



# ZEAS condensing unit for commercial refrigeration

LREQ-BY1/LREQ-BY1R



Inverter



Scroll compressor

## Refrigeration solution for medium to large capacity applications featuring proven VRV

- › One model for all applications from -45°C to 10°C evaporating temperature
- › Perfect solution for all cooling and freezing applications with variable load conditions and high energy efficiency requirements. In particular used in supermarkets, cold storage, blast coolers and freezers etc.
- › VRV (Variable Refrigerant Volume) technology for flexible application range
- › Low sound level including „night mode“ operation
- › Dedicated unit to allow multi combination of 2 x 15 HP or 2 x 20 HP resulting in less pipework or installation time

# LREQ-BY1/LREQ-BY1R



				LREQ-BY1/BY1R									
				5	6	8	10	12	15	20	15	20	
Refrigerating capacity	Low temperature	Nom.	kW	5.51 (1)	6.51 (1)	8.33 (1)	10.0 (1)	10.7 (1)	13.9 (1)	15.4 (1)	-	-	
	Medium temperature	Nom.	kW	12.5 (2)	15.2 (2)	19.8 (2)	23.8 (2)	26.5 (2)	33.9 (2)	37.9 (2)	-	-	
Power input	Low temperature	Nom.	kW	4.65 (1)	5.88 (1)	7.72 (1)	9.27 (1)	9.89 (1)	12.8 (1)	14.1 (1)	-	-	
	Medium temperature	Nom.	kW	5.10 (2)	6.56 (2)	8.76 (2)	10.6 (2)	12.0 (2)	15.2 (2)	17.0 (2)	-	-	
Capacity control	Method	Variable											
Seasonal energy performance ratio SEPR	R-410A	Te -10°C		3.86	3.79	3.64	3.42	3.51	3.38	3.23	-	-	
		Te -35°C		1.80	1.77	1.84	1.88	1.80	1.70	-	-		
Annual electricity consumption Q	R-410A	Te -10°C	kWh/a	19,907	24,681	33,483	42,794	46,377	61,683	72,030	-	-	
		Te -35°C	kWh/a	22,805	27,453	33,817	39,747	44,363	61,090	67,325	-	-	
Parameters at full load and ambient temp. 32°C	R-410A	Te -10°C	Rated COP (COPA)	2.45	2.32	2.26	2.25	2.21	2.23	-	-		
		Te -35°C	Rated COP (COPA)	1.18	1.11		1.08		1.09	-	-		
Parameters at part load and ambient temp. 25°C	R-410A	Te -10°C	Declared COP	2.94	2.86	2.74	2.65	2.59	2.55	2.44	-	-	
		Te -35°C	Declared COP	1.30	1.31	1.24	1.21		1.33	1.28	-	-	
Parameters at full load and ambient temp. 43°C	R-410A	Te -10°C	Declared COP	1.54	1.57	1.40	1.46	1.47	1.46	1.51	-	-	
		Te -35°C	Declared COP	0.76	0.74	0.68	0.70	0.71	0.74	-	-		
Dimensions	Unit	Height	mm	1,680								1,680	
		Width	mm	635				930				1,240	
		Depth	mm	765								765	
Weight	Unit	kg	166				242				331	337	
Heat exchanger	Type	Cross fin coil											
Compressor	Type	Hermetically sealed scroll compressor											
	Output	W	2,600	3,200	2,100	3,000	3,400	2,600	3,400	2,600	3,400		
	Piston displacement	m <sup>3</sup> /h	11.18	13.85	19.68	23.36	25.27	32.24	35.8	32.24	35.80		
	Speed	rpm	5,280	6,540	4,320	6,060	6,960	5,280	6,960	5,280	6,960		
	Starting method	Direct on line (inverter driven)											
Compressor 2	Output	W	-	-	-	3,600	-	-	-	3,600	-		
	Piston displacement	m <sup>3</sup> /h	-	-	19.68	23.36	25.27	32.24	35.8	32.24	35.80		
	Speed	rpm	-	-	-	2,900	-	-	-	2,900	-		
Compressor 3	Output	W	-	-	-	-	-	3,600	-	3,600	-		
	Piston displacement	m <sup>3</sup> /h	-	-	-	-	-	32.24	35.8	32.24	35.80		
	Speed	rpm	-	-	-	-	-	2,900	-	2,900	-		
Fan	Type	Propeller fan											
	Quantity		1					2				2	
Fan motor	Air flow rate	Cooling Nom.	m <sup>3</sup> /min	95	102	171	179	191	230	240	230	240	
	Output	W	350				750				350	750	
Fan motor 2	Drive	Direct drive											
	Output	W	-					350	750	350	750		
Sound pressure level	Nom.	dB(A)	55.0 (3)	56.0 (3)	57.0 (3)	59.0 (3)	61.0 (3)	62.0 (3)	63.0 (3)	62.0	63.0		
Operation range	Evaporator	Cooling Max.~Min.	°CDB	10~-45									
Refrigerant	Type	R-410A											
	GWP	2,087.5											
	Charge	kg	5.2				7.9				11.5	11.5	
	Control	TCO <sub>2eq</sub>	10.9				16.5				24.0	24.0	
Power supply	Phase/Frequency/Voltage	Hz/V	Electronic expansion valve										
			3~/50/380-415										

(1) Cooling: evaporating temp. -35°C; outdoor temp. 32°C; suction SH10°C  
 (2) Cooling: evaporating temp. -10°C; outdoor temp. 32°C; suction SH10°C  
 (3) Sound pressure data: measured at 1m in front of unit, at 1.5m height  
 RLA is based on following conditions: outdoor temp. 32°CDB; suction SH 10°C; saturated temperature equivalent to suction pressure -10°C  
 Maximum allowable voltage range variation between phases is 2%.  
 Contains fluorinated greenhouse gases

Daikin Europe N.V. Naamloze Vennootschap · Zandvoordestraat 300 · 8400 Oostende · Belgium · www.daikin.eu · BE 0412 120 336 · RPR Oostende (Responsible Editor)

The present leaflet is drawn up by way of information only and does not constitute an offer binding upon Daikin Europe N.V. Daikin Europe N.V. has compiled the content of this leaflet to the best of its knowledge. No express or implied warranty is given for the completeness, accuracy, reliability or fitness for particular purpose of its content and the products and services presented therein. Specifications are subject to change without prior notice. Daikin Europe N.V. explicitly rejects any liability for any direct or indirect damage, in the broadest sense, arising from or related to the use and/or interpretation of this leaflet. All content is copyrighted by Daikin Europe N.V.

ECPEN18-811

09/18

