

MAE 32 Series

15 WATTS SINGLE & DUAL & TRIPLE OUTPUT DC/DC INDUSTRIAL

Features

- 2:1 Input range
- Efficiency to 84%
- 200 kHz switching frequency
- Remote ON/OFF control
- 500 VDC isolation
- Six-sided shield



Specifications

INPUT

Nominal voltage	12V, 24V, 48V.
Voltage range	9-18V, 18-36V, 36-72V.
Filter	PI-type

OUTPUT

Power	15W.
Line regulation	Single, dual $\pm 0.2\%$, triple $\pm 1\%$
Load regulation	Single, dual $\pm 1.0\%$, triple $\pm 5\%$. 25% min load is required to meet specification.
Load transient	Response $< 480\mu s$.
Setting accuracy	Single: $\pm 1\%$. Dual +output $\pm 1\%$, -output $\pm 3\%$ triple: 5V $\pm 2\%$, 12/15V $\pm 3\%$
Ripple and noise Max	75 mVp-p.
Short circuit protection	Fold-back. Approx 80% of output current at short circuit.
Temp coefficient	$\pm 0.02\% / ^\circ C$.

ENVIRONMENTAL

Ambient temperature	-25°C to +71°C.
Storage temperature	-55°C to +105°C.
Cooling	Convection.

OPERATING

Efficiency	77% to 84%.
MTBF	200 000 hours at 25°C ambient.
Switching frequency	Min. 200 kHz.
Equivalent capacitance	1000 pF.
Isolation	500VDC.

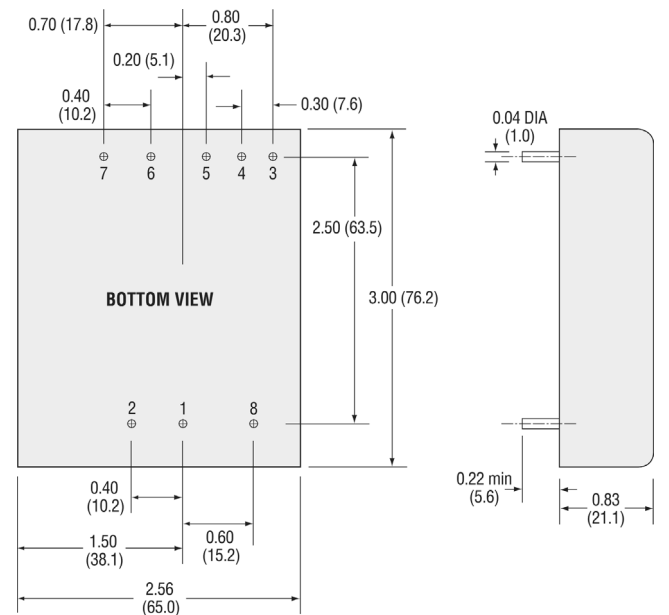
STANDARDS AND APPROVALS

C-Tick	AS/NZS CISPR11 Group 1 Class A
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MECHANICAL

Case	Black coated copper with non-conductive base.
Dimensions	(H x W x L) 21.1 x 65.0 x 76.2 mm.
Weight	180g.

Technical Illustration



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Selection Table

POWERBOX ARTICLE NUMBER	INPUT VOLTAGE VDC	OUTPUT VOLTAGE VDC	OUTPUT CURRENT mA	INPUT CURRENT NO LOAD mA	INPUT CURRENT FULL LOAD mA
MAE 32-003	9-18	5	3000	20	1700
MAE 32-006	9-18	12	1250	20	1600
MAE 32-009	9-18	15	1000	20	1600
MAE 32-012	9-18	±12	625	35	1520
MAE 32-015	9-18	±15	500	35	1520
MAE 32-018	9-18	5/±12	1500/310	30	1600
MAE 32-021	9-18	5/±15	1500/250	30	1600
MAE 32-024	9-18	+5/+12/-5	1500/310/500	30	1470
MAE 32-027	18-36	5	3000	25	810
MAE 32-030	18-36	12	1250	25	780
MAE 32-033	18-36	15	1000	25	780
MAE 32-036	18-36	±12	625	25	750
MAE 32-039	18-36	±15	500	25	750
MAE 32-042	18-36	5/±12	1500/310	25	780
MAE 32-045	18-36	5/±15	1500/250	25	780
MAE 32-048	18-36	+5/+12/-5	1500/310/500	25	715
MAE 32-051	36-72	5	3000	10	410
MAE 32-054	36-72	12	1250	10	390
MAE 32-057	36-72	15	1000	10	390
MAE 32-060	36-72	±12	625	15	380
MAE 32-063	36-72	±15	500	15	380
MAE 32-066	36-72	5/±12	1500/310	15	380
MAE 32-069	36-72	5/±15	1500/250	15	380
MAE 32-072	36-72	+5/+12/-5	1500/310/500	15	350

Pin Connection

PIN	SINGLE OUTPUT	DUAL OUTPUT	TRIPLE OUTPUT
1	+V Input	+V Input	+V Input
2	-V Input	-V Input	-V Input
3	NP	+V Output	+V Output
4	Output trim	Common	Common
5	NP	-V Output	-V Output
6	+V Output	NP	+5V Output
7	-V Output	NP	NP
8	Remote on/off control		

REMOTE ON/OFF CONTROL

Logic compatibility	CMOS or open collector TTL
Output-On	>5.5VDC or open circuit
Output-Off	<1.8VDC
Shutdown idle current	10mA
Input resistance	100K ohms (Ein 0 to 9VDC)
Control common	Referenced to input minus

EXTERNAL OUTPUT TRIMMING

Output may optionally be externally trimmed (±10%) with a fixed resistor or an external trimpot.