



**JABATAN KERJA RAYA MALAYSIA  
CAWANGAN KEJURUTERAAN ELEKTRIK  
UNIT PENSIJILAN BAHAN & STANDARD**

**TECHNICAL INFORMATION**

**AUTO FAN**

A. COMPANY INFORMATION						
COMPANY NAME :						
ADDRESS :				TELEPHONE NO :		
				FAX NO :		
				COMPANY EMAIL :		
ISO CERTIFIED COMPANY		REGISTRATION NO:		SCOPE:		
1. ISO 9001	<input type="checkbox"/>	YES	<input type="checkbox"/>	NO	.....	.....
2. ISO 14001	<input type="checkbox"/>	YES	<input type="checkbox"/>	NO	.....	.....
3. ISO 50001	<input type="checkbox"/>	YES	<input type="checkbox"/>	NO	.....	.....
4. ISO .....	<input type="checkbox"/>	YES	<input type="checkbox"/>	NO	.....	.....

B. PRODUCT INFORMATION				
BRAND NAME: .....				
PRODUCT CERTIFICATION LICENSE NO:		VALID UNTIL (dd/mm/yyyy):		
.....		.....		
MODEL NO:	CERTIFICATE OF APPROVAL NO: (ST)	VALID UNTIL (dd/mm/yyyy)	EE STAR RATING	COLOUR
1. ....	.....	.....	.....	.....
2. ....	.....	.....	.....	.....
3. ....	.....	.....	.....	.....
4. ....	.....	.....	.....	.....
5. ....	.....	.....	.....	.....
6. ....	.....	.....	.....	.....

**TECHNICAL INFORMATION**

**AUTO FAN**

B. PRODUCT INFORMATION (continue)						
APPROVAL STANDARD:						
1. MS IEC 60335-1	YES	<input type="checkbox"/>	NO	<input type="checkbox"/>		
2. MS IEC 60335-2-80 @ MS 1597	YES	<input type="checkbox"/>	NO	<input type="checkbox"/>		
3. MS 1220	YES	<input type="checkbox"/>	NO	<input type="checkbox"/>		
4. MS 2574	YES	<input type="checkbox"/>	NO	<input type="checkbox"/>		
5.....						
NAME OF MANUFACTURER:						
.....						
FACTORY ADDRESS:						
.....						
.....						
.....						
PHYSICAL DATA :						
MODEL NO.	POWER (W)	VOLTAGE (V)	DIMENSION (mm)	WEIGHT (kg)	PICTURE	
1.					YES <input type="checkbox"/>	NO <input type="checkbox"/>
2.					YES <input type="checkbox"/>	NO <input type="checkbox"/>
3.					YES <input type="checkbox"/>	NO <input type="checkbox"/>
4.					YES <input type="checkbox"/>	NO <input type="checkbox"/>
5.					YES <input type="checkbox"/>	NO <input type="checkbox"/>
6.					YES <input type="checkbox"/>	NO <input type="checkbox"/>
7.					YES <input type="checkbox"/>	NO <input type="checkbox"/>
8.					YES <input type="checkbox"/>	NO <input type="checkbox"/>
COMPONENTS INFORMATION :						
NO.	NAME OF PART	MANUFACTURER	MODEL NO.	TECHNICAL DATA	MILL CERTIFICATE	STANDARD
1.	Fan Blade					
2.	Fan Cover					
3.	Motor					
4.	Capacitor for Motor					
5.	Thermal Fuse					
6.	Internal Wire					
7.	Safety Wire Rope					
8.	Close End Connector					
9.						
10.						
SALT SPRAY TESTED?						
<input type="checkbox"/> Yes <input type="checkbox"/> No						
If yes, please also complete <b>Section D</b>						

**TECHNICAL INFORMATION**

**AUTO FAN**

<b>C. STANDARDS AND SPECIFICATIONS</b>						
<i>Please tick (✓) where applicable, fill up Test Report No, Page No and Remarks.</i>						
No.	Descriptions	Yes	No	Test Report No.	Page	Remarks/ Material
<b>1.</b>	<b>Motor Capacitor</b>					
	1.1 Brand: _____			_____	_____	_____
	1.2 Voltage and rating: _____ V/ _____ μF			_____	_____	_____
	1.3 Frequency: _____ Hz			_____	_____	_____
	1.4 Temperature: _____ °C			_____	_____	_____
	1.5 Standard: IEC 60252-1.	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____	_____
	1.6 Class B	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____	_____
	1.7 Life hour 10 000 hours	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____	_____
	1.8 Made from fire retardant material and shall be totally encapsulated with a thermosetting resin	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____	_____
	1.9 Dry self healing, metalized polypropylene type.	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____	_____
<b>2.</b>	<b>Power Consumption (≤ 55W)</b>	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____	_____
	2.1 Watts: _____ W					
	2.2 Power consumption at a different speed regulations c/w regulator loss					
	- speed No. 1: _____ W, rpm : _____					
	- speed No. 2 : _____ W, rpm: _____					
	- speed No. 3 : _____ W, rpm : _____					
<b>3.</b>	<b>Air Delivery (≥ 60m<sup>3</sup>/min)</b>	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____	_____
	3.1 Air delivery : _____ m <sup>3</sup> /min					
	3.2 Air delivery at a different speed regulations c/w regulator loss.					
	- speed No. 1 (minimum) : _____ m <sup>3</sup> /min					
	- speed No. 2 : _____ m <sup>3</sup> /min					
	- speed No. 3(maximum): _____ m <sup>3</sup> /min					
<b>4.</b>	<b>Noise Level (≤ 62dB)</b>	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____	_____
	4.1 Noise level : _____ dB					

**TECHNICAL INFORMATION**

**AUTO FAN**

<b>C. STANDARDS AND SPECIFICATIONS (continue)</b>						
<i>Please tick (✓) where applicable, fill up Test Report No, Page No and Remarks.</i>						
No.	Descriptions	Yes	No	Test Report No.	Page	Remarks/ Material
5.	<b>Blade</b> 5.1 Material of blade : _____					
6.	<b>Thermal Fuse (≥ 130°C, 2A)</b> Others (Please specify) : _____	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____	_____
7.	<b>Speed control</b> Type of speed control : _____	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____	_____
8.	<b>Supplementary Suspension (wire rope)</b>					
	8.1 With wire rope	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____	_____
	8.2 Method of installation in accordance to JKR requirement (horizontally hang when drop) c/w picture	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____	_____
	8.3 Allowance for auto supply cut-off c/w enough allowance for safety wire for it to be operational	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____	_____
	8.4 Anti-corrosive					
	8.5 Others (please specify) _____	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____	_____
9.	<b>Markings:</b>					
	9.1 _____					
	9.2 _____					
	9.3 _____					
	9.4 _____					
	9.5 _____					
10.	<b>Others (Please specify) :</b> _____ _____ _____ _____					

**TECHNICAL INFORMATION**

**AUTO FAN**

<b>D. ADDITIONAL REQUIREMENT FOR INDOOR SALT SPRAY AUTO FAN</b>						
<i>Please tick (✓) where applicable, fill up Test Report No, Page No and Remarks.</i>						
No.	Descriptions	Yes	No	Test Report No.	Page	Remarks/ Material
1.	Rust proof type	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____	_____
2.	The housing and blades shall be finished with double powder coatings of hybrid epoxy polyester compounds.	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____	_____
3.	All metal parts shall undergo surface preparation and surface pre-treatment before application of first powder coating.	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____	_____
4.	Surface Preparation					
	4.1 Shall consist of firstly chemical cleaning to effectively remove mill scale, rust, contaminants & corrosive compound	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____	_____
	4.2 Then, followed by solvent cleaning & degreasing to remove oil or greases	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____	_____
	4.3 Rinsing	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____	_____
5.	Surface Pre- treatment					
	5.1 The cleaned surface shall immediately undergo zinc phosphate surface pre-treatment	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____	_____
	5.2 Prior to zinc phosphate surface treatment, the surface shall be conditioned with recommended conditioner	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____	_____
	5.3 The pre-treated surface shall then be rinsed & dried in the oven	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____	_____
6.	First Powder Coating - After pre- treated surface, the first powder coating is baked in the oven.					
	6.1 The curing time & temperature shall be recommended by manufacturer or 204 °C for 10 minutes	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____	_____
	6.2 The film thickness of first powder coating shall be within 50 to 80 microns	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____	_____
				Thickness:	_____	microns
	6.3 The part shall be inspected for any defect before applying second powder coating	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____	_____

**TECHNICAL INFORMATION**

**AUTO FAN**

D. ADDITIONAL REQUIREMENT FOR INDOOR SALT SPRAY AUTO FAN (continue)						
<i>Please tick (✓) where applicable, fill up Test Report No, Page No and Remarks.</i>						
No.	Descriptions	Yes	No	Test Report No.	Page	Remarks/ Material
7.	Second Powder Coating					
	7.1 The part shall be baked in oven for the recommended time & temperature	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____	_____
	7.2 The film thickness of second powder coating shall be within 50 to 80 microns	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____	_____
				Thickness:	_____	microns
	7.3 The finished part then be inspected any defects	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____	_____
	7.4 The finished colour shall be white	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____	_____
	If the process is different from the above, please explain the details:					
	_____					
	_____					
	_____					
8.	The manufacturer shall give warranty / guarantee for the special treatment to the metal parts (Auto fan housing & fan blades against corrosion far: at least a year from the date of installation at site)	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____	_____
				No. of Year:	_____	year
9.	Each fan blade shall be properly marked / labelled for identification purpose with the expression "Double Hybrid Epoxy Polyester Powder Coating"	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____	_____
				Marking:	_____	_____
				_____	_____	_____
10.	The fans shall carry the model, serial numbers, brand name & date of manufacturer	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____	_____
11.	Standard compliance?	<input type="checkbox"/>	<input type="checkbox"/>			
	Test Report No.	Test Standard		Testing Laboratory		Date of Issue
11.1	_____	_____		_____		_____
11.2	_____	_____		_____		_____
11.3	_____	_____		_____		_____

**TECHNICAL INFORMATION**

**AUTO FAN**

**E. TYPE TEST CHECKLIST (With Reference to MS IEC 60335-1 & MS IEC 60335-2-80 @ MS 1597 )**

Test Report No : \_\_\_\_\_

Accredited Laboratory : \_\_\_\_\_

Clause	Title / Descriptions	Page No	Result (P / F / NA)	Value
5	General conditions for the tests	_____	_____	_____
6	Classification	_____	_____	_____
7	Marking and instructions	_____	_____	_____
8	Protection against access to live parts	_____	_____	_____
10	Power input and current	_____	_____	_____
11	Heating	_____	_____	_____
13	Leakage current and electric strength at operating temperature	_____	_____	_____
14	Transient overvoltage's	_____	_____	_____
15	Moisture resistance	_____	_____	_____
16	Leakage current and electric strength	_____	_____	_____
17	Overload protection of transformers and associated circuits	_____	_____	_____
18	Endurance	_____	_____	_____
19	Abnormal operation	_____	_____	_____
20	Stability and mechanical hazards	_____	_____	_____
21	Mechanical strength	_____	_____	_____
22	Construction	_____	_____	_____
23	Internal wiring	_____	_____	_____
24	Components	_____	_____	_____
25	Supply connection and external flexible cords	_____	_____	_____
26	Terminals for external conductor	_____	_____	_____
27	Provision for earthing	_____	_____	_____
28	Screws and connections	_____	_____	_____
29	Clearance, creepage distances and solid insulation	_____	_____	_____
30	Resistance to heat and fire	_____	_____	_____
31	Resistance to rusting	_____	_____	_____
32	Radiation, toxicity and similar hazards	_____	_____	_____

**TECHNICAL INFORMATION**

**AUTO FAN**

**E. TYPE TEST CHECKLIST (With Reference to MS 1220)**

Test Report No : \_\_\_\_\_

Accredited Laboratory : \_\_\_\_\_

Clause	Title / Descriptions	Page No	Result (P / F / NA)	Value
4	Sizes, number of speeds and types	_____	_____	_____
5	Frequency	_____	_____	_____
6	Design and general construction	_____	_____	_____
7	Speed regulators	_____	_____	_____
8	Interchangeability	_____	_____	_____
9	Marking	_____	_____	_____
10	Test	_____	_____	_____
11	Tolerance on ratings	_____	_____	_____

**F. LIST OF DOCUMENTS TO BE ATTACH:**

- 1. Technical catalogue
- 2. Installation manual / instruction
- 3. Maintenance manual / instruction
- 4. Softcopy picture (jpeg)
  - 4.1 Front view c/w regulator
  - 4.2 Back View
  - 4.3 Marking
  - 4.4 Others



**TECHNICAL INFORMATION**

**AUTO FAN**

**G. OTHERS** (*Please Specify*)

1. ....
2. ....
3. ....

**H. PENGESAHAN**

Adalah saya ..... dengan ini mengesahkan segala keterangan yang diberikan/dikemukakan bagi produk di atas adalah benar. Jika saya didapati membuat pengakuan **PALSU**, maka tindakan seterusnya boleh diambil oleh pihak JKR ke atas diri saya.

Cop Syarikat:



Tandatangan : \_\_\_\_\_

Nama : \_\_\_\_\_

Jawatan : \_\_\_\_\_

Tarikh : \_\_\_\_\_

**I. ULASAN** (*Untuk Kegunaan Pejabat*)

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