ENGINEERING
TOMORROW

Optyma™ Slim Pack

Lightweight size. Heavyweight performance. Benefit from the cost-effective packaged solution!

Range extension for an extended offer:

- For medium-temperature refrigeration applications ranging from 0.7 to 10.6 kW
- For low-temperature refrigeration applications ranging from 0.6 to 5.6 kW
- Complies with the new Energy Related Regulations for fan motors

Compact

Light weight. Space-saving design. Easy to handle and to install

www.danfoss.com

OPTYMA™
DANFOSS CONDENSING UNITS

Lightweight size. Heavyweight performance.

For the safety of refrigerated products and for easy handling

Reliability, compactness and low cost make the Danfoss Optyma™ **Slim Pack** condensing unit a favourite cooling solution for cost-effective refrigeration.

High reliability for food and good safety

- The Optyma™ **Slim Pack** condensing unit is equipped with components that are optimised to work together: compressor, controls, heat exchanger. It's a smart way to obtain high performance and reliability.
- The heavy-duty scroll and reciprocating technologies make the unit sturdy and provides long-term reliability.
- Voltage relay protects from voltage variations.
- 100% factory testing of the units reduces risk of leakage.

Compact and light for transport and handling

The system is designed to perfectly fit into a light, compact housing.
The Optyma™ **Slim Pack** weighs up to 87 kg. It is the lightest solution on the market, weighing from 15 to 60 kg less than alternative outdoor solutions. It delivers energy efficiency with its low power factor.
The similar footprints of the two housings used allow the use of a single standard bracket for wall mounting, optimising the number of parts it is necessary to keep in stock.

Tailored for outdoor use

The Danfoss Optyma™ **Slim Pack** is designed for indoor or outdoor conditions:

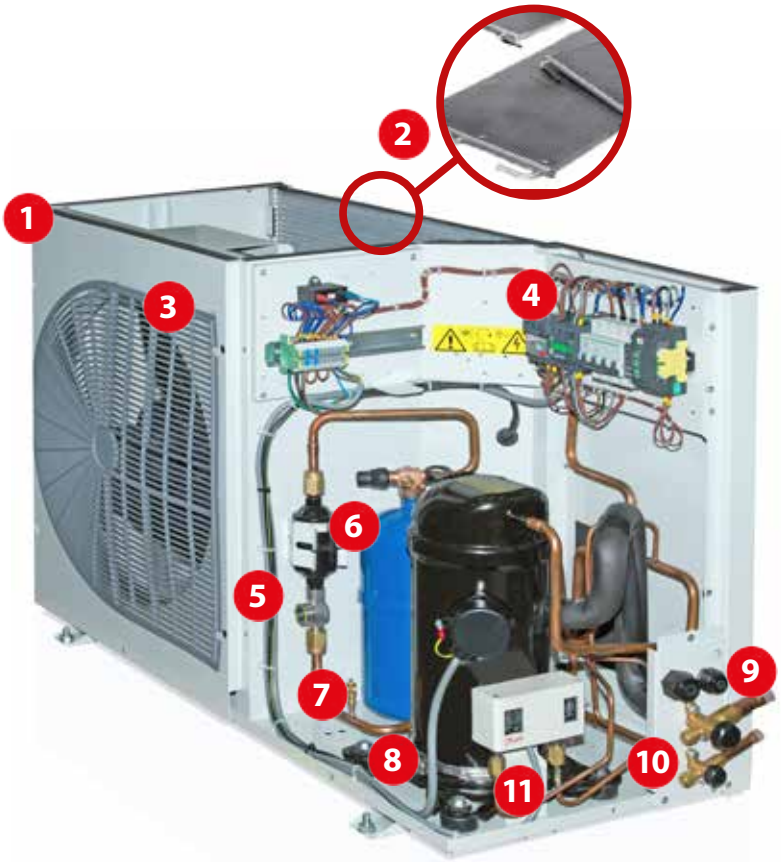
- The micro-channel heat exchangers and the housing are corrosion resistant.
- The housing is galvanized and painted to ensure a long lifetime, and has passed the 400-hour salt spray test.
- The unit provides IP54 electrical board protection.

Easy from day 1 - saves time and money:

- Easy selection with Danfoss online selection tools.
- Easy to handle and transport thanks to the compact design.
- Easy to install, with quick connections.
- Easy-to-clean micro-channel heat exchangers, ensuring longer lifetime and optimised efficiency.
- The reliable compressor and micro-channel heat exchanger reduce maintenance and improve uptime.
- One-stop shopping available to buy the Optyma™ **Slim Pack** with well-known refrigeration components equipment.
- Integrates easily into its surroundings thanks to its aesthetic design.

Superior safety at low costs:

1. Resistance to corrosion of the heat exchanger and housing prolongs the lifetime of the unit
2. Micro-channel heat exchanger is light and easy to clean
3. Accessible fan and condenser for easy maintenance
4. Accessible pre-wired electrical junction panel enables easy servicing
5. Filter drier and sight glass protect the unit from moisture, acids and solid particles. Flare connections simplify maintenance
6. Receiver with shut-off valve makes servicing easier
7. Thanks to Schrader valve the unit is prepared for using different devices of fan control
8. Crankcase heater protects the compressor when operating under cold weather conditions
9. Quick connections accelerate installation: just mount, braze and plug.
10. Accessible service ports on service valves (suction and liquid)
11. Dual KP17WB pressure control for enhanced safety



Up to

35%

savings on refrigerant with micro-channel heat exhanger.

Slim range designed for medium and low-temperature refrigeration

The Optyma™ **Slim Pack** provides cooling capacities from 0.7 to 10.8 kW in medium-temperature applications depending on the model and on the refrigerant. It is suitable for cold rooms, fermentation rooms and cold storage space in all kinds of convenience stores and restaurants. In LBP, it provides from 0.6 to 5.6 kW for freezers and cold rooms.

MBP and LBP applications:
Mini-markets, supermarkets
Cold rooms
Freezers
Restaurants
Wine cellars
Fish markets
Butchers' shops
Bakeries
Laboratories
Florists
Petrol stations
Industrial processes
Milk cooling
Dairy and general food storage

Technical data

Designation

OP- MSUM034 ML W05 E

1 2 3 4 5 6 7 8

1	**Application:** M = MBP / L = LBP
2	**Condensing unit family: S**= Optyma™ **Slim Pack**
3	**Refrigerant** **U**= R407A/F/R134a/R404A/R507/R22 **H**= R404A/R507 **G**= R134A
4	**Condenser type: M**= Standard with micro channel heat exchanger
5	**Displacement** in cm3
6	**Compressor platform**
7	**Version** W05
8	**Voltage code:** **G**= 230V/1-phase compressor & fan **E**= 400V/3-phase compressor & 230V/1-phase fan

MLZ compressors may be blue or black depending on the manufacturing origin

Make your choice!

Range extension for low and medium temperatures

Model and cooling capacity by cold room type	Meat +1°C - 18h		Fish +1°C - 18h		Laboratories +12°C - 18h		Fruit & Vegetables +8°C - 18h		Fruit & Vegetables 0°C - 18h		Butter, Eggs, Cheese +5°C - 18h		Freezers -18°C - 16h	
	Cap. (W)	CR* (m^3)	Cap. (W)	CR* (m^3)	Cap. (W)	CR* (m^3)	Cap. (W)	CR* (m^3)	Cap. (W)	CR* (m^3)	Cap. (W)	CR* (m^3)	Cap. (W)	CR* (m^3)
OP-MSHM010	900	6	900	6	1 270	8	1 270	17	900	7	1 030	9		
OP-MSHM012	1 090	8	1 090	8	1 530	10	1 530	25	1 090	8	1 240	12		
OP-MSHM015	1 350	11	1 350	11	1 890	13	1 890	30	1 350	12	1 530	16		
OP-MSHM018	1 570	14	1 570	14	2 200	15	2 200	40	1 570	14	1 790	20		
OP-MSHM024	2 200	18	2 200	18	3 100	18	3 100	55	2 200	18	2 550	30		
OP-MSHM026	2 500	20	2 500	20	3 400	20	3 500	65	2 500	20	2 800	35		
OP-MSHM034	3 000	28	3 000	28	4 100	28	4 300	90	3 000	28	3 400	45		
OP-MSUM034	3 700	45	3 700	45	4 800	40	4 800	120	3 700	45	4 050	65		
OP-MSUM046	4 850	60	4 850	60	6 250	60	6 250	180	4 850	65	5 350	85		
OP-MSUM057	5 500	75	5 500	75	7 300	75	7 300	210	5 500	75	6 250	110		
OP-MSUM068	7 850	110	7 850	110	10 350	150	10 350	280	7 850	120	8 750	160		
OP-MSUM080	9 100	140	9 100	140	11 950	180	11 950	350	9 100	140	10 150	200		
OP-MSUM099	10 800	170	10 800	170	13 800	210	13 800	430	10 800	170	11 750	245		
OP-MSUM108	11 350	180	11 350	180	14 700	220	14 700	450	11 350	180	12 550	260		
OP-LSHM015													680	2
OP-LSHM018													750	3
OP-LSHM026													1 150	6
OP-LSHM034													1 450	9
OP-LSHM048													1 850	16
OP-LSHM074													2 600	22
OP-LSHM068													2 750	30
OP-LSHM067													4 100	50
OP-LSHM084													4 900	60
OP-LSHM098													5 650	70

*Data relate to +32°C ambient temperature; please refer to Danfoss for other working conditions. Cold room data: Temperature - Daily working hours. * Volume of cold room.*

R134a

Unit	Code	Phases	Cooling capacity in [w] at ambient 32°C Evaporating temperature [°C]							Power consumption [W] at -10°C evap. temp	COP at -10°C evap. temp	Dimensions and weight	
			-15°C	-10°C	-5°C	0°C	+5°C	+10°C	+15°C			Height x Width x Depth [mm]	Kg net
OP-MSGM012	114X7099	1	510	650	820	1010	1230	1480	1760	380	1.71	680 x 950 x 443	52
OP-MSGM015	114X7100	1	570	730	920	1140	1390	1680	2000	445	1.64	680 x 950 x 443	52
OP-MSGM018	114X7101	1	700	890	1100	1330	1600	1900	2250	512	1.62	680 x 950 x 443	53
OP-MSGM021	114X7102	1	830	1050	1300	1590	1900	2250	2630	598	1.77	680 x 950 x 443	53
OP-MSGM026	114X7103	1	1000	1300	1670	2090	2580	3130	3750	725	1.80	695 x 1106 x 464	96
OP-MSGM033	114X7104	1	1350	1730	2170	2660	3220	3850	4560	843	2.02	695 x 1106 x 464	95
OP-MSUM034	114X7061	1	1 700	2 150	2 700	3 300	4 000	4 800	5 650	1 000	2.15	695 x 1106 x 464	66
	114X7062	3											
OP-MSUM046	114X7063	1	2 350	2 900	3 600	4 400	5 300	6 300	7 450	1 300	2.23		
	114X7064	3											
OP-MSUM057	114X7065	1	2 800	3 500	4 350	5 300	6 350	7 550	8 850	1 600	2.19	830 x 1106 x 464	87
	114X7066	3											
OP-MSUM068	114X7067	1	3 550	4 450	5 550	6 800	8 250	9 900	11 750	1 850	2.41		
	114X7068	3											
OP-MSUM080	114X7069	1	4 100	5 200	6 450	7 900	9 550	11 450	13 500	2 250	2.31		
	114X7070	3											
OP-MSUM099	114X7071	3	5 050	6 350	7 900	9 650	11 700	13 900	15 500	2 600	2.44		
OP-MSUM108	114X7072	3	5 350	6 700	8 300	10 150	12 250	14 550	17 050	2 800	2.39		

R407A

Unit	Code	Phases	Cooling capacity in [w] at ambient 32°C Evaporating temperature [°C]							Power consumption [W] at -10°C evap. temp	COP at -10°C evap. temp	Dimensions and weight	
			-20°C	-15°C	-10°C	-5°C	0°C	+5°C	+10°C			Height x Width x Depth [mm]	Kg net
OP-MSUM034	114X7061	1	2 100	2 650	3 300	4 000	4 850	5 800	6 900	1 500	2.20	695 x 1106 x 464	66
	114X7062	3											
OP-MSUM046	114X7063	1	2 700	3 400	4 250	5 150	6 200	7 300	8 550	2 200	1.93		
	114X7064	3											
OP-MSUM057	114X7065	1	3 300	4 150	5 100	6 150	7 350	8 650	10 050	2 850	1.79		
	114X7066	3											
OP-MSUM068	114X7067	1	4 500	5 550	6 850	8 350	10 100	12 050	14 300	2 850	2.40	830 x 1106 x 464	87
	114X7068	3											
OP-MSUM080	114X7069	1	5 150	6 350	7 800	9 500	11 450	13 650	16 100	3 350	2.33		
	114X7070	3											
OP-MSUM099	114X7071	3	5 900	7 500	9 350	11 450	13 800	16 400	19 300	4 500	2.08		
OP-MSUM108	114X7072	3	6 400	8 100	10 100	12 350	14 850	17 600	20 650	5 050	2.00		

Conditions: +32°C ambient temp., superheat 10K, subcooling 0K - Values refer to 3-phase units.

R407F

Unit	Code	Phases	Cooling capacity in [w] at ambient 32°C Evaporating temperature [°C]							Power consumption [W] at -10°C evap. temp	COP at -10°C evap. temp	Dimensions and weight	
			-20°C	-15°C	-10°C	-5°C	0°C	+5°C	+10°C			Height x Width x Depth [mm]	Kg net
OP-MSUM034	114X7061	1	2 250	2 850	3 500	4 300	5 150	6 200	7 300	1 600	2.19		
	114X7062	3											
OP-MSUM046	114X7063	1	2 900	3 650	4 550	5 500	6 550	7 750	9 050	2 400	1.90	695 x 1106 x 464	66
	114X7064	3											
OP-MSUM057	114X7065	1	3 550	4 450	5 450	6 550	7 800	9 150	10 600	3 150	1.73		
	114X7066	3											
OP-MSUM068	114X7067	1	4 850	6 000	7 350	8 900	10 750	12 800	15 100	3 050	2.41		
	114X7068	3											
OP-MSUM080	114X7069	1	5 550	6 850	8 350	10 150	12 150	14 450	17 000	3 600	2.32	830 x 1106 x 464	87
	114X7070	3											
OP-MSUM099	114X7071	3	6 350	8 050	10 000	12 200	14 650	17 350	20 350	4 900	2.04		
OP-MSUM108	114X7072	3	6 900	8 700	10 800	13 100	15 750	18 600	21 750	5 500	1.96		

R404A

Unit	Code	Phases	Cooling capacity in [w] at ambient 32°C Evaporating temperature [°C]										Power consumption [W] at evap. temp. -10°C MBP -25°C LBP	COP Evap temp -10°C MBP -25°C LBP	Dimensions and weight	
			-40°C	-35°C	-30°C	-25°C	-20°C	-15°C	-10°C	-5°C	0°C	+5°C	+10°C			Height x Width x Depth [mm]	Kg net
OP-MSHM010	114X7077	1					510	650	820	1 030	1 270	1 550		570	1.44		
OP-MSHM012	114X7078	1					620	790	1 000	1 240	1 530	1 870		660	1.52	680 x 950 x 443	41
OP-MSHM015	114X7079	1					770	980	1 230	1 540	1 890	2 300		830	1.48		
OP-MSHM018	114X7080	1					900	1 140	1 440	1 790	2 200	2 670		910	1.58		
OP-MSHM024	114X7097	1					1 250	1 650	2 050	2 550	3 100	3 700	4 400	1 050	1.95		
OP-MSHM026	114X7083	1					1 400	1 800	2 300	2 800	3 400	4 000	4 700	1 250	1.84		63
	114X7093	3															
OP-MSHM034	114X7084	1					1 800	2 300	2 800	3 400	4 100	4 800	5 600	1 550	1.81		64
	114X7094	3															
OP-MSUM034	114X7061	1					2 250	2 800	3 400	4 050	4 800	5 650	6 550	1 700	2.0	695 x 1106 x 464	
	114X7062	3															
OP-MSUM046	114X7063	1					3 100	3 750	4 500	5 350	6 250	7 250	8 400	2 300	1.96		66
	114X7064	3															
OP-MSUM057	114X7065	1					3 700	4 500	5 350	6 250	7 300	8 400	9 600	3 050	1.75		
	114X7066	3															
OP-MSUM068	114X7067	1					4 950	6 050	7 300	8 750	10 350	12 150	14 100	3 200	2.28		
	114X7068	3															
OP-MSUM080	114X7069	1					5 800	7 050	8 500	10 150	11 950	13 950	16200	3 850	2.21	830 x 1106 x 464	87
	114X7070	3															
OP-MSUM099	114X7071	3					6 750	8 250	9 900	11 750	13 800	16 050	18 500	4 800	2.06		
OP-MSUM108	114X7072	3					7 300	8 850	10 600	12 550	14 700	17 050	19 700	5 250	2.02		
OP-LSHM015	114X7081	1	300	400	530	680	860	1 070	1 300					600	1.13	680 x 950 x 443	41
OP-LSHM018	114X7082	1	320	440	580	750	940	1 160	1 410					720	1.04		
OP-LSHM026	114X7085	1	450	650	850	1 150	1 450	1 800	2 200					900	1.28	695 x 1106 x 464	63
OP-LSHM034	114X7086	1	600	850	1 150	1 500	1 900	2 350	2 900					1 100	1.36		64
OP-LSHM048	114X7087	1	650	1 000	1 400	1 850	2 350	2 950	3 600					1 450	1.28		60
	114X7088	3															
OP-LSHM074	114X7095	1	1 000	1 450	1 950	2 600	3 300	4 050	4 950					2 100	1.23		77
	114X7096	3															
OP-LSHM068	114X7089	1	1 150	1 650	2 150	2 750	3 450	4 200	5 050					2 150	1.28		60
	114X7090	3															
OP-LSHM067	114X7091	3	2 050	2 600	3 300	4 100	5 000	6 050	7 250					2 850	1.44	830 x 1106 x 464	73
OP-LSHM084	114X7092	3	2 450	3 150	3 950	4 900	6 000	7 300	8 750					3 400	1.44		
OP-LSHM098	114X7075	3	2 850	3 650	4 600	5 650	6 950	8 400	10 000					3 850	1.47		

Conditions: +32°C ambient temp., superheat 10K, subcooling 0K - Values refer to 3-phase units.

For more information, please contact your Danfoss sales office

