



## CONDENSING UNITS



Optyma™ **Plus** INVERTER



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The Danfoss Optyma™ outdoor condensing units are designed to provide different refrigerant options, depending on your specific needs. They offer standard versions that use A1 refrigerants, multi-refrigerant versions that offer both A1 and A2L refrigerants in a single unit, as well as natural refrigerant versions that use CO2 refrigerant. Indoor models are also available with R290.

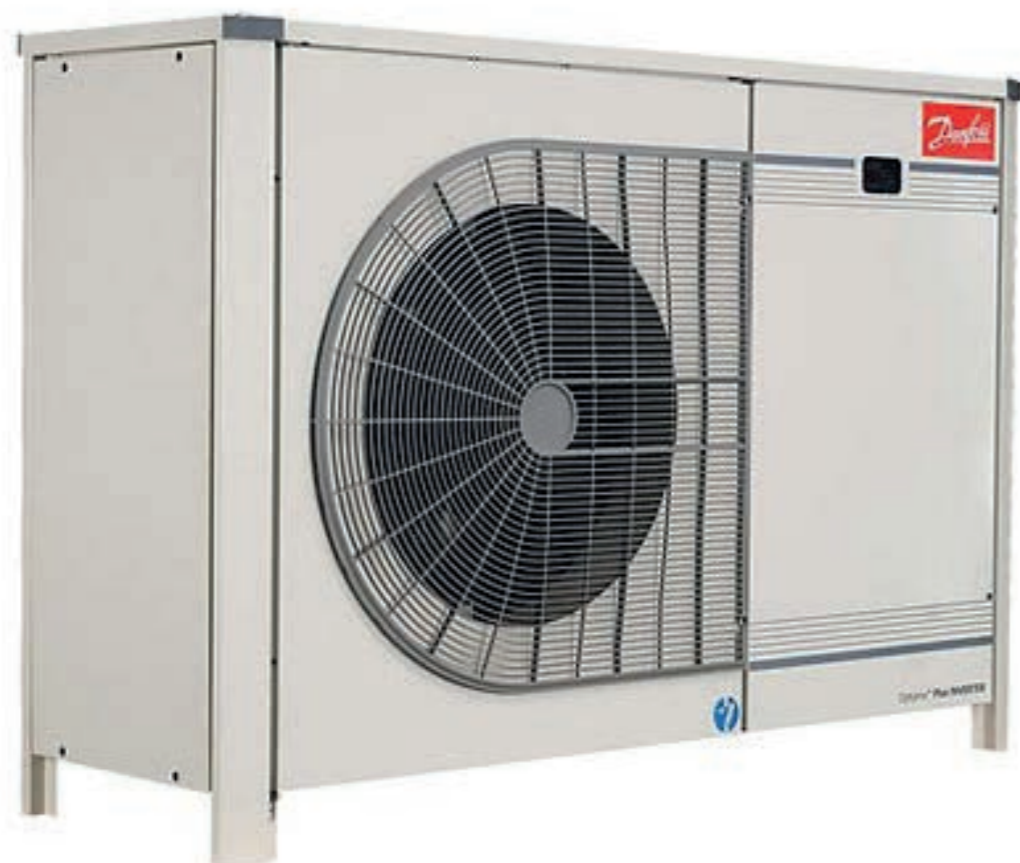
This variety of options ensures that you can find a suitable solution without having to deal with complicated configurations. In addition, these units have high energy efficiency and cooling performance, making them suitable for both medium and low-temperature applications. They are also designed to be easy to install and are reliable, making them ideal for supporting the transition towards greener technologies.



**Optyma™ Plus INVERTER**

**Light on refrigerant, heavy on efficiency**

Get it all with Optyma™ Slim Pack. It combines quiet operation and more value for money with an energy-efficient and compact solution.



**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.

**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.

**Full intelligent control through the Optyma™ Plus Controller**

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

**Simple plug-and-play installation**

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



**Optyma™ Plus INVERTER - Performance data R448A/R449A MBP**

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)				
							Evaporating Temperature (Mid point) [°C]					COP	SEPR						
							-15 °C	-10 °C	-5 °C	0 °C	5 °C								
OP-MPPM028VVL	114X4302	P01	VLZ028TGA	E	30	27	1.61	2.01	2.49	3.03	-	-	-	72	41				
						32	1.52	1.90	2.35	2.87	-	-	-						
						38	-	-	-	-	-	-	-			-			
						43	-	-	-	-	-	-	-			-			
						50	27	2.74	3.39	4.16	5.02	-	-			-	73	41	
							32	2.58	3.20	3.93	4.75	-	-			-			
							38	-	2.96	3.65	4.42	-	-			-			-
							43	-	2.75	3.40	4.13	-	-			-			-
						75	27	4.01	4.94	6.04	7.27	-	-			-	73	42	
							32	3.78	4.66	5.70	6.87	-	-			-			-
							38	-	4.32	5.29	6.38	-	-			-			-
							43	-	4.02	4.93	5.96	-	-			-			-
100	27	5.14	6.30	7.68	9.24	-	-	-	74	43									
	32	4.85	5.95	7.26	8.73	-	3.75	-			-								
	38	-	5.53	6.74	8.11	-	-	-			-								
	43	-	5.16	6.31	7.59	-	-	-			-								
OP-MPPM035VVL	114X4316	P01	VLZ035TGA	E	30	27	2.02	2.52	3.11	3.79	-	-	-	72	41				
						32	1.90	2.37	2.94	3.58	-	-	-			-			
						38	-	-	-	-	-	-	-			-	-		
						43	-	-	-	-	-	-	-			-			
						50	27	3.40	4.20	5.14	6.19	-	-			-	72	41	
							32	3.19	3.96	4.85	5.85	-	-			-			-
							38	-	3.65	4.49	5.42	-	-			-			-
							43	-	3.38	4.18	5.06	-	-			-			-
						75	27	4.95	6.09	7.42	8.90	-	-			-	74	43	
							32	4.66	5.73	6.99	8.40	-	-			-			-
							38	-	5.30	6.47	7.78	-	-			-			-
							43	-	4.923	6.02	7.25	-	-			-			-
100	27	6.34	7.76	9.43	11.31	-	-	-	74	43									
	32	5.98	7.32	8.90	10.67	-	3.63	-			-								
	38	-	6.79	8.25	9.90	-	-	-			-								
	43	-	6.34	7.71	9.25	-	-	-			-								
OP-MPPM044VVL	114X4334	P01	VLZ044TGA	E	30	27	2.60	3.23	3.97	4.80	-	-	-	72	41				
						32	2.44	3.04	3.75	4.54	-	-	-			-			
						38	-	-	-	-	-	-	-			-	-		
						43	-	-	-	-	-	-	-			-			
						50	27	4.27	5.27	6.44	7.74	-	-			-	74	43	
							32	4.01	4.96	6.07	7.30	-	-			-			-
							38	-	4.57	5.61	6.77	-	-			-			-
							43	-	4.24	5.22	6.31	-	-			-			-
						75	27	6.22	7.62	9.25	11.04	-	-			-	74	43	
							32	5.83	7.16	8.70	10.40	-	-			-			-
							38	-	6.59	8.03	9.61	-	-			-			-
							43	-	6.10	7.45	8.94	-	-			-			-
100	27	7.99	9.75	11.76	13.95	-	-	-	74	43									
	32	7.46	9.13	11.05	13.12	-	4.12	-			-								
	38	-	8.36	10.14	12.08	-	-	-			-								
	43	-	7.68	9.35	11.18	-	-	-			-								

**MBP**

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

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

(3) Rated conditions (EN13215), Evaporating temperature (Mid 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

**Optyma™ Plus INVERTER - Performance data R404A MBP**

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)				
							Evaporating Temperature (Mid point) [°C]					COP	SEPR						
							-15 °C	-10 °C	-5 °C	0 °C	5 °C								
OP-MPPM028VVL	114X4302	P01	VLZ028TGA	E	30	27	1.61	2.00	2.46	2.99	-	-	-	72	41				
						32	1.49	1.87	2.30	2.80	-	-	-			-			
						38	-	-	-	-	-	-	-			-	-		
						43	-	-	-	-	-	-	-			-	-		
						50	27	2.72	3.36	4.11	4.96	-	-			-	72	41	
							32	2.52	3.13	3.83	4.63	-	-			-			-
							38	-	2.84	3.49	4.23	-	-			-			-
							43	-	2.60	3.19	3.88	-	-			-			-
						75	27	4.03	4.96	6.02	7.24	-	-			-	73	42	
							32	3.74	4.61	5.61	6.76	-	-			-			-
							38	-	4.19	5.11	6.16	-	-			-			-
							43	-	3.82	4.68	5.65	-	-			-			-
100	27	5.25	6.44	7.79	9.32	-	-	-	74	43									
	32	4.88	6.00	7.27	8.70	-	3.56	-			-								
	38	-	5.44	6.61	7.92	-	-	-			-								
	43	-	4.96	6.03	7.25	-	-	-			-								
OP-MPPM035VVL	114X4316	P01	VLZ035TGA	E	30	27	2.04	2.53	3.11	3.76	-	-	-	72	41				
						32	1.89	2.36	2.89	3.52	-	-	-			-			
						38	-	-	-	-	-	-	-			-	-		
						43	-	-	-	-	-	-	-			-			
						50	27	3.43	4.22	5.14	6.20	-	-			-	72	41	
							32	3.18	3.93	4.79	5.78	-	-			-			-
							38	-	3.56	4.35	5.25	-	-			-			-
							43	-	3.24	3.97	4.80	-	-			-			-
						75	27	5.01	6.14	7.44	8.93	-	-			-	74	43	
							32	4.65	5.71	6.93	8.31	-	-			-			-
							38	-	5.17	6.28	7.55	-	-			-			-
							43	-	4.71	5.73	6.90	-	-			-			-
100	27	6.42	7.85	9.48	11.34	-	-	-	74	43									
	32	5.96	7.29	8.82	10.55	-	3.87	-			-								
	38	-	6.60	7.99	9.57	-	-	-			-								
	43	-	6.00	7.27	8.72	-	-	-			-								
OP-MPPM044VVL	114X4334	P01	VLZ044TGA	E	30	27	2.64	3.26	3.98	4.80	-	-	-	72	41				
						32	2.44	3.03	3.71	4.48	-	-	-			-			
						38	-	-	-	-	-	-	-			-	-		
						43	-	-	-	-	-	-	-			-			
						50	27	4.36	5.34	6.47	7.75	-	-			-	74	43	
							32	4.04	4.97	6.03	7.24	-	-			-			-
							38	-	4.51	5.49	6.60	-	-			-			-
							43	-	4.10	5.01	6.04	-	-			-			-
						75	27	6.32	7.72	9.31	11.10	-	-			-	74	43	
							32	5.87	7.18	8.67	10.34	-	-			-			-
							38	-	6.50	7.87	9.40	-	-			-			-
							43	-	5.91	7.17	8.59	-	-			-			-
100	27	8.09	9.86	11.85	14.06	-	-	-	74	43									
	32	7.49	9.14	11.00	13.06	-	3.89	-			-								
	38	-	8.23	9.93	11.82	-	-	-			-								
	43	-	7.45	9.01	10.75	-	-	-			-								

**MBP**

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

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

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

SEPR, Seasonal Energy Performance Ratio

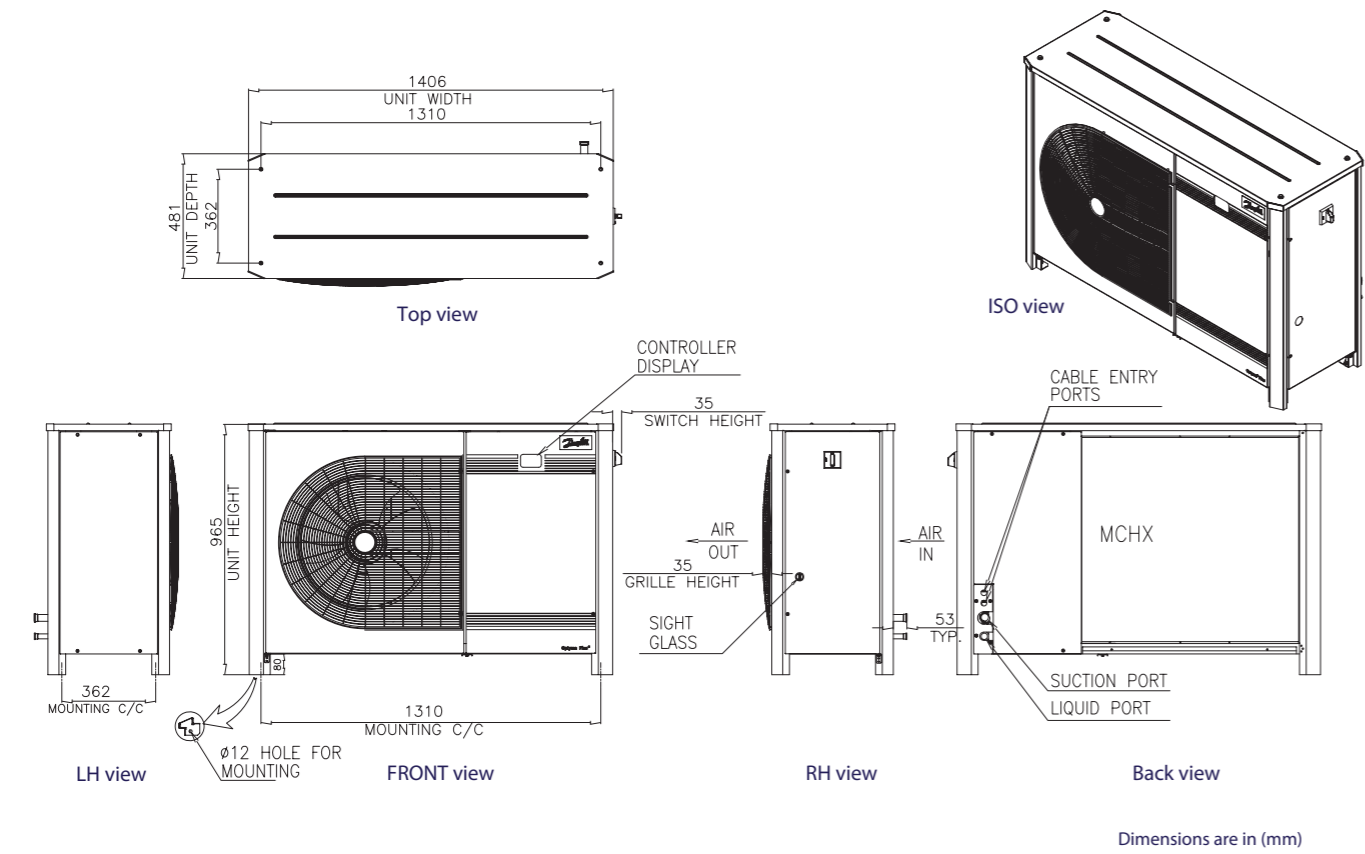
Q [kW], Cooling Capacity

P [kW], Power Input

**Optyma™ Plus INVERTER - Dimensions**

**OP-MPLM028-035-044, OP-MPPM028-035-044**

**Housing H3**




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