



Your Power Partner

# Application Guide

## Volume 3



Medical



Industrial



Lighting



Transportation



Renewable Energy



IoT



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## Legend

Term	Definition
OCP	Over Current Protection
SCP	Short Circuit Protection
CSP	Continuous Short Circuit Protection
OVP	Over Voltage Protection
OLP	Over Load Protection
QB	Quarter Brick
HB	Half Brick



## Transportation

### Railroad

LED displays  
Audio amplifiers  
Safety monitors  
Lighting  
Communication systems

### Key Features

Nominal Input Voltage 110VDC  
Industrial temp: -40 to 85°C  
Encapsulated packages for withstanding shock and vibration  
High Isolation between circuits



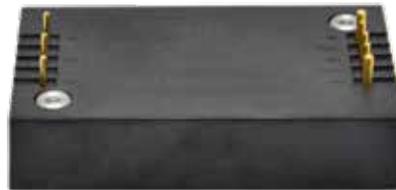
AM20CWR-ZK

### Automotive

Navigation systems  
Communication systems  
Entertainment systems

### Key Features

Sensing  
Industrial temp. range: -55 to 125°C  
Remote On/Off  
Over temperature protection  
Encapsulated packages for withstanding shock and vibration  
High Isolation between circuits



AM200QB-NZ

### Electric Car Chargers

Charging system  
Communication system  
Payment system

### Key Features

480V input for fast charging  
Overcurrent protection  
High Isolation between circuits



AME20-BJZ



## Railroad - DC/DC Converters

Series	Power (W)	Input (VDC)	Single Output (VDC)	Dual Output (VDC)	Operating Temperature (°C)	Isolation (VDC)	Case	Safety
AM6CW-NZ	6	40-160	5, 12, 15, 24	-	-40 to +85	2.25k	1 x 1", metal	CE, UL
AM8TW-Z	8	42-176	3.3, 5, 12, 15	±5, ±12, ±15	-40 to +85	3k VDC	DIP24, metal	CE
AM10EW-NZ	10	40-160	5, 12, 15, 24	-	-40 to +85	2.25k	2 x 1", metal	CE
AM15EW-NZ	15	40-160	3.3, 5, 12, 15, 24	-	-40 to +85	2.25k	2 x 1", metal	CE
AM20EW-NZ	20	40-160	3.3, 5, 12, 15, 24	-	-40 to +85	2.25k	2 x 1", metal	CE, UL
AM20CWR-ZK	20	13-176	3.3, 5, 12, 15	-	-40 to +100	3k	1 x 1"	CE
AM25EUW-ZK	25	16-160	5, 12, 15, 24	-	-40 to +100	3k	2 x 1"	CE
AM40EW-NZ	40	40-160	3.3, 5, 12, 15, 24, 48	-	-40 to +85	3k	2 x 1"	CE
AM75QB-NZ	75	66-160	5, 12, 15, 24	-	-40 to +100	3k	QB	CE
AM100QB-NZ	100	66-160	12, 15, 24	-	-40 to +100	3k	QB	CE
AM150QB-NZ	150	18-75	5, 12, 15, 24, 48	-	-40 to +100	2.25k	QB	CE
AM150HB-NZ	150	66-160	12, 15, 24	-	-40 to +85	3k	HB	CE
AM200QB-NZ	200	18-75	5, 12, 15, 24, 48	-	-40 to +85	2.25k	QB	CE



## Electric Car Chargers - AC/DC Converters

Please see page 15 for solutions to enhance EMC compliance

Series	Power (W)	Input (VAC)	Single Output (VDC)	Operating Temperature (°C)	Isolation (VAC)	Dimensions	Features	Safety
AME3-BJZ	3	90-528	3.3, 5, 9, 12, 15, 24	-40 to +70	3k	2 x 1"	OCP, CSP	CE, UL
AMEOF3-BJZ	3	90-528	3.3, 5, 9, 12, 15, 24	-40 to +85	4k	Open Frame SIP	OCP, CSP	CE, UL
AMEOF5-BJZ	5	90-528	3.3, 5, 9, 12, 15, 24	-40 to +85	4k	Open Frame SIP	OCP, CSP	CE
AME10-BJZ	10	90-528	3.3, 5, 9, 12, 15, 24	-40 to +70	4k	2.44 x 1.77"	OCP, CSP	CE
AME20-BJZ	20	90-528	3.3, 5, 9, 12, 15, 24	-40 to +70	4k	2.76 x 1.89"	OCP, CSP	CE

## Switching Regulators

Series	Input (VDC)	Single Output (VDC)	Output Current (A)	Operating Temperature (°C)	Isolation (VDC)	Case	Safety
AMSR1-NZ	6-36	-15, -12, -5, 3.3, 5, 9, 12, 15	1	-40 to +85	-	SIP3	CE, UL
AMSR1-Z	9-72	3.3, 5, 6.5, 9, 12, 15	1	-40 to +105	-	Open Frame SMD	CE
AMSR1-LZ	3-36	1.2, 1.5, 1.8, 2.5, 3.3, 5, 6.5, 9, 12, 15	1	-40 to +105	-	Open Frame SMD	CE
AMSR1-LJZ	4.75-36	1.5, 1.8, 2.5, 3.3, 5, 6.5, 9, 12	1	-40 to +85	-	SMD	CE
AMSRB1-JZ	6-36	3.3, 5, 9, 12, 15/-5, -12, -15	1	-40 to +85	-	SIP3	CE
AMSR2-JZ	6-36	3.3, 5, 9, 12, 15	2	-40 to +85	-	SIP3	CE



## Renewable Energy

### Photovoltaic Systems

Power generators  
Charge controllers  
Inverters

### Key Features

Ultra wide input voltage range  
High Isolation between circuits  
Cold startup temperature: -40°C  
OLP, Continuous SCP

### Wind Turbines

Turbine generators  
Charge controllers  
Inverters

### Key Features

Ultra wide input voltage range  
High Isolation between circuits  
Cold startup temperature: -40°C  
OLP, Continuous SCP

### Fast Power Transfer

IGBT drivers  
SiC drivers

### Key Features

Extremely low Isolation capacitance  
High Isolation between circuits

## Fast Power Transfer - DC/DC Converters

*Please see page 15 for solutions to enhance EMC compliance*

Series	Power (W)	Input (VDC)	Output (VDC)	Operating Temperature (°C)	Isolation	Case	Isolation Capacitance (pF)
AM1DC-Z	1	5, 9, 12, 15, 24	15/-9	-40 to +85	6k VDC	SIP7	10
AM1DG-NZ	1	15	9, 9/-9	-40 to +105	3k VDC	SIP7	6.6
AM2DG-NZ	2	12, 15, 24	15/-8.7, 15/-3.5, 17/-8.7	-40 to +105	3.5k VAC	SIP7	3.5-6
AM3DG-NZ	3	12, 15, 24	20/-4, 15/-8	-40 to +105	3.5k VAC	SIP7	3.5
AM5TG-NZ	5	12, 24	15/-9	-40 to +85	3k VDC	DIP24	50-100
AM5NG-NZ	5	15	15/-9	-40 to +85	4k VAC	DIP24	3



## Photovoltaic Systems and Wind Turbines - DC/DC Converters

Series	Power (W)	Input (VDC)	Output (VDC)	Operating Temperature (°C)	Isolation (VAC)	Dimensions (In)	Features
AM5W-NZ	5	100-1000	5	-40 to +70	4k	2.76 x 1.89	CSP, OCP, OVP, Reversed connection protection
AM10W-NZ	10	100-1000 200-1500	5, 9, 24	-40 to +70	4k	2.76 x 1.89 4.92 x 2.95	CSP, OCP, OVP, Reversed connection protection
AM10WM-NZ	10	200-1500	5	-25 to +70	4k	4.92 x 2.95	CSP, OCP, OVP, Reversed connection protection
AM15W-NZ	15	100-1000 200-1500	12,15, 24	-40 to +70	4k	2.76 x 1.89 4.92 x 2.95	CSP, OCP, OVP, Reversed connection protection
AM15WM-NZ	15	200-1500	12,15, 24	-25 to +70	4k	4.29 x 2.30	CSP, OCP, OVP, Reversed connection protection
AM40W-NZ	40	200-1200 200-1500	12,15, 24	-40 to +70	4k VAC	3.5 x 2.5 4.92 x 2.95	CSP, OCP, OVP, Reversed connection protection
AM45W-NST	45	150-1500	15/15	-40 to +85	4k	5.69 x 4.13	CSP, OCP, OVP, Reversed connection protection
AM200W-NZ	200	300-1500	24,48	-40 to +70	2k, 4k	8.47 x 4.92	CSP, OCP, OVP, Reversed connection protection



AM45W-NST



AM40W-NZ



AM3A-Z



### Life Support Key Features

Ultra-small leakage current  
2 x MOOPP

### Medical

### Non-Life Support Key Features

Small leakage current  
2 x MOOP/1 x MOPP

## Medical Converters

Series	Power (W)	Input (VAC)	Single Output (VDC)	Dual Output (VDC)	Operating Temperature (°C)	Isolation (VAC)	Dimensions	Features	Means of Protection	Safety
AM1DM-NZ	1	3-26	3.3, 5, 12, 24	±5, ±9, ±12, ±15	-40 to +85	4.2k	SIP7	SCP	2 X MOOP	CE, UL
AM2DM-NZ	2	5-26	5, 12, 24	±5, ±9, ±12, ±15	-40 to +85	4.2k	SIP7	SCP	2 X MOOP	CE, UL
AM2L-NZ	2	5, 12, 24	5, 15	-	-40 to +85	6k VDC	SMD	SCP/CSP	-	CE
AMEL5-MJZ	5	85-264	5, 12, 15, 24	-	-25 to +70	4k	2.12 x 1.13"	CSP, OCP, OVP	2 X MOPP	CE, UL
AMEL5-MAZ	5	90-264	3.3, 5, 12, 15, 24	±5, ±12, ±15	-40 to +80	4k	2.03 x 1.1"	CSP, OLV, OVP	2 x MOOP	CE, UL
AM10TWM-YZ	10	9-36, 18-75	3.3, 5, 12, 15	±5, ±12, ±15	-40 to +90	5k	0.79 x 1.24"	CSP, OCP, OVP	-	CE
AMEL10-MJZ	10	85-264	3.3, 5, 9, 12, 15, 24	-	-25 to +70	4k	2.11 x 1.13"	CSP, OCP, OVP	2 X MOPP	CE, UL
AMEL10-MAZ	10	90-264	3.3, 5, 12, 15, 24	-5/5, ±3.3/5, ±3.3/12, ±3.3/15, 3.3/24, ±5/12, ±5/15, 5/24, -12/12, ±12/15, 12/24, 15/24	-40 to +70	4k	2.22 x 1.21"	CSP, OLP, OVP	2 x MOOP	CE, UL
AME15-MJZ	15	85-264	5, 12, 15, 18, 24	-	-40 to +70	4k	2.44 x 1.77"	CSP, OCP, OVP	2 X MOPP	CE, UL
AMEC15-MAZ	15	90-264	3.3, 5, 12, 15, 24	±5, ±12, ±15	-40 to +80	4k	3.62 x 2.56"	SCP, OLP, OVP	2 x MOOP	CE, UL



## Medical Converters

Please see page 15 for solutions to enhance EMC compliance

Series	Power (W)	Input (VAC)	Single Output (VDC)	Dual Output (VDC)	Operating Temperature (°C)	Isolation (VAC)	Dimensions	Features	Means of Protection	Safety
AME15-MAZ	15	90-264	3.3, 5, 12, 15, 24	±5, ±12, ±15	-40 to +85	4k	2.56 x 1.83"	CSP, OLP, OVP	2 x MOOP	CE, UL
AMEL20-MAZ	20	90-264	3.3, 5, 12, 15, 24	-5/5, ±3.3/5, ±3.3/12, ±3.3/15, 3.3/24, ±5/12, ±5/15, 5/24, -12/12, ±12/15, 12/24, 15/24	-40 to +70	4k	2.22 x 1.21"	CSP, OLP, OVP	2 x MOOP	CE, UL
AME25-MJZ	25	85-264	5, 12, 15, 18, 24	-	-40 to +70	4k	2.75 x 1.84"	CSP, OCP	2 X MOPP	CE, UL
AME30-MAZ	30	90-264	3.3, 5, 12, 15, 24	±5, ±12, ±15, ±24	-40 to +85	4k	3.56 x 2.48"	SCP, OVP, OVP	2 x MOOP	CE, UL
AMEC30-MAZ	30	90-264	3.3, 5, 12, 15, 24	±5, ±12, ±15, ±24	-40 to +85	4k	4.92 x 2.56"	SCP, OCP, OVP	2 x MOOP	CE, UL
AMEOS30-MAZ	30	90-264	3.3, 5, 12, 15, 24	±5, ±12, ±15, ±24	-40 to +85	4k	4.92 x 2.32"	SCP, OCP, OVP	2 x MOOP	CE, UL
AMEOC30-MAZ	30	90-264	3.3, 5, 12, 15, 24	±5, ±12, ±15, ±24	-40 to +85	4k	4.92 x 2.32"	SCP, OCP, OVP	2 x MOOP	CE, UL
AME40-MAZ	40	90-264	3.3, 5, 12, 15, 24	±5, ±12, ±15, ±24	-40 to +85	4k	3.56 x 2.48"	SCP, OCP, OVP	2 x MOOP	CE, UL
AMEC40-MAZ	40	90-264	3.3, 5, 12, 15, 24	±5, ±12, ±15, ±24	-40 to +85	4k	4.92 x 2.56"	SCP, OCP, OVP	2 x MOOP	CE, UL
AMEOC40-MAZ	40	90-264	3.3, 5, 12, 15, 24	±5, ±12, ±15, ±24	-40 to +85	4k	4.92 x 2.32"	SCP, OCP, OVP	2 x MOOP	CE, UL
AMEOS40-MAZ	40	90-264	3.3, 5, 12, 15, 24	±5, ±12, ±15, ±24	-40 to +85	4k	4.92 x 2.32"	SCP, OCP, OVP	2 x MOOP	CE, UL



## IoT

### Remote Control Systems

Automatic garage doors  
 Interior lighting  
 Alarms  
 Fire detectors  
 HVAC  
 Energy meters  
 Water meters  
 Gas meters  
 Building Controls  
 Exterior Lighting

### Elevators

Displays  
 Communication systems  
 Safety Monitor

### Key Features

High Isolation between circuits  
 Small Packages  
 Up to 528VAC Input Voltage  
 Low no load consumption  
 EN55032 Class B EMI emissions  
 Remote On/Off control

## IoT - AC/DC Converters

Series	Power (W)	Input (VAC)	Single / Dual Output (VDC)	No Load (W)	Isolation (VAC)	Dimensions	Features	Safety
AME1-BAZ	1	90-528	3.3, 5, 12, 15, 24	<0.3	3k	1.40 x 0.92"	OLP, CSP	CE, UL
AMEOF1-JZ	1	85-305	5, 9, 12, 15, 24	<0.5	3k	Open Frame SIP	OCP, CSP	CE, UL
AME1-JZ	1	85-305	3.3, 5, 9, 12, 15, 24	-	3k	1.33 x 0.87"	OCP, SCP	CE, UL
AME2-AZ	2	90-305	3.3, 5, 12, 15, 24	<0.3	3k	1.40 x 0.92"	OLP, CSP	CE, UL
AME2-JZ	2	85-305	3.3, 5, 9, 12, 15, 24	-	3k	1.33 x 0.87"	OCP, SCP	CE, UL
AME3-BAZ	3	90-528	3.3, 5, 12, 15, 24	<0.3	3k	1.40 x 0.92"	OLP, CSP	CE, UL
AMEOF3-BJZ	3	90-528	3.3, 5, 9, 12, 15, 24	<0.5	4k	Open Frame SIP	OCP, CSP	CE, UL



## IoT - AC/DC Converters

Please see page 15 for solutions to enhance EMC compliance

Series	Power (W)	Input (VAC)	Single / Dual Output (VDC)	No Load (W)	Isolation (VAC)	Dimensions	Features	Safety
AMEL3-VZ	3	85-264	3.3, 5, 9, 12, 15, 24	-	4K	1.46 x 0.96"	OCP, OVP, CSP	CE, UL
AME3-HAVZ	3	85-264	5,12,24	-	4K	1.27 x 1.07	OCP, OVP, CSP	CE
AMEL5-277NZ	5	85-305	3.3, 5, 9, 12, 15, 24	-	4k	2 x 1"	OCP, OVP, CSP	CE
AMEOF5-BJZ	5	90-528	3.3, 5, 9, 12, 15, 24	-	4k	Open Frame SIP	OCP, CSP	CE
AMEOF5-277NZ	5	85-305	3.3, 5, 9, 12, 15, 24	-	3k	Open Frame SIP	OCP, OVP, CSP	CE
AMEL5-VZ	5	85-264	3.3, 5, 9, 12, 15, 24	-	4k	1.46 x 0.96"	OCP, OVP, CSP	CE, UL
AME5-VZ	5	85-264	3.3, 5, 9, 12, 15, 24	-	4k	1.91 x 1.42"	OCP, OVP, CSP	CE, UL
AMEL6-VZ	6	85-264	3.3, 5, 9, 12, 15, 24	-	4k	2 x 1"	OCP, OVP, CSP	CE, UL
AMEOF8-277NZ	8	85-305	3.3, 5, 9, 12, 15, 24	-	3k	Open Frame SIP	OCP, OVP, CSP	CE
AME10-JZ	10	85-305	3.3, 5, 9, 12, 15, 24	-	3k	2.17 x 1.77"	OCP, OVP, CSP	CE, UL
AME10-VZ	10	85-264	3.3, 5, 9, 12, 15, 24	-	4k	2.17 x 1.77"	OCP, OVP, CSP	CE
AMEOF10-277NZ	10	85-305	3.3, 5, 9, 12, 15, 24	-	3k	Open Frame SIP	OCP, OVP, CSP	CE
AME15-VZ	15	85-264	3.3, 5, 9, 12, 15, 24	-	4k	2.44 x 1.77"	OCP, OVP, CSP	CE, UL
AMEL15-JZ	15	85-264	3.3, 5, 9, 12, 15, 24	-	4k	2.11 x 1.13"	OCP, OVP, CSP	CE, UL
AMEL20-JZ	20	85-264	3.3, 5, 9, 12, 15, 24	-	4k	2.11 x 1.13"	OCP, OVP, CSP	CE
AME20-VZ	20	85-264	3.3, 5, 9, 12, 15, 24	-	4k	2.44 x 1.77"	OCP, OVP, CSP	CE, UL
AME25-VZ	25	85-264	3.3, 5, 9, 12, 15, 24, 48	-	4k	2.76 x 1.89"	OCP, OVP, CSP	CE



## IoT - DC/DC Converters

Series	Input (VDC)	Single Output (VDC)	Dual Output (VDC)	Isolation (VDC)	Package	Features	Safety
AM1LO-Z	3, 5	3.3, 5 / $\pm 3.3, \pm 5$	-	4.2k	0.50 x 0.44"	SCP	CE, UL
AM1DR-N(J)Z	5, 12, 15, 24	5, 12, 15, 24	-	1K, 1.5k, 3K	SIP7	CSP	CE
AM1DR-Z	5, 12, 24	3.3, 5, 7.2, 9, 12, 15	-	1K, 3K	SIP7	-	CE
AM1DR-RZ	5, 12, 24	3.3, 5, 7.2, 9, 12, 15	-	1K	SIP7	CSP	CE
AM1LS-N(J)Z	3.3, 5, 12, 15, 24	3.3, 5, 9, 12, 15, 24	$\pm 5, \pm 9, \pm 12, \pm 15, \pm 24$	1.5K, 3K	SMD	SCP	CE
AM1LS-XZ	5	5	-	1.5k	SMD	SCP	CE
AM1LS-VZ	5	3.3, 5, 9, 12, 15, 24	$\pm 3.3, \pm 5, \pm 9, \pm 12, \pm 15, \pm 24$	1.5K, 3K	SMD	SCP	CE
AM1SS-N(J)Z	3.3, 5, 12, 15, 24	3.3, 5, 9, 12, 15, 24	-	1.5K	SIP4	SCP	CE, UL
AM1DS-N(J)Z	3.3, 5, 12, 15, 24	3.3, 5, 9, 12, 15, 24	$\pm 3.3, \pm 5, \pm 9, \pm 12, \pm 15, \pm 24$	1.5K, 3K	SIP7	SCP	CE, UL
AM1DS-Z	5, 12, 24	5, 7.2, 9, 12, 15, 18, 24	$\pm 5, \pm 7.2, \pm 9, \pm 12, \pm 15$	1K, 3K, 4K, 5.2K, 6K	SIP7	CSP	CE
AM1DU-Z	4.5-9, 9-18, 18-36	5, 12	-	1.5K, 3K	SIP7	CSP	CE
AM1LR-JZ	5	3.3, 5, 9, 12, 15	-	3K	SMD	CSP	CE
AM1DG-NZ	15	9	$\pm 9$	3K VAC	SIP7	CSP	CE, UL
AM1PS-JZ	5	3.3, 5, 9, 12, 15, 24	-	3K	DIP8	CSP	CE
AM2LO-Z	3, 5	3.3, 5	$\pm 5, \pm 3.3$	4.2K	SMD	-	CE
AM2LOW-Z	4.5-18, 9-36	5, 12, 15	$\pm 12, \pm 15$	3K	SMD	SCP	CE
AM2DS-NZ	5, 12, 24	3.3, 5, 9, 12, 15, 24	$\pm 5, \pm 9, \pm 12, \pm 15, \pm 24$	1.5K, 3K	SIP8	SCP	CE, UL



## IoT - DC/DC Converters

Please see page 15 for solutions to enhance EMC compliance

Series	Input (VDC)	Single Output (VDC)	Dual Output (VDC)	Isolation (VDC)	Package	Features	Safety
AM2LS-NZ	5, 12, 15, 24	3.3, 5, 9, 12, 15, 24	-	1.5K, 3K	SMD	SCP	CE
AM2LV-NZ	8-18, 18-36	3.3, 5, 12	±9, ±12, ±15	1.5k	SMD	SCP	CE
AM3A-Z	12, 24, 48 VDC	3.3, 5, 12, 15, ±5, ±12, ±15	-	1.6k VDC	SIP6	CSP	CE
AM3GW-Z	9-36, 18-75	3.3, 5, 12, 15	±5, ±12, ±15	1.5K	SIP9	CSP	CE, UL
AM4TW-VZ	9-36, 18-72	3.3, 5, 12, 15	±5, ±12, ±15	1.5K, 3.5K	DIP24	CSP	CE
AM5T-VZ	9-18, 18-36, 36-72	5, 9, 12, 15, 24	±5, ±9, ±12, ±15, ±24	1.5K, 3.5K	DIP24	CSP	CE
AM6TW-NZ	9-36, 18-75	3.3, 5, 6, 9, 12, 15, 24	±5, ±9, ±12, ±15, ±24	1.5K, 3K, 6K	DIP24	CSP, OCP	CE, UL
AM8TW-Z	9-36, 13-70, 18-75, 42-176	3.3, 5, 12, 15	±5, ±12, ±15	1.6K, 3K	DIP24	CSP, OVP, OLP	CE, UL
AM9G-Z	9-18, 18-36, 36-75	3.3, 5, 9, 12, 15, 24	±5, ±12, ±15	1.6K	SIP8	CSP, OVP, OLP	CE
AM9GH-Z	9-36, 18-75	3.3, 5, 9, 12, 15, 24	±5, ±12, ±15	1.6K	SIP8	CSP	CE
AM10CW-NZ	9-36, 18-75	3.3, 5, 9, 12, 15, 24	±5, ±9, ±12, ±15, ±24	1.5K	1x1"	CSP, OVP, OLP	CE, UL
AM10EW-NZ	9-36, 18-75, 40-160	3.3, 5, 12, 15, 24	±5, ±12, ±15	1.5K, 2.25K, 3K	2x1"	CSP, OVP, OLP	CE, UL
AM10G-NZ	9-18, 18-36	3.3, 5, 9, 12, 15, 24	-	1.5K	SIP8	CSP, OCP	CE
AM10GH-NZ	9-36	3.3, 5, 9, 12, 15, 24	-	1.5K	SIP8	CSP, OCP	CE
AM10BRW-Z	9-36, 18-75	3.3, 5, 12, 15, 24	±12, ±15	1.6k	Encapsulated	CSP, OVP, OCP	CE



## IoT - Switching Regulators

Series	Input (VDC)	Single Output (VDC)	Output Current (A)	Operating Temperature (°C)	Case	Safety
AMSR2-78JZ	6-36	3.3, 5, 9, 12, 15	2	-40 to +85	SIP3	CE
AMSR-78Z	4.75-34	1.5, 1.8, 2.5, 3.3, 5, 6.5, 7.2, 9, 12, 15	0.5	-40 to +85	SIP3	CE
AMSRL1-78JZ	4.75-36	1.5, 1.8, 2.5, 3.5, 5, 6.5, 9, 12	1	-40 to +85	SMD	-
AMSRO1-78-NZ	6-36	-15, -12, -5, 3.3, 5, 12, 15	1	-40 to +85	SIP3	CE, UL
AMSRO-78-NZ	4.75-36	-15, -12, -5, 3.3, 5, 12, 15	0.5	-40 to +85	SIP3	CE, UL
AMSRL-Z	9-72	3.3, 5, 6.5, 7.2, 9, 12, 15	0.5	-40 to +105	Open Frame SMD	-
AMSRL1-Z	3-36	1.2, 1.5, 1.8, 2.5, 3.3, 5, 6.5, 9, 12, 15	1	-40 to +105	Open Frame SMD	-



AMSRL1-Z



AMSR2-78JZ



AMSRL1-78JZ



## EMC Filters

Designed to work in combination  
with Aimtec converters

PCB mountable potted packages

Achieve significant improvements to  
EMI and EMC performance

### EMC Filters - Applicable Everywhere

Series	Temp Range (°C)	Active/Passive	Input Voltage Range	Max Output Current (A)	Output Voltage Range	EMC Compliance	Package
AMFW40-JZ	-40 to +85	Passive	0 - 80VDC	3	-	CISPR32/EN55032 Class B	1 x 1"
AMFW24-JZ	-40 to +85	Passive	9 - 36VDC	1	-	CISPR32/EN55032 Class B	Encapsulated
AMFE305150	-40 to +85	Passive	85 - 305VAC	1.5	-	CISPR32/EN55032 Class B	Encapsulated
AMFE30503	-40 to +85	Passive	85 - 305VAC	0.3	-	CISPR32/EN55032 Class B	Encapsulated
AMFW40FT-JZ	-40 to +85	Passive	0 - 80VDC	1.5	-	-	Encapsulated
AMFW24-NZ	-40 to +85	Active	18-36VDC	75	82	CISPR32/EN55032 Class B	Encapsulated
AMFW48-NZ	-40 to +85	Active	18 - 75VDC	30	82	CISPR32/EN55032 Class B	Encapsulated
AMFW48-JZ	-40 to +85	Passive	18-75VDC	1	-	CISPR32/EN55032 Class B	Encapsulated
AMF48-NZ	-40 to +85	Active	36 - 76VDC	-	-	-	Encapsulated
AMF24-NZ	-40 to +85	Active	10 - 36VDC	-	39	CISPR32/EN55032 Class B	Encapsulated
AMFW72-NZ	-40 to +85	Active	40 - 160VDC	-	165	CISPR32/EN55032 Class B	Encapsulated
AMFW110-NZ	-40 to +85	Active	66 - 160VDC	-	165	CISPR32/EN55032 Class B	Encapsulated
AMFC-NZ	-25 to +105	Passive	0 - 2000VDC	3	-	-	Open Frame



## Industrial

### Industrial Automation

Industrial lifts  
Industrial robots  
Automated visual inspection

### Industrial Control

Sensing Systems  
Temperature control  
Protection systems  
Alarms

### Industrial Motor Drives

IGBT drivers  
SiC drivers

### Key Features

Industrial temperature range: -40 to 85°C  
Encapsulated packages  
Isolation  
OLP, OVP, SCP, OTP

## DC/DC Converters

Package	Power Range (W)	Input Voltage Range (VDC)	Single Output (VDC)	Dual Output (VDC)	Isolation (VDC)	Efficiency Range (%)
SMD	0.25 ~ 3	3.3, 5, 12, 15, 24, 9-18, 9-36, 18-36, 18-72, 18-75, 36-75	3.3, 5, 9, 12, 15, 24	±3.3, ±5, ±9, ±12, ±15, ±24	1K, 1.5K, 3K, 3.5K, 4.2k, 6K	64 ~ 86
SIP4	0.25 ~ 2	3.3, 5, 12, 15, 24, 48	3.3, 5, 7.2, 9, 12, 15, 18, 24	-	1K, 1.5K, 3K	49 ~ 88
DIP8	1	3.3, 5, 12, 24, 48	3.3, 5, 7.2, 9, 12, 15, 18, 24	±3.3, ±5, ±7.2, ±9, ±12, ±15, ±18, ±24	1K, 1.5K, 3K	67 ~ 85
SIP6	1 ~ 3	3.3, 4.5-9, 9-18, 18-36, 36-75	5, 12, 15, 24	±5, ±12, ±15	1.5k	74 ~ 84



## DC/DC Converters

Please see page 15 for solutions to enhance EMC compliance

Package	Power Range (W)	Input Voltage Range (VDC)	Single Output (VDC)	Dual Output (VDC)	Isolation (VDC)	Efficiency Range (%)
SIP7	1 ~ 3	3.3, 5, 7.2, 12, 15, 18, 24, 48	3.3, 5, 7.2, 9, 12, 15, 18, 24	±3.3, ±5, ±7.2, ±9, ±12, ±15, ±18, ±24, 15/-9, 15/-8.7, 9, 9/-9, 17/-8.7, 15/-8, 20/-4	1K, 1.5K, 3K, 3.5K, 4K, 5.2K, 6K	57 ~ 86
DIP14	1 ~ 2	3.3, 5, 9, 12, 15, 24	3.3, 5, 7.2, 9, 12, 15, 24	±5, ±9, ±12, ±15, ±24	1K, 1.5K, 3K	57 ~ 85
SIP8	1 ~ 10	4.5-9, 9-18, 18-36, 36-75, 9-36, 18-75	3.3, 5, 7.2, 9, 12, 15, 18, 24	±3.3, ±5, ±7.2, ±9, ±12, ±15, ±18, ±24	1K, 1.5K, 3K	65 ~ 90
DIP16	2	5, 12, 24	5, 12, 15	±5, ±12, ±15	6k	77 ~ 81
SIP9	2 ~ 3	9-36, 18-72, 18-75	3.3, 5, 12, 15	-	1.5k	75 ~ 85
SIP12	2 ~ 3	5, 12, 24	3.3, 5, 7.2, 9, 12, 15, 18, 24	-	1K, 3K, 5.2K	54 ~ 72
DIP24	1 ~ 15	5, 12, 24, 4.5-9, 9-18, 18-36, 36-75, 9-36, 18-75, 36-160, 42-176	3.3, 5, 7.2, 9, 12, 15, 18, 24	±3.3, ±5, ±7.2, ±9, ±12, ±15, ±18, ±24, 15/-9	1K, 1.5K, 3K, 3.5K, 5.2K, 6K, 4KVAC, 5KVAC	58 ~ 91
1 x 1"	6 ~ 30	9-18, 18-36, 36-75, 9-36, 18-75, 40-160, 42-176	3.3, 5, 9, 12, 15, 24	±5, ±9, ±12, ±15, ±24	1.5K, 1.6k, 2.25k, 3k	76 ~ 92



## DC/DC Converters

Package	Power Range (W)	Input Voltage Range (VDC)	Single Output (VDC)	Dual Output (VDC)	Triple Output (VDC)	Isolation (VDC)	Efficiency Range (%)
2 x 1"	10 ~ 60	9-18, 18-36, 36-72, 36-75, 9-36, 18-72, 18-75, 36-160	3.3, 5, 7.2, 9, 12, 15, 18, 24, 48	$\pm 3.3, \pm 5, \pm 7.2, \pm 9, \pm 12, \pm 15, \pm 18, \pm 24$	3.3/ $\pm 12$ , 3.3/ $\pm 15$ , 5/ $\pm 12$ , 5/ $\pm 15$	1.5K, 1.6K, 3K	78 ~ 93
2 x 1.6"	30	9-18, 18-36, 36-75, 9-36, 18-75	3.3, 5, 12, 15, 24	$\pm 5, \pm 12, \pm 15$	-	1.5K, 3K	81 ~ 91
2 x 2"	40 ~ 60	9-18, 18-36, 36-75, 9-36, 18-75	3.3, 5, 12, 15, 24	$\pm 5, \pm 12, \pm 15$	-	1.5K, 1.6K, 3K	80 ~ 92
2.76 x 1.89"	5 ~ 15	100-1000, 200-1500	5, 9, 12, 15, 24	-	-	4KVAC	72 ~ 80
3.50 x 2.50"	40	200-1200	12, 15, 24	-	-	4k	83 ~ 84
4.92 x 2.95"	15 ~ 40	200-1500	12, 15, 24	-	-	4KVAC	71 ~ 80
5.69 x 4.13"	45	150-1500	-	15/15, $\pm 15$	-	1.5k, 4k	76 ~ 78

## Switching Regulators

Package	Output Current (A)	Input Voltage Range (VDC)	Output (VDC)	Efficiency Range (%)
SIP3	0.5 ~ 2	4.5 ~ 72	1.5, 1.8, 2.5, 3.3, 5, 6.5, 7.2, 9, 12, 15, 24 / -5, -12, -15	78 ~ 97
SMD	0.5 ~ 1	4.75 ~ 36	1.5, 1.8, 2.5, 3.3, 5, 6.5, 9, 12	75 ~ 96



## AC/DC Converters

Please see page 15 for solutions to enhance EMC compliance

Input Voltage (VAC)	Power Range (W)	Package	Single Output (VDC)	Dual Output (VDC)	Triple Output (VDC)	Isolation (VAC)	Efficiency Range (%)
85-264	1 ~ 65	SIP12, SIP14, 1.46 x 0.96", 1 x 1", 2 x 1", 1.91 x 1.42", 2.17 x 1.77", 2.12 x 1.13", 2.44 x 1.77", 2.76 x 1.89", 3.5 x 2.5", DIP12, 0.54 x 1.65", 0.71 x 1.38", 1.07 x 1.27", 1.24 x 2.99", 2.3 x 4.3	3.3, 5, 9, 12, 15, 24, 36, 48	5/5, 5/12, 5/15, 5/24, ±5, ±12, ±15, ±24	5/±5, 5/±12, 5/±15, 5/±24	3K, 4K	66 ~ 87
85-305	1 ~ 25	1.33 x 0.87", 2 x 1", 2.17 x 1.77", 2.44 x 1.77", 2.76 x 1.89"	3.3, 5, 9, 12, 15, 24, 48			3k, 4k	63 ~ 87
90-264	5 ~ 60	2.03 x 1.10", 2.22 x 1.21", 2.56 x 1.83", 3.56 x 2.48", 4.29 x 2.3"	3.3, 5, 12, 15, 24, 48	±5, ±12, ±15, ±24	-	4K	70 ~ 86
90-305	1 ~ 20	1.4 x 0.92", 2.03 x 1.10", 2.22 x 1.21"	3.3, 5, 12, 15, 24	-	-	3K	57 ~ 81
90-528	1 ~ 20	1.4 x 0.92", 2.44 x 1.77", 1.75 x 0.94", 1.89 x 2.76", 2 x 1", 1.75 x 0.5"	3.3, 5, 9, 12, 15, 24	-	-	3K, 4K	50 ~ 83



## Lighting

### Outdoor

High bay lights  
Street lights  
Area Lights

### Key Features

Cold startup temperature: -40°C or -55°C  
Input Voltage up to 305VAC  
IP67 or IP68 (submersible)  
Dimming

### Indoor

Interior  
Entertainment Lights

### Key Features

60W and lower  
Dimming

## Indoor - AC/DC LED Drivers

Series	Input (VAC)	Single Output (VDC)	Output Current (A)	Isolation (VAC)	Dimming	Operating Temperature (°C)	IP Rating	Safety
AMEPR5-AZ	90-264	3-5, 2-6, 5-12, 6-14, 8-16	1, 0.7, 0.36, 0.35, 0.3	3k	-	0 to +80	IP67	CE
AMEPR8D-AZ	90-264	6-12, 9-18, 12-24	0.7, 0.4, 0.35	3k	TRIAC	-20 to +85	IP67	CE
AMEPR10-Z	90-264	18-26, 23-33, 30-42	0.24, 0.29	3.75k	-	-20 to +50	IP20	CE
AMEPR10D-AZ	90-264	5-12, 8-15, 15-30, 24-36, 30-40, 36-50	0.7, 0.64, 0.35, 0.3, 0.25, 0.2	3k	TRIAC	-20 to +80	IP20, IP67	CE
AMEPR15D-AZ	90-264	8-15, 12-24, 24-36, 30-48, 36-50	1, 0.7, 0.5, 0.35, 0.3	3k	TRIAC	-20 to +80	IP20, IP67	CE
AMEPR16-Z	90-264	24-42, 40-58, 30-42	0.29, 0.36	3.75k	-	-20 to +50	IP20	CE
AMEPR25D-AZ	180-264	12-24	1	3k	TRIAC	-20 to +80	IP67	CE
AMEPR30-Z	90-264	24-42	0.5, 0.6, 0.7	3.75k	-	-30 to +50	IP20	CE



## Indoor - AC/DC LED Drivers

Series	Input (VAC)	Single Output (VDC)	Output Current (A)	Isolation (VAC)	Dimming	Operating Temperature (°C)	IP Rating	Safety
AMEPR30N-Z	90-305	24-42	0.5, 0.6, 0.7	3.75k	-	-30 to +50	IP62	CE
AMEPR30NC-Z	90-305	24-42	0.5, 0.6, 0.7	3.75k	Resistive, Analog, PWM	-30 to +50	IP62	CE
AMEPR30D-AZ	90-264	8-15, 12-24, 24-36, 32-42, 36-50	2, 1.4, 1.25, 1, 0.7	3k	TRIAC, Analog, PWM	-20 to +80	IP67	CE
AMEPR30-AZ	90-305	5-12, 12-24, 24-36, 36-48, 36-50	2.5, 1.4, 1, 0.64, 0.7	3.75k	Resistive	-40 to +85	IP68	CE
AMEPR30C-AZ	90-305	5-12, 12-24, 24-36, 36-48, 36-50	2.5, 1.4, 1, 0.64, 0.7	3.75k	Resistive, Analog, PWM	-40 to +85	IP68	CE
AMEPR40-Z	90-264	80-100, 30-42	1, 0.4	3.75k	-	-20 to +50	IP20	CE
AMEPR40N-Z	90-305	24-42	1, 0.9, 0.85, 0.8	3.75k	-	-30 to +50	IP62	CE
AMEPR50N-Z	90-264	30-42	1.15, 1.05, 1	3.75k	-	-40 to +50	IP54	CE
AMEHR50-Z	90-385	24-42	1.2, 1, 0.85, 0.7	3750	Resistive, Analog, PWM	-40 to +85	IP20	CE
AMEPR60N-Z	90-264	24-42	1.4	3.75k	-	-40 to +50	IP54	CE



## Indoor - DC/DC LED Drivers

Series	Input (VDC)	Single Output (VDC)	Output Current (mA)	Type	Dimming	Operating Temperature (°C)	Package	Safety
AMLB-Z/AMLBW-Z	9-36	14-48	150, 250, 300, 350, 500, 600, 700, 900	Boost	Analog, PWM	-40 to +85	2 x 1"/wire	CE
AMLDV-NZ	5.5-48	3.3-36	300, 350, 500, 600, 700	Step-down	Analog, PWM	-40 to +85	SMD	CE
AMLD-Z	7-60	2-57	150, 250, 300, 350, 500, 600, 700, 1000	Step-down	Analog, PWM	-40 to +85	DIP24	CE
AMLD-RZ/AMLDW-RZ	9-60	2-56	300, 350, 500, 600, 700, 1000	Step-down	Analog, PWM	-40 to +85	DIP24/wire	CE
AMLDP-Z	7-16	2-14	300, 350, 500, 600, 700, 1000	Step-down	Analog, PWM	-40 to +85	DIP8	CE
AMLDL-RZ	7-30	2-28	500, 600, 700	Step-down	Analog, PWM	-40 to +71	DIP14	CE
AMLDL-Z/ AMLDLW-Z	7-30	2-28	300, 350, 500, 600, 700, 1000	Step-down	Analog, PWM	-40 to +85	DIP14 & DIP16	CE



## Outdoor - AC/DC LED Drivers

Series	Input (VAC)	Single Output (VDC)	Output Current (A)	Isolation (VAC)	Dimming	Operating Temperature (°C)	IP Rating	Safety
AMER40(N)-Z	90-305	30-42	0.75, 0.9	3750	-	-40 to +60	IP67	CE
AMER50(N)-Z	90-305	30-42	1.05, 1.2	3750	-	-40 to +60	IP67	CE
AMEQR50N-Z	90-305	36-50	1	3750	-	-40 to +60	IP67	CE
AMEPR60-AZ	90-305	5-12, 12-24, 24-36, 36-50	5, 2.5, 1.7, 1.2	3000	Resistive, Analog, PWM	-40 to +85	IP68	CE
AMEPR60C-AZ	90-305	5-12, 12-24, 24-36, 36-50	5, 2.5, 1.7, 1.2	3000	Resistive, Analog, PWM	-40 to +85	IP68	CE
AMER60(N)-Z	90-305	24-42	1.6, 1.5, 1.4, 1.3	3750	-	-40 to +60	IP67	CE
AMER60-12VC	90-295	12	5	3750	-	-25 to +70	IP68	CE
AMEQR70N-Z	90-305	36-50	1.4	3750	-	-40 to +60	IP67	CE
AMER72N-Z	90-305	12-24	3	3750	-	-40 to +60	IP67	CE
AMER90C-Z	90-305	35-70	1.2	3750	Resistive, Analog, PWM	-40 to +70	IP67	CE
AMER130-Z	90-305	35-55	2.4	3750	-	-40 to +70	IP67	CE
AMER160-Z	90-305	15-48, 30-55	3.4, 3.2, 2.9,	3750	-	-40 to +70	IP67	CE
AMER175-Z	90-305	15-48	3.6	3750	-	-40 to +70	IP67	CE
AMER250C-Z	90-305	12-24, 21-42	5/10, 3/6	3750	Resistive, Analog, PWM	-40 to +70	IP67	CE



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