

# DC Reactor for (Buck-) Boost Converter



## PS SERIES

Rev. C  
Mar, 2015

### Features

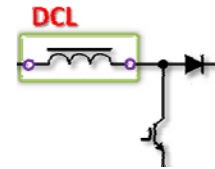
- 3KW,4KW,5KW ext. to 1.5~15KW
- Grade: Premium-S
- Spike Blocker™ Better EMC
- H-mounting,V-mounting
- High Frequency 20~50KHz
- Extra Low Audio Noise

- Competitive Cost Performance
- Open Structure makes Easy Modification

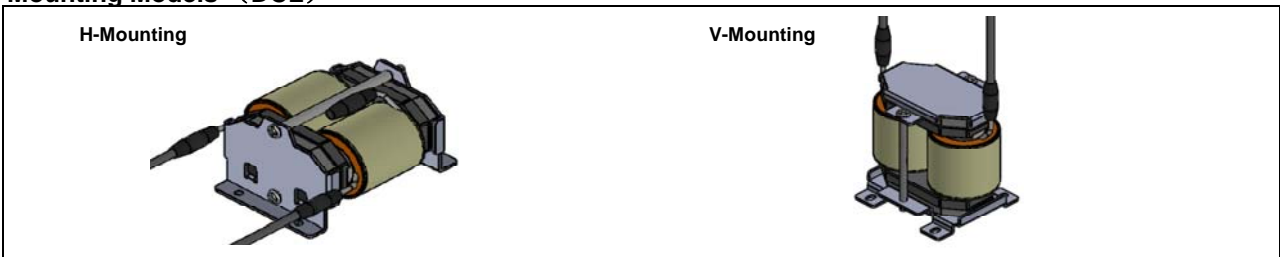
Grade	
Premium-S	Extra Low Noise, High Performance

### Typical Application

PV Inverter,UPS



### Mounting Models (DCL)



### Electric Characteristics (DCL)

Power	Model	Grade	Part Number	L ※1	I ※2
3KW	DCL	Premium-S	SP10218B-PS□□00SS□□□	1000μH	18A
4KW	DCL	Premium-S	SP10224B-PS□□00SS□□□	1000μH	24A
5KW	DCL	Premium-S	SP10229B-PS□□00SS□□□	1000μH	29A

※1 At 0A ※2 As a continuous load

### Specification (DCL)

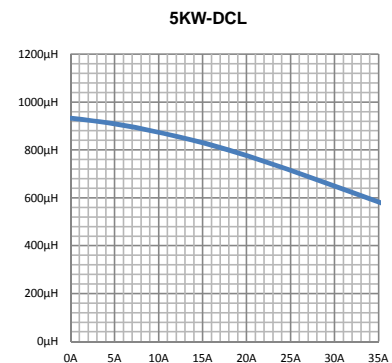
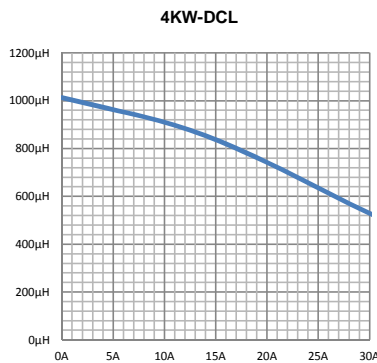
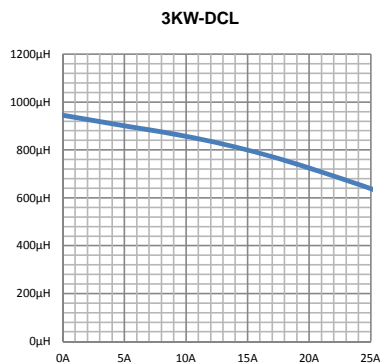
Items	Testing Condition	Testing Point	Specification
Inductance	20KHz, 1V HP4284 or Equivalent	L: S-F	as L-I Curve
Dielectric Strength	E×TECH 7142 or Equivalent	Coil - Core,Chasis	2.5KV AC, 50Hz, 1Min. <2mA
Insulation Resistance	E×TECH 7142 or Equivalent	Coil - Core,Chasis	>100MΩ, 0.5KV DC
Operating Temperature	Class F Insulation, -25°C~155°C		
Storage Temperature	-25°C~75°C		
Dimension (mm)	See Spec. detail		

### Part Number Designation (DCL)

Example: SP11218B-PSH00SS\*\*\*

SP	102	18	B-	PS	H	00	SS	**	*
	Inductance	Current		Grade	Mounting			Lead wire lenth	Terminal type
	3KW: <b>102</b>	<b>18A</b>		<b>Premium-S</b>	<b>H-Mounting</b>			** cm Lead wire	F: 250 FASTON Quick disconnect terminals
	4KW: <b>102</b>	<b>24A</b>			<b>V-Mounting</b>			35 → 35 cm	R: Ring tongue terminals
	5KW: <b>102</b>	<b>29A</b>							

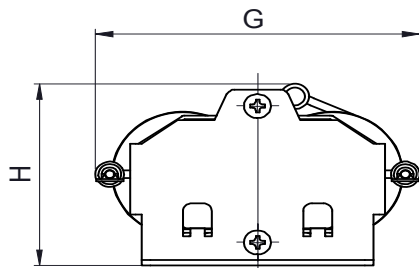
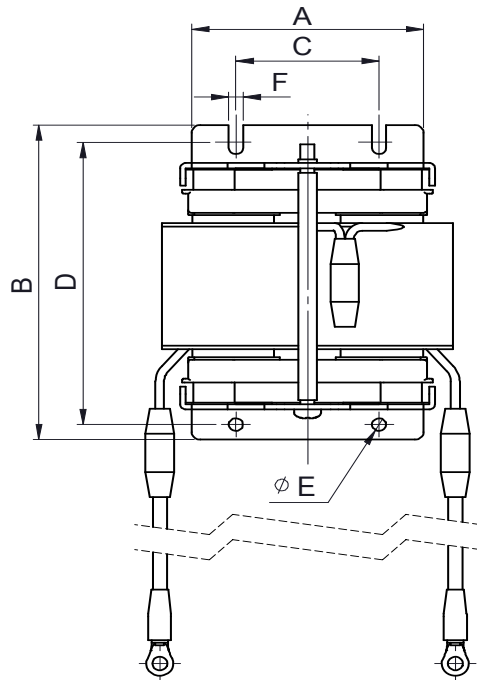
### Typical L-I Curve Characteristics (DCL)



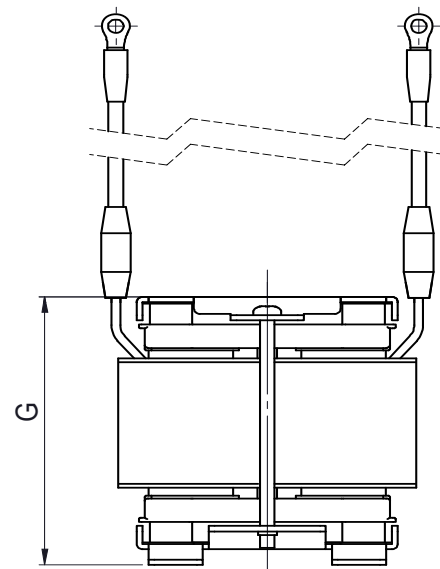
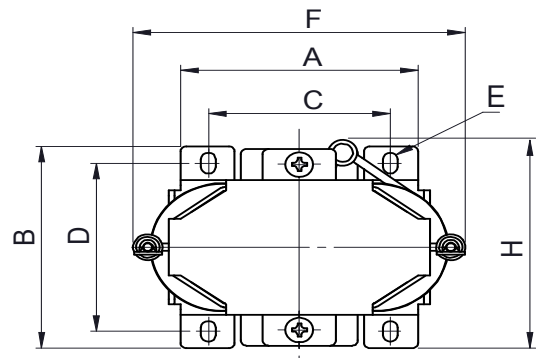
● Providing fast L-I modification products to meet custom requirements.

### Dimensions (DCL)

Power	Grade	Part Number	Structure	Dimensions (mm)							
				A	B	C	D	E	F	G	H
3KW	Premium-S	SP10218B-PS□00SS	H	81	114	50	97	5	5	125	80
			V	81	78	62	65	5x8	125	93	85
4KW	Premium-S	SP10224B-PS□00SS	H	81	129	50	112	5	5	125	80
			V	81	78	62	65	5x8	125	108	85
5KW	Premium-S	SP10229B-PS□00SS	H	93	129	60	112	5	5	140	90
			V	98	90	78	76.5	5x8	140	106	100



H-Mounting Dimension



V-Mounting Dimension

# AC Reactor for Inverter



## PS SERIES

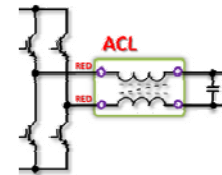
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### Features

- 3KW,4KW,5KW ext. to 1.5~15KW
- Grade:Premium-S
- Spike Blocker™ Better EMC
- H-mounting,V-mounting
- High Frequency 20~50KHz
- Extra Low Audio Noise
- 2 Coupling Inductors in 1 Reactor
- Competitive Cost Performance
- Open Structure makes Easy Modification

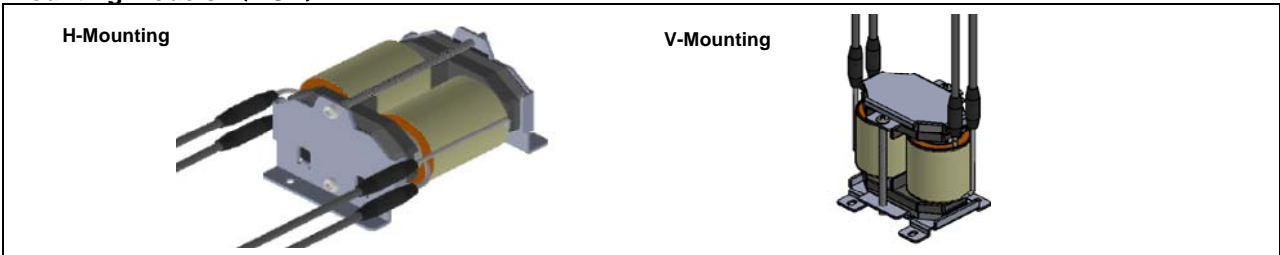
### Typical Application

PV Inverter,UPS



Grade	
Premium-S	Extra Low Noise, High Performance

### Mounting Models (ACL)



### Electric Characteristics (ACL) (NOTE ACL:In serial)

Power	Model	Grade	Part Number	L ※1	I ※2
3KW	ACL	Premium-S	SF12221B-PS□00SS□□□	1200μH	21A
4KW	ACL	Premium-S	SF14228B-PS□00SS□□□	1400μH	28A
5KW	ACL	Premium-S	SF13235B-PS□00SS□□□	1300μH	35A

※1 At 0A ※2 As a continuous load

### Specification (ACL)

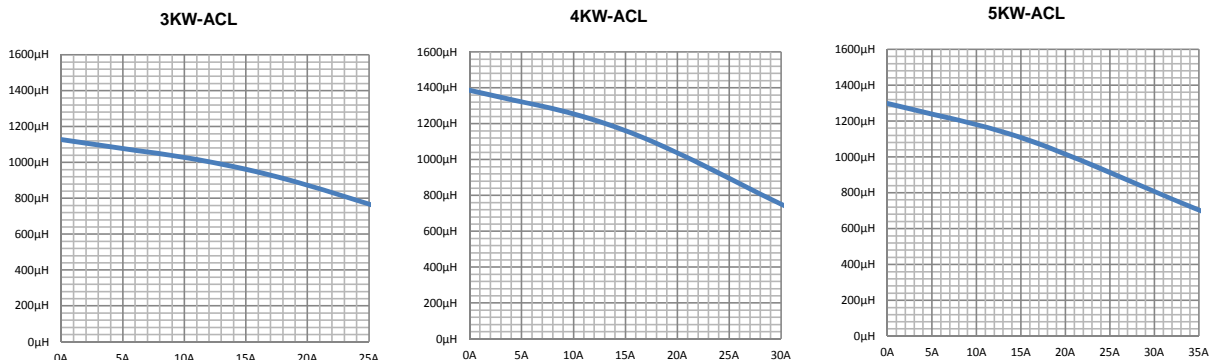
Items	Testing Condition	Testing Point	Specification
Inductance	20KHz, 1V HP4284 or Equivalent	L: S-F	as L-I Curve (in series)
Dielectric Strength	E×TECH 7142 or Equivalent	Coil - Core,Chasis	2.5KV AC, 50Hz, 1Min. <2mA
		Coil -Coil	1.5KV AC, 50Hz, 1Min. <2mA
Insulation Resistance	E×TECH 7142 or Equivalent	Coil - Core,Coil,Chasis	>100MΩ, 0.5KV DC
Operating Temperature	Class F Insulation, -25°C~155°C		
Storage Temperature	-25°C~75°C		
Dimension (mm)	See Spec. detail		

### Part Number Designation (ACL)

Example: SF12221B-PSH00DS\*\*\*

SF	122	21	B-	PS	H	00	DS	**	*
	Inductance	Current		Grade	Mounting			Lead wire length	Terminal type
	3KW:122	21A		Premium-S	H-Mounting			** cm Lead wire	F: 250 FASTON Quick disconnect terminals
	4KW:142	28A			V-Mounting			35 → 35 cm	R: Ring tongue terminals
	5KW:132	35A							

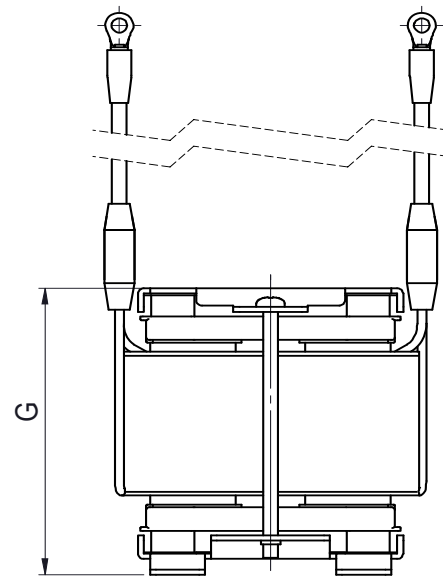
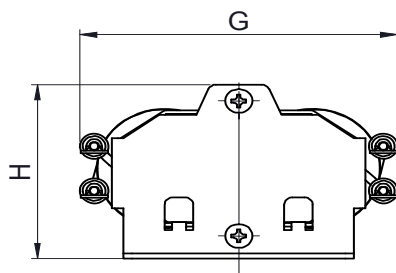
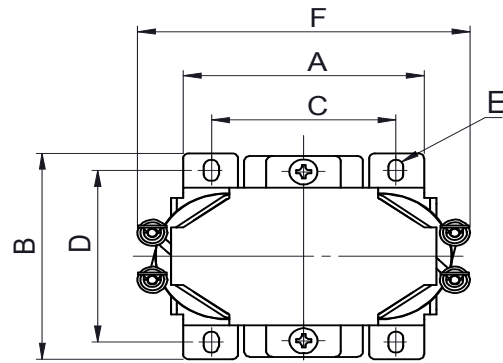
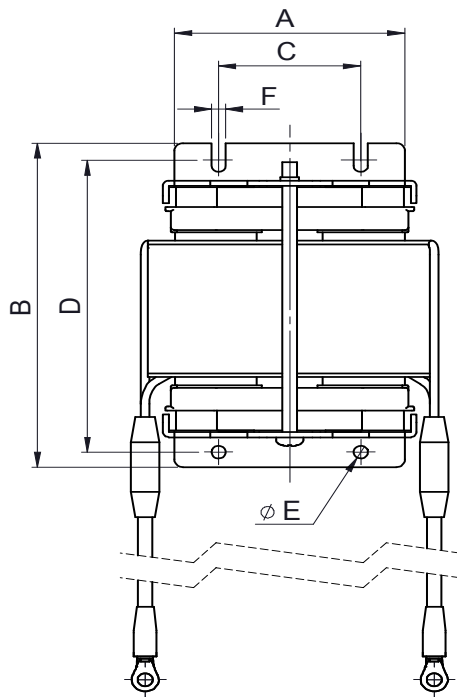
### Typical L-I Curve Characteristics (ACL)



● Providing fast L-I modification products to meet custom requirements.

### Dimensions (ACL)

Power	Grade	Part Number	Structure	Dimensions (mm)							
				A	B	C	D	E	F	G	H
3KW	Premium-S	SF12221B-PS□00DS	H	81	119	50	102	5	5	125	72
			V	81	78	62	65	5x8	125	98	-
4KW	Premium-S	SF14228B-PS□00DS	H	81	134	50	117	5	5	125	72
			V	81	78	62	65	5x8	125	113	-
5KW	Premium-S	SF13235B-PS□00DS	H	93	134	60	117	5	5	140	77
			V	98	90	78	76.5	5x8	140	111	-



H-Mounting Dimension

V-Mounting Dimension

### Noise level vs Frequency (Reference)

