



COMMERCIAL SYSTEMS MODULAR VRF

The Tadiran Modular VRF range features 9 models, with the option of connecting from 16 to 45 indoor units — wall-mounted, console, ducted and 8-way cassettes. Indoor units can be connected for a capacity of 50% to 135% of the outdoor unit.

OUTDOOR UNITS

8-12HP

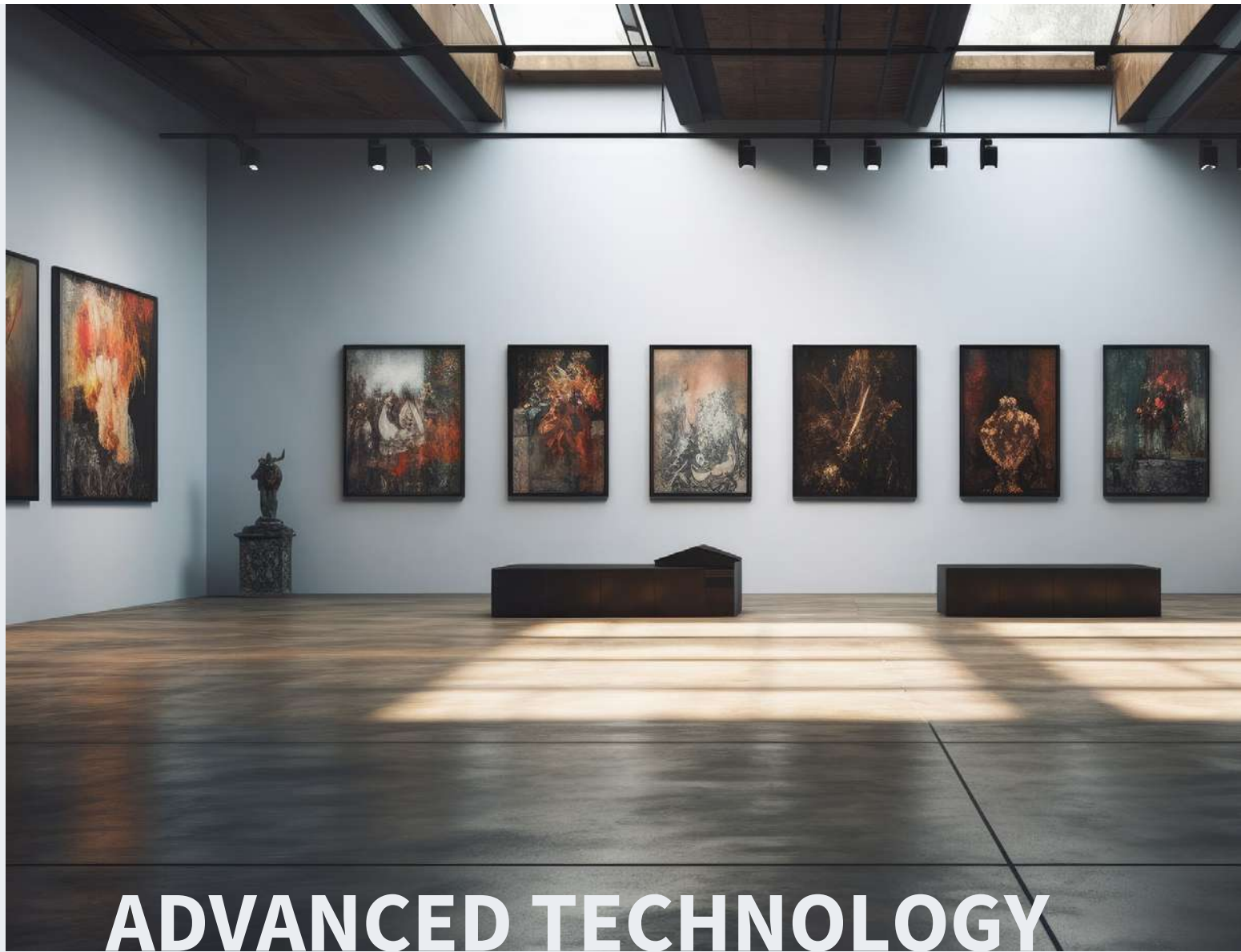
TAD-VRFODUM-8IT
TAD-VRFODUM-10IT
TAD-VRFODUM-12IT



14-24HP

TAD-VRFODUM-14IT
TAD-VRFODUM-16IT
TAD-VRFODUM-18IT
TAD-VRFODUM-20IT
TAD-VRFODUM-22IT
TAD-VRFODUM-24IT





ADVANCED TECHNOLOGY



EFFICIENCY

- New-generation compressor
- Sensorless DC Inverter
- Fan motors
- High-control vapour injection with dual expansion valve (EEV)
- Multi EEV control technology



HEAT EXCHANGER

- High efficiency
- Dual-zone stratified heat exchanger
- Exclusive fan blade design
- Golden Fin protection



INTELLIGENT DEFROSTING

- New generation of intelligent defrosting, thanks to advanced cooling and heating technologies



NOISE CONTROL

- High air flow and reduced fan noise
- Acoustic insulation and soundproofing
- Improved acoustic control of vapour injection
- Reduced refrigerant flow noise
- "Intelligent Quiet Control"



SENSORLESS DC INVERTER FAN MOTOR

Linear speed regulation operates over a range of 5 to 65 Hz. Compared with traditional inverter motors, this system delivers higher energy efficiency. In addition, sensorless control technology ensures quieter operation with reduced vibration.



SMART CONTROL

- Dual energy-saving mode
- Efficient modular control (HPAC)
- Self-adapting load control (SRL)
- Intelligent refrigerant circuit control

WIDE OPERATING RANGE



*Cooling between -15°C and -5°C is subject to specific operating conditions

OIL BALANCE CONTROL TECHNOLOGY

The outdoor units are designed to ensure oil balance between the different modules, eliminating the need to install a dedicated connection pipe. This significantly simplifies installation operations.





Model			TAD-VRFODUM-8IT	TAD-VRFODUM-10IT	TAD-VRFODUM-12IT
Capacity	Size	HP	8	10	12
	Cooling	kW	22,4	28,0	33,5
	Heating	kW	25	31,5	37,5
Electrical data	Power supply		V/Ph/Hz	380-415/3/50	380-415/3/50
	Cooling	Rated power input	kW	n.d.	n.d.
		Rated current	A	n.d.	n.d.
	Heating	Rated power input	kW	n.d.	n.d.
		Rated current	A	n.d.	n.d.
		Max power	kW	12,9	14,0
		Max. current	A	27,0	28,0
Performance	EER*		4,38	3,7	3,44
	COP*		5,02	4,21	4,27
	SEER		7,5	7,2	7,2
	SCOP		4,6	4,6	4,6
	ηsc	%	296,6	285,4	283,0
	ηsh	%	181,8	181,0	179,8
	Air flow	m³/h	9750	10500	11100
	Sound power (H)	dB(A)	78	79	82
	Sound pressure (H)	dB(A)	56	57	58
Installation	External dimensions (W/D/H)		mm	930/775/1690	930/775/1690
	Packaging dimensions (W/D/H)		mm	1000/830/1855	1000/830/1855
	Net weight/with packaging		kg	210/220	210/220
	Compressor type			Inverter Scroll	
	No. of compressors			1	
	Refrigerant			R410A	
	Refrigerant charge		kg	5,5	5,5
	T equivalent of CO ₂		T CO ₂ eq	11,484	11,484
	Liquid piping		mm (inch)	9.52 (3/8")	12.7 (1/2")
	Gas piping		mm (inch)	19.05 (3/4")	25.4 (1")
	Total equivalent piping length		m	1000	1000
	Max length of longest pipe (actual/equivalent)		m	200 / 240	200 / 240
	Standard height difference between I.U. & O.U		m	100 / 110	100 / 110
	Standard height difference between I.U.		m	30	30
Connectivity	Connectivity percentage		%	50-135	50-135
	Max. number of indoor units			16	20
Operating temperatures	Cooling		°C	-15~55 *	-15~55 *
	Heating		°C	-30~27	-30~27



TAD-VRFODUM-14IT	TAD-VRFODUM-16IT	TAD-VRFODUM-18IT	TAD-VRFODUM-20IT	TAD-VRFODUM-22IT	TAD-VRFODUM-24IT
14	16	18	20	22	24
40,0	45,0	50,4	56,0	61,5	68,0
45,0	50	56,5	63,0	69,0	76,5
380-415/3/50	380-415/3/50	380-415/3/50	380-415/3/50	380-415/3/50	380-415/3/50
n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
18,0	18,6	18,6	22,0	25,8	27,4
38,0	38,5	38,5	39,3	46,1	49,0
3,83	3,43	3,47	3,54	3,25	3,28
4,28	4,11	4,11	3,83	3,85	3,8
7,4	7,3	7,1	6,9	6,7	6,5
4,6	4,8	4,7	4,3	4,4	4,2
291,4	287,8	281,0	271,8	265,8	255,0
179,0	187,4	183,4	167,4	172,2	165,0
13500	15400	16000	16500	16500	18350
81	82	85	88	88	90
59	60	61	62	63	64
1340/775/1690	1340/775/1690	1340/775/1690	1340/775/1690	1340/775/1690	1340/775/1690
1400/830/1855	1400/830/1855	1400/830/1855	1400/830/1855	1400/830/1855	1400/830/1855
285/300	285/300	285/300	340/355	340/355	355/370
Inverter Scroll					
1					
R410A					
7,5	7,5	7,5	7,5	7,8	8,3
15,660	15,660	15,660	15,660	16,286	17,330
12.7 (1/2")	12.7 (1/2")	15.9 (5/8")	15.9 (5/8")	15.9 (5/8")	15.9 (5/8")
25.4 (1")	28.6 (1-1/8")	28.6 (1-1/8")	28.6 (1-1/8")	28.6 (1-1/8")	28.6 (1-1/8")
1000	1000	1000	1000	1000	1000
200 / 240	200 / 240	200 / 240	200 / 240	200 / 240	200 / 240
100 / 110	100 / 110	100 / 110	100 / 110	100 / 110	100 / 110
30	30	30	30	30	30
50-135	50-135	50-135	50-135	50-135	50-135
28	30	35	39	42	45
-15~55 *	-15~55 *	-15~55 *	-15~55 *	-15~55 *	-15~55 *
-30~27	-30~27	-30~27	-30~27	-30~27	-30~27

*EER/COP in accordance with the Standard (EN 14511), declared solely for the purposes of the tax deductions in force

**All specifications are tested under nominal conditions (in cooling, indoor temperature is 27°C DB/19°C WB; outdoor temperature is 35°C DB/24WB; in heating, indoor temperature is 20°C DB; outdoor temperature is 7°C)