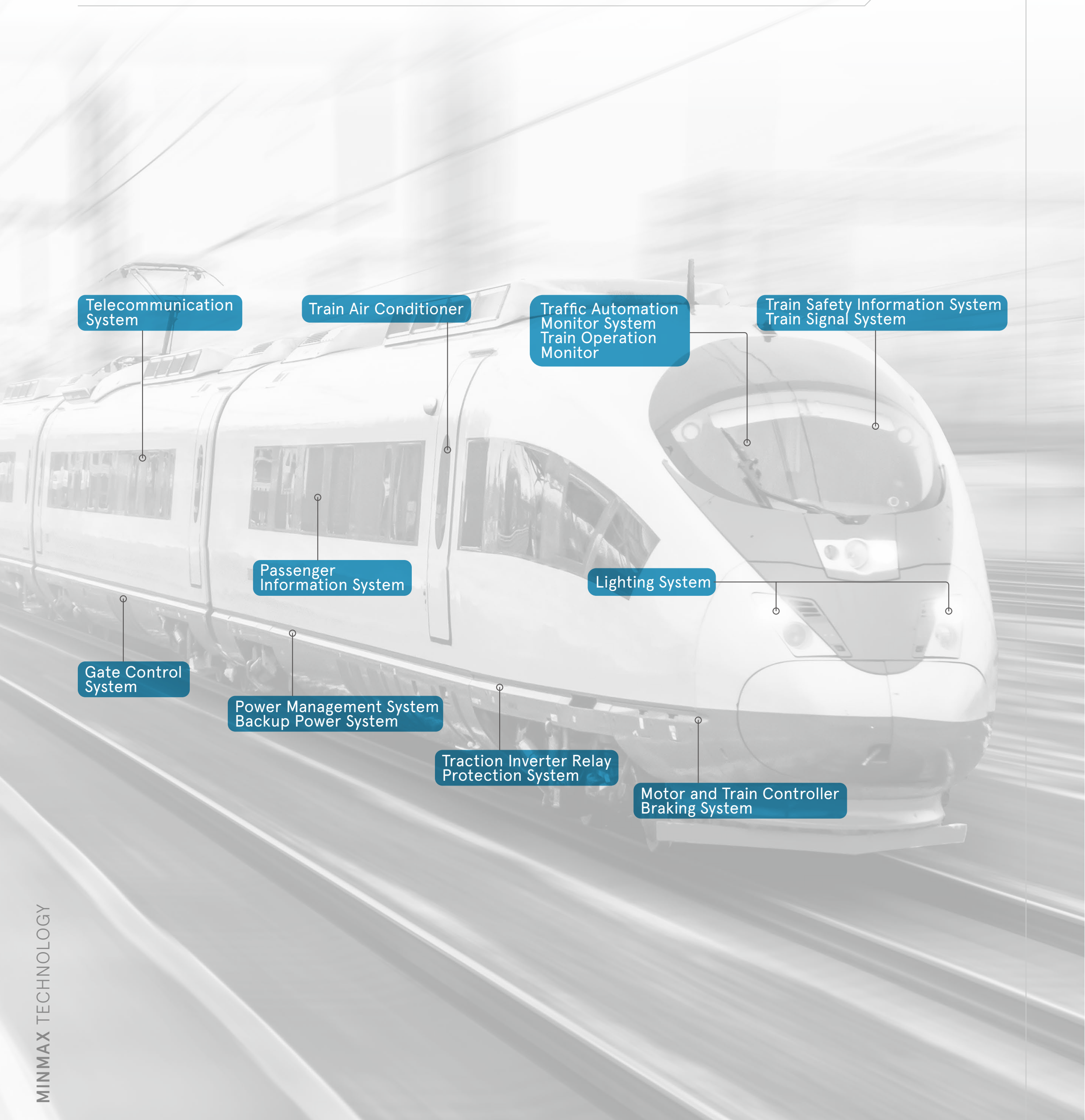


MINMAX RAILWAY CERTIFIED POWER SOLUTIONS

SUCCESSFUL APPLICATION



MINMAX TECHNOLOGY

RAILWAY CERTIFIED PRODUCTS OVERVIEW

Series	Output Power	Input Voltage Range (VDC)	Output Voltage (VDC)	Isolation (VAC)	Efficiency	Operating Ambient Temp. Range ⁽¹⁾	No Min. Load	OCP/SCP	OVP	OTP	Remote ON/OFF Control	Output Voltage Trim	Output Sense	EN50155 (IEC60571)	UL/cUL/IEC/EN 62368-1
3W • DIP Package															
MIZI03	3W	9-36 18-75 40-160	5, 12, 15, ±12, ±15	3000VAC Reinforced	85%	-40~+92°C Ambient	•	•						•	•
10-40W • 2"×1" Package															
MKZI10	10W	9-36 18-75 40-160	5, 12, 15, 24, ±12, ±15	3000VAC Reinforced	89%	-40~+95°C Ambient	•	•	•		•	•		•	•
MKZI20	20W	9-36 18-75 40-160	5, 12, 15, 24, ±12, ±15	3000VAC Reinforced	88%	-40~+88.5°C Ambient	•	•	•		•	•		•	•
NEW MKZI40	40W	36-160	5, 12, 15, 24, 54, ±12, ±15	3000VAC Reinforced	90%	-40~+77.5°C Ambient	•	•	•	•	•	•		•	•
50-150W • Quarter Brick															
MTQZ50	50W	43-101 66-160	5, 12, 15, 24	3000VAC Reinforced	92%	-40~+85°C Ambient	•	•	•	•	•	•	•	•	•
NEW MRZI75	75W	36-160 ⁽²⁾	5, 12, 15, 24, 54	2000VAC Reinforced	91%	-40~+105°C Base plate	•	•	•	•	•	•	•	•	•
NEW MRZI100	100W	36-160 ⁽²⁾	5, 12, 15, 24, 54	2000VAC Reinforced	91.5%	-40~+105°C Base plate	•	•	•	•	•	•	•	•	•
NEW MRZI150	150W	36-160 ⁽²⁾	5, 12, 15, 24, 54	2000VAC Reinforced	90%	-40~+105°C Base plate	•	•	•	•	•	•	•	•	•

⁽¹⁾ Please refer to derating curve information form datasheet⁽²⁾ Please refer to star-up voltage information form datasheet

RAILWAY CERTIFIED • DC-DC CONVERTERS

3W MIZ103 Series • DIP Package



Model Selection Guide				
Model Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)max	Efficiency
MIZI03-24S05	24 (9 - 36)	5	600	80%
MIZI03-24S12		12	250	84%
MIZI03-24S15		15	200	85%
MIZI03-24D12		±12	±125	83%
MIZI03-24D15		±15	±100	84%
MIZI03-48S05	48 (18 - 75)	5	600	80%
MIZI03-48S12		12	250	83%
MIZI03-48S15		15	200	84%
MIZI03-48D12		±12	±125	83%
MIZI03-48D15		±15	±100	83%
MIZI03-110S05	110 (40 - 160)	5	600	80%
MIZI03-110S12		12	250	84%
MIZI03-110S15		15	200	84%
MIZI03-110D12		±12	±125	83%
MIZI03-110D15		±15	±100	85%

10W MKZI10 Series • 2" x1" Package



Model Selection Guide				
Model Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)max	Efficiency
MKZI10-24S05	24 (9 - 36)	5	2000	84%
MKZI10-24S12		12	835	86%
MKZI10-24S15		15	670	87%
MKZI10-24S24		24	417	88%
MKZI10-24D12		±12	±417	86%
MKZI10-24D15	±15	±335	87%	
MKZI10-48S05	48 (18 - 75)	5	2000	85%
MKZI10-48S12		12	835	87%
MKZI10-48S15		15	670	87%
MKZI10-48S24		24	417	86%
MKZI10-48D12		±12	±417	89%
MKZI10-48D15	±15	±335	88%	
MKZI10-110S05	110 (40 - 160)	5	2000	82%
MKZI10-110S12		12	835	85%
MKZI10-110S15		15	670	85%
MKZI10-110S24		24	417	85%
MKZI10-110D12		±12	±417	86%
MKZI10-110D15	±15	±335	86%	

*There are different features & spec. by each series. For detailed series datasheet, please refer to www.minmax.com.tw

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20W MKZI20 Series · 2" x1" Package



Model Selection Guide				
Model Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)max	Efficiency
MKZI20-24S05	24 (9 - 36)	5	4000	87%
MKZI20-24S12		12	1670	87%
MKZI20-24S15		15	1330	87%
MKZI20-24S24		24	833	87%
MKZI20-24D12		±12	±833	86%
MKZI20-24D15		±15	±667	86%
MKZI20-48S05	48 (18 - 75)	5	4000	87%
MKZI20-48S12		12	1670	88%
MKZI20-48S15		15	1330	88%
MKZI20-48S24		24	833	88%
MKZI20-48D12		±12	±833	87%
MKZI20-48D15		±15	±667	87%
MKZI20-110S05	110 (40 - 160)	5	4000	84%
MKZI20-110S12		12	1670	86%
MKZI20-110S15		15	1330	86%
MKZI20-110S24		24	833	86%
MKZI20-110D12		±12	±833	86%
MKZI20-110D15		±15	±667	86%

40W MKZI40 Series · 2" x1" Package **NEW**



Model Selection Guide				
Model Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)max	Efficiency
MKZI40-110S05	110 (36-160)	5	8000	88%
MKZI40-110S12		12	3330	89%
MKZI40-110S15		15	2670	89%
MKZI40-110S24		24	1670	89%
MKZI40-110S54		54	741	90%
MKZI40-110D12		±12	±1670	89%
MKZI40-110D15		±15	±1330	89%

*There are different features & spec. by each series. For detailed series datasheet, please refer to www.minmax.com.tw

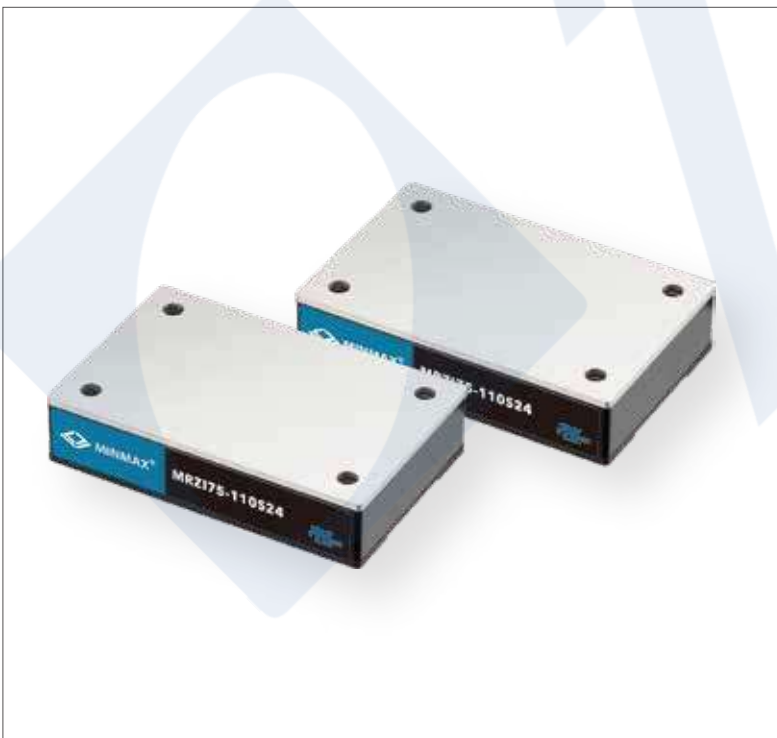
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50W MTQZ50 Series Quarter Brick Package



Model Selection Guide				
Model Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)max	Efficiency
MTQZ50-72S05	72 (43 - 101)	5	610000	90%
MTQZ50-72S12		12	4170	92%
MTQZ50-72S15		15	3330	92%
MTQZ50-72S24		24	2080	91%
MTQZ50-110S05	110 (66 - 160)	5	10000	90%
MTQZ50-110S12		12	4170	91%
MTQZ50-110S15		15	3330	92%
MTQZ50-110S24		24	2080	91%

75W MRZI75 Series NEW Quarter Brick Package



Model Selection Guide				
Model Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)max	Efficiency
MRZI75-110S05	110 (36 - 160)	5	15000	89%
MRZI75-110S12		12	6250	91%
MRZI75-110S15		15	5000	91%
MRZI75-110S24		24	3125	90%
MRZI75-110S54		54	1390	89%

*There are different features & spec. by each series. For detailed series datasheet, please refer to www.minmax.com.tw

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100W MRZI100 Series NEW Quarter Brick Package



Model Selection Guide				
Model Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)max	Efficiency
MRZI100-110S05		5	20000	91.5%
MRZI100-110S12		12	8400	91%
MRZI100-110S15	110 (36-160)	15	6700	90.5%
MRZI100-110S24		24	4200	89%
MRZI100-110S54		54	1850	89%

150W MRZI150 Series NEW Quarter Brick Package



Model Selection Guide				
Model Number	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)max	Efficiency
MRZI150-110S05		5	27000	90%
MRZI150-110S12		12	12500	90%
MRZI150-110S15	110 (36-160)	15	10000	89%
MRZI150-110S24		24	6250	88%
MRZI150-110S54		54	2780	88.5%

*There are different features & spec. by each series. For detailed series datasheet, please refer to www.minmax.com.tw