signal	Alarm Signal
⑦	Alarm Signal	Alarm Signal	Alarm Signal	Alarm Signal
⑧	On/Off Switch	On/Off Switch	On/Off Switch	On/Off Switch
⑨	AC Socket	AC Socket	AC Socket	AC Socket
⑩	AC Socket	AC Socket	AC Socket	AC Socket
⑪	AC Socket	AC Socket	AC Socket	AC Socket
⑫	AC Socket	AC Socket	AC Socket	AC Socket

注1: AC出力ケース間に雷サージ対策用バリスタが入っている為絶縁試験時には同部品を取外す必要があります。  
(工場出荷時に同部品を取外して絶縁試験を全数実施済み)

### Selection Guide

Table 1

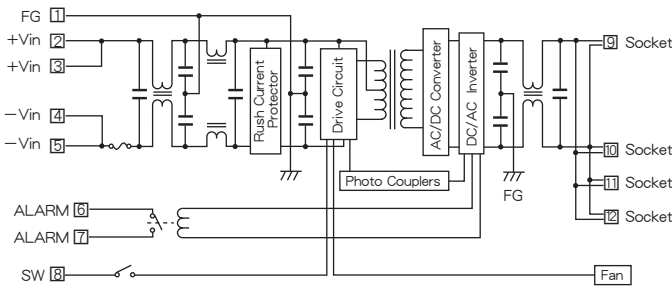
Model Number	Input Volt. (Range) (V. DC)	Output Voltage (V. AC)	Output Current (A rms)	Output Frequency (Hz)	Efficiency (Typical)(%)	
					20% Load	80% Load
FA1010-24-100S10A50	24 (18~36)	100	10	50	86	87
FA1010-24-100S10A60						
FA1010-36-100S10A50	36 (27~54)	100	10	50	86	87
FA1010-36-100S10A60						
FA1010-48-100S10A50	48 (36~76)	100	10	50	86	87
FA1010-48-100S10A60						
FA1010-96-100S10A50	96 (72~144)	100	10	50	86	87
FA1010-96-100S10A60						

※ 上記仕様以外にも対応可能ですので お問い合わせ下さい。  
Please consult with us about other specification.

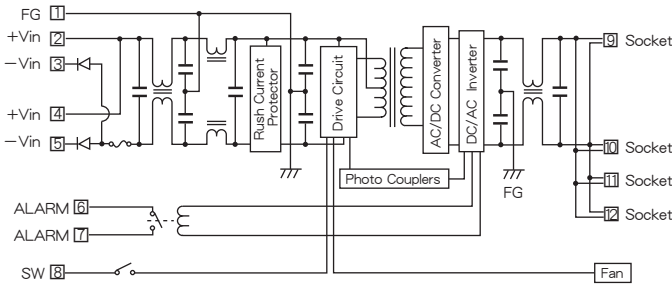
# FA1010 SERIES DATA SHEET

## Block Diagram

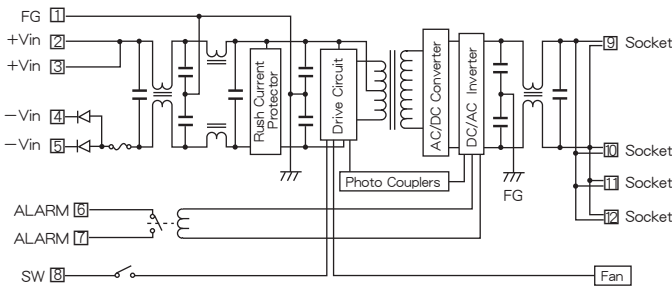
\* 24V Input, 36V Input



\* 48V Input

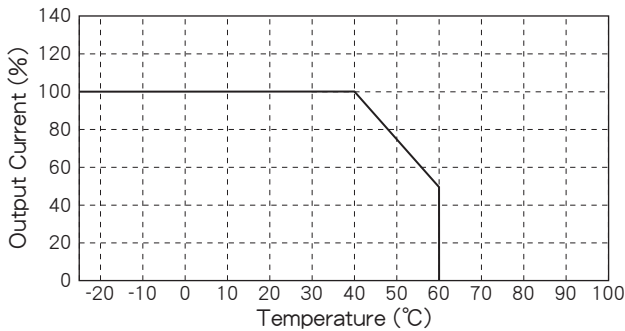


\* 96V Input

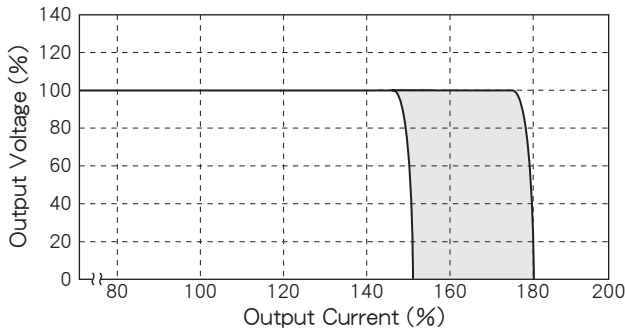


## Characteristic Curves

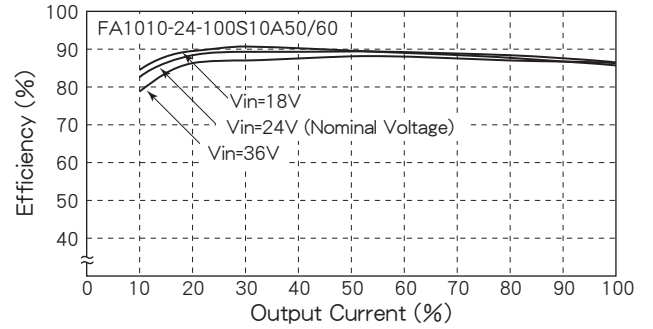
**Fig. 1 Derating Curve**



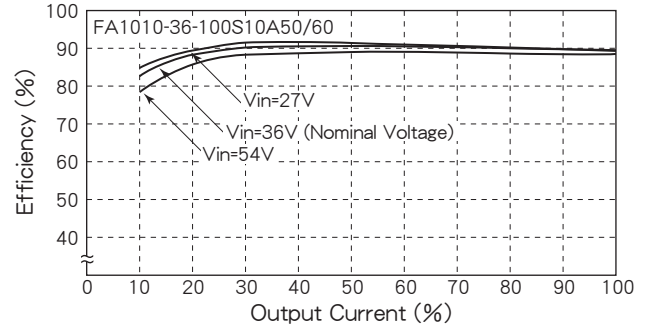
**Fig. 2 Short Circuit Operating Area**



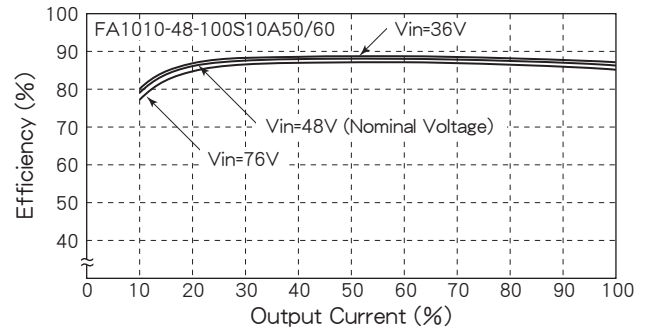
**Fig. 3 Efficiency vs. Output Current**



**Fig. 4 Efficiency vs. Output Current**



**Fig. 5 Efficiency vs. Output Current**



**Fig. 6 Efficiency vs. Output Current**

