1-2. Specifications

Model	PAL 16-20	PAL 35-10
Input		
Input Supply	☐ 120 V ±10%, 50/60 Hz AC, 1ø ☐ 240 V ±10%, 50/60 Hz AC, 1ø	
Power consumption (120 VAC, rated load)	Approx. 800 VA	Approx. 800 VA
Output		
Output voltage range (10 turns)	0 - 16 V	0 - 35 V
Voltage resolution (theoretical value)	3 mV	6 mV
Output current range (1 turn)	0 - 20 A	0 - 10 A
Current resolution (theoretical value)	50 mA	25 mA
Constant voltage characteristics		
Regulation *1		
Source effect (Line regulation) (For ±10% change of line voltage)	1 mV	1 mV
Load effect (Load regulation) (For 0 to 100% change of output current)	2 mV	2 mV
Ripple and noise *2 [rms] (5 Hz - 1 MHz) [p-p] (DC - 10 MHz) (Typical)	 500 μVrms 10 mVp-p	 500 μVrms 10 mVp-p
Transient response *3 5 - 100% (typical)	50 μsec	
Temperature coefficient (typical)	50 ppm/°C	
Remote control, voltage to output voltage raio	Approx. 10 V to 16 V	Approx. 10 V to 35 V
Remote control, resistance to output voltage ratio	Approx. 10 kΩ to 16 V	Approx. 10 kΩ to 35 V
Remote control, current to output voltage ratio	Approx. 1 mA to 16 V	Approx. 1 mA to 35 V

(Notes) *1: Measured using the sensing terminals.

*2: Measured with the positive or negative output grounded.

*3: Recovery time to within 0.05% + 10 mV of the output voltage.

Model	PAL 16-20	PAL 35-10
Constant current characteristics		
Regulation		
Source effect (Line regulation) (For ±10% change of line voltage)	1 mA	1 mA
Load effect (Load regulation) (For 0 to 100% change of Output voltage)	5 mA	5 mA
Ripple and noise *2 rms (5 Hz - 1 MHz)	3 mA	5 mA
Remote control, voltage to output current ratio	Approx. 10 V to 20 A	Approx. 10 V to 10 A
Remote control, resistance to output current ratio	Approx. 1 kΩ to 20 A	Approx. 1 kΩ to 10 A
Remote control, current to output current ratio	Approx. 0.4 mA to 20 A	Approx. 0.5 mA to 10 A
Operating ambient temperature range	0°C - 40°C (32°F - 104°F)	
Operating ambient humidity range	10% - 90% RH	
Cooling method	Forced air cooling with fan	
Polarity of output voltage	Positive or negative grounded	
Isolation from ground	±250V DC	
Protections		
Overvoltage protection (OVP)		
Voltage setting range *4	3 - 18 V	3 - 38 V
Trigger pulse width *4	50 msec	50 msec
Protective actions	Oscillation stops. Series control transistor cuts off.	
Overheat protection (OHP)		
Trip temperature of thermal protector	100°C ±5°C (212°F)	
Protective actions	Oscillation stops. Series control transistor cuts off.	
Input fuse rating		
For 120 VAC source	10 A	10 A
For 240 VAC source	8 A	8 A
Thermal fuse rating (at sub-transformer)	135°C (275°F)	

(Note) *4: Typical value

Model	PAL 16-20	PAL 35-10
Meters (full scale)		
DC voltmeter (2.5% of full scale)	16 V F.S	35 V F.S
DC ammeter (2.5% of full scale)	22 A F.S	12 A F.S
Constant voltage mode indication	C.V: with green LED	
Constant current mode indication	C.C: with red LED	
Insulation resistances *5		
Between chassis and line	500V DC more than 30MΩ	
Between chassis and output terminal	500V DC more than 20MΩ	
Dimensions	210 W × 130 H × 130 H × 310 D mm (8.27 W × 5.12 H × 12.20 D in.)	
Maximum dimensions	230 W × 145 H × 368 D mm (9.06 W × 5.71 H × 14.49 D in.)	
Rack mounting		
JIS Std. (mm rack)	With RMF 4M and B23	
EIA Std. (in. rack)	With RMF 4 and B23	
Weight	Approx. 8.5 kg (19 lbs)	
Accessories (in carton)		
Instruction manual	1 copy	
Input line fuses (spares)		
For 120 VAC 10 A or For 240 VAC 8 A	1 ea.	
Guard caps	1 set	
Input cord	3-core cabtire cable with a ground wire, 2.0 square-mm, approx. 3 m (9.8 ft.) long	

(Note) *5: With ambient humidity not higher than 70% RH.

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