

Dear Sir/Madam,

We thank you for your constant efforts to promote our products and services.  
 This is to update the replacement products in addition to item name typos in the previous announcement sent on 22/MAY/2014.

We will continue our best efforts to meet the customers' satisfaction by providing the total product lineup, new models development, and manufacturing capability enhancements.

1. Obsolete models and their recommended replacement models

AC-DC Switching power supply

Obsolete models	Items	Final purchase order receiving date	Estimated final shipping date	Recommended substitutes	
1	PFE300S Series	See attached list.	31/Mar/2015	30/Sep/2015	See attached list.
2	PFE500S Series	See attached list.	31/Mar/2015	30/Sep/2015	See attached list.
3	PFE700S Series	See attached list.	30/Sep/2015	31/Mar/2016	See attached list.
4	HWS15-150 Series	See attached list.	30/Sep/2015	31/Mar/2016	See attached list.
5	ZWS 5-50 & 300 Series	See attached list.	30/Sep/2015	31/Mar/2016	See attached list.
6	ZWS-AF 50-150 Series	See attached list.	30/Sep/2015	31/Mar/2016	See attached list.
7	ZWS-150PAF & 240PAF	See attached list.	30/Sep/2015	31/Mar/2016	See attached list.
8	VS-B	See attached list.	30/Sep/2015	31/Mar/2016	See attached list.
9	HK-A	See attached list.	30/Sep/2015	31/Mar/2016	See attached list.
10	SWS 50-600 Series	See attached list.	30/Sep/2016	31/Mar/2017	See attached list.
11	SWS300A Series	See attached list.	30/Sep/2016	31/Mar/2017	See attached list.

DC-DC Converter

Obsolete models	Items	Final purchase order receiving date	Estimated final shipping date	Recommended substitutes	
12	CE Series	See attached list.	30/Sep/2014	31/Mar/2015	See attached list.
13	PMH Series	See attached list.	30/Sep/2014	31/Mar/2015	See attached list.
14	PH Series	See attached list.	30/Sep/2016	31/Mar/2017	See attached list.

DC-AC Inverter

Obsolete models	Items	Final purchase order receiving date	Estimated final shipping date	Recommended substitutes	
14	CXA Series	See attached list.	30/Sep/2014	31/Mar/2015	No replacement.

2. Reason of discontinuance

Difficulty in procurement of main materials.

3. Final purchase order receiving date

Please see the above dates.

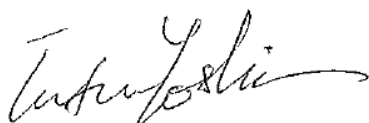
(Please place purchase orders for your necessary quantity including for service purpose units.)

4. Final shipping date and production closing.

Please see the above dates.

Please contact our sales person in charge for any questions.

Sincerely,



28-May-2014  
 TDK-Lambda Corporation  
 Overseas Business Management Division  
 Tamotsu YOSHIDA  
 General Manager

## EOL Items &amp; Replacement Items List (AC/DC) (1/4)

EOL Items	Dimmension [mm]				Replacement Items ( - No replacement Items)	Dimmension [mm]			Mounting compatibility	Connector compatibility	Remark
	Hight	Depth	Width			Hight	Depth	Width			
	HWS15	82	80			26.5 (31.5)	→	HWS15A			
HWS30	82	95	26.5 (31.5)	→	HWS30A	82	95	26.5 (31.5)	Y	Y	※ ( ) with cover
HWS50	82	120	26.5 (31.5)	→	HWS50A	82	120	26.5 (31.5)	Y	Y	※ ( ) with cover
HWS80	82	160	28 (33)	→	HWS80A	82	160	28 (33)	Y	Y	※ ( ) with cover
HWS100	82	160	28 (33)	→	HWS100A	82	160	28 (33)	Y	Y	※ ( ) with cover
HWS150	82	160	37 (42)	→	HWS150A	82	160	37 (42)	Y	Y	※ ( ) with cover

## ◆Option Line Up

EOL Items	Option	Remark	Replacement	Option	Remark
HWS	(Standard)		HWS-A	(Standard)	Open Flame
	/A			/A	with cover
	/ADIN	(24V only)		/ADIN	Din Rail with cover
	/B	(50,80,100,150W)		/B	JSTconnector
	/CO	(30,50,80,100,150W)		/HD	Heavy duty
	/HD	(30,50,100,150W)		/HD	
	/HDA	(30,50,100,150W)		/HDA	Heavy duty with cover
	/ME	(30,50,100,150W)		/ME	Medical
	/MEA	(30,50,100,150W)		/MEA	Medical with cover
	/R	(50,80,100,150W)		/R	ON/OFF-CNT
/RA	(50,80,100,150W)	/RA	ON/OFF-CNT with cover		

**EOL Items & Replacement Items List (AC/DC) (2/4)**

EOL Items	Dimention [mm]				Replacement Items ( - No replacement Items)	Dimention [mm]			Mounting compatibility	Connector compatibility	Remark		
	Hight	Depth	Width			Hight	Depth	Width					
	SWS50	- 3 - 5 - 12 - 15 - 18 - 24	92			159	37	→				RWS50B (Under development)	- - - 5 - 12 - 15 - - - 24
SWS75	- 3 - 5 - 12 - 15 - 24	94	170	43	→	RWS100B	- - - 5 - 12 - - - 24	94	108	39	N	N	
SWS100	- 3 - 5 - 12 - 15 - 24	96	188	45	→	RWS100B	- - - 5 - 12 - - - 24	94	108	39	N	N	
SWS150	- 3 - 5 - 7R5 - 12 - 15 - 18 - 24 - 28	99	198	51	→	RWS150B	- - - 5 - - - 12 - - - - - 24 - -	94	128	41	N	N	
SWS300	- 3 - 5 - 7R5 - 12 - 15 - 24 - 28 - 36 - 48	102	198	52	→	RWS300B	- - - 5 - - - 12 - 15 - 24 - - - 36 - 48	102	170	41	N	N	
SWS600	- 3 - 5 - 12 - 15 - 24 - 36 - 48	120	190	92	→	RWS600B	- - - 5 - 12 - 15 - 24 - 36 - 48	120	190	61	N	N	

## EOL Items &amp; Replacement Items List (AC/DC) (3/4)

EOL Items	Dimmension [mm]				Replacement Items ( - No replacement Items)	Dimmension [mm]			Mounting compatibility	Connector compatibility	Remark
	Hight	Depth	Width			Hight	Depth	Width			
VS50B - 3 - 5 - 12 - 15 - 24	25	195	50	→	VS50E - 3 - 5 - 12 - 15 - 24	26	132	50	N	Y	
VS75B - 3 - 5 - 12 - 15 - 24 - 48	32	222	50	→	VS75E - 3 - 5 - 12 - 15 - 24 - 48	32	150	50	N	Y	
					ZWS150BP - 36	37	160	75	N	Y	
VS100B - 3 - 5 - 12 - 15 - 24 - 48 - 36	32	222	62	→	VS100E - 3 - 5 - 12 - 15 - 24 - 48	32	155	62	N	Y	
					ZWS150BP - 36	37	160	75	N	Input :Y/Output: N	
VS150B - 3 - 5 - 12 - 15 - 18 - 24 - 48 - 36	36	222	75	→	VS150E - 3 - 5 - 12 - 15 - 18 - 24 - 48	37	160	75	N	Y	
					ZWS150BP - 36					N	
RKY 24-50R 36-42R 48-32R	120	237	92	→	HWS1800T 24 36 48	82	280	126.5	N	Y	
HK10A - 3 - 5 - 12 - 15 - 24	68 (72)	68 (72)	22 (26)	→	HWS15A - 3 - 5 - 12 - 15 - 24	82	80	26.5 (31.5)	N	HK-A M4 ↓ HWS-A M3.5	※ ( ) with cover
HK15A - 3 - 5 - 12 - 15 - 24	68 (72)	80 (84)	23.5 (27.5)	→	HWS15A - 3 - 5 - 12 - 15 - 24	82	80	26.5 (31.5)	N	HK-A M4 ↓ HWS-A M3.5	※ ( ) with cover
HK25A - 3 - 5 - 12 - 15 - 24	68 (72)	95 (99)	28 (32)	→	HWS30A - 3 - 5 - 12 - 15 - 24	82	95	26.5 (31.5)	N	HK-A M4 ↓ HWS-A M3.5	※ ( ) with cover
HK50A - 3 - 5 - 12 - 15 - 24	68 (72)	119	31 (35)	→	HWS50A - 3 - 5 - 12 - 15 - 24	82	120	26.5 (31.5)	N	HK-A M4 ↓ HWS-A M3.5	※ ( ) with cover
HK100A - 3 - 5 - 12 - 15 - 24	93	150	34.5 (38.5)	→	HWS100A - 3 - 5 - 12 - 15 - 24	82	160	28 (33)	N	HK-A M4 ↓ HWS Output: M4 Others: M3.5	※ ( ) with cover
HK150A - 3 - 5 - 12 - 15 - 24	93	170	43 (47)	→	HWS150A - 3 - 5 - 12 - 15 - 24	82	160	37 (42)	N	HK-A M4 ↓ HWS Output: M4 Others: M3.5	※ ( ) with cover

## ◆Option Line Up

EOL Items	Option	Remark	Replacement	Option	Remark
HK-A	(Standard)		HWS-A	(Standard)	
	/A			/A	
	/B	(50W)		/B	(50W)
	/C	(10,15,25,50W)	ZWS*B-*	(Standard)	
				/A	

**EOL Items & Replacement Items List(AC/DC)(4/4)**

EOL Items	Dimmension [mm]			Replacement Items ( - No replacement Items)	Dimmension [mm]			Mounting compatibility	Connector compatibility	Remark
	Hight	Depth	Width		Hight	Depth	Width			
ZWS5 - 3 /J - 5 /J - 12 /J - 15 /J - 24 /J	21	98	45	ZWS10B - 3 - 5 - 12 - 15 - 24	22	73.5	50	N	Input Y Output N	- ZWS5-* (Molex Connector) - ZWS5-*/J (JST Connector) - ZWS10B-* (JST Connector) ◎No Molex connector for ZWS10B
ZWS10 - 3 /J - 5 /J - 12 /J - 15 /J - 24 /J	21	105	50	ZWS10B - 3 - 5 - 12 - 15 - 24	22	73.5	50	N	Input Y Output N	- ZWS10-* (Molex Connector) - ZWS10-*/J (JST Connector) - ZWS10B-* (JST Connector) ◎No Molex connector for ZWS10B
ZWS15 - 3 /J - 5 /J - 12 /J - 15 /J - 24 /J	21	125	50	ZWS15B - 3 - 5 - 12 - 15 - 24	22	87.5	50	N	Input Y Output N	- ZWS15-* (Molex Connector) - ZWS15-*/J (JST Connector) - ZWS15B-* (JST Connector) ◎No Molex connector for ZWS15B
ZWS30 - 3 /J - 5 /J - 12 /J - 15 /J - 24 /J - 36 /J - 48 /J	26	133	55	ZWS30B - 3 - 5 - 12 - 15 - 24 - - ZWS50B - 48	26	105	50	N	Y	- ZWS30-* (Molex Connector) - ZWS30-*/J (JST Connector) - ZWS30B-* (JST Connector) ◎No Molex connector for ZWS30B
ZWS50 - 3 /J - 5 /J - 12 /J - 15 /J - 24 /J - 36 /J - 48 /J	26	195	55	ZWS50B - 3 - 5 - 12 - 15 - 24 - - - 48	26	132	50	N	Y	- ZWS50-* (Molex Connector) - ZWS50-*/J (JST Connector) - ZWS50B-* (JST Connector) ◎No Molex connector for ZWS50B
ZWS300 - 3 - 5 - 12 - 15 - 24 - 48	50	255	108	HWS300 - 3 - 5 ZWS300BAF - 12 - 15 - 24 - 48	61	165	82	N	N	※HWS300 is enclosed and fan cooling
ZWS50AF - 5 /J - 12 /J - 15 /J - 24 /J - 3 /J	26	195	55	ZWS50BAF - 5 - 12 - 15 - 24 - 3	26	132	50	N	Y	- ZWS50AF Molex Connector(J : JST Connector) - ZWS50BAF JST Connector ◎No Molex connector for ZWS50BAF
ZWS75AF - 5 /J - 12 /J - 15 /J - 24 /J - 36 /J - 48 /J	32	222	55	ZWS75BAF - 5 - 12 - 15 - 24 - 48	33	150	50	N	Y	- ZWS75AF Molex Connector(J : JST Connector) - ZWS75BAF JST Connector ◎No Molex connector for ZWS75BAF
ZWS100AF - 3 /J - 5 /J - 12 /J - 15 /J - 24 /J - 36 /J - 48 /J	35	222	62	ZWS100BAF - 3 - 5 - 12 - 15 - 24 - 48	33	155	62	N	Y	- ZWS100AF Molex Connector(J : JST Connector) - ZWS100BAF JST Connector ◎No Molex connector for ZWS100BAF
ZWS150AF - 3 /J - 5 /J - 12 /J - 15 /J - 24 /J - 36 /J - 48 /J	40	222	75	ZWS150BAF - 3 - 5 - 12 - 15 - 24 - 48	37	160	75	N	Y	- ZWS150AF Molex Connector(J : JST Connector) - ZWS150BAF JST Connector ◎No Molex connector for ZWS150BAF
ZWS150PAF - 24 /J - 36 /J - 48 /J	40	208	80	ZWS150BP - 24 - 36 - 48	37	160	75	N	Y	- ZWS-PAF Molex Connector(J : JST connector) - ZWS-BP JST Connector ◎No Molex connector for ZWS150BP
ZWS240PAF - 24 /J - 36 /J - 48 /J	45	222	95	ZWS240BP - 24 - 36 - 48	42	180	84	N	Y	- ZWS-PAF Molex Connector(J : JST connector) - ZWS-BP JST Connector ◎No Molex connector for ZWS240BP

◆Option Line Up

EOL Items	Option	Remark	Replacement	Option	Remark	EOL Items	Option	Remark	Replacement	Option	Remark
ZWS (5-50W)	(Standard) /J /A /JA	Molex Conector JST Connector with Cover Molex Conector with Cover JST Connector	ZWS-B	- (Standard) /A	- JST Connector with Cover JST Connector	ZWS-PAF	(Standard) /A /J /JA /JL /S /SA /T /TA /TL	Molex Conector with Cover Molex Conector JST Connector with Cover JST Connector with Chassis Molex Conector Horizontal Terminal Horizontal Terminal with Cover Horizontal Terminal with Chassis Horizontal Terminal Vertical Terminal with Cover Vertical Terminal with Chassis Vertical Terminal	ZWS-BP	- (Standard) /A /L /T /TL	- JST Connector with Cover JST Connector with Chassis JST Connector Horizontal Terminal Horizontal Terminal Vertical Terminal with Chassis JST Connector
ZWS300	(Standard) /B /R /RB /RT /T	Horizontal Terminal AMP connector Horizontal Terminal, ON/OFF-CNT AMP connector, ON/OFF-CNT Vertical Terminal, ON/OFF-CNT Vertical Terminal	ZWS300BAF	- - /R /T	- - JST Connector, ON/OFF-CNT Vertical Terminal						
ZWS-AF	(Standard) /J /A /JA /JL	Molex Conector JST Connector with Cover Molex Conector with Cover JST Connector with Chassis JST Connector	ZWS-BAF	- (Standard) /A /L	- JST Connector with Cover JST Connector with Chassis JST Connector						

**EOL Items & Replacement Items List (Inverter & DC/DC) (1/1)**

EOL Items		Replacement Items ( - No replacement Items)
Model	EOL Items	
CXA	CXA-0286A	-
	CXA-0454-CG	-
	CXA-0494	-
	CXA-0494-M	-
	CXA-0498T	-
	CXA-0526	-
	CXA-0540	-
	CXA-0540-M	-
	CXA-0548T	-
	CXA-2081	-
	CXA-A002	-
	CXA-A015	-
	CXA-A021	-
	CXA-K0505A-VJL	-
	CXA-K0612-VSL	-
	CE	CE-0928
CE-0929		-
CE-0994		-
CE-3101		-
CE-3101-T		-
PMH	PMH-AD07RPVWD	iBF12012A007V
	PMH-AD16RPVMD	iAF12020A007V
	PMH-AD16RPVWD	iAF12020A007V

## EOL Items &amp; Replacement Items List (Power Module) (2/2)

	EOL Items			Replacement Items ( - No replacement Items)	Pin Compatibility	Function Compatibility	Remark
	Model	Input V	EOL Items				
PH series	PH50S	DC24V	PH50S24-3.3	IQE24030A033V-007-R	N	N	※Output 100W、No baseplate, Need Fan cooling
			PH50S24-5	CN50A24-5	N	Y	
			PH50S24-12	CN50A24-12	N	Y	
			PH50S24-15	-	-	-	*1
			PH50S24-24	CN50A24-24	N	Y	
			PH50S24-28	-	-	-	*1
		DC48V	PH50S48-3.3	PAH50S48-3.3	N	N	Withstand voltage Input-Output. 3KVAC=>1.5KVAC
			PH50S48-5	PAH50S48-5	N	N	Withstand voltage Input-Output. 3KVAC=>1.5KVAC
			PH50S48-12	PAH50S48-12	N	N	Withstand voltage Input-Output. 3KVAC=>1.5KVAC
			PH50S48-15	PAH50S48-15	N	N	Withstand voltage Input-Output. 3KVAC=>1.5KVAC
			PH50S48-24	PAH50S48-24	N	N	Withstand voltage Input-Output. 3KVAC=>1.5KVAC
			PH50S48-28	PAH50S48-28	N	N	Withstand voltage Input-Output. 3KVAC=>1.5KVAC
		DC110V	PH50S110-5	CN50A110-5	N	Y	
			PH50S110-12	CN50A110-12	N	Y	
			PH50S110-15	CN50A110-15	N	Y	
	PH50S110-24		CN50A110-24	N	Y		
	PH50S110-28		-	-	-	*1	
	DC280V	PH50S280-3.3	-	-	-	*1	
		PH50S280-5	PH50A280-5	N	Y		
		PH50S280-12	PH50A280-12	N	Y		
		PH50S280-15	-	-	-	*1	
		PH50S280-24	PH50A280-24	N	Y		
		PH50S280-28	-	-	-	*1	
	PH75S	DC48V	PH75S48-3.3	PAH75S48-3.3	N	N	Withstand voltage Input-Output. 3KVAC=>1.5KVAC
			PH75S48-5	PAH75S48-5	N	N	Withstand voltage Input-Output. 3KVAC=>1.5KVAC
			PH75S48-12	PAH75S48-12	N	N	Withstand voltage Input-Output. 3KVAC=>1.5KVAC
			PH75S48-15	PAH75S48-15	N	N	Withstand voltage Input-Output. 3KVAC=>1.5KVAC
			PH75S48-24	PAH75S48-24	N	N	Withstand voltage Input-Output. 3KVAC=>1.5KVAC
			PH75S48-28	PAH75S48-28	N	N	Withstand voltage Input-Output. 3KVAC=>1.5KVAC
		DC110V	PH75S110-5	CN100A110-5	N	Y	
PH75S110-12			CN100A110-12	N	Y		
PH75S110-15			CN100A110-15	N	Y		
PH75S110-24			CN100A110-24	N	Y		
PH75S110-28			-	-	-	*1	
DC280V		PH75S280-3.3	-	-	-	*1	
		PH75S280-5	PH75A280-5	N	Y		
		PH75S280-12	PH75A280-12	N	Y		
		PH75S280-15	-	-	-	*1	
	PH75S280-24	PH75A280-24	N	Y			
	PH75S280-28	-	-	-	*1		
PH100S	DC48V	PH100S48-3.3	PAH100S48-3.3	N	N	Withstand voltage Input-Output. 3KVAC=>1.5KVAC	
		PH100S48-5	PAH100S48-5	N	N	Withstand voltage Input-Output. 3KVAC=>1.5KVAC	
		PH100S48-12	PAH100S48-12	N	N	Withstand voltage Input-Output. 3KVAC=>1.5KVAC	
		PH100S48-15	PAH100S48-15	N	N	Withstand voltage Input-Output. 3KVAC=>1.5KVAC	
		PH100S48-24	PAH100S48-24	N	N	Withstand voltage Input-Output. 3KVAC=>1.5KVAC	
		PH100S48-28	PAH100S48-28	N	N	Withstand voltage Input-Output. 3KVAC=>1.5KVAC	
	DC280V	PH100S280-3.3	-	-	-	*1	
		PH100S280-5	PH100A280-5	N	Y		
		PH100S280-12	PH100A280-12	N	Y		
		PH100S280-15	-	-	-	*1	
		PH100S280-24	PH100A280-24	N	Y		
		PH100S280-28	-	-	-	*1	
	PH150S	DC48V	PH150S48-3.3	PAH150S48-3.3	N	N	Withstand voltage Input-Output. 3KVAC=>1.5KVAC
			PH150S48-5	PAH150S48-5	N	N	Withstand voltage Input-Output. 3KVAC=>1.5KVAC
			PH150S48-12	PAH150S48-12	N	N	Withstand voltage Input-Output. 3KVAC=>1.5KVAC
PH150S48-15			PAH150S48-15	N	N	Withstand voltage Input-Output. 3KVAC=>1.5KVAC	
PH150S48-24			PAH150S48-24	N	N	Withstand voltage Input-Output. 3KVAC=>1.5KVAC	
PH150S48-28			PAH150S48-28	N	N	Withstand voltage Input-Output. 3KVAC=>1.5KVAC	
DC110V		PH150S110-5	CN200A110-5	N	Y		
		PH150S110-12	CN200A110-12	N	Y		
		PH150S110-15	CN200A110-15	N	Y		
		PH150S110-24	CN200A110-24	N	Y		
		PH150S110-28	-	-	-	*1	
DC280V		PH150S280-3.3	-	-	-	*1	
		PH150S280-5	(PH100A280-5)	N	Y	※Possible to replace by PH100A280-5 below 20A output	
		PH150S280-12	PH150A280-12	N	Y		
		PH150S280-15	-	-	-	*1	
	PH150S280-24	PH150A280-24	N	Y			
	PH150S280-28	-	-	-	*1		
PH600S	DC280V	PH600S280-3.3	-	-	-		
		PH600S280-5	-	-	-		
		PH600S280-12	PAF600F280-12	N	Y		
		PH600S280-15	-	-	-	*1	
		PH600S280-24	PAF600F280-24	N	Y		
		PH600S280-28	PAF600F280-28	N	Y		
		PH600S280-48	PAF600F280-48	N	Y		

\*1. Please contact us for more detail

## EOL Items &amp; Replacement Items List(Power Module)(2/2)

	EOL Items			Replacement Items ( - No replacement Items)	Pin Compatibility	Function Compatibilit y	Remark	
	Model	Input V	EOL Items					
PH series	PH75F	DC48V	PH75F48-2	PAH75S48-2.5	N	N	Withstand voltage Input-Output. 3KVAC=>1.5KVAC	
			PH75F48-3	PAH75S48-3.3	N	N	Withstand voltage Input-Output. 3KVAC=>1.5KVAC	
			PH75F48-5	PAH75S48-5	N	N	Withstand voltage Input-Output. 3KVAC=>1.5KVAC	
			PH75F48-12	PAH75S48-12	N	N	Withstand voltage Input-Output. 3KVAC=>1.5KVAC	
			PH75F48-15	PAH75S48-15	N	N	Withstand voltage Input-Output. 3KVAC=>1.5KVAC	
			PH75F48-24	PAH75S48-24	N	N	Withstand voltage Input-Output. 3KVAC=>1.5KVAC	
		PH75F48-28	PAH75S48-28	N	N	Withstand voltage Input-Output. 3KVAC=>1.5KVAC		
		DC110V	PH75F110-2	-	-	-	-	*1
			PH75F110-3	-	-	-	-	*1
			PH75F110-5	CN100A110-5	N	N	Parallel not possible	
			PH75F110-12	CN100A110-12	N	N	Parallel not possible	
			PH75F110-15	CN100A110-15	N	N	Parallel not possible	
			PH75F110-24	CN100A110-24	N	N	Parallel not possible	
		DC280V	PH75F280-2	-	-	-	-	*1
			PH75F280-3	-	-	-	-	*1
			PH75F280-5	PH75A280-5	N	N		
			PH75F280-12	PH75A280-12	N	N		
			PH75F280-15	-	-	-	-	*1
			PH75F280-24	PH75A280-24	N	N		
		PH100F	DC24V	PH100F24-2	-	-	-	*1
				PH100F24-3	-	-	-	*1
	PH100F24-5			CN100A24-5	N	N		
	PH100F24-12			CN100A24-12	N	N		
	PH100F24-15			-	-	-	-	*1
	PH100F24-24			CN100A24-24	N	N		
	PH150F	DC48V	PH150F48-2	PAH150S48-2.5	N	N	Withstand voltage Input-Output. 3KVAC=>1.5KVAC	
			PH150F48-3	PAH150S48-3.3	N	N	Withstand voltage Input-Output. 3KVAC=>1.5KVAC	
			PH150F48-5	PAH150S48-5	N	N	Withstand voltage Input-Output. 3KVAC=>1.5KVAC	
			PH150F48-12	PAH150S48-12	N	N	Withstand voltage Input-Output. 3KVAC=>1.5KVAC	
			PH150F48-15	PAH150S48-15	N	N	Withstand voltage Input-Output. 3KVAC=>1.5KVAC	
			PH150F48-24	PAH150S48-24	N	N	Withstand voltage Input-Output. 3KVAC=>1.5KVAC	
		PH150F48-28	PAH150S48-28	N	N	Withstand voltage Input-Output. 3KVAC=>1.5KVAC		
		DC110V	PH150F110-2	-	-	-	-	*1
			PH150F110-3	-	-	-	-	*1
			PH150F110-5	CN200A110-5	N	Y		
			PH150F110-12	CN200A110-12	N	Y		
			PH150F110-15	CN200A110-15	N	Y		
			PH150F110-24	CN200A110-24	N	Y		
		DC280V	PH150F280-2	-	-	-	-	*1
			PH150F280-3	-	-	-	-	*1
			PH150F280-5	(PH100A280-5)	N	N	※Possible to replace by PH100A280-5 below 20A output	
			PH150F280-12	PH150A280-12	N	N		
			PH150F280-15	-	-	-	-	*1
			PH150F280-24	PH150A280-24	N	N		
		PH300F	DC24V	PH300F24-12	PAH300S24-12	N	N	Parallel not possible
				PH300F24-28	PAH300S24-28	N	N	Parallel not possible
	DC48V		PH300F48-2	PAH200H48-2R5	N	N	Withstand voltage Input-Output. 3KVAC=>1.5KVAC	
			PH300F48-3	PAF500F48-3R3	N	N	Withstand voltage Input-Output. 3KVAC=>1.5KVAC	
PH300F48-5			PAF500F48-5	N	N	Withstand voltage Input-Output. 3KVAC=>1.5KVAC		
PH300F48-12			PAF500F48-12	N	N	Withstand voltage Input-Output. 3KVAC=>1.5KVAC		
PH300F48-15			PAH200S48-15	N	N	※Output Current 20A=>13A. Withstand voltage Input-Output. 3KVAC=>1.5KVAC		
PH300F48-24			PAF500F48-28	N	N	Withstand voltage Input-Output. 3KVAC=>1.5KVAC		
PH300F48-28	PAF500F48-28		N	N	Withstand voltage Input-Output. 3KVAC=>1.5KVAC			
DC110V	PH300F110-2		-	-	-	-	*1	
	PH300F110-3		-	-	-	-	*1	
	PH300F110-5		(CN200A110-5)	N	N	※Possible to replace by CN200A110-5 below 40A output		
	PH300F110-12		(CN200A110-12)	N	N	※Possible to replace by CN200A110-12 below 16.7A output		
	PH300F110-15		(CN200A110-15)	N	N	※Possible to replace by CN200A110-15 below 13.4A output		
	PH300F110-24		(CN200A110-24)	N	N	※Possible to replace by CN200A110-24 below 8.4A output		
	PH300F110-28	-	-	-	-	*1		
PFE	PFE300S	AC	PFE300S-12	PFE300SA-12	Y	Y		
			PFE300S-28	PFE300SA-28	Y	Y		
			PFE300S-48	PFE300SA-48	Y	Y		
	PFE500S	AC	PFE500S-12	PFE500SA-12	Y	Y		
			PFE500S-28	PFE500SA-28	Y	Y		
			PFE500S-48	PFE500SA-48	Y	Y		
	PFE700S	AC	PFE700S-48	PFE700SA-48	Y	Y		

\*1: Please contact us for more detail