



**A** COOLING  
Series

*Everything Cool  
to everywhere*



**SAUDI  
MADE**



*We keep it cool  
in extreme conditions*

[asadtech.com](http://asadtech.com)

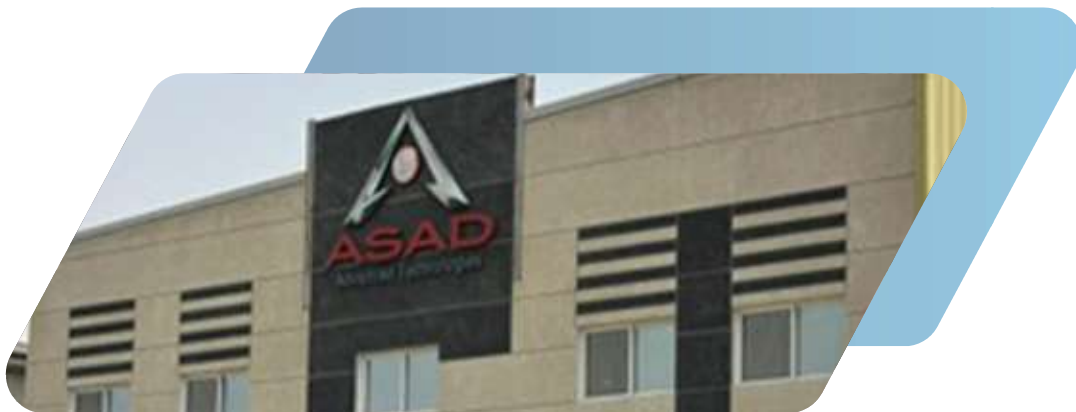


*Satisfied people is our best business*

## About ASAD

ASAD helps to enhance the shipping of temperature-controlled cargoes either within cities or for long haul trips. The experience that ASAD has built during the last decade resulted in designing the best solutions and products taking into account the extreme climates such as the middle east. ASAD carefully design and manufacture its products based on the international standards and having the flexibility to produce based on individual requirements to exceed our international clients around the globe.

ASAD is proud of its internal suppliers network who assist and participate in enhancing our products reliability and efficiency.



### Vision



Delivering a competitive Transport-refrigeration solutions that enhances the value added in terms of reliability and efficiency.

### Mission



Empowering industries through cutting-edge technologies and exceptional service.

### Values



Transparency  
Integrity  
Care  
Innovation  
Continuous Improvement



**We design and manufacture cold equipment designed for the most demanding conditions**

At ASAD Group we know how difficult it is to maintain a temperature constant during the distribution of refrigerated goods in the city, with the constant stops and doors opening in the delivery.

Our goal is to maintain the chain of cold, which is the most important for certain goods to arrive in perfect conditions to the consumer.



# ASAD A-100



## Model Refrigeration Capacity at 30°C

	0°C	(-20)°C
Refrigeration Capacity on Road (W)	2300	1196
Electric Stand-by @ 60 Hz	1380	718
<b>Airflow</b>		
Airflow Volume @ 0 Pa Static Pressure (m <sup>3</sup> /hr)	1100	
<b>Weight</b>		
Condenser W/O Electric Standby - kg	35	
Condenser with Electric Standby - kg	N/A	
Evaporator - kg	13	
<b>Dimensions</b>		
Condenser W/O Electric Standby - mm	800 W X 520 L X 160 H	
Condenser with Electric Standby - mm	N/A	
Evaporator - mm	700 W X 600 L X 180 H	
<b>Condenser Position/Structure</b>		
Condenser W/O Electric Standby	Front/Roof	
Condenser with Electric Standby	N/A	
<b>Compressor</b>		
Model	Sanden 7H15	
Displacement - CC	160	
No. of Cylinders	7	
<b>Electric Stand-by Motor</b>		
Voltage/phase/frequency	N/A	
output power - kw		
<b>Refrigerant</b>		
Refrigerant	R-134a	
<b>Defrost</b>		
Defrost	Automatic hot gas	

- Stand-By option 220 V or 380 V

- System includes an additional fully working circuit to work with 220v or 380v plug. When the vehicle is stop, the ELECTRIC STAND BY SYSTEM permits to keep the cold. This additional circuit includes a second

- compressor, electric motor, electrovalves, specific pipes, electric and electronic control, etc ... This is built inside the unit.



- **Equipment designed for low capacity vehicles.**

- **Perfect for short and medium distances.**

- **Suitable for tropical climate, up to 55 C.**



# ASAD A-200



Model Refrigeration Capacity at 30°C		
	0°C	(-20)°C
Refrigeration Capacity on Road (W)	2600	1352
Electric Stand-by @ 60 Hz	1560	811
Airflow		
Airflow Volume @ 0 Pa Static Pressure (m <sup>3</sup> /hr)	2200	
Weight		
Condenser W/O Electric Standby - kg	35	
Condenser with Electric Standby - kg	N/A	
Evaporator - kg	20	
Dimensions		
Condenser W/O Electric Standby - mm	800 W X 520 L X 160 H	
Condenser with Electric Standby - mm	900 W X 750 L X 240 H	
Evaporator - mm	870 W X 600 L X 180 H	
Condenser Position/Structure		
Condenser W/O Electric Standby	Front/Roof	
Condenser with Electric Standby	Roof	
Compressor		
Model	Sanden 7H16	
Displacement - CC	160	
No. of Cylinders	7	
Electric Stand-by Motor		
Voltage/phase/frequency	230/1/50 or 60	
output power - kw	2	
Refrigerant		
Refrigerant	R-134a/R-404A	
Defrost		
Defrost	Automatic hot gas	

- Stand-By option 220 V or 380 V

- System includes an additional fully working circuit to work with 220v or 380v plug. When the vehicle is stop, the ELECTRIC STAND BY SYSTEM permits to keep the cold. This additional circuit includes a second

- compressor, electric motor, electrovalves, specific pipes, electric and electronic control, etc ... This is built inside the unit.



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# ASAD A-300



## Model Refrigeration Capacity at 30°C

	0°C	(-20)°C
Refrigeration Capacity on Road (W)	4050	2106
Electric Stand-by @ 60 Hz	2430	1264
<b>Airflow</b>		
Airflow Volume @ 0 Pa Static Pressure (m <sup>3</sup> /hr)	2200	
<b>Weight</b>		
Condenser W/O Electric Standby - kg	45	
Condenser with Electric Standby - kg	95	
Evaporator - kg	26	
<b>Dimensions</b>		
Condenser W/O Electric Standby - mm	950 W X 520 L X 160 H	
Condenser with Electric Standby - mm	990 W X 620 L X 590 H	
Evaporator - mm	1080 W X 600 L X 180 H	
<b>Condenser Position/Structure</b>		
Condenser W/O Electric Standby	Front/Roof	
Condenser with Electric Standby	Front	
<b>Compressor</b>		
Model	Sanden 7H17	
Displacement - CC	160	
No. of Cylinders	7	
<b>Electric Stand-by Motor</b>		
Voltage/phase/frequency	230/1/50 or 60 - 230/3/50 or 60	
output power - kw	3.8	
<b>Refrigerant</b>		
Refrigerant	R-134a/R-404A	
<b>Defrost</b>		
Defrost	Automatic hot gas	

- Stand-By option 220 V or 380 V
- System includes an additional fully working circuit to work with 220v or 380v plug. When the vehicle is stop, the ELECTRIC STAND BY SYSTEM permits to keep the cold. This additional circuit includes a second compressor, electric motor, electrovalves, specific pipes, electric and electronic control, etc ... This is built inside the unit.



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# ASAD A-500



## Model Refrigeration Capacity at 30°C

	0°C	(-20)°C
Refrigeration Capacity on Road (W)	4950	2574
Electric Stand-by @ 60 Hz	2970	1544
<b>Airflow</b>		
Airflow Volume @ 0 Pa Static Pressure (m <sup>3</sup> /hr)	3300	
<b>Weight</b>		
Condenser W/O Electric Standby - kg	55	
Condenser with Electric Standby - kg	105	
Evaporator - kg	38	
<b>Dimensions</b>		
Condenser W/O Electric Standby - mm	1500 W X 520 L X 160 H	
Condenser with Electric Standby - mm	990 W X 650 L X 590 H	
Evaporator - mm	1290 W X 600 L X 180 H	
<b>Condenser Position/Structure</b>		
Condenser W/O Electric Standby	Front/Roof	
Condenser with Electric Standby	Front	
<b>Compressor</b>		
Model	Valeo TM21	
Displacement - CC	210	
No. of Cylinders	10	
<b>Electric Stand-by Motor</b>		
Voltage/phase/frequency	230/1/50 or 60 - 230/3/50 or 60	
output power - kw	4.5	
<b>Refrigerant</b>		
Refrigerant	R-134a/R-404A	
<b>Defrost</b>		
Defrost	Automatic hot gas	

- Stand-By option 220 V or 380 V

- System includes an additional fully working circuit to work with 220v or 380v plug. When the vehicle is stop, the ELECTRIC STAND BY SYSTEM permits to keep the cold. This additional circuit includes a second

- compressor, electric motor, electrovalves, specific pipes, electric and electronic control, etc ... This is built inside the unit.



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# ASAD AD Series

We know exactly what you need



ASAD AD series have been designed and developed very carefully with the cooperation of our reliable global partners to build a very reliable unit which assist to deliver refrigerated goods under the extreme climates.

ASAD have set various criteria and focused on multiple targets such as performance, reliability, low maintenance cost and ease of usage.

The design was carefully made to reduce both vibration and noise to be lower than our global competitors.

We also, took into account that users can easily operate and maintain the unit by increasing the visibility of internal parts.

The control is super friendly for any users and smart to reduce the refrigeration load on the engine to deliver exceeded performance.

## Main Design Features

### Engine

- Higher output
- Reduced maintenance.
- Longer life.
- Larger radiator.

### Maintenance Access

- Easy access Engine maintenance.
- Both Engine oil and water Coolant.

### Air Inlet

- Front enlarge Air Intake for better cooling.

### Condenser

- Larger Condenser for better Refrigeration output.
- Cooled by Mechanical high-speed Fan.
- Large Grill to enable better system cooling

### Compressor

- 3 different compressor models
- Heavy duty version designed for high ambient.
- Smart design bracket to take various forces.

### Evaporator

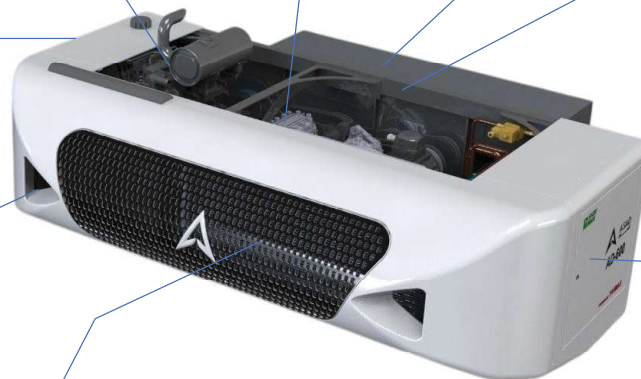
- Powerful Evaporator for different sizes.
- Supported by powerful tube in tube heat ex-changer.

### Low Vibration Chassis

- Strong Cantilever Chassis.
- Supported by 4 types and 6 positions anti-vibration mounts to handle multi directional forces.

### Control Panel

- Easy access Maintenance Control Panel door.
- Very Intelligent fault diagnosis detection.
- Supported by dual heat exhaust fans.



# DIESEL TRANSPORT REFRIGERATION UNIT

## AD Advantages

### Refrigeration Capacity

- The refrigeration capacity is made at 55 °C.
- AD series has 3 different models which covers all truck body sizes up to 8m length.

### Lower Vibration

- Our units are built to provide lower vibration to reduce noise and to provide higher reliability from all refrigeration components.

### Maintenance Friendly

- The accessibility of AD units is quite easy due to the simple design.
- The Control is programmed to assist the operator to follow all maintenance procedure such as filters and oil quality.

### Engine's Performance

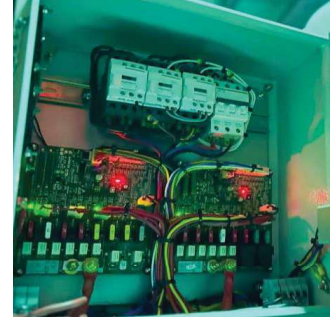
- The new AD unit allow the engine to give not more than 80% of kw output and 75% of the required torque. That assists to enhance and prolong the engine's life.
- The coolant radiator is larger than competitors to enable the engine works

### Product Components

- All the suppliers are carefully selected taking into account the reliability of products.
- The parts are globally available to ensure the best after sales assistance.

### AD Control

- The Control is designed to resist very harsh climate from -20 °C to 55 °C engine.
- The control is monitoring all compressor as well as other electrical performance.
- The control will continuously remind the operator for engine maintenance and will provide all adequate information to enables faster and more accurate fault diagnosis.
- The new LED display is bright and clear, ensuring better visibility in all light supporting different languages.



# Product Features

Feature and Options	AD – 600 / AD – 800 / AD – 1000
Enlarged Engine Coolant tank	●
Enlarged Engine Oil Filter	○
Maintenance Package	△
Oil Temp. Sensor	●
Water Coolant Temp. Sensor	●
Water Coolant Level Sensor	●
Battery Voltage Sensor	●
Compressor Pressure Transducer	○
Engine working hrs reader	●
Auto Start/Stop Engine	●
Defrost heater	●
Drain Kit	●
Spare fuse kit	●
2 year Warranty Coverage	●
Dairy product Friendly	○

● Standard   ○ Optional   △ Ask your Dealer

## Models Vs Truck sizes

Truck Sizes



AD Model



AD- 600

AD- 800

AD- 1000

# Product Specifications



Model	AD - 600 TABREED		AD - 800 TABREED		AD-600		AD-800		AD-1000	
<b>Refrigeration Capacity at 40°C</b>										
	0°C	(-20)°C	0°C	(-20)°C	0°C	(-20)°C	0°C	(-20)°C	0°C	(-20)°C
Refrigeration Capacity on Engine (W)	7300	N/A	8500	N/A	7300	4380	8500	5100	10500	5460
Electric Stand-by @ 60 Hz	5110	N/A	6205	N/A	5110	3322	6205	4033	7350	3276
<b>Airflow</b>										
Airflow Volume @ 0 Pa Static Pressure (m³/hr)	3600		5400		3600		5400		5400	
<b>Engine</b>										
Model	3TNV70-ASD		3TNV70-ASD		3TNV70-ASD		3TNV70-ASD		3TNV76-ASD	
output power - kw	11		11		11		11		15	
Maintenance Interval (hrs)	500		500		500		500		500	
<b>Weight</b>										
Weight with Electric Standby (kg)	510		515		510		515		540	
<b>Compressor</b>										
Model	FK30/235 N		FK30/235 N		FK30/235 TK		FK30/235 TK		FK40/390	
Displacement - CC	235		235		235		235		390	
No. of Cylinders	2		2		2		2		4	
<b>Electric Stand-by Motor</b>										
Voltage/phase/frequency	230/3/50 or 60 400/3/50 or 60		230/3/50 or 60 400/3/50 or 61		230/3/50 or 60 400/3/50 or 60		230/3/50 or 60 400/3/50 or 60		230/3/50 or 60 400/3/50 or 60	
output power - kw	5.5		5.5		5.5		5.5		7.5	
<b>Refrigerant</b>										
Refrigerant	R-134A				R-404A					
<b>Defrost</b>										
Defrost						Hot gas				