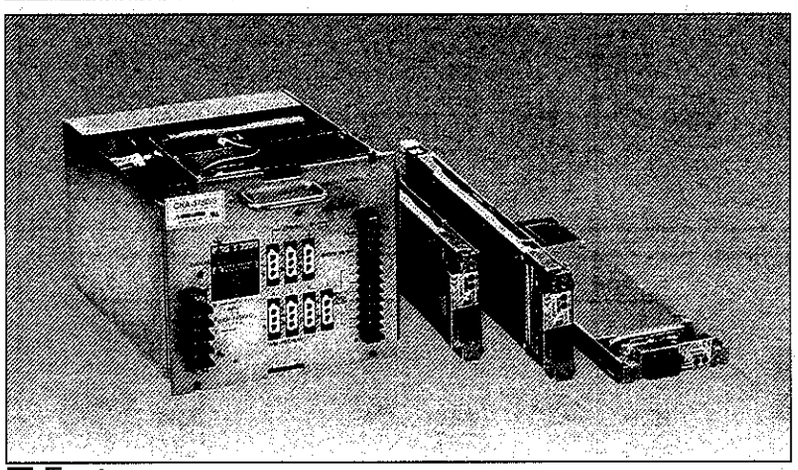
CKA·MT-SERIES

DC dispersion type switching power supply

LAMBDA
DENSEI-LAMBDA



Outline

- Suitable for computers and semiconductor testing devices
- Smaller power unit, flexible selection by combination of output modules
- Flexible organizing by 3 phase input AC-DC front-end unit (CKA-3750/S) and DC-DC back-end unit (MT400 series)
- 10 kinds of DC-DC back-end unit (single output 2V, 2.5V,3.3V, 5V to 36V) selectable depending upon the applications
- Safety standard for each country qualified, suitable for devices for export

Feature

AC-DC FRONT-END (CKA-3750/S)

- Input: Triple AC current input 170-264VAC
- High efficiency: 95%, High power factor: 0.85
- Maximum output wattage: 3750W
- Detecting Signal · Function
  Detecting low output voltage, Overheat protection, System On/Off control, Remote On/Off signal (DC-DC back-end control function)

* CKA-3750/S is a product which contains fuse on each output line of CKA3750

DC-DC BACK-END [MT400 SERIES]

- Input: DC input 210-375VDC
- Output: 10 kinds of 400W type
  2V80A/2.5V80A/3.3V80A/5V80A
  7V57A/11V36A/15V27A/18V22A
  26V15.5A/36V11A
- Function: Parallel redundant operation function
  Master slave function, Low output voltage protection, Overheat protection, On/Off function, Output voltage adjustment function etc.

Safety standards

- AC-DC front-end [CKA series]

	Conformable	Low Voltage Directive
	Approved	UL1950
	Approved	CSA950 (C-UL)
	Meets	EN60950

* CE marking conformable
(CB report for voltage directive prepared)

- DC-DC BACK-END [MT400 SERIES]

CE	Conformed	Low Voltage Directive
	Approved	UL1950
	Approved	CSA950 (C-UL)
	Approved	EN60950 (TUV)

System Power Supply

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■AC-DC FRONT-END : CKA-3750/S SERIES SPECIFICATIONS

(Supply specification sheet possibly submitted before use)

Items \ Model	CKA-3750/S
1.Input Voltage range	3 phase 170-264VAC (47-63Hz)
2.Input Current (Typ)	17.5A (input200VAC at full load)
3.Efficiency (Typ)	95% (input 200VAC at full load)
4.Power factor (Typ)	0.85 (input 200VAC at full load)
5.Output Voltage (Average)	212-373VDC
6.Output Current	0-23A
7.Output Wattage max.	3750W
8.Functions	Equipped with low output voltage detector, over-heat protection, system ON/OFF control and remote ON/OFF control
9.Operating temperature	At non-load: 0 ~ +50°C At installed in system with load: Breathe-in temperature 0 ~ +35°C Exhaust temperature: Within 20°C higher than breathe-in temperature
10.Cooling	Forced air (forced air by external blower fan for more than 2.1m*3 /min)
11.Durable Voltage	Input to chassis: 1500VAC(200mA) for 1 minute
12.Weight (Typ)	7kg
13.Size (W x H x D/mm)	199*144*250 (Please see outline drawing)

* Detailed specification rating sheet & instruction manual available on request

■DC-DC BACK-END : MT400 SERIES SPECIFICATIONS

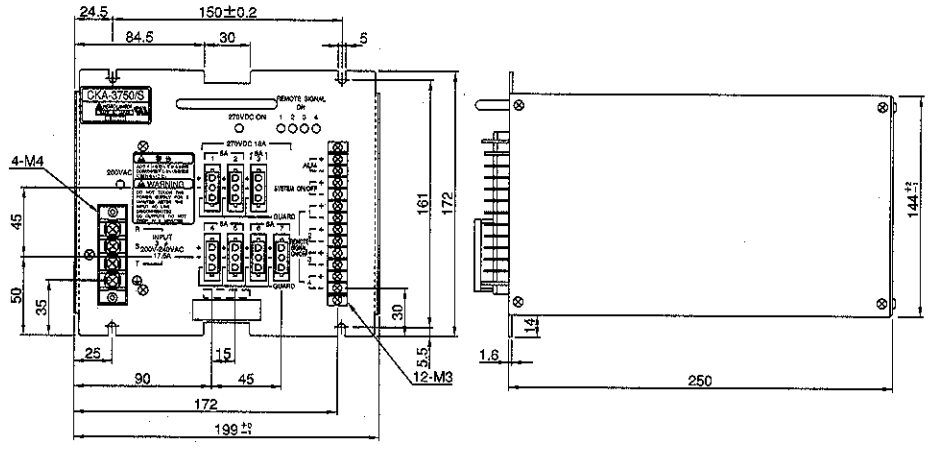
(Supply specification sheet possibly submitted before use)

Items \ Model	MT400 -2	MT400 -2.5	MT400 -3.3	MT400 -5	MT400 -7	MT400 -11	MT400 -15	MT400 -18	MT400 -26	MT400 -36
1.Nominal output Voltage	2V	2.5V	3.3V	5V	7V	11V	15V	18V	26V	36V
2.Maximam output Current	80A	80A	80A	80A	57A	36A	27A	22A	15.5A	11A
3.Output Wattage max.	160W	200W	264W	400W	399W	396W	405W	396W	403W	396W
4.Efficiency (Typ) (*1)	74%	77%	82%	87%	88%					
5.Input Voltage range	210 ~ 375 VDC									
6.Input Current (Typ) (*2)	0.9A	1.1A	1.3A	1.8A						
7.Output Voltage variable range	±20%								-30%~+10%	
8.Output ripple noise (pk-pk) (*3)	100mA				200mA				400mA	
9.Input allowance (*4)	±0.5%	± 0.4%								
10.Output adjusting range (*5)	± 1.5%	± 0.6%								
11.Ambient temperature change	± 0.6%									
12.Protection functions	Over-voltage protection, low output voltage protection, over-current protection, over-heat protection									
13.Input signal (ON/OFF)	Equipped with signal input terminal for output power ON/OFF									
14.Remote sensing	Equipped									
15.Voltage centralization adjusting functions	Equipped (one control, master, slave running function : less than 20 pcs)									
16.Current balancing functions	Equipped (one control & current balancing operation function : less than 20 pcs)									
17.Parallel redundancy operating functions	Equipped (redundancy operating function at current balancing, one control and master slave & current balancing)									
18.Operating temperature	At non-load: 0 ~ +50°C At installed in system with load: Breathe-in temperature 0 ~ +35°C Exhaust temperature: Within 20°C higher than breathe-in temperature									
19.Cooling	Forced air, liquid cooling (surface temperature with radiator installed: less than 60°C)									
20.Durable Voltage	Input to output : 3000VAC (200mA) for 1 minute Input to chassis : 1500VAC (20mA) for 1munite									
21.Weight (Typ)	900g									
22.Size (W x H x D/mm)	94 x 310 x 19 (Please see outline drawing)									

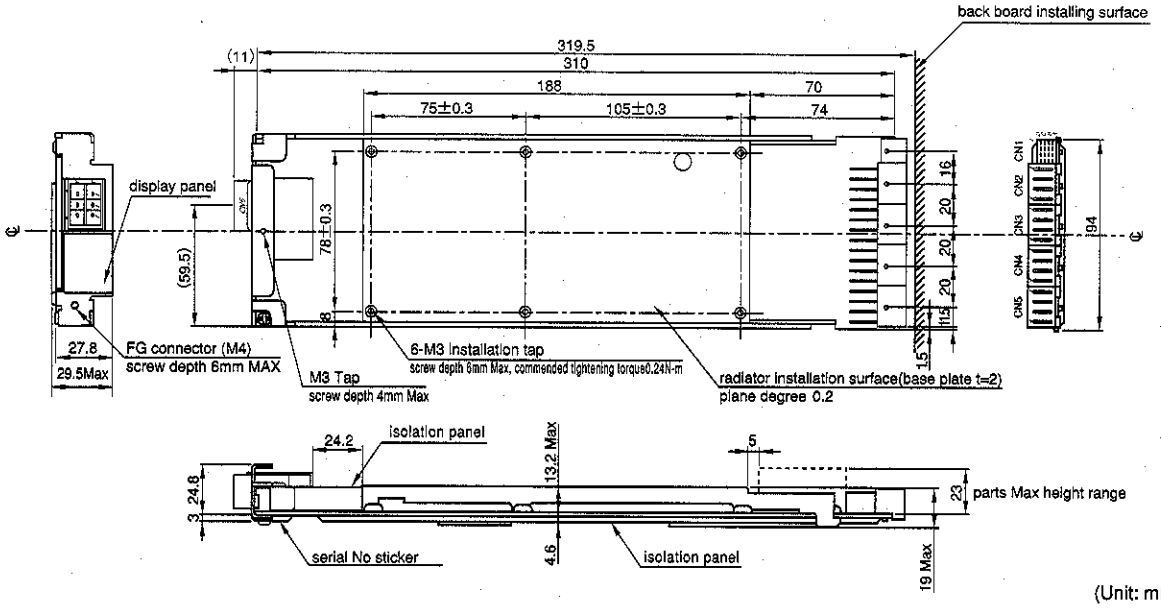
*1 : With nominal input at 80% load
*2 : With nominal input at nominal output
*3 : By standard measuring, input DC210 ~ 375V, load change 5 ~ 100%
*4 : With Input DC210 ~ 375V, constant load
*5 : With no load ~ full load, constant input voltage
*6 : For the other functions, detailed specification rating sheet & instruction manual available on request

■CKA SERIES OUTLINE DRAWING

[AC-DC FRONT-END : CKA-3750/S SERIES]

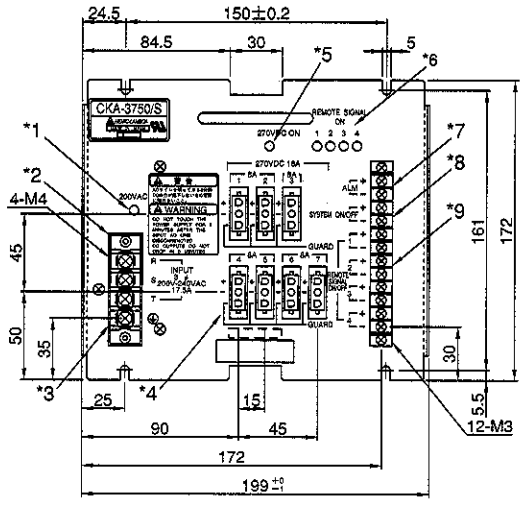


[DC-DC BACK-END : MT400 SERIES]



(Unit: mm)

■CKA-3750/S FRONT PANEL INSTRUCTION



*1. AC receiving light : Turns on when input voltage is received (yellow-colored LED)
*2. Input terminal : 3 phase AC input (R, S, T) Fuses contained in each terminal
*3. Frame ground (FG) terminal : Grounding terminal connected to chassis
*4. Output connector (1~7) : Fuses contained. The output capacity of each fuse is as below.
CH1,2 : 400V15A CH3 : 400V15A CH4,5 : 400V15A CH6,7:400V15A
*5. Output indicator : Turns on during output voltage exists (green-colored LED)
*6. Remote signal indicator 1~4 : Terns on when remote signal ON/OFF terminals 1~4 are on (green-colored LED)
*7. Alarm (ALM) signal terminal : Changes to HI when CKA-3750/S is operating abnormally (stays at LO in normal operation)
*8. System ON/OFF terminal : Possible to control remote signal terminal 1~4 by external signal
*9. Remote signal ON/OFF terminal 1~4 : Controls ON/OFF of DC/DC unit output by connecting to ON/OFF control terminal of DC/DC unit
Strictly make sure that this terminal is connected to ON/OFF control terminal of DC/DC unit. Otherwise, CKA-3750/S could be damaged badly.