

F&eIT Series
AC-DC Power Supply Unit
POW-AD22GY



* Specifications, color and design of the products are subject to change without notice.

This product is a compact power supply unit designed to supply DC power to the F&eIT series of products.

This AC-DC power supply unit is carrying out the standard equipment of the DIN rail attachment mechanism to the main part like other products of this series, and can install it simply and smartly.

AC input can prepare wide-range 85 - 264V, and can unite and choose them as a system. In addition, a system can be easily built combining F&eIT series product.

Specification

Specifications

Item	Specifications	
Input	Voltage	AC85 - 264V
	Current	ACIN 100V:0.3A(Typ. lo=100%) ACIN 200V:0.2A(Typ. lo=100%)
	Frequency	47 - 440Hz
	Rush current	ACIN 100V:15A(Typ. lo=100%) ACIN 200V:30A(Typ. lo=100%)
	Leakage current	0.5mA(Max.) (60Hz,IEC60950)
	Efficiency	74%(Typ.)
	Output	Rated voltage
Rated current		2.0A(Max.)
Static input fluctuations		20mV(Max.)
Static load fluctuations		40mV(Max.)
Ripple noise		200mVp-p(Max.)
Ambient temperature fluctuations		50mV(Max.)(0 - 55°C)
Time-dependent drift		20mV(Max.) (It is change of the 30 minute - 8 hours after input voltage impression in the circumference temperature of 25°C, and rated inputand output)
warm-up time		700ms(Max.) (ACIN 85V, lo=100%)
holding time		8ms(Typ.)(ACIN 100V, lo=100%) 16ms(Typ.)(ACIN 200V, lo=100%)
Auxiliary functions		Overcurrent protection
	Overvoltage protection	Operates at 115%(Min.) of rated voltage (Zener diode clamp)
Other functions	FG pin	An FG terminal is provided on the power I/O connectors
	External dimensions (mm)	52.4(W) x 64.7(D) x 94.0(H) (exclusive of any protrusions)
	Cooling method	Natural air cooling
	Service life	It is seven years (lo=75%) at the circumference temperature of 25°C.
	Weight of the system unit	110g
Installation method	One-touch attachment to a 35mm DIN rail The mounting mechanism is provided on the system unit as a standard item.	

Installation Environment Requirements

Parameter	Requirement description	
Ambient temperature	0 - 50°C	
Ambient Humidity	10 - 90%RH (No condensation)	
Floating dust particles	Not to be excessive	
Corrosive gases	None	
Noise immunity	Line-noise	AC line/2kV, Signal line/1kV (IEC1000-4-4Level 3, EN61000-4-4Level 3)
	Static electricity resistance	Contact discharge/4kV (IEC1000-4-2Level 2, EN61000-4-2Level 2) Atmospheric discharge/8kV (IEC1000-4-2Level 3, EN61000-4-2Level 3)
Vibration resistance	Sweep resistance	10 - 57Hz/semi-amplitude 0.15mm, 57 - 150Hz/2.0G
	Resistance	80minutes each in X, Y, and Z directions (JIS C0040-compliant, IEC68-2-6-compliant)
Impact resistance	15G, half-sine shock for 11ms in X, Y, and Z directions (JIS C004-compliant, IEC68-2-27-compliant)	
Grounding	Class D grounding (previous class 3 grounding)	
Installation location	Installing to the DIN rail (the control boards,etc.) as the power supply dedicated to the F&eIT.	

I/O Connectors

Item	Description	
Input	Board connector	5.08mm pitch 12.0A rated current
	Compatible plug	Laterally operable screw-in type (MSTB2,5/3-STF-5,08 made by PHOENIX CONTACT Corp.)
	Compatible wires	AWG 24 - 12 12.0A rated current
Output	Board connector	3.5mm pitch 8.0A rated current
	Applicable plug	Laterally operable screw-in type (MC1,5/3-ST-3,5 made by PHOENIX CONTACT Corp.)
	Applicable wires	AWG 28 - 16 8.0A rated current

List of Options

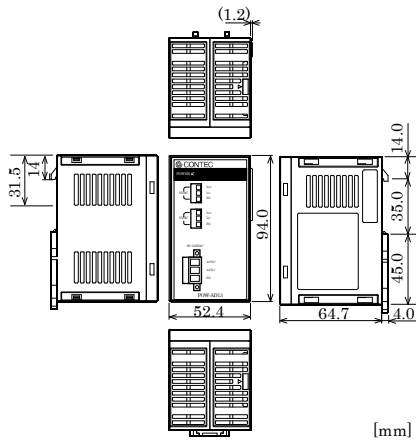
FAN Unit

FAN-FIT FAN Unit For 52.4mm-width unit or module

Packing List

System unit...1
User's Manual...1
AC Power Supply input connector plug...1
DC Power Supply output connector plug...2

Physical Dimensions



Connecting the I/O cables to the AC-DC power supply unit

Cables are connected to the AC-DC power supply unit by means of detachable connectors that are provided as standard items.

(Input unit: compatible cables: AWG 24 - 12. Tightening torque: 0.5 - 0.6Nm)

(Output unit: compatible cables: AWG 28 - 16. Tightening torque: 0.22 - 0.25Nm)

The AC-DC power supply unit and F&IT Series product can be cable-connected using the detachable connector that is provided on either the unit face or the module face (compatible cables: AWG 28 - 16). Please use the clothing of a cable, turning to it about 7mm.

⚠ CAUTION

Because the AC-DC power supply unit generates heat, a minimum spacing of 2.0 cm should be provided between the POW-AD22GY or POW-AD13GY and any adjoining units, and care should be taken so that the ventilation holes are not covered.

