

YEF200 SERIES
200W



YEF series are single-output slim type power supply and for wide range AC input from 90VAC to 305VAC.

This series has high efficiency up to 89% and operates from -30~+70 C under air convection without fan.

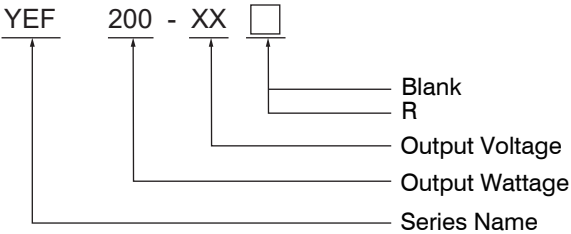
This series serves as a high performance power supply solution for various industrial applications.

RoHS UK CA CE  Pending

Features

- Universal AC Input/ Full Range
- Built-in Active PFC Function
- Fanless design,200W convection
- High efficiency up to 89%
- DC OK active signal and redundant function(option)
- Protections: Short circuit/Over load/Over voltage/Over temperature
- LED indicator for power on
- Three years warranty

Model Description



Type	Description
Blank	Enclosed
R	Buit-in DC ok active signal and redundant function

Model Information

Part number	DC Voltage	Rated Current(max.)	Rated Power	Average Efficiency	Ripple & Noise	Max Capacitive Load	Voltage ADJ Range
YEF200-3.3□	3.3V	40A	132W	88.5%	150mVp-p	10000uF	3.2~3.5V
YEF200-4.2□	4.2V	40A	168W	88.5%	150mVp-p	10000uF	3.6~4.4V
YEF200-5□	5V	40A	200W	89%	200mVp-p	10000uF	4.5~5.5V
YEF200-12□	12V	16.7A	200.4W	90%	240mVp-p	8000uF	11.4~12.6V
YEF200-15□	15V	13.4A	201W	91.5%	240mVp-p	7000uF	14.3~15.8V
YEF200-24□	24V	8.4A	201.6W	91%	240mVp-p	5000uF	22.8~25.2V
YEF200-36□	36V	5.6A	201.6W	92.5%	240mVp-p	3000uF	34.2~37.8V
YEF200-48□	48V	4.2A	201.6W	92%	300mVp-p	2000uF	45.6~50.4V
YEF200-55□	55V	3.6A	201.6W	93.5%	360mVp-p	1000uF	45~58V

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Specification

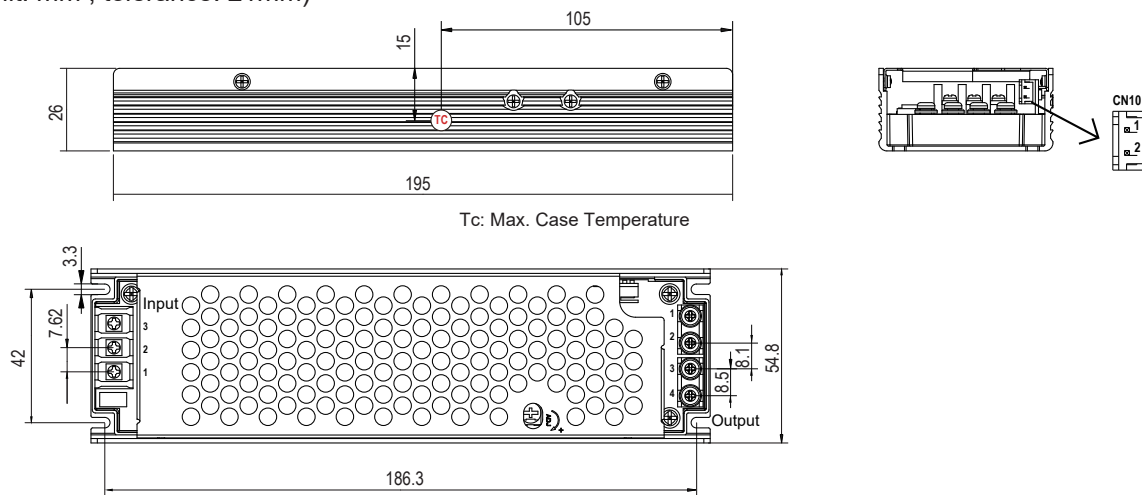
Model	Safety Model No.	YEF200-XX□			
Output	Setup,Rise,Hold up Time	2.0s,80ms,10ms/230VAC(at full load)		3.0s,80ms,10ms/115VAC(at full load)	
	Voltage Tolerance	± 2.0%	YEF200-3.3/4.2/5□	± 1.0%	YEF200-12/15/24/36/48/55□
	Line Regulation	± 0.5%	YEF200-3.3/4.2/5□	± 0.3%	YEF200-12/15/24/36/48/55□
	Load Regulation	± 1.0%	YEF200-3.3/4.2/5□	± 0.5%	YEF200-12/15/24/36/48/55□
Input	Rated Voltage Range	100-277VAC			
	Voltage Range	90-305VAC/127-430VDC			
	Frequency Range	50/60Hz			
	AC Current	2.6A/115VAC		1.3A/230VAC	
	Inrush Current	Cold Start 80A/200us at 230VAC 50Hz		Cold Start 40A/200us at 115VAC 50Hz	
	Leakage Current	<0.75mA/240VAC			
	Power Factor(Typ.)	>0.94/230VAC at full load		>0.98/115VAC at full load	
Protection	Over Load	110~140%Rated Output Power			
		Hiccup mode, recovers automatically after fault condition is removed.			
	Short Circuit	Hiccup mode, recovers automatically after fault condition is removed.			
	Over Voltage	115~135%Rated Output Voltage			
		Shut down o/p voltage, re-power on to recover.			
	Over Temperature	Shut down o/p voltage, recovers automatically after temperature goes down.			
Ambient	Working TEMP.	-30 ~ +70 ℃ (Please refer to “Derating Curve”section)			
	Working Humidity	20 ~ 95%RH Non-condensing			
	Storage TEMP. Humidity	-40 ~ +85 ℃,10 ~ 95%RH Non-condensing			
	TEMP. Coefficient	± 0.03%/(0 ~ 50 ℃) on load output			
	Vibration	Component: 10 ~ 500Hz, 5G 10min./1cycle, 60min. each along X, Y, Z axes			
	Safety Protection	Class I			
	Over Voltage Category	OVC III / According to EN62368-1;altitude up to 2000 meters			
Safety	Safety Standards	EN62368-1 approved , design to meet :UL62368-1,BS EN62368-1,EN60335-1, EN61558-1			
	Withstand Voltage	I/P-O/P:3.75KVAC/1min I/P-FG:2KVAC/1min O/P-FG:1.25KVAC/1min			
	Isolation Resistance	I/P-O/P:100M Ohms / 500VDC / 25 ℃ / 70% RH			
EMC	EMC EMISSION	Compliance to BS EN/EN55032 (CISPR32) Class B,BS EN/EN55035 BS EN/EN61000-3-2 Class A-D,BS EN/EN61000-3-3			
	EMC IMMUNITY	Compliance to BS EN/EN61000-4-11 Criteria B, BS EN/EN61000-4-2,3,4,5,6,8 Criteria A			
Others	Packing	500g/pcs; 26 x 18 x 24 cm; 20pcs/carton			
	Dimension (LxWxH)	195 x 54.8 x 26 mm			
	MTBF	188.4Khrs min. MIL-HDBK-217F(25 ℃)			
	Housing material	Aluminium / steel			
Note	1.All parameters NOT specially mentioned are measured at 115/230VAC input, rated load and 25 ℃ of ambient temperature. 2.Ripple&noise are measured at 20MHz of bandwidth by using a 12” twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor. 3.The power supply is considered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets EMC directives. 4.Derating may be needed under low input voltages. Please check the derating curve for more details. 5.Strongly recommended that external output capacitance should not exceed 10000uF(Only for the models with output voltage 5/12V) 6.The ambient temperature derating of 3.5 ℃/1000m with fanless models and of 5 ℃/1000m with fan models for operating altitude higher than 2000m(6500ft).				

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Drawing & Label

(Unit: mm , tolerance: $\pm 1\text{mm}$)



Tc: Max. Case Temperature

AC Input Terminal pin NO.Assignment

Pin No.	Assignment	Terminal	Max mounting torque
1	AC/L	BHN 1.5-XX-7.62-02-T1-C	5.2N-m
2	AC/N		
3	\perp		

DC Output Terminal pin NO.Assignment

Pin No.	Assignment	Terminal	Max mounting torque
1,2	- V	MFR 06426-T2	9.5N-m
3,4	+ V		

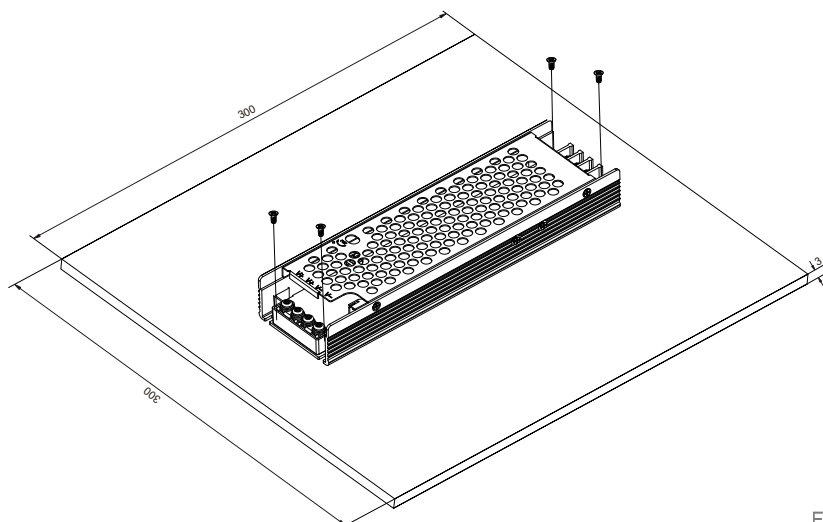
DC OK Connector(CN10): DL20001-AWD or requivalent

Pin No.	Assignment	Mating Housing	Terminal
1	DC COM	DL20001-AWD	DL20001-PH-AWD
2	DC OK+V		

Installation

1. Operate with additional aluminum plate

In order to meet the "Derating Curve" and the "static Characteristics", YEF200 series must be installed onto an aluminum plate (or the cabinet of the same size) on the bottom. The size of the suggested aluminum plate is shown as below. And for optimizing thermal performance, the aluminum plate must have an even and smooth surface (or coated with thermal grease), and YEF200 series must be firmly mounted at the center of the aluminum plate.

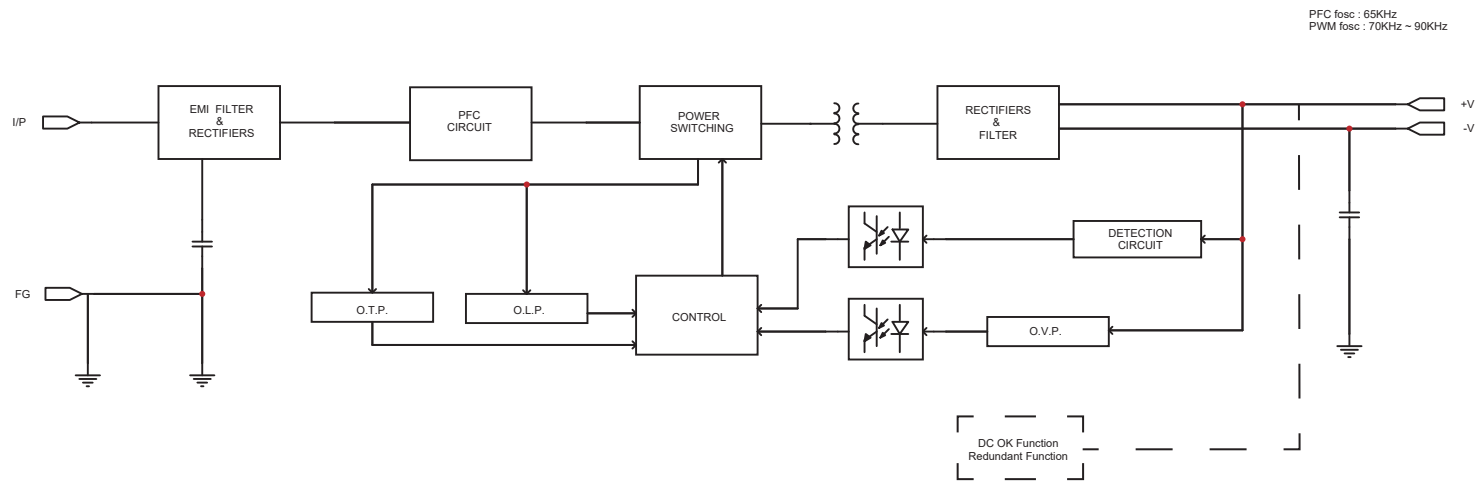


(Unit: mm , tolerance: $\pm 1\text{mm}$)

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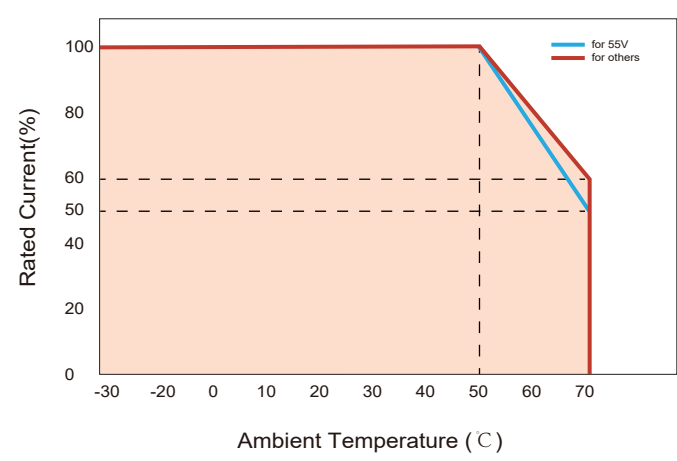
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Block Diagram

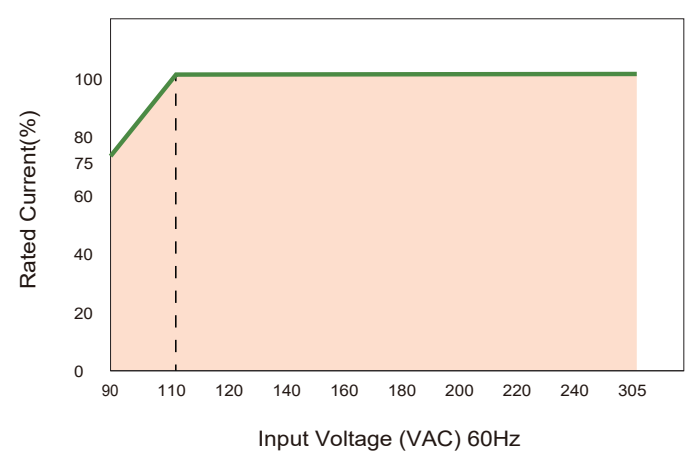


Engineering Data

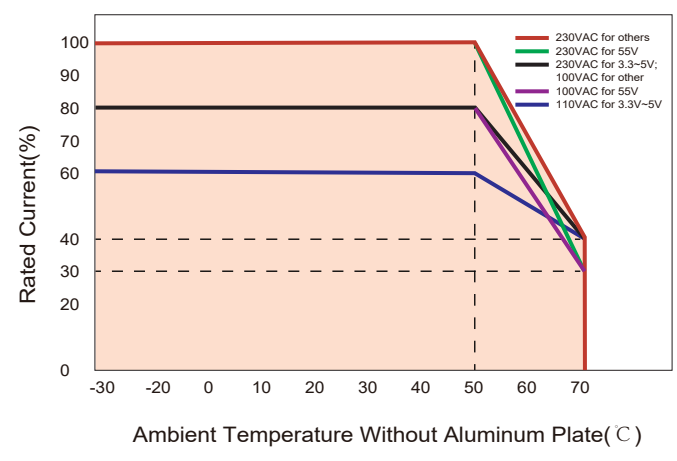
Derating Curve



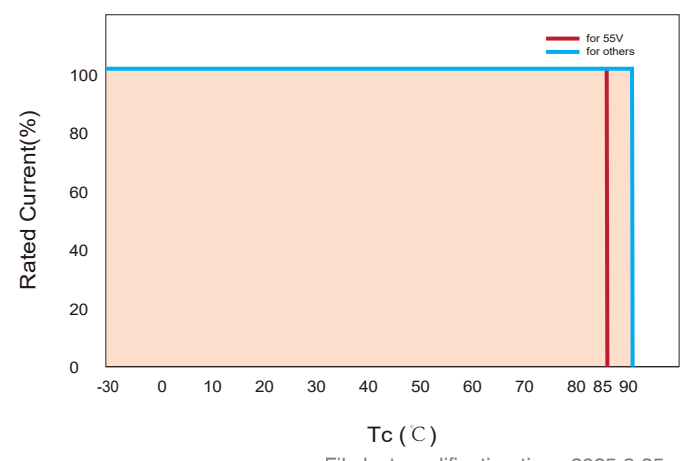
Static Characteristics



Derating Curve



Tc VS Rated Current



File last modification time: 2025-2-25

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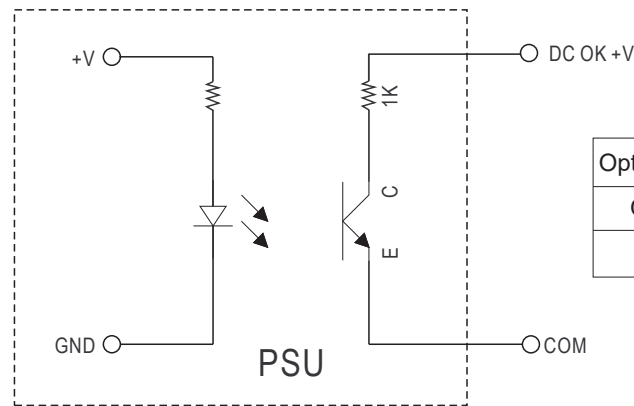
Function

DC OK Signal(Optional)	Contact rating(max.): 15VDC/10mA resistive load
Redundant(Optional)	For parallel connection protection:For parallel applications, when one PSU can not work , the another one will be automatically enabled. This can prevent the system crash, and provide the reliability of system

Function Manual

1. DC OK Singal

DC OK is a collector shorted signal. It is used by an optocoupler in the power supply which indicates the output status of the power supply as exhibited below.



Optocoupler C-E Pin Conduction	PSU turns on	DC OK
Optocoupler C-E Pin Open	PSU turns off	DC Fail
Optocoupler Rating(Max.)	15VDC/10mA resistive load	

2. Redundant Function

- (1) YEF200-XXR is built-in redundant function and can be connected 2 units in parallel.
- (2) When in parallel operation the maximum load should not be greater than the rated power of any PSU.

