

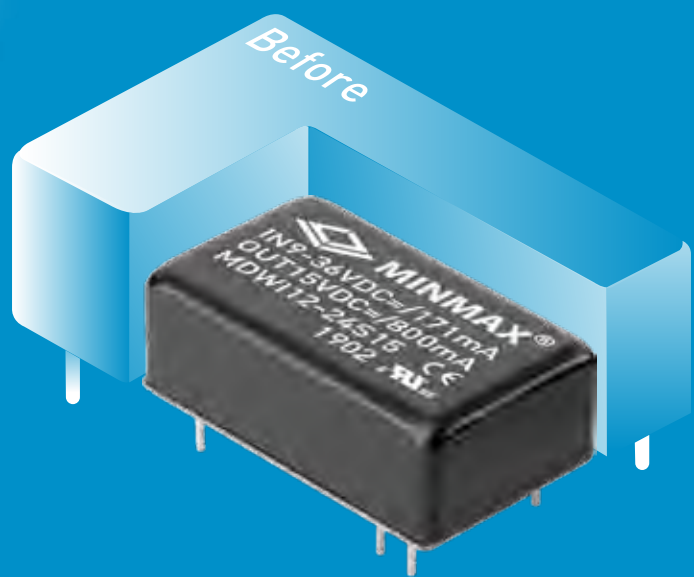


GENERAL INDUSTRIAL POWER SOLUTIONS

MINMAX TECHNOLOGY

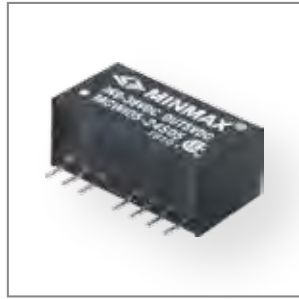
75%
Board Space

79%
Weight



Power Density
4 x UP

GENERAL INDUSTRIAL • DC-DC CONVERTERS



1-5W • SIP PACKAGE



Series	Output Power	Input Voltage Range (VDC)	Output Voltage (VDC)	Isolation (VDC)	Efficiency	Operating Ambient Temp. Range ⁽¹⁾	Output Regulation	No Min. Load	Package	OCP	SCP	Remote ON/OFF Control	UL/cUL/IEC/EN 60950-1	UL/cUL/IEC/EN 62368-1
MBU100	1W	2.97-3.63, 4.5-5.5, 10.8-13.2, 21.6-26.4	3.3, 5, 9, 12, 15	1000	80%	-40~+85°C			SIP-4					
MAU100	1W	4.5-5.5, 10.8-13.2, 13.5-16.5, 21.6-26.4	3.3, 5, 9, 12, 15, ±5, ±9, ±12, ±15	1000	81%	-40~+85°C			SIP-7				•	
MAU200	1W	4.5-5.5, 10.8-13.2, 21.6-26.4	3.3, 5, 9, 12, 15, ±5, ±9, ±12, ±15	3000	81%	-40~+90°C			SIP-7				•	
MAPU01H	1W	2.97-3.63, 4.5-5.5, 10.8-13.2, 21.6-26.4	3.3, 5, 9, 12, 15, ±5, ±12, ±15	3000	84%	-40~+90°C			SIP-7		•		•	•
MAW01	1W	4.5-9, 9-18, 18-36, 36-75	5, 12, 15, 24, ±12, ±15	1500	80%	-40~+95°C	•	•	SIP-6	•	•		•	•
MAPU02H	2W	4.5-5.5, 10.8-13.2, 21.6-26.4	3.3, 5, 9, 12, 15, ±5, ±12, ±15	3000	82%	-40~+90°C			SIP-7		•			
MCW1000	2W	4.5-9, 9-18, 18-36, 36-75	3.3, 5, 12	1000	81%	-40~+85°C	•		SIP-8	•	•	•	•	•
MCWI02	2W	4.5-18, 9-36, 18-75	3.3, 5, 12, 15, ±5, ±12, ±15	1500	82%	-40~+90°C	•	•	SIP-8	•	•	•	•	•
NEW MBSU03	3W	4.5-5.5, 10.8-13.2, 21.6-26.4	5, 12, 15	1500	86%	-40~+75°C			SIP-4		•			•
MCW04	4W	9-18, 18-36, 36-75	5, 12, 15, 24, ±12, ±15	1600	86%	-40~+85°C	•	•	SIP-8	•	•	•		•
MCWI04	4W	9-36, 18-75	3.3, 5, 12, 15, 24, ±12, ±15	1600	83%	-40~+85°C	•	•	SIP-8	•	•	•	•	•
MCWI05	5W	4.5-18, 9-36, 18-75	5, 12, 15, 24, ±12, ±15	1500	84%	-40~+75°C	•	•	SIP-8	•	•	•	•	•

⁽¹⁾ Please refer to derating curve information from datasheet

GENERAL INDUSTRIAL • DC-DC CONVERTERS



1-6W • SMD PACKAGE



Series	Output Power	Input Voltage Range (VDC)	Output Voltage (VDC)	Isolation (VDC)	Efficiency	Operating Ambient Temp. Range ⁽¹⁾	Output Regulation	No Min. Load	SCP	OCP	Remote ON/OFF Control	Water-washable Process Available	UL/cUL/IEC/EN 60950-1	UL/cUL/IEC/EN 62368-1
MSLU100	1W	4.5-5.5, 10.8-13.2, 13.5-16.5, 21.6-26.4	3.3, 5, 9, 12, 15, ±5, ±12, ±15	1500	80%	-40~+90°C						•	•	•
MSLU300	1W	4.5-5.5, 10.8-13.2, 21.6-26.4	3.3, 5, 12, 15, ±5, ±12, ±15	3000	81%	-40~+90°C						•		
MSPU01H	1W	2.97-3.63, 4.5-5.5, 10.8-13.2	3.3, 5, 12, 15, ±5, ±12, ±15	3000	85%	-40~+85°C			•	•		•	•	•
MSCW01	1W	4.5-9, 9-18, 18-36, 36-75	5, 12, 15, ±12, ±15	1500	82%	-40~+85°C	•	•	•	•	•	•	•	•
MSLU400	2W	4.5-5.5, 10.8-13.2, 21.6-26.4	3.3, 5, 12, ±5, ±12, ±15	1500	80%	-40~+92°C						•		
MSDW1000	2W	4.5-9, 9-18, 18-36, 36-75	3.3, 5, 12, 15, ±5, ±12, ±15	1500	81%	-40~+85°C	•		•			•	•	
MSCWI02	2W	4.5-12, 9-36, 18-75	5, 12, 15, 24, ±12, ±15	1500	85%	-40~+80°C	•	•	•	•	•	•	•	•
MSCWI03	3W	4.5-12, 9-36, 18-75	5, 12, 15, 24, ±12, ±15	1500	85%	-40~+80°C	•	•	•	•	•	•	•	•
MSGWI06	6W	9-36, 18-75	3.3, 5, 12, 15, 24, ±5, ±12, ±15	1500	83%	-40~+80°C	•		•	•	•	•	•	•

* Qualified to IPC/JEDEC J-STD-020D.1

* Tape & Reel Package Available

⁽¹⁾ Please refer to derating curve information from datasheet

GENERAL INDUSTRIAL • DC-DC CONVERTERS



1-15W • DIP PACKAGE



Series	Output Power	Input Voltage Range (VDC)	Output Voltage (VDC)	Isolation (VDC)	Efficiency	Operating Ambient Temp. Range ⁽¹⁾	Output Regulation	No Min. Load	Package	OCP/SCP	Remote ON/OFF Control	UL/cUL/IEC/EN 62368-1
MFSU01	1W	4.5-5.5, 10.8-13.2, 21.6-26.4	5, 12, 15	1500	83%	-40~+85°C			DIP-8	SCP		
MFPU01H	1W	2.97-3.63, 4.5-5.5, 10.8-13.2	3.3, 5, 12, 15, ±5, ±12, ±15	3000	83%	-40~+90°C			DIP-8	•		•
MFW02	2W	4.5-10, 9-18, 18-36, 36-75	3.3, 5, 12, 15, ±5, ±12, ±15	1500	87%	-40~+80°C	•	•	DIP-8	•		•
MFW03	3W	4.5-10, 9-18, 18-36, 36-75	3.3, 5, 12, 15, ±5, ±12, ±15	1500	87%	-40~+80°C	•	•	DIP-8	•		•
MDWI03	3W	9-36, 18-75	3.3, 5, 12, 15, 24, ±5, ±12, ±15	1500	80%	-40~+85°C	•		DIP-16	•	•	•
MIW03	3W	4.5-9, 9-18, 18-36, 36-75	3.3, 5, 12, 15, 24, ±5, ±12, ±15	1500 3000	85%	-40~+85°C	•	•	DIP-24	•		•
MIWI03	3W	9-36, 18-75	3.3, 5, 12, 15, 24, ±5, ±12, ±15	1500 3000	84%	-40~+85°C	•	•	DIP-24	•		•
MIW06	6W	9-18, 18-75	3.3, 5, 12, 15, 24, ±5, ±12, ±15	1500 3000	84%	-40~+85°C	•	•	DIP-24	•		•
MIWI06	6W	9-36, 18-75	3.3, 5, 12, 15, 24, ±12, ±15	1500	87%	-40~+90°C	•	•	DIP-24	•		•
MDWI06	6W	9-36, 18-75	3.3, 5, 12, 15, 24, ±5, ±12, ±15	1500 3000	84%	-40~+85°C	•	•	DIP-16	•		•
MDW08	8W	9-18, 18-36, 36-75	3.3, 5, 12, 15, 24, ±12, ±15	1500	86%	-40~+80°C	•	•	DIP-16	•		•
MDWI08	8W	9-36, 18-75	3.3, 5, 12, 15, 24, ±12, ±15	1500	86%	-40~+80°C	•	•	DIP-16	•		•
MDW10	10W	9-18, 18-36, 36-75	3.3, 5, 5.1, 12, 15, 24, ±12, ±15	1500	88%	-40~+88°C	•	•	DIP-16	•		•
MDWI10	10W	9-36, 18-75	3.3, 5, 5.1, 12, 15, 24, ±12, ±15	1500	88%	40~+88°C	•	•	DIP-16	•		•
MIW10	10W	9-18, 18-36, 36-75	3.3, 5, 5.1, 12, 15, ±12, ±15	1500	89%	-40~+85°C	•	•	DIP-24	•	•	•
MIWI10	10W	9-36, 18-75	3.3, 5, 5.1, 12, 15, 24, ±12, ±15	1500	87%	-40~+85°C	•	•	DIP-24	•	•	•
NEW MDW12	12W	9-18, 18-36, 36-75	3.3, 5, 5.1, 12, 15, 24, ±12, ±15	1500	88%	-40~+85°C	•	•	DIP-16	•		•
NEW MDWI12	12W	9-36, 18-75	3.3, 5, 5.1, 12, 15, 24, ±12, ±15	1500	88%	-40~+85°C	•	•	DIP-16	•		•
NEW MDW15	15W	9-18, 18-36, 36-75	5.1, 12, 15, 24, ±12, ±15	1500	87%	-40~+85°C	•	•	DIP-16	•		•
NEW MDWI15	15W	9-36, 18-75	5.1, 12, 15, 24, ±12, ±15	1500	87%	-40~+85°C	•	•	DIP-16	•		•

⁽¹⁾Please refer to derating curve information from datasheet

GENERAL INDUSTRIAL • DC-DC CONVERTERS



10-30W • 1" x 1" PACKAGE



Series	Output Power	Input Voltage Range (VDC)	Output Voltage (VDC)	Isolation (VDC)	Efficiency	Operating Ambient Temp. Range ⁽¹⁾	Output Regulation	No Min. Load	OCP/SCP	OVP	Remote ON/OFF Control	Output Voltage Trim	UL/cUL/IEC/EN 62368-1
MJW10	10W	9-18, 18-36, 36-75	3.3, 5, 5.1, 12, 15, ±5, ±12, ±15	1500	89%	-40~+80°C	•	•	•	•	•	•	•
MJWI10	10W	9-36, 18-75	3.3, 5, 5.1, 12, 15, ±5, ±12, ±15	1500	87%	-40~+80°C	•	•	•	•	•	•	•
MJW15	15W	9-18, 18-36, 36-75	3.3, 5, 12, 15, 24, ±12, ±15	1500	91%	-40~+90°C	•	•	•	•	•	•	•
MJWI15	15W	9-36, 18-75	3.3, 5, 12, 15, 24, ±12, ±15	1500	91%	-40~+90°C	•	•	•	•	•	•	•
MJWI20	20W	9-36, 18-75	3.3, 5, 12, 15, 24, ±12, ±15	1500	89%	-40~+85°C	•	•	•	•	•	•	•
MJW25	25W	9-36, 18-36, 36-75	3.3, 5, 12, 15, ±12, ±15	1500	90%	-40~+80°C	•	•	•	•	•	•	•
MJWI25	25W	9-36, 18-75	3.3, 5, 12, 15, 24, ±12, ±15	1500	90%	-40~+80°C	•	•	•	•	•	•	•
NEW MJWI30	30W	9-36, 18-75	3.3, 5, 12, 15, 24, ±12, ±15	1500	90%	-40~+80°C	•	•	•	•	•	•	•



40-50W • 2" x 1" PACKAGE



Series	Output Power	Input Voltage Range (VDC)	Output Voltage (VDC)	Isolation (VDC)	Efficiency	Operating Ambient Temp. Range ⁽¹⁾	Output Regulation	No Min. Load	Package	OCP/SCP	OVP / OTP	Remote ON/OFF Control	Output Voltage Trim	UL/cUL/IEC/EN 60950-1	UL/cUL/IEC/EN 62368-1
MKW40	40W	9-18, 18-36, 36-75	3.3, 5, 12, 15, 24 ±12, ±15	1500	92%	-40~+80°C	•	•	2" x 1"	•	•	•	•	•	•
MKWI40	40W	9-36, 18-75	3.3, 5, 12, 15, 24 ±12, ±15	1500	91%	-40~+80°C	•	•	2" x 1"	•	•	•	•	•	•
MKW50	50W	9-18, 18-36, 36-75	3.3, 5, 12, 15, 24	1500	92%	-40~+80°C	•	•	2" x 1"	•	•	•	•	•	•
MKWI50	50W	9-36, 18-75	3.3, 5, 12, 15, 24	1500	92%	-40~+80°C	•	•	2" x 1"	•	•	•	•	•	•

⁽¹⁾ Please refer to derating curve information from datasheet

GENERAL INDUSTRIAL • DC-DC CONVERTERS



6-60W • CHASSIS & DIN-RAIL MOUNTING



Series	Output Power	Input Voltage Range (VDC)	Output Voltage (VDC)	Isolation (VDC)	Efficiency	Operating Ambient Temp. Range ⁽¹⁾	Output Regulation	No Min. Load	Package	OCP/SCP	OVP	Remote ON/OFF Control	UL/cUL/IEC/EN 62368-1
MJWI06C	6W	9-36, 18-75	5, 5.1, 12, 15, 24, 48, ±12, ±15, ±24	3000VDC	85%	-40~+92.5°C	•	•	Chassis DIN-Rail	•		•	•
MKWI10C	10W	9-36, 18-75	5, 5.1, 12, 15, 24, 48, ±12, ±15, ±24	3000VDC	86%	-40~+92.5°C	•	•	Chassis DIN-Rail	•		•	•
MOWI20C	20W	9-36, 18-75	5.1, 12, 24, 48	2500VDC	91%	-40~+90°C	•	•	Chassis DIN-Rail	•	•	•	•
MQWI40C	40W	9-36, 18-75	5.1, 12, 24, 48	2500VDC	92%	-40~+85°C	•	•	Chassis DIN-Rail	•	•	•	•
MRWI60C	60W	9-36, 18-75	5.1, 12, 24, 48	2500VDC	92%	-40~+85°C	•	•	Chassis DIN-Rail	•	•	•	•



0.5-1A • SWITCHING REGULATORS



Series	Output Power	Input Voltage Range (VDC)	Output Voltage (VDC)	Efficiency	Operating Ambient Temp. Range ⁽¹⁾	Output Regulation	No Min. Load	Package	OTP	SCP	Remote ON/OFF Control	Output Voltage Trim
M78AR-0.5	0.5A	4.75-32	1.5, 1.8, 2.5, 3.3	91%	-40~+90°C	•	•	SIP-3	•	•		
		6.5-32	5	94%	-40~+90°C	•	•	SIP-3	•	•		
		8-32	6.5	95%	-40~+90°C	•	•	SIP-3	•	•		
		11-32	9	96%	-40~+90°C	•	•	SIP-3	•	•		
		15-32	12	97%	-40~+90°C	•	•	SIP-3	•	•		
		18-32	15	97%	-40~+90°C	•	•	SIP-3	•	•		
M78SAR-0.5	0.5A	4.75-32	1.5, 1.8, 2.5, 3.3	91%	-40~+90°C	•	•	SMD	•	•	•	•
		6.5-32	5	94%	-40~+90°C	•	•	SMD	•	•	•	•
		8-32	6.5	95%	-40~+90°C	•	•	SMD	•	•	•	•
		11-32	9	96%	-40~+90°C	•	•	SMD	•	•	•	•
		15-32	12	97%	-40~+90°C	•	•	SMD	•	•	•	•
		18-32	15	97%	-40~+90°C	•	•	SMD	•	•	•	•
M78AR-1	1A	6.5-32	3.3	93%	-40~+85°C	•	•	SIP-3	•	•		
		6.5-32	5	94%	-40~+85°C	•	•	SIP-3	•	•		
		15-32	12	96%	-40~+85°C	•	•	SIP-3	•	•		

⁽¹⁾ Please refer to derating curve information from datasheet

GENERAL INDUSTRIAL • AC-DC POWER SUPPLIES



3-60W • ENCAPSULATED PACKAGE



Series	Output Power	Input Voltage Range (VDC)	Output Voltage (VDC)	Isolation (VAC)	Efficiency	Operating Ambient Temp. Range ⁽¹⁾	Output Regulation	No Min. Load	Package	Case Size (inches)	SCP/OCP/OVP	UL/cUL/IEC/EN 62368-1	TUV/IEC/EN 60335-1
AAF-03	3W	85 – 264VAC 120-370VDC	3.3, 5, 9, 12, 15, 24	3000 VAC Reinforced	78%	-25~+70°C	•	•	PCB	1.00x1.00x0.64"	•	•	•
ABF-04	4W	85 – 264VAC 120-370VDC	3.3, 5, 9, 12, 15, 24, 5/3.3, 12/5, ±12, ±15	3000 VAC Reinforced	77%	-25~+60°C	•	•	PCB	1.44x1.06x0.67"	•	•	•
AAF-05	5W	85 – 264VAC 120-370VDC	3.3, 5, 9, 12, 15, 24, 48	3000 VAC Reinforced	85%	-25~+70°C	•	•	PCB Chassis	1.00x1.00x0.64" 1.65x1.02x0.76"	•	•	•
NEW AMF-07	7W	85-264VAC 90-370VDC	5, 12, 15, 24, 48	3000 VAC Reinforced	85%	-40~+80°C	•	•	PCB	1.52x1.0x0.66" 2.40x1.20x0.74"	•	•	•
ACF-10	10W	85 – 264VAC 120-370VDC	5, 12, 15, 24, 48	3000 VAC Reinforced	86%	-25~+70°C	•	•	PCB	1.52x1.00x0.62"	•	•	•
NEW AGF-15	15W	85 – 264VAC 120-370VDC	3.3, 5, 9, 12, 15, 24, 48	3000 VAC Reinforced	84%	-25~+70°C	•	•	PCB	2.06x1.07x0.93	•	•	•
NEW AMF-15	15W	85 – 264VAC 90-370VDC	5.1, 12, 15, 24, 48	3000 VAC Reinforced	86%	-40~+70°C	•	•	PCB Chassis & DIN-Rail	2.06x1.07x0.93" 2.89x1.18x0.91"	•	•	•
NEW AMF-30	30W	85 – 264VAC 90-370VDC	5.1, 12, 15, 24, 48	3000 VAC Reinforced	88%	-40~+70°C	•	•	PCB Chassis & DIN-Rail	2.52x1.77x0.94" 3.39x1.15x1.00"	•	•	•
NEW AMF-60	60W	85 – 264VAC 90-370VDC	5.1, 12, 15, 24, 48	3000 VAC Reinforced	89%	-40~+70°C	•	•	PCB Chassis & DIN-Rail	2.99x2.13x1.10" 3.86x2.20x1.12"	•	•	•

⁽¹⁾ Please refer to derating curve information from datasheet