



CELLAR COOLING SYSTEM

Duty range: 3.67 - 7.59 kW

Refrigerants: Pre-charged with R449A

Temperature range: 4°C to 16°C

Product description:

The KD Cellar Star is a high performance cooling system designed for a wide range of applications, including cellars, flower stores, fruit and veg rooms, dairy storage and others.

Product features:

- ★ Housed outdoor unit equipped with a recip or scroll compressor
- ★ Includes microchannel condenser, liquid receiver, refrigerant charge and service valves
- ★ Acoustically lined compressor compartment for noise reduction
- ★ Dixell electronic controller with off cycle defrost
- ★ LP Safety switch
- ★ HP Switch - Manual reset
- ★ Sanhua expansion valve and orifice
- ★ Fitted contactor
- ★ Long lasting white powder coated finish
- ★ Indoor unit comes with hinged side panels for easy access

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KD CELLAR STAR

Performance data - R449A

Indoor / Outdoor	Cooling capacity (watts) Ambient 32°C							Above Ground	Below Ground
	Room Temperature °C								
	4°C	6°C	8°C	10°C	12.7°C	14°C	16°C		
SC040R/PAP015MR1	2,999	3,158	3,335	3,468	3,678	3,820	3,856	45	55
SC045R/PAP020MR1	3,756	4,057	4,493	4,625	5,212	5,363	5,606	64	112
SC050R/PAP025MR1	4,556	4,838	5,164	5,362	5,901	6,039	6,262	75	125
SC070R/PAP028MR1	5,837	6,207	6,635	6,890	7,593	7,780	8,067	120	155

Technical data

Model	Nominal Kw	Airflow m3/hr indoor	Airflow m3/hr outdoor	Pipework		Max pipe run	
				Liquid	Suction	Length	Rise
SC040R/PAP015MR1	3,678	3,439	1,800	3/8"	1/2"	25	5
SC045R/PAP020MR1	5,212	3,310	2,400	3/8"	1/2"	25	8
SC050R/PAP025MR1	5,901	3,310	2,520	3/8"	5/8"	25	8
SC070R/PAP028MR1	7,593	3,648	2,460	3/8"	5/8"	25	8

Electrical data

Model	Power Supply	Noise levels dB(A)	FLA Amps	LRA Amps	Interconnecting cable	Fuse Rating
SC040R/PAP015MR1	230/1/50	47 / 29	8.7	38	5 Core	20
SC045R/PAP020MR1	230/1/50	47 / 29	12.6	41	5 Core	32
SC050R/PAP025MR1	230/1/50	46 / 32	13.6	60	5 Core	32
SC070R/PAP028MR1	230/1/50	46 / 32	16.1	97	5 Core	40

System charge

Outdoor Model	Pre-charge Kg	Max pipe run (m)	Additional charge g/m
PAP015MR1	1.1	13	51.7
PAP020MR1	1.65	19	51.7
PAP025MR1	2.2	25	N/A
PAP028MR1	2.5	25	N/A

The maximum pipe run must include the rise, it is not additional to the length. Air throw of SC cooler is 11m with 0.25m/s terminal air velocity.

Physical

Model	Width (mm)	Depth (mm)	Height (mm)	Weight (Kg)
SC040R	840	327	590	26
SC045R	840	327	590	28
SC050R	840	327	590	28
SC070R	1,040	327	590	41
PAP015MR1	822	342	615	51
PAP020MR1	860	342	706	57
PAP020MR1	880	400	810	80
PAP028MR1	880	400	810	81

Chill room sizes

Model	Room size
SC040R/PAP015MR1	20 m ³
SC045R/PAP020MR1	40 m ³
SC050R/PAP025MR1	50 m ³
SC070R/PAP028MR1	70 m ³

Selections are based on the following criteria:

- Rooms to be held at +4°C
- Rooms fully insulated with 80mm to walls/ceiling and floor
- Product load 65kg/m³ entering at no more than 5K above the room holding temperature
- Ambient temperature 32°C
- Normal air changes
- Refrigerant R449A

For different conditions, please contact our technical department for confirmation of selection.