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Date: 2015/12/08 Subscriber: 100576847

PartySite:

File No:

Service Request No: 3046876 Project Number: 15SR3046876

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PO Number:

Subject: Multiple Listing Correlation Sheet

Dear Macchi Alessandro,

Enclosed is a copy of your completed Multiple Listing Correlation Sheet covering the Basic File listed below. The following documents were added (new) or revised on 12/08/2015.

 Basic File
 Vol
 ML File
 Pages
 Revised
 New

 MH47104
 1
 MH48901
 ML Correlation Page(s)

Please review this material and report any inaccuracies to JING-HON DENG (EXT. 0) referring to the above Service Request number.

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ML FILE NO. MH48901

Issued: 2012-11-27 Revised: 2015-12-08

MULTIPLE RECOGNITION
of
BATTERIES, STANDBY - COMPONENT
(BAZR2)
for

[100576-847] DBA SRL

Basically Recognized for:

[100520-180] FUJIAN MINHUA POWER SOURCE CO LTD (SUZ)

Basically Recognized products covered by Procedure and/or Reports under File No. MH47104, Volume 1

Products Covered	Report Date	Basic Applicant's (Supplier's) Product Designation	Multiple Listee's Product Designation
Sealed cell, lead acid batteries with pressure release vents	2009-07-14	MS1.3-6	40601 3FM1.2
		MS2.8-6	40602 3FM2.8
		MS3.2-6	40603 3FM3
		MS4.5-6	40604 3FM4.5
		MS5-6	40605 3FM5.5
		MS7-6	40606 3FM7
		MS12-6	40610 3FM12
		MS14-6	40612 3FM14

<u>MARKING</u>: Same as that described in Follow-Up Service Procedure and/or Report except for

Multiple Listee's name, file number, Trademark / Tradename, when applicable, and

product designation.

<u>LITERATURE</u>: If literature is packaged with the Multiple Listed product(s) it shall be in compliance

with the requirements outlined in the appropriate UL Standard(s).

Multiple Recognition Correlation Sheet



Issued: 2012-11-27 Revised: 2015-12-08

M/L [100576-847] DBA SRL

AP [100520-180] FUJIAN MINHUA POWER SOURCE CO LTD (SUZ)

Report Date	Basic Applicant's (Supplier's) Product Designation	Multiple Listee's Product Designation
2009-07-14	MS0.8-12	41200 6FM0.8
	MS1.3-12	41201 6FM1.2
	MS2.3-12	41202 6FM2
	MS3.2-12	41204 6FM3.2
	MS4.5-12	41205 6FM4.5
	MS5-12	41205/1 6FM5
	MS7-12	41208 6FM7
	MS7-12	41209 6FM7
	MS12-12	41212
	MS18-12	6FM12 41215
	MS28-12	6FM18 41226
		6FM26G 41228
		6FM28G 41233
		6FM33G 41240 6FM40G
	Date	Report Date (Supplier's) Product Designation 2009-07-14 MS0.8-12 MS1.3-12 MS2.3-12 MS3.2-12 MS4.5-12 MS5-12 MS7-12 MS7-12 MS12-12

MARKING: Same as that described in Follow-Up Service Procedure and/or Report except for

Multiple Listee's name, file number, Trademark / Tradename, when applicable, and

product designation.

<u>LITERATURE</u>: If literature is packaged with the Multiple Listed product(s) it shall be in compliance

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Multiple Recognition Correlation Sheet



Issued: 2012-11-27 Revised: 2015-12-08

M/L [100576-847] DBA SRL

AP [100520-180] FUJIAN MINHUA POWER SOURCE CO LTD (SUZ)

Products Covered	Report Date	Basic Applicant's (Supplier's) Product Designation	Multiple Listee's Product Designation
Sealed cell, lead acid batteries with pressure release vents	2009-07-14	MM45-12	41245 6FM45G
•		MM55-12	41255 6FM55G
		MM65-12	41265SX 6FM65G
		MM65-12	41265DX
			6FM65G
		MM80-12	41275 6FM75G
		MM100-12	41360 6FM100G/A
		MM100-12	41300/1
			6FM100G/C
		MM120-12	41320 6FM120G/A
		MM150-12	41350 6FM150G/A
		MM200-12	41400/1 6FM200G/B
		MS7.2-12	41208 6FM7.2 41209 6FM7.2
			.120, 0111112
Sealed cell, lead acid batteries with pressure release vents	2009-07-14	MM100-12	41310 6FM110G/C
1		MS9-12	41209/9 6FM9

MARKING: Same as that described in Follow-Up Service Procedure and/or Report except for

Multiple Listee's name, file number, Trademark / Tradename, when applicable, and

product designation.

<u>LITERATURE</u>: If literature is packaged with the Multiple Listed product(s) it shall be in compliance

with the requirements outlined in the appropriate UL Standard(s).

File MH47104 Project 09CA18096

0000-00-00

REPORT

On

COMPONENT - Batteries, Standby

FUJIAN MINHUA POWER SOURCE CO., LTD.

FUJIAN, CHINA

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DESCRIPTION

PRODUCT COVERED:

Component - Sealed cell, rechargeable lead-acid batteries, Models MS1.2-6, MS1.3-6, MS2.8-6, MS3.2-6, MS4-6, MS4.5-6, MS5-6, MS7-6, MS10-6, MS12-6, MS14-6, MS0.7-12, MS0.8-12, MS1.2-12, MS1.3-12, MS1.9-12, MS2.3-12, MS3.2-12, MS4-12, MS4.5-12, MS5-12, MS7-12, MS7.2-12, MS7.5-12, MS9-12, MS10-12, MS12-12, MS17-12, MS18-12, MS24-12, MS25-12, MS28-12, MM33-12, MM38-12, MM40-12, MM45-12, MM55-12, MM60-12, MM75-12, MM65-12, MM80-12, MM100-12, MM120-12, MM134-12, MM150-12, MM200-12, MR55-12, MR75-12, MR100-12 and MR150-12.

ELECTRICAL RATINGS:

	Nominal	Manufacturer's
Model	Voltage, V	Capacity Ah
MS1.2-6	6	1.2
MS1.3-6	6	1.3
MS2.8-6	6	2.8
MS3.2-6	6	3.2
MS4-6	6	4
MS4.5-6	6	4.5
MS5-6	6	5
MS7-6	6	7
MS10-6	6	10
MS12-6	6	12
MS14-6	6	14
MS0.7-12	12	0.7
MS0.8-12	12	0.8
MS1.2-12	12	1.2
MS1.3-12	12	1.3
MS1.9-12	12	1.9
MS2.3-12	12	2.3
MS3.2-12	12	3.2
MS4-12	12	4
MS4.5-12	12	4.5
MS5-12	12	5
MS7-12	12	7
MS7.2-12	12	7.2
MS7.5-12	12	7.5
MS9-12	12	9
MS10-12	12	10
MS12-12	12	12
MS17-12	12	17
MS18-12	12	18
MS24-12	12	24

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Nominal	Man Carl III
NOMETICE	Manufacturer's
Voltage, V	Capacity Ah
12	24
12	28
12	33
12	38
12	40
12	45
12	55
12	60
12	75
12	65
12	80
12	100
12	120
12	134
12	150
12	200
12	55
12	75
12	100
12	150
	Voltage, V 12 12 12 12 12 12 12 12 12 12 12 12 12

GENERAL DESCRIPTION

These rechargeable lead-acid batteries are provided with one pressure release vent per cell, designed to prevent excessive accumulations of gas pressure and battery/cell rupture.

Material Modification - There shall be no changes in the formulation or composition of any of the materials used in the construction of the batteries or relief vents unless previously cleared through Underwriters Laboratories Inc.

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TECHNICAL CONSIDERATION (NOT FOR FIELD REPRESENTATIVE'S USE):

Use - For use only in complete equipment where the acceptability of the combination is determined by Underwriters Laboratories Inc.

Conditions of Acceptability - The use of these devices may be considered acceptable under the following conditions:

- 1. These batteries in combination with their pressure release vents have been found to comply with the requirements of the pressure release test in the Standard for Standby Batteries, UL 1989, third edition, dated 2006-12-28. No other performance related tests have been conducted on these batteries.
- 2. The capacity under Electrical Ratings was assigned by the manufacturer and has not been evaluated.
- The need for additional testing shall be determined in the end use application.
- 4. For material of ZHENJIANG GPPC CHEMICAL CO LTD (E206417), Type D-1000 or D-120, the battery enclosure of all Models are classed as HB flame rating. The batteries may not be appropriate for use in a UPS application. The suitability of the flame rating and the need for an enclosure shall be determined in the end-use application.
- 5. The suitability of the terminals and electrical connections shall be considered in the end use product.

RECHARGEABLE LEAD-ACID BATTERY, MODEL MODEL MS14-6 - FIG. 1 MODEL MS-1.2-6 - FIG. 2 (REPRESENTS MODELS IN TABLE A)

Battery Case and Cover - R/C (QMFZ2), ZHENJIANG GPPC CHEMICAL CO LTD (E206417), Type D-1000, rated $V\!-\!0$, 60°C, minimum 1.5 mm thick for case and cover, case and cover secured by ultrasonic welding or epoxy, refer to Table A for overall dimensions and minimum thickness.

Alternate - same as above except that ZHENJIANG GPPC CHEMICAL CO LTD (E206417), Type D-120, rated HB, 60° C, minimum 1.5 mm thick for case and cover

Cells - Each nominal 2 V, lead-acid type.

Terminals - Positive and negative, plate type. Each plate formed of Pb alloy, potted with epoxy at plate exit.

Alternate - Same as above except tab type.

Separator - Micro glass-fiber.

Electrolyte - Immobilized dilute sulfuric acid.

Pressure Release Vent - One vent per cell, constructed as follows.

- A. Vent Body Integrally molded in top half of battery case, refer to Table B for dimensions of vent.
- B. Vent Cap Molded of natural rubber.

Markings - See Sec. Gen.

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TABLE A

OVERALL AND VENT DIMENSIONS OF BATTERIES

Battery		Overall		Case Min. Wall		Minimum Wall Thickness		Vent	
Model		ensions,		Thickne		Cell	Vent	. Vent Designation	
								-	
Designation	Length	Width	Height	Bottom	Sides	Cover,	Cover,	Type	
						mm	mm		
MS1.2-6	97	24	52	2.2	2.2	15	1.5	ABS	
MS1.3-6	97	24	52	2.2	2.2	15	1.5	ABS	
MS2.8-6	66	33	97	2.2	2.2	15	1.5	ABS	
MS3.2-6	134	35	61	2.2	2.2	15	1.5	ABS	
MS4-6	70	47	101	2.2	2.2	15	1.7	ABS	
MS4.5-6	70	47	101	2.2	2.2	15	1.5	ABS	
MS5-6	70	47	101	2.2	2.2	15	1.5	ABS	
MS7-6	151	34	94	2.2	2.2	15	1.5	ABS	
MS10-6	151	50	94	2.2	2.2	15	1.5	ABS	
MS12-6	151	50	94	2.2	2.2	15	1.5	ABS	
MS14-6	108	71	140	2.2	2.2	15	1.5	ABS	
MS0.7-12	96	25	62	2.2	2.2	15	1.5	ABS	
MS0.8-12	96	25	62	2.2	2.2	15	1.5	ABS	
MS1.2-12	97	43	52	2.2	2.2	15	1.5	ABS	
MS1.3-12	97	43	52	2.2	2.2	15	1.5	ABS	
MS1.9-12	178	35	61	2.2	2.2	15	1.5	ABS	
MS2.3-12	178	35	61	2.2	2.2	14	1.5	ABS	
MS3.2-12	134	67	61	2.2	2.2	14	1.5	ABS	
MS4-12	90	70	101	2.2	2.2	14	1.5	ABS	
MS4.5-12	90	70	101	2.2	2.2	14	1.5	ABS	
MS5-12	90	70	101	2.2	2.2	14	1.5	ABS	
MS7-12	151	65	94	2.2	2.2	14	1.5	ABS	
MS7.2-12	151	65	94	2.2	2.2	14	1.7	ABS	
MS7.5-12	151	65	94	2.2	2.2	14	1.7	ABS	
MS9-12	151	65	94	2.2	2.2	14	1.7	ABS	
MS10-12	151	98	95	2.2	2.2	14	1.7	ABS	
MS12-12	151	98	95	2.2	2.2	12	1.5	ABS	
MS17-12	181	77	167	2.2	2.2	25.7	1.7	ABS	
MS18-12	181	77	167	2.2	2.2	25.7	1.7	ABS	
MS24-12	166	175	125	2.2	2.2	25	1.7	ABS	
MS25-12	165	125	175	2.2	2.2	25	1.7	ABS	
MS28-12	166	175	125	4.3	4.3	25	1.7	ABS	
MM33-12	195	130	155	4.3	4.3	30	1.7	ABS	
MM38-12	197	165	170	4.3	4.3	31	2.6	ABS	
MM40-12	197	165	170	4.3	4.3	31	2.6	ABS	
MM45-12	197	165	170	4.3	4.3	24.7	2.6	ABS	
MM55-12	229	139	209	4.3	4.3	24.7	2.6	ABS	
MM60-12	260	168	211	4.3	4.3	39.4	2.6	ABS	
MM75-12	260	168	211	4.3	4.3	35.2	2.6	ABS	
MM65-12	350	167	179	4.3	4.3	39.4	2.6	ABS	
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TABLE A

OVERALL AND VENT DIMENSIONS OF BATTERIES

				Cas	se	Minimu	ım Wall	
Battery		Overall		Min.	Wall	Thic	kness	Vent
Model	Dime	ensions,	mm	Thickne	ss, mm	Cell	Vent	Designation
Designation	Length	Width	Height	Bottom	Sides	Cover,	Cover,	Type
						mm	mm	
								-
MM80-12	350	167	179	4.3	4.3	35.2	2.6	ABS
MM100-12	331	173	213	4.3	4.3	34.5	2.6	ABS
MM120-12	409	176	225	4.3	4.3	29.7	2.6	ABS
MM134-12	342	172	280	4.3	4.3	34	2.6	ABS
MM150-12	485	172	240	4.3	4.3	34	2.6	ABS
MM200-12	522	238	218	4.3	4.3	35	2.6	ABS
MR55-12	277	106	222	4.3	4.3	24.7	2.6	ABS
MR75-12	562	114	188	4.3	4.3	35.2	2.6	ABS
MR100-12	394	109	285	4.3	4.3	34.5	2.6	ABS
MR150-12	551	109	287	4.3	4.3	34	2.6	ABS

Table B VENT DIMENSIONS OF BATTERIES

Dottom: Model No	Vent Dimension, mm				
Battery Model No.	ID, mm	Height, mm			
MS1.2-6	5.7	6.5			
MS1.3-6	5.7	6.5			
MS2.8-6	5.7	6.5			
MS3.2-6	5.7	6.5			
MS4-6	5.7	6.5			
MS4.5-6	5.7	6.5			
MS5-6	5.7	6.5			
MS7-6	5.7	6.5			
MS10-6	5.7	6.5			
MS12-6	5.7	6.5			
MS14-6	5.7	6.5			
MS0.7-12	5.7	6.5			
MS0.8-12	5.7	6.5			
MS1.2-12	5.7	6.5			
MS1.3-12	5.7	6.5			
MS1.9-12	5.7	6.5			
MS2.3-12	5.7	6.5			
MS3.2-12	5.7	6.5			
MS4-12	5.7	6.5			
MS4.5-12	5.7	6.5			
MS5-12	5.7	6.5			
MS7-12	5.7	6.5			
MS7.2-12	5.7	6.5			
MS7.5-12	5.7	6.5			
MS9-12	5.7	6.5			
MS10-12	5.7	6.5			
MS12-12	5.7	6.5			
MS17-12	5.7	6.5			
MS18-12	5.7	6.5			
MS24-12	5.7	6.5			
MS25-12	5.7	5.2			
MS28-12	5.7	5.2			
MM33-12	8.2	5.2			
MM38-12	8.2	5.2			
MM40-12	8.2	5.2			
MM45-12	8.2	5.2			
MM55-12	8.2	5.2			
MM60-12	8.2	5.2			
MM75-12	8.2	5.2			
MM65-12	8.2	5.2			

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Table B cont'd

Battery Model No.	Vent Dimension, mm			
	ID, mm	Height, mm		
MM80-12	8.2	5.2		
MM100-12	8.2	5.2		
MM120-12	8.2	5.2		
MM134-12	8.2	5.2		
MM150-12	8.2	5.2		
MM200-12	8.2	5.2		
MR55-12	8.2	5.2		
MR75-12	8.2	5.2		
MR100-12	8.2	5.2		
MR150-12	8.2	5.2		