

Form B03

## Scheduled Maintenance Work Order

Quantum Medical Solutions sdn bhd  
transcending boundaries, transforming life

Format Ref. - QMS/TSD-003 Rev. 00

Work Order No	POW 372053	Scheduled Month	FEBRUARY 2018
Work Order Date	1/2/18	Completed Date	13/2/2018
Clinic Name	KD BUKIT KALAM	Clinic Code	WPL011
BE No	WPL000281	District	MP Labuan
BE Category	FREEZERS, LABORATORY, VACCINE	WO Assigned to	Moff. ACHMAD
Ownership	<input type="checkbox"/> Existing Equipment	<input type="checkbox"/> New & Purchased Equipment	
BE Condition	<input type="checkbox"/> Under Warranty	<input type="checkbox"/> BER Proposed	
Work Order Type	<input type="checkbox"/> Preventive Maintenance (PM) <input type="checkbox"/> Routine Inspection (RI)	<input type="checkbox"/> Third Party Calibration (TPC) <input type="checkbox"/> Statutory Certification (SC)	

## BE Third Party Calibration / Statutory Certification Details

Company Name	NA	Cal / Cert Date	NA
Contact Number		Cal / Cert Expiry Date	

## Action Taken

↳ Do PPM as per Checklist.

## Schedule Maintenance Execution Details

Sl No	QMS Engineer / Technician Name	Date	Start Time	End Time
		13/2/2018	2:00pm	3:00pm

## Customer Remarks

Engineer / Technician Signature Name Date 13/2/2018	Customer Signature Name Designation Date Stamp JURANI AHMAD KETUA SURUJAWAT KESIHATAN USKUP LRA: 24420
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For Internal Use only




First Verification  
QMS Circle Incharge

JULIUS LIANSUN  
BIOMEDICAL ENGINEER QMS  
020-8810015

Final Verification  
QMS State Incharge

DICKY LEE  
SABAH STATE MANAGER  
QUANTUM MEDICAL SOLUTIONS SDN BHD

 Quantum Medical Solutions sdn bhd <small>transforming technology, transforming lives</small>	<b>Quantum Medical Solutions Sdn Bhd</b> <b>BEMS Planned Preventive Maintenance Checklist</b> <b>Freezers, Laboratory, Vaccine</b> <small>BE CODE :ME-015</small>	CHECKLIST NO: CL-073 REV.000					
<b>PART 1 ASSET DETAILS</b>							
WORK ORDER NO ▶ <u>FW032053</u>		ASSET NO ▶ <u>WPL000281</u>					
MANUFACTURER ▶ <u>216</u>		MODEL ▶ <u>216</u>					
FREQUENCY ▶ 3 MONTHLY ( ) 6 MONTHLY ( ) 12 MONTHLY <input checked="" type="checkbox"/>		PPM HOURS ▶ <u>1.0</u>					
<b>PART 2 SPECIAL PRECAUTION</b>							
If there is evidence of body fluid contamination, submit the device for cleaning and decontamination before inspecting it. Wear appropriate Personnel Protection Equipment (PPE) during work. Wear grounded electrostatic wristband when handling PCB or electronic components. Refer to the safety procedure for additional precautions and guidance as per manufacturer guidelines. Make sure the test equipment used are duly calibrated.							
<b>PART 3 TEST APPARATUS</b>							
<i>Tick (✓) where appropriate</i>							
NO	ASSET NO	DESCRIPTION	SERIAL NO	CALIBRATION DUE ON			
	<u>TEEST 0085</u>	ELECTRICAL SAFETY TESTER	<u>3227039</u>	<u>10/1/19</u>			
	<u>TEEST 0020</u>	THERMOMETER	<u>3043034265</u>	<u>09/11/18</u>			
<b>PART 4 QUALITATIVE TASKS</b>							
<i>Tick (✓) where appropriate</i>							
	PASS	FAIL	NA		PASS	FAIL	NA
1 Chassis - verify physical integrity, cleanliness and condition	(✓)	( )	( )	7 Controls/ Switches/ Keypad - verify proper operation of controls	(✓)	( )	( )
2 Mount/ Fasteners - verify physical integrity	(✓)	( )	( )	8 Indicators/ Displays - verify proper illumination and operation	(✓)	( )	( )
3 Power Cord - verify proper insulation and integrity	(✓)	( )	( )	9 Alarm/ Audible Signal - verify operation	(✓)	( )	(✓)
4 Strain Relief - verify physical integrity at both ends of line cord	(✓)	( )	( )	10 Door Gasket, Hinges - Verify physical Integrity	(✓)	( )	( )
5 Circuit Breaker/ Fuse - verify integrity of external circuit breaker and/or rating of external fuse	(✓)	( )	( )	11 Check Compressor - Verify physical Integrity	( )	( )	(✓)
6 Fittings/ Connectors - check all fittings/connectors	(✓)	( )	( )	12 Calibration	(✓)	( )	( )
<b>PART 5 PREVENTIVE MAINTENANCE TASKS</b>							
<i>Tick (✓) where appropriate</i>							
	DONE	NOT DONE**	NA		DONE	NOT DONE**	NA
1 Cleaning the inside with a vacuum cleaner	(✓)	( )	( )	4 Check / replace door gasket	(✓)	( )	( )
2 Clean compressor	(✓)	( )	( )	Notes: * For all Parts, NA is defined as NOT APPLICABLE ** If you have ticked 'NOT DONE', then justify in Part 8 *** Choose Whichever Applicable			
3 Check/ clean thermostat	(✓)	( )	( )				

 Quantum Medical Solutions sdn bhd <small>100, Jalan Puchong Perdana 1/1, Puchong Perdana, 47100 Puchong, Selangor, Malaysia</small>	<b>Quantum Medical Solutions Sdn Bhd</b> <b>BEMS Planned Preventive Maintenance Checklist</b> <b>Freezers, Laboratory Vaccine</b> BE CODE : ME-015	CHECKLIST NO: CL-073 REV.000						
WORK ORDER NO ▶ <u>pwo 372053</u>								
<b>PART 6 QUANTITATIVE TASKS</b>								
<i>Tick (✓) where appropriate</i>								
No	Description	Units / UOM	Set Values	Measured Values	Limit/Tolerance	PASS	FAIL	NA
	Temperature	°C	4	4.2	± 1°C	(✓)	( )	( )
<b>PART 7 ELECTRICAL SAFETY TEST</b>								
ELECTRICAL SAFETY TEST, (attach report) <small>(In accordance to IEC 60601)</small> <div style="display: flex; justify-content: space-around; align-items: center;"> <input checked="" type="checkbox"/> PASS         <input type="checkbox"/> FAIL         <input type="checkbox"/> NA       </div>								
<b>PART 8 NOTES</b>								
JURAINI AHMAD <small>KETUA JURURAHAT KESIHATAN USG/GRUP</small> <small>(UKR: 24420)</small> 								
<div style="display: flex; justify-content: space-between;"> <div> <input type="checkbox"/> CORRECTIVE MAINTENANCE REQUIRED         </div> <div> <input checked="" type="checkbox"/> FUNCTIONING         </div> <div> <input type="checkbox"/> NOT FUNCTIONING         </div> </div> <div style="display: flex; justify-content: space-between; margin-top: 10px;"> <div>           WORK ORDER NO ▶ <u>NA</u> </div> <div>           NEXT PPM DATE ▶ <u>12/12/2019</u> </div> </div>								
PPM has been performed in accordance to the checklist and the equipment is functioning to the intended purpose. COMPLETED BY:  DATE: <u>13/12/2018</u>								

# Fluke Biomedical

Date 13/02/2018

## Test Setup

Operator ID LBNBME  
Calibration Tech  
Calibration Date 10/01/2019  
Firmware Version 2.08.01  
Serial Number 3227039  
Date & Time 13/02/2018 & 14:14  
JOB Name

## DUT Information

Equipment Number WPL 000281  
Serial Number  
Manufacturer  
Model  
Location KD BUKIT KALAM  
Other

## Template Information

Template Name FREEZERS, LAB, VACCINE  
Pause after Power ON NO  
Power ON delay 2  
Test Speed RAPID  
Halt on Test Failure YES  
Include Time YES  
Insulation Resistance Voltage 250V  
Multi Enclosure Test NO

Standard IEC62353-Differential  
Pause before Power OFF NO  
Power OFF delay 0  
Test Mode AUTO  
Multi PE Test NO  
Multi Restore WORST/LAST  
Reverse Polarity YES  
Classification I

## PLC Configuration-Applied part setup

AP Name AP Type AP Num

## ESA615 Test Results

Test Name	Value	High Limits	Low Limits	Status
Protective Earth Resistance	0.20 Ohm	0.3	-	P
Insulation Resistance				P
Mains to Protective Earth	999 MOhm	-	-	P
Mains Voltage				P
Live to Neutral	241.5 V	-	-	P
Live to Earth	12.8 V	-	-	P
Neutral to Earth	240.5 V	-	-	P
Equipment Current	11.6 A	-	-	P
Differential Leakage				P
Normal Condition	49 uA	500	-	P
Normal Condition-Reversed mains	61 uA	500	-	P

Signature

MOHD. ASHMANI B MOHD HISHAM  
BIOMEDICAL TECHNICIAN, GMS  
019-2634231