



DC-DC Converters



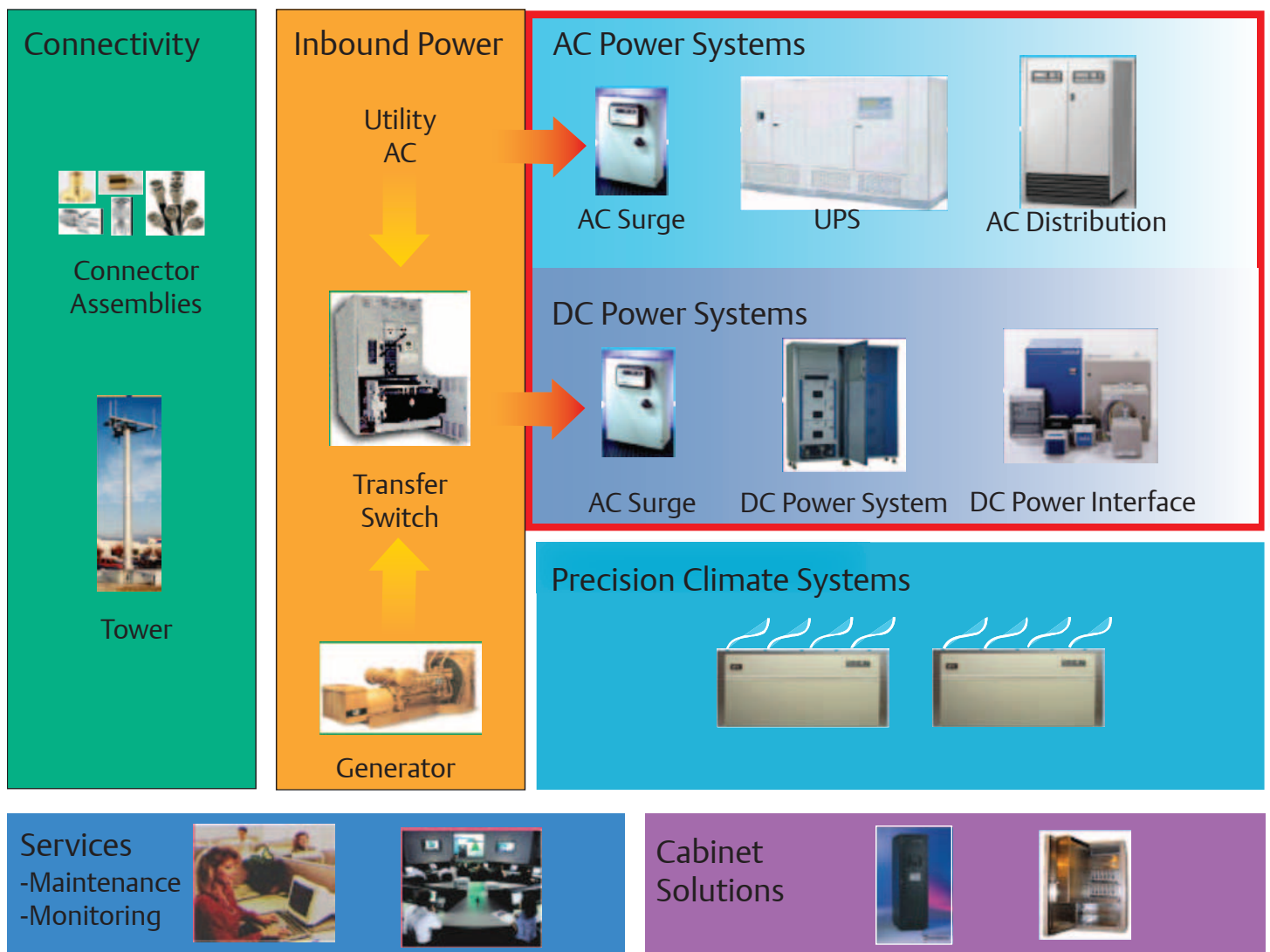
www.astecpower.com

July 2004

Emerson Network Power . . .

Emerson Network Power is an Emerson business that provides a full spectrum of reliable power solutions, including inbound power, connectivity, power supplies, power systems and precision cooling, backed by the largest global services organization in the power industry. These Emerson companies serve the needs of telecommunications networks, data centers, health care and industrial facilities worldwide.

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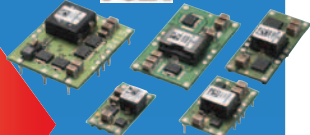


... Power and Connectivity

Astec Power, an Emerson Network Power company headquartered in Carlsbad, California, is a leading international supplier of power conversion solutions. Dedicated to advanced research and development, state of the art design, sophisticated automation and in-process testing, Astec Power produces standard, modified standard, and custom AC-DC power supplies and DC-DC converters from one to 18,000 watts. In order to satisfy and continue to grow its international customer base, Astec Power has operations on three continents. Through this strategic allocation of its manufacturing resources, Astec Power delivers competitively priced quality products worldwide, in a timely and reliable manner.

OEM Embedded DC-DC Converters

POLA



Isolated Industry Bricks



AC-DC Power Supplies



Industry Standard Isolated

Full Brick	4
Half Brick (3A to 80A)	4
1/4 Brick (6A to 75A)	6
1/8 Brick (4A to 40A)	8
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Industry Standard Non Isolated

POLA

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High Power 300V Products

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Ultra Low Profile

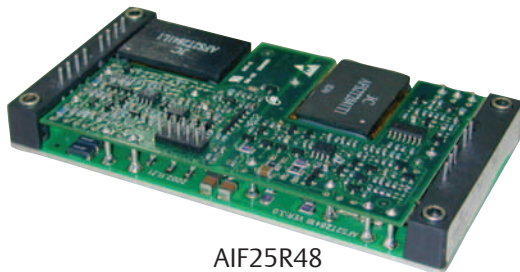
Model Number Decoder

AC-DC Power Supplies

In addition to DC - DC Converters, Astec Power is a broad line supplier of standard, modified standard, and custom AC/DC power supplies that offer outstanding technology, performance, price and reliability. Outputs range from 16 Watts to 18,000 Watts in many package styles including open frame, enclosed, DIN-rail mount and external adapters. Available in single or multiple outputs with many standard output voltage combinations, Astec Power's AC-DC power supplies are ideally suited to a wide range of applications in telecommunications, computers, test/industrial equipment and medical applications.

For more information on Astec Power's AC-DC power supplies, please see the AC-DC shortform catalog, or visit our website at www.astecpower.com

Full Brick



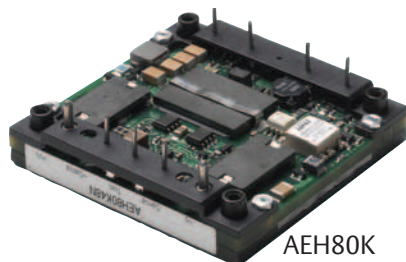
AIF25R48

Features/Description

- 700W continuous power @ 100°C baseplate temperature
- High efficiency 89% @ 28V
- Low output ripple and noise
- RF Amplifier applications
- Pos and Neg enable option
- Excellent transient response
- OVP, LVP, OCP, OTP, short circuit protection
- Basic insulation

28.0V	Full Brick, Industry Standard, Isolated			
I _{out}	Input Voltage	Package	Efficiency	Model Number
25A	48V (36-75V)	4.60" x 2.40" x 0.50" (116.8 x 61.0 x 12.7) Baseplate	89%	AIF25R48*

Half Brick



AEH80K

Features/Description

- Available from 6A to 80A. Consult factory for 100 amp version
- Open frame and baseplate construction
- Open frame has heat sink adapter for conductive cooling applications
- Highest efficiencies available
- Optimum transient load performance and reactive loading capacity
- "Industry standard" trim

1.2V	Half Brick Single Industry Standard, Isolated			
I _{out}	Input Voltage	Package (mm)	Efficiency	Model Number
60A	48V (36-75V)	2.30" x 2.40" x 0.40" (58.4 x 61.0 x 10.16) Openframe	86%	AEH60K48
		2.30" x 2.40" x 0.50" (58.4 x 61.0 x 12.7) Baseplate	86%	AEH60K48
80A	48V (36-75V)	2.30" x 2.40" x 0.40" (58.4 x 61.0 x 10.16) Openframe	86%	ALH80K48
		2.30" x 2.40" x 0.50" (58.4 x 61.0 x 12.7) Baseplate	83%	AEH80K48**

1.5 V	Half Brick Single Industry Standard, Isolated			
30A	48V (36-75V)	2.28" x 2.40" x 0.50" (57.9 x 61.0 x 12.7) Baseplate	78%	AEH30M48
80A	48V (36-75V)	2.30" x 2.40" x 0.50" (58.4 x 61.0 x 12.7) Baseplate	86%	AEH80M48**
		2.30" x 2.40" x 0.40" (58.4 x 61.0 x 10.16) Openframe	86%	ALH80M48**

1.8V	Half Brick Single Industry Standard, Isolated			
60A	48V (36-75V)	2.30" x 2.40" x 0.50" (58.4 x 61.0 x 12.7) Baseplate	89%	AEH60Y48
		2.30" x 2.40" x 0.40" (58.4 x 61.0 x 10.16) Openframe	89%	ALH60Y48
80A	48V (36-75V)	2.30" x 2.40" x 0.50" (58.4 x 61.0 x 12.7) Baseplate	87%	AEH80Y48**
		2.30" x 2.40" x 0.40" (58.4 x 61.0 x 10.16) Openframe	87%	ALH80Y48**

2.5V	Half Brick Single Industry Standard, Isolated			
10A	24V (18-36V)	2.28" x 2.40" x 0.50" (57.9 x 61.0 x 12.7) Baseplate	85%	AEH10G24
	48V (36-75V)	2.28" x 2.40" x 0.50" (57.9 x 61.0 x 12.7) Baseplate	87%	AEH10G48
15A	48V (36-75V)	2.28" x 2.40" x 0.50" (57.9 x 61.0 x 12.7) Baseplate	87%	AEH15G48
	24V (18-36V)	2.28" x 2.40" x 0.50" (57.9 x 61.0 x 12.7) Baseplate	85%	AEH20G24
20A	48V (36-75V)	2.28" x 2.40" x 0.50" (57.9 x 61.0 x 12.7) Baseplate	86%	AEH20G48
	48V (36-75V)	2.28" x 2.40" x 0.50" (57.9 x 61.0 x 12.7) Baseplate	85%	AEH30G48
30A	48V (36-75V)	2.30" x 2.40" x 0.50" (58.4 x 61.0 x 12.7) Baseplate	90%	AEH60G48
		2.30" x 2.40" x 0.40" (58.4 x 61.0 x 10.16) Openframe	90%	ALH60G48

Note: Add appropriate suffix for available option(s)

N = Negative Enable (Pos default)

* -6 = 3.8mm pin length (4.8mm default)

** -3 = Single pair of +Vo/-Vo pins; (default is 2 sets of +Vo/-Vo pins)

3.3 V	Half Brick Single Industry Standard, Isolated			
I _{out}	Input Voltage	Package (mm)	Efficiency	Model Number
6A	48V (36-75V)	2.28" x 2.40" x 0.50" (57.9 x 61.0 x 12.7) Baseplate	84%	AV60C-048L-033F06
10A	24V (18-36V)	2.28" x 2.40" x 0.50" (57.9 x 61.0 x 12.7) Baseplate	87%	AEH10F24
	48V (36-75V)	2.28" x 2.40" x 0.50" (57.9 x 61.0 x 12.7) Baseplate	87%	AEH10F48
15A	48V (36-75V)	2.28" x 2.40" x 0.50" (57.9 x 61.0 x 12.7) Baseplate	88%	AEH15F48
20A	24V (18-36V)	2.28" x 2.40" x 0.50" (57.9 x 61.0 x 12.7) Baseplate	87%	AEH20F24
	48V (36-75V)	2.28" x 2.40" x 0.50" (57.9 x 61.0 x 12.7) Baseplate	88%	AEH20F48
30A	48V (36-75V)	2.28" x 2.40" x 0.50" (57.9 x 61.0 x 12.7) Baseplate	85%	AEH30F48
40A	48V (36-75V)	2.28" x 2.40" x 0.50" (57.9 x 61.0 x 12.7) Openframe	89%	AEH40F48*
60A	48V (36-75V)	2.30" x 2.40" x 0.50" (58.4 x 61.0 x 12.7) Baseplate	91%	AEH60F48
		2.30" x 2.40" x 0.40" (58.4 x 61.0 x 10.16) Openframe	91%	ALH60F48

5.0 V	Half Brick Single Industry Standard, Isolated			
I _{out}	Input Voltage	Package (mm)	Efficiency	Model Number
6A	48V (36-75V)	2.28" x 2.40" x 0.50" (57.9 x 61.0 x 12.7) Baseplate	87%	AV60C-048L-050F06
10A	24V (18-36V)	2.28" x 2.40" x 0.50" (57.9 x 61.0 x 12.7) Baseplate	88%	AEH10A24
	48V (36-75V)	2.28" x 2.40" x 0.50" (57.9 x 61.0 x 12.7) Baseplate	89%	AEH10A48
15A	48V (36-75V)	2.28" x 2.40" x 0.50" (57.9 x 61.0 x 12.7) Baseplate	89%	AEH15A48
20A	24V (18-36V)	2.28" x 2.40" x 0.50" (57.9 x 61.0 x 12.7) Baseplate	88%	AEH20A24
	48V (36-75V)	2.28" x 2.40" x 0.50" (57.9 x 61.0 x 12.7) Baseplate	89%	AEH20A48
30A	48V (36-75V)	2.28" x 2.40" x 0.50" (57.9 x 61.0 x 12.7) Baseplate	88%	AEH30A48

12.0 V	Half Brick Single Industry Standard, Isolated			
I _{out}	Input Voltage	Package (mm)	Efficiency	Model Number
4A	48V (36-75V)	2.28" x 2.40" x 0.50" (57.9 x 61.0 x 12.7) Baseplate	85%	AV60C-048L-120F04
6A	48V (36-75V)	2.28" x 2.40" x 0.50" (57.9 x 61.0 x 12.7) Baseplate	86%	AV60C-048L-120F06
8A	48V (36-75V)	2.28" x 2.40" x 0.50" (57.9 x 61.0 x 12.7) Baseplate	87%	AV60C-048L-120F08
12A	48V (36-75V)	2.28" x 2.40" x 0.50" (57.9 x 61.0 x 12.7) Baseplate	87%	AV60C-048L-120F12
25A	48V (36-75V)	2.30" x 2.40" x 0.50" (58.4 x 61.0 x 12.7) Baseplate	93%	AEH25B48
30A	48V (36-75V)	2.30" x 2.40" x 0.50" (58.4 x 61.0 x 12.7) Baseplate	93%	AEH30B48

15.0 V	Half Brick Single Industry Standard, Isolated			
I _{out}	Input Voltage	Package (mm)	Efficiency	Model Number
3A	48V (36-75V)	2.28" x 2.40" x 0.50" (57.9 x 61.0 x 12.7) Baseplate	86%	AV60C-048L-150F03
5A	48V (36-75V)	2.28" x 2.40" x 0.50" (57.9 x 61.0 x 12.7) Baseplate	87%	AV60C-048L-150F05
6A	48V (36-75V)	2.28" x 2.40" x 0.50" (57.9 x 61.0 x 12.7) Baseplate	87%	AV60C-048L-150F06
10A	48V (36-75V)	2.28" x 2.40" x 0.50" (57.9 x 61.0 x 12.7) Baseplate	87%	AV60C-048L-150F10

Half Brick Dual



ALH25

Features/Description

- 1/2 Brick Open Frame construction.
- Power : 75W, 100W
- Efficiency up to 88%
- Output Current : 12 to 25 Amps/ch
- Trim : $\pm 10\%$
- Topology: Synchronous Rectification
- Options: Enable Pin : (Default=Pos, N=Neg), Pin Length (Default=0.5")
- Operating Temperature : -40 to 85° C
- Protection :
 OCP - Hiccup (Latching option - 5),
 OVP - Hiccup (Latching Option - 5),
 OTP - Auto recovery

3.3/2.5V	Half Brick Dual			
I _{out}	Input Voltage	Package (mm)	Efficiency	Model Number
15/15A	48V (36-75V)	2.28" x 2.40" x 0.50" (57.9 x 61.0 x 12.7) Openframe	80%	AV60A-048L-033D025
19/19A	48V (36-75V)	2.30" x 2.40" x 0.50" (58.4 x 61.0 x 12.7) Baseplate	79%	AA60A-048L-033D025*

5.0 / 3.3V	Half Brick Dual			
I _{out}	Input Voltage	Package (mm)	Efficiency	Model Number
12/15A	36V (18-60V)	2.30" x 2.40" x 0.50" (58.4 x 61.0 x 12.7) Baseplate	83%	AA60A-036L-050D033H*
14/14A	48V (36-75V)	2.30" x 2.40" x 0.50" (58.4 x 61.0 x 12.7) Baseplate	83%	AA60A-048L-050D033*
15/15A	48V (36-75V)	2.28" x 2.40" x 0.50" (57.9 x 61.0 x 12.7) Openframe	82%	AV60A-048L-050D033
20/25A	48V (36-75V)	2.28" x 2.40" x 0.45" (57.9 x 61.0 x 11.43) Openframe	88%	ALH25AF48

Note: Add appropriate suffix for available option(s)
 N = Negative Enable (Pos default)

* -6 = 3.8mm pin length (4.8mm default)

Quarter Brick



ALQ50



ALQ40

Features/Description

- Single output 1/4 brick, 6A to 75A
- Wide operating temperature range
- Rich feature sets: UVLO, Enable, On/Off, OCP, OVP, OTP, Differential Remote Sense, Output Trim
- Meets basic insulation
- Exceptional dynamic response and reactive loading capability
- Monotonic start-up characteristic
- Open and baseplated version

1.2V	Quarter Brick Single			
lout	Input Voltage	Package (mm)	Efficiency	Model Number
40A	48V (36-75V)	1.45" x 2.28" x 0.38" (36.8 x 57.9 x 9.7) Open frame	85%	ALQ40K48*
50A	48V (36-75V)	1.48" x 2.30" x 0.38" (37.6 x 58.4 x 9.7) Openframe	85%	ALQ50K48
1.5V	Quarter Brick Single			
20A	48V (36-75V)	1.45" x 2.28" x 0.50" (36.8 x 57.9 x 12.7) Baseplate	85%	AV45C-048L-015F20HA*
40A	48V (36-75V)	1.45" x 2.28" x 0.38" (36.8 x 57.9 x 9.7) Open frame	86%	ALQ40M48*
1.8V	Quarter Brick Single			
20A	48V (36-75V)	1.45" x 2.28" x 0.50" (36.8 x 57.9 x 12.7) Baseplate	85%	AV45C-048L-018F20HA*
40A	48V (36-75V)	1.45" x 2.28" x 0.38" (36.8 x 57.9 x 9.7) Open frame	87%	ALQ40Y48*
50A	48V (36-75V)	1.48" x 2.30" x 0.38" (37.6 x 58.4 x 9.7) Openframe	88%	ALQ50Y48
60A	48V (36-75V)	1.45" x 2.30" x 0.44" (36.8 x 58.4 x 11.2) Baseplate	90%	AEQ60Y48***
		1.45" x 2.30" x 0.37" (36.8 x 58.4 x 9.4) Openframe	90%	ALQ60Y48***
75A	48V (36-75V)	1.45" x 2.30" x 0.44" (36.8 x 58.4 x 11.2) Baseplate	90%	AEQ75Y48***
		1.45" x 2.30" x 0.35" (36.8 x 58.4 x 11.2) Openframe	90%	ALQ75Y48***
2.5V	Quarter Brick Single			
20A	48V (36-75V)	1.45" x 2.30" x 0.35" (36.8 x 58.4 x 12.7) Baseplate	84%	AK45C-048L-025F20HA**
40A	48V (36-75V)	1.45" x 2.28" x 0.38" (36.8 x 57.9 x 9.7) Open frame	89%	ALQ40G48*
50A	48V (36-75V)	1.48" x 2.30" x 0.38" (37.6 x 58.4 x 9.7) Openframe	90%	ALQ50G48
3.3V	Quarter Brick Single			
12A	48V (36-75V)	1.45" x 2.30" x 0.35" (36.8 x 58.4 x 8.9) Openframe	88%	ALQ12F48*
20A	48V (36-75V)	1.45" x 2.28" x 0.50" (36.8 x 57.9 x 12.7) Baseplate	89%	AV45C-048L-033F20HA
35A	48V (36-75V)	1.45" x 2.28" x 0.38" (36.8 x 57.9 x 9.7) Open frame	90%	ALQ35F48*
40A	48V (36-75V)	1.48" x 2.30" x 0.38" (37.6 x 58.4 x 9.7) Openframe	91%	ALQ40F48
5.0V	Quarter Brick Single			
20A	48V (36-75V)	1.45" x 2.28" x 0.50" (36.8 x 57.9 x 12.7) Baseplate	89%	AV45C-048L-050F20HA
25A	48V (36-75V)	1.45" x 2.30" x 0.35" (36.8 x 58.4 x 12.7) Openframe	91%	ALQ25A48*
8.0V	Quarter Brick Single			
6A	48V (36-75V)	1.45" x 2.30" x 0.35" (36.8 x 58.4 x 8.9) Baseplate	90%	AEQ06L48*

Note: Add appropriate suffix for available option(s)

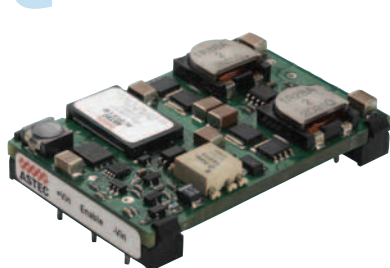
N = Negative Enable (Pos default)

* -7 = 5.8mm pin length (default is 4.8mm)

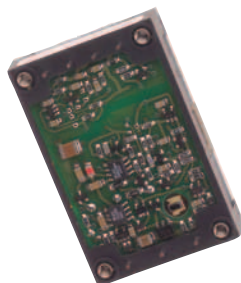
** -6 = 3.7mm pin length; -8 = 2.8mm pin length; M1 = External heatsink

*** -3 = single pair of +Vo/-Vo pins; (default is 2 pairs of +Vo/-Vo pins)

Quarter Brick Dual



ALQ15Y48N



AEQ15

Features/Description

- Drop-in replacement for several widely used dual output 1/4 bricks
- Independent control loop - eliminates cross regulation
- Tightly regulated individual output channels
- Clean, fast transient load response
- Open frame construction
- 6 - 15 amps per channel - 60 watts total output power

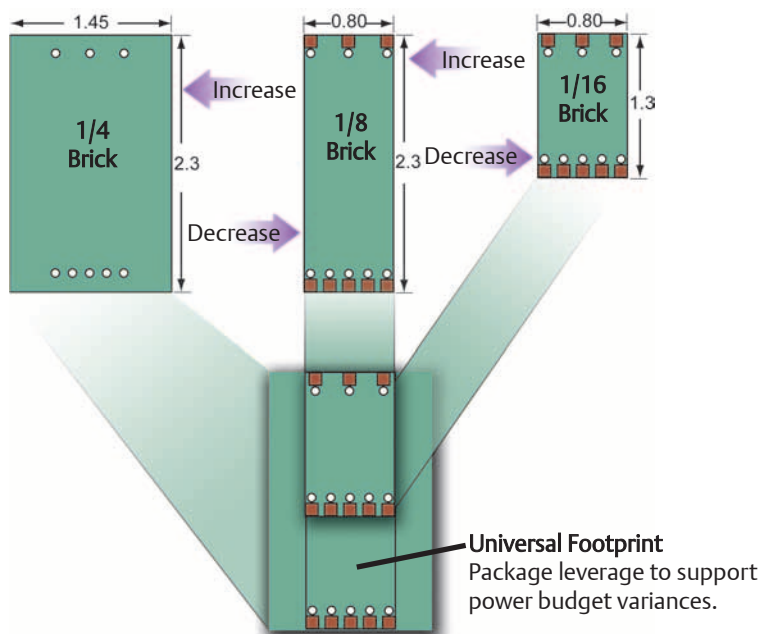
2.5V / 1.5V Quarter Brick Dual				
I _{out}	Input Voltage	Package (mm)	Efficiency	Model Number
15/15A	48V (36-75V)	1.48" x 2.30" x 0.50" (37.6 x 58.4 x 12.7) Openframe	84%	ALQ15GM48**
3.3V / 1.2V Quarter Brick Dual				
6/7A	48V (36-75V)	1.45" x 2.28" x 0.43" (36.8 x 57.9 x 10.9) Openframe	82%	ALQ07FK48*
15/15A	48V (36-75V)	1.48" x 2.30" x 0.50" (37.6 x 58.4 x 12.7) Openframe	90%	ALQ15FK48**
20/20A	48V (36-75V)	1.48" x 2.30" x 0.50" (37.6 x 58.4 x 12.7) Openframe	90%	ALQ20FK48**
3.3V / 1.5V Quarter Brick Dual				
6/7A	48V (36-75V)	1.45" x 2.28" x 0.43" (36.8 x 57.9 x 10.9) Openframe	82%	ALQ07FM48*
20/20A	48V (36-75V)	1.48" x 2.30" x 0.50" (37.6 x 58.4 x 12.7) Openframe	90%	ALQ20FM48**
3.3V / 1.8V Quarter Brick Dual				
6/7A	48V (36-75V)	1.45" x 2.28" x 0.43" (36.8 x 57.9 x 10.9) Openframe	82%	ALQ07FY48*
15/15A	48V (36-75V)	1.48" x 2.30" x 0.50" (37.6 x 58.4 x 12.7) Openframe	87%	ALQ15FY48**
3.3V / 2.5V Quarter Brick Dual				
15/15A	48V (36-75V)	1.48" x 2.30" x 0.50" (37.6 x 58.4 x 12.7) Openframe	88%	ALQ15FG48**
5.0V / 3.3V Quarter Brick Dual				
12/15A	48V (36-75V)	1.50" x 2.30" x 0.50" (38.1 x 58.4 x 12.7) Baseplate	90%	AEQ15AF48**
15/15A	48V (36-75V)	1.48" x 2.30" x 0.50" (37.6 x 58.4 x 12.7) Openframe	90%	ALQ15AF48**

Footprint/ Package Leverage

Common Features

Open Frame or Baseplate
Thru Hole or SMT
3.7mm or 5mm pin length
Negative or Positive enable

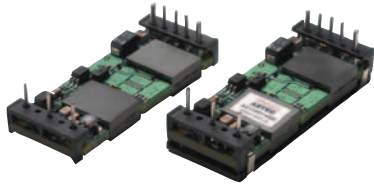
Designing multiple footprints maximizes product availability (supply) and creates greatest cost/price leverage



Note: Add appropriate suffix for available option(s)
N = Negative Enable (Pos default)

* -6 = 3.8mm pin length (4.8mm default)
** -6A = 3.7mm pin length (5mm default); A = Auto-recovery mode protection

Eighth Brick



AEO/AEL40Y48



ALO35/40

Features/Description

- Input Voltage: 36V to 75Vdc with UVLO
- Less than 1% Overall regulation
- 2.3" x 0.9" x 0.32 8th Brick industry outline
- Baseplate (AEO) or Open-frame (ALO) construction
- High Efficiency ~ 91% @ 3.3Vo
- OCP (hiccup – auto recovery)
- OVP (shutdown – auto recovery)
- OTP (shutdown – auto recovery)
- Enable On/Off
- Remote Sense
- ±10% Output Trim
- Operating Temperature Range -40°C to 100°C (Case / Baseplate)
- -40°C to 85°C Ambient (Open-Frame)
- Available in Through Hole or SMT Termination
- Meets Basic Insulation

1.2V	8th Brick Industry Standard - Isolated			
I _{out}	Input Voltage	Package (mm)	Efficiency	Model Number
25A	48V (36-75V)	0.90" x 2.3" x 0.4" (22.90 x 58.40 x 10.16) Baseplate	86%	AEO25K48*
		0.90" x 2.3" x 0.32" (22.90 x 58.40 x 8.1) Openframe	86%	ALO25K48*
35A	24V (18-36V)	0.80" x 2.3" x 0.32" (20.3 x 58.40 x 8.1) Openframe	84%	ALO35K24
40A	48V (36-75V)	0.90" x 2.3" x 0.4" (22.90 x 58.40 x 10.16) Baseplate	85%	AEO40K48
		0.90" x 2.3" x 0.32" (22.90 x 58.40 x 8.1) Openframe	85%	ALO40K48

1.5V	8th Brick Industry Standard - Isolated			
25A	48V (36-75V)	0.90" x 2.3" x 0.4" (22.90 x 58.40 x 10.16) Baseplate	87%	AEO25M48*
		0.90" x 2.3" x 0.32" (22.90 x 58.40 x 8.1) Openframe	87%	ALO25M48*
40A	48V (36-75V)	0.90" x 2.3" x 0.4" (22.90 x 58.40 x 10.16) Baseplate	86%	AEO40M48
		0.90" x 2.3" x 0.32" (22.90 x 58.40 x 8.1) Openframe	86%	ALO40M48

1.8V	8th Brick Industry Standard - Isolated			
25A	48V (36-75V)	0.90" x 2.3" x 0.4" (22.90 x 58.40 x 10.16) Baseplate	89%	AEO25Y48*
		0.90" x 2.3" x 0.32" (22.90 x 58.40 x 8.1) Openframe	89%	ALO25Y48*
35A	24V (18-36V)	0.80" x 2.3" x 0.32" (20.3 x 58.40 x 8.1) Openframe	85%	ALO35Y24
40A	48V (36-75V)	0.90" x 2.3" x 0.4" (22.90 x 58.40 x 10.16) Baseplate	88%	AEO40Y48
		0.90" x 2.3" x 0.32" (22.90 x 58.40 x 8.1) Openframe	88%	ALO40Y48

2.5V	8th Brick Industry Standard - Isolated			
20A	48V (36-75V)	0.90" x 2.3" x 0.4" (22.90 x 58.40 x 10.16) Baseplate	90%	AEO20G48*
		0.90" x 2.3" x 0.32" (22.90 x 58.40 x 8.1) Openframe	90%	ALO20G48*
30A	24V (18-36V)	0.80" x 2.3" x 0.32" (20.3 x 58.40 x 8.1) Openframe	87%	ALO30G24*
35A	48V (36-75V)	0.90" x 2.3" x 0.4" (22.90 x 58.40 x 10.16) Baseplate	90%	AEO35G48
		0.90" x 2.3" x 0.32" (22.90 x 58.40 x 8.1) Openframe	90%	ALO35G48

3.3V	8th Brick Industry Standard - Isolated			
20A	48V (36-75V)	0.90" x 2.3" x 0.4" (22.90 x 58.40 x 10.16) Baseplate	91%	AEO20F48*
		0.90" x 2.3" x 0.32" (22.90 x 58.40 x 8.1) Openframe	91%	ALO20F48*
25A	24V (18-36V)	0.80" x 2.3" x 0.32" (20.3 x 58.40 x 8.1) Openframe	88%	ALO25F24*
30A	48V (36-75V)	0.90" x 2.3" x 0.4" (22.90 x 58.40 x 10.16) Baseplate	91%	AEO30F48*
		0.90" x 2.3" x 0.32" (22.90 x 58.40 x 8.1) Openframe	91%	ALO30F48*

5.0V	8th Brick Industry Standard - Isolated			
12A	48V (36-75V)	0.90" x 2.3" x 0.4" (22.90 x 58.40 x 10.16) Baseplate	92%	AEO12A48*
		0.90" x 2.3" x 0.32" (22.90 x 58.40 x 8.1) Openframe	92%	ALO12A48*
20A	48V (36-75V)	0.90" x 2.3" x 0.4" (22.90 x 58.40 x 10.16) Baseplate	92%	AEO20A48*
		0.90" x 2.3" x 0.32" (22.90 x 58.40 x 8.1) Openframe	92%	ALO20A48*

12.0V	8th Brick Industry Standard - Isolated			
4A	48V (36-75V)	0.90" x 2.3" x 0.4" (22.90 x 58.40 x 10.16) Baseplate	93%	AEO04B48*
		0.90" x 2.3" x 0.32" (22.90 x 58.40 x 8.1) Openframe	93%	ALO04B48*
10A	48V (36-75V)	0.90" x 2.3" x 0.4" (22.90 x 58.40 x 10.16) Baseplate	93%	AEO10B48*
		0.90" x 2.3" x 0.32" (22.90 x 58.40 x 8.1) Openframe	93%	ALO10B48*

Note: Add appropriate suffix for available option(s)
N = Negative Enable (Pos default)

-6 = 3.7mm pin length (5.0mm default)
* -S = Surface Mount Termination

Sixteenth Brick



ALD25

Features/Description

- 1.3" x 0.9" x 0.34" Outline
- Up to 90% Efficiency (at 3.3V)
- High Current at 25A max load (1.8V and below)
- Meets the output current requirements for 1/8th Brick
- Meets DOSA standards
- Positive or Negative Logic Enable
- UVLO
- OCP (autorecovery)
- OVP (autorecovery)
- OTP (autorecovery)
- $\pm 10\%$ O/P Adjust
- Remote Sense
- Tight regulation and very low ripple
- Available either in SMT or TH termination
- -40°C to 85°C Ambient Operating Temperature

1.2V	16th Brick Industry Standard - Isolated			
I _{out}	Input Voltage	Package (mm)	Efficiency	Model Number
25A	48V (36-75V)	0.80" x 2.3" x 0.32" (20.3 x 33.0 x 8.9) Openframe	86%	ALD25K48
1.5V	16th Brick Industry Standard - Isolated			
25A	48V (36-75V)	0.80" x 2.3" x 0.32" (20.3 x 33.0 x 8.9) Openframe	87%	ALD25M48
1.8V	16th Brick Industry Standard - Isolated			
25A	48V (36-75V)	0.80" x 2.3" x 0.32" (20.3 x 33.0 x 8.9) Openframe	88%	ALD25Y48
2.5V	16th Brick Industry Standard - Isolated			
20A	48V (36-75V)	0.80" x 2.3" x 0.32" (20.3 x 33.0 x 8.9) Openframe	89%	ALD20G48
3.3V	16th Brick Industry Standard - Isolated			
15A	48V (36-75V)	0.80" x 2.3" x 0.32" (20.3 x 33.0 x 8.9) Openframe	90%	ALD15F48
5.0V	16th Brick Industry Standard - Isolated			
10A	48V (36-75V)	0.80" x 2.3" x 0.32" (20.3 x 33.0 x 8.9) Openframe	91%	ALD10A48

Note: Add appropriate suffix for available option(s)
N = Negative Enable (Pos default)

-6 = 3.7mm pin length (5.0mm default)
-S = Surface Mount Termination

Bus Converters



ALQ25B50

Features/Description

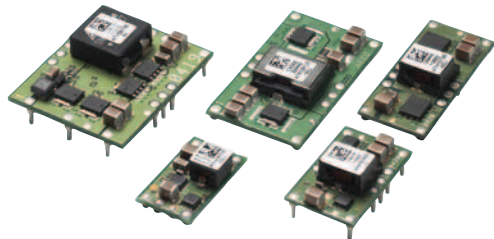
- Specialized Industry standard bricks for Distributed Power Architecture (DPA) Front End Bus source
- Optimized for driving POL regulators
- Available in multiple configurations:
DC Transformer (Open Loop): $\pm 10\%$ Vo range
Line Regulated: $\pm 5\%$ Vo range
Fully Regulated (Close Loop): $\sim 1\%$ Vo range
- Wide operating temperature range
-40°C to 100°C Case (Baseplate)
-40°C to 85°C Ambient (Openframe)
- Rich Feature Sets: Overvoltage, Over temperature protection, On/Off Enable
- Meets Basic Insulation

9.0V	Bus Converter Industry Standard - Isolated			
I _{out}	Input Voltage	Package (mm)	Efficiency	Model Number
10A	48V (38-55V)	0.90" x 2.30" x 0.38" (22.90 x 58.40 x 9.7) Openframe	95%	ALO12Q45
12.0V	Bus Converter Industry Standard - Isolated			
10A	48V (36-75V)	0.90" x 2.30" x 0.38" (22.90 x 58.40 x 9.7) Openframe	95%	ALO10B48*
25A	48V (36-75V)	2.30" x 2.40" x 0.50" (58.4 x 61.0 x 12.7) Baseplate	94%	AEH25B48
	48V (42-53V)	1.48" x 2.30" x 0.38" (37.6 x 58.4 x 9.7) Openframe	96%	ALQ25B50*
30A	48V (36-75V)	2.30" x 2.40" x 0.50" (58.4 x 61.0 x 12.7) Baseplate	94%	AEH30B48

Note: Add appropriate suffix for available option(s)
N = Negative Enable (Pos default)

* -6 = 3.8mm pin length (5.0mm default)

Industry Standard Non-Isolated



Features/Description

- ATH Series modules with Auto-Track Sequencing are Point-of-Load Alliance (POLA) products
- POLA offers customers advanced non-isolated modules that provide the same functionality form factor and electrical interoperability
- Products range from 6A to 30A in the families
- High efficiency
- Standardized electronically interoperable technology
- Same PWM for consistent performance under all conditions
- EN60950 (TÜV Product Service), UL/cUL60950
- POLA partners have common lead-free manufacturing roadmap
- Consult factory or www.astecpower.com for new POLA releases

Featuring “Auto-Track™ Sequencing”

0.8 - 2.5V POLA Industry Standard, Non-Isolated				
I _{out}	Input Voltage	Package (mm)	Efficiency	Model Number
6A	3.3V (3.0-3.6V)	0.87" x 0.50" x 0.34" (22.1 x 12.70 x 8.64)	95%	ATH06T033-9*
8A	3.3V (3.0-3.6V)	0.90" x 0.33" x 0.50" (22.9 x 8.4 x 12.70) SIP	94%	PTV03010WAH
10A	3.3V (3.0-3.6V)	1.00" x 0.62" x 0.35" (25.4 x 15.7 x 8.9)	92%	ATH10T033-9*
15A	3.3V (3.0-3.6V)	1.37" x 0.62" x 0.35" (34.8 x 15.7 x 8.9)	95%	ATH15T033-9*
18A	3.3V (3.0-3.6V)	1.75" x 0.35" x 0.50" (44.5 x 8.9 x 12.7) SIP	92%	PTV03020WAH
22A	3.3V (3.0-3.6V)	1.50" x 0.87" x 0.35" (38.1 x 22.1 x 8.9)	93%	ATH22T033-9*
30A	3.3V (3.0-3.6V)	1.37" x 1.12" x 0.35" (34.8 x 28.4 x 8.9)	93%	ATH30T033-9*

0.8-3.6V POLA Industry Standard, Non-Isolated				
I _{out}	Input Voltage	Package (mm)	Efficiency	Model Number
6A	5.0V (4.5-5.5V)	0.87" x 0.50" x 0.34" (22.1 x 12.70 x 8.64)	95%	ATH06T05-9*
8A	5.0V (4.5-5.5V)	0.90" x 0.33" x 0.50" (22.9 x 8.4 x 12.70) SIP	95%	PTV05010WAH
10A	5.0V (4.5-5.5V)	1.00" x 0.62" x 0.35" (25.4 x 15.7 x 8.9)	92%	ATH10T05-9*
15A	5.0V (4.5-5.5V)	1.37" x 0.62" x 0.35" (34.8 x 15.7 x 8.9)	96%	ATH15T05-9*
18A	5.0V (4.5-5.5V)	1.75" x 0.35" x 0.50" (44.5 x 8.9 x 12.7) SIP	92%	PTV05020WAH
22A	5.0V (4.5-5.5V)	1.50" x 0.87" x 0.35" (38.1 x 22.1 x 8.9)	93%	ATH22T05-9*
30A	5.0V (4.5-5.5V)	1.37" x 1.12" x 0.35" (34.8 x 28.4 x 8.9)	94%	ATH30T05-9*

1.2-5.5V POLA Industry Standard, Non-Isolated				
I _{out}	Input Voltage	Package (mm)	Efficiency	Model Number
6A	12.0V (10.8-13.2V)	0.87" x 0.50" x 0.34" (22.1 x 12.70 x 8.64)	95%	ATH06K12-9*
8A	12.0V (10.8-13.2V)	0.90" x 0.33" x 0.50" (22.9 x 8.4 x 12.70) SIP	95%	PTV12010WAH
10A	12.0V (10.8-13.2V)	1.00" x 0.62" x 0.35" (25.4 x 15.7 x 8.9)	92%	ATH10K12-9*
12A	12.0V (10.8-13.2V)	1.37" x 0.62" x 0.35" (34.8 x 15.7 x 8.9)	94%	ATH12K12-9*
18A	12.0V (10.8-13.2V)	1.50" x 0.87" x 0.35" (38.1 x 22.1 x 8.9)	95%	ATH18K12-9*
26A	12.0V (10.8-13.2V)	1.75" x 0.35" x 0.50" (44.5 x 8.9 x 12.7) SIP	92%	PTV12020WAH
		1.37" x 1.12" x 0.35" (34.8 x 28.4 x 8.9)	94%	ATH26K12-9*

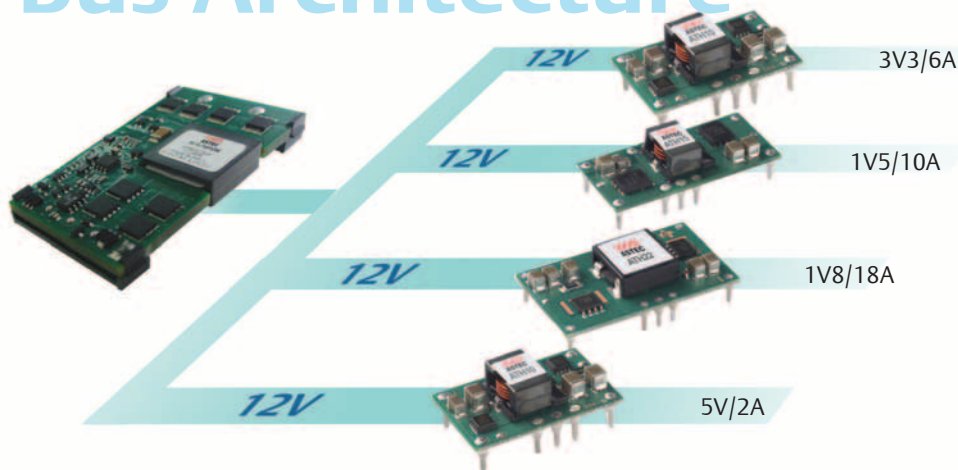
Note: *Add appropriate suffix for available option(s)

S = Surface Mount Termination (default is TH)

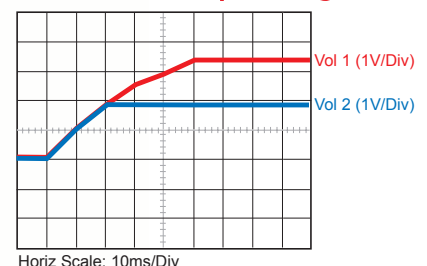
J = Tray Packaging (default is T&R)

SJ = Surface Mount/Tray Package

Bus Architecture



Auto-Track Sequencing



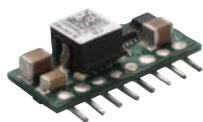


The "Customer" Alliance



Upcoming POLA Products

8A & 18A New SIPs w/ AutoTrack



The 8A and 18A Single-In-Line (SIP) converters are the first Vertical-mount POLA offering that features Auto-Track. These modules are less than 0.35" in width consuming minimal area and resulting to better board space utilization. The SIP modules come in 3.3V, 5V and 12V input voltages to cater to various distributed power architecture schemes.

50-60A High Density, SMD POL



The new 50-60A series is an extension of the existing 5 Horizontal-mount families employing the same POLA features such as: Auto-Track; Margin pins; Differential Remote sense. With this 6th addition, it further allows flexibility and scalability of power for applications ranging from 6A all the way to 60A.

New POLA 1/16th Brick



The new 16th brick comes in an industry standard outline of 1.3" x 0.9" x 0.34" either in SMT or Through hole termination. It's an inch shorter than the 8th brick and delivers similar power levels of around 50W. It also shares the same pin designation as the quarter and 8th bricks. All these add up into making the 16th brick as an attractive choice for densely populated boards, low power applications.

6A, 10A, 15A SMT POLs for DDR/QDR Applications



The new memory modules provide the required voltage terminations needed to supply the tracking voltage, V_{TT} for DDR/QDR's. These modules can track voltages from 0.55V up to 1.8V. The 3 power levels provide excellent scalability and ease of use for most memory power applications.

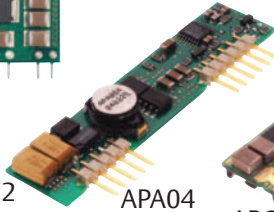
Point-of-Load



APA18



APC12



APA04



APC08

Features/Description

- Non-Isolated Point of Load (POL) converters from 4A to 18A
- Various input voltage ranges to choose from that suits different Distributed Power Architecture (DPA) bus voltages
- Output current rating higher than commercially available POLs
- Adjustable output voltage through external resistor programming
- Low Profile SMT modules - APC's
- SIP Through-Hole modules - APA's
- Wide operating temperature range from -40° up to 85°C Ambient
- Remote Sense, Power Good signal, Active Ishare are extra options that exist for some codes

0.75-5.5V Industry Standard - Non-Isolated				
I _{out}	Input Voltage	Package (mm)	Efficiency	Model Number
18A	3.0-5.5V	2.00" x 0.39" x 0.50" (50.8 x 9.91 x 12.7) SIP	92%	APA18T04-9*
18A	3.0-5.5V	1.30" x 0.53" x 0.34" (33.0 x 13.46 x 8.64) SMT	92%	APC18T04-9
18A	10.0-14.0V	2.00" x 0.39" x 0.50" (50.8 x 9.91 x 12.7) SIP	92%	APA18T12-9*
18A	10.0-14.0V	1.30" x 0.53" x 0.34" (33.0 x 13.46 x 8.64) SMT	92%	APC18T12-9
0.9V Industry Standard - Non-Isolated				
8A	1.8-6.0V	1.30" x 0.53" x 0.29" (33.0 x 13.46 x 8.26) SMT	76%	APC08J03
8A	5.0-13.0V	1.30" x 0.53" x 0.29" (33.0 x 13.46 x 8.26) SMT	75%	APC08J08
12A	1.8-6.0V	1.30" x 0.63" x 0.37" (33.0 x 16.0 x 9.4) SMT	76%	APC12J03
12A	5.0-13.0V	1.30" x 0.63" x 0.37" (33.0 x 16.0 x 9.4) SMT	75%	APC12J08
1.2V Industry Standard - Non-Isolated				
6A	3.0-5.5V	2.50" x 0.31" x 0.55" (63.50 x 7.87 x 13.97) SIP	78%	APA06K04*
8A	1.8-6.0V	1.30" x 0.53" x 0.29" (33.0 x 13.46 x 8.26) SMT	81%	APC08K03
8A	5.0-13.0V	1.30" x 0.53" x 0.29" (33.0 x 13.46 x 8.26) SMT	81%	APC08K08
12A	1.8-6.0V	1.30" x 0.63" x 0.37" (33.0 x 16.0 x 9.4) SMT	81%	APC12K03
12A	5.0-13.0V	1.30" x 0.63" x 0.37" (33.0 x 16.0 x 9.4) SMT	81%	APC12K08
1.8V Industry Standard - Non-Isolated				
6A	3.0-5.5V	2.50" x 0.31" x 0.55" (63.50 x 7.87 x 13.97) SIP	83%	APA06Y04*
8A	2.2-6.0V	1.30" x 0.53" x 0.29" (33.0 x 13.46 x 8.26) SMT	88%	APC08Y03
8A	5.0-13.0V	1.30" x 0.53" x 0.29" (33.0 x 13.46 x 8.26) SMT	86%	APC08Y08
12A	2.2-6.0V	1.30" x 0.63" x 0.37" (33.0 x 16.0 x 9.4) SMT	88%	APC12Y03
12A	5.0-13.0V	1.30" x 0.63" x 0.37" (33.0 x 16.0 x 9.4) SMT	86%	APC12Y08
2.1V Industry Standard - Non-Isolated				
6A	3.0-5.5V	2.50" x 0.31" x 0.55" (63.50 x 7.87 x 13.97) SIP	86%	APA06D04*
2.5V Industry Standard - Non-Isolated				
6A	4.5-5.5V	2.50" x 0.31" x 0.55" (63.50 x 7.87 x 13.97) SIP	88%	APA06G05*
8A	3.0-6.0V	1.30" x 0.53" x 0.29" (33.0 x 13.46 x 8.26) SMT	91%	APC08G03
8A	5.0-13.0V	1.30" x 0.53" x 0.29" (33.0 x 13.46 x 8.26) SMT	90%	APC08G08
12A	3.0-6.0V	1.30" x 0.63" x 0.37" (33.0 x 16.0 x 9.4) SMT	91%	APC12G03
12A	5.0-13.0V	1.30" x 0.63" x 0.37" (33.0 x 16.0 x 9.4) SMT	90%	APC12G08
3.3V Industry Standard - Non-Isolated				
6A	4.5-5.5V	2.50" x 0.31" x 0.55" (63.50 x 7.87 x 13.97) SIP	89%	APA06F05*
8A	4.0-6.0V	1.30" x 0.53" x 0.29" (33.0 x 13.46 x 8.26) SMT	93%	APC08F03
8A	5.0-13.0V	1.30" x 0.53" x 0.29" (33.0 x 13.46 x 8.26) SMT	92%	APC08F08
12A	4.0-6.0V	1.30" x 0.63" x 0.37" (33.0 x 16.0 x 9.4) SMT	93%	APC12F03
12A	5.0-13.0V	1.30" x 0.63" x 0.37" (33.0 x 16.0 x 9.4) SMT	92%	APC12F08
5.0V Industry Standard - Non-Isolated				
4A	3.0-4.0V	2.50" x 0.31" x 0.55" (63.50 x 7.87 x 13.97) SIP	87%	APA04A03
5A	7.5-13.0V	1.30" x 0.53" x 0.29" (33.0 x 13.46 x 8.26) SMT	94%	APC05A08
6.0V Industry Standard - Non-Isolated				
4A	8.5-13.0V	1.30" x 0.53" x 0.29" (33.0 x 13.46 x 8.26) SMT	95%	APC04S08

Note: Add appropriate suffix for available option(s)

*H = Right angle pins for horizontal mounting

*E-6 = Basic Function, 3.8mm pin length

(default is Full Function, 6.0mm pin length)

All APC08 and APC12 have the following options. Consult website for the correct optional combinations.

W = Wide bandwidth

-9 = Output Adjust

9MA = Output Trim, Power Good Signal, Active Current Share

-J = for trays (default is T&R)

2nd Generation



PFC module
1600 watt

Features/Description

- 1600 Watt
- Unity power factor
- Universal input and frequency range
- Pos and Neg enable
- Paralleling with current share
- IEC 1000-3.2 compliance
- 100°C baseplate
- Clock Synch (in/out)
- Current monitoring
- Vout adjust
- On/off enable
- Remote sensing
- 95% Efficiency
- Fast Transient Response

AIF04ZPFC		PFC Module			
Vout	Iout	Input Voltage	Package (mm)	Efficiency	Model Number
380V	4.2A	85-264Vac	4.60" x 2.40" x 0.50" (116.8 x 61.0 x 12.7) Baseplate	95%	AIF04ZPFC-01
380V	4.2A	85-264Vac	4.60" x 2.40" x 0.50" (116.8 x 61.0 x 12.7) Baseplate	95%	AIF04ZPFC-02

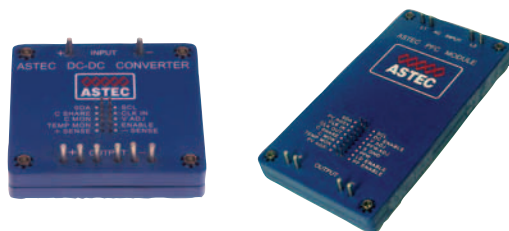
For stand-alone application - AIF04ZPFC-01

For parallel application - AIF04ZPFC-02

Note: Add appropriate suffix for available option

N = Negative Enable (Pos default)

2nd Generation



300V input 250 - 600W output

Features/Description

- 300V Input (250V to 420V PFC Ready)
- 2nd Generation Product
- Standard thru-hole full and half bricks
- 250 watts (50Amps); 600 watts (120Amps)
- Power Density > 100W/in³
- Baseplate construction – 100 °C max
- Embedded Controls on secondary side:
- Temp monitor
- Current sharing
- Power-good signal
- Current limit & OVP adjust

AIF 300Vin		Full Brick			
Vout	Iout	Input Voltage	Package (mm)	Efficiency	Model Number
1.80V	120A	300V (250-420V)	4.60" x 2.40" x 0.50" (116.8 x 61.0 x 12.7) Baseplate	80%	AIF120Y300
3.3V	120A	300V (250-420V)	4.60" x 2.40" x 0.50" (116.8 x 61.0 x 12.7) Baseplate	87%	AIF120F300
5.0V	80A	300V (250-420V)	4.60" x 2.40" x 0.50" (116.8 x 61.0 x 12.7) Baseplate	90%	AIF80A300
12.0V	50A	300V (250-420V)	4.60" x 2.40" x 0.50" (116.8 x 61.0 x 12.7) Baseplate	90%	AIF50B300
15.0V	40A	300V (250-420V)	4.60" x 2.40" x 0.50" (116.8 x 61.0 x 12.7) Baseplate	90%	AIF40C300
24.0V	25A	300V (250-420V)	4.60" x 2.40" x 0.50" (116.8 x 61.0 x 12.7) Baseplate	90%	AIF25H300

AIH 300Vin		Half Brick			
Vout	Iout	Input Voltage	Package	Efficiency	Model Number
1.8V	50A	300V (250-420V)	2.30" x 2.40" x 0.50" (58.4 x 61.0 x 12.7) Baseplate	80%	AIH50Y300
3.3V	50A	300V (250-420V)	2.30" x 2.40" x 0.50" (58.4 x 61.0 x 12.7) Baseplate	85%	AIH50F300
5.0V	40A	300V (250-420V)	2.30" x 2.40" x 0.50" (58.4 x 61.0 x 12.7) Baseplate	88%	AIH40A300
12.0V	20A	300V (250-420V)	2.30" x 2.40" x 0.50" (58.4 x 61.0 x 12.7) Baseplate	90%	AIH20B300
15.0V	16A	300V (250-420V)	2.30" x 2.40" x 0.50" (58.4 x 61.0 x 12.7) Baseplate	90%	AIH16C300
24.0V	10A	300V (250-420V)	2.30" x 2.40" x 0.50" (58.4 x 61.0 x 12.7) Baseplate	90%	AIH10H300

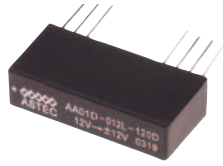
Note: Add appropriate suffix for available option

N = Negative Enable (Pos default)

DIP & SIP Packages



AA05E



AA01D

Features/Description

- Input Voltage: 9-18, 18-36, 36 - 75V
- Power: 1W - 5W
- Regulated outputs
- Operating Temperature: -40 to 85°C (Ambient)
- Protection: OVP, OCP, LVP
- Remote On/Off
- 1500Vdc isolation

1-2W		Industrial			
Input Voltage	Output	Package (mm)	I/O Isolated	Efficiency	Model
4.5-5.5V	5V @ 0.200A	1.25" x 0.34" x 0.57" (31.75 x 8.64 x 14.48) SIP	500VDC	50%	AA01D-005L-050S
	9V @ 0.200A	1.25" x 0.34" x 0.57" (31.75 x 8.64 x 14.48) SIP	500VDC	55%	AA01D-005L-090S
	12V @ 0.125A	1.25" x 0.34" x 0.57" (31.75 x 8.64 x 14.48) SIP	500VDC	61%	AA01D-005L-120S
	15V @ 0.100A	1.25" x 0.34" x 0.57" (31.75 x 8.64 x 14.48) SIP	500VDC	62%	AA01D-005L-150S
	±12V @ 0.060A	1.25" x 0.34" x 0.57" (31.75 x 8.64 x 14.48) SIP	500VDC	55%	AA01D-005L-120D
	±15V @ 0.050A	1.25" x 0.34" x 0.57" (31.75 x 8.64 x 14.48) SIP	500VDC	61%	AA01D-005L-150D
10.8-13.2V	5V @ 0.200A	1.25" x 0.34" x 0.57" (31.75 x 8.64 x 14.48) SIP	500VDC	50%	AA01D-012L-050S
	9V @ 0.200A	1.25" x 0.34" x 0.57" (31.75 x 8.64 x 14.48) SIP	500VDC	55%	AA01D-012L-090S
	12V @ 0.125A	1.25" x 0.34" x 0.57" (31.75 x 8.64 x 14.48) SIP	500VDC	60%	AA01D-012L-120S
	15V @ 0.100A	1.25" x 0.34" x 0.57" (31.75 x 8.64 x 14.48) SIP	500VDC	61%	AA01D-012L-150S
	±12V @ 0.060A	1.25" x 0.34" x 0.57" (31.75 x 8.64 x 14.48) SIP	500VDC	61%	AA01D-012L-120D
	±15V @ 0.050A	1.25" x 0.34" x 0.57" (31.75 x 8.64 x 14.48) SIP	500VDC	60%	AA01D-012L-150D
21.6-26.4V	5V @ 0.200A	1.25" x 0.34" x 0.57" (31.75 x 8.64 x 14.48) SIP	500VDC	50%	AA01D-024L-050S
	9V @ 0.200A	1.25" x 0.34" x 0.57" (31.75 x 8.64 x 14.48) SIP	500VDC	53%	AA01D-024L-090S
	12V @ 0.125A	1.25" x 0.34" x 0.57" (31.75 x 8.64 x 14.48) SIP	500VDC	55%	AA01D-024L-120S
	15V @ 0.100A	1.25" x 0.34" x 0.57" (31.75 x 8.64 x 14.48) SIP	500VDC	58%	AA01D-024L-150S
	±12V @ 0.060A	1.25" x 0.34" x 0.57" (31.75 x 8.64 x 14.48) SIP	500VDC	60%	AA01D-024L-120D
	±15V @ 0.050A	1.25" x 0.34" x 0.57" (31.75 x 8.64 x 14.48) SIP	500VDC	61%	AA01D-024L-150D

3-5W		Industrial			
9-18V	3.3V @ 1.0A	1.25" x 0.8" x 0.4" (31.75 x 20.3 x 10.16) DIP	1500VDC	65%	AA05E-012L-033S
	5V @ 1.0A	1.25" x 0.8" x 0.4" (31.75 x 20.3 x 10.16) DIP	1500VDC	70%	AA05E-012L-050S
	12V @ 0.41A	1.25" x 0.8" x 0.4" (31.75 x 20.3 x 10.16) DIP	1500VDC	77%	AA05E-012L-120S
	15V @ 0.33A	1.25" x 0.8" x 0.4" (31.75 x 20.3 x 10.16) DIP	1500VDC	77%	AA05E-012L-150S
	±12V @ 0.20A	1.25" x 0.8" x 0.4" (31.75 x 20.3 x 10.16) DIP	1500VDC	77%	AA05E-012L-120D
	±15V @ 0.16A	1.25" x 0.8" x 0.4" (31.75 x 20.3 x 10.16) DIP	1500VDC	77%	AA05E-012L-150D
18-36V	3.3V @ 1.0A	1.25" x 0.8" x 0.4" (31.75 x 20.3 x 10.16) DIP	1500VDC	69%	AA05E-024L-033S
	5V @ 1.0A	1.25" x 0.8" x 0.4" (31.75 x 20.3 x 10.16) DIP	1500VDC	74%	AA05E-024L-050S
	12V @ 0.41A	1.25" x 0.8" x 0.4" (31.75 x 20.3 x 10.16) DIP	1500VDC	80%	AA05E-024L-120S
	15V @ 0.33A	1.25" x 0.8" x 0.4" (31.75 x 20.3 x 10.16) DIP	1500VDC	80%	AA05E-024L-150S
	±12V @ 0.20A	1.25" x 0.8" x 0.4" (31.75 x 20.3 x 10.16) DIP	1500VDC	80%	AA05E-024L-120D
	±15V @ 0.16A	1.25" x 0.8" x 0.4" (31.75 x 20.3 x 10.16) DIP	1500VDC	80%	AA05E-024L-150D
36-72V	3.3V @ 1.0A	1.25" x 0.8" x 0.4" (31.75 x 20.3 x 10.16) DIP	1500VDC	73%	AA05E-048L-033S
	5V @ 1.0A	1.25" x 0.8" x 0.4" (31.75 x 20.3 x 10.16) DIP	1500VDC	78%	AA05E-048L-050S
	12V @ 0.41A	1.25" x 0.8" x 0.4" (31.75 x 20.3 x 10.16) DIP	1500VDC	80%	AA05E-048L-120S
	15V @ 0.33A	1.25" x 0.8" x 0.4" (31.75 x 20.3 x 10.16) DIP	1500VDC	82%	AA05E-048L-150S
	±12V @ 0.20A	1.25" x 0.8" x 0.4" (31.75 x 20.3 x 10.16) DIP	1500VDC	80%	AA05E-048L-120D
	±15V @ 0.16A	1.25" x 0.8" x 0.4" (31.75 x 20.3 x 10.16) DIP	1500VDC	80%	AA05E-048L-150D

Standard Packages



Features/Description

- Input Voltage: 9-18, 18-36, 36 - 75V
- Power: 10W - 25W
- Regulated outputs
- Operating Temperature: -40 to 85°C (Ambient)
- Protection: OVP, OCP, LVP
- Remote On/Off
- 1500Vdc isolation

7.5-10W		Industrial			
Input Voltage	Output	Package (mm)	I/O Isolated	Efficiency	Model
9-36V	3.3V @ 2.42A	1.00" x 2.00" x 0.38" (25.4 x 50.8 x 9.7)	1500VDC	76%	AA10U-024L-033S
	5V @ 2.00A	1.00" x 2.00" x 0.38" (25.4 x 50.8 x 9.7)	1500VDC	80%	AA10U-024L-050S
	12V @ 0.830A	1.00" x 2.00" x 0.38" (25.4 x 50.8 x 9.7)	1500VDC	84%	AA10U-024L-120S
	15V @ 0.670A	1.00" x 2.00" x 0.38" (25.4 x 50.8 x 9.7)	1500VDC	83%	AA10U-024L-150S
	±5V @ .750A	1.00" x 2.00" x 0.38" (25.4 x 50.8 x 9.7)	1500VDC	79%	AA10U-024L-050D
	±12V @ .375A	1.00" x 2.00" x 0.38" (25.4 x 50.8 x 9.7)	1500VDC	82%	AA10U-024L-120D
	±15V @ .300A	1.00" x 2.00" x 0.38" (25.4 x 50.8 x 9.7)	1500VDC	83%	AA10U-024L-150D
18-75V	3.3V @ 2.42A	1.00" x 2.00" x 0.38" (25.4 x 50.8 x 9.7)	1500VDC	77%	AA10U-048L-033S
	5V @ 2.00A	1.00" x 2.00" x 0.38" (25.4 x 50.8 x 9.7)	1500VDC	82%	AA10U-048L-050S
	12V @ 0.830A	1.00" x 2.00" x 0.38" (25.4 x 50.8 x 9.7)	1500VDC	85%	AA10U-048L-120S
	15V @ .670A	1.00" x 2.00" x 0.38" (25.4 x 50.8 x 9.7)	1500VDC	84%	AA10U-048L-150S
	±5V @ .750A	1.00" x 2.00" x 0.38" (25.4 x 50.8 x 9.7)	1500VDC	81%	AA10U-048L-050D
	±12V @ 0.375A	1.00" x 2.00" x 0.38" (25.4 x 50.8 x 9.7)	1500VDC	86%	AA10U-048L-120D
	±15V @ 0.300A	1.00" x 2.00" x 0.38" (25.4 x 50.8 x 9.7)	1500VDC	83%	AA10U-048L-150D

10W		Industrial			
9-18V	3.3V@2.5A	1.00" x 2.00" x 0.35" (25.4 x 50.8 x 8.9)	500VDC	77%	AEE02F12-49
	±5.0V@1A	1.00" x 2.00" x 0.35" (25.4 x 50.8 x 8.9)	500VDC	80%	AEE01AA12-4
	5.0V@2A	1.00" x 2.00" x 0.35" (25.4 x 50.8 x 8.9)	500VDC	80%	AEE02A12-49
	±12.0V@420mA	1.00" x 2.00" x 0.35" (25.4 x 50.8 x 8.9)	500VDC	83%	AEE00BB12-4
	12.0V@840mA	1.00" x 2.00" x 0.35" (25.4 x 50.8 x 8.9)	500VDC	83%	AEE00B12-49
	±15.0V@335mA	1.00" x 2.00" x 0.35" (25.4 x 50.8 x 8.9)	500VDC	84%	AEE00CC12-4
	15.0V@670mA	1.00" x 2.00" x 0.35" (25.4 x 50.8 x 8.9)	500VDC	84%	AEE00C12-49
18-36V	3.3V@2.5A	1.00" x 2.00" x 0.35" (25.4 x 50.8 x 8.9)	500VDC	76%	AEE02F24
	±5.0V@1A	1.00" x 2.00" x 0.35" (25.4 x 50.8 x 8.9)	500VDC	79%	AEE01AA24
	5.0V@2A	1.00" x 2.00" x 0.35" (25.4 x 50.8 x 8.9)	500VDC	78%	AEE02A24
	8.0V@1.25mA	1.00" x 2.00" x 0.35" (25.4 x 50.8 x 8.9)	500VDC	82%	AEE01L24
	±12.0V@420mA	1.00" x 2.00" x 0.35" (25.4 x 50.8 x 8.9)	500VDC	83%	AEE00BB24
	12.0V@840mA	1.00" x 2.00" x 0.35" (25.4 x 50.8 x 8.9)	500VDC	82%	AEE00B24
	±15.0V@335mA	1.00" x 2.00" x 0.35" (25.4 x 50.8 x 8.9)	500VDC	83%	AEE00CC24
36-72V	15.0V@670mA	1.00" x 2.00" x 0.35" (25.4 x 50.8 x 8.9)	500VDC	82%	AEE00C24
	3.3V@2.5A	1.00" x 2.00" x 0.35" (25.4 x 50.8 x 8.9)	500VDC	77%	AEE02F48
	±5.0V@1A	1.00" x 2.00" x 0.35" (25.4 x 50.8 x 8.9)	500VDC	79%	AEE01AA48
	5.0V@2A	1.00" x 2.00" x 0.35" (25.4 x 50.8 x 8.9)	500VDC	80%	AEE02A48
	5.2V@2A	1.00" x 2.00" x 0.35" (25.4 x 50.8 x 8.9)	500VDC	77%	AEE02A48-5V2
	8.0V@1.25mA	1.00" x 2.00" x 0.35" (25.4 x 50.8 x 8.9)	500VDC	82%	AEE01L48
	±12.0V@420mA	1.00" x 2.00" x 0.35" (25.4 x 50.8 x 8.9)	500VDC	85%	AEE00BB48
	12.0V@840mA	1.00" x 2.00" x 0.35" (25.4 x 50.8 x 8.9)	500VDC	85%	AEE00B48
	±15.0V@335mA	1.00" x 2.00" x 0.35" (25.4 x 50.8 x 8.9)	500VDC	83%	AEE00CC48
	15.0V@670mA	1.00" x 2.00" x 0.35" (25.4 x 50.8 x 8.9)	500VDC	85%	AEE00C48

Available options listed separately -1 = Negative enable 9 = Trim pin
 -4 = Positive enable pin -7 = Pin length is 5.6mm

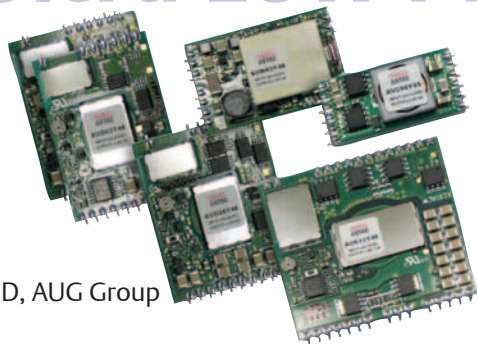
Low Power Industrial Products

15W	Industrial				
Input Voltage	Output	Package (mm)	I/O Isolation	Efficiency	Model
18-36V	3.3V@4.5A	1.00" x 2.00" x 0.40" (25.4 x 50.8 x 10.16)	500VDC	84%	AEE04F24-197
		1.00" x 2.00" x 0.40" (25.4 x 50.8 x 10.16)	500VDC	84%	AEE04F24-96
		1.00" x 2.00" x 0.40" (25.4 x 50.8 x 10.16)	500VDC	84%	AEE04F24-97
		1.00" x 2.00" x 0.40" (25.4 x 50.8 x 10.16)	500VDC	84%	AEE04F24-98
36-75V	2.5.0V@4.5A	1.00" x 2.00" x 0.40" (25.4 x 50.8 x 10.16)	500VDC	81%	AEE04G48-197
	3.3V@4.5A	1.00" x 2.00" x 0.40" (25.4 x 50.8 x 10.16)	500VDC	85%	AEE04F48-17
		1.00" x 2.00" x 0.40" (25.4 x 50.8 x 10.16)	500VDC	85%	AEE04F48-197
		1.00" x 2.00" x 0.40" (25.4 x 50.8 x 10.16)	500VDC	85%	AEE04F48-7
		1.00" x 2.00" x 0.40" (25.4 x 50.8 x 10.16)	500VDC	85%	AEE04F48-97
	5.0V@3A	1.00" x 2.00" x 0.40" (25.4 x 50.8 x 10.16)	500VDC	85%	AEE03A48-17
		1.00" x 2.00" x 0.40" (25.4 x 50.8 x 10.16)	500VDC	85%	AEE03A48-197
		1.00" x 2.00" x 0.40" (25.4 x 50.8 x 10.16)	500VDC	85%	AEE03A48-7
		1.00" x 2.00" x 0.40" (25.4 x 50.8 x 10.16)	500VDC	85%	AEE03A48-97
	±12.0V@630mA	1.00" x 2.00" x 0.40" (25.4 x 50.8 x 10.16)	500VDC	86%	AEE01BB48-7
	12.0V@1.25A	1.00" x 2.00" x 0.40" (25.4 x 50.8 x 10.16)	500VDC	87%	AEE01B48-17
		1.00" x 2.00" x 0.40" (25.4 x 50.8 x 10.16)	500VDC	87%	AEE01B48-197
		1.00" x 2.00" x 0.40" (25.4 x 50.8 x 10.16)	500VDC	87%	AEE01B48-7
		1.00" x 2.00" x 0.40" (25.4 x 50.8 x 10.16)	500VDC	87%	AEE01B48-97

25W	Industrial				
18-36V	3.3V@5A	2.00" x 2.56" x 0.33" (50.8 x 65.0 x 8.4)	500VDC	80%	AEV05F24
	3.3V@6A	1.60" x 2.00" x 0.38" (40.6 x 50.8 x 9.7)	1500VDC	83%	ALT06F24*
	±5.0V@2A	2.00" x 2.56" x 0.33" (50.8 x 65.0 x 8.4)	500VDC	83%	AEV02AA24
	5.0V@4A	2.00" x 2.56" x 0.33" (50.8 x 65.0 x 8.4)	500VDC	83%	AEV04A24
	5.0V@5A	1.60" x 2.00" x 0.38" (40.6 x 50.8 x 9.7)	1500VDC	85%	ALT05A24*
	±12.0V@1.05A	2.00" x 2.56" x 0.33" (50.8 x 65.0 x 8.4)	500VDC	86%	AEV01BB24
	12.0V@2.1A	2.00" x 2.56" x 0.33" (50.8 x 65.0 x 8.4)	500VDC	85%	AEV02B24
	±15.0V@850mA	2.00" x 2.56" x 0.33" (50.8 x 65.0 x 8.4)	500VDC	86%	AEV01CC24
36-72V	15.0V@1.7A	2.00" x 2.56" x 0.33" (50.8 x 65.0 x 8.4)	500VDC	86%	AEV02C24
	3.3V@5A	2.00" x 2.56" x 0.33" (50.8 x 65.0 x 8.4)	500VDC	80%	AEV05F48
	±5.0V@2A	2.00" x 2.56" x 0.33" (50.8 x 65.0 x 8.4)	500VDC	83%	AEV02AA48
	5.0V@4A	2.00" x 2.56" x 0.33" (50.8 x 65.0 x 8.4)	500VDC	83%	AEV04A48
	6.0V@4.1A	2.00" x 2.56" x 0.33" (50.8 x 65.0 x 8.4)	500VDC	86%	AEV04N48
	±12.0V@1.05A	2.00" x 2.56" x 0.33" (50.8 x 65.0 x 8.4)	500VDC	86%	AEV01BB48
	12.0V@2.1A	2.00" x 2.56" x 0.33" (50.8 x 65.0 x 8.4)	500VDC	86%	AEV02B48
	±15.0V@850mA	2.00" x 2.56" x 0.33" (50.8 x 65.0 x 8.4)	500VDC	86%	AEV01CC48
	15.0V@1.7A	2.00" x 2.56" x 0.33" (50.8 x 65.0 x 8.4)	500VDC	86%	AEV02C48
	3.3V@6A	1.60" x 2.00" x 0.38" (40.6 x 50.8 x 9.7)	1500VDC	85%	ALT06F48*
	±5.0V@3A	1.60" x 2.00" x 0.38" (40.6 x 50.8 x 9.7)	1500VDC	84%	ALT03AA48*
	5.0V@5A	1.60" x 2.00" x 0.38" (40.6 x 50.8 x 9.7)	1500VDC	87%	ALT05A48*
	8.0V@3.13A	1.60" x 2.00" x 0.38" (40.6 x 50.8 x 9.7)	1500VDC	85%	ALT03L48*
	±12.0V@1.25A	1.60" x 2.00" x 0.38" (40.6 x 50.8 x 9.7)	1500VDC	87%	ALT01BB48*
	12.0V@2A	1.60" x 2.00" x 0.38" (40.6 x 50.8 x 9.7)	1500VDC	87%	ALT02B48*
	15.0V@1.67A	1.60" x 2.00" x 0.38" (40.6 x 50.8 x 9.7)	1500VDC	87%	ALT01C48*

Available options listed separately * Add appropriate suffix N = Negative Enable (Pos default)
 -1 = Negative enable (Pos default)
 -7 = Pin length is 5.6mm
 9 = Trim pin

Ultra Low Profile



AUD, AUG Group

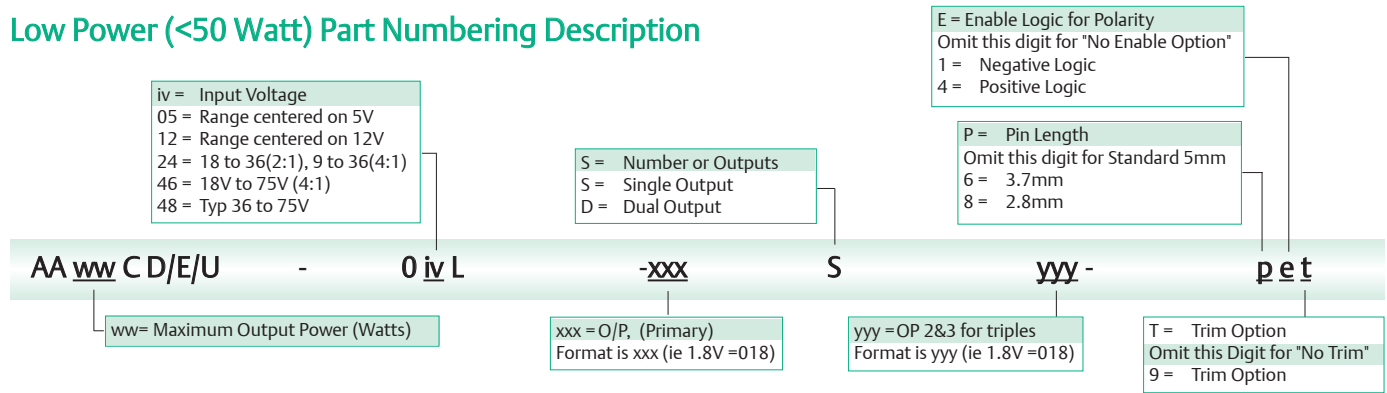
Features/Description

- Ultra Low Profile - 4.2mm - for low profile applications
- Input Voltage: 36 - 75V
- Power: 10W - 30W
- Output Voltage: 1.5, 1.8, 2.5 3.3 and 5 volts
- Output Current: 2A -10A
- High Efficiency: 89% at 5 volts output
- Regulation to zero load
- Operating Temperature: -40 to 85°C (Ambient)
- Protection: OVP, OCP, LVP
- Remote On/Off
- Current Sharing for parallel application
- Meet CISPR22, Class A on Conducted and Radiated EMI
- 1500Vdc isolation

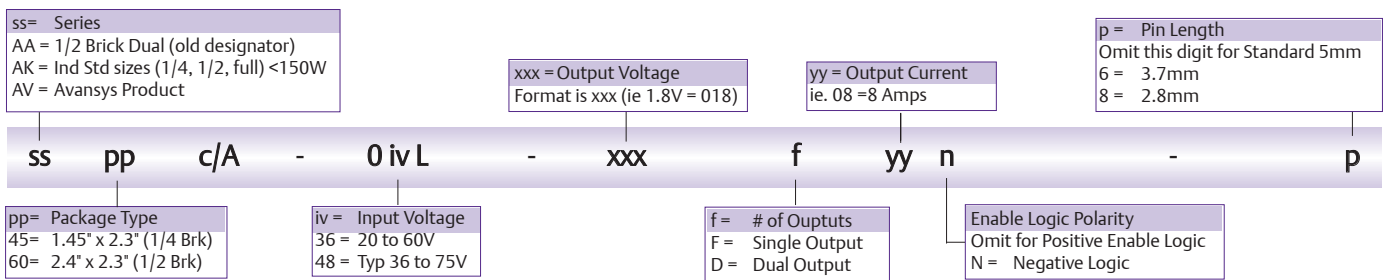
10W		Isolated			
Input Range	Output	Package (mm)	I/O Isolation	Efficiency	Model Number
48V (36-60V)	1.5V@3A	1.39" x 0.92" x 0.30" (35.3 x 23.4 x 7.7)	1500VDC	78%	AUM03M48
	1.8V@3A	1.39" x 0.92" x 0.30" (35.3 x 23.4 x 7.7)	1500VDC	80%	AUM03Y48
	2.5V@3A	1.39" x 0.92" x 0.30" (35.3 x 23.4 x 7.7)	1500VDC	84%	AUM03G48
	3.3V@3A	1.39" x 0.92" x 0.30" (35.3 x 23.4 x 7.7)	1500VDC	86%	AUM03F48
	5.0V@2A	1.39" x 0.92" x 0.30" (35.3 x 23.4 x 7.7)	1500VDC	88%	AUM02A48
48V (36-75V)	1.5V@3.5A	1.47" x 1.07" x 0.17" (37.3 x 27.2 x 4.3)	1500VDC	82%	AUD03M48
	1.8V@3A	1.47" x 1.07" x 0.17" (37.3 x 27.2 x 4.3)	1500VDC	84%	AUD03Y48
	2.5V@3A	1.47" x 1.07" x 0.17" (37.3 x 27.2 x 4.3)	1500VDC	86%	AUD03G48
	3.3V@3A	1.47" x 1.07" x 0.17" (37.3 x 27.2 x 4.3)	1500VDC	88%	AUD03F48
	5.0V@2A	1.47" x 1.07" x 0.17" (37.3 x 27.2 x 4.3)	1500VDC	89%	AUD02A48
15W		Isolated			
48V (36-75V)	1.2V@5.2A	1.47" x 1.23" x 0.17" (37.3 x 31.2 x 4.3)	1500VDC	82%	AUG05K48
	1.8V@4.5A	1.47" x 1.23" x 0.17" (37.3 x 31.2 x 4.3)	1500VDC	84%	AUG04Y48
	2.5V@4.5A	1.47" x 1.23" x 0.17" (37.3 x 31.2 x 4.3)	1500VDC	86%	AUG04G48
	3.3V@4.5A	1.47" x 1.23" x 0.17" (37.3 x 31.2 x 4.3)	1500VDC	88%	AUG04F48
	5.0V@3A	1.47" x 1.23" x 0.17" (37.3 x 31.2 x 4.3)	1500VDC	89%	AUG03A48
20W		Isolated			
48V (36-75V)	1.5V@8A	1.47" x 1.23" x 0.19" (37.3 x 31.2 x 0.19)	1500VDC	83%	AUG08M48
	1.8V@8A	1.47" x 1.23" x 0.19" (37.3 x 31.2 x 0.19)	1500VDC	84%	AUG08Y48
	2.5V@7A	1.47" x 1.23" x 0.19" (37.3 x 31.2 x 0.19)	1500VDC	86%	AUG07G48
	3.3V@6A	1.47" x 1.23" x 0.19" (37.3 x 31.2 x 0.19)	1500VDC	88%	AUG06F48
	5.0V@4A	1.47" x 1.23" x 0.19" (37.3 x 31.2 x 0.19)	1500VDC	88%	AUG04A48
30W		Isolated			
48V (36-75V)	1.5V@11A	1.77" x 1.77" x 0.17" (45 x 45 x 4.4)	1500VDC	85%	AUK11M48
	1.8V@11A	1.77" x 1.77" x 0.17" (45 x 45 x 4.4)	1500VDC	86%	AUK11Y48
	2.5V@10A	1.77" x 1.77" x 0.17" (45 x 45 x 4.4)	1500VDC	89%	AUK10G48
	3.3V@9A	1.77" x 1.77" x 0.17" (45 x 45 x 4.4)	1500VDC	90%	AUK09F48
	5.0V@6A	1.77" x 1.77" x 0.17" (45 x 45 x 4.4)	1500VDC	91%	AUK06A48
20W		Non-Isolated			
3.3V (2.97-3.63V)	1.0V@6A	1.33" x 0.61" x 0.24" (33.8 x 15.4 x 6)	Non-isolated	84%	AVC06S04
	1.2V@6A	1.33" x 0.61" x 0.24" (33.8 x 15.4 x 6)	Non-isolated	87%	AVC06K04
	1.5V@6A	1.33" x 0.61" x 0.24" (33.8 x 15.4 x 6)	Non-isolated	89%	AVC06M04
	1.8V@6A	1.33" x 0.61" x 0.24" (33.8 x 15.4 x 6)	Non-isolated	90%	AVC06Y04
	2.0V@6A	1.33" x 0.61" x 0.24" (33.8 x 15.4 x 6)	Non-isolated	92%	AVC06D04
	2.5V@6A	1.33" x 0.61" x 0.24" (33.8 x 15.4 x 6)	Non-isolated	93%	AVC06G04
5V (4.5-5.5V)	1.0V@6A	1.33" x 0.61" x 0.24" (33.8 x 15.4 x 6)	Non-isolated	82%	AVC06S05
	1.2V@6A	1.33" x 0.61" x 0.24" (33.8 x 15.4 x 6)	Non-isolated	84%	AVC06K05
	1.5V@6A	1.33" x 0.61" x 0.24" (33.8 x 15.4 x 6)	Non-isolated	86%	AVC06M05
	1.8V@6A	1.33" x 0.61" x 0.24" (33.8 x 15.4 x 6)	Non-isolated	88%	AVC06Y05
	2.0V@6A	1.33" x 0.61" x 0.24" (33.8 x 15.4 x 6)	Non-isolated	89%	AVC06D05
	2.5V@6A	1.33" x 0.61" x 0.24" (33.8 x 15.4 x 6)	Non-isolated	91%	AVC06G05
	3.3V@6A	1.33" x 0.61" x 0.24" (33.8 x 15.4 x 6)	Non-isolated	93%	AVC06F05

Diagrams for Decoding Model Number

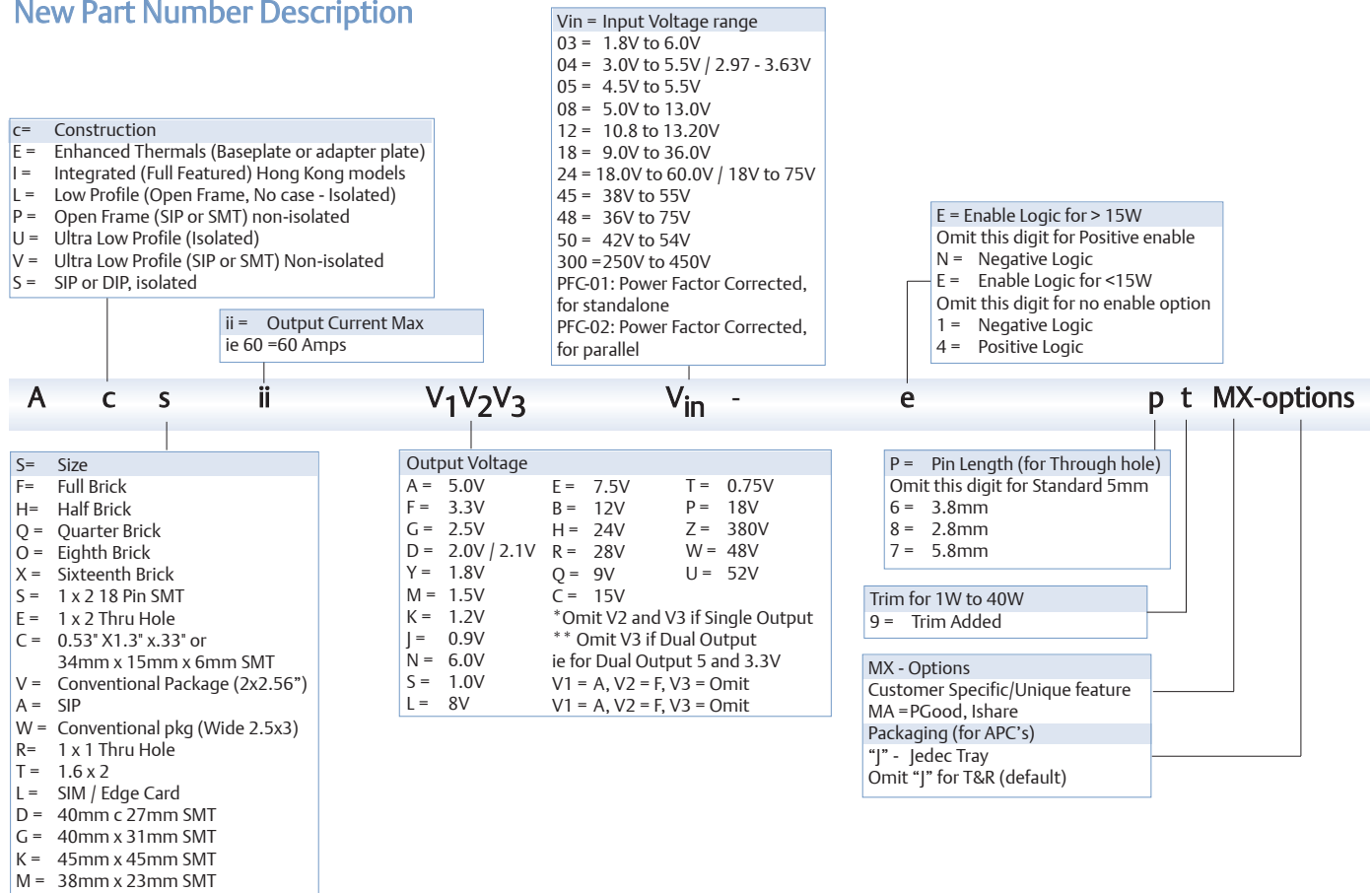
Low Power (<50 Watt) Part Numbering Description



Medium/High Power (100W to 250W) Industry Standard Products



New Part Number Description



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AMERICAS

5810 Van Allen Way
Carlsbad, CA 92008
Telephone: 760-930-4600
Facsimile: 760-930-0698

EUROPE

Astec House
Waterfront Business Park
Merry Hill, Dudley
West Midlands, DY5 1LX, UK
Telephone: 44 (1384) 842-211
Facsimile: 44 (1384) 843-355

ASIA

Units 2111-2116, Level 21
Tower1, Metroplaza
223, Hing Fong Road
Fwai Fong, New Territories
Hong Kong
Telephone: 852-2437-9662
Facsimile: 852-2402-4426



www.astecpower.com
Technical Support
technicalsupport@astec.com
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