

Certificate of Conformity

Certificate Number: CN-PV-230664

On the basis of the tests undertaken, the sample<s> of the below product have been found to comply with the requirements of the referenced specification<s>/standard<s> at the time the tests were carried out. It does not imply that Intertek has performed any surveillance or control of the manufacture(s). The manufacture(s) shall ensure that the manufacturing process assures compliance of the production units with the examined products mentioned in this certificate.

Applicant:	Afore New Energy Technology (Shanghai) Co., Ltd.
	Building 7, No.333 Wanfang Rd, Minhang District, Shanghai. China.201112
Product:	Hybrid Inverter
Ratings & Principle Characteristics:	See appendix of Certificate of Conformity
Model:	AF3K-TH, AF4K-TH, AF5K-TH, AF6K-TH, AF8K-TH, AF10K-TH, AF12K-TH, AF15K- TH, AF3K-THP, AF4K-THP, AF5K-THP, AF6K-THP, AF8K-THP, AF10K-THP, AF12K-THP, AF17K-TH, AF20K-TH, AF25K-TH, AF30K-TH, AF3K-TH-0, AF4K-TH- 0, AF5K-TH-0, AF6K-TH-0, AF8K-TH-0, AF10K-TH-0, AF12K-TH-0, AF15K-TH-0, AF3K-THP-0, AF4K-THP-0, AF5K-THP-0, AF6K-THP-0, AF8K-THP-0, AF10K-THP- 0, AF12K-THP-0, AF17K-TH-0, AF20K-TH-0, AF25K-TH-0, AF30K-TH-0
Brand Name <s>:</s>	Afore
Product Complies with:	IEC 61727:2004 IEC 62116:2014
Certificate Issuing Office Name & Address:	Intertek Testing Services Ltd. Shanghai West Area, 2 nd Floor, No. 707, Zhangyang Road China (Shanghai) Pilot Free Trade Zone, Shanghai, P. R. China
Test Report No. <s>:</s>	Accredited by ACCREDIA in accordance with ISO/IEC 17065:2012 230900413SHA-001

Additional information in Appendix.

Signature

Certification Manager: Qiao Qiao Date: 24 November 2023



PRD Nº 306B



This is an Appendix to Certificate of Conformity Number: CN-PV-230664

Ratings & Principle Characteristics:

Specifications table					
Model	AF3K-TH	AF4K-TH	AF5K-TH	AF6K-TH	
PV input					
P pv Max (kW)	5	6	7.5	9	
Vmax PV (Vdc) (absolute Max.)	1000	1000	1000	1000	
Isc PV (absolute Max.) (A)	30*2	30*2	30*2	30*2	
Number MPP trackers	2	2	2	2	
Number input strings	1/1	1/1	1/1	1/1	
Max. PV input current (A)	20*2	20*2	20*2	20*2	
MPPT voltage range (Vdc)	150-850	150-850	150-850	150-850	
Vdc range @ full power (Vdc)	200-850	200-850	200-850	250-850	
Battery (charge/discharge)					
Battery type			ead-acid		
Battery Normal Voltage Range (Vdc)	150	-800(Field adapt I	battery voltage ra	nge)	
Max charge/discharge Current(A)	30	30	30	30	
Max charge/discharge Power(kW)	3	4	5	6	
AC Grid (input and output)					
Normal AC Voltage (VAC)		3P+N+PE/3F	P+PE 230/400	9	
Frequency (Hz)		50	/ 60		
Normal AC Current (A)	4.4	5.8	7.3	8.7	
Max. cont. input/output current (A)	8 / 5.3	10.5 / 7	13 / 8.5	16 / 10.5	
Rated Power (kW)	3	4	5	6	
Rated Apparent Power (kVA)	3	4	5	6	
Max. cont. input/output Power (kW)	4.5 / 3.3	6 / 4.4	7.5 / 5.5	9 / 6.6	
Max. cont. Apparent input/output Power (kVA)	4.5 / 3.3	6 / 4.4	7.5 / 5.5	9 / 6.6	
Power factor(adjustable)		1.0(-0.8	8~ +0.8)		
AC Load output (stand alone)					
Normal Voltage (VAC)		3P+N+PE/3F	P+PE 230/400		
Frequency (Hz)		50	/ 60		
Nominal Current (A)	4.4	5.8	7.3	8.7	
Max. cont. current (A)	5.3	7	8.5	10.5	
Max. cont. Power (kW)	3	4	5	6	
Rated Apparent Power (kVA)	3	4	5	6	
Max. cont. Apparent Power (kVA)	3	4	5	6	
Others					
Ingress protection (IP)		IP	65		
Protective class		Cla	iss I		
Temperature (°C)		-25 ℃ to	୦ +60 ℃		
Inverter Isolation		Non-isolated (I	PV - AC - BAT)		
Overvoltage category	OVC III (AC Main), OVC II (PV)				



This is an Appendix to Certificate of Conformity Number: CN-PV-230664

Ratings & Principle Characteristics:

Specifications table				
Model	AF8K-TH	AF10K-TH	AF12K-TH	AF15K-TH
PV input				
P pv Max (kW)	12	15	18	22.5
Vmax PV (Vdc) (absolute Max.)	1000	1000	1000	1000
Isc PV (absolute Max.) (A)	30*2	30*2	30*2	30+48
Number MPP trackers	2	2	2	2
Number input strings	1/1	1/1	1/1	1/2
Max. PV input current (A)	20*2	20*2	20*2	20+32
MPPT voltage range (Vdc)	150-850	150-850	150-850	150-850
Vdc range @ full power (Vdc)	300-850	500-850	500-850	500-850
Battery (charge/discharge)				
Battery type	111		ead-acid	
Battery Normal Voltage Range (Vdc)		0-800(Field adapt l	battery voltage rar	
Max charge/discharge Current(A)	30	30	30	50
Max charge/discharge Power(kW)	8	10	12	15
AC Grid (input and output)				
Normal AC Voltage (VAC)		3P+N+PE/3P	P+PE 230/400	
Frequency (Hz)		50	/ 60	
Normal AC Current (A)	11.6	14.5	17.4	21.8
Max. cont. input/output current (A)	20 / 13.5	26 / 17	32 / 21.5	40.5 / 27
Rated Power (kW)	8	10	12	15
Rated Apparent Power (kVA)	8	10	12	15
Max. cont. input/output Power (kW)	12 / 8.8	15 / 11	18 / 13.2	22.5 / 16.5
Max. cont. Apparent input/output Power (kVA)	12 / 8.8	15 / 11	18 / 13.2	22.5 / 16.5
Power factor(adjustable)		1.0(-0.8	8~ +0.8)	•
AC Load output (stand alone)				
Normal Voltage (VAC)		3P+N+PE/3F	P+PE 230/400	
Frequency (Hz)		50	/ 60	
Nominal Current (A)	11.6	14.5	17.4	21.8
Max. cont. current (A)	13.5	17	21.5	27
Max. cont. Power (kW)	8	10	12	15
Rated Apparent Power (kVA)	8	10	12	15
Max. cont. Apparent Power (kVA)	8	10	12	15
Others				
Ingress protection (IP)		IP	65	
Protective class		Cla	iss I	
Temperature (℃)	-25℃ to +60℃			
Inverter Isolation		Non-isolated (I	PV - AC - BAT)	
Overvoltage category		OVC III (AC Ma	iin), OVC II (PV)	



This is an Appendix to Certificate of Conformity Number: CN-PV-230664

Ratings & Principle Characteristics:

Specifications table					
Model	AF3K-THP	AF4K-THP	AF5K-THP	AF6K-THP	
PV input					
P pv Max (kW)	5	6	7.5	9	
Vmax PV (Vdc) (absolute Max.)	1000	1000	1000	1000	
Isc PV (absolute Max.) (A)	30*2	30*2	30*2	30*2	
Number MPP trackers	2	2	2	2	
Number input strings	1/1	1/1	1/1	1/1	
Max. PV input current (A)	20*2	20*2	20*2	20*2	
MPPT voltage range (Vdc)	150-850	150-850	150-850	150-850	
Vdc range @ full power (Vdc)	200-850	200-850	200-850	250-850	
Battery (charge/discharge)					
Battery type		Li-ion/L	ead-acid		
Battery Normal Voltage Range (Vdc)	80	-600(Field adapt b	attery voltage ran	ge)	
Max charge/discharge Current(A)	50	50	50	50	
Max charge/discharge Power(kW)	3	4	5	6	
AC Grid (input and output)					
Normal AC Voltage (VAC)		3P+N+PE/3F	P+PE 230/400		
Frequency (Hz)		50	/ 60		
Normal AC Current (A)	4.4	5.8	7.3	8.7	
Max. cont. input/output current (A)	8/5.3	10.5 / 7	13 / 8.5	16 / 10.5	
Rated Power (kW)	3	4	5	6	
Rated Apparent Power (kVA)	3	4	5	6	
Max. cont. input/output Power (kW)	4.5 / 3.3	6/4.4	7.5 / 5.5	9 / 6.6	
Max. cont. Apparent input/output Power (kVA)	4.5 / 3.3	6 / 4.4	7.5 / 5.5	9 / 6.6	
Power factor(adjustable)		1.0(-0.	8~ +0.8)	·	
AC Load output (stand alone)					
Normal Voltage (VAC)		3P+N+PE/3F	P+PE 230/400		
Frequency (Hz)		50	/ 60		
Nominal Current (A)	4.4	5.8	7.3	8.7	
Max. cont. current (A)	5.3	7	8.5	10.5	
Max. cont. Power (kW)	3	4	5	6	
Rated Apparent Power (kVA)	3	4	5	6	
Max. cont. Apparent Power (kVA)	3	4	5	6	
Others					
Ingress protection (IP)		IP	65		
Protective class		Cla	iss I		
Temperature (℃)		-25 ℃ t	୦ +60 ℃		
Inverter Isolation		Non-isolated (PV - AC - BAT)		
Overvoltage category		OVC III (AC Ma	in), OVC II (PV)		



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Ratings & Principle Characteristics:

Specifications table			
Model	AF8K-THP	AF10K-THP	AF12K-THP
PV input			
P pv Max (kW)	12	15	18
Vmax PV (Vdc) (absolute Max.)	1000	1000	1000
Isc PV (absolute Max.) (A)	30*2	30*2	30*2
Number MPP trackers	2	2	2
Number input strings	1/1	1/1	1/1
Max. PV input current (A)	20*2	20*2	20*2
MPPT voltage range (Vdc)	150-850	150-850	150-850
Vdc range @ full power (Vdc)	300-850	500-850	500-850
Battery (charge/discharge)			
Battery type		Li-ion/Lead-acid	
Battery Normal Voltage Range (Vdc)	80-600 (Field adapt battery voltage range)	120- (Field adapt batte	
Max charge/discharge Current(A)	50	50	50
Max charge/discharge Power(kW)	8	10	12
AC Grid (input and output)			
Normal AC Voltage (VAC)	3F	P+N+PE/3P+PE 230/40	0
Frequency (Hz)		50 / 60	
Normal AC Current (A)	11.6	14.5	17.4
Max. cont. input/output current (A)	20 / 13.5	26 / 17	32 / 21.5
Rated Power (kW)	8	10	12
Rated Apparent Power (kVA)	8	10	12
Max. cont. input/output Power (kW)	12 / 8.8	15 / 11	18 / 13.2
Max. cont. Apparent input/output Power (kVA)	12 / 8.8	15 / 11	18 / 13.2
Power factor(adjustable)		1.0(-0.8~ +0.8)	
AC Load output (stand alone)			
Normal Voltage (VAC)	3F	P+N+PE/3P+PE 230/40	0
Frequency (Hz)		50 / 60	
Nominal Current (A)	11.6	14.5	17.4
Max. cont. current (A)	13.5	17	21.5
Max. cont. Power (kW)	8	10	12
Rated Apparent Power (kVA)	8	10	12
Max. cont. Apparent Power (kVA)	8	10	12
Others			
Ingress protection (IP)		IP65	
Protective class		Class I	
Temperature (°C)		-25℃ to +60℃	
Inverter Isolation	Nor	n-isolated (PV - AC - BA	(T)
Overvoltage category	OVC	III (AC Main), OVC II (PV)



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Ratings & Principle Characteristics:

Specifications table					
Model	AF17K-TH	AF20K-TH	AF25K-TH	AF30K-TH	
PV input					
P pv Max (kW)	25.5	30	37.5	45	
Vmax PV (Vdc) (absolute Max.)	1000	1000	1000	1000	
Isc PV (absolute Max.) (A)	48*2	48*2	60*2	60*2	
Number MPP trackers	2	2	2	2	
Number input strings	2/2	2/2	2/2	2/2	
Max. PV input current (A)	32*2	32*2	40*2	40*2	
MPPT voltage range (Vdc)	150-850	150-850	150-850	150-850	
Vdc range @ full power (Vdc)	500-850	500-850	500-850	500-850	
Battery (charge/discharge)					
Battery type			ead-acid		
Battery Normal Voltage Range (Vdc)	150	0-800(Field adapt	battery voltage ran	ige)	
Max charge/discharge Current(A)	50	50	60	60	
Max charge/discharge Power(kW)	17	20	25	30	
AC Grid (input and output)					
Normal AC Voltage (VAC)		3P+N+PE/3F	P+PE 230/400		
Frequency (Hz)	0	50	/ 60		
Normal AC Current (A)	24.7	29	36.3	43.5	
Max. cont. input/output current (A)	45 / 30	48 / 32	60 / 40	72 / 48	
Rated Power (kW)	17	20	25	30	
Rated Apparent Power (kVA)	17	20	25	30	
Max. cont. input/output Power (kW)	25.5 / 18.7	30 / 22	37.5 / 27.5	45 / 33	
Max. cont. Apparent input/output Power (kVA)	25.5 / 18.7	30 / 22	37.5 / 27.5	45 / 33	
Power factor(adjustable)		1.0(-0.	8~ +0.8)	I	
AC Load output (stand alone)		, , , , , , , , , , , , , , , , , , ,	,		
Normal Voltage (VAC)		3P+N+PE/3F	P+PE 230/400		
Frequency (Hz)		50	/ 60		
Nominal Current (A)	24.7	29	36.3	43.5	
Max. cont. current (A)	30	32	40	48	
Max. cont. Power (kW)	17	20	25	30	
Rated Apparent Power (kVA)	17	20	25	30	
Max. cont. Apparent Power (kVA)	17	20	25	30	
Others					
Ingress protection (IP)		IP	65		
Protective class		Cla	iss I		
Temperature (°C)	-25℃ to +60℃				
Inverter Isolation		Non-isolated (PV - AC - BAT)		
Overvoltage category		OVC III (AC Ma	iin), OVC II (PV)		



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Ratings & Principle Characteristics:

Specifications table						
Model	AF3K-TH-0 AF4K-TH-0 AF5K-TH-0 AF6K-TH-0					
Battery (charge/discharge)						
Battery type		Li-ion/Le	ead-acid			
Battery Normal Voltage Range (Vdc)	80	-800(Field adapt b	attery voltage ran	ge)		
Max charge/discharge Current(A)	30	30	30	30		
Max charge/discharge Power(kW)	3/3.3	4/4.4	5 / 5.5	6/6.6		
AC Grid (input and output)						
Normal AC Voltage (VAC)		3P+N+PE/3F	P+PE 230/400			
Frequency (Hz)		50	/ 60			
Normal AC Current (A)	4.4	5.8	7.3	8.7		
Max. cont. input/output current (A)	8 / 5.3	10.5 / 7	13 / 8.5	16 / 10.5		
Rated Power (kW)	3	4	5	6		
Rated Apparent Power (kVA)	3	4	5	6		
Max. cont. input/output Power (kW)	4.5/3	6 / 4	7.5 / 5	9 / 6		
Max. cont. Apparent input/output Power (kVA)	4.5 / 3	6 / 4	7.5 / 5	9 / 6		
Power factor(adjustable)		1.0(-0.8	8~ +0.8)			
AC Load output (stand alone)						
Normal Voltage (VAC)			P+PE 230/400			
Frequency (Hz)			/ 60			
Nominal Current (A)	4.4	5.8	7.3	8.7		
Max. cont. current (A)	5.3	7	8.5	10.5		
Max. cont. Power (kW)	3	4	5	6		
Rated Apparent Power (kVA)	3	4	5	6		
Max. cont. Apparent Power (kVA)	3	4	5	6		
Others						
Ingress protection (IP)	IP65					
Protective class		Cla	ss I			
Temperature (°C)	-25℃ to +60℃ (Derating 45℃)					
Inverter Isolation	Non-isolated (AC - BAT)					
Overvoltage category	OVC III (AC Main)					



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Ratings & Principle Characteristics:

Specifications table						
Model	AF8K-TH-0	AF10K-TH-0	AF12K-TH-0	AF15K-TH-0		
Battery (charge/discharge)						
Battery type	Li-ion/Lead-acid					
Battery Normal Voltage Range (Vdc)	80-800(Fiel	150-800(Field adapt battery voltage range)				
Max charge/discharge Current(A)	30	30	30	50		
Max charge/discharge Power(kW)	8 / 8.8	10 / 11	12 / 13.2	15 / 16.5		
AC Grid (input and output)						
Normal AC Voltage (VAC)	_	3P+N+PE/3P	P+PE 230/400			
Frequency (Hz)		50 /	/ 60			
Normal AC Current (A)	11.6	14.5	17.4	21.8		
Max. cont. input/output current (A)	20 / 13.5	26 / 17	32 / 21.5	40.5 / 27		
Rated Power (kW)	8	10	12	15		
Rated Apparent Power (kVA)	8	10	12	15		
Max. cont. input/output Power (kW)	12/8	15 / 10	18 / 12	22.5 / 15		
Max. cont. Apparent input/output Power (kVA)	12/8	15 / 10	18 / 12	22.5 / 15		
Power factor(adjustable)		1.0(-0.8	8~ +0.8)			
AC Load output (stand alone)						
Normal Voltage (VAC)		3P+N+PE/3P	P+PE 230/400			
Frequency (Hz)		50 /	/ 60			
Nominal Current (A)	11.6	14.5	17.4	21.8		
Max. cont. current (A)	13.5	17	21.5	27		
Max. cont. Power (kW)	8	10	12	15		
Rated Apparent Power (kVA)	8	10	12	15		
Max. cont. Apparent Power (kVA)	8	10	12	15		
Others		11 11				
Ingress protection (IP)	IP65					
Protective class	Class I					
Temperature (℃)	-25℃ to +60℃ (Derating 45℃)					
Inverter Isolation	Non-isolated (AC - BAT)					
Overvoltage category	OVC III (AC Main)					



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Ratings & Principle Characteristics:

Specifications table						
Model	AF3K-THP-0 AF4K-THP-0 AF5K-THP-0 AF6K-THP-0					
Battery (charge/discharge)						
Battery type			ead-acid			
Battery Normal Voltage Range (Vdc)	80	-600(Field adapt b	attery voltage range	ge)		
Max charge/discharge Current(A)	50	50	50	50		
Max charge/discharge Power(kW)	3/3.3	4 / 4.4	5 / 5.5	6 / 6.6		
AC Grid (input and output)						
Normal AC Voltage (VAC)		3P+N+PE/3P	+PE 230/400			
Frequency (Hz)		50,	/ 60			
Normal AC Current (A)	4.4	5.8	7.3	8.7		
Max. cont. input/output current (A)	8 / 5.3	10.5 / 7	13 / 8.5	16 / 10.5		
Rated Power (kW)	3	4	5	6		
Rated Apparent Power (kVA)	3	4	5	6		
Max. cont. input/output Power (kW)	4.5 / 3	6 / 4	7.5 / 5	9/6		
Max. cont. Apparent input/output Power (kVA)	4.5 / 3	6 / 4	7.5 / 5	9 / 6		
Power factor(adjustable)		1.0(-0.8	8~ +0.8)			
AC Load output (stand alone)						
Normal Voltage (VAC)			+PE 230/400			
Frequency (Hz)			/ 60	•		
Nominal Current (A)	4.4	5.8	7.3	8.7		
Max. cont. current (A)	5.3	7	8.5	10.5		
Max. cont. Power (kW)	3	4	5	6		
Rated Apparent Power (kVA)	3	4	5	6		
Max. cont. Apparent Power (kVA)	3	4	5	6		
Others						
Ingress protection (IP)		IP	65			
Protective class		Cla	ss I			
Temperature (°C)		-25℃ to +60℃	(Derating 45℃)			
Inverter Isolation		Non-isolated	d (AC - BAT)			
Overvoltage category	OVC III (AC Main)					



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Ratings & Principle Characteristics:

Specifications table						
Model	AF8K-THP-0	AF10K-THP-0	AF12K-THP-0			
Battery (charge/discharge)						
Battery type	Li-ion/Lead-acid					
Battery Normal Voltage Range (Vdc)	80-600120-650(Field adapt battery voltage range)(Field adapt battery voltage ran					
Max charge/discharge Current(A)	50	50	50			
Max charge/discharge Power(kW)	8 / 8.8	10 / 11	12 / 13.2			
AC Grid (input and output)						
Normal AC Voltage (VAC)	3F	P+N+PE/3P+PE 230/40	0			
Frequency (Hz)		50 / 60				
Normal AC Current (A)	11.6	14.5	17.4			
Max. cont. input/output current (A)	20 / 13.5	26 / 17	32 / 21.5			
Rated Power (kW)	8	10	12			
Rated Apparent Power (kVA)	8	10	12			
Max. cont. input/output Power (kW)	12 / 8	15 / 10	18 / 12			
Max. cont. Apparent input/output Power (kVA)	12 / 8	15 / 10	18 / 12			
Power factor(adjustable)	1.0(-0.8~+0.8)					
AC Load output (stand alone)						
Normal Voltage (VAC)	3F	P+N+PE/3P+PE 230/40	0			
Frequency (Hz)		50 / 60				
Nominal Current (A)	11.6	14.5	17.4			
Max. cont. current (A)	13.5	17	21.5			
Max. cont. Power (kW)	8	10	12			
Rated Apparent Power (kVA)	8	10	12			
Max. cont. Apparent Power (kVA)	8	10	12			
Others		_				
Ingress protection (IP)	IP65					
Protective class	Class I					
Temperature (°C)	-25°	$^\circ$ to +60 $^\circ$ (Derating 45	5°C)			
Inverter Isolation	Non-isolated (AC - BAT)					
Overvoltage category	OVC III (AC Main)					



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Ratings & Principle Characteristics:

Specifications table							
Model	AF17K-TH-0 AF20K-TH-0 AF25K-TH-0 AF30K-TH-0						
Battery (charge/discharge)							
Battery type		Li-ion/Le	ead-acid				
Battery Normal Voltage Range (Vdc)	150)-800(Field adapt I	battery voltage ran	ige)			
Max charge/discharge Current(A)	50	50	60	60			
Max charge/discharge Power(kW)	17 / 18.7	20 / 22	25 / 27.5	30 / 33			
AC Grid (input and output)							
Normal AC Voltage (VAC)		3P+N+PE/3P	+PE 230/400				
Frequency (Hz)		50 /	/ 60				
Normal AC Current (A)	24.7	29	36.3	43.5			
Max. cont. input/output current (A)	45 / 30	48 / 32	60 / 40	72 / 48			
Rated Power (kW)	17	20	25	30			
Rated Apparent Power (kVA)	17	20	25	30			
Max. cont. input/output Power (kW)	25.5 / 17	30 / 20	37.5 / 25	45 / 30			
Max. cont. Apparent input/output Power (kVA)	25.5 / 17	30 / 20	37.5 / 25	45 / 30			
Power factor(adjustable)		1.0(-0.8	3~ +0.8)				
AC Load output (stand alone)							
Normal Voltage (VAC)		3P+N+PE/3P	+PE 230/400				
Frequency (Hz)			/ 60	-			
Nominal Current (A)	24.7	29	36.3	43.5			
Max. cont. current (A)	30	32	40	48			
Max. cont. Power (kW)	17	20	25	30			
Rated Apparent Power (kVA)	17	20	25	30			
Max. cont. Apparent Power (kVA)	17	20	25	30			
Others							
Ingress protection (IP)	IP65						
Protective class	Class I						
Temperature (°C)	-25℃ to +60℃ (Derating 45℃)						
Inverter Isolation	Non-isolated (AC - BAT)						
Overvoltage category	OVC III (AC Main)						