

## **CELLAR COOLING SYSTEM**

Duty range: 3.83 - 7.59 kW Refrigerants: Pre-charged with R410A Operates down to 4°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 rotary 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
- R410A Sporlan expansion valve and contactor
- Long lasting white powder coated finish
- ★ Indoor unit comes with hinged side panels for easy access





# **KD CELLAR STAR**

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#### Performance data - R410A

Indoor /	Cooling capacity (watts) Ambient 32°C						Above	Below	
Outdoor		Room Temperature °C						Ground Ground	
	4°C	6°C	8°C	10°C	12.7°C	14°C	16°C	n	า <sup>3</sup>
SC040/PAP015M1	2,906	3,099	3,325	3,462	3,836	3,931	4,084	45	55
SC045/PAP020M1	3,819	4,083	4,344	4,503	4,940	5,056	5,242	57	90
SC070/PAP028M1	5,888	6,247	6,754	6,911	7,592	7,875	8,047	120	155

#### **Technical data**

Model	Nominal		Airflow	Pipework		Max pipe run	
Widder	Kw	m3/hr indoor	m3/hr outdoor	Liquid	Suction	Length	Rise
SC040/PAP015M1	3,836	3,439	1,800	1/4"	1/2"	25	5
SC045/PAP020M1	4,940	3,310	2,400	1/4"	1/2"	25	8
SC070/PAP028M1	7,592	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
SC040/PAP015M1	230/1/50	47 / 30	6.8	24	5 Core	16
SC045/PAP020M1	230/1/50	47 / 30	8.2	36	5 Core	20
SC070/PAP028M1	230/1/50	45 / 33	10.9	62	5 Core	25

#### System charge

Outdoor Model	Pre-charge Kg	Max pipe run (m)	Additional charge g/m
PAP015M1	1.0	25	N/A
PAP020M1	1.0	13	22
PAP028M1	1.5	8	52

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)
SC040	840	327	590	26
SC045	840	327	590	28
SC070	1040	327	590	41
PAP015M1	702	342	612	48
PAP020M1	860	342	706	55
PAP028M1	860	342	810	67

#### **Chill room sizes**

Model	Room size
SC040/PAP015M1	20 m <sup>3</sup>
SC045/PAP020M1	40 m <sup>3</sup>
SC070/PAP028M1	70 m <sup>3</sup>

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/m<sup>3</sup> entering at no more than 5K above the room holding temperature
- Ambient temperature 32°C
- Normal air changes
- Refrigerant R410A

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