

ENTERPRISE ENVIRONMENT

Company Display



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DSP is a leading supplier of power conversion solutions to the military, avionics, transportation, medical, industrial, telecommunications and computing markets. DSP's innovative products are designed to exceed the demanding performance, quality, and reliability requirements of today's power electronic engineers who develop leading-edge infrastructure hardware. DSP provides all the power conversion modules needed to build a power system solution, as well as complete power systems.

We offer PFC, AD-DC, DC-DC, Bus converter, No-Isolation DC-DC module etc. These products are designed and manufactured to comply with a wide range of military standards. DSP's Military Power Systems are designed and manufactured in our CN facilities to comply with a wide range of standards for the extreme environmental and demanding electrical conditions of Military applications. DSP incorporates field proven high efficiency designs and rugged packaging technologies.

Product Select list

DC-DC High Voltage Series

◆High Voltage Full Brick series (119*63.1*13mm)(116.6*60.8*13mm)

Series List	5V	6.5V	12V	24V	28V	36V	48V	Page
GDFAH270 (200V-400V)					71.4A/2000W		41.7A/2000W	
DFAH270 (200V-400V)					71.4A/2000W	50A/1800W	41.7A/2000W	
GDFBH270 (200V-400V)			100A/1200W	25A/600W	42.9A/1200W		16.7A/800W	
DFBH270W (155V-425V)	80A/400W	69.23A/450W	66.67A/800W	41.67A/1000W	42.86A/1200W	22.22A/800W	20.83A/1000W	
GDFBH600 (400V-800V)					64.3A/1800W			
DFBH600 (400V-800V)			66.67A/800W		42.86A/1200W			
GDFAH270 (200V-400V)					100A/2800W		62.5A/3000W	
GDFAH540 (400V-720V)					100A/2800W		62.5A/3000W	

◆High Voltage Half Brick series (63.4*60.8*12.7mm)

系列名称	3.3V	5V	6V	6.5V	10V	12V	15V	18V	24V	28V	36V	48V	页码
GDHAH270W (155V-425V)		50A 250W							10.4A 250W				
DHAH270W (155V-425V)	36.36A 120W	50A 250W	33.33A 200W		40A 400W	33.33A 400W	26.67A 400W	22.22A 400W	16.67A 400W	14.29A 400W	11.11A 400W	8.3A 400W	
DHBH270 (200V-400V)		60A 300W				58.33A 600W/700W				35.71 700W/1000W			
GDHAH270 (200V-400V)										14.3A 400W		8.3A 400W	
GDBH270 (180V-425V)		50 400W		53.8A 350W		66.7A 800W			41.7A 1000W	1000W/1200w		20.8A 1000W	
GDHH540 (400V-720V)						83.3A 1000W				53.6A 1500W		31.25A 1500W	

◆High Voltage Quarter Brick series (64*39*12.7mm)

Series list	3.3V	5V	6V	8V	12V	15V	24V	28V	48V	Page
GDQNH270W (155V-425V)			33.3A 200W	25A 200W	16.7A 200W	13.3A 200W	8.3A 200W		31.A 150W	
DQH270W (100V-450V)	30.30A 100W	30A 150W	25A 150W	15A 120W	12.5A 150W	13.33A 200W	6.25A 150W	7.14A 200W	3.13A 150W	
GDQH270 (200V-400V)		80A 400w			25A 300W			10.7A 300W	6.3A 300W	

◆High Voltage Eighth Brick (GDGH:65.5×30×10.2mm;GDEH270:60.3×25.25×12.7mm)

Series list	3.3V	5V	6V	7V	12V	15V	24V	28V	40V	48V	Page
GDGH270 (180V-425V)		6A 30W						1.4A 40W			
DGH270W (200V-400V)	9.1A 30W	8A 40W	5A 30W	5.7A 40W	3.33A 40W	2.67A 40W	1.67A 40W	1.07A 30W	0.75A 30W		
GDEH270 (180V-425V)	18.2A 60W		13.3A 80W		8.3A 100W/150W		3.3A 80W	3.6A 100W		2.1A 100W	

◆High Voltage Sixteenth Brick GDSH(35.2×25.0×12.7mm)

Series list	5V	12V	40V	Page
GDSH270 (100V-500V)	4A/20W	1.6A/20W		
GDSAH270 (185V-390V)			0.75A/30W	

DC-DC Low Voltage Series

◆ Low Voltage Half brick series (63.2×60.6×12.7mm)

Series list	5V	7V	8V	12V	24V	28V	48V	270V	Page
GDHL28 (16V~40V)	60A/300W	64.3A/450W	70A/560W	50A/600W		21.5A/600W	12.5A/600W	1.85A/500W	
GDHL28V (9V~40V)					12.5A/300W				
GDHL28E (16V~70V)						21.5A/600W			
GDHL48 (34V~75V)				50A/600W		21.5A/600W			
DHL28 (16V~40V)	60A/300W		50A/400W	42A/500W	20.8A/500W	21.5A/600W	12.5A/600W	1.85A/500W	

◆ Low Voltage Quarter Brick (58.9×37.8×12.7mm)

Series list	3.3V	5V	6V	8V	12V	24V	28V	48V	Page
GDQL28 (16V~40V)		60A/300W	50A/300W		25A/300W		14.3A/300W		
DQL28 (16V~40V)	100W	150W	100W	150W	200W	200W	200W	200W	
DQL48 (36V~75V)					200W	200W	150W		



Low Voltage Eighth Brick (60.3×25.2×12.7mm) (60.3×25.2×10.0mm)

Series list	5V	6V	9V	12V	15V	24V	28V	Page
GDEL28 (16V~40V)	30A/150W	33.3A/240W	16.7A/150W	25A/300W		6.25A/150W	10.7A/300W	
GDEL28V (9V~40V)	20A/100W			10.4A/125W			3.6A/100W	
GDEL48W (18V~72V)	20A/100W				8.3A/125W*			
DEL28 (16V~40V)	20A/100W			25A/300W		6.25A/150W	10.7A/300W	

◆ Low Voltage Sixteenth Brick (35.2×25×12.7mm) (35.2×25×10mm)

Series list	3.3V	5V	6V	8V	9V	12V	15V	24V	28V	50V	Page
GDHL (9V~40V)	15.2A/50W	15A/75W	12.5A/75W			6.25A/75W		3.12A/75W	2.7A/75W		
GDHL (16V~40V)			12.5A/75W	2.5A/100W	13.3A/120W	8.3A/100W	6.6A/100W*	4.2A/100W	4.29A/120W	2A/100W	
GDHL (18V~72V)		12A/60W	10A/60W			6.25A/75W	4A/60W	3.12A/75W	2.7A/75W		

◆ Low Voltage 1*2Inch (50.8×25.4×10.2mm)

Series list	5V	12V	28V	50V	Page
GDGL24W (9V~36V)	12A/60W	5A/60W	2.2A/60W	1.2A/60W	

◆ Low Voltage 1*1 Inch (25.4×25.4×10.2mm)

Series list	3.3V	5V	6V	12V	15V	24V	28V	Page
GDUL (16V~40V)				4.2A/50W	3.3A/50W	2.1A/50W	1.8A/50W	
GDUL28V (9V~40V)	6.1A/20W	6A/30W	5A/30W	2.5A/30W	2A/30W	1.25A/30W	1.1A/30W	
GDUL48 (36V~72V)		6A/30W*		2.5A/30W*			1.1A/30W*	

◆ Low Voltage 1*0.5 Inch (25.6×12.9×10.2mm)

Series list	3.3V	5V	6V	12V	15V	24V	28V	Page
GDBL28V (9V~40V)		10W/15W	2.5A/15W	1.25A/15W	1A/15W	0.625A/15W	0.53A/15W	
GDBL28 (9V~40V)	6.1A/20W	4A/20W	5A/20W	2.5A/20W	1.33A/20W	0.83A/20W	0.712A/20W	

◆ Low Voltage 0.5*0.5 Inch (13.0×13.0×10.0mm)

Series list	3.3V	5V	7V	9v	12V	15V	24V	28V	Page
GDAL28V (9V-40V)	0.9A/3w	1A/5W	0.71A/5W	0.55A/5W	0.41A/5W	0.33A/5W	0.21A/15W	0.18A/5W	
GDAL28 (16V-40V)					0.834A/10W	0.67A/10W		0.358A/10W	

PFC Series

◆ AC Three Phase PFC Full Brick (119.5×63.6×12.7mm)

Series list	28V	270V			360V	540V	Page
GDFPF115/DFPF (85Vac-140Vac)	2.77A/750W	5.55A/1500W	6.66A/1800W	7.41A/2000w			
GDFPF380/DFPF (323Vac-457Vac)		7.41A/2000W			5.55A/2000w	3.71A/2000W	

◆ AC Single Phase PFC Half Brick (63.1×60.6×12.7mm)

Series list	270V	300V	360v	380V	390v	Page
DHPF115 (85v-180v)	1.8A/700w	1.33A/400W		1.05A/400W		
GDHPF220W (85v-264V)					700W/1300W	
DHPF220W (85V-264V)			2.5A/900W	2.1A/800W		

◆ AC Single Phase PFC Quarter Brick (58.9×37.8×12.7mm)

Series list	390V						Page
GDQPF/DQPF220W (85Vac-264Vac)	0.51A/200W	1.03A/400W	1.54A/600W	0.31A/120W	0.51A/200W	0.9A/350W	

AC-DC Series

◆ AC-DC Full Brick (GDFAPFC122.0×70.0×12.7mm) (GDSPF158.0×89.0×12.7mm)

Series list	12V	24V	28V	270V		Page
GDFAPFC220W/DFAPFC (85Vac-264Vac)	600W/1500W	800W/1500W	800W/1500W			
GDSPF/DSPF (176Vac-264Vac)				5.55A/1500W	10.4A/2800W	

◆ AC-DC Full Brick (GDFBPFC116.8×61.0×12.7mm)

Series list	12V			28V		48V	Page
GDFBPFC/DFBPFC220W (85Vac-264Vac)	25A/300W	83.33A/1000W	41.66A/500W	42.86A/1200W	21.5A/600W	25A/1200W 12.5A/500W	

◆ AC-DC Half Brick (63.2×60.6×12.7mm)

Series list	12V		24V		28V		48V		Page
GDHPFC/DHPFC220W (85Vac-264Vac)	29.17A/350W	41.67A/500W	14.58A/350W	20.83A/500W	12.5A/500W	17.86A/500W	7.29A/350W	10.42A/500W	

◆ AC-DC Quarter Brick (58.9×37.8×12.7mm)

Series list	5V	12V		24V		28V		Page
GDQPFPC/DQPFPC220 (85Vac-264Vac)	10A/50W	4.17A/50W	12.5A/150W	2.08A/50W	6.25A/150W	1.79A/50W	5.36A/150W	

◆ AC-DC Three Phase Quarter Brick (47.2×36.8×12.7mm)

Series list	12V		Page
GDQPFPC380 (300Vac-400Vac)	2A/24W		

Non Isolated DC-DC Power Module

◆ Non Isolated DC-DC Half Brick (GDHNB61.6×58.6×12.7mm) (GDHN63.14×60.6×12.7mm)

Series list	9V	0-40V	0-60V	270V	Page
GDHNB(16V-40V)	88.89A/800W				
GDHNB270(200V-400V)				7.41A/2000W	
GDHNB540(480-600V)				7.41A/2000W	
GDHN28V(9V-40V)		0-55A/2200W			
DHN28VE(9V-60V)			0-40A/2400W		

◆ Non Isolated DC-DC Quarter Brick (60.6×39.0×12.7mm)

Series list	0-60V	Page
GDQN/DQN28VE(9V-60V)	0-25A/1500W	

◆ Non Isolated DC-DC Eighth Brick (60.6×25.0×12.7mm)

Series list	0-60V	Page
GDEN/DEN28VE(9V-60V)	0-15A/900W	

◆ Non Isolated DC-DC Sixteenth Brick (33.0×23.0×12.7mm)

Series list	3.3-9V	Page
GDSN/DSN12 (10V-16V)	0-30A/150W	

◆DC-DC Bus Converters Half Brick (GDHNB60. 6×63. 1×12. 7mm) (GDHN63. 14×60. 6×12. 7mm)

Series list	28V	11V			Page
DHBC270 (230V-320V)	35.71/1000W				
DHBC540 (440V-700V)	35.71/1000W				
DHBC270 (250-290V)		36.36A/400W			

Filter list

●DC-DC Filter GLD list

Part list	Input voltage	Out current A	Out Pin type	Page
GLD28	5~50V (Typical 28Vdc)	2-70A	Lead wire/DIP	P73
GLD48	10~80V (Typical 48Vdc)	2-30A	Lead Wire/DIP	P73
GLD280	100-400V (Typical 280Vdc)	1-40A	Lead Wire/DIP	P73

●AD-DC GLA list

Part list	Input Voltage	Out current A	Out Pin Type	Page
GLA220	50~275V (Typical 220Vac)	1-40A	Lead Wire/DIP/Flange	P75
GLA115	85~150V (Typical 115Vac)	5-15A	Flange	P75

●DC GLGD list

Part list	Input Voltage	Out current A	Out Pin Type	Page
GLGD25	1.5~25V (Typical 12Vdc)	10-20A	DIP	P76
GLGD50	5.0~50V (Typical 28Vdc)	10-20A	DIP	P76

DC Current Surge Controller

●Low DC Current Surge Controller

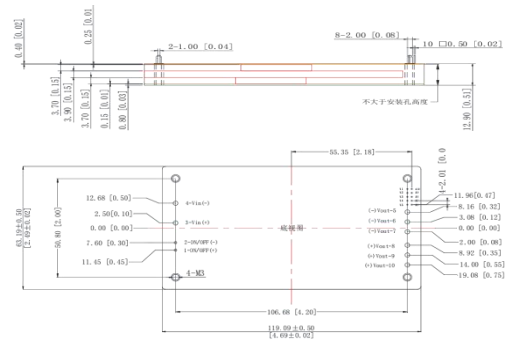
Part list	Input Voltage	Out Current A	Clamping Voltage	Page
GDSAF	28 (8Vdc~32Vdc) ; 28 (8Vdc~36Vdc) : -I 28 (8Vdc~40Vdc) : -H	2-30A	32.5Vdc~36Vdc : 36.5Vdc~39Vdc : -I 40.5Vdc~43Vdc : -H	P67
GDSA		2-30A		P68
GDSB		3-6A		P69
GDSC		5A		P70
GSDS		16A		P71

High Voltage DC-DC Full-Brick GDFAH



Product Features

- High power and high conversion efficiency
- Full-Brick, Multiple packaging forms are available
- Wide input voltage range, Output power: 2200~3000W
- Typical efficiency: 95%~96%
- Output voltage: 80%~110%
- Multiple protection functions, output anti-backflow circuit
- Support parallel current sharing and synchronous start-up functions to achieve power expansion
- Application: military electronic systems such as airborne, vehicular and shipborne industrial motion control, information displays, factory automation and power generation systems



Package Size: 119.1*63.2*13

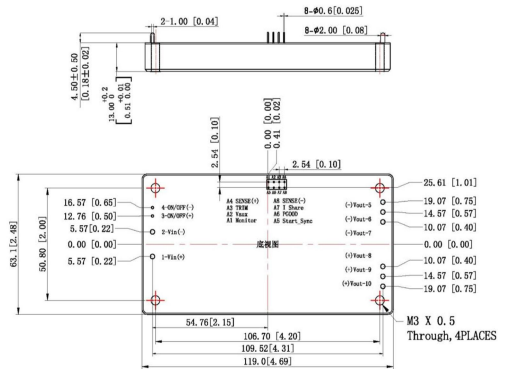
◆ Specifications			
INPUT CHARACTERISTICS	Module	ELECTRICAL CHARACTERISTICS	
	Operating Input Voltage Range (Vdc)	270 (200~400)	540 (400~750)
	Input surge voltage (Vdc)	475	800
	Typical efficiency	95%	96%
OUTPUT CHARACTERISTICS	Output voltage accuracy	±1% (Typical)	±1% (Typical)
	Voltage regulation rate	±1% (Typical)	±1% (Typical)
	Load adjustment rate	±1% (Typical)	±1% (Typical)
	Ripple noise (mV)	≤3%Vo (Typical)	≤3%Vo (Typical)
	Transient response 50%~75%~50% (mV)	≤6%Vo (Typical)	≤6%Vo (Typical)
	Output voltage regulation range (Vdc)	80%~110%Vo	80%~110%Vo
	Flow uniformity	±5% (Typical)	±5% (Typical)
Enable control feature	Negative logic (Reference location VIN-)	The enable pin is floating or the output is turned off when it is at a high level.	The enable pin is floating or the output is turned off when it is at a high level.
	Positive logic (Reference location VIN+)	The enable pin is grounded or the output is turned off when it is at a low level.	The enable pin is floating or the output is turned off when it is at a high level.
General characteristics	Input undervoltage protection	Y	Y
	Output overvoltage protection	Y	Y
	Output overcurrent protection	Y	Y
	Over-temperature protection function	Y	Y
	Isolation Voltage	Input to Output 1500Vac	Input to Output 1500Vac
	Isolation Voltage	Input to Base-Plate 1500Vac	Input to Base-Plate 1500Vac
	Isolation Voltage	Output to Base-Plate 500Vdc	Output to Base-Plate 500Vdc
	Isolation Resistance	≥100MQ	≥100MQ
	Isolation Capacitance	1000 pF	1000 pF
	Maximum Baseplate Temperature Tb	≤100℃	≤100℃
	Storage temperature	-55℃~+125℃	-55℃~+125℃
	Total weight (g)	340±10 (Typical)	320±10 (Typical)

P/N	Input (Vdc)	Output (Vdc)	Output current (A)	Output power (W)	Notes & Conditions
GDFAH2702K8M28SN	270 (200~400)	28	100	2800	
GDFAH2703KM48SN	270 (200~400)	48	62.5	3000	
GDFAH5402K8M28SN	540 (400~750)	28	100	2800	
GDFAH5402K2M28SN	540 (400~750)	28	78.6	2200	
GDFAH5403KM48SN	540 (400~750)	48	62.5	3000	
GDFAH5402K4M48SN	540 (400~750)	48	50	2400	
GDFAH5403KM28SN	540 (450~650)	28	107.1	3000	
GDFAH2703KM100SN	270 (250~325)	100	30	3000	



Product Features

- High power and high conversion efficiency
- Full-Brick, Multiple packaging forms are available
- Wide input voltage range, Output power: 800~2000W
- Typical efficiency: 95%~96%
- Output voltage: 80%~110%Vo
- Multiple protection functions ,output anti-backflow circuit
- Support parallel current sharing and synchronous start-up functions to achieve power expansion
- Application: military electronic systems such as airborne, vehicular and shipborne industrial motion control, information displays, factory automation and power generation systems

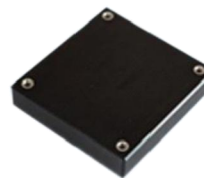


Package Size:119.1*63.2*21.0

◆ Specifications			
INPUT CHARACTERISTICS	Module	ELECTRICAL CHARACTERISTICS	
	Operating Input Voltage Range (Vdc)	270 (200~400)	600 (400~800)
	Input surge voltage (Vdc)	475	850
	Typical efficiency	95%	95%
OUTPUT CHARACTERISTICS	Output voltage accuracy	±0.5% (Typical)	±0.5% (Typical)
	Voltage regulation rate	±1% (Typical)	±1% (Typical)
	Load adjustment rate	±1% (Typical)	±1% (Typical)
	Ripple noise (mV)	≤3%Vo (Typical)	≤3%Vo (Typical)
	Transient response 50%~75%~50% (mV)	≤6%Vo (Typical)	≤6%Vo (Typical)
	Output voltage regulation range (Vdc)	80%~110%Vo	80%~110%Vo
	Flow uniformity	±6% (Typical)	±6% (Typical)
Enable Control Feature	Negative logic (Reference location VIN-)	The enable pin is floating or the output is turned off when it is at a high level.	The enable pin is floating or the output is turned off when it is at a high level.
	Positive logic (Reference location VIN+)	The enable pin is grounded or the output is turned off when it is at a low level.	The enable pin is floating or the output is turned off when it is at a high level.
General Characteristics	Input undervoltage protection	Y	Y
	Output overvoltage protection	Y	Y
	Output overcurrent protection	Y	Y
	Over-temperature protection function	Y	Y
	Isolation Voltage	Input to Output 1500Vac	Input to Output 1500Vac
	Isolation Voltage	Input to Base-Plate 1500Vac	Input to Base-Plate 1500Vac
	Isolation Voltage	Output to Base-Plate 500Vdc	Output to Base-Plate 500Vdc
	Isolation Resistance	≥100MQ	≥100MQ
	Isolation Capacitance	1000 pF	1000 pF
	Maximum Baseplate Temperature Tb	≤100°C	≤100°C
	Storage temperature	-55°C~+125°C	-55°C~+125°C
	Total weight (g)	330±10 (Typical)	320±10 (Typical)

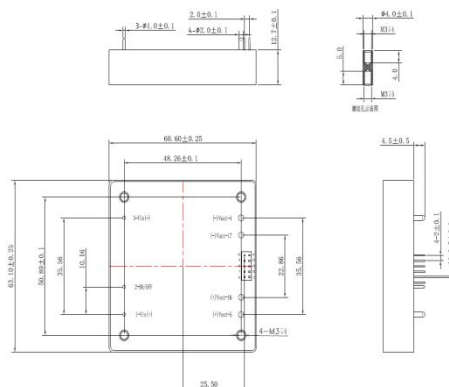
P/N	Input (Vdc)	Output (Vdc)	Output Current (A)	Output Power (W)	Notes & Conditions
GDFBH2701K2M12SN	270 (200~400)	12	100	1200	
GDFBH270600M24SN	270 (200~400)	24	25	600	
GDFBH2701K2M28SN	270 (200~400)	28	42.9	1200	
GDFBH270800M48SN	270 (200~400)	48	16.7	800	
GDFBH6001K8M28SN	600 (400~800)	28	64.3	1800	
GDFAH2702KM28SN	270 (200~400)	28	71.4	2000	
GDFAH2702KM48SN	270 (200~400)	48	41.7	2000	
DFAH270400M05SN	270 (200~400)	5	80	400	
DFAH270450M6R5SN	270 (200~400)	6.5	69.2	450	
DFAH270700M09SN	270 (200~400)	9	77.8	700	
DFAH270800M12SN	270 (200~400)	12	66.7	800	
DFAH2701K2M12SN	270 (200~400)	12	100	1200	
DFAH2701KM24SN	270 (200~400)	24	41.7	1000	
DFAH2701K2M28SN	270 (200~400)	28	42.8	1200	
DFAH270800M36SN	270 (200~400)	36	22.2	800	
DFAH2701KM48SN	270 (200~400)	48	20.8	1000	
DFAH270W400M05SN	270W (155~425)	5	80	400	
DFAH270W800M28SN	270W (155~425)	28	28.6	800	
DFAH270500800M12SN	500 (400~650)	12	66.78	800	
DFAH270500800M28SN	500 (400~650)	28	28.6	800	
DFAH6001K2M28SN	600 (400~800)	28	42.8	1200	
DFAH7001K2M50SN	700 (560~900)	50	24	1200	
GDFAH2702KM28SN-A	270 (180~360)	28	71.4	2000	H: 8mm

High Voltage DC-DC Half-Brick GDHH



Product Features

- High power and high conversion efficiency
- Half-Brick, Multiple packaging forms are available
- Wide input voltage range, Output power: 1200~1500W
- Typical efficiency: 95%~96%
- Output voltage: 80%~110%Vo
- Multiple protection functions ,output anti-backflow circuit
- Support parallel current sharing and synchronous start-up functions to achieve power expansion
- Built-in non-isolated communication interface supports system-level power management
- Application: military electronic systems such as airborne, vehicular and shipborne industrial motion control, information displays, factory automation and power generation systems

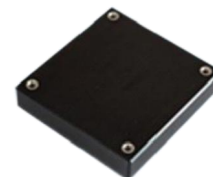


Package size: 63.1*60*12.7mm

◆ Specifications		
INPUT CHARACTERISTICS	Modle	ELECTRICAL CHARACTERISTICS
	Operating Input Voltage Range (Vdc)	540 (380~720)
	Input surge voltage (Vdc)	/
OUTPUT CHARACTERISTICS	Typical efficiency	96%
	Output voltage accuracy	±1% (Typical)
	Voltage regulation rate	±1% (Typical)
	Load adjustment rate	±1% (Typical)
	Ripple noise (mV)	≤2%Vo (Typical)
	Transient response 50%~75%~50% (mV)	≤6%Vo (Typical)
	Output voltage regulation range (Vdc)	80%~110%Vo
Enable Control Feature	Flow uniformity	±5% (Typical)
	Negative logic (Reference location VIN-)	The enable pin is floating or the output is turned off when it is at a high level.
General Characteristics	Positive logic (Reference location VIN-)	The enable pin is grounded or the output is turned off when it is at a low level.
	Input undervoltage protection	Y
	Output overvoltage protection	Y
	Output overcurrent protection	Y
	Over-temperature protection function	Y
	Isolation Voltage	Input to Output 1500Vac
	Isolation Voltage	Input to Base-Plate 1500Vac
	Isolation Voltage	Output to Base-Plate 500Vdc
	Isolation Resistance	≥100MQ
	Isolation Capacitance	1000 pF
	Maximum Baseplate Temperature Tb	≤105℃
	Storage temperature	-55℃~+125℃
	Total weight (g)	160±10 (Typical)

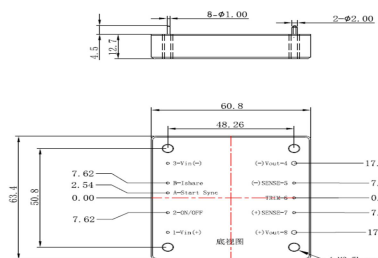
P/N	Input (Vdc)	Output (Vdc)	Output Current (A)	Output Power (W)	Notes & Conditions
GDHH5401KM12SN	540 (400~720)	12	83.3	1200	
GDHH5401K5M28SN	540 (400~720)	28	53.6	1500	
GDHH2701K2M28SN	270 (220~320)	28	42.9	1200	

High Voltage DC-DC Half-Brick GDAH/BH



Product Features

- High power and high conversion efficiency
- Half-Brick, Encapsulated in metal shell
- Wide input voltage range, Output power: 250~1000W
- Typical efficiency: 94%
- Output voltage: 80%~110%Vo
- Multiple protection functions, output anti-backflow circuit
- Support parallel current sharing and synchronous start-up functions to achieve power expansion
- Application: military electronic systems such as airborne, vehicular and shipborne industrial motion control, information displays, factory automation and power generation systems



Package Size: 63.4*60.8*12.7mm

Specifications		
INPUT CHARACTERISTICS	Module	ELECTRICAL CHARACTERISTICS
	Operating Input Voltage Range (Vdc)	270 (200~400) / 270W (155~425)
	Input surge voltage (Vdc)	475
OUTPUT CHARACTERISTICS	Typical efficiency	94%
	Output voltage accuracy	±1% (Typical)
	Voltage regulation rate	±1% (Typical)
	Load adjustment rate	±1% (Typical)
	Ripple noise (mV)	≤3%Vo (Typical)
	Transient response 50%~75%~50% (mV)	≤6%Vo (Typical)
	Output voltage regulation range (Vdc)	80%~110%Vo
Enable Control Feature	Flow uniformity	±5% (Typical)
	Negative logic (Reference location VIN-)	The enable pin is floating or the output is turned off when it is at a high level.
General Characteristics	Positive logic (Reference location VIN-)	The enable pin is grounded or the output is turned off when it is at a low level.
	Input undervoltage protection	Y
	Output overvoltage protection	Y
	Output overcurrent protection	Y
	Over-temperature protection function	Y
	Isolation Voltage	Input to Output 1500Vac
	Isolation Voltage	Input to Base-Plate 1500Vac
	Isolation Voltage	Output to Base-Plate 500Vdc
	Isolation Resistance	≥100MQ
	Isolation Capacitance	1000 pF
	Maximum Baseplate Temperature T _b	≤105°C
	Storage temperature	-55°C~+125°C
	Total weight (g)	130 ± 5 (GDHAH), 165 ± 5 (GDHBH)

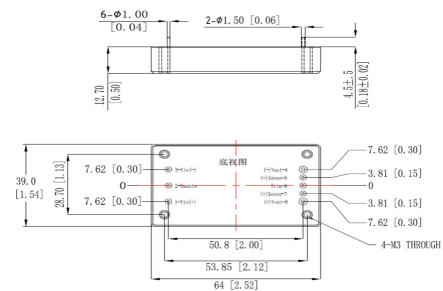
P/N	Input (Vdc)	Output (Vdc)	Output Current (A)	Output Power (W)	Notes & Conditions
GDHAH270W250M05SN	270W (155~425)	5	50	250	
GDHAH270W250M24SN	270W (155~425)	24	10.4	250	
GDHAH270400M28SN	270 (200~400)	28	14.3	400	
GDHAH270400M48SN	270 (200~400)	48	8.3	400	
GDHBH270400M05SN	270 (200~400)	5	80	400	
GDHBH270350M6R5SN	270 (200~400)	6.5	53.8	350	
GDHBH270600M12SN	270 (200~400)	12	50	600	
GDHBH270700M12SN	270 (200~400)	12	58.3	700	
GDHBH270800M12SN	270 (200~400)	12	66.7	800	
GDHBH270700M24SN	270 (200~400)	24	29.2	700	
GDHBH270700M28SN	270 (200~400)	28	25	700	
GDHBH2701KM24SN	270 (200~400)	24	41.7	1000	
GDHBH2701KM28SN	270 (200~400)	28	35.7	1000	
GDHBH2701KM48SN	270 (200~400)	48	20.8	1000	
DHAH270120M3R3	270 (200~400)	3.3	36.4	120	
DHAH270200M06SN	270 (200~400)	6	33.3	200	
DHAH270400M36SN	270W (155~425)	36	11.1	400	

High Voltage DC-DC Quarter-Brick GDQH



Product Features

- High power and high conversion efficiency
- Quarter-Brick, Encapsulated in metal shell
- Wide input voltage range, Output power: 150~400W
- Typical efficiency: 90%~92%
- Output voltage: 80%~110%V_O
- Multiple protection functions
- Application: military electronic systems such as airborne, vehicular and shipborne industrial motion control, information displays, factory automation and power generation systems



Package Size: 64*39*12.7mm

◆ Specifications		
INPUT CHARACTERISTICS	Module	ELECTRICAL CHARACTERISTICS
	Operating Input Voltage Range (Vdc)	270 (180~425) / 270W (155~425)
	Input surge voltage (Vdc)	475
OUTPUT CHARACTERISTICS	Typical efficiency	91%
	Output voltage accuracy	±1% (Typical)
	Voltage regulation rate	±1% (Typical)
	Load adjustment rate	±1% (Typical)
	Ripple noise (mV)	≤3%V _O (Typical)
	Transient response 50%~75%~50% (mV)	≤6%V _O (Typical)
	Output voltage regulation range (Vdc)	80%~110%V _O
Enable Control Feature	Flow uniformity	/
	Negative logic (Reference location VIN-)	The enable pin is floating or the output is turned off when it is at a high level.
General Characteristics	Positive logic (Reference location VIN-)	The enable pin is grounded or the output is turned off when it is at a low level.
	Input undervoltage protection	Y
	Output overvoltage protection	Y
	Output overcurrent protection	Y
	Over-temperature protection function	Y
	Isolation Voltage	Input to Output 1500Vac
	Isolation Voltage	Input to Base-Plate 1500Vac
	Isolation Voltage	Output to Base-Plate 500Vdc
	Isolation Resistance	≥100MQ
	Isolation Capacitance	1000 pF
	Maximum Baseplate Temperature T _b	≤105°C
	Storage temperature	-55°C~+125°C
	Total weight (g)	95±5

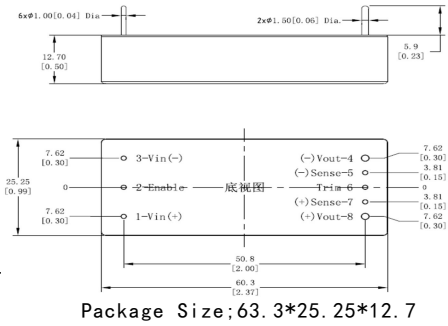
P/N	Input (Vdc)	Output (Vdc)	Output Current (A)	Output Power (W)	Notes & Conditions
GDQH270W150M06S	270W (155~425)	6	33.3	200	
GDQH270W150H08SN	270W (155~425)	8	25	200	
GDQH270W150M12SN	270W (155~425)	12	16.7	200	
GDQH270W150M15SN	270W (155~425)	15	13.3	200	
GDQH270W150M24SN	270W (155~425)	24	8.3	200	
GDQH270W150M48SN	270W (155~425)	48	3.1	150	
GDQH270300M28SN	270 (180~425)	28	10.7	300	
GDQH270300M48SN	270 (180~425)	48	6.3	300	
GDQH270300M2SN	270 (180~425)	12	25	300	
GDQH270400M05SN	270 (200~400)	5	80	400	Reference Data

High Voltage DC-DC Eighth-Brick GDEH



Product Features

- High power and high conversion efficiency
- Eighth-Brick, Encapsulated in metal shell
- Wide input voltage range, Output power: 60W~150W
- Typical efficiency:90%
- Output voltage: 80%~110%Vo
- Multiple protection functions
- Application: military electronic systems such as airborne, vehicular and shipborne industrial motion control, information displays, factory automation and power generation systems



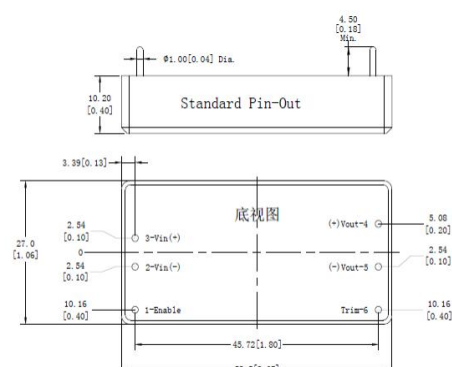
◆Specifications		
	Modle	ELECTRICAL CHARACTERISTICS
INPUT CHARACTERISTICS	Operating Input Voltage Range(Vdc)	270(180~425)
	Input surge voltage(Vdc)	475
	Typical efficiency	90%
OUTPUT CHARACTERISTICS	Output voltage accuracy	±1%(Typical)
	Voltage regulation rate	±1%(Typical)
	Load adjustment rate	±1%(Typical)
	Ripple noise(mV)	≤3%Vo(Typical)
	Transient response50%~75%~50%(mV)	≤6%Vo(Typical)
	Output voltage regulation range(Vdc)	80%~110%Vo
	Flow uniformity	/
Enable Control Feature	Negative logic(Reference location VIN-)	The enable pin is floating or the output is turned off when it is at a high level.
	Positive logic(Reference location VIN-)	The enable pin is grounded or the output is turned off when it is at a low level.
General Characteristics	Input undervoltage protection	Y
	Output overvoltage protection	Y
	Output overcurrent protection	Y
	Over-temperature protection function	Y
	Isolation Voltage	Input to Output 1500Vac
	Isolation Voltage	Input to Base-Plate1 1500Vac
	Isolation Voltage	Output to Base-Plate 500Vdc
	Isolation Resistanc	≥100MQ
	Isolation Capacitance	1000 pF
	Maximum Baseplate Temperature Tb	≤105℃
	Storage temperature	-55℃~+125℃
	Total weight(g)	50±10

P/N	Input (Vdc)	Output (Vdc)	Output Current (A)	Output Power (W)	Notes & Conditions
GDEH27060M3R3SN	270(180~425)	3.3	118.2	60	
GDEH27080M06SN	270(180~425)	6	13.3	80	
GDEH270100M12SN	270(180~425)	12	8.3	100	
GDEH27080M24SN	270(180~425)	24	3.3	80	
GDEH270100M28SN	270(180~425)	28	3.6	100	
GDEH270100M48SN	270(180~425)	48	2.1	100	
GDEH270150M12SN	270(180~425)	12	12.5	150	

High Voltage DC-DC 1*2 Inch GDGH

Product Features

- 1*2 Inch (65.5*31*10.2mm), Encapsulated in metal shell
- Wide input voltage range, Output power: 40W
- Typical efficiency: 85%
- Output voltage: 90%~110%V_O
- Multiple protection functions
- Application: military and industrial electronic systems



◆ Specifications		
INPUT CHARACTERISTICS	Modle	ELECTRICAL CHARACTERISTICS
	Operating Input Voltage Range (Vdc)	270 (180~425)
	Input surge voltage (Vdc)	440
OUTPUT CHARACTERISTICS	Typical efficiency	85%
	Output voltage accuracy	±1% (Typical)
	Voltage regulation rate	±1% (Typical)
	Load adjustment rate	±1% (Typical)
	Ripple noise (mV)	≤3%V _O (Typical)
	Transient response 50%~75%~50% (mV)	≤6%V _O (Typical)
	Output voltage regulation range (Vdc)	90%~110%V _O
Enable Control Feature	Flow uniformity	/
	Negative logic (Reference location VIN-)	The enable pin is floating or the output is turned off when it is at a high level.
General Characteristics	Positive logic (Reference location VIN-)	The enable pin is grounded or the output is turned off when it is at a low level.
	Input undervoltage protection	Y
	Output overvoltage protection	Y
	Output overcurrent protection	Y
	Over-temperature protection function	Y
	Isolation Voltage	Input to Output 1500Vac
	Isolation Voltage	Input to Base-Plate 1500Vac
	Isolation Voltage	Output to Base-Plate 500Vdc
	Isolation Resistance	≥100MQ
	Isolation Capacitance	1000 pF
	Maximum Baseplate Temperature T _b	≤105℃
	Storage temperature	-55℃~+125℃
	Total weight (g)	40±5

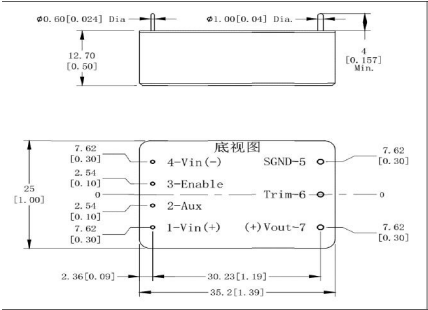
P/N	Input (Vdc)	Output (Vdc)	Output Current (A)	Output Power (W)	Notes & Conditions
GDGH27040M28SN	270 (180~425)	28	1.4	40	
GDGH27030M05SN	270 (200~400)	5	6	30	
DGH27040M05SN	270 (200~400)	5	8	40	
DGH27040M10SN	270 (200~400)	10	3	30	
DGH27040M12SN	270 (200~400)	12	3.33	40	
DGH27040M15SN	270 (200~400)	15	2.67	40	
DGH27040M24SN	270 (200~400)	24	1.67	40	
DGH27030M28SN	270 (200~400)	28	1.07	30	

High Voltage DC-DC Sixteenth Brick GDSH



Product Features

- High power and high conversion efficiency
- Sixteenth Brick,Encapsulated in metal shell
- Wide input voltage range, Output power: 30W
- Typical efficiency:85%
- Output voltage : : 90%~110% Vo
- Multiple protection functions
- Application: military and industrial electronic systems



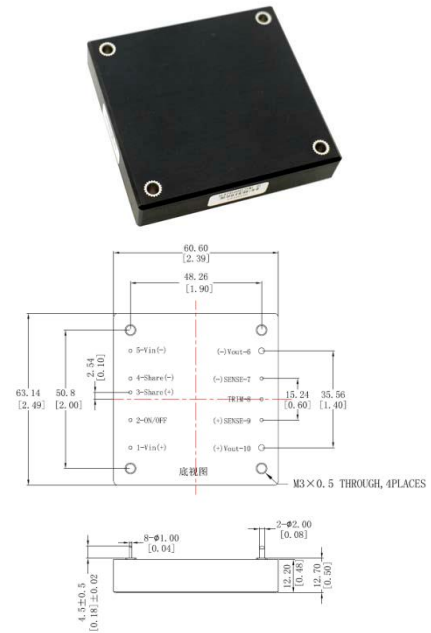
◆Specifications		
INPUT CHARACTERISTICS	Modle	ELECTRICAL CHARACTERISTICS
	Operating Input Voltage Range(Vdc)	270 (100~500)
	Input surge voltage(Vdc)	510
	Typical efficiency	78%
OUTPUT CHARACTERISTICS	Output voltage accuracy	±1%(Typical)
	Voltage regulation rate	±1%(Typical)
	Load adjustment rate	±1%(Typical)
	Ripple noise(mV)	≤4%Vo(Typical)
	Transient response50%~75%~50%(mV)	≤6%Vo(Typical)
	Output voltage regulation range (Vdc)	80%~110%Vo
	Flow uniformity	/
Enable Control Feature	Negative logic(Reference location VIN-)	The enable pin is floating or the output is turned off when it is at a high level.
	Positive logic(Reference location VIN-)	The enable pin is grounded or the output is turned off when it is at a low level.
General Characteristics	Input undervoltage protection	Y
	Output overvoltage protection	Y
	Output overcurrent protection	Y
	Over-temperature protection function	Y
	Isolation Voltage	Input to Output 1500Vac
	Isolation Voltage	Input to Base-Plate1 1500Vac
	Isolation Voltage	Output to Base-Plate 500Vdc
	Isolation Resistanc	≥100MQ
	Isolation Capacitance	1000 pF
	Maximum Baseplate Temperature Tb	≤105℃
	Storage temperature	-55℃~+125℃
	Total weight(g)	30±5

P/N	Input (Vdc)	Output (Vdc)	Output Current (A)	Output Power (W)	Notes & Conditions
GDSH2702MH05SN	270 (100~500)	5	4	20	
GDSH27020M12SN	270 (100~500)	12	1.6	20	
GDSH27030M40SN	270 (185~390)	40	0.75	30	

Low Voltage DC-DC Half Brick GDHL

Product Features

- High power and high conversion efficiency
- Half Brick, Encapsulated in metal shell
- Wide input voltage range, Output power: 250~600W
- Typical efficiency: 91%~94%
- Output voltage : : 50%~110% Vo
- Multiple protection functions, Built in Origin circuit
- Support parallel current sharing and synchronous start-up functions to achieve power expansion
- Built-in non-isolated communication interface supports system-level power management
- Application: military and industrial electronic systems
- Compatible SynQor MCOTS/IQ DC-DC



◆ Specifications		
INPUT CHARACTERISTICS	Modle	ELECTRICAL CHARACTERISTICS
	Operating Input Voltage Range(Vdc)	28(16~40)/28V(9~40)/28E(16~60)/48(34~75)
	Input surge voltage(Vdc)	55/55/85/85
OUTPUT CHARACTERISTICS	Typical efficiency	93%
	Output voltage accuracy	±1%(Typical)
	Voltage regulation rate	±1%(Typical)
	Load adjustment rate	±1%(Typical)
	Ripple noise(mV)	≤1%Vo(Typical)
	Transient response 50%~75%~50%(mV) (Add an external 100 μF capacitor.)	≤15%Vo(Typical)
	Output voltage regulation range(Vdc)	50%~110%Vo
Enable Control Feature	Flow uniformity	≤±10% (Typical)
	Negative logic(Reference location VIN-)	The enable pin is floating or the output is turned off when it is at a high level.
General Characteristics	Positive logic(Reference location VIN-)	The enable pin is grounded or the output is turned off when it is at a low level.
	Input undervoltage protection	Y
	Output overvoltage protection	Y
	Output overcurrent protection	Y
	Over-temperature protection function	Y
	Isolation Voltage	Input to Output 1500Vac
	Isolation Voltage	Input to Base-Plate 1500Vac
	Isolation Voltage	Output to Base-Plate 500Vdc
	Isolation Resistance	≥100MQ
	Isolation Capacitance	1000 pF
	Maximum Baseplate Temperature Tb	≤105℃
	Storage temperature	-55℃~+125℃
	Total weight(g)	150±5

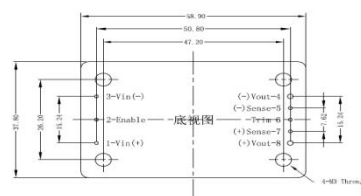
P/N	Input (Vdc)	Output (Vdc)	Output Current (A)	Output Power (W)	Pin to Pin Replacment Synqor
GDHL28300M05SN	28(16~40)	5	60	300	MCOTS-C-28-05-HZ
GDHL28450M07SN	28(16~40)	7	64.3	450	MCOTS-C-28-07-HZ
GDHL28560M08SN	28(16~40)	8	70	560	MCOTS-C-28-08-HZ
GDHL28600M12SN	28(16~40)	12	50	600	MCOTS-C-28-12-HZ
GDHL28600M28SN	28(16~40)	28	21.5	600	MCOTS-C-28-28-HZ
GDHL28600M36SN	28(16~40)	36	16.66	600	MCOTS-C-28-36-HZ
GDHL28600M48SN	28(16~40)	48	12.5	600	MCOTS-C-28-48-HZ
GDHL28500M270SN	28(16~40)	270	1.85	500	MCOTS-C-28-270-HZ
GDHL28V300M24SN	28(16~40)	24	12.5	300	MCOTS-C-28V-24-HZ
GDHL28E600M28SN	28E(16~60)	28	21.5	600	MCOTS-C-28E-28-HZ
GDHL48600M12SN	48(34~75)	12	50	600	MCOTS-C-48-12-HZ
GDHL48600M28SN	48(34~75)	28	21.5	600	MCOTS-C-48-28-HZ
DHL28500M12SN	28(16~40)	12	41.66	500	MCOTS-C-28-12-HZ
DHL28600M28SN	28(16~40)	28	21.5	600	MCOTS-C-28-28-HZ
DHL28500M48SN	28(16~40)	48	10.4	500	MCOTS-C-28-48-HZ
DHL28500M50SN	28(16~40)	50	10	500	MCOTS-C-28-50-HZ
DHL28V350M12SN	28V(9~40)	12	29.16	350	MCOTS-C-28V-12-HZ
DHL28V350M24SN	28V(9~40)	24	14.58	350	MCOTS-C-28V-24-HZ
DHL28E400M12SN	28E(16~70)	12	33.3	400	MCOTS-C-28VE-12-HZ
DHL28E400M28SN	28E(16~70)	28	14.3	400	MCOTS-C-28VE-28-HZ
DHL48600M12SN	48(34~75)	12	50	600	MCOTS-C-48-12-HZ
DHL48600M28SN	48(34~75)	28	21	600	MCOTS-C-48-28-HZ
GDHL28600M05SN	28(16~40)	5	120	600	

Low Voltage DC-DC Quarter Brick GDQL



Product Features

- High power and high conversion efficiency
- Quarter Brick, Encapsulated in metal shell
- Wide input voltage range, Output power: 200~400W
- Typical efficiency: 90%~92%
- Output voltage : 80%~110% Vo
- Multiple protection functions, Built in Origin circuit
- Application: military and industrial electronic systems



◆Specifications		
INPUT CHARACTERISTICS	Modle	ELECTRICAL CHARACTERISTICS
	Operating Input Voltage Range(Vdc)	28(16~40)/28V(9~40)
	Input surge voltage(Vdc)	50
	Typical efficiency	92%
OUTPUT CHARACTERISTICS	Output voltage accuracy	±1%(Typical)
	Voltage regulation rate	±1%(Typical)
	Load adjustment rate	±1%(Typical)
	Ripple noise(mV)	≤1%Vo(Typical)
	Transient response50%~75%~50%(mV)	≤8%Vo(Typical)
	Output voltage regulation range(Vdc)	80%~110%Vo
Enable Control Feature	Flow uniformity	/
	Negative logic(Reference location VIN-)	The enable pin is floating or the output is turned off when it is at a high level.
General Characteristics	Positive logic(Reference location VIN-)	The enable pin is grounded or the output is turned off when it is at a low level.
	Input undervoltage protection	Y
	Output overvoltage protection	Y
	Output overcurrent protection	Y
	Over-temperature protection function	Y
	Isolation Voltage	Input to Output 1500Vac
	Isolation Voltage	Input to Base-Plate1 1500Vac
	Isolation Voltage	Output to Base-Plate 500Vdc
	Isolation Resistanc	≥100MQ
	Isolation Capacitance	1000pF
	Maximum Baseplate Temperature Tb	≤100℃
	Storage temperature	-55℃~+125℃
	Total weight(g)	91±5

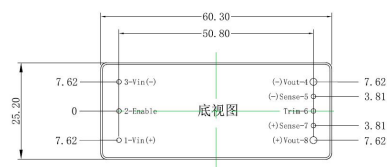
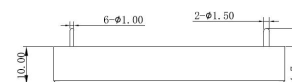
P/N	Input (Vdc)	Output (Vdc)	Output Current (A)	Output Power (W)	Notes
GDQL28300M06S	28(16~40)	6	50	300	
GDQL28300M06SN	28(16~40)	6	50	300	
GDQL28300M12S	28(16~40)	12	25	300	
GDQL28300M12SN	28(16~40)	12	25	300	
GDQL28200M28SN	28(16~40)	28	7.15	200	
GDQL28300M28S	28(16~40)	28	10.71	300	
GDQL28300M28SN	28(16~40)	28	10.71	300	
GDQL28400M12S*	28(16~40)	12	33.33	400	
GDQL28400M12SN*	28(16~40)	12	33.33	400	
GDQL28400M28S*	28(16~40)	28	14.28	400	
GDQL28400M28SN*	28(16~40)	28	14.28	400	
GDQL28V400H28S*	28V(9~40)	28	14.28	400	
DQL28300M06SN	28(16~40)	6	50	300	
DQL28300M12SN	28(16~40)	12	25	300	
DQL28300M28SN	28(16~40)	28	10.71	300	

Low Voltage DC-DC Eighth Brick GDEL



Product Features

- Support Flange Package ,Height Size:12.7mm And 10mm
- Eighth Brick,Encapsulated in metal shell
- Wide input voltage range, Output power: 100~300W
- Typical efficiency:88%~92%
- Output voltage : 80%~110% Vo
- Multiple protection functions,Built in Origin circuit
- Application: military and industrial electronic systems



◆Specifications		
INPUT CHARACTERISTICS	Modle	ELECTRICAL CHARACTERISTICS
	Operating Input Voltage Range(Vdc)	28V (9~40) / 28 (16~40) / 48 (18~72)
	Input surge voltage(Vdc)	50/50/80
	Typical efficiency	90%
OUTPUT CHARACTERISTICS	Output voltage accuracy	±1%(Typical)
	Voltage regulation rate	±1%(Typical)
	Load adjustment rate	±1%(Typical)
	Ripple noise(mV)	≤1%Vo (Typical)
	Transient response50%~75%~50%(mV)	≤5%Vo (Typical)
	Output voltage regulation range(Vdc)	80%~110%Vo
	Flow uniformity	/
Enable Control Feature	Negative logic(Reference location VIN-)	The enable pin is floating or the output is turned off when it is at a high level.
	Positive logic(Reference location VIN-)	The enable pin is grounded or the output is turned off when it is at a low level.
General Characteristics	Input undervoltage protection	Y
	Output overvoltage protection	Y
	Output overcurrent protection	Y
	Over-temperature protection function	Y
	Isolation Voltage	Input to Output 1500Vac
	Isolation Voltage	Input to Base-Plate1 1500Vac
	Isolation Voltage	Output to Base-Plate 500Vdc
	Isolation Resistanc	≥100MQ
	Isolation Capacitance	1000pF
	Maximum Baseplate Temperature Tb	≤100℃
	Storage temperature	-55℃~+125℃
	Total weight(g)	50±5 (10mm) ; 60±5 (12.7mm)

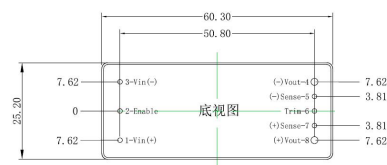
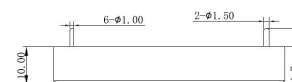
P/N	Input (Vdc)	Output (Vdc)	Output Current (A)	Output Power (W)	Notes
GDEL28V100M05SN-A	28V (9~40)	5	20	100	
GDEL28V100M05SN	28V (9~40)	5	20	100	
GDEL28V100M12SN-A	28V (9~40)	12	8.34	100	
GDEL28V180M12SN-A	28V (9~40)	12	15	180	
GDEL28V100M28SN	28V (9~40)	28	3.58	100	
GDEL28150M05SN	28 (16~40)	5	30	150	
GDEL28150M06SN	28 (16~40)	6	25	150	
GDEL28240M06SN-A	28 (16~40)	6	40	240	
GDEL28150M09SN	28 (16~40)	9	16.67	150	
GDEL28150M12SN	28 (16~40)	12	12.5	150	
GDEL28150M28SN	28 (16~40)	28	5.36	150	
GDEL28300M12SN	28 (16~40)	12	25	300	

Low Voltage DC-DC Eighth Brick GDEL



Product Features

- Support Flange Package ,Height Size:12.7mm And 10mm
- Eighth Brick,Encapsulated in metal shell
- Wide input voltage range, Output power: 100~300W
- Typical efficiency:88%~92%
- Output voltage : 80%~110% Vo
- Multiple protection functions,Built in Origin circuit
- Application: military and industrial electronic systems



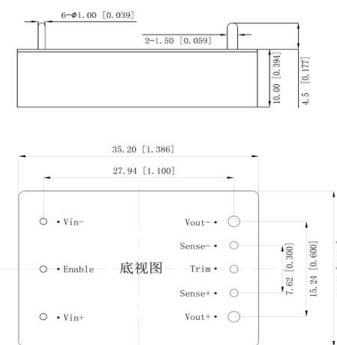
◆Specifications					
INPUT CHARACTERISTICS	Modle	ELECTRICAL CHARACTERISTICS			
	Operating Input Voltage Range(Vdc)	28V (9~40) / 28 (16~40) / 48 (18~72)			
	Input surge voltage(Vdc)	50/50/80			
	Typical efficiency	90%			
OUTPUT CHARACTERISTICS	Output voltage accuracy	±1%(Typical)			
	Voltage regulation rate	±1%(Typical)			
	Load adjustment rate	±1%(Typical)			
	Ripple noise(mV)	≤1%Vo (Typical)			
	Transient response50%~75%~50%(mV)	≤5%Vo (Typical)			
	Output voltage regulation range(Vdc)	80%~110%Vo			
	Flow uniformity	/			
Enable Control Feature	Negative logic(Reference location VIN-)	The enable pin is floating or the output is turned off when it is at a high level.			
	Positive logic(Reference location VIN-)	The enable pin is grounded or the output is turned off when it is at a low level.			
General Characteristics	Input undervoltage protection	Y			
	Output overvoltage protection	Y			
	Output overcurrent protection	Y			
	Over-temperature protection function	Y			
	Isolation Voltage	Input to Output 1500Vac			
	Isolation Voltage	Input to Base-Plate1 1500Vac			
	Isolation Voltage	Output to Base-Plate 500Vdc			
	Isolation Resistanc	≥100MQ			
	Isolation Capacitance	1000pF			
	Maximum Baseplate Temperature Tb	≤100℃			
	Storage temperature	-55℃~+125℃			
	Total weight(g)	50±5 (10mm) ; 60±5 (12.7mm)			
P/N	Input (Vdc)	Output (Vdc)	Output Current (A)	Output Power (W)	Notes
GDEL28300M28SN	28 (16~40)	28	10.71	300	
GDEL28180M12SN	28 (16~40)	12	15	180	
GDEL28150M24SN	28 (16~40)	24	6.25	150	
DEL28150M12SN	28 (16~40)	12	25	300	
DEL28150M24SN	28 (16~40)	24	6.25	150	
DEL28150M28SN	28 (16~40)	28	5.36	150	
DEL28300M12SN	28 (16~40)	12	25	300	
DEL28300M28SN	28 (16~40)	28	10.71	300	
GDEL48100M05SN-A*	48W (18~72)	5	20	100	
GDEL48100M15SN-A	48W (18~72)	15	6.67	100	
GDEL48125M15SN-A*	48W (18~72)	15	8.33	125	

Low Voltage DC-DC Sixteenth Brick GDSL



Product Features

- Support Flange Package ,Height Size:12.7mm And 10mm
- Sixteenth Brick,Encapsulated in metal shell
- Wide input voltage range, Output power: 50~120W
- Typical efficiency:87%~90%
- Output voltage : 80%~110% Vo
- Multiple protection functions,Built in Origin circuit
- Application: military and industrial electronic systems



◆Specifications		
INPUT CHARACTERISTICS	Modle	ELECTRICAL CHARACTERISTICS
	Operating Input Voltage Range(Vdc)	28V (9~40) /28 (16~40) /48W (18~72)
	Input surge voltage (Vdc)	50/50/80
	Typical efficiency	89%
OUTPUT CHARACTERISTICS	Output voltage accuracy	±1%(Typical)
	Voltage regulation rate	±1%(Typical)
	Load adjustment rate	±1%(Typical)
	Ripple noise (mV)	≤1%Vo (Typical)
	Transient response 50%~75%~50% (mV)	≤5%Vo (Typical)
	Output voltage regulation range (Vdc)	80%~110%Vo
Enable Control Feature	Flow uniformity	/
	Negative logic (Reference location VIN-)	The enable pin is floating or the output is turned off when it is at a high level.
General Characteristics	Positive logic (Reference location VIN-)	The enable pin is grounded or the output is turned off when it is at a low level.
	Input undervoltage protection	Y
	Output overvoltage protection	Y
	Output overcurrent protection	Y
	Over-temperature protection function	Y
	Isolation Voltage	Input to Output 1500Vac
	Isolation Voltage	Input to Base-Plate 1500Vac
	Isolation Voltage	Output to Base-Plate 500Vdc
	Isolation Resistance	≥100MQ
	Isolation Capacitance	1000pF
	Maximum Baseplate Temperature Tb	≤100℃
	Storage temperature	-55℃~+125℃
	Total weight (g)	30±3 (10mm) ; 35±5 (12.7mm)

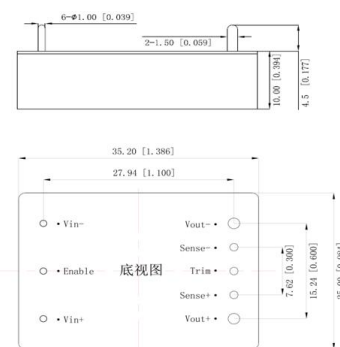
P/N	Input (Vdc)	Output (Vdc)	Output Current (A)	Output Power (W)	Notes
GDSL28V50M3R3S	28V (9~36)	3.3	15.2	50	
GDSL28V75M05SN-A	28V (9~36)	5	15	75	
GDSL28V75M06SN-A	28V (9~36)	6	12.5	75	
GDSL28V75M12SN	28V (9~36)	12	6.25	75	
GDSL28V75M24SN	28V (9~36)	24	15	75	
GDSL28V75M28SN	28V (9~36)	28	12.5	75	
GDSL2875M05SN	28 (16~40)	5	15	75	
GDSL2875M06SN	28 (16~40)	6	12.5	75	
GDSL2875M6R5SN	28 (16~40)	6.5	15.38	100	
GDSL2875M08SN	28 (16~40)	8	12.5	100	
GDSL28100M09SN	28 (16~40)	9	13.33	120	
GDSL28120M12SN	28 (16~40)	12	8.33	100	
GDSL28100M15SN	28 (16~40)	15	6.66	100	

Low Voltage DC-DC Sixteenth Brick GDSL



Product Features

- Support Flange Package ,Height Size:12.7mm And 10mm
- Sixteenth Brick,Encapsulated in metal shell
- Wide input voltage range, Output power: 50~120W
- Typical efficiency:87%~90%
- Output voltage : 80%~110% Vo
- Multiple protection functions,Built in Origin circuit
- Application: military and industrial electronic systems



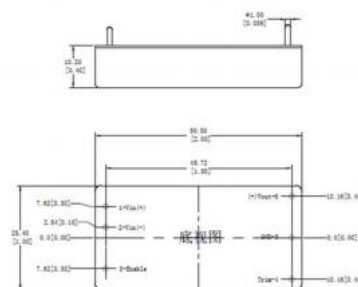
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INPUT CHARACTERISTICS	Modle	ELECTRICAL CHARACTERISTICS
	Operating Input Voltage Range(Vdc)	28V (9~40) /28 (16~40) /48W (18~72)
	Input surge voltage (Vdc)	50/50/80
	Typical efficiency	89%
OUTPUT CHARACTERISTICS	Output voltage accuracy	±1%(Typical)
	Voltage regulation rate	±1%(Typical)
	Load adjustment rate	±1%(Typical)
	Ripple noise (mV)	≤1%Vo (Typical)
	Transient response 50%~75%~50% (mV)	≤5%Vo (Typical)
	Output voltage regulation range (Vdc)	80%~110%Vo
Enable Control Feature	Flow uniformity	/
	Negative logic (Reference location VIN-)	The enable pin is floating or the output is turned off when it is at a high level.
General Characteristics	Positive logic (Reference location VIN-)	The enable pin is grounded or the output is turned off when it is at a low level.
	Input undervoltage protection	Y
	Output overvoltage protection	Y
	Output overcurrent protection	Y
	Over-temperature protection function	Y
	Isolation Voltage	Input to Output 1500Vac
	Isolation Voltage	Input to Base-Plate 1500Vac
	Isolation Voltage	Output to Base-Plate 500Vdc
	Isolation Resistance	≥100MQ
	Isolation Capacitance	1000pF
	Maximum Baseplate Temperature Tb	≤100℃
	Storage temperature	-55℃~+125℃
	Total weight (g)	30±3 (10mm) ; 35±5 (12.7mm)

P/N	Input (Vdc)	Output (Vdc)	Output Current (A)	Output Power (W)	Notes
GDSL28100M24SN	28 (16~40)	24	4.16	100	
GDSL28100M28SN	28 (16~40)	28	3.57	100	
GDSL28120M28SN	28 (16~40)	28	4.28	120	
GDSL28100M50SN	28 (16~40)	50	2	100	
GDSL48W60M05SN	48W (18~72)	5	12	60	
GDSL48W60M06S	48W (18~72)	6	10	60	
GDSL48W60M12SN	48W (18~72)	12	5	60	
GDSL48W75M12S	48W (18~72)	12	6.25	75	
GDSL48W60M15SN	48W (18~72)	15	4	60	
GDSL48W60M24S	48W (18~72)	24	2.5	60	
GDSL48W75M28SN	48W (18~72)	28	2.67	75	

Low Voltage DC-DC 1*2Inch GDGL

Product Features

- 1*2 Inch (50.8*25.4*10.2mm) ,Encapsulated in metal shell
- Wide input voltage range, Output power: 60W
- Typical efficiency:88%
- Output voltage : 90%~110% Vo
- Multiple protection functions,Built in Origin circuit
- Application: military and industrial electronic systems



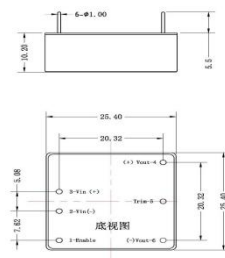
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INPUT CHARACTERISTICS	Module	ELECTRICAL CHARACTERISTICS
	Operating Input Voltage Range(Vdc)	28V (9~36)
	Input surge voltage(Vdc)	50
OUTPUT CHARACTERISTICS	Typical efficiency	88%
	Output voltage accuracy	±1%(Typical)
	Voltage regulation rate	±1%(Typical)
	Load adjustment rate	±1%(Typical)
	Ripple noise(mV)	≤1%Vo(Typical)
	Transient response50%~75%~50%(mV)	≤5%Vo(Typical)
	Output voltage regulation range(Vdc)	90%~110%Vo
Enable Control Feature	Flow uniformity	/
	Negative logic(Reference location VIN-)	The enable pin is floating or the output is turned off when it is at a high level.
General Characteristics	Positive logic(Reference location VIN-)	The enable pin is grounded or the output is turned off when it is at a low level.
	Input undervoltage protection	Y
	Output overvoltage protection	Y
	Output overcurrent protection	Y
	Over-temperature protection function	Y
	Isolation Voltage	Input to Output 1500Vac
	Isolation Voltage	Input to Base-Plate1 1500Vac
	Isolation Voltage	Output to Base-Plate 500Vdc
	Isolation Resistance	≥100MQ
	Isolation Capacitance	500pF
	Maximum Baseplate Temperature Tb	≤100℃
	Storage temperature	-55℃~+125℃
	Total weight(g)	50±5

P/N	Input (Vdc)	Output (Vdc)	Output Current (A)	Output Power (W)	Notes
GDGL28V60M05SN	28V (9~36)	5	12	60	
GDGL28V60M12SN	28V (9~36)	12	5	60	
GDGL28V60M28SN	28V (9~36)	28	2. 14	60	
GDGL28V60M50SN	28V (9~36)	50	1. 2	60	
DGL28V60M05SN	28V (9~36)	5	12	60	
DGL28V60M12SN	28V (9~36)	12	5	60	
DGL28V60M28SN	28V (9~36)	28	2. 14	60	
DGL28V60M50SN	28V (9~36)	50	1. 2	60	

Low Voltage DC-DC 1*1 Inch GDUL

Product Features

- 1*1 Inch (25.4*25.4*10.2mm) ,Encapsulated in metal shell
- Wide input voltage range, Output power: 20-50W
- Typical efficiency: 88%~90%
- Output voltage : 90%~110% Vo
- Multiple protection functions,Built in Origin circuit
- Application: military and industrial electronic systems



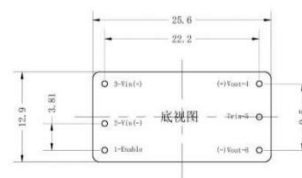
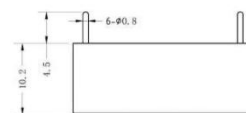
◆Specifications		
INPUT CHARACTERISTICS	Modle	ELECTRICAL CHARACTERISTICS
	Operating Input Voltage Range (Vdc)	28V (9~40) / 28 (16~40) / 48 (36~72)
	Input surge voltage (Vdc)	50/50/80
	Typical efficiency	90%
OUTPUT CHARACTERISTICS	Output voltage accuracy	±1% (Typical)
	Voltage regulation rate	±1% (Typical)
	Load adjustment rate	±1% (Typical)
	Ripple noise (mV)	≤1%Vo (Typical)
	Transient response 50%~75%~50% (mV)	≤5%Vo (Typical)
	Output voltage regulation range (Vdc)	90%~110%Vo
	Flow uniformity	/
Enable Control Feature	Negative logic (Reference location VIN-)	The enable pin is floating or the output is turned off when it is at a high level.
	Positive logic (Reference location VIN-)	The enable pin is grounded or the output is turned off when it is at a low level.
General Characteristics	Input undervoltage protection	Y
	Output overvoltage protection	Y
	Output overcurrent protection	Y
	Over-temperature protection function	Y
	Isolation Voltage	Input to Output 1500Vac
	Isolation Voltage	Input to Base-Plate 1500Vac
	Isolation Voltage	Output to Base-Plate 500Vdc
	Isolation Resistance	≥100MQ
	Isolation Capacitance	500pF
	Maximum Baseplate Temperature Tb	≤100℃
	Storage temperature	-55℃~+125℃
	Total weight (g)	20±2

P/N	Input (Vdc)	Output (Vdc)	Output Current (A)	Output Power (W)	Notes
GDUL28V20M3R3S	28V (9~40)	3.3	6.06	20	
GDUL28V30M05SN	28V (9~40)	5	6	30	
DUL28V30M05SN	28V (9~40)	5	6	30	
GDUL28V30M06SN	28V (9~40)	6	5	30	
GDUL28V30M12SN	28V (9~40)	12	2.5	30	
DUL28V30M12SN	28V (9~40)	12	2.5	30	
GDUL28V30M15SN	28V (9~40)	15	2	30	
DUL28V30M15SN	28V (9~40)	15	2	30	
GDUL28V30M24SN	28V (9~40)	24	1.25	30	
DUL28V30M24SN	28V (9~40)	24	1.25	30	
GDUL28V30M28SN	28V (9~40)	28	1.08	30	
DUL28V30M28SN	28V (9~40)	28	1.08	30	
GDUL2850M12SN	28 (16~40)	12	4.17	50	
GDUL2850M15SN	28 (16~40)	15	3.34	50	
GDUL2850M24S	28 (16~40)	24	2.09	50	
GDUL2850M28SN	28 (16~40)	28	1.79	50	
GDUL4830M05S*	48 (36~72)	5	6	30	
GDUL4830M12S*	48 (36~72)	12	2.5	30	
GDUL4830M28S*	48 (36~72)	28	1.08	30	

Low Voltage DC-DC 1*0.5 Inch GDBL

Product Features

- 1*0.5 Inch (25.4*12.9*10.2mm) ,Encapsulated in metal shell
- Wide input voltage range, Output power: 10-20W
- Typical efficiency:85%~86%
- Output voltage : 90%~110% Vo
- Multiple protection functions,Built in Origin circuit
- Application: military and industrial electronic systems



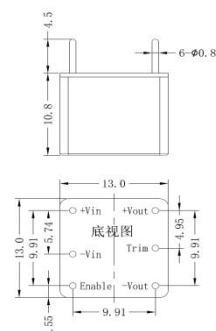
◆Specifications		
INPUT CHARACTERISTICS	Modle	ELECTRICAL CHARACTERISTICS
	Operating Input Voltage Range (Vdc)	28V (9~40)
	Input surge voltage (Vdc)	50
	Typical efficiency	86%
OUTPUT CHARACTERISTICS	Output voltage accuracy	±1% (Typical)
	Voltage regulation rate	±1% (Typical)
	Load adjustment rate	±1% (Typical)
	Ripple noise (mV)	≤1%Vo (Typical)
	Transient response 50%~75%~50% (mV)	≤5%Vo (Typical)
	Output voltage regulation range (Vdc)	90%~110%Vo
	Flow uniformity	/
Enable Control Feature	Negative logic (Reference location VIN-)	The enable pin is floating or the output is turned off when it is at a high level.
	Positive logic (Reference location VIN-)	The enable pin is floating or the output is turned off when it is at a low level.
General Characteristics	Input undervoltage protection	Y
	Output overvoltage protection	Y
	Output overcurrent protection	Y
	Over-temperature protection function	Y
	Isolation Voltage	Input to Output 1500Vac
	Isolation Voltage	Input to Base-Plate 1500Vac
	Isolation Voltage	Output to Base-Plate 500Vdc
	Isolation Resistance	≥100MQ
	Isolation Capacitance	500pF
	Maximum Baseplate Temperature Tb	≤100℃
	Storage temperature	-55℃~+125℃
	Total weight (g)	10±2

P/N	Input (Vdc)	Output (Vdc)	Output Current (A)	Output Power (W)	Notes
GDBL28V10M05S	28V (9~40)	5	2	10	
GDBL28V15M05S	28V (9~40)	5	3	15	
GDBL28V15M06S	28V (9~40)	6	2.5	15	
GDBL28V15M12S	28V (9~40)	12	1.25	15	
GDBL28V15M15S	28V (9~40)	15	1	15	
GDBL28V15M24S	28V (9~40)	24	0.625	15	
GDBL28V15M28S	28V (9~40)	28	0.53	15	
GDBL2815M05S	28V (9~40)	±5	1	10	
GDBL2815M06S	28V (9~40)	±12	0.625	15	
GDBL2820M05S	28V (9~40)	5	3	20	
GDBL2820M06S	28V (9~40)	6	2.5	20	
GDBL2820M12S	28V (9~40)	12	1.25	20	
GDBL2820M15S	28V (9~40)	15	1	20	
GDBL2820M24S	28V (9~40)	24	0.625	20	
GDBL2820M28S	28V (9~40)	28	0.53	20	

Low Voltage DC-DC 0.5*0.5 Inch GDAL

Product Features

- 0.5*0.5 Inch (13*13*10.8mm) ,Encapsulated in metal shell
- Wide input voltage range, Output power: 3-10W
- Typical efficiency: 85%~87%
- Output voltage : 90%~110% Vo
- Multiple protection functions, Built in Origin circuit
- Application: military and industrial electronic systems



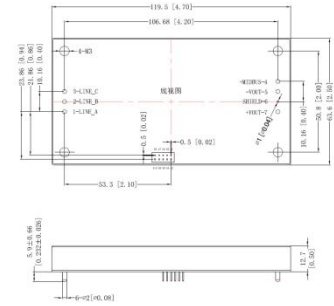
◆ Specifications		
INPUT CHARACTERISTICS	Modle	ELECTRICAL CHARACTERISTICS
	Operating Input Voltage Range(Vdc)	28V (9~40) 28 (16~40)
	Input surge voltage(Vdc)	50/50
	Typical efficiency	87%
OUTPUT CHARACTERISTICS	Output voltage accuracy	±1%(Typical)
	Voltage regulation rate	±1%(Typical)
	Load adjustment rate	±1%(Typical)
	Ripple noise(mV)	≤1%Vo (Typical)
	Transient response 50%~75%~50%(mV)	≤5%Vo (Typical)
	Output voltage regulation range(Vdc)	90%~110%Vo
	Flow uniformity	/
Enable Control Feature	Negative logic(Reference location VIN-)	The enable pin is floating or the output is turned off when it is at a high level.
	Positive logic(Reference location VIN-)	The enable pin is floating or the output is turned off when it is at a high level.
General Characteristics	Input undervoltage protection	Y
	Output overvoltage protection	Y
	Output overcurrent protection	Y
	Over-temperature protection function	Y
	Isolation Voltage	Input to Output 1500Vac
	Isolation Voltage	Input to Base-Plate 1500Vac
	Isolation Voltage	Output to Base-Plate 500Vdc
	Isolation Resistanc	≥100MQ
	Isolation Capacitance	500pF
	Maximum Baseplate Temperature Tb	≤100℃
	Storage temperature	-55℃~+125℃
	Total weight(g)	5±1

P/N	Input (Vdc)	Output (Vdc)	Output Current (A)	Output Power (W)	Notes
GDAL28V3M3R3S	28V (9~40)	3.3	0.9	3	
GDAL28V5M05S	28V (9~40)	5	1	5	
GDAL28V5M07S	28V (9~40)	7	0.71	5	
GDAL28V5M09S	28V (9~40)	9	0.55	5	
GDAL28V5M12	28V (9~40)	12	0.41	5	
GDAL28V5M15S	28V (9~40)	15	0.33	5	
GDAL28V5M24S	28V (9~40)	24	0.21	5	
GDAL28V5M28S	28V (9~40)	28	0.18	5	
GDL2810M12S	28 (16~40)	12	0.834	10	
GSI2810M15S	28 (16~40)	15	0.667	10	
GSI2810M28S	28 (16~40)	28	0.358	10	

AC Three Phase PFC Full Brick GDFPF/DFPF

Product Features

- full Brick , metal casing
- AC three phase wide input voltage range, Output power: 750~2000W
- Typical efficiency:96%
- ≥ 0.99 Power Factor, THD $\leq 5\%$
- Constant power, support pulse load
- Support MIL-STD-461 CE101 and US military Standard 60Hz ,400Hz
- Multiple protection functions,Built in Origin circuit
- Application: military and industrial electronic systems
- Compatible SynQor MPFC/APFC



Specifications

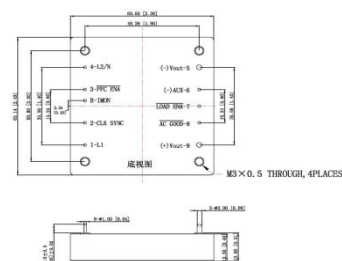
INPUT CHARACTERISTICS	Modle	ELECTRICAL CHARACTERISTICS
	Operating Input Voltage Range(Vdc)	115 (80~140) /380 (304~457 /323~457)
	AC input frequency (Hz)	400/50
	Power factor (PF)	0.99(Typical)
	Input surge voltage(Vac)	180/502
	No-load power consumption (W)	10/12(Typical)
	Typical efficiency	94.5%/95.5%
OUTPUT CHARACTERISTICS	Output voltage accuracy	$\leq \pm 10\%$
	Output voltage accuracy	$\leq \pm 1\%$
	Load adjustment rate	$\leq \pm 10\%$
	Ripple noise(mV)	$\leq 6\%$
AC input status	reference place Vout-,OC Output structure	Provide external reference signals according to the normal state of the input voltage range.
Auxiliary power supply characteristics	Open-circuit voltage	3.3V/100mA (GDFPF115), 5V/100mA (GDFPF380)
General Characteristics	Input undervoltage protection	YES
	Output overvoltage protection	YES
	Output overcurrent protection	YES
	Over-temperature protection function	YES
	Isolation Voltage	Input - Shell 1500Vac
	Isolation Resistanc	$\geq 100M\Omega$
	Maximum Baseplate Temperature(Tc)	$\leq 100^{\circ}\text{C}$
	Storage temperature	$-55^{\circ}\text{C} \sim +125^{\circ}\text{C}$
	Total weight (g)	310 ± 5 (GDFPF115), 300 ± 5 (GDFPF380)

P/N	Input (Vac)	Output (Vdc)	Output Current (A)	Output Power (W)	Pin to Pin Replacment Synqor
GDFPF1151K5M270SNP	115 (80~140)	270	5.55	1500	MPFC-115-3PH-270--HP
GDFPF1151K8M270SNP	115 (80~140)	270	6.66	1800	MPFC-115-3PH-270--HP
GDFPF1152KM270SNP	115 (80~140)	270	7.41	2000	MPFC-115-3PH-270--HP
GDFPF115750M28SNP	115 (80~140)	28	26.78	750	MPFC-115-3PH-28R--FT
GDFPF3802KM270SNP	380 (304~457)	270	7.3	2000	
GDFPF3802KM360SNP	380 (323~457)	360	5.75	2000	
DFPF1151K5M270SNP	115 (80~140)	270	5.55	1500	MPFC-115-3PH-270--HP
DFPF1151K8M270SNP	115 (80~140)	270	6.66	1800	MPFC-115-3PH-270--HP
DFPF1152KM270SNP	115 (80~140)	270	7.41	2000	MPFC-115-3PH-270--HP
DFPF115750M28SNP	115 (80~140)	28	26.78	750	MPFC/APFC-115-3PH-28R--FT
DFPF3802KM270SNP	380 (304~457)	270	7.3	2000	
DFPF3802KM360SNP	380 (323~457)	360	5.75	2000	
DFPF3802KM540SNP	380 (323~457)	540	3.6	2000	

AC Single Phase PFC Half Brick GDHPF

Product Features

- Half Brick , metal casing
- AC single phase wide input voltage range
- Output power: 400~1300W
- Typical efficiency: 97%
- ≥ 0.99 Power Factor, THD $\leq 5\%$
- Internal inrush current limit
- Internal PFC enable
- Multiple protection functions, Built in Origin circuit
- Application: military and industrial electronic systems
- Compatible SynQor MPFC and Cosel



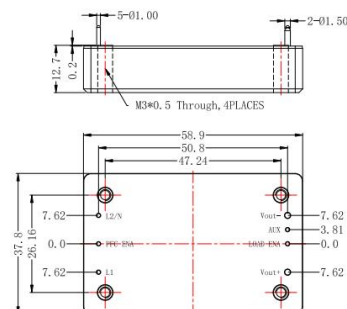
◆ Specifications					
INPUT CHARACTERISTICS	Modle		ELECTRICAL CHARACTERISTICS		
	Operating Input Voltage Range (Vdc)		220 (85~264)		
	AC input frequency (Hz)		50/400 (45~800)		
	Power factor (PF)		0.99 (Typical)		
	Input surge voltage (Vac)		290		
	No-load power consumption (W)		5 (Typical)		
	Typical efficiency		97%		
OUTPUT CHARACTERISTICS	Output voltage accuracy		$\leq \pm 1\%$		
	Output voltage accuracy		$\leq \pm 1\%$		
	Load adjustment rate		$\leq \pm 2\%$		
	Ripple noise (mV)		≤ 38		
Switch control	reference place Vout-, OC Output structure		Turn-on voltage 0~0.8V, Shutdown voltage 4~400V, Realization of PFC Function Control		
Load Enable Feature	reference place Vout-, OC Output structure		It is in a high-impedance state when the rear-stage load is turned off, and the enable voltage does not exceed 0.2V when the rear-stage load is turned on.		
AC input status	reference place Vout-, OC Output structure		Provide external reference signals according to the normal state of the input voltage range.		
Auxiliary power supply characteristics	Open-circuit voltage		10~16.5V/20mA		
General Characteristics	Input undervoltage protection		Yes		
	Output overvoltage protection		Yes		
	Output overcurrent protection		Yes		
	Over-temperature protection function		Yes		
	Isolation Voltage		Input - Shell 1500Vac		
	Isolation Resistanc		$\geq 200M\Omega$		
	Maximum Baseplate Temperature (Tc)		$\leq 100^{\circ}C$		
	Storage temperature		$-55^{\circ}C \sim +125^{\circ}C$		
		Total weight (g)	150 $\pm$ 10		
P/N	Input (Vac)	Output (Vdc)	Output Current (A)	Output Power (W)	Pin To Pin Replacment
GDHPF220W700M390SNN	220W (85~264)	390	1.79	700	
GDHPF220W1K3M390SNN	220W (85~264)	390	3.33	1300	
DHPF115400M300SNN	115 (85~115)	300	1.33	400	
DHPF220W1K3M390SNN	220W (85~264)	380	2.1	800	
DHPF115W400M380SNN	220W (85~264)	380	1.05	800	
DHPF115700H270SN	115 (85~180)	270	1.8	700	MPFC-115-270-HP Synqor
DHPF220W700M390SN	220W (85~266)	390	1.8	700	MPFC-U-115-390-HP Synqor
DHPF220900H271SPN	220 (176~264)	360	2.5	900	DPG-750W Cosel
DHPF220W750M360SPN	220W (85~267)	360	2.08	700	DPG-500W Cosel

AC single Phase PFC Quarter Brick GDQPF



Product Features

- Quarter Brick , plastic casing
- AC single phase wide input voltage range,wide frequency range
- Output power: 120~600W
- Typical efficiency:95~97%
- ≥ 0.99 Power Factor, THD $\leq 5\%$
- Internal inrush current limit
- Internal PFC enable
- Multiple protection functions,Built in Origin circuit
- Application: military and industrial electronic systems
- Compatible SynQor MPFC/PFC



Specifications

Modle		ELECTRICAL CHARACTERISTICS
INPUT CHARACTERISTICS	Operating Input Voltage Range(Vdc)	115/220 (85~264)
	AC input frequency (Hz)	50/400 (45~800)
	THD	3.5%(Typical)
	Input surge voltage(Vac)	290
	No-load power consumption (W)	≤ 6.5
	Typical efficiency	97%
OUTPUT CHARACTERISTICS	Output voltage accuracy	$\leq \pm 2\%$
	Output voltage accuracy	$\leq \pm 1\%$
	Load adjustment rate	$\leq \pm 2\%$
	Ripple noise(mV)	≤ 20
Load Enable Feature	Negative logic (Vout-)	The output is normal when the enable pin is grounded or at a low level.
Auxiliary power supply characteristics	Open-circuit voltage	9.5~15V/12mA
General Characteristics	Input undervoltage protection	Yes
	Output overvoltage protection	Yes
	Output overcurrent protection	Yes
	Over-temperature protection function	Yes
	Isolation Voltage	Input - Shell 1500Vac
	Isolation Resistanc	$\geq 200M\Omega$
	Maximum Baseplate Temperature(Tc)	$\leq 100^{\circ}C$
	Storage temperature	$-55^{\circ}C \sim +125^{\circ}C$
Total weight(g)		78 ± 5

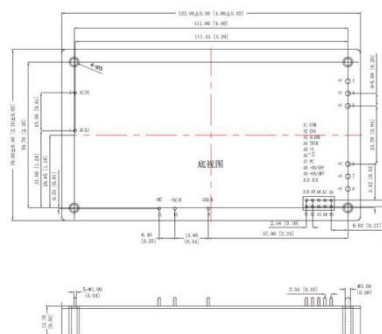
P/N	Input (Vac)	Output (Vdc)	Output Current (A)	Output Power (W)	Pin to Pin Replacment Synqor
GDQPF220W200M390SNN	220W (85~264)	390	0.51	200	MPFC-U-390-QP
GDQPF220W200M390SNN	220W (85~264)	390	1.03	400	MPFC-U-390-QP
GDQPF220W200M390SNN	220W (85~264)	390	1.54	600	MPFC-U-390-QP
DQPF220W200M390SNN	220 (176~264)	390	0.51	200	MPFC-U-390-QP
GDQPF220W120H390SNN	220 (176~264)	390	0.31	120	MPFC-U-390-QP
GDQPF220W350H390SNN	220W (85~264)	390	0.9	350	MPFC-U-390-QP

AC-DC Full Brick GDFAPFC



Product Features

- Full Brick (122*70*12.7mm), metal casing
- AC single phase wide input voltage range
- Output power: 600~1500W
- Typical efficiency: 93.5%
- ≥ 0.99 Power Factor, THD $\leq 5\%$
- Internal inrush current limit
- Internal PFC and load enable
- Multiple protection functions, Built in Origin circuit
- Support parallel current sharing
- Application: military and industrial electronic systems
- Compatible TDK-Lambda PE1000FA



Specifications

Modle		ELECTRICAL CHARACTERISTICS
INPUT CHARACTERISTICS	Operating Input Voltage Range (Vdc)	220W (85~264)
	AC input frequency (Hz)	50/ (47~63)
	THD	3% (Typical)
	Input surge voltage (Vac)	290
	No-load power consumption (W)	≤ 25
	Standby power consumption (W)	≤ 5
	Typical efficiency	93%
OUTPUT CHARACTERISTICS	Output voltage accuracy	$\leq \pm 1\%$
	Output voltage accuracy	$\leq \pm 1\%$
	Load adjustment rate	$\leq \pm 1\%$
Auxiliary power supply characteristics	Ripple noise (mV)	$\leq \pm 1\% V_o$
	Open-circuit voltage	11V/20mA
General Characteristics	Input undervoltage protection	Yes
	Output overvoltage protection	Yes
	Output overcurrent protection	Yes
	Over-temperature protection function	Yes
	Isolation Voltage	Input - out Put 3000Vac
	Isolation Resistanc	$\geq 100M\Omega$
	Isolation Capacitance	1500 pF
	Maximum Baseplate Temperature (Tc)	$\leq 105^\circ\text{C}$
	Storage temperature	$-55^\circ\text{C} \sim +125^\circ\text{C}$
Total weight (g)		360 $\pm$ 10

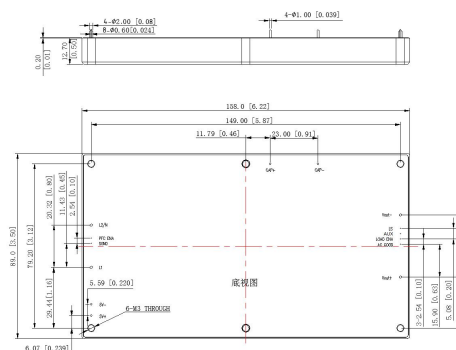
P/N	Input (Vac)	Output (Vdc)	Output Current (A)	Output Power (W)	Pin to Pin TDK-Lambda
GDFAPFC220W1K5M28SNN	220W (85~264)	28	53.57	1500	PFE1000FA-28
GDFAPFC220W1K5M28SNN-01	220W (85~265)	28	54.57	1500	Constant current charging
GDFAPFC220W1K5M24SNN	220W (85~264)	24	62.5	1500	PFE1000FA-24
GDFAPFC220W1K5M12SNN	220W (85~264)	12	125	1500	PFE1000FA-12
DFAPFC220W1KM28SNN	220W (85~264)	28	35.7	1000	PFE1000FA-28
DFAPFC220W800M28SNN	220W (85~264)	28	28.58	800	PFE1000FA-28
DFAPFC220W800M48SNN	220W (85~264)	48	16.66	800	PFE1000FA-48
DFAPFC220W600M12SNN	220W (85~264)	12	50	600	PFE1000FA-12

AC single phase PFC Full Brick GDSPF



Product Features

- Full Brick (158*89*12.7mm), metal casing
- AC single phase wide input voltage range
- Output power: 1200~2800W
- Typical efficiency: 94%
- ≥ 0.97 Power Factor, THD $\leq 5\%$
- Internal auxiliary 5v/1A
- Internal inrush current limit
- Internal PFC and load enable
- Multiple protection functions, Built in Origin circuit
- Support parallel current sharing
- Application: military and industrial electronic systems



Specifications

	Modle	ELECTRICAL CHARACTERISTICS	
INPUT CHARACTERISTICS	Operating Input Voltage Range (Vdc)	220 (176~264)	
	AC input frequency (Hz)	50/ (40~63)	
	THD	5% (Typical)	
	Input surge voltage (Vac)	290	
	No-load power consumption (W)	≤ 10	
	Standby power consumption (W)	≤ 5	
	Typical efficiency	94%	
OUTPUT CHARACTERISTICS	Output voltage accuracy	$\leq \pm 2\%$	
	Output voltage accuracy	$\leq \pm 1\%$	
	Load adjustment rate	$\leq \pm 2\%$	
	Ripple noise (mV)	≤ 13	
Switch control	reference place Vout-, OC Output structure	Turn-on voltage 0~0.5V, Shutdown voltage 3~400V, Realization of PFC Function Control	
Load Enable Feature	reference place Vout-, OC Output structure	It is in a high-impedance state when the rear-stage load is turned off, and the enable voltage does not exceed	
AC input status	reference place Vout-, OC Output structure	Provide external reference signals according to the normal state of the input voltage range.	
Auxiliary power supply characteristics	Open-circuit voltage	8~14V/25mA	
General Characteristics	Input undervoltage protection	Yes	
	Output overvoltage protection	Yes	
	Output overcurrent protection	Yes	
	Over-temperature protection function	Yes	
	Isolation Voltage	Input /Oout - Shell 1500Vac	
	Isolation Resistance	$\geq 100M\Omega$	
	Maximum Baseplate Temperature (Tc)	$\leq 105^\circ\text{C}$	
	Storage temperature	$-55^\circ\text{C} \sim +125^\circ\text{C}$	
	Total weight (g)	630 $\pm$ 15	

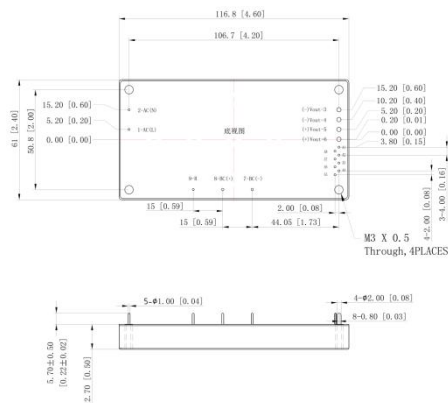
P/N	Input (Vac)	Output (Vdc)	Output Current (A)	Output Power (W)	Notes
GDSPF2202800M270SNN	220 (176~264)	270	10.4	2800	
GDSPF2201500M270SNN	220 (176~264)	270	5.55	1500	
DSPF2202800M270SNN	220 (176~264)	270	10.4	2800	
DSPF2201500M270SNN	220 (176~264)	270	5.55	1500	
DSPF2201200M300SNN	220 (176~264)	300	4	1200	

AC-DC Full Brick GDFBFC



Product Features

- Full Brick (116.8*61*12.7mm), metal casing
- AC single phase wide input voltage range
- Output power: 600~1200W
- Typical efficiency: 92~93%
- ≥ 0.99 Power Factor, THD $\leq 5\%$
- Internal inrush current limit
- Internal PFC and load enable
- Multiple protection functions, Built in Origin circuit
- Support parallel current sharing
- Application: military and industrial electronic systems
- Compatible TDK-Lambda PE500/700SA

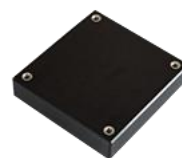


Specifications

INPUT CHARACTERISTICS	Modle	ELECTRICAL CHARACTERISTICS
	Operating Input Voltage Range (Vdc)	220W (85~264)
	AC input frequency (Hz)	50/ (47~63)
	THD	3%(Typical)
	Input surge voltage (Vac)	290
	No-load power consumption (W)	≤ 25
	Standby power consumption (W)	≤ 5
	Typical efficiency	93%
OUTPUT CHARACTERISTICS	Output voltage accuracy	$\leq \pm 1\%$
	Output voltage accuracy	$\leq \pm 1\%$
	Load adjustment rate	$\leq \pm 1\%$
	Ripple noise (mV)	$\leq \pm 1\%V_o$
Auxiliary power supply characteristics	Open-circuit voltage	11V/20mA
General Characteristics	Input undervoltage protection	Yes
	Output overvoltage protection	Yes
	Output overcurrent protection	Yes
	Over-temperature protection function	Yes
	Isolation Voltage	Input - out Put 3000Vac
	Isolation Resistanc	$\geq 100M\Omega$
	Isolation Capacitance	1500 pF
	Maximum Baseplate Temperature (Tc)	$\leq 105^\circ\text{C}$
	Storage temperature	$-55^\circ\text{C} \sim +125^\circ\text{C}$
	Total weight (g)	290 $\pm$ 15

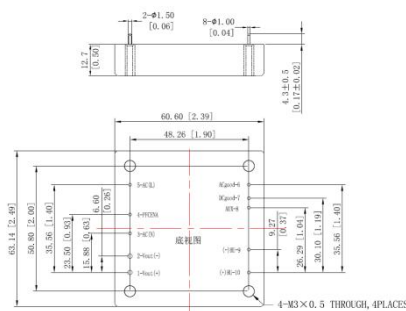
P/N	Input (Vac)	Output (Vdc)	Output Current (A)	Output Power (W)	Pin to Pin TDK-Lambda
GDFBPFC220W1KM12SN	220W (85~264)	12	83.33	1000	PFE700SA-12
GDFBPFC220W1K2M28SN	220W (85~264)	28	42.86	1200	PFE700SA-28
GDFBPFC220W1K2M48SN	220W (85~264)	48	25	1200	PFE700SA-48
GDFBPFC220W300M12S-NL	220W (85~264)	12	25	300	
DFBPFC220W1KM12SN-NL	220W (85~264)	12	41.66	500	PFE500AS-12
DFBPFC220W1K2M28SN-NL	220W (85~264)	28	21.43	600	PFE500AS-28
DFBPFC220W1K2M48SN-NL	220W (85~264)	48	12.5	600	PFE500AS-48

AC-DC Half Brick GDHPFC



Product Features

- Half Brick (60.6*63.14*12.7mm) ,metal casing
- AC single phase wide input voltage range,wide frequency range
- Output power: 350~500W
- Typical efficiency:92~93%
- ≥ 0.99 Power Factor, THD $\leq 5\%$
- Internal inrush current limit
- Internal PFC and load enable
- Multiple protection functions,Built in Origin circuit
- Support parallel current sharing
- Application: military and industrial electronic systems
- Compatible SynQor MPFC-U Products

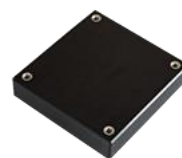


Specifications

INPUT CHARACTERISTICS	Modle	ELECTRICAL CHARACTERISTICS
	Operating Input Voltage Range (Vdc)	220W (85~264)
	AC input frequency (Hz)	50/400 (47~800)
	THD	5% (Typical)
	Input surge voltage (Vac)	290
	No-load power consumption (W)	≤ 7
	Standby power consumption (W)	≤ 5
	Typical efficiency	92%
OUTPUT CHARACTERISTICS	Output voltage accuracy	$\leq \pm 5\%$
	Output voltage accuracy	$\leq \pm 1\%$
	Load adjustment rate	$\leq \pm 2\%$
	Ripple noise (mV)	$\leq \pm 1\% V_o$
Auxiliary power supply characteristics	Open-circuit voltage	7~16V/10mA
General Characteristics	Input undervoltage protection	Yes
	Output overvoltage protection	Yes
	Output overcurrent protection	Yes
	Over-temperature protection function	Yes
	Isolation Voltage	Input-OutPut 3000Vac
	Isolation Resistanc	$\geq 100M \Omega$
	Isolation Capacitance	500 pF
	Maximum Baseplate Temperature (Tc)	$\leq 105^\circ C$
	Storage temperature	$-55^\circ C \sim +125^\circ C$
	Total weight (g)	140 $\pm$ 10

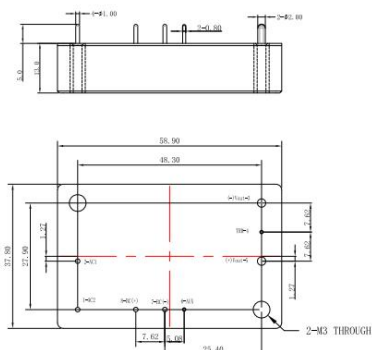
P/N	Input (Vac)	Output (Vdc)	Output Current (A)	Output Power (W)	Pin to Pin Synqor MPFC-U' s
GDHPFC220W350M12SN	220W (85~264)	12	29.17	350	MPFC-U-12-HT
GDHPFC220W350M12SN-NL	220W (85~264)	12	29.17	350	MPFC-U-12-HT
GDHPFC220W500M12SN	220W (85~264)	12	41.67	500	MPFC-U-12-HT
GDHPFC220W500M24SN	220W (85~264)	24	20.83	500	MPFC-U-24-HT
GDHPFC220W500M28SN	220W (85~264)	28	17.86	500	MPFC-U-28-HT
GDHPFC220W500M48SN	220W (85~264)	48	10.42	500	MPFC-U-48-HT
DHPFC220W350M12SN	220W (85~264)	12	29.17	350	MPFC-U-12-HT
DHPFC220W350M24SN	220W (85~264)	24	14.58	350	MPFC-U-24-HT
DHPFC220W350M28SN	220W (85~264)	28	12.5	350	MPFC-U-28-HT
DHPFC220W350M48SN	220W (85~264)	48	7.29	350	MPFC-U-48-HT

AC-DC Quarter Brick GDQPFC



Product Features

- Quarter Brick (58.9*37.8*12.7mm) ,metal casing
- AC single phase wide input voltage range
- Output power: 50~150W
- Typical efficiency:90%
- ≥ 0.99 Power Factor
- Internal inrush current limit
- Internal enable
- Multiple protection functions,Built in Origin circuit
- Support voltage adjustable $\pm 10\%$
- Application: military and industrial electronic systems
- Compatible Cosel TUNS,s Products



Specifications

Modle		ELECTRICAL CHARACTERISTICS
INPUT CHARACTERISTICS	Operating Input Voltage Range (Vdc)	220 (176~264)
	AC input frequency (Hz)	50/ (47~63)
	THD	/
	Input surge voltage (Vac)	290
	No-load power consumption (W)	≤ 3
	Standby power consumption (W)	/
	Typical efficiency	89%
OUTPUT CHARACTERISTICS	Output voltage accuracy	$\leq \pm 1\%$
	Output voltage accuracy	$\leq \pm 1\%$
	Load adjustment rate	$\leq \pm 1\%$
	Ripple noise (mV)	$\leq \pm 1\%V_o$
Auxiliary power supply characteristics		Open-circuit voltage
General Characteristics	Input undervoltage protection	Yes
	Output overvoltage protection	Yes
	Output overcurrent protection	Yes
	Over-temperature protection function	Yes
	Isolation Voltage	Input-Output 3000Vac
	Isolation Resistance	$\geq 100M\Omega$
	Isolation Capacitance	500 pF
	Maximum Baseplate Temperature (Tc)	$\leq 105^\circ\text{C}$
	Storage temperature	$-55^\circ\text{C} \sim +125^\circ\text{C}$
	Total weight (g)	85 ± 10

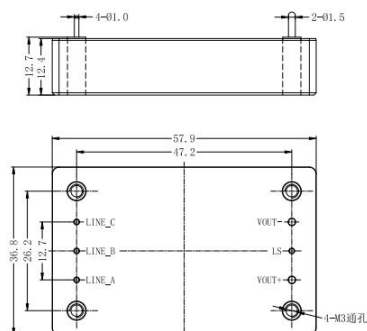
P/N	Input (Vac)	Output (Vdc)	Output Current (A)	Output Power (W)	Pin to Pin Cosel TUNS, s
GDQPFC22050M05S	220 (176~264)	5	10	50	TUNS50F05
GDQPFC22050M12S	220 (176~264)	12	4.17	50	TUNS50F012
GDQPFC22050M24S	220 (176~264)	24	2.08	50	TUNS50F024
GDQPFC22050M28S	220 (176~264)	28	1.79	50	TUNS50F028
GDQPFC220150M12S	220 (176~264)	12	12.5	150	TUNS50F012
GDQPFC220150M24S	220 (176~264)	24	6.25	150	TUNS50F024
GDQPFC220150M28S	220 (176~264)	28	5.36	150	TUNS50F028
DQPFC22050M05S	220W (85~264)	5	10	50	TUNS50F05
DQPFC22050M12S	220W (85~264)	12	4.17	50	TUNS50F012
DQPFC22050M24S	220W (85~264)	24	2.08	50	TUNS50F024
DQPFC22050M28S	220W (85~264)	28	1.79	50	TUNS50F028

AC-DC Three Phase Quarter Brick GDQPFC



Product Features

- Quarter Brick (57.9*36.8*12.7mm) ,metal casing
- AC three phase wide input voltage range
- Output power: 24W
- Typical efficiency:80%
- Support parallel current sharing
- Multiple protection functions,Built in Origin circuit
- Application: military and industrial electronic systems



Specifications

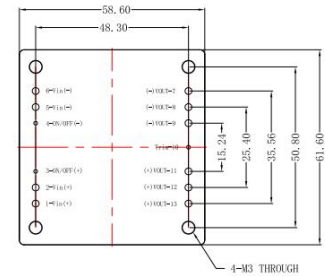
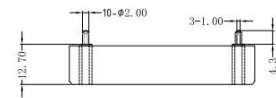
Modle			ELECTRICAL CHARACTERISTICS		
INPUT CHARACTERISTICS	Operating Input Voltage Range(Vdc)		380(300~440)		
	AC input frequency (Hz)		50/(45~55)		
	THD		/		
	Input surge voltage(Vac)		500		
	No-load power consumption (W)		1W		
	Standby power consumption(W)		/		
	Typical efficiency		80%		
	OUTPUT CHARACTERISTICS	Output voltage accuracy		$\leq \pm 1\%$	
Output voltage accuracy		$\leq \pm 1\%$			
Load adjustment rate		$\leq \pm 2\%$			
Ripple noise(mV)		$\leq \pm 2\%V_o$			
Auxiliary power supply characteristics					
Open-circuit voltage		8~15V/10mA			
General Characteristics	Input undervoltage protection		Yes		
	Output overvoltage protection		Yes		
	Output overcurrent protection		Yes		
	Over-temperature protection function		Yes		
	Isolation Voltage		Input to Output 1500Vac		
	Isolation Voltage		Input to Base-Plate1 1500Vac		
	Isolation Voltage		Output to Base-Plate 500Vdc		
	Isolation Resistanc		$\geq 100M\Omega$		
	Isolation Capacitance		/		
	Maximum Baseplate Temperature(Tc)		$\leq 100^{\circ}C$		
	Storage temperature		$-55^{\circ}C \sim +125^{\circ}C$		
	Total weight(g)		85 $\pm$ 10		
P/N	Input (Vac)	Output (Vdc)	Output Current (A)	Output Power (W)	Notes
GDQPFC38024M12S	380(300~440)	12	2	24	

Non-Isolated DC-DC Half Brick GDHNB



Product Features

- Half Brick, metal casing
- High power and high conversion efficiency
- Input and Output Non-Isolated
- Output power: 800~2000W
- Typical efficiency: 93~97%
- Support parallel current sharing
- Multiple protection functions, Built in Origin circuit
- Application: military and industrial electronic systems



◆Specifications		
INPUT CHARACTERISTICS	Modle	ELECTRICAL CHARACTERISTICS
	Operating Input Voltage Range(Vdc)	28 (16~40) /270 (200~400) /270 (480~600)
	Input surge voltage(Vdc)	45/450/650
	Typical efficiency	93%/97%/97%
OUTPUT CHARACTERISTICS	Output voltage accuracy	±2%(Typical)
	Voltage regulation rate	±2%(Typical)
	Load adjustment rate	±2%(Typical)
	Ripple noise(mV)	≤3%Vo(Typical)
	Transient response50%~75%~50%(mV)	/
	Output voltage regulation range (Vdc)	5~12/80%~110%Vo/80%~110%Vo
	Flow uniformity	N/A
Enable Control Feature	Negative logic(Reference location VIN-)	The enable pin is floating or the output is turned off when it is at a high level.
	Positive logic(Reference location VIN-)	The enable pin is floating or the output is turned off when it is at a low level.
General Characteristics	Input undervoltage protection	Y
	Output overvoltage protection	Y
	Output overcurrent protection	Y
	Over-temperature protection function	Y
	Isolation Voltage	Input to Output No Isolation
	Isolation Voltage	Input to Base-Plate1 500Vdc
	Isolation Voltage	Output to Base-Plate 500Vdc
	Isolation Resistanc	≥30MΩ
	Isolation Capacitance	N/A
	Maximum Baseplate Temperature Tb	≤105℃
	Storage temperature	-55℃~+125℃
	Total weight(g)	165±20

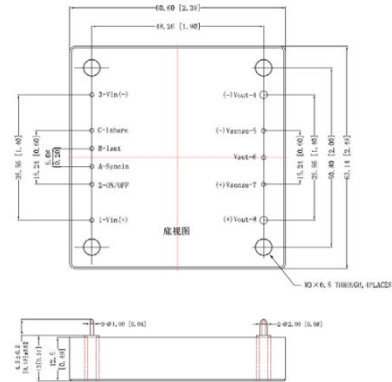
P/N	Input (Vdc)	Output (Vdc)	Output Current (A)	Output Power (W)	Notes
GDHNB28800M09SN	28 (16~40)	9	88.89	800	no current sharing
GDHNB2702KM270SN	270 (200~400)	270	7.41	2000	
GDHNB5402KM270SN	540 (480~600)	270	7.41	2000	

Non-Isolated DC-DC Half Brick GDHN



Product Features

- Half Brick, metal casing
- High power and high conversion efficiency
- Input and Output Non-Isolated
- Output power: 2200~2400W
- Output Voltage: 0~60V
- Typical efficiency: 95%
- Support parallel current sharing
- Multiple protection functions
- Provides the power conversion platform for battery charging
Output current limit is externally controlled for constant-current charging
- Application: military and industrial electronic systems
- Compatible SynQor MCOTS-N,s Products



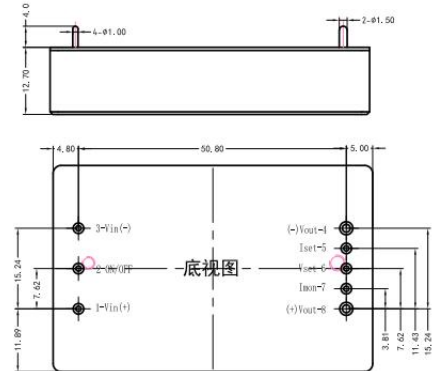
◆ Specifications		
INPUT CHARACTERISTICS	Module	ELECTRICAL CHARACTERISTICS
	Operating Input Voltage Range (Vdc)	28V (9~40) / 28VE (9~60)
	Output voltage accuracy	±2% (Typical)
OUTPUT CHARACTERISTICS	Typical efficiency	95%/97%
	Output voltage accuracy	±2% (Typical)
	Voltage regulation rate	±2% (Typical)
	Load adjustment rate	±2% (Typical)
	Ripple noise (mV)	≤3%Vo (Typical)
	Transient response 50%~75%~50% (mV)	/
	Output voltage regulation range (Vdc)	0~40/0~60
Enable Control Feature	Flow uniformity	/
	Negative logic (Reference location VIN-)	The enable pin is floating or the output is turned off when it is at a high level.
General Characteristics	Positive logic (Reference location VIN-)	The enable pin is floating or the output is turned off when it is at a high level.
	Input undervoltage protection	Y
	Output overvoltage protection	Y
	Output overcurrent protection	Y
	Over-temperature protection function	Y
	Isolation Voltage	Input to Output No Isolation
	Isolation Voltage	Input to Base-Plate 1 500Vdc
	Isolation Voltage	Output to Base-Plate 500Vdc
	Isolation Resistance	≥30MΩ
	Isolation Capacitance	/
	Maximum Baseplate Temperature Tb	≤105℃
	Storage temperature	-55℃~+125℃
	Total weight (g)	165±20

P/N	Input (Vdc)	Output (Vdc)	Output Current (A)	Output Power (W)	Pin to Pin Synqor MCOTS-N
GDHN28V2K2M40SN	28V (9~40)	0~40	55	2200	MCOTS-N-28V-40-HG
DHN28V2K2M40SN	28V (9~40)	0~40	55	2200	MCOTS-N-28V-40-HG
DHN28VE2K4M60SN	28VE (9~60)	0~60	40	2400	MCOTS-N-28VE-60-HG
DHN28VE2K4M62SN	28VE (9~62)	0~60	42	2400	MCOTS-N-28VE-60-HG

Non-Isolated DC-DC Quarter Brick GDQN

Product Features

- Quarter Brick ,metal casing
- High power and high conversion efficiency
- Input and Output Non-Isolated
- Output power: 1500W
- Output Voltage:0~60V
- Typical efficiency:96%
- Multiple protection functions
- Provides the power conversion platform for battery charging
- Output current limit is externally controlled for constant-current charging
- Application: military and industrial electronic systems
- Compatible SynQor MCOTS-N,s Products



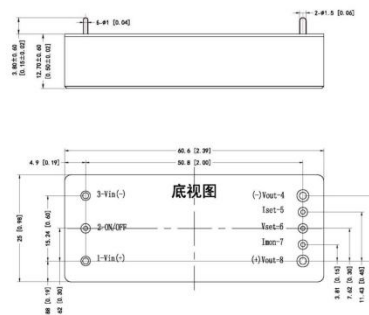
◆Specifications		
INPUT CHARACTERISTICS	Modle	ELECTRICAL CHARACTERISTICS
	Operating Input Voltage Range(Vdc)	28VE(9~60)
	Output voltage accuracy	±1% (Typical)
	Typical efficiency	96%
OUTPUT CHARACTERISTICS	Output voltage accuracy	±2%(Typical)
	Voltage regulation rate	±2%(Typical)
	Load adjustment rate	±2%(Typical)
	Ripple noise(mV)	≤2%Vo(Typical)
	Transient response50%~75%~50%(mV)	/
	Output voltage regulation range(Vdc)	0~60
	Flow uniformity	/
Enable Control Feature	Negative logic(Reference location VIN-)	The enable pin is floating or the output is turned off when it is at a high level.
	Positive logic(Reference location VIN-)	The enable pin is floating or the output is turned off when it is at a low level.
General Characteristics	Input undervoltage protection	Y
	Output overvoltage protection	Y
	Output overcurrent protection	Y
	Over-temperature protection function	Y
	Isolation Voltage	Input to Output No Isolation
	Isolation Voltage	Input to Base-Plate1 500Vdc
	Isolation Voltage	Output to Base-Plate 500Vdc
	Isolation Resistanc	≥30MΩ
	Isolation Capacitance	/
	Maximum Baseplate Temperature Tb	≤105℃
	Storage temperature	-55℃~+125℃
	Total weight(g)	100±10

P/N	Input(Vac)	Output(Vdc)	Output Current(A)	Output Power(W)	Pin to Pin Synqor MCOTS-N
GDQN28VE1K5M60SN	28VE(9~60)	0~60	0~25	1500	MCOTS-N-28V-60-QT
DQN28VE1K5M60SN	28VE(9~60)	0~60	0~25	1500	MCOTS-N-28V-60-QT

Non-Isolated DC-DC Eighth Brick GDEN

Product Features

- Eighth Brick ,metal casing
- High power and high conversion efficiency
- Input and Output Non-Isolated
- Output power: 900W
- Output Voltage: 0~60V
- Typical efficiency: 97%
- Multiple protection functions
- Provides the power conversion platform for battery charging
Output current limit is externally controlled for
constant-current charging
- Application: military and industrial electronic systems
- Compatible SynQor MCOTS-N,s Products



◆ Specifications		
INPUT CHARACTERISTICS	Module	ELECTRICAL CHARACTERISTICS
	Operating Input Voltage Range (Vdc)	28VE (9~60)
	Output voltage accuracy	±1% (Typical)
OUTPUT CHARACTERISTICS	Typical efficiency	97%
	Output voltage accuracy	±2% (Typical)
	Voltage regulation rate	±2% (Typical)
	Load adjustment rate	±2% (Typical)
	Ripple noise (mV)	≤2%Vo (Typical)
	Transient response 50%~75%~50% (mV)	/
	Output voltage regulation range (Vdc)	0~60
Enable Control Feature	Flow uniformity	/
	Negative logic (Reference location VIN-)	The enable pin is floating or the output is turned off when it is at a high level.
General Characteristics	Positive logic (Reference location VIN-)	The enable pin is floating or the output is turned off when it is at a low level.
	Input undervoltage protection	Y
	Output overvoltage protection	Y
	Output overcurrent protection	Y
	Over-temperature protection function	Y
	Isolation Voltage	Input to Output No Isolation
	Isolation Voltage	Input to Base-Plate 1150Vdc
	Isolation Voltage	Output to Base-Plate 1150Vdc
	Isolation Resistance	≥30MΩ
	Isolation Capacitance	/
	Maximum Baseplate Temperature Tb	≤105℃
	Storage temperature	-55℃~+125℃
	Total weight (g)	58±5

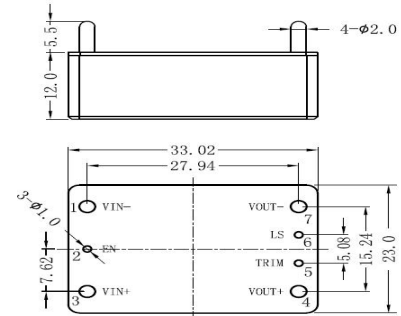
P/N	Input (Vac)	Output (Vdc)	Output Current (A)	Output Power (W)	Pin to Pin Synqor MCOTS-N
DEN28VE900M60SN	28VE (9~60)	0~60	0~15	900	MCOTS-N-28V-60-EP

Non-Isolated DC-DC Sixteenth Brick GDSN



Product Features

- Sixteenth Brick ,metal casing
- High power and high conversion efficiency
- Input and Output Non-Isolated
- Output power: 150W
- Output Voltage: 3.3~9V
- Typical efficiency: 94.5%
- Multiple protection functions
- Support parallel current sharing
- Application: military and industrial electronic systems



◆Specifications		
INPUT CHARACTERISTICS	Module	ELECTRICAL CHARACTERISTICS
	Operating Input Voltage Range(Vdc)	12(10~16)
	Output voltage accuracy	±1% (Typical)
	Typical efficiency	95%
OUTPUT CHARACTERISTICS	Output voltage accuracy	±1%(Typical)
	Voltage regulation rate	±1%(Typical)
	Load adjustment rate	±2%(Typical)
	Ripple noise(mV)	≤3%Vo(Typical)
	Transient response50%~75%~50%(mV)	/
	Output voltage regulation range(Vdc)	3.3~9
	Flow uniformity	/
Enable Control Feature	Negative logic(Reference location VIN-)	The enable pin is floating or the output is turned off when it is at a high level.
	Positive logic(Reference location VIN-)	The enable pin is floating or the output is turned off when it is at a high level.
General Characteristics	Input undervoltage protection	Y
	Output overvoltage protection	Y
	Output overcurrent protection	Y
	Over-temperature protection function	Y
	Isolation Voltage	Input to Output No Isolation
	Isolation Voltage	Input to Base-Plate1 500Vdc
	Isolation Voltage	Output to Base-Plate 500Vdc
	Isolation Resistanc	≥100MΩ
	Isolation Capacitance	/
	Maximum Baseplate Temperature Tb	≤105℃
	Storage temperature	-55℃~+125℃
	Total weight(g)	32±5

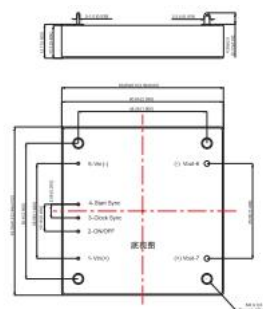
P/N	Input (Vac)	Output (Vdc)	Output Current (A)	Output Power (W)	Notes
GDSN12150M05SN	12(10~16)	3.3~9	0~30	150	
DSN12150M05SN	12(10~16)	3.3~9	0~30	150	

DC-DC Bus Converters Half Brick DHBC



Product Features

- Half Brick, metal casing
- High power and high conversion efficiency
- Input and Output Isolated
- Output power: 400~1000W
- Output Voltage: 0~60V
- Typical efficiency: 96%
- Support parallel current sharing, N+1
- Multiple protection functions
- Application: military and industrial electronic systems
- Compatible SynQor MCOTS-B, s Products



◆Specifications		
INPUT CHARACTERISTICS	Module	ELECTRICAL CHARACTERISTICS
	Operating Input Voltage Range(Vdc)	270 (230~320) /540 (440~700)
	Input surge voltage(Vdc)	450/750
	Typical efficiency	96%
OUTPUT CHARACTERISTICS	Output voltage accuracy	±1%(Typical)
	Voltage regulation rate	±1%(Typical)
	Load adjustment rate	±2%(Typical)
	Ripple noise(mV)	≤1%Vo (Typical)
	Transient response50%~75%~50%(mV)	≤6%Vo (Typical)
	Output voltage regulation range(Vdc)	N/A
	Flow uniformity	N/A
Enable Control Feature	Negative logic(Reference location VIN-)	The enable pin is floating or the output is turned off when it is at a high level.
	Positive logic(Reference location VIN-)	The enable pin is floating or the output is turned off when it is at a low level.
General Characteristics	Input undervoltage protection	Y
	Output overvoltage protection	Y
	Output overcurrent protection	Y
	Over-temperature protection function	Y
	Isolation Voltage	Input to Output 1500Vdc
	Isolation Voltage	Input to Base-Plate1 1500Vdc
	Isolation Voltage	Output to Base-Plate 500Vdc
	Isolation Resistanc	≥100M Ω
	Isolation Capacitance	/
	Maximum Baseplate Temperature Tb	≤105℃
	Storage temperature	-55℃~+125℃
	Total weight(g)	145±5

P/N	Input (Vdc)	Output (Vdc)	Output Current (A)	Output Power (W)	Pin to Pin Synqor, s MCOTS-B
DHBC2701KM28SN	270 (230~320)	28	35.71	1000	MCOTS-B-270-31-HT
DHBC5401KM28SN	540 (440~700)	28	35.71	1000	MCOTS-B-600-31-HT
DHBC270400M11SN	200 (250~290)	11	36.36	400	

