



TECHNICAL SELECTION

Software version: ELCA World v. 1.6.1.0

User: James Askey

Database version: 1.7.1.0

Print data:16/11/2021 09:56

TECHNICAL SELECTION

i-NEXT DX O 018 M1 S E2

Close control unit, INVERTER direct expansion air cooled



R HFC R-410A

SCROLL

Model	i-NEXT DX O 018 M1 S E2		
Version	O		
Frame	E2		
Primary circuit type	DIRECT EXPANSION AIR COOLED		
No. Circuits	N°	1	
Refrigerant	R410A		

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1 TECHNICAL SELECTION

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1.1 INDOOR UNIT

MAIN CIRCUIT

DESIGN CONDITIONS

Dry bulb temperature	°C	21.0
Relative humidity	%	50
Altitude	m	0
Air flow	m³/h	4100
ESP External Static Pressure	Pa	20
Outdoor air temperature	°C	35.0
Coil working pressure		-

PERFORMANCE AT DESIGN CONDITIONS

Total cooling capacity gross	kW	19.6
Sensible cooling capacity gross	kW	17.0
Net cooling capacity	kW	19.1
Net sensible cooling capacity	kW	16.5
SHR		0.87
EER (Indoor unit)	kW/kW	2.74
Total power input (Comp.+fans)	kW	7.16
Leaving air temperature	°C	8.8
Leaving air relative humidity	%	99
Effective heat exchange area		-

PERFORMANCE AT MINIMUM SPEED COMPRESSOR

Total cooling capacity gross	kW	6.25
Sensible cooling capacity gross	kW	5.80
Net cooling capacity	kW	6.17
Net sensible cooling capacity	kW	5.72
SHR		0.93
EER (Indoor unit)	kW/kW	4.96
Total power input (Comp.+fans)	kW	1.26
Leaving air temperature	°C	9.6
Leaving air relative humidity	%	99
Air flow	m³/h	1500

The performance shown are obtained from theoretical calculations and tolerances will apply. Rpt.version: 1.0.7.0

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PARTIAL LOADS WITH COMPRESSOR MODULATION

Load	%	100	80	60	40	20
Outdoor air temperature	°C	35.0	35.0	35.0	35.0	35.0
Air flow	m³/h	4100	3337	2573	1810	1500
Total cooling capacity gross	kW	19.6	15.7	11.8	7.84	3.92
Sensible cooling capacity gross	kW	17	13.9	10.3	6.9	3.4
Net cooling capacity	kW	19.1	15.4	11.6	7.73	3.84
Net sensible cooling capacity	kW	16.5	13.6	10.1	6.79	3.32
Compressors power absorption	kW	6.64	4.58	2.7	1.51	0.79
Fans power input	kW	0.52	0.33	0.2	0.11	0.08
Total power input (Comp.+fans)	kW	7.16	4.91	2.9	1.62	0.87
Condensing temperature	°C	49.8	46.8	43.6	40.8	39.8
EER (Indoor unit)	kW/kW	2.74	3.2	4.07	4.84	4.51

Note

Note

Note: The columns with bold text identify the area of "cycling", in which the inverter compressor works with cycles of ON / OFF below the minimum modulation frequency (operation only for short periods). PLEASE SELECT THE CORRECT UNIT IN THE MODULATION FIELD.

COMPRESSORS

Compressor type		SCROLL
Compressors nr.	N°	1
Compressors power absorption	kW	6.64

FANS

Fans type		EC BASIC
Quantity	N°	1
Air flow	m³/h	4100
Fans power input	kW	0.52
SPF (Specific Power Factor)	W / l/s	0.45

ACCESSORIES

FILTERS

Accessory filter type	COARSE 60% (ISO EN 16890)
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HUMIDIFIER

Humidifier type		Humidifier 3 kg/h
Quantity	N°	1
Capacity	kg/h	3.0
Electrical power abs.	kW	2.30
Max absorbed current (FLA)	A	4.50
Power supply	V/ph/Hz	-

NOISE DATA

Spectrum	Hz	63	125	250	500	1000	2000	4000	8000	Tot
		dB	dB	dB	dB	dB	dB	dB	dB	dB(A)
Sound Power		58	61	61	62	56	58	48	40	63
Total sound Pressure		42	45	45	46	40	42	32	24	47
Distance	m					1				

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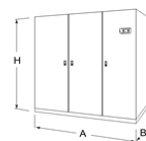
Note

Note

Average sound pressure level, at 1 m distance, unit in a free field on a reflective surface according to ISO3744. Non-binding value obtained from the sound power level.

WEIGHT & DIMENSIONS

A	mm	785
B	mm	675
H	mm	1925
Weight	kg	244



ELECTRICAL DATA (refer to indoor unit)

Power supply	V/ph/Hz	400/3+N/50
Max Electrical power absorbed (FLI)	kW	11.8
Max absorbed current (FLA)	A	23.2
Max inrush current (SA)	A	10.2
Power input (OI)	kW	7.16

1.2 REMOTE CONDENSER

MAIN CIRCUIT

REMOTE CONDENSER

Code		GR-Z A B 50 027
Quantity	N°	1
Version		B
Circuits	N°	1
Outdoor air temperature	°C	35.0
Condensing temperature	°C	49.8
Air flow	m³/h	8350
Rejection capacity	kW	25.8

FANS

Fans power input	kW	0.60
Quantity	N°	1
Project pressure	Pa	0

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WEIGHT & DIMENSIONS

Dimension A	mm	1150
Dimension B	mm	718
Dimension H	mm	900
Weight	kg	45
Packaged dimension A	mm	1400
Packaged dimension B	mm	850
Packaged dimension H	mm	1050
Package weight	kg	66

ELECTRICAL DATA

Power supply	V/ph/Hz	230/1/50
Power input (OI)	kW	0.60
Total power input	kW	0.64
Max absorbed current	A	2.90

AIR SUPPLY REMOTE CONDENSER

Supply air direction	None air delivery selected
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NOISE DATA

Spectrum	Hz	63	125	250	500	1000	2000	4000	8000	Tot
		dB	dB	dB	dB	dB	dB	dB	dB	dB(A)
Sound Power		-	-	-	-	-	-	-	-	70
Total sound Pressure		-	-	-	-	-	-	-	-	55
Distance	m					1				

Note

Note

Average sound pressure level, at 1 m distance, unit in a free field on a reflective surface according to ISO3744. Non-binding value obtained from the sound power level.

