

Optyma™ Plus INVERTER

Capacity modulation in a simple and adaptive package

Combines our market-leading expertise in condensing unit design with the unique benefits of stepless inverter scroll technology. The result is energy consumption reduced by up to 30% with better food preservation.



Quick and safe installation and service

Preset parameters and Modbus communication makes start-up and maintenance of the condensing unit effortlessly quick and easy.



High SEPR*: 3.84 – certified by ASERCOM

All models in the range are highly efficient and well above EcoDesign 2018 thresholds, contributing to a reduction in energy costs.
*SEPR: Seasonal Energy Performance Ratio.



Accurate temperature control

Accurate temperature control and low in-rush current result in a more stable storage temperature and longer product shelf life.



Extended capacity

Stepless compressor modulation - able to slow down and speed up from 30 to 100 RPS to save energy and match load fluctuations very accurately. The inverter drive incorporates smart logic to increase reliability during operation.



Best SEPR with stepless modulation reduces energy consumption by up to

30%

Designed for ultimate efficiency

Stepless capacity modulation

From 30 to 100 rps modulation leads to 20-30% higher energy efficiency compared to fixed-speed condensing units.

Simple commissioning

Preset drive parameters with dedicated refrigeration software.

Future-proof

Working with lower GWP refrigerants such as R448A and R449. Also compatible with R407A/F and R404A.



Danfoss compressor and drive package

Dedicated to refrigeration with years of market application and validation.

Simple plug-and-play installation

Safe, simple and hassle-free installation with tried-and-tested components.

Full intelligent control through the Optyma™ Plus Controller

Control, alarm management, day & night operation, can connect to ADAP-KOOL® software, etc.

High SEPR/COP cuts energy costs

E.g. in a cold room where meat is stored and with 9 kW of cooling capacity.

Optyma™ Plus INVERTER MBP unit vs mechanically modulated technology*

Cooling cap.: 9 kW
Refrigerant: R407F



UNIT	Danfoss	Market
SEPR	3.84	2.50
USAGE	~ 14 000 kWh	~ 21 600 kWh

Annual energy consumption saved: 7 600 kWh

Savings based on cost of energy:

Savings based on cost of energy in the UK:
£0.13/ 1 KWH = 7 600 X 0.13 = £988

£988

annual electricity savings made by your customer in UK

* Source: Danfoss

Model	Code	Version	Compressor	Electrical code (1)	Compressor speed, rps	Tamb [°C]	Cooling capacity Q [kW] (2)					EcoDesign (3)				Sound power level dB(A)	Sound pressure level 10 m dB(A)
							Te [°C]					Q [kW]	P [kW]	COP	SEPR		
							-15 °C	-10 °C	-5 °C	0 °C	5 °C						
OP-MPPM028VVVL	114X4302	P01	VLZ028TGA	E	30	27	1.465	1.839	2.276	2.783	3.365					72	41
						32	1.375	1.732	2.149	2.633	3.190						
						38	-	-	-	-	-						
						43	-	-	-	-	-						
					50	27	2.494	3.107	3.816	4.629	5.553					72	41
						32	2.346	2.930	3.605	4.379	5.259						
						38	-	2.706	3.338	4.064	4.891						
						43	-	-	3.106	3.790	4.571						
					75	27	3.656	4.527	5.536	6.695	8.013					73	42
						32	3.443	4.270	5.226	6.324	7.573						
						38	-	3.949	4.842	5.866	7.032						
						43	-	-	4.509	5.472	6.569						
					100	27	4.686	5.774	7.041	8.502	10.171					74	43
						32	4.421	5.451	6.648	8.028	9.605	5.548	3.058	1.81	3.38		
						38	-	5.056	6.170	7.454	8.922						
						43	-	-	5.761	6.967	8.346						
OP-MPPM035VVVL	114X4316	P01	VLZ035TGA	E	30	27	1.837	2.303	2.848	3.479	4.205					72	41
						32	1.723	2.167	2.686	3.287	3.978						
						38	-	-	-	-	-						
						43	-	-	-	-	-						
					50	27	3.094	3.851	4.719	5.708	6.824					72	41
						32	2.899	3.621	4.448	5.389	6.452						
						38	-	3.332	4.108	4.991	5.989						
						43	-	-	3.813	4.646	5.588						
					75	27	4.512	5.579	6.805	8.202	9.777					74	43
						32	4.234	5.247	6.409	7.732	9.225						
						38	-	4.837	5.921	7.154	8.548						
						43	-	-	5.501	6.660	7.970						
					100	27	5.784	7.106	8.637	10.392	12.381					74	43
						32	5.450	6.698	8.141	9.795	11.673	6.829	3.826	1.78	3.30		
						38	-	6.201	7.540	9.075	10.820						
						43	-	-	-	-	-						
OP-MPPM044VVVL	114X4334	P01	VLZ044TGA	E	30	27	2.364	2.954	3.637	4.422	5.317					72	41
						32	2.213	2.776	3.429	4.180	5.037						
						38	-	-	-	-	-						
						43	-	-	-	-	-						
					50	27	3.894	4.834	5.915	7.145	8.532					74	43
						32	3.650	4.544	5.570	6.739	8.058						
						38	-	4.185	5.144	6.238	7.473						
						43	-	-	4.779	5.808	6.973						
					75	27	5.674	7.003	8.510	10.203	12.087					74	43
						32	5.308	6.572	8.003	9.609	11.397						
						38	-	6.034	7.371	8.873	10.544						
						43	-	-	6.825	8.237	9.810						
					100	27	7.289	8.959	10.828	12.899	15.173					74	43
						32	6.786	8.375	10.149	12.112	14.265	8.558	4.753	1.8	3.73		
						38	-	7.634	9.291	11.123	13.130						
						43	-	-	8.539	10.260	12.145						

(1) E - Compressor 400V/3~/50Hz, fan 230V/1~/50Hz

(2) Nominal conditions (EN13215), Evaporating temperatures at dew point, Superheat 10K, Subcooling 0K

(3) Rated conditions (EN13215), Evaporating temperature (dew point) -10°C, Ambient air temperature +32°C, Return Gas Temperature 20°C, Subcooling 0K

SEPR, Seasonal Energy Performance Ratio

Q [kW], Cooling Capacity

P [kW], Power Input



For regular updates and detailed capacities, please refer to **Coolselector®2** software

