3-13. Power supply unit PAC-SC50KUA

PAC-SC50KUA supplies DC powers of 24V and 12V at TB2 and TB3 respectively; the former is for central control transmission use and the latter is for G-50A operation and LAN function use.

3-13-1. When using PAC-SC50KUA as the power supplier for system controller, the capacity for system controller is considered as follows.

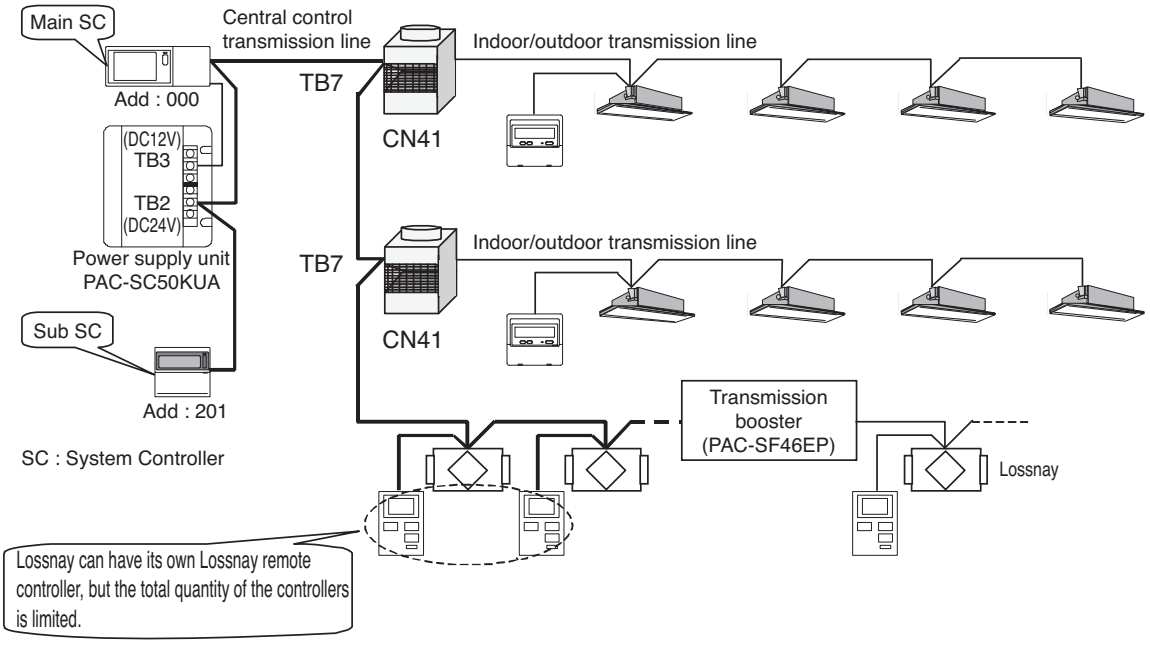

Fig. 3-13-1 Equivalent power consumption of controllers

In this case, pay attention to leave the power supply switch connector on CN41 of the Outdoor unit as the factory setting before shipment.

Taking the power consumption of the control board of Indoor unit as 1, the power consumption of various controllers is rated at Table 3-13-1.

Table 3-13-1 Equivalent power consumption of controllers

Central controller		Other system controllers		Remote controllers
G-50A	GB-50A	ON/OFF remote controller (PAC-YT40ANRA)	System remote controller (PAC-SF44SRA) Schedule timer (PAC-YT34STA) Group remote controller (PAC-SC30GRA)	ME remote controller (PAR-F27MEA) LOSSNAY remote controller (PZ-52SF)
0.5	3	1	0.5	0.25

PAC-SC50KUA is capable to supply equivalent power up to 6, therefore the maximum connectable number of system controllers is as follows.

Table 3-13-2 Max. connectable quantity of controller when using PAC-SC50KUA

Central controller		Other system controllers		Remote controllers
G-50A	GB-50A	ON/OFF remote controller (PAC-YT40ANRA)	System remote controller (PAC-SF44SRA) Schedule timer (PAC-YT34STA) Group remote controller (PAC-SC30GRA)	ME remote controller (PAR-F27MEA) LOSSNAY remote controller (PZ-52SF)
2 units (Note 1)	2 units	6 units	12 units	24 units

(Note 1) Due to its current limit of DC12V supplying, the PAC-SC50KUA can supply power for maximum 2 G-50As.

As the air conditioner control system may combine all kinds of system controllers, the total power consumption of system controllers need to count with Table 3-13-1.
For example, the controller system contain 1 G-50A, 2 ON/OFF remote controllers, 1 schedule timer, 6 Lossnay remote controllers connected at centralized control communication line.
then the total power consumption is
1x0.5+2x1+1x0.5 +6x0.25 = 4.5 < 6.
One PAC-SC50KUA is therefore enough. In the case that total power consumption exceeds 6, transmission booster PAC-SF46EPA should be added. Details refer to section 3-14 Transmission booster.

3-13. Power supply unit
PAC-SC50KUA

3-13-2. When supply power to 1 G-50A or GB-50A, the PAC-SC50KUA can supply power to other system controllers as follows. Details refer to Table 3-13-2-1 and Table 3-13-2-2.

Table 3-13-2-1
Connectable number of system controller when 1 G-50A is used.

V : Connectable

		Total number of ON/OFF remote controller						
		0	1	2	3	4	5	6
Total number of System remote controller, Schedule timer, Group remote controller	0	-	V	V	V	V	V	
	1	V	V	V	V	V	V	
	2	V	V	V	V	V		
	3	V	V	V	V	V		
	4	V	V	V	V			
	5	V	V	V	V			
	6	V	V	V				
	7	V	V	V				
	8	V	V					
	9	V	V					
	10	V						
	11	V						
	12							

Table 3-13-2-2
Connectable number of system controller when 1 GB-50A is used.

V : Connectable

		Total number of ON/OFF remote controller						
		0	1	2	3	4	5	6
Total number of System remote controller, Schedule timer	0	-	V	V	V			
	1	V	V	V				
	2	V	V	V				
	3	V	V					
	4	V	V					
	5	V						
	6	V						
	7							
	8							
	9							
	10							
	11							
	12							

■ External dimension