TAHVIEH
AIR CONDITIONING SYSTEMS

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ISO 9001
Registered Firm
IMQ

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ECO FRIENDLY

Train Air Condition

Tahvieh History and activity

Tahvieh Company was established in 1964 and successfully paved its way in the air conditioning industry by utilizing technology of Air temp & Trane companies. This company later managed to receive manufacturing permit under the license of two U.S. companies of Chrysler and Air temp.
During 80's, Tahvieh started to design and manufacture a new generation of air conditioning system relying on its rich technical knowledge and great capability of its manpower. As one of the largest private companies in designing and manufacturing air conditioning equipment, it has managed to become a pioneer of this industry in Iran.
In 2013, we began the second half-century of our glorious presence in air conditioning industry and in addition to the previous products, Tahvieh initiated manufacturing of new products and by the end of the first half of 2016, we managed to manufacture and supply mini-chillers, various types of split air condition systems (floor standing, wall mounted and ducted), electrical enclosure air condition, precision air condition, ice cream makers and air conditioning systems for automotive and rail industry.
Leadership, the ability to meet all consumer demands in designing and manufacturing of superior quality products and extensive and fast aftersales services have enabled us to become a premium brand in Iran. Unique customer care has been assigned as the main strategy of Tahvieh and this company has always been loyal to its customers.
Tahvieh Co., In 2016 being a member of International Institute of Refrigeration (IIR). Today, Tahvieh, as one of the largest manufacturers of air conditioning systems and as a top brand in Iran, is one of the reliable sources of supplying the strategic and important industries of the country such as oil, gas, petrochemical, refining, power plants, telecommunications, steel making, train & automobiles, healthcare, Development and other industries of the country.

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Features

We assist our customers to achieve the heating, Venting & cooling they need. Our Low power -High output units are compact and can be easily installed on new and legacy train's, metro's tram's, locomotives and other rolling stock to enhance passenger and driver comfort. To reduce development cost and lead time we have developed standard products which can be adapted to fit your application. Custom made units are possible as well.

Air Conditioning System for Train

Specification - Model TTGR & TTPR

- Evaporator section body material is galvanized steel sheet
- Condenser section material is steel profile (ST-37)
- Evaporator and condenser coils is copper tube with aluminum fins (anti corrosion coating is option)

Model		Unit	TTGR-40	TTPR-40/60
Total Cooling Capacity		Kw	46	42.7
Total Heating Capacity		Kw	2412+	2412+
Power Supply		V / Ph /Hz	380 / 3 / 50	380 / 3 / 50
Total Power Input	Cooling	Kw	20.46	28
	Heating	Kw	25.8	27
Total Current	Cooling	A	63	53
	Heating	A	66	52
Evaporator Section	Filter Type / Efficiency	D.Spot	-	Nonwoven / 65%
	Fan Type	-	Forward	Plug Fan
	No. Of Fan	No.	22+	1
	Air Flow Rate	M^3/Hr	6800	3800
	Total Static Pressure	Pa	500	1000
	Revolution	RPM	2850	2850
	Power Input	Kw	(2 + 2) × 0.45	1 × 2.2
	Current	A	(2 + 2) × 5	1 × 4
Fresh Air Section	Fan Type	-	-	Backward / AC
	No. Of Fan	No.	-	1
	Air Flow Rate	M^3/Hr	-	700 ~ 1400
	Revolution	RPM	-	3200
	Power Input	Kw	-	1 × 0.75
	Current	A	-	1 × 1.7
Compressor Section	No. Of Circuit	No.	1	1
	No. Of Compressor	No.	1	1
	Type Of Compressor	-	Reciprocating	Reciprocating
	Refrigerant	-	R-134a	R-134a
	Refrigerant Charge	Kg	58	52
	COP	w/w	2.7	2.7
	Power Input	Kw	1 × 16.02	1 × 16.02
	Current	A	1 × 31	1 × 31
Condenser Section	Fan Type	-	Axial	Axial
	No. Of Fan	No.	6	4
	Air Flow Rate	M^3/Hr	6000	6000
	Power Input	Kw	6 × 0.44	4 × 2.2
	Current	A	6 × 2	4 × 4
Dimension (L × W × H)	Evaporator Section	mm	1680 × 625 × 425	2624 × 1766 × 640
	Fresh Air Section	mm	-	1500 × 580 × 550
	Condenser Section	mm	2520 × 610 × 640	3425 × 927 × 690
	Compressor Section	mm	1370 × 940 × 640	1295 × 745 × 605
Weight	Evaporator Section	Kg	2 × 70	780
	Fresh Air Section	Kg	-	110
	Condenser Section	Kg	250	790
	Compressor Section	Kg	400	400
Installation	Evaporator Section	-	Indoor Wagons	Indoor Wagons
	Fresh Air Section	-	-	Under Wagons
	Condenser Section	-	Under Wagons	Under Wagons
	Compressor Section	-	Under Wagons	Under Wagons

* Capacities are based on the following conditions:
Summer Condition: Indoor Temperature: 24~27 °C & 15% RH
Outdoor Temperature: +50 °C
Winter Condition: Indoor Temperature: 20~24 °C
Outdoor Temperature: -20 °C
Altitude: Sea Level

Air Conditioning System for Locomotive

Specification
- Sections body material is galvanized steel sheet
- Evaporator section insulation is 4mm foam
- Evaporator and condenser coils is copper tube with aluminum fins
- Evaporator filter type is non-woven

Title		Unit	Description
Total Cooling Capacity		Kw	9.37
Power Supply		V / Ph / Hz	220 / 1 / 50 AC
Total Power Input		Kw	3.3
Total Current		A	28.5
Evaporator Section	Fan Type	-	Forward / AC
	No. Of Fan	No.	2
	Air Flow Rate	M^3/Hr	2 × 900
	Total Static Pressure	Pa	100
	Revolution	RPM	3500
	Power Supply	V / Ph /Hz	24 / 1 / 50
	Current	A	2 × 13
Compressor Section	No. Of Circuit	No.	2
	No. Of Compressor	No.	2
	Type Of Compressor	-	Scroll
	Refrigerant	-	R-22
	Refrigerant Charge	Kg	2 × 3
	COP	w/w	3.5
	Power Supply	V / Ph /Hz	220 / 1 / 50
	Power Input	Kw	2 × 0.9
	Current	A	2 × 15.3
Condenser Section	Fan Type	-	Axial / AC
	No. Of Fan	No.	2
	Air Flow Rate	M^3/Hr	2 × 1800
	Power Supply	V / Ph /Hz	220 / 1 / 50
	Current	A	2 × 1.2
Sound Level		dB(A)	75
Dimension (L × W × H)		mm	1300 × 998 × 759
Weight		Kg	300
Installation		-	Above Locomotive

* Capacities are based on the following conditions:
Weather Condition: Indoor Temperature: 18~27 °C & 35~50% RH
Outdoor Temperature: +10~+50 °C
Altitude : Sea Level

Air Conditioning System for Metro

Specification
- Sections body material is stainless steel sheet
- Evaporator section insulation is 20mm foam
- Evaporator and condenser coils is copper tube with aluminum fins
- Evaporator filter type is non-woven

Title		Unit	Description
Total Cooling Capacity		Kw	37
Total Heating Capacity		Kw	9
Power Supply		V / Ph / Hz	380 / 3 / 50
Total Power Input		Kw	16.7
Total Current		A	32
Evaporator Section	Fan Type	-	Centrifugal
	No. Of Fan	No.	2
	Air Flow Rate	M^3/Hr	2 × 2125
	Total Static Pressure	Pa	160
	Revolution	RPM	1400
	Power Supply	V / Ph /Hz	380 / 3 / 50
	Power Input	Kw	2 × 0.75
	Current	A	2 × 2.1
Compressor Section	No. Of Circuit	No.	2
	No. Of Compressor	No.	2
	Type Of Compressor	-	Scroll
	Refrigerant	-	R-407c
	Refrigerant Charge	Kg	2 × 5.1
	COP	w/w	3.1
	Power Supply	V / Ph /Hz	380 / 3 / 50
	Power Input	Kw	2 × 6.8
	Current	A	2 × 15.9
Condenser Section	Fan Type	-	Axial
	No. Of Fan	No.	2
	Air Flow Rate	M^3/Hr	2 × 8000
	Power Supply	V / Ph /Hz	380 / 3 / 50
	Power Input	Kw	2 × 1.1
	Current	A	2 × 3
Sound Pressure Level @1meter		db(A)	71
Dimension (L × W × H)		mm	3600 × 1600 × 320
Weight		Kg	675
Installation		-	Above Wagons

* Capacities are based on the following conditions:
Weather Condition: Indoor Temperature: 18~27 °C & 35~50% RH
Outdoor Temperature: -20~+50 °C
Altitude : Sea Level