

2.2 Outdoor Type Code

Row-DENCO®

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Product range

Key outdoor unit

Outdoor system

Refrigerant

Unit size

Series

Power supply

Version

DR Row-DENCO

O Outdoor units

U Condensing Unit

D R-410A

051

071

121

A Series

1 400 V / 3Ph / +N / 50 Hz - only Unit size 071-121

5 230 V / 1Ph / +N / 50 Hz - only Unit size 051

.N Standard version

.W Winter-Kit down to -35 °C ambient



NOTICE!

For detailed planning please only use the order-related documentation. Detailed dimensional drawings can be obtained on request from your relevant GEA sales office. Specifications and technical data are subject to regular updates. The manufacturer reserves the right to make necessary changes to information without prior written notice.

Filters

Regenerable polyester fibre filtering media (G2 efficiency) treated with synthetic resins, supported by a frame with protective metal mesh. The filtering media is flame retardant.

Air-Sources Heat Exchanger

Finned coil with large frontal surface area, made from mechanically expanded tubes and aluminium fins with hydrophilic treatment and high heat transfer area. The coil is placed upstream of the fans for optimum air distribution.

Electrical Panel

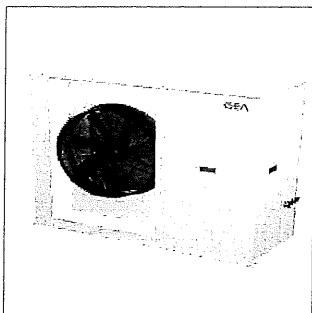
Built and wired in compliance with IEC 204-1/EN60204-1 standards, complete with fan contactor and overload protection.

Microprocessor Control System

The microprocessor, by managing the compressor for the direct expansion unit and the modulating 3-way valve for the water chiller, controls cooling capacity and operating alarms, with the possibility of connection to supervisory systems.

Immersed Electrode Humidifier (Optional)

Modulating steam production and automatic control of salt concentration in the water tank to allow the use of untreated water.

3.2.2 Outdoor Condensing Unit**Description of the DROU Unit**

For direct expansion versions, the DROU outdoor condensing unit combined with the DRX indoor unit, is aircooled with axial-flow fans, fitted with INVERTER-DRIVEN HERMETIC SCROLL compressor for operation on R-410A refrigerant, mounted on rubber vibration dampers, complete with oil pre-charge, supplied with oil separator to ensure correct lubrication even at minimum speed, and fitted with thermal protector.

Structure

Powder coated metal plate base panelling and inside structure. Non-flammable closed cell polyethylene foam thermal insulation and soundproofing on the inside.

Inverter-Driven Compressors

High efficiency hermetic scroll compressor with brushless DC motor, complete with thermal protector, with electronic capacity control managed by INVERTER. This ensures unit operating efficiency even at part loads, which represent more than 75 % of normal operating time, meaning effective overall average energy savings of up to 50 % compared to traditional ON/OFF technology. Mounted on rubber vibration dampers, complete with sump heater, oil charge and oil separator to prevent migration of the gas charge and ensure lubrication of the compressor sump during operation at minimum speed. Complete with thermal protector and sump heater installed as standard on all versions.

ELECTRICAL PANEL

Power and control electrical panel constructed in accordance with IEC 204-1/EN60204-1, complete with control and terminal blocks for connection to the power supply and auxiliary controls.

PROTECTION GRILL

The unit comes with a protection grill on the condenser coil.

5 Technical Data

5.1 Row-DENCO DX Rack Cooler

DRX		051		071		121	
Power supply	V-Ph~Hz	230/1N/50-60		230/1N/50-60		230/1N/50-60	
Refrigerant		R410A		R410A		R410A	
No. of circuits	No.	1		1		1	
CAPACITY DELIVERED		MAX	MIN	MAX	MIN	MAX	MIN
Total capacity (1)	kW	10,63	4,72	16,59	6,78	28,62	11,76
Sensible capacity (1)	kW	9,61	4,72	15,67	6,78	27,37	11,76
SHR		0,90	1,00	0,94	1,00	0,96	1
FANS							
Fan air flow-rate	m³/h	1500	900	2700	1200	4200	1800
EC radial fan power consumption	kW	0,16	0,04	0,304	0,064	0,86	0,09
No. of EC radial fans	No.	2		4		5	
Std. available static pressure	Pa	20		20		20	
SOUND DATA							
Sound pressure (2)	dB(A)	60		61		66	
AIR FILTER							
Filtration grade		G2		G2		G2	
REFRIGERANT CONNECTIONS							
Refrigerant connections (ODS Ø)	IN - LIQ	12		16		18	
	OUT-GAS	18		22		28	
HUMIDIFIER (3)							
Capacity	kg/h	3		3		3	
DIMENSIONS							
Length	mm	300		300		300	
Depth	mm	1000 / 1200		1000 / 1200		1000 / 1200	
Height	mm	2085		2085		2085	
DROU		051		071		121	
Power supply	V-Ph~Hz	230/1N/50		400/3N/50		400/3N/50	
COMPRESSORS		MAX	MIN	MAX	MIN	MAX	MIN
No. of compressors	No.	1		1		1	
Compressor power consumption (1)	kW	2,63	0,77	4,56	1,17	7,19	1,81
FANS							
Fan air flow-rate	m³/h	6400		8640		15768	
Fan power consumption	kW	0,31		0,60		1,20	
No. of fans	No.	2		1		2	
REFRIGERANT CONNECTIONS							
Refrigerant connections (ODS Ø)	IN - GAS	3/4" SAE -18		22		28	
	OUT-LIQ	3/8" SAE - 12		16		18	
SOUND DATA							
Sound pressure (2)	dB(A)	54		61		64	
DIMENSIONS							
Length	mm	900		1450		1450	
Depth	mm	420		550		550	
Height	mm	1240		1200		1700	

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1 Inside conditions: air 35 °C/27 % RH - Outside air temp.: 35 °C

2 Measured at a height of 1.5 m and 2 m from the front of the unit in a free field

3 1200 mm DEEP RACK ONLY

7.8 DROU 121

DROU 121

1: POWER SUPPLIES

2: GAS LINE Ø 22.2 ODS

3: LIQUID LINE Ø 16.2 ODS

