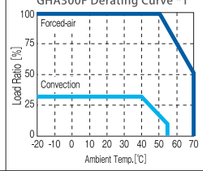
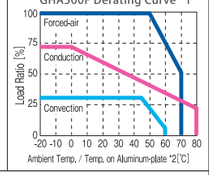
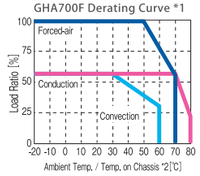
GHA series



NEW

Model			GHA300F	GHA500F	GHA700F
Input Voltage			90-264VAC, 50/60Hz (Derating is required)		85-264VAC, 50/60Hz (Derating is required)
Efficiency (Output Voltage 24V)			90.0% / 92.0% (120VAC / 230VAC, Max. Output Power)		94.0% / 96.0% 93.0% / 95.5% (115VAC / 230VAC, Output Power 400W) (115VAC / 230VAC, Output Power 700W)
Output Voltage / Current (Cooling Method) * Current Value at 50℃ [Ambient Temp.] at forced-air or convection cooling, 50℃ [Temp. on Aluminum-plate or Chassis] at conduction cooling. * Output power of 12V (GHA700F) is 650W max.	12V	Forced-air	25A	41.7A	54.2A
		Convection	4.5A	9.2A	22.2A
		Conduction	—	16.7A	33.4A
	15V	Forced-air	—	33.4A	—
		Convection	—	7.4A	—
		Conduction	—	13.4A	—
	24V	Forced-air	12.5A	21.0A	29.2A
		Convection	2.2A	4.6A	11.1A
		Conduction	—	8.4A	16.7A
	30V	Forced-air	—	16.7A	23.3A
		Convection	—	3.7A	8.9A
		Conduction	—	6.7A	13.4A
	48V	Forced-air	6.3A	10.5A	14.6A
		Convection	1.1A	2.3A	5.6A
		Conduction	—	4.2A	8.4A
	56V	Forced-air	—	9.0A	12.5A
		Convection	—	1.9A	4.8A
		Conduction	—	3.6A	7.2A
Leakage Current (Io=100%)			0.25mA Max. 240VACin 60Hz		0.2mA Max. 264VACin 60Hz
Operating Ambient Temperature *1 At Measurement Point where Cosel suggests. *2 Ambient Temp. at Forced-air and Convection Cooling. Aluminum-plate or Chassis Temp. at Conduction Cooling.			-20℃-+70℃ (Derating is required)	-20℃-+80℃ (Derating is required)	-20℃-+80℃ (Derating is required)
			GHA300F Derating Curve *1 	GHA500F Derating Curve *1 	GHA700F Derating Curve *1 
Safety Standard			ANSI/AAMI ES60601-1, EN60601-1 3rd, EN62368-1, UL60950-1, EN60950-1, C-UL (Equivalent to CSA60950-1, CAN/CSA60601-1)		ANSI/AAMI ES60601-1, EN60601-1 3rd (BF type), EN62368-1, UL62638-1, C-UL (Equivalent to CAN/CSA-C22.2 No.62368-1, CAN/CSA-C22.2 No.60601-1) EN61558-2-16 (OVC-III)[Compliant], Class- II [Option]
Size (W x H x D)			76.2 x 35 x 127mm [3 x 1.38 x 5inches]		76.2 x 38.1 x 127mm [3 x 1.50 x 5inches]

*"-SNF" Option: With Cover, Chassis and Fan. For details, please see Cosel Website.

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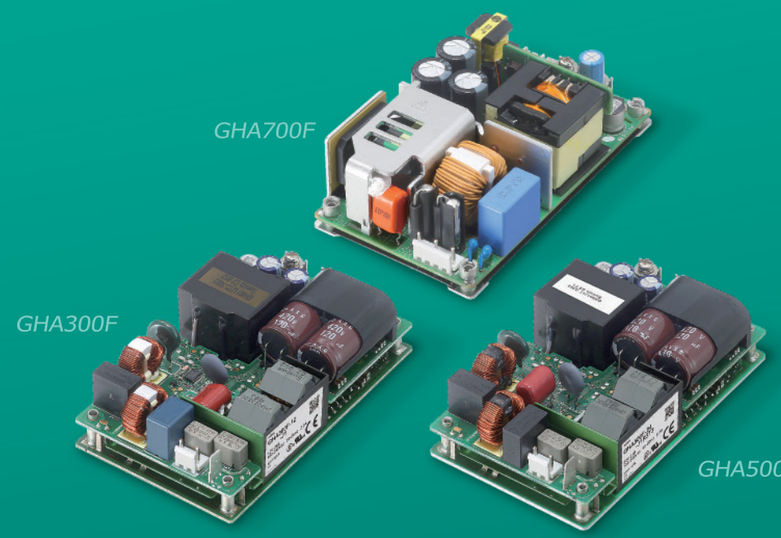
Apr. 2024

COSEL

3×5 Inches High Power AC-DC Power Supply

GHA series



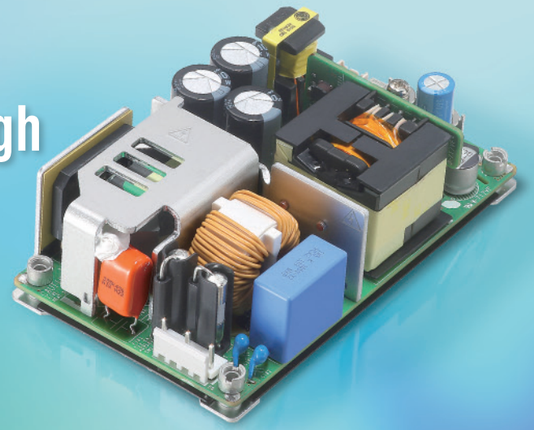
MEDICAL / ITE / INDUSTRIAL

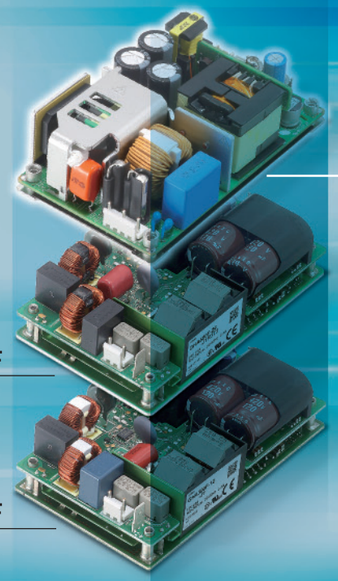
300 / 500 / 700W

NEW

GHA series

BF Rated 3”x5”<1U High
Forced Air Cooling
700W





GHA700F

The Same Foot Print as the GHA300F and 500F

GHA500F

GHA300F

Highest Power Density Class in the World
31.1 W/inch³

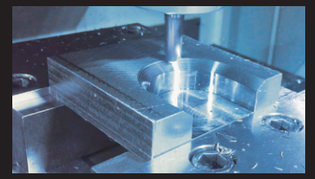
Quiet Operation

Fan less-type（Conduction cooling 400W）

Conventional High Power supplies often have built in fans that make noise.
In addition multiple power supplies in an application create high leakage current problems. The GHA700 can operate as a convection cooled power supply with a small foot print. And also increases product safety for medical personnel and patients.

Medical Standard
IEC60601

Suitable High-Efficiency Power Supply for Medical Equipment like MRI, Hemodialyzer as well as ITE applications such as Measurement Equipment and Communication Systems.



Decreased Risk of Contamination
Fanless operation ideal for dusty environments.

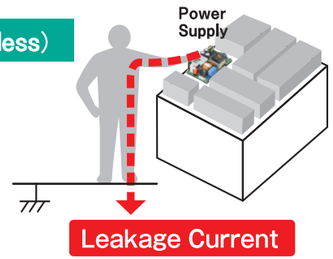
No Need of Fan Maintenance
No need for fan maintenance in the field

Fan-Less for Quiet Operation
Quiet fanless operation ideal for Medical or Audio applications

Low Leakage Current（BF-type, Touch current 100μA or less）

Compliance with Safety Standards

Decreased leakage current to GND (250→200μA)
Also decreased touch current. Increases design availability to add power supply or noise filter in application.



New Solution Proposal

Compact

Due to the small footprint and high power density, system requirements can be achieved without using power supplies in parallel. Not only Improve Reliability, Also Optimize EMC and Heat Dissipation Design.

High Power
High Efficiency

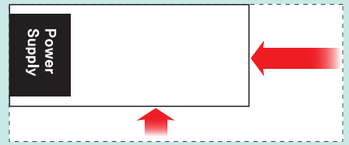
Contributes to Compact Application Space

Decreases Noise

Decreases Cost

Contributes to Compact Application Space

Can reduce heat problem and downsize application space by power supply's conduction cooling operation. Increased design flexibility with high density power.



◎GHA700 operating temperature is lower which extends the life of electrolytic capacitors.

Low Energy Consumption

Assists for the achievement of "Net Zero Energy Building"

GHA700F achieves High Efficiency (96%). Contributes to energy savings due to high efficiency and helps to achieve "Net Zero Energy Building". Can meet IEC60335 easily by the IEC61558-2-16 Compliance.