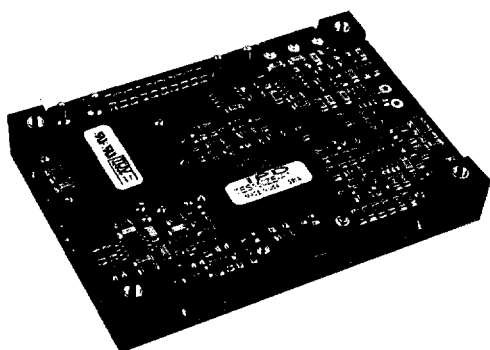




Input voltage range up to 72 V DC
2.5, 3.3 and 5 V DC output
1500 V DC I/O electric strength test voltage



- 100°C case operation
- 45 A three quarter brick
- Very high efficiency up to 88% at 5 V DC output

Selection chart

Output $U_{o\ nom}$ [V DC]	$I_{o\ nom}$ [A]	Input voltage U_i [V DC]	Rated power $P_{o\ tot}$ [W]	Efficiency η_{typ} [%]	Type
2.5	45	18...36	113	79	TES 113YD-A
2.5	45	36...72	113	80	TES 113ZD-A
3.3	45	18...36	150	82	TES 150YE-A
3.3	45	36...72	150	83	TES 150ZE-A
5	45	18...36	225	82	TES 225YG-A
5	45	36...72	225	82	TES 225ZG-A

Input

Input voltage	continuous range, 24 V	18...36 V DC
	continuous range, 48 V	36...72 V DC

Output

Output voltage setting accuracy	$U_{i\ nom}, I_{o\ nom}$	$\pm 1\% U_{o\ nom}$
Minimum load	recommended	10% $I_{o\ nom}$
Line regulation	$U_{i\ min}...U_{i\ max}, I_{o\ nom}$	typ. $\pm 0.2\% U_{o\ nom}$
Load regulation	$U_{i\ nom}, 1...100\% I_{o\ nom}$	typ. $\pm 0.5\% U_{o\ nom}$
Output voltage switching noise	$U_{i\ nom}, I_{o\ nom}$, peak-peak, total	max. 4% $U_{o\ nom}$
Voltage trim range		$\pm 10\% U_{o\ nom}$
Switching frequency		200 or 300 kHz

Control and protection

Overload protection	latch	110...140% $I_{o\ nom}$
		max. 200% $I_{o\ nom}$
Overvoltage protection	latch	115...140% $U_{o\ nom}$
Undervoltage lockout	latch	70...90% $U_{o\ nom}$
Thermal shutdown		105...115°C
Remote shutdown	positive logic, negative reference	

Safety and EMC

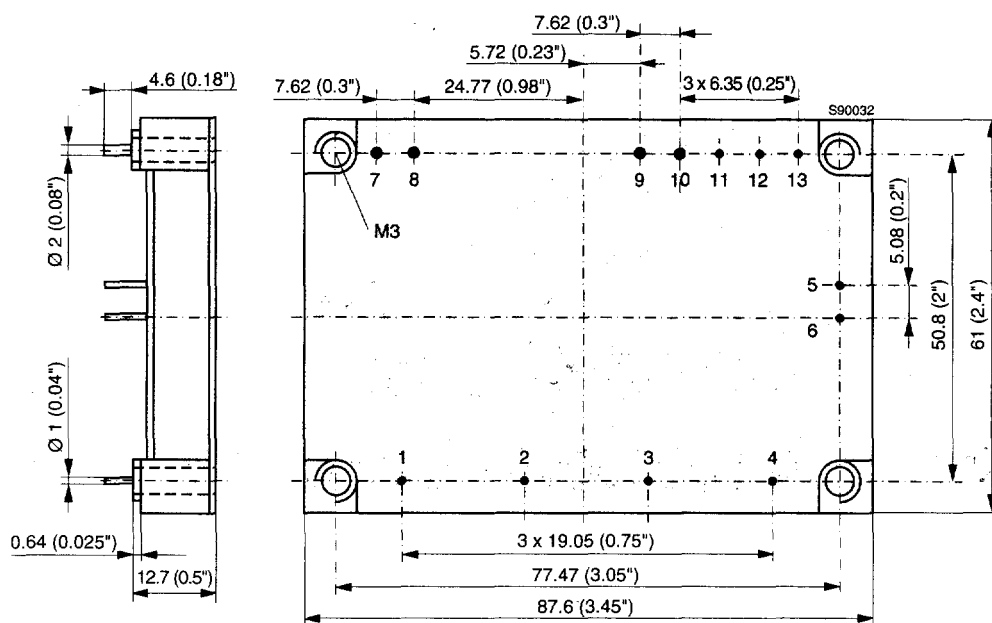
Electric strength test voltage	I/O	1500 V DC
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Environmental

Operating case temperature T_C	$U_{I\text{ nom}}, I_{O\text{ nom}}$	-40...100°C
Storage temperature	non operational	-40...125°C
Relative humidity	non condensing	95%
MTBF	Bellcore TR-NWT-000332	1'000'000 h

Mechanical data

Tolerances ± 0.3 mm (0.012") unless otherwise indicated.

**Pin allocation**

Pin	Double output units
1	V_{i-}
2	Enable
3	Case
4	V_{i+}
5	cn2 (opt.)
6	cn1 (opt.)
7	V_{o+}

Pin	Double output units
8	V_{o+}
9	V_{o-}
10	V_{o-}
11	Sense-
12	Trim
13	Sense+