PRODUCT BULLETIN

VRF Indoor Unit For SMMSe : Hot Water Module

- *Compatible with SMMSe*
- *Lightweight & Compact Design*

*** Available Now ***

TOSHIBA Are pleased to announce the VRF Hot Water Module to join the SMMSe VRF indoor unit Line-up

1. Line Up

Line-Up		
HP	**Model Name**	**Capacity (kW)**
2.5	MMW-AP0271LQ-E	8kW
5	MMW-AP0561LQ-E	16kW

2. Features

- Compatible with VRF SMMSe
- Lightweight and compact design
- Wide Range of use:

  -20°C to 19°C (WB)

  Hot water supply up to 45°C by heat pump and up to 50°C with an external heater (locally supplied)

3. Connectable Units

- VRF Systems; SMMSe, SMMSi
- The system will not work when connecting to; MiNi-SMMS, SMMS (5,6HP) and SHRMi
- Connectable controllers

  - RBC-AMT32E
  - RBC-AMS41E
  - RBC-AMS51E-ES
  - RBC-AMS51E-EN
  - TCB-CC163TLE2
  - TCB-EXS21TLE
  - TCB-SC642TLE2 *

  * Lead-time dependant on TCC subject to forecast, order to factory, shipping time from factory and normal despatch method.

4. Specifications

		8kW	16Kw
MMW-AP -		**0271LQ-E**	**0561LQ-E**
Heating Capacity	(kW)	8.0	16.0
Water Flow Rate	(L/min)	22.9	45.8
Water Flow Rate Range	(L/min)	19.5 – 26.3	38.9 – 52.7
Water Pressure Loss	(kPa)	40.5	44.2
Power Supply	(ph/Hz/V)	1 Phase 50Hz 220-240V	
Power Consumption	(kw)	0.014	
Selection Range Of Heating Water Temperature	(°C)	15 ~ 50°C (By heat pump up to 45°C, with external heater up to 50°C)	
Heating Operation Range Of Outdoor Units Ambient	(°C WB)	-20 ~ 19°C	
Connectable Max Number Of Units		Max 2 units	
Connectable Max Diversity	(%)	70%* - 115%	
Connecting Refrigerant Pipe Gas	(mm)	15.9 Flare Connection	
Connecting Refrigerant Pipe Liquid	(mm)	9.5 Flare Connection	
Connecting Water Pipe		R1 – ¼	
Maximum HWM Connection		50% capacity	
Minimum Indoor Unit Connection		65% capacity	
Dimensions Of Unit	(mm)	580 x 467 x 250 (leg included)	
Dimensions Of Unit Packed	(mm)	357 x 638 x 833 (sideways stack)	
Weight	(kg)	17.8	20.3

5. Functionality

- The Hot Water Module has the ability to supply 45°C outlet water temperature, which can be used for the purpose of either Space Heating or Domestic Hot Water. Temperature can be raised up to 50°C by using a locally supplied external heater.
- For all Space Heating applications, Toshiba would recommend the use of a buffer tank. As this will prevent continuous on/off operation of the Hot Water Module.
- For domestic hot water applications, the Hot Water Module has been designed to be used within an unvented system via a coaxial heat exchanger. It is recommended that an electric heater be installed inside the domestic hot water tank, which is controlled externally to the Hot Water Module. This will provide additional heating when the outdoor ambient temperature exceeds specification.
- An external controller (locally supplied) must be used to control any anti bacteria cycle, required on the domestic hot water system, requested by the end user.

6. BMS Compatibility

In order to prevent potential problems it is recommended that you do not use the Hot Water Module with BMS systems. The following scenarios explain the functionality with and without BMS connectivity:

- When you do not add the Hot Water Module in the BMS Setting File

  - All other Indoor units can be controlled by the BMS system.
  - The Hot Water Module must be controlled only from the following: RBC-AMT32E, RBC-AMS41E, RBC-AMS51E-ES, RBC-AMS51E-EN, TCB-CC163TLE2, TCB-SC642TLE2, TCB-EXS21TLE
  - If Energy Monitoring is being used, then the power used by the Hot Water Module will be proportionally spread across the other operating Indoor Units. If no Indoor Units are in operation then the power used by the Hot Water Module will be treated as Standby Power, and will be spread across all the Indoor Units as selected in the Setting File.

- When you do add the Hot Water Module in the BMS Setting File

  - You cannot select Hot Water Module in the BMS Setting File Software, therefore you must select another indoor type.
  - You can control the On/Off of the Hot Water Module.
  - You cannot control the Water Pump or the Heater Output (CN60), as these are controlled solely by the Hot Water Module.
  - Fan Speed will always report Fan Stop, as there is no fan connected.
  - Setpoint Control will depend on the type of BMS device connected, most will be limited to 18°C to 29°C, some like Smart Manager Web Interface can offer a wider range.

For further information please contact our customer support team on 0870 843 0333, your local representative, your supplier of TOSHIBA products or email any enquiries to: - general.enquiries@toshiba-ac.com