

Input voltage range up to 75 V DC  
 2.5 V...15 V DC output  
 1500 V DC I/O electric strength test voltage



- 100°C case operation
- High power density
- Quarter-brick footprint

## Selection chart

Output		Input voltage $U_i$ [V DC]	Rated power $P_{o\ tot}$ [W]	Efficiency $\eta_{typ}$ [%]	Type
$U_{o\ nom}$ [V DC]	$I_{o\ nom}$ [A]				
2.5	15	18...36	38	76	QBS 038YD-A
2.5	15	36...75	38	77	QBS 038ZD-A
3.3	15	18...36	50	80	QBS 050YE-A
3.3	15	36...75	50	81	QBS 050ZE-A
5	15	18...36	75	84	QBS 075YG-A
5	15	36...75	75	83	QBS 075ZG-A
12	8.33	18...36	100	85	QBS 100YH-A
12	8.33	36...75	150	86	QBS 100ZH-A
12	10	36...75	120	84	QBS 120ZH-A
15	6.67	18...36	100	85	QBS 100YJ-A
15	6.67	36...75	100	86	QBS 100ZJ-A
15	10	36...75	150	84	QBS 150ZJ-A

## Input

Input voltage	continuous range, 24 V	18...36 V DC
	continuous range, 48 V	36...75 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. 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		400 kHz

## Safety and EMC

Electric strength test voltage	I/O	1500 V DC
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**Control and protection**

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

**Environmental**

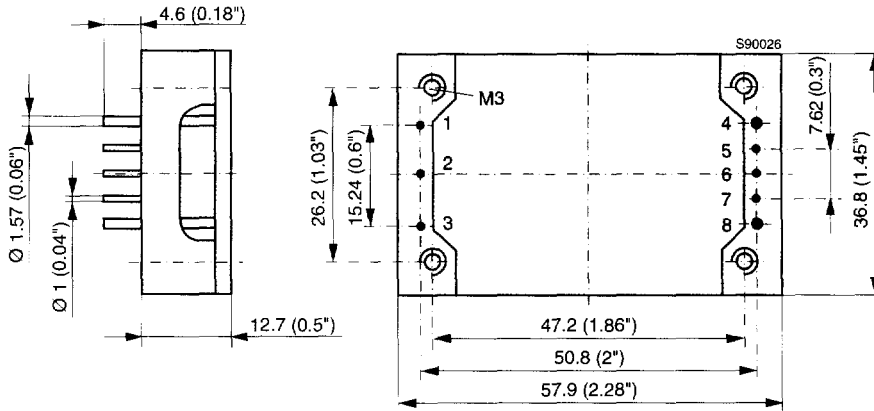
Operating case temperature $T_C$	$U_{i\ nom}, I_{o\ nom}$	-40...100°C
Storage temperature	non operational	-40...125°C
Relative humidity	non condensing	95%
MTBF	Bellcore TR-NWT-000332	2'500'000 h

**Options**

Remote shutdown	negative logic	N
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**Mechanical data**

Tolerances  $\pm 0.3$  mm (0.012") unless otherwise indicated.



**Pin allocation**

Pin	Single output units
1	Vi-
2	On/Off
3	Vi+
4	Vo-
5	Sense-
6	Trim
7	Sense+
8	Vo+