

AC/DC Converter Controller

Application Information

IC Product Name	BM2P0363F
Control Method	PWM
Input	85 Vac to 264 Vac
Output	20.6V 0.3A
Type	Non- Isolation
Document Number	66AN140E
Revision	001

Reference Circuit

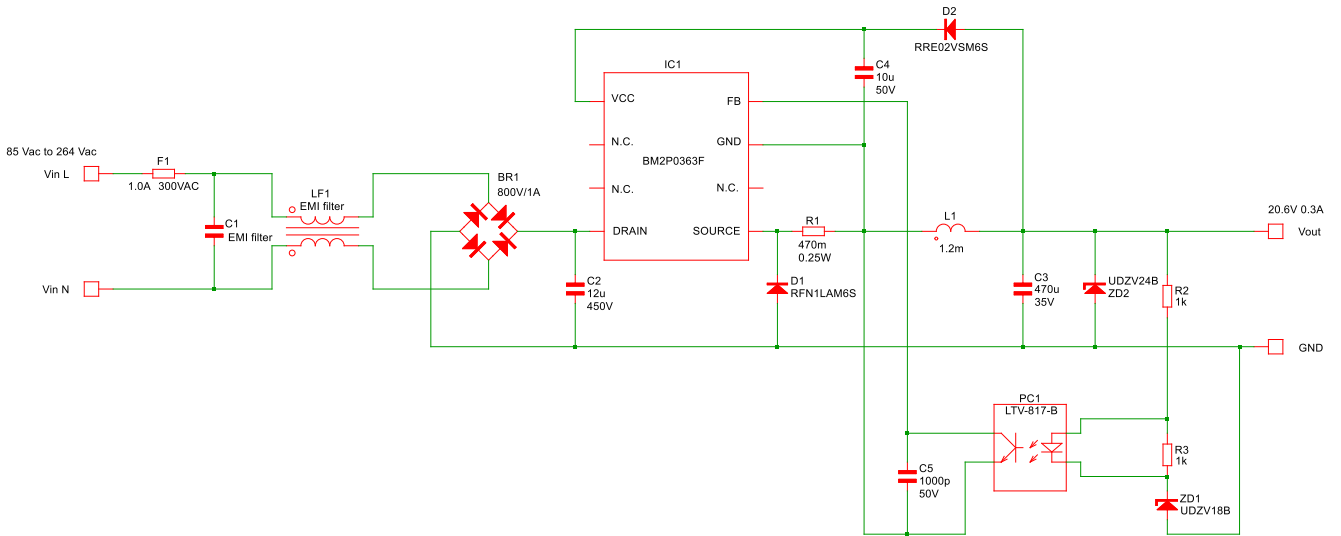


Fig1. Reference Circuit

Bill of Materials

Item	Specification	Parts name	Manufacture
IC1		BM2P0363F	Rohm
BR1	800V/1A		
C1	EMI filter	X-Capacitor	
C2	12 μ F/450V		
C3	470 μ F/35V		
C4	10 μ F/50V		
C5	1000pF/50V		
D1	600V/0.8A	RFN1LAM6S	Rohm
D2	600V/0.2A	RRE02VSM6S	Rohm
F1	1.0A/300VAC		
L1※	1.2mH/0.8A		
LF1	EMI filter		
PC1		LTV-817-B	
R1	470m Ω /0.25W		
R2	1k Ω	MCR03EZPFX1001	Rohm
R3	1k Ω	MCR03EZPFX1001	Rohm
ZD1	18V/0.2W	UDZV18B	Rohm
ZD2	24V/0.2W	UDZV24B	Rohm

※コイルは閉磁型のものを選んでください。

Use a shield coil.

Fig2. Bill of Materials

Typical Characteristics

	85Vac	100Vac	230Vac	264Vac
0A	20.63V	20.62V	20.62V	20.63V
0.005A	20.60V	20.59V	20.61V	20.60V
0.01A	20.60V	20.61V	20.61V	20.62V
0.05A	20.62V	20.62V	20.61V	20.61V
0.1A	20.62V	20.63V	20.64V	20.65V
0.2A	20.64V	20.64V	20.63V	20.63V
0.3A	20.62V	20.62V	20.62V	20.62V

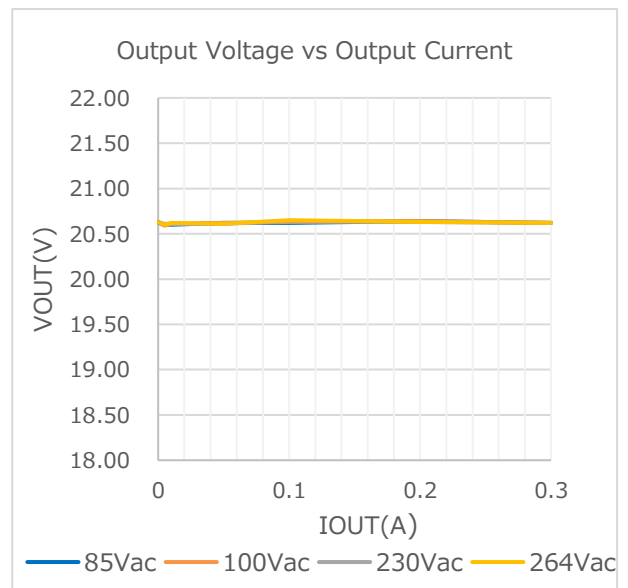


Fig3. Output Voltage vs Output Current

	85Vac	100Vac	230Vac	264Vac
0.005A	65.5%	65.4%	61.7%	60.4%
0.01A	74.9%	74.7%	70.8%	69.4%
0.05A	86.5%	86.3%	82.6%	81.2%
0.1A	87.6%	87.6%	85.7%	84.9%
0.2A	87.7%	87.8%	86.9%	86.4%
0.3A	87.2%	87.2%	86.9%	86.6%

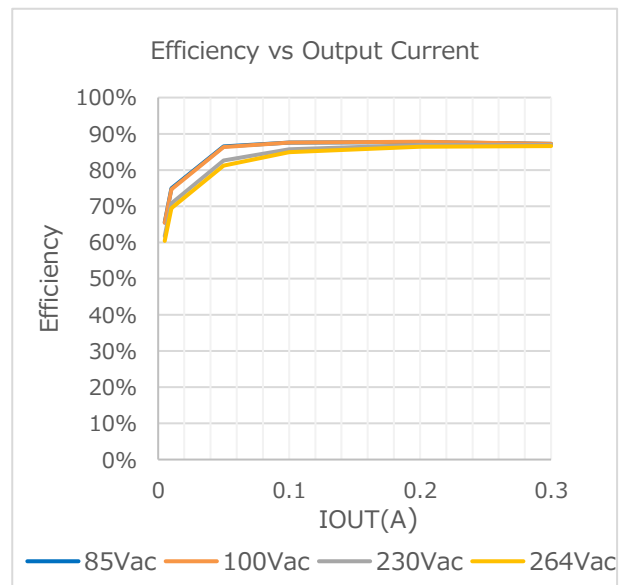


Fig4. Efficiency vs Output Current

Revision History

Date	Revision	Changes
19.Feb.2024	001	New Release

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