

Chapter 8. POWER SUPPLY MODULE

This chapter describes the selection method, type and specifications of the power supply module.

8.1 Selection of power supply module

Selection of the power supply module is determined by the total current consumption of digital input modules, special modules and communications modules, etc. whose powers are supplied by the power supply module.

If total load overrun the rated output capacity, the system will not normally operate. When configuring a system, select a power supply module with due consideration of current consumption of each module.

1) Current consumption GM6 series modules (unit: mA)

Modules	Models	Current Consumption	Modules	Models	Current Consumption
CPU module	GM6-CPUA	170	Transistor output module	G6Q-TR2A	180
	GM6-CPUB	210		G6Q-TR2B	170
	GM6-CPUC	170		G6Q-TR4A	140
		G6Q-TR4B		145	
24 VDC input module	G6I-D21A	40	A/D conversion module	G6F-AD2A	50
	G6I-D22A	70	D/A conversion module	G6F-DA2V	50
	G6I-D22B	70		G6F-DA2I	50
	G6I-D24A	75	High speed counting module	G6F-HSCA	220
	G6I-D24B	75			
110 VAC input module	G6I-A11A	35	Computer link module	G6L-CUEB	140
220 VAC input module	G6I-A21A	35		G6L-CUEC	180
Relay output module	G6Q-RY1A	210	Fnet I/F module	G6L-FUEA	215
	G6Q-RY2A	400		G6L-RBEA	215
Triac output module	G6Q-SS1A	190	Dnet I/F module	G6L-DUEA	220
Positioning module	G6F-POPA	345		G6L-DSIA	155
				G6L-DSQA	240

8.2 Specifications

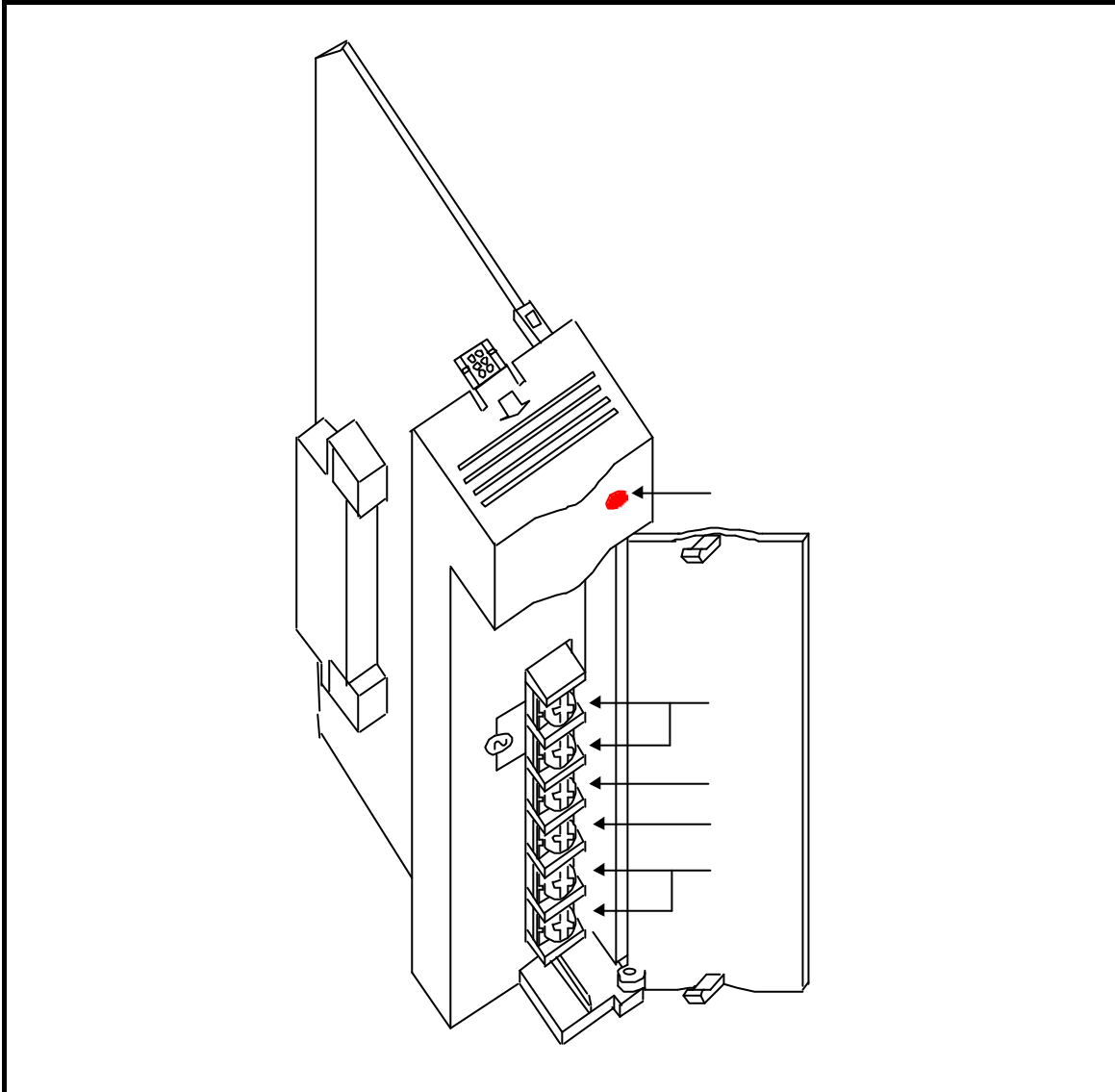
Item		GM6-PAFA	GM6-PAFB	GM6-PDFA	GM6-PD3A
Input	Input voltage	85 to 264 VAC	85 to 264 VAC	12 / 24VDC	24VDC
	Input frequency	50 / 60 Hz (47 to 63 Hz)		-	
	Input current	0.7 / 0.35 A	0.7 / 0.35 A	1.5A (12VDC)	0.7A (24VDC)
	Inrush current	30 A or less		40A or less	
	Efficiency	70% or more (rated load, 110/220 VAC)		60% or more (rated input, rated load)	
	Input fuse	250 VAC / 2A		250VAC / 3A	
	Allowable momentary power failure	20 ms or less		1ms or less	
Output	Output voltage	5 VDC			
	Output current	5 VDC : 2 A			
	Over-current protection	5 VDC : 2.2 A or more			
	Output voltage	24 VDC	± 15VDC	-	
	Output current	24 VDC : 0.3 A	+15 VDC : 0.5 A -15VDC : 0.2 A	-	
	Over-current protection	24 VDC : 0.33 A or more	+15 VDC : 0.55 A -15VDC : 0.22 A	-	
Voltage status indicator		LED turns On at normal output voltage.		-	
Used wire specifications		0.75 to 2 mm ²		-	
Weight		0.4 kg			

REMARK

To use A/D and D/A modules (G6F-AD2A, G6F-DA2V, G6F-DA2I), choose the GM6-PAFB power module.

8.3 Names of Parts

The followings describe names of parts and their purposes of the power supply module.



No.	Name	Purpose	
1	Power LED	It used to indicate the 5 VDC power supply.	
2	Power input terminal	Connect 110 or 220 VAC power. (GM6-PAFA, GM6-PAFB)	
		Connect 12 / 24VDC power. (GM6-PDFA)	
		Connect 24VDC power (GM6-PD3A)	
3	LG terminal	Line Ground	
4	FG terminal	Frame Ground	
5	24 VDC and DC24G terminal	GM6-PAFA	It used the 24 VDC power to supply to the other module
	No connection	GM6-PAFB GM6-PDFA GM6-PD3A	