

Annex 1

Technical Specifications

Number	Items to be Supplied*	Quantity	Description / Specifications of Goods	Latest Delivery Date
1.	Split Air- Conditioners Training Kit (HFC32)	8	1. Split air conditioner 18000 BTU, minimum EER 10, dry airflow 500+ CFM, indoor noise level less than 40bB, indoor fan speed auto/three speed, rotary/ reciprocating compressor, heat exchangers preferably with copper tubing, refrigerant pre-charged with HFC-32, fitted with all the safety devices required for A2L. Installation manual and data of key fault finding. Power supply 220V, 60Hz.	30 th August 2019
2.	MAC Test Rigs	3	R-134a	30 th August 2019
3.	Test Rig Water Chiller	4	R-134a	30 th August 2019
4.	Two stage Vacuum Pump	5	Vacuum pump, two stage, for the use with flammable A3 refrigerants such as R290, R1270 and R600a. Vacuum pump equipped with gas ballast valve and exhaust port with oil-filter connection. The unit must be CE certificated. Technical data: - Swept volume of about 46 L/min	30 th August 2019

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			- Ultimate vacuum 1x10-2 mbar or better	
			- Power Supply 220V/1Ph/60Hz	
			- Hard wired mains lead minimum length 5 m	
			- Oil charge about 300 cc	
			- Protection classification IP54	
			- Hose connection 3/8" and ¼" SAE	
			- Classification according to II3GD nA tD 4T IP55 (zone 2-22	
			ATEX)	
			- Power supply 220V / 1Ph / 60Hz	
			- instructional manual	
5.	Mini Reclamation		• Recovery and Reclaim : R22, R32, R500, R502, R134a,	30 th August 2019
	Machine/Centre		R404A, R410A, R507A, R509A	
			Recovery Method: Vapour and/or Liquid	
			Reclaim method: electrostatic separation method	
			Voltage: 220V, 60 Hz (as per country power)	
			Compressor : oil less compressor	
		2	Oil separator : heat exchange style, capacity 2L	
		2	Operating temperature 5-35°C	
			Cylinders : (3 nos.) 40Litres with sensor	
			Charging hoses: 1.5 mtr with ball valves	
			• Filters: 8 pcs	
			Sight Glass 2pcs	
			Moisture Absorbent 24pcs	
			Adapters : different adapters for R22, R32, R410A	
6.	Digital four-way		Digital four-way manifold gauge for refrigeration and AC	30 th August 2019
	gauge manifold		applications. RAC refrigerant circuit measurements,	
			analyse and log pressure, temperature, electricity and	
		8	vacuum measurements and save all measuring data.	
			Technical data:	
			- 999 hours of internal memory	
1			- Real time data measurement and graphical editing	

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			- Including software presenting the data in an easy-to-	
			understand format	
			- Including 40 most common type refrigerants stored in the	
			meter	
			- Updates for other refrigerants free of charge using the	
			software	
			- Two temperature compensated pressure sensors	
			measure high and low pressure and calculate the	
			temperatures automatically	
			- Three temperature connecting points for connectable	
			temperature sensors: calculate superheat and sub-cooling	
			simultaneously, measure parallel the surrounding	
			temperature	
			- Integrated vacuum measurements	
			- Temperature compensated leak-tightness check function	
			and automatic surrounding pressure compensation	
			Scope of supply includes:	
			- Two clamp temperature sensor	
			- Downloadable PC software	
			- USB cable	
			- Power adaptor	
			- Batteries	
			- Protective carry case	
			- Calibration protocol	
			- CE certification	
			- Operation manual in English language	
			Technical data:	
			- Pressure measuring range 50 bar	
			- Accuracy ±0.5 % fs (±1 Digit)	
			- Resolution 0.01 bar / 0.1 psi	
			- Refrigerant hose connection 3 x 7/16" UNF + 1 x 5/8"	

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			UNF	
			- Overload rel. (low/high pressure) 52 bar	
			- Vacuum measuring range -1 to 0 bar	
			- Vacuum resolution 1 hPa / 1 mbar / 500 micron.	
7.	Air Velocity Meter		Measurement range:	30 th August 2019
	/ Digital		• temperature: -10~50°C	
	Anemometer		• air velocity: 0.7~25m/s	
			Resolution:	
		2	• temperature : 0.1°C	
			• air velocity : 0.001m/s	
			Accuracy:	
			• temperature : +/- 0.6°C	
			• air velocity : +/- 2%	
8.	dB Meter or Noise		• Sound Level Meter ANSI S1.4 type 2 / IEC 60651 type 2 /	30 th August 2019
	Tester		IEC 61672 class 2	
		3	Measurement range: 30-100dB / 60-100dB	
			Operating range: Temperature 0 to 50°C	
			Humidity: 0-95% RH non-condensable	
9.	Weighing Scale		Electronic weighing scale for maximum capacity 50 kg with	30 th August 2019
		6	accuracy of ±0.015% of reading weight and no more than	
			10 gm. scale in both lb and kg (for commercial 100 Kgs.)	