



Input voltage range up to 72 VDC
1, 2 or 3 outputs up to 30 VDC
1500 VDC I/O electric strength test voltage

- Wide input range
- Short circuit protection
- Low cost

Model Selection

Output 1 $V_{o\ nom}$ $I_{o\ nom}$ [VDC][mA]		Output 2 $V_{o\ nom}$ $I_{o\ nom}$ [VDC][mA]		Output 3 $V_{o\ nom}$ $I_{o\ nom}$ [VDC][mA]		Type Input voltage 4.5 - 5.5 VDC	Type Input voltage 10 - 36 VDC ¹	Type Input voltage 18 - 72 VDC	Opt.
3.3	1500	-	-	-	-	5 IMP 6-03-7	24 IMP 6-03-7	48 IMP 6-03-7	-
3.3	3000	-	-	-	-	-	24 IMP 12-03-7	48 IMP 12-03-7	-
5	200	-	-	-	-	5 IMP 1-05-7	-	-	S
5	500	-	-	-	-	-	24 IMP 3-05-7	48 IMP 3-05-7	S
5	1000	-	-	-	-	5 IMP 6-05-7	24 IMP 6-05-7	48 IMP 6-05-7	-
5	2400	-	-	-	-	-	24 IMP 12-05-7	48 IMP 12-05-7	-
12	84	-	-	-	-	5 IMP 1-12-7	-	-	S
12	250	-	-	-	-	-	24 IMP 3-12-7	48 IMP 3-12-7	S
12	500	-	-	-	-	5 IMP 6-12-7	24 IMP 6-12-7	48 IMP 6-12-7	-
12	1000	-	-	-	-	-	24 IMP 12-12-7	48 IMP 12-12-7	-
15	66	-	-	-	-	5 IMP 1-15-7	-	-	S
15	200	-	-	-	-	-	24 IMP 3-15-7	48 IMP 3-15-7	S
15	400	-	-	-	-	5 IMP 6-15-7	24 IMP 6-15-7	48 IMP 6-15-7	-
15	800	-	-	-	-	-	24 IMP 12-15-7	48 IMP 12-15-7	-
+5	100	-5	100	-	-	5 IMP 1-0505-7	-	-	S
+5	250	-5	250	-	-	-	24 IMP 3-0505-7	48 IMP 3-0505-7	S
+5	500	-5	500	-	-	5 IMP 6-0505-7	24 IMP 6-0505-7	48 IMP 6-0505-7	-
+5	1200	-5	1200	-	-	-	24 IMP 12-0505-7	48 IMP 12-0505-7	-
+12	42	-12	42	-	-	5 IMP 1-1212-7	-	-	S
+12	125	-12	125	-	-	-	24 IMP 3-1212-7	48 IMP 3-1212-7	S
12	125	12	125	-	-	-	24 IMP 3-12-12-7	48 IMP 3-12-12-7	-
+12	250	-12	250	-	-	5 IMP 6-1212-7	24 IMP 6-1212-7	48 IMP 6-1212-7	-
+12	500	-12	500	-	-	-	24 IMP 12-1212-7	48 IMP 12-1212-7	-
+15	33	-15	33	-	-	5 IMP 1-1515-7	-	-	S
15	100	15	100	-	-	-	24 IMP 3-15-15-7	48 IMP 3-15-15-7	-
+15	100	-15	100	-	-	-	24 IMP 3-1515-7	48 IMP 3-1515-7	S
+15	200	-15	200	-	-	5 IMP 6-1515-7	24 IMP 6-1515-7	48 IMP 6-1515-7	-
+15	400	-15	400	-	-	-	24 IMP 12-1515-7	48 IMP 12-1515-7	-
5	250	5	250	-	-	-	24 IMP 3-05-05-7	48 IMP 3-05-05-7	-
5	1500	+12	200	-12	200	-	24 IMP 12-051212-7	48 IMP 12-051212-7	-
5	1500	+15	160	-15	160	-	24 IMP 12-051515-7	48 IMP 12-051515-7	-

¹ 9 - 36 VDC for IMP 3 series

Model numbers highlighted in yellow or shaded are not recommended for new designs.

Input

Input voltage	continuous range, 5 V (IMP 1, IMP 6)	4.5 - 5.5 VDC
	continuous range, 24 V (IMP 3)	9 - 36 VDC
	continuous range, 24 V (IMP 6, IMP 12)	10 - 36 VDC
	continuous range, 48 V	18 - 72 VDC
Reverse voltage protection	shunt diode	

Output

Output voltage setting accuracy	$V_{i\ nom}, I_{o\ nom}$	$\pm 2\% V_{o\ nom}$
Minimum load	recommended	$20\% I_{o\ nom}$
Line regulation	$V_{i\ min} - V_{i\ max}, I_{o\ nom}$	$\pm 1\% V_{o\ nom}$
Load regulation	$V_{i\ nom}, 0 - 100\% I_{o\ nom},$ regulated outputs	$2\% V_{o\ nom}$
	tracking outputs	max. $6\% V_{o\ nom}$
Output voltage switching noise	$V_{i\ nom}, 20 - 100\% I_{o\ nom},$ peak-peak, total	max. $3\% V_{o\ nom}$
Efficiency	$V_{i\ nom}, I_{o\ nom}$	up to 83%

Control and protection

Overload protection	$V_{i\ min},$ full load	$125\% P_{i\ nom}$
No-load protection		
Remote shut down	positive logic (floating or high signal = on)	

Safety and EMC

Electric strength test voltage	I/O	1500 VDC
Electromagnetic interference	conducted with external filter	class B

Environmental

Operating ambient temperature	$V_{i\ nom}, I_{o\ nom}$	-25 to 71°C
Storage temperature	non operational	-40 to 100°C
Relative humidity	non condensing	95%
MTBF	MIL-HDBK-217F, N2	>3'700'000 h

Options

Industry standard pinout	IMP 1 and IMP 3	S
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Accessories

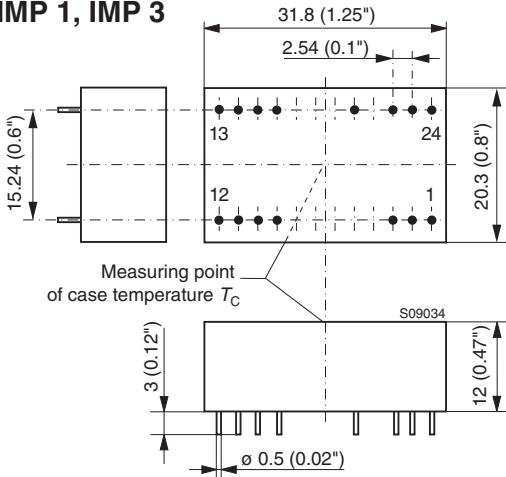
DIN and chassis mounting bracket		
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Mechanical data

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



IMP 1, IMP 3



Pin allocation IMP 1

Pin	Single output unit	Dual output unit
1	Vi+	Vi+
2	Vi+	Vi+
10	-	COM
11	-	COM
12	Vo-	-
13	Vo+	Vo-
15	-	Vo+
23	Vi-	Vi-
24	Vi-	Vi-

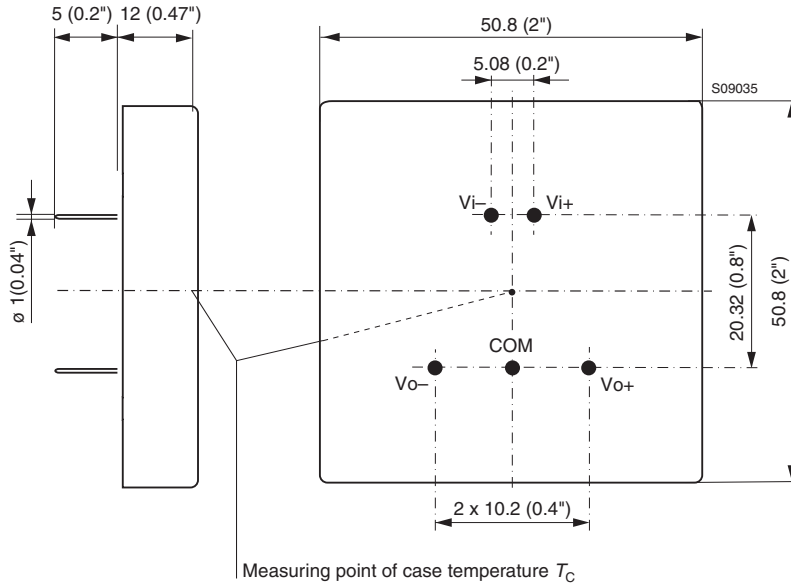
Industry standard pinout (option S)

Pin	Single output	Dual output
2	Vi-	Vi-
3	Vi-	Vi-
9	n.c.	COM
10	n.c.	n.c.
11	n.c.	Vo-
14	Vo+	Vo+
15	n.c.	n.c.
16	Vo-	COM
22	Vi+	Vi+
23	Vi+	Vi+

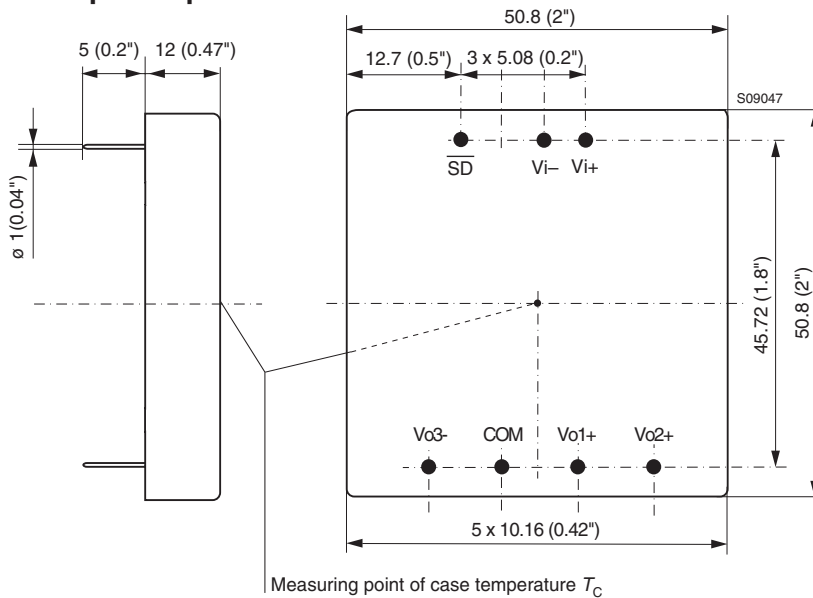
Alternative pinout IMP 3

Pin	Single output	Dual output	Double output
1	Vi+	Vi+	Vi+
2	Vi+	Vi+	Vi+
9	-	-	Go1
10	-	COM	-
11	-	COM	-
12	Vo-	-	Vo1
13	Vo+	Vo-	Vo2
15	-	Vo+	-
16	-	-	Go2
20	SD	SD	SD
23	Vi-	Vi-	Vi-
24	Vi-	Vi-	Vi-

IMP 6, IMP 12 with single or dual output



IMP 12 with triple output



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