

Vidiam MAVA APPLIANCES		Thermal Efficiency Test Report																													
Test Method : IS 4246 : 2002		CM/L : 6700000198																													
Model Name : Viva Pro SS 3B		Clause : 26																													
Description : New Design Burner		Date : 02/07/2024																													
Formula :	$E = \frac{100(G+W)(T2-T1)}{MK}$	Spec : Should be above 68%																													
E = Thermal efficiency of the burner in percent		M = Gas consumption in kg (M=M1-M2)																													
G = Quantity of water in the vessel in kg		M1 = Initial weight of cylinder in kg																													
T1 = Initial temperature of water in °C		M2 = Final weight of the cylinder in kg																													
T2 = Final temperature of water in °C		K = Calorific value of the gas in (kcal/kg 10900)																													
W = Water equivalent of the vessel complete with stirrer and lid		Specific heat of aluminium is 0.214																													
Burner: Small Jet Rate: 58 <table border="0"> <tr> <td>T1 :</td> <td>27.5</td> <td>Burner To Pansupport Height in mm :</td> <td></td> </tr> <tr> <td>T2 :</td> <td>90.5</td> <td>Room Temperature °C :</td> <td>27.5</td> </tr> <tr> <td>M1 :</td> <td>2.7971</td> <td>Time Duration in min. :</td> <td>17</td> </tr> <tr> <td>M2 :</td> <td>2.7624</td> <td>Weight of Vessel+Stirrer+Lid in Kg :</td> <td>0.531</td> </tr> <tr> <td>W :</td> <td>0.113634</td> <td>Gas Consumption in L/hr :</td> <td></td> </tr> <tr> <td>G :</td> <td>3.7</td> <td>Calorific value K :</td> <td>10900</td> </tr> <tr> <td></td> <td></td> <td>Specific Heat Of Aluminium :</td> <td>0.214</td> </tr> </table> $= \frac{24025.8942}{378.23}$ Thermal efficiency = 63.52				T1 :	27.5	Burner To Pansupport Height in mm :		T2 :	90.5	Room Temperature °C :	27.5	M1 :	2.7971	Time Duration in min. :	17	M2 :	2.7624	Weight of Vessel+Stirrer+Lid in Kg :	0.531	W :	0.113634	Gas Consumption in L/hr :		G :	3.7	Calorific value K :	10900			Specific Heat Of Aluminium :	0.214
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Burner: Medium Jet Rate: 77 <table border="0"> <tr> <td>T1 :</td> <td>27</td> <td>Burner To Pansupport Height in mm :</td> <td></td> </tr> <tr> <td>T2 :</td> <td>90</td> <td>Room Temperature °C :</td> <td>27.1</td> </tr> <tr> <td>M1 :</td> <td>2.7624</td> <td>Time Duration in min. :</td> <td>19.32</td> </tr> <tr> <td>M2 :</td> <td>2.7076</td> <td>Weight of Vessel+Stirrer+Lid in Kg :</td> <td>0.717</td> </tr> <tr> <td>W :</td> <td>0.153438</td> <td>Gas Consumption in L/hr :</td> <td>-</td> </tr> <tr> <td>G :</td> <td>6.1</td> <td>Calorific value K :</td> <td>10900</td> </tr> <tr> <td></td> <td></td> <td>Specific Heat Of Aluminium :</td> <td>0.214</td> </tr> </table> $= \frac{39396.6594}{597.32}$ Thermal efficiency = 65.96				T1 :	27	Burner To Pansupport Height in mm :		T2 :	90	Room Temperature °C :	27.1	M1 :	2.7624	Time Duration in min. :	19.32	M2 :	2.7076	Weight of Vessel+Stirrer+Lid in Kg :	0.717	W :	0.153438	Gas Consumption in L/hr :	-	G :	6.1	Calorific value K :	10900			Specific Heat Of Aluminium :	0.214
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Remarks: Thermal Efficiency test failed all the three Burner. Note: In jumbo Burner yellow flame observed.																															
Prepared By: <i>Dhinesh</i>		Verified By: <i>[Signature]</i> 02/07/24	Approved By: <i>[Signature]</i> 2/7/24																												