

ENERGY
EFFICIENT



ISK Series Cassette

Product Review

Reverse Cycle or Cooling Only Split System Air Conditioners



**Nominal
Cooling Capacities
7.0 kW - 12.3 kW**

Shops Improve your selling and working environment - customers shop longer and buy more plus you and your staff will feel a whole lot better at the end of a long day.

Offices Clients, staff and management will benefit from greater environmental comfort - promoting increased efficiency, productivity, healthier and happier attitudes all year round.

Clubs Bars, restaurants, night clubs. Beat the heat. Install cool comfort air conditioning. Encourage your clients to stay longer ... come again.

ISK SERIES - CASSETTE TYPE SPLIT SYSTEM AIR CONDITIONERS

GENERAL

The ISK Cassette type indoor unit, together with its associated OSA outdoor unit, provides a split system air conditioner designed to provide year round comfort and economy.

Reverse Cycle (heat pump) or Cooling Only systems are available.

Applications

These units are typically installed in open office areas, receptions, shops, showrooms and other commercial and public spaces. Installed overhead, the Cassette neither uses valuable shop wall and floor space, nor incurs the extra expense of installing ducting, grilles and diffusers.

Design

The Indoor Unit is designed to be installed recessed within a level ceiling space and located centrally to take full advantage of the four way supply air pattern. Only the louvred fascia is visible to the occupant. The low profile, elegant and modern design of the indoor unit allows it to blend harmoniously with any room decor.

Swing louvre operation prevents stratified room air. Alternatively louvres can be set via the remote control to a fixed angle

Provision has been made for the ducting of supply air to a remote diffuser, e.g. around a corner. Fresh air can be ducted to the Cassette to mix with room air.

The Outdoor Unit is designed to be freestanding or wall mounted, with kit, to fit the available space.

Comfort

The Auto changeover mode allows the Reverse Cycle systems to maintain a preset comfort level by switching automatically between cooling and heating modes.

Manual control of all functions can be achieved using the convenience of a wireless remote control - including the selection of one of three fan speeds.

Economy

The air conditioner provides cooling and heating as required. On reverse cycle the system can generate up to 3 kW of heating for every 1 kW of power consumed - making it one of the most efficient forms of heating available.

The system includes the convenience and economy of a programmable start/stop timer.

The Outdoor Units are pre-charged with refrigerant - allowing for easy installation and lower associated costs.

Efficient

The Outdoor Unit incorporates a high efficiency scroll compressor. Heat exchange coils incorporate inner grooved (rifled) tube for better heat transfer.

Quiet

Because of its carefully designed fan the ISK Cassette emits only the comforting whisper of conditioned air entering the room.

The system's compressor is isolated in the Outdoor Unit's built-in, insulated compartment to minimise noise. The indoor unit is also insulated for noise attenuation.

Pre-Heat Cold Draught Protection

The system is designed to prevent cold draughts which can occur when an air conditioner first switches on to heating mode.

Ease of Servicing

The air filter is easily accessible for periodic cleaning via the cassette fascia hinged/removable return air panel.

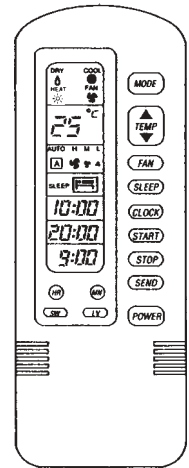
temperzone units are supplied with the assurance of full technical backup service and readily available spare parts.

Quality Outdoor Cabinet

The Outdoor Unit, made from the high quality galvanised steel finished with tough oven-cured polyester powder coating and fixed with stainless steel fasteners, is built to withstand the rigours of the weather year in and year out. The outdoor coil fins are epoxy coated for extra protection in corrosive environments, e.g. salt laden sea air.

Fingertip Control

The infra red remote control is versatile and simple to use. Its functions include - Auto, Heat, Cool, Dry, Fan and Sleep modes, powered swing louvre, on/off time clock - and manual override. Note: The Heat function is only available on Reverse Cycle systems.



Set & Forget

The ISK system includes a room temperature thermostat. The desired temperature is set on the remote control - the system does the rest. In Auto Fan mode fan speed will vary according to the room temperature and the setting temperature.

Optional Equipment

- temperzone HP Fan Speed Controller (4 amp)** - recommended where cooling is required in below 20°C ambient conditions for long periods of time.
- Wall mounting brackets for outdoor unit.

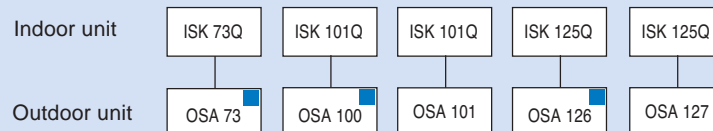
Dual-Zone Alternative

Two independently controlled ISK 73Q indoor units can be connected to one OSA 146 B twin system outdoor unit, thereby providing the ability to service two zones instead of just one.

temperzone operates an ISO 9002 certified quality management system.

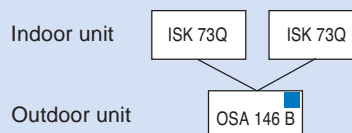
Split System Configurations

The ISK Cassette series air conditioners are available in a variety of split system configurations - Cooling Only or Reverse Cycle; Single and Three Phase systems. Refer to back page for nominal capacity figures.



Twin Split System

Service two zones with two independent thermostats



■ Single Phase System

DIMENSIONS (mm)

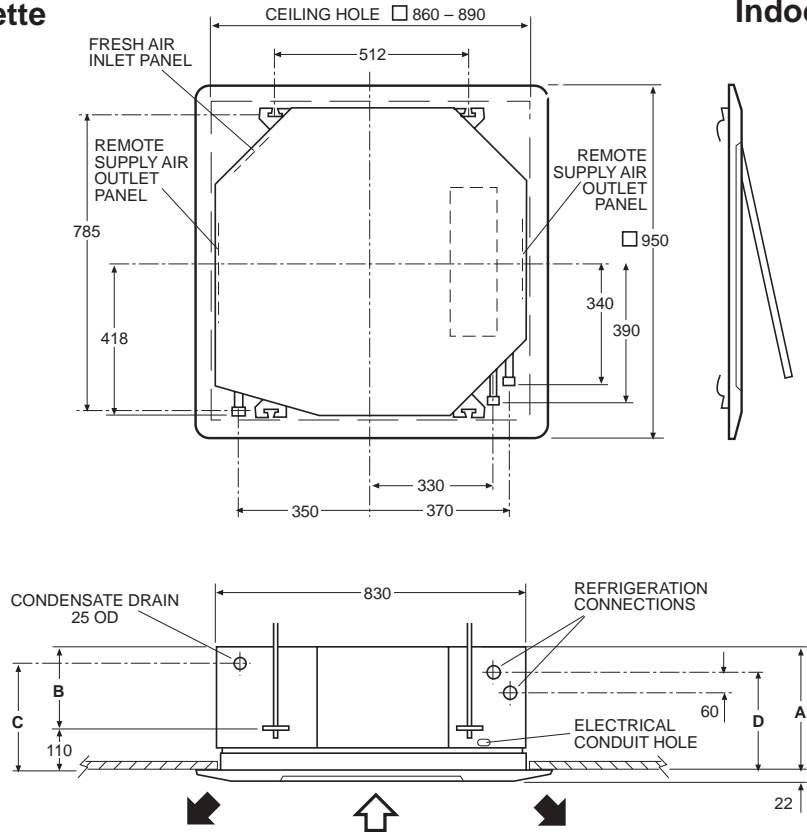
Not to Scale

Fig. 1 ISK 73Q - 125Q Cassette

MODEL	A	B	C	D
ISK 73Q	290	180	230	165
ISK 101Q	340	230	280	215
ISK 125Q	340	230	280	215

NOTE

The manufacturer reserves the right to make changes to specifications at any time without notice or obligation. Certified data is available on request.

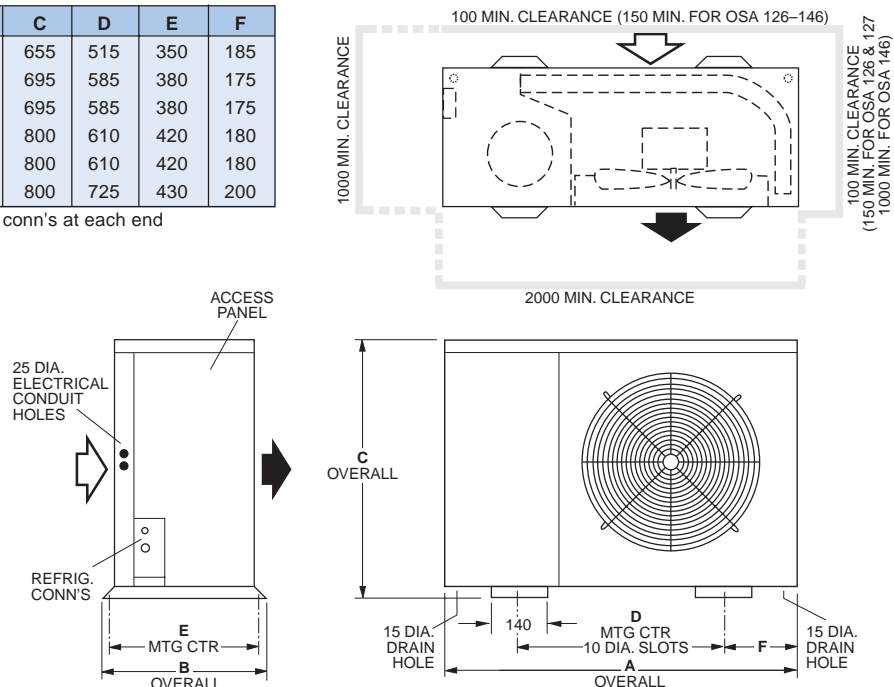


Indoor Units

Fig. 2 OSA 73 - 146

MODEL	A	B	C	D	E	F
OSA 73	885	380	655	515	350	185
OSA 100	935	410	695	585	380	175
OSA 101	935	410	695	585	380	175
OSA 126	970	440	800	610	420	180
OSA 127	970	440	800	610	420	180
OSA 146	1135	480	800	725	430	200

Note: OSA 146 has refrig. conn's at each end



Outdoor Units

Pipe Length Capacity Loss

On Cooling Cycle Due to Pressure Drop

Note : Loss percentages are approximations only, due to piping variations. No allowance made for vertical piping.

MODEL	PIPE SIZE (mm)		EQUIVALENT LINE PIPE LENGTH (m)					ADDITIONAL PIPE LENGTH TO ALLOW PER BEND			
	Liquid	Suction	5	10	15	20	30	Suction Pipe Size OD	16 mm	19 mm	22 mm
ISK 73Q	10	16	2 %	4 %	6.5 %	9 %	13 %				
	10	16	2.5 %	5 %	8 %	11 %	15 %				
ISK 101Q	10	19	1.2 %	2.5 %	3.8 %	5 %	8 %	Long 90° Radius	0.30 m	0.43 m	0.46 m
	13	19	1.6 %	3.2 %	4.7 %	-	-				
ISK 125Q	13	22	0.8 %	1.6 %	2.4 %	3.2 %	4.7 %	Long 90° Radius	0.30 m	0.43 m	0.46 m
	13	22	0.8 %	1.6 %	2.4 %	3.2 %	4.7 %				

SPECIFICATIONS

SPLIT SYSTEM		REVERSE CYCLE OPTIONS *1					
Indoor 'Cassette' Unit		ISK 73Q	ISK 101Q	ISK 101Q	ISK 125Q	ISK 125Q	ISK 73Q (x2)
Outdoor Unit		OSA 73R	OSA 100R	OSA 101R	OSA 126R	OSA 127R	OSA 146RB
Cooling Capacity (Total) *2	kW	7.0	10.1	10.1	12.3	12.3	7.0 (x2)
Heating Capacity *3	kW	7.5	10.5	10.5	13	13	7.5 (x2)
E.E.R. / C.O.P. (Cooling)		11.5 / 3.4	10.5 / 3.1	10.5 / 3.1	11.5 / 3.4	11.5 / 3.4	11.5 / 3.4
Power Source	volts / phases	230 / 1	230 / 1	400 / 3	230 / 1	400 / 3	230 / 1
Recom'd Max. Line Length	m	30	30	30	30	30	30 (x2)
Max. Height Separation Between Indoor & Outdoor Units (Reverse Cycle Systems) :							
	m	12	12	12	12	12	12
Running Amps (Total) / External Fuse	A	9.1 / 25	14.5 / 32	5.7/ph. / 25	16 / 32	6.3/ph. / 25	9.1 / 30 (x2)

INDOOR UNITS

Air Flow (l/s)	Low	220	300	300	330	330	220
	Med	255	360	360	385	385	255
	High	300	433	433	460	460	300
Sound Pressure dB(A) (SPL) *4	Low	39	39	39	41	41	39
	Med	40	45	45	46	46	40
	High	44	48	48	48	48	44
Motor Input (High Speed)	W	90	110	110	150	150	90 (x2)
Holding Charge		dry air					
Heat Exchanger Type		aluminium slit plate fins to expanded inner grooved copper tube					
Indoor Fan Type		high static mixed flow turbo					
Weight (incl. fascia)	kg	37	43	43	45	45	37 (x2)

OUTDOOR UNITS

Sound Pressure (SPL) *5	dB(A)	45	49	49	51	51	48
Refrigerant		H C F C - 2 2 (R 2 2)					
Heat Exchanger Type		aluminium corrugated plate fins to expanded inner grooved copper tube					
Outdoor Fan Type		propeller					
Finish		tan polyester powder coat					
Weight	kg	72	87	83	87	89	143

Note:

Capacities are for close coupled systems. Allowance must be made for pipe length, pipe size and bends.

*1 All of the above systems are available in Cooling Only versions, except the OSA 100R.

*2 Nominal Cooling Capacity based on: Indoor Entering Air Temperature 27°C D.B., 19°C W.B.;
Outdoor Entering Air Temperature 35°C D.B.

*3 Nominal Heating Capacity based on: Indoor Entering Air Temperature 21°C D.B.;
Outdoor Entering Air Temperature 8.3°C D.B., 6.1°C W.B.

*4 Sound Pressure Level (SPL) for Indoor Units is measured 1.5 m from supply air outlet in an anechoic chamber.

*5 Sound Pressure Level (SPL) for Outdoor Units is measured 3 m from exhaust air fans.

Materials and specifications subject to change without notice due to the manufacturer's ongoing research and development programme.



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