

# FC SERIES SYSTEM POWER SUPPLY UNIT

DATA SHEET

PXJ

FC series receiving instruments, converters, computational units and distributors which are mountable on instrument panels are designed in principle for a power supply of 24V DC.

Type PXJ is a regulated-voltage power supply to be used as a common system power supply unit for providing 24V DC to the panel-mounted instruments from a commercial line power outlet of 100V AC. It adopts a switching regulator system for realizing a compact and highly efficient common system power supply unit. It is also prepared as a common system power supply unit equipped with a battery backup system which permits parallel operation to assure failure-free power supply of even higher reliability. The power supply unit can be equipped further with a protective function against line power failure in cooperation with a digital component.



PXJ5

## SPECIFICATIONS

**Input power supply:**

100V or 115V  $\pm 10\%$  AC, 50/60 Hz, single phase

**Output voltage:** 25.8V  $\pm 0.5\%$  DC (with PXJ5)

25.8V  $^{+0.5}_{-1.0}\%$  DC (with PXJ3)

**Output capacity:** PXJ5 ... 10A

PXJ3 ... 3A

**Parallel operation:**

Possible for PXJ5 only

**Backup with batteries (option):**

Possible for PXJ5 only

(110V  $^{+30}_{-20}\%$  DC from DC power source or batteries)

**Protective function:**

Protection against shorting (overcurrent drooping characteristic, automatic recovery )

Protection against overvoltage (output voltage interruption at overvoltage, manual reset)

**Efficiency:** PXJ5 ... 85% typical

(100V AC, load 10A)

PXJ3 ... 80% typical

(100V AC, load 3A)

**Input current:** PXJ5 ... 4.7 A rms typical

(100V AC, load 10A)

PXJ3 ... 1.6 A rms typical

(100V AC, load 3A)



PXJ3

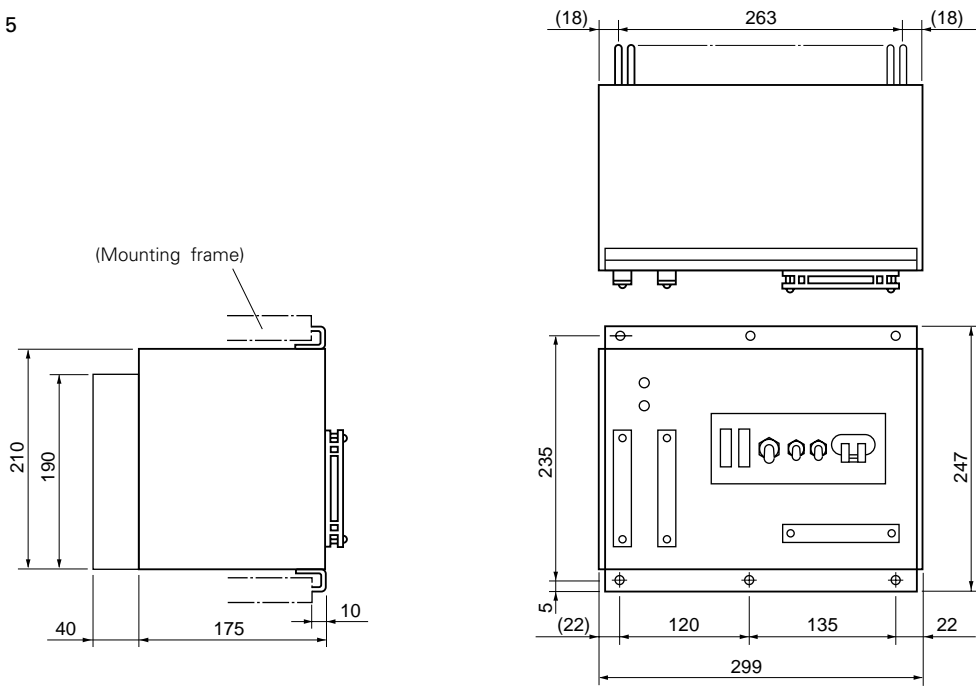
- Protective function against power failure (option):**  
Approx. 30msec after power failure, it is detected to emit power failure signal (open collector ON)
- Hold time** Output held till 40msec after power failure (output 20V DC at input of 90V AC) and then interrupted for approx. 100msec with PXJ3 or approx. 500msec with PXJ5
- Alarm output:** Alarm contact signal provided at output voltage interruption, single contact  
Contact capacity  
PXJ5.. 220V AC, 3 A/24V DC, 2 A  
PXJ3.. 100V AC, 0.5 A/24V DC, 0.5A
- Dielectric strength:**  
1500V AC for one minute between input/output terminal and ground
- Surge protection:** With Z-trap arrester for primary of power supply
- Insulation resistance:**  
At least 100MΩ between each terminal and ground as measured with 500V DC megger.
- Ambient temperature:**  
0 to 45°C
- Ambient humidity:**  
90% RH (max)
- Mounting:** Rack mounting
- Mass {weight} approx.:**  
PXJ5 ... 7kg  
PXJ3 ... 2.5 kg
- Enclosure:** Steel case
- External dimensions (HxWxD):**  
PXJ5 ... 247x299x215mm  
PXJ3 ... 247x74x221mm
- Finish color:** Black

## CODE SYMBOLS

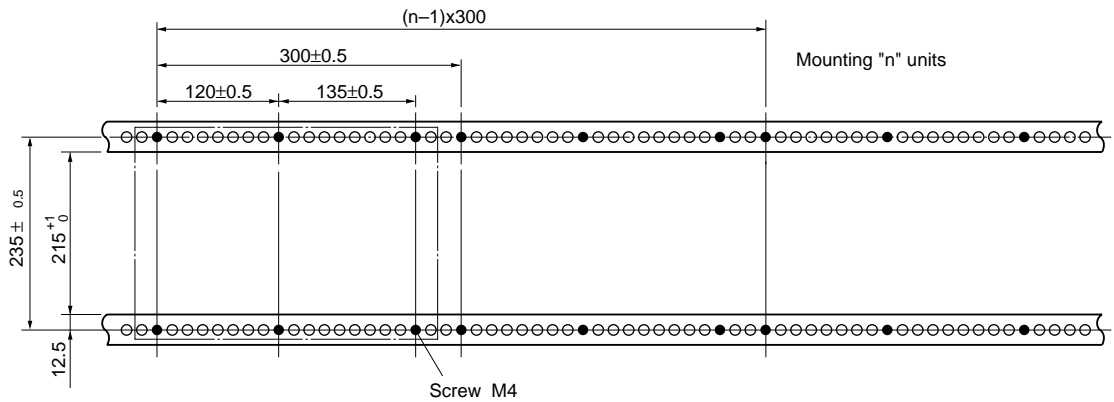
1 2 3 4 5 6 7 8								Description	
P	X	J						<b>Capacity</b> 10A 3A	
				5					
				3				<b>Protective function against power failure</b> None Equipped (only "1" for PXJ5)	
				0					
				1				<b>Backup with batteries</b> Impossible Possible (for PXJ5 only)	
				0					
				1				<b>Power supply</b> 100V AC, 50/60Hz 115V, AC 50/60Hz	
				3					
				9				<b>Version No.</b> For PXJ5 For PXJ3	
				2					
				3					

# OUTLINE DIAGRAM (Unit : mm) AND CONNECTION DIAGRAM

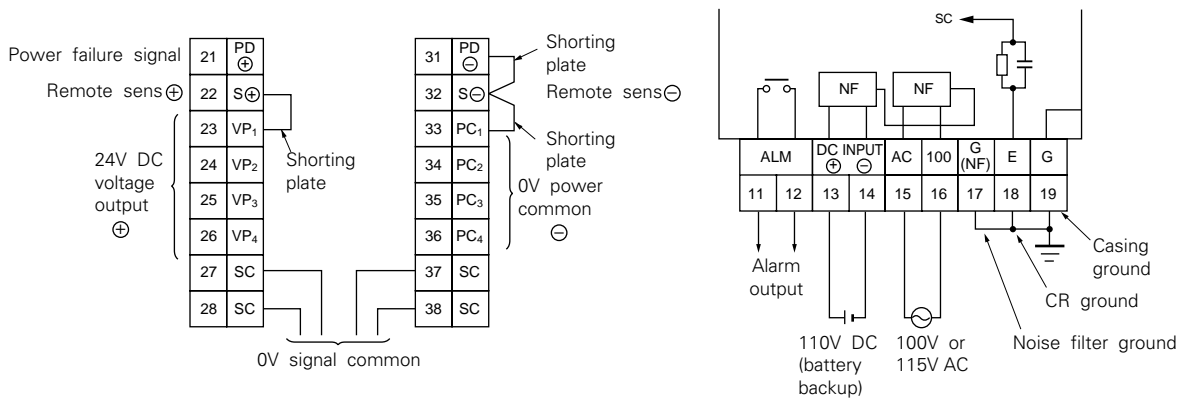
PXJ 5



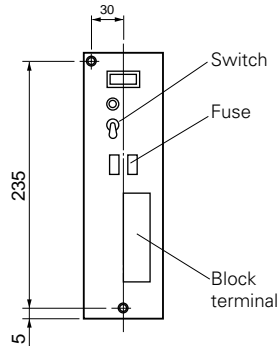
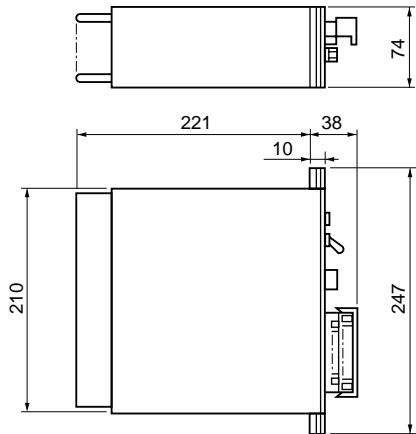
Hole dimensions in mounting frame



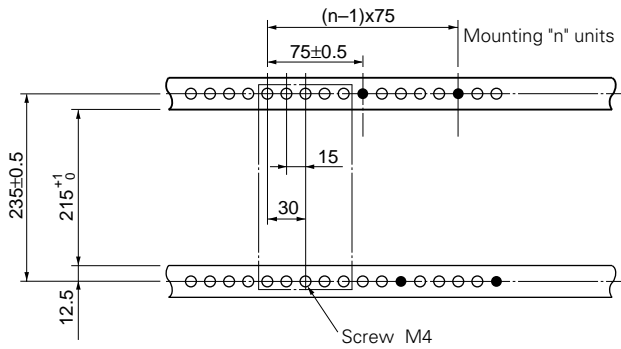
Connection diagram



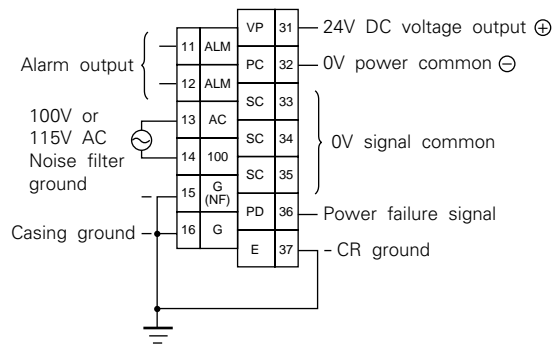
PXJ 3



**Hole dimensions in mounting frame**



**Connection diagram**



**ORDERING INFORMATION**

1. Product name
2. Type
3. Capacity
4. Input power supply
5. Application

⚠ Caution on Safety

\*Before using this product, be sure to read its instruction manual in advance.

**Fuji Electric Systems Co., Ltd.**

**Head Office**

Gate City Ohsaki, East Tower, 11-2, Osaki 1-chome,  
Shinagawa-ku, Tokyo 141-0032, Japan

<http://www.fesys.co.jp/eng>

**Instrumentation Div.**

**International Sales Dept.**

No.1, Fuji-machi, Hino-city, Tokyo, 191-8502 Japan

Phone: 81-42-585-6201, 6202 Fax: 81-42-585-6187

<http://www.fic-net.jp/eng>

Information in this catalog is subject to change without notice.

Printed in Japan