

Catalogue

# Optyma™ condensing unit Scroll and reciprocating compressors

for R404A / R507, R134a and R407C - 50 Hz



OPTYMA™  
DANFOSS CONDENSING UNITS







### Reduce your customers' running costs

Optyma™ condensing unit is a very energy-efficient solution for your application. Due to the large heat transfer area and high COP of our compressors you are going to reduce the energy consumption significantly and therefore cut the energy bill.



### Optimise your stock and logistics

Most Optyma™ condensing units can be used with R404A/R507 as well as R134a. A multifunctional condensing unit for a wide variety of applications. It will reduce your stock and improve your logistics.



### Installation just got easier

Optyma™ condensing unit saves costs for service and maintenance. The high robustness and easy access to all components, reduce costs for installation even in very harsh environments.



### No compromise on quality

We at Danfoss do not accept any concessions regarding quality & reliability for our products. With Optyma™ we provide 100% factory tested units to our customers with a premium quality.



**Optyma™ the most reliable and efficient condensing units for the widest application range**

Optyma™ is the widest range of hermetic condensing units on the market.

Optyma™ condensing unit is available with high capacity models of reciprocating and scroll compressors so to cover a large range of commercial refrigeration applications, reducing costs and complexity of the systems.

All Optyma™ condensing units are extremely efficient and reliable. That means less energy consumption and less running costs, less cost for service and maintenance. Thanks to scroll compressors, Optyma™ offers also the best solution for applications where

noise and vibration are relevant for the system and the environment where it is installed.

Optyma™ with scroll is a real multi refrigerant condensing unit. It can be used with R404A/R507/R134a refrigerants, so that you can really optimize your stock.

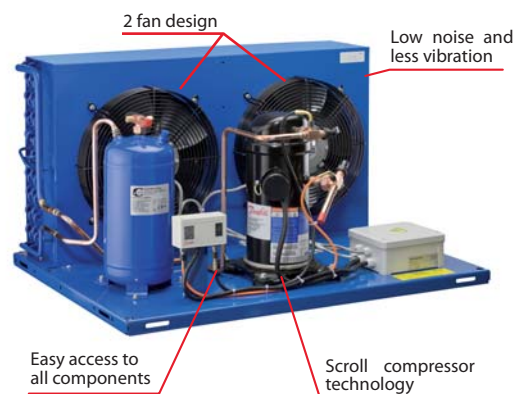
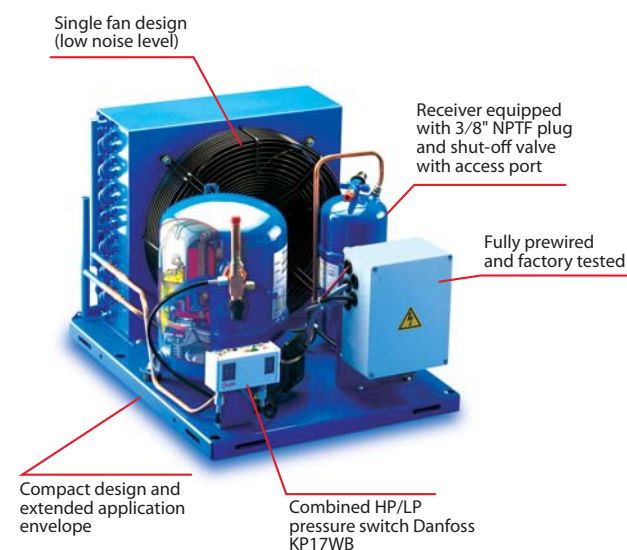
In addition to the wide Optyma™ range we also include local support and guidance if needed. A network of partner wholesalers and local Danfoss teams can offer you help and will do their utmost to fulfil your needs. At Danfoss we simply believe it is important to offer an "Optimum service".

**Benefits**

- High-efficiency condensers allowing an extended application envelope in higher ambient conditions as standard
- Low electrical consumption and low running cost
- Reliable components for longer life and less warranty call out costs
- Fully pre-wired and factory tested, reducing commissioning time on site
- Built-in grab handles for easier handling on site
- Base plate designed to allow easy mounting on wall brackets
- Flexible add-on design options including: fan speed control, oil separator, pressure switches or weather proof housing
- Easy access to all components for higher serviceability and simplified maintenance
- Compact dimensions and minimum foot print for easy handling, shipping and installation
- More reliable and silent system due to less vibration and less noise of scroll compressor
- Local technical support included
- Perfect for retrofit with systems using old refrigerants

**Features**

- HFC refrigerants R134a, R404A and R507 (MCZC and MGZC are suitable for use with R407C)
- Capacity: from 0 to 20000 Watt (R404A)
- High COP
- Low noise and low vibration (Scroll compressors)
- 100% factory tested for leakage
- High efficient compressors (MBP + LBP)
- Low energy consumption
- Wide application range
- Powder coated steel parts
- Crankcase heater standard (optional for fractional units)
- Service valves standard with access ports
- Access valves/stubs for easy connection



N° of fans	Test conditions	Unit	Version	Electrical code	Compressor	Amb. temp. [°C]	Capacity range in [W] at evaporating temperature [°C]				Power consumption (W) at -25°C evap. temp.	Application range [°C]
							-35°C	-30°C	-25°C	-20°C		
							A02					
	SH10	OP-LCHC048	114X5044	G	NTZ048	27°C	1120	1490	1900	2320	887	46°C: -20°C till -35°C 43°C: -15°C till -40°C
			114X5030	D		38°C	840	1150	1470	1810	835	
			114X5037	E		43°C	710	990	1280	1580	795	
		OP-LCHC068	114X5045	G	NTZ068	27°C	1980	2560	3200	3890	1483	
			114X5031	D		38°C	1530	2020	2540	3110	1543	
			114X5038	E		43°C	1350	1790	2270	2780	1563	
		OP-LCHC096	114X5032	D	NTZ096	27°C	2280	3000	3820	4750	1771	
			114X5039	E		38°C	1690	2270	2950	3700	1674	
						43°C	1410	1940	2540	3220	1607	
		OP-LCHC108	114X5033	D	NTZ108	27°C	2780	3640	4600	5640	2097	
			114X5040	E		38°C	2090	2810	3590	4430	2031	
						43°C	1780	2430	3140	3890	1966	
		OP-LCHC136	114X5034	D	NTZ136	27°C	3560	4600	5770	7050	2910	
			114X5041	E		38°C	2740	3610	4570	5610	2857	
						43°C	2370	3160	4020	4960	2824	
		OP-LCHC215	114X5035	D	NTZ215	27°C	5480	7080	8850	10750	4159	
			114X5042	E		38°C	4090	5440	6900	8450	4059	
						43°C	3430	4660	5980	7380	3929	
		OP-LCHC271	114X5036	D	NTZ271	27°C	7390	9450	11700	14100	5584	
			114X5043	E		38°C	5760	7450	9270	11180	5661	
						43°C	4990	6520	8140	9820	5632	
		OP-LGHC048	114X5096	G	NTZ048	27°C	1160	1550	1990	2450	891	
			114X5089	E		38°C	870	1200	1550	1920	842	
						43°C	740	1030	1350	1680	804	
OP-LGHC068	114X5097	G	NTZ068	27°C	1940	2500	3120	3780	1488			
	114X5083	D		38°C	1510	1970	2480	3020	1546			
	114X5090	E		43°C	1330	1750	2210	2700	1565			
OP-LGHC096	114X5084	D	NTZ096	27°C	2290	3020	3850	4790	1772			
	114X5091	E		38°C	1700	2290	2970	3730	1676			
				43°C	1420	1950	2560	3250	1610			
OP-LGHC108	114X5085	D	NTZ108	27°C	2840	3730	4740	5840	2097			
	114X5092	E		38°C	2140	2890	3710	4610	2039			
				43°C	1830	2510	3250	4050	1977			
OP-LGHC136	114X5086	D	NTZ136	27°C	3660	4750	5980	7350	2911			
	114X5093	E		38°C	2830	3740	4760	5890	2865			
				43°C	2450	3280	4200	5220	2831			
OP-LGHC215	114X5087	D	NTZ215	27°C	5770	7520	9490	11670	4147			
	114X5094	E		38°C	4370	5860	7520	9330	4098			
				43°C	3690	5050	6570	8210	3986			
OP-LGHC271	114X5088	D	NTZ271	27°C	7570	9730	12110	14690	5564			
	114X5095	E		38°C	5930	7710	9660	11730	5662			
				43°C	5150	6770	8510	10350	5642			

**Test condition**
**EN13215**

SH: 10K

**Electrical code**
**D:** Compressor 400 V/3 phase/50 Hz, fan 400 V/3 phase/50 Hz

**E:** Compressor 400 V/3 phase/50 Hz, fan 230 V/1 phase/50 Hz

**G:** Compressor 230 V/1 phase/50 Hz, fan 230 V/1 phase/50 Hz

Subcooling with the limits of the condensing unit

**Version: A02:** With receiver, stop valve, universal pressure switch, (KP17WB), flexible hoses and electrical box

Unit	Condenser coil			Condenser fan Fan blade Ø [mm]	Receiver volume [L]	Dimensions [mm]						Weight [kg]	
	Type	Air flow [m <sup>3</sup> /h]	Int. volume [dm <sup>3</sup> ]			Fig.	Height H [mm]	Width W [mm]	Length D [mm]	Suction line	Liquid line	Gross	Net
OP-LCHC048	A4	1200	1.2	1 × 300	3	1	402	500	600	5/8"	3/8"	54	45
OP-LCHC068	C4	2150	2.3	1 × 350	6	1	555	630	650	5/8"	1/2"	64	57
OP-LCHC096	D4	2000	3.1	1 × 350	6	1	555	630	650	7/8"	1/2"	78	71
OP-LCHC108	E4	3150	2.5	1 × 400	6	1	605	630	650	7/8"	1/2"	92	80
OP-LCHC136	G4	3150	4.1	1 × 400	8	1	656	755	700	7/8"	1/2"	95	83
OP-LCHC215	J4	6000	4.4	1 × 500	14	1	708	900	900	11/8"	5/8"	151	136
OP-LCHC271	L4	5850	6.3	1 × 500	14	1	759	900	900	11/8"	5/8"	166	151
OP-LGHC048	C3	1450	1.6	2 × 254	3	2	392	700	500	5/8"	3/8"	55	45
OP-LGHC068	D3	2800	1.5	2 × 300	6	2	442	800	600	5/8"	1/2"	62	55
OP-LGHC096	E3	2100	2.2	2 × 300	6	2	442	800	600	7/8"	1/2"	78	71
OP-LGHC108	G3	4600	2.3	2 × 355	8	2	555	1000	700	7/8"	1/2"	102	89
OP-LGHC136	H3	3600	4.7	2 × 355	8	2	555	1000	700	7/8"	1/2"	107	94
OP-LGHC215	L3	9000	5.1	2 × 450	14	2	671	1200	800	11/8"	5/8"	152	138
OP-LGHC271	L3	8600	5.1	2 × 450	14	2	671	1200	800	11/8"	5/8"	158	144





Unit	Condenser coil			Condenser fan Fan blade Ø [mm]	Receiver volume [L]	Dimensions [mm]						Weight [kg]	
	Type	Air flow [m <sup>3</sup> /h]	Int. volume [dm <sup>3</sup> ]			Fig.	Height H [mm]	Width W [mm]	Length D [mm]	Suction line	Liquid line	Gross	Net
OP-MCZC030	A4	1200	1.2	1 × 300	3	1	408	500	600	1/2"	3/8"	54	45
OP-MCZC038	B4	1750	1.3	1 × 350	3	1	451	500	620	1/2"	3/8"	56	47
OP-MCZC048	C4	2150	2.3	1 × 350	6	1	555	630	650	1/2"	1/2"	64	57
OP-MCZC054	C4	2150	2.3	1 × 350	6	1	555	630	650	5/8"	1/2"	65	58
OP-MCZC060	D4	2000	3.1	1 × 350	6	1	555	630	650	5/8"	1/2"	68	61
OP-MCZC068	E4	3150	2.5	1 × 400	6	1	605	630	650	5/8"	1/2"	72	65
OP-MCZC086	F4	3300	3.1	1 × 400	8	1	656	755	700	7/8"	1/2"	95	83
OP-MCZC096	G4	3150	4.1	1 × 400	8	1	656	755	700	7/8"	1/2"	100	88
OP-MCZC108	H4	4300	4.1	1 × 500	8	1	656	755	700	7/8"	1/2"	113	101
OP-MCZC121	J4	6000	4.4	1 × 500	10	1	708	900	900	1 1/8"	1/2"	127	113
OP-MCZC136	K4	6200	4.7	1 × 500	10	1	759	900	900	1 1/8"	1/2"	140	126
OP-MCZC171	L4	5850	6.3	1 × 500	14	1	759	900	900	1 1/8"	5/8"	162	147
OP-MGZC215	M4	11000	7.4	2 × 500	14	2	759	1350	820	1 1/8"	5/8"	191	176
OP-MGZC242	M4	11000	7.4	2 × 500	14	2	759	1350	820	1 1/8"	5/8"	194	179
OP-MGZC271	N4	9200	12.3	2 × 500	14	2	759	1350	820	1 1/8"	5/8"	199	184
OP-MGZD030	C3	1300	1.7	2 × 254	3	2	392	700	500	1/2"	3/8"	56	46
OP-MGZD038	D3	2800	1.5	2 × 300	6	2	442	800	600	1/2"	1/2"	60	53
OP-MGZD048	E3	2600	2.2	2 × 300	6	2	442	800	600	1/2"	1/2"	64	57
OP-MGZD054	E3	2600	2.2	2 × 300	6	2	442	800	600	5/8"	1/2"	65	58
OP-MGZD060	G3	4600	2.3	2 × 355	8	2	555	1000	700	5/8"	1/2"	88	75
OP-MGZD068	H3	3600	4.7	2 × 355	8	2	555	1000	700	5/8"	1/2"	96	82
OP-MGZD086	H3	3600	4.7	2 × 355	8	2	555	1000	700	7/8"	1/2"	107	93
OP-MGZD096	H3	3600	4.7	2 × 355	8	2	555	1000	700	7/8"	1/2"	109	95
OP-MGZD108	J3	5400	4.7	2 × 400	10	2	555	1000	700	7/8"	1/2"	113	99
OP-MGZD121	J3	5400	4.7	2 × 400	10	2	555	1000	700	7/8"	1/2"	115	101
OP-MGZD136	L3	8600	5.1	2 × 450	10	2	671	1200	800	1 1/8"	1/2"	133	118
OP-MGZD171	M3	8200	6.8	2 × 450	14	2	671	1200	800	1 1/8"	5/8"	158	144
OP-MGZD215	N4	9200	12.25	2 × 500	14	2	759	1350	820	1 1/8"	5/8"	196	180
OP-MGZD242	N4	9200	12.25	2 × 500	14	2	759	1350	820	1 1/8"	5/8"	199	183
OP-MGZD271	U	14000	14.2	2 × 600	14	2	975	1500	870	1 1/8"	5/8"	230	212

N° of fans	Test conditions	Unit	Version	Electrical code	Compressor	Amb. temp. [°C]	Capacity range in [W] at evaporating temperature [°C]					Power consumption (W)	Application range [°C]
			A02				-15°C	-10°C	-5°C	-0°C	+5°C		
	SH=10K	OP-MCUC034	114X5564	G	MLZ015	27°C	2635	3087	3549	4020	4491	1911	38°C: -25°C till 10°C 43°C: -20°C till 5°C
			114X5576	D		38°C	1911	2281	2654	3027	3402	2506	
			114X5568	E		43°C	1538	1876	2213	2547	2884	2851	
		OP-MCUC043	114X5565	G	MLZ019	27°C	3258	3716	4179	4653	5133	2624	
			114X5577	D		38°C	2472	2815	3162	3524	3891	3186	
		OP-MCUC057	114X5569	E	MLZ026	43°C	2090	2384	2679	2972	3274	3463	
			114X5566	G		27°C	5305	6226	7222	8286	9408	2667	
			114X5578	D		38°C	4332	5082	5890	6753	7666	3382	
		OP-MCUC068	114X5570	E	MLZ030	43°C	3845	4520	5243	6017	6838	3787	
			114X5567	G		27°C	6278	7357	8517	9748	11044	3224	
			114X5579	D		38°C	5108	5974	6907	7903	8958	4043	
		OP-MCUC080	114X5571	E	MLZ038	43°C	4533	5300	6131	7021	7970	4483	
			114X5580	D		27°C	7744	9116	10604	12202	13901	3652	
			114X5572	E		38°C	6371	7491	8703	10005	11400	4584	
		OP-MCUC107	114X5581	D	MLZ048	43°C	5698	6703	7791	8961	10219	5096	
			114X5573	E		27°C	10047	11785	13663	15685	17857	4844	
			114X5582	D		32°C	8232	9647	11170	12811	14579	6122	
		OP-MGUC148	114X5574	E	MLZ066	43°C	7345	8612	9973	11445	13036	6836	
			114X5582	D		27°C	13608	15956	18471	21138	23944	6586	
		OP-MGUC162	114X5574	E	MLZ076	38°C	11188	13126	15175	17335	19609	8233	
			114X5583	D		43°C	9988	11746	13591	15529	17571	9155	
		OP-MGUD034	114X5575	E	MLZ015	27°C	16241	18945	21853	24995	28365	7297	
			114X5507	G		38°C	13236	15217	17383	19748	22344	8967	
			114X5512	E		43°C	11809	13422	15219	17218	19454	9852	
OP-MGUD043	114X5523	E	MLZ019	27°C	3097	3681	4309	4979	5689	1545			
	114X5508	G		38°C	2437	2926	3442	3986	4560	2020			
	114X5513	D		46°C	1888	2314	2755	3214	3697	2479			
OP-MGUD057	114X5524	E	MLZ026	27°C	4115	4844	5637	6496	7420	1952			
	114X5510	G		38°C	3398	3994	4639	5338	6095	2454			
	114X5515	D		46°C	2816	3317	3856	4442	5084	2871			
OP-MGUD068	114X5511	G	MLZ030	27°C	5433	6398	7449	8582	9788	2571			
	114X5516	D		38°C	4472	5264	6124	7050	8038	3258			
	114X5527	E		46°C	3693	4360	5082	5861	6695	3909			
OP-MGUD080	114X5517	D	MLZ038	27°C	6637	7844	9164	10591	12113	2961			
	114X5516	D		38°C	5495	6483	7566	8740	9999	3728			
	114X5517	D		46°C	4582	5406	6314	7305	8379	4412			
OP-MGUD107	114X5517	D	MLZ048	27°C	8038	9516	11141	12907	14811	3446			
	114X5519	D		38°C	6685	7906	9244	10700	12273	4330			
	114X5530	E		46°C	5610	6641	7771	9003	10340	5139			
OP-MGUD148	114X5521	D	MLZ066	27°C	10534	12444	14542	16837	19333	4497			
	114X5521	D		38°C	8754	10331	12057	13948	16012	5686			
	114X5532	E		46°C	7341	8674	10128	11726	13482	6791			
OP-MGUD162	114X5521	D	MLZ076	27°C	14006	16492	19185	22072	25144	6310			
	114X5522	D		38°C	11617	13683	15893	18249	20756	7883			
	114X5533	E		46°C	9694	11466	13338	15322	17425	9352			
						27°C	16760	19669	22835	26293	30042	6995	38°C: -25°C till 10°C 46°C: -25°C till 10°C
						38°C	13765	15950	18362	21018	23954	8622	
						46°C	11465	13043	14840	16877	19196	10046	

Test condition EN13215

SH10K

Electrical code

D: Compressor 400 V/3 phase/50 Hz, fan 400 V/3 phase/50 Hz  
 E: Compressor 400 V/3 phase/50 Hz, fan 230 V/1 phase/50 Hz  
 G: Compressor 230 V/1 phase/50 Hz, fan 230 V/1 phase/50 Hz

Subcooling with the limits of the condensing unit

Version: A02: With receiver, stop valve, universal pressure switch, (KP17WB), flexible hoses and electrical box

Unit	Condenser coil			Condenser fan	Receiver volume [L]	Dimensions [mm]						Weight [kg]	
	Type	Air flow [m³/h]	Int. volume [dm³]	Fan blade Ø [mm]		Fig.	Height H [mm]	Width W [mm]	Length D [mm]	Suction line	Liquid line	Gross	Net
OP-MCUC034	C4	2150	2.3	1 x 350	6	3	555	630	650	3/4"	1/2"	72	65
OP-MCUC043	C4	2150	2.3	1 x 350	6	3	555	630	650	3/4"	1/2"	72	65
OP-MCUC057	E4	3150	2.5	1 x 400	6	3	605	630	650	3/4"	1/2"	77	70
OP-MCUC068	F4	3300	3.1	1 x 400	8	3	656	755	700	7/8"	1/2"	95	83
OP-MCUC080	H4	4300	4.1	1 x 500	8	3	656	755	700	7/8"	1/2"	111	99
OP-MCUC107	K4	6200	4.7	1 x 500	10	3	759	900	900	7/8"	1/2"	136	122
OP-MGUC148	L3	8600	5.1	2 X 450	10	3	671	1200	800	1 1/8"	1/2"	139	125
OP-MGUC162	M4	11000	7.4	2 x 500	14	3	759	1350	820	1 1/8"	5/8"	172	157
OP-MGUD034	D3	2800	1.5	2 x 300	6	3	442	800	600	3/4"	1/2"	70	63
OP-MGUD043	E3	2600	2.2	2 x 300	6	3	442	800	600	3/4"	1/2"	72	65
OP-MGUD057	G3	4600	2.3	2 x 355	8	3	555	1000	700	3/4"	1/2"	72	63
OP-MGUD068	H3	3600	4.7	2 x 355	8	3	555	1000	700	7/8"	1/2"	107	93
OP-MGUD080	J3	5400	4.7	2 x 400	8	3	555	1000	700	7/8"	1/2"	108	95
OP-MGUD107	L3	8600	5.1	2 x 450	10	3	671	1200	800	7/8"	1/2"	129	114
OP-MGUD148	M3	8200	6.8	2 x 450	10	3	671	1200	800	1 1/8"	1/2"	141	126
OP-MGUD162	N4	9200	12.3	2 x 500	14	3	750	1350	870	1 1/8"	5/8"	177	161



Unit	Condenser coil			Condenser fan Fan blade Ø [mm]	Receiver volume [L]	Dimensions [mm]						Weight [kg]	
	Type	Air flow [m³/h]	Int. volume [dm³]			Fig.	Height H [mm]	Width W [mm]	Length D [mm]	Suction line	Liquid line	Gross	Net
OP-MCZC030	A4	1200	1.2	1 × 300	3	1	408	500	600	1/2"	3/8"	54	45
OP-MCZC038	B4	1750	1.3	1 × 350	3	1	451	500	620	1/2"	3/8"	56	47
OP-MCZC048	C4	2150	2.3	1 × 350	6	1	555	630	650	1/2"	1/2"	64	57
OP-MCZC054	C4	2150	2.3	1 × 350	6	1	555	630	650	5/8"	1/2"	65	58
OP-MCZC060	D4	2000	3.1	1 × 350	6	1	555	630	650	5/8"	1/2"	68	61
OP-MCZC068	E4	3150	2.5	1 × 400	6	1	605	630	650	5/8"	1/2"	72	65
OP-MCZC086	F4	3300	3.1	1 × 400	8	1	656	755	700	7/8"	1/2"	95	83
OP-MCZC096	G4	3150	4.1	1 × 400	8	1	656	755	700	7/8"	1/2"	100	88
OP-MCZC108	H4	4300	4.1	1 × 500	8	1	656	755	700	7/8"	1/2"	113	101
OP-MCZC121	J4	6000	4.4	1 × 500	10	1	708	900	900	1 1/8"	1/2"	127	113
OP-MCZC136	K4	6200	4.7	1 × 500	10	1	759	900	900	1 1/8"	1/2"	140	126
OP-MCZC171	L4	5850	6.3	1 × 500	14	1	759	900	900	1 1/8"	5/8"	162	147
OP-MGZC215	M4	11000	7.4	2 × 500	14	2	759	1350	820	1 1/8"	5/8"	191	176
OP-MGZC242	M4	11000	7.4	2 × 500	14	2	759	1350	820	1 1/8"	5/8"	194	179
OP-MGZC271	N4	9200	12.3	2 × 500	14	2	759	1350	820	1 1/8"	5/8"	199	184
OP-MGZD030	C3	1300	1.7	2 × 254	3	2	392	700	500	1/2"	3/8"	56	46
OP-MGZD038	D3	2800	1.5	2 × 300	6	2	442	800	600	1/2"	1/2"	60	53
OP-MGZD048	E3	2600	2.2	2 × 300	6	2	442	800	600	1/2"	1/2"	64	57
OP-MGZD054	E3	2600	2.2	2 × 300	6	2	442	800	600	5/8"	1/2"	65	58
OP-MGZD060	G3	4600	2.3	2 × 355	8	2	555	1000	700	5/8"	1/2"	88	75
OP-MGZD068	H3	3600	4.7	2 × 355	8	2	555	1000	700	5/8"	1/2"	96	82
OP-MGZD086	H3	3600	4.7	2 × 355	8	2	555	1000	700	7/8"	1/2"	107	93
OP-MGZD096	H3	3600	4.7	2 × 355	8	2	555	1000	700	7/8"	1/2"	109	95
OP-MGZD108	J3	5400	4.7	2 × 400	10	2	555	1000	700	7/8"	1/2"	113	99
OP-MGZD121	J3	5400	4.7	2 × 400	10	2	555	1000	700	7/8"	1/2"	115	101
OP-MGZD136	L3	8600	5.1	2 × 450	10	2	671	1200	800	1 1/8"	1/2"	133	118
OP-MGZD171	M3	8200	6.8	2 × 450	14	2	671	1200	800	1 1/8"	5/8"	158	144
OP-MGZD215	N4	9200	12.25	2 × 500	14	2	759	1350	820	1 1/8"	5/8"	196	180
OP-MGZD242	N4	9200	12.25	2 × 500	14	2	759	1350	820	1 1/8"	5/8"	199	183
OP-MGZD271	U	14000	14.2	2 × 600	14	2	975	1500	870	1 1/8"	5/8"	230	212

N° of fans	Test conditions	Unit	Version	Electrical code	Compressor	Amb. temp. [°C]	Capacity range in [W] at evaporating temperature [°C]					Power consumption (W)	Application range [°C]
							-15°C	-10°C	-5°C	-0°C	+5°C		
	SH=10K	OP-MCUC034	114X5564	G	MLZ015	27°C	1843	2313	2860	3488	4201	809	38°C: -15°C till 15°C 48°C: -10°C till 15°C
			114X5576	D		38°C	1625	2040	2528	3093	3737	1015	
			114X5568	E		43°C	1528	1914	2373	2905	3515	1123	
		OP-MCUC043	114X5565	G	MLZ019	27°C	2349	2920	3594	4368	5241	1075	
			114X5577	D		38°C	2058	2565	3164	3856	4637	1330	
			114X5569	E		43°C	1921	2397	2960	3612	4351	1459	
		OP-MCUC057	114X5566	G	MLZ026	27°C	3058	3832	4725	5742	6885	1349	
			114X5578	D		38°C	2666	3360	4160	5071	6097	1679	
			114X5570	E		43°C	2486	3140	3893	4753	5722	1851	
		OP-MCUC068	114X5567	G	MLZ030	27°C	3667	4580	5639	6846	8201	1626	
			114X5579	D		38°C	3224	4028	4965	6040	7252	2023	
			114X5571	E		43°C	3022	3770	4647	5656	6799	2232	
		OP-MCUC080	114X5580	D	MLZ038	27°C	4361	5478	6766	8232	9883	1923	
			114X5572	E		38°C	3796	4803	5962	7280	8765	2385	
			114X5573	D		43°C	3533	4486	5581	6828	8235	2625	
		OP-MCUC107	114X5581	D	MLZ048	27°C	5754	7187	8863	10774	12907	2394	
			114X5573	E		32°C	5008	6277	7776	9494	11421	2990	
			114X5573	E		43°C	4668	5851	7259	8881	10705	3299	
		OP-MGUC148	114X5582	D	MLZ066	27°C	7978	9914	12153	14692	17525	3439	
			114X5574	E		38°C	6900	8645	10661	12946	15496	4261	
			114X5574	E		43°C	6396	8049	9957	12121	14538	4664	
		OP-MGUC162	114X5583	D	MLZ076	27°C	8960	11210	13793	16719	19997	3803	
			114X5575	E		38°C	7807	9804	12117	14754	17725	4744	
			114X5575	E		43°C	7299	9163	11336	13827	16643	5214	
OP-MGUD034	114X5507	G	MLZ015	27°C	1830	2294	2834	3452	4151	822			
	114X5512	D		38°C	1613	2022	2502	3055	3686	1030			
	114X5523	E		46°C	1457	1820	2251	2753	3328	1212			
OP-MGUD043	114X5508	G	MLZ019	27°C	2372	2954	3642	4436	5335	1052			
	114X5513	D		38°C	2082	2600	3214	3925	4732	1304			
	114X5524	E		46°C	1862	2330	2886	3533	4270	1513			
OP-MGUD057	114X5510	G	MLZ026	27°C	3088	3875	4785	5826	7001	1321			
	114X5515	D		38°C	2696	3403	4221	5157	6214	1647			
	114X5526	E		46°C	2409	3050	3793	4645	5610	1925			
OP-MGUD068	114X5511	G	MLZ030	27°C	3749	4698	5807	7083	8527	1550			
	114X5516	D		38°C	3305	4146	5137	6281	7583	1932			
	114X5527	E		46°C	2981	3733	4626	5665	6855	2263			
OP-MGUD080	114X5517	D	MLZ038	27°C	4431	5577	6903	8425	10148	1861			
	114X5528	E		38°C	3867	4905	6103	7477	9034	2312			
	114X5528	E		46°C	3445	4395	5492	6750	8180	2697			
OP-MGUD107	114X5519	D	MLZ048	27°C	5871	7353	9094	11093	13341	2293			
	114X5530	E		38°C	5123	6445	8013	9824	11869	2873			
	114X5530	E		46°C	4578	5762	7183	8839	10719	3367			
OP-MGUD148	114X5521	D	MLZ066	27°C	8082	10058	12353	14967	17899	3349			
	114X5532	E		38°C	7007	8793	10865	13226	15873	4163			
	114X5532	E		46°C	6199	7834	9733	11897	14328	4811			
OP-MGUD162	114X5521	D	MLZ076	27°C	9076	11374	14018	17028	20412	3701			
	114X5533	E		38°C	7917	9965	12343	15067	18147	4630			
	114X5533	E		46°C	7105	8937	11087	13573	16404	5385			

**Test condition**  
**EN13215**
**SH10K**
**Electrical code**
**D:** Compressor 400 V/3 phase/50 Hz, fan 400 V/3 phase/50 Hz  
**E:** Compressor 400 V/3 phase/50 Hz, fan 230 V/1 phase/50 Hz  
**G:** Compressor 230 V/1 phase/50 Hz, fan 230 V/1 phase/50 Hz

Subcooling with the limits of the condensing unit

 Version: **A02:** With receiver, stop valve, universal pressure switch, (KP17WB), flexible hoses and electrical box

Unit	Condenser coil			Condenser fan	Receiver volume [L]	Dimensions [mm]						Weight [kg]	
	Type	Air flow [m <sup>3</sup> /h]	Int. volume [dm <sup>3</sup> ]	Fan blade Ø [mm]		Fig.	Height H [mm]	Width W [mm]	Length D [mm]	Suction line	Liquid line	Gross	Net
OP-MCUC034	C4	2150	2.3	1 x 350	6	3	555	630	650	3/4"	1/2"	72	65
OP-MCUC043	C4	2150	2.3	1 x 350	6	3	555	630	650	3/4"	1/2"	72	65
OP-MCUC057	E4	3150	2.5	1 x 400	6	3	605	630	650	3/4"	1/2"	77	70
OP-MCUC068	F4	3300	3.1	1 x 400	8	3	656	755	700	7/8"	1/2"	95	83
OP-MCUC080	H4	4300	4.1	1 x 500	8	3	656	755	700	7/8"	1/2"	111	99
OP-MCUC107	K4	6200	4.7	1 x 500	10	3	759	900	900	7/8"	1/2"	136	122
OP-MGUC148	L3	8600	5.1	2 X 450	10	3	671	1200	800	1 1/8"	1/2"	139	125
OP-MGUC162	M4	11000	7.4	2 x 500	14	3	759	1350	820	1 1/8"	5/8"	172	157
OP-MGUD034	D3	2800	1.5	2 x 300	6	3	442	800	600	3/4"	1/2"	70	63
OP-MGUD043	E3	2600	2.2	2 x 300	6	3	442	800	600	3/4"	1/2"	72	65
OP-MGUD057	G3	4600	2.3	2 x 355	8	3	555	1000	700	3/4"	1/2"	72	63
OP-MGUD068	H3	3600	4.7	2 x 355	8	3	555	1000	700	7/8"	1/2"	107	93
OP-MGUD080	J3	5400	4.7	2 x 400	8	3	555	1000	700	7/8"	1/2"	108	95
OP-MGUD107	L3	8600	5.1	2 x 450	10	3	671	1200	800	7/8"	1/2"	129	114
OP-MGUD148	M3	8200	6.8	2 x 450	10	3	671	1200	800	1 1/8"	1/2"	141	126
OP-MGUD162	N4	9200	12.3	2 x 500	14	3	750	1350	870	1 1/8"	5/8"	177	161

N° of fans	Test conditions	Unit	Version	Electrical code	Compressor	Amb. temp. [°C]	Capacity range in [W] at evaporating temperature [°C]					Power consumption (W)	Application range [°C]
							-15°C	-10°C	-5°C	0°C	+5°C		
	SH=10K	OP-MCZC030	114X5024	G	MTZ18	27°C	1323	1810	2357	2960	3605	985	38°C: -10°C till 10°C 43°C: -5°C till 0°C
			114X5000	D		38°C		1404	1879	2398	2955	1025	
			114X5012	E		43°C			1676	2157			
		OP-MCZC038	114X5025	G	MTZ22	27°C	1891	2494	3167	3907	4702	1342	
			114X5001	D		38°C		1962	2538	3165	3841	1380	
			114X5013	E		43°C			2264	2838			
		OP-MCZC048	114X5026	G	MTZ28	27°C	2408	3228	4150	5172	6277	1603	
			114X5002	D		38°C		2562	3363	4239	5187	1664	
			114X5014	E		43°C			3007	3818			
		OP-MCZC054	114X5027	G	MTZ32	27°C	2888	3747	4698	5737	6844	1834	
			114X5003	D		38°C		2997	3816	4703	5640	1909	
			114X5015	E		43°C			3423	4236			
		OP-MCZC060	114X5028	G	MTZ36	27°C	3420	4353	5379	6489	7658	2185	
			114X5004	D		38°C		3538	4428	5377	6367	2301	
			114X5016	E		43°C			3987	4864			
		OP-MCZC068	114X5005	D	MTZ40	27°C	3973	5037	6214	7502	8871	2575	
			114X5017	E		38°C		4143	5164	6264	7419	2743	
						43°C			4668	5686			
		OP-MCZC086	114X5029	G	MTZ51	27°C	4410	5712	7172	8784	10518	2797	
			114X5006	D		38°C		4559	5806	7177	8648	2916	
			114X5018	E		43°C			5195	6451			
		OP-MCZC096	114X5007	D	MTZ57	27°C	4848	6334	8018	9886	11910	2986	
			114X5019	E		38°C		5088	6534	8131	9866	3111	
						43°C			5874	7344			
		OP-MCZC108	114X5008	D	MTZ65	27°C	5888	7547	9442	11568	13896	3949	
			114X5020	E		38°C		6129	7744	9547	11549	4124	
						43°C			7002	8658			
		OP-MCZC121	114X5009	D	MTZ73	27°C	6682	8615	10817	13284	15970	4546	
			114X5021	E		38°C		7013	8902	10995	13307	4759	
						43°C			8045	9971			
OP-MCZC136	114X5010	D	MTZ81	27°C	7494	9659	12088	14774	17669	5241			
	114X5022	E		38°C		7906	10000	12296	14763	5517			
				43°C			9050	11160					
OP-MCZC171	114X5011	D	MTZ100	27°C	8314	10939	13891	17162	20680	6067			
	114X5023	E		38°C		8668	11183	13957	16945	6316			
				43°C			9996	12524					
OP-MGZC215	114X5058	D	MTZ125	27°C	12154	15528	19327	23540	28116	8139			
	114X5073	E		38°C		12579	15864	19477	23419	8567			
				43°C			14298	17635					
OP-MGZC242	114X5059	D	MTZ144	27°C	13280	17003	21176	25802	30818	9141			
	114X5074	E		38°C		13957	17609	21661	26068	9678			
				43°C			16051	19844					
OP-MGZC271	114X5060	D	MTZ160	27°C	15857	19931	24522	29611	35128	10356			
	114X5075	E		38°C		16441	20394	24738	29478	10980			
				43°C			18528	22536					
OP-MGZD030	114X5076	G	MTZ18	27°C	1483	2003	2592	3241	3945	894			
	114X5046	D		38°C		1116	1574	2088	2652	3261	946		
	114X5061	E		46°C			1748	2251	2791				
OP-MGZD038	114X5077	G	MTZ22	27°C	2145	2801	3541	4361	5252	1180			
	114X5047	D		38°C		1674	2249	2891	3596	4360	1251		
	114X5062	E		46°C			2432	3054	3724				
OP-MGZD048	114X5078	G	MTZ28	27°C	2625	3486	4460	5538	6713	1445			
	114X5048	D		38°C		2054	2818	3670	4605	5615	1534		
	114X5063	E		46°C			3094	3924	4816				
OP-MGZD054	114X5079	G	MTZ32	27°C	3140	4045	5053	6156	7340	1667			
	114X5049	D		38°C		2490	3286	4161	5108	6117	1774		
	114X5064	E		46°C			3521	4355	5238				
OP-MGZD060	114X5080	G	MTZ36	27°C	3756	4782	5927	7184	8537	1978			
	114X5050	D		38°C		3051	3958	4957	6036	7191	2136		
	114X5065	E		46°C			4239	5201	6218				
OP-MGZD068	114X5051	D	MTZ40	27°C	4430	5614	6957	8449	10078	2285			
	114X5066	E		38°C		3679	4732	5903	7191	8587	2506		
				46°C			5110	6257	7490				
OP-MGZD086	114X5081	G	MTZ51	27°C	4932	6370	8006	9830	11824	2542			
	114X5052	D		38°C		3932	5184	6594	8157	9865	2734		
	114X5067	E		46°C			5579	6957	8458				
OP-MGZD096	114X5053	D	MTZ57	27°C	5261	6841	8640	10644	12829	2762			
	114X5068	E		38°C		4190	5573	7133	8860	10740	2944		
				46°C			6050	7576	9233				
OP-MGZD108	114X5054	D	MTZ65	27°C	6439	8242	10314	12648	15229	3150			
	114X5069	E		38°C		5208	6763	8549	10563	12796	3391		
				46°C			7312	9083	11053				
OP-MGZD121	114X5055	D	MTZ73	27°C	7126	9136	11421	13973	16769	3777			
	114X5070	E		38°C		5775	7524	9504	11703	14103	4033		
				46°C			8123	10054	12163				
OP-MGZD136	114X5056	D	MTZ81	27°C	8286	10636	13310	16290	19550	4344			
	114X5071	E		38°C		6793	8874	11210	13790	16600	4713		
				46°C			9658	11942	14420				
OP-MGZD171	114X5057	D	MTZ100	27°C	9362	12248	15537	19203	23212	5159			
	114X5072	E		38°C		7368	9877	12715	15868	19312	5539		
				46°C			10721	13490	16513				
OP-MGZD215	114X5115	D	MTZ125	27°C	13245	16843	20912	25448	30413	6505			
	114X5118	E		38°C		10710	13885	17443	21377	25667	7077		
				46°C			14890	18385	22184				
OP-MGZD242	114X5116	D	MTZ144	27°C	14269	18160	22555	27424	32727	7507			
	114X5119	E		38°C		11570	14999	18830	23049	27631	8106		
				46°C			16136	19873	23922				
OP-MGZD271	114X5117	D	MTZ160	27°C	17185	21568	26558	32126	38232	8618			
	114X5120	E		38°C		14184	18042	22383	27198	32464	9388		
				46°C			19325	23588	28239				

Test condition  
EN13215

SH10K

Electrical code

D: Compressor 400 V/3 phase/50 Hz, fan 400 V/3 phase/50 Hz  
E: Compressor 400 V/3 phase/50 Hz, fan 230 V/1 phase/50 Hz  
G: Compressor 230 V/1 phase/50 Hz, fan 230 V/1 phase/50 Hz

Subcooling with the limits of the condensing unit

Version: A02: With receiver, stop valve, universal pressure switch, (KP17WB), flexible hoses and electrical box



**QUICK REFERENCE**
**R407C MBP RECIPROCATING**

Unit	Condenser coil			Condenser fan Fan blade Ø [mm]	Receiver volume [L]	Dimensions [mm]						Weight [kg]	
	Type	Air flow [m <sup>3</sup> /h]	Int. volume [dm <sup>3</sup> ]			Fig.	Height H [mm]	Width W [mm]	Length D [mm]	Suction line	Liquid line	Gross	Net
OP-MCZC030	A4	1200	1.2	1 × 300	3	1	408	500	600	1/2"	3/8"	54	45
OP-MCZC038	B4	1750	1.3	1 × 350	3	1	451	500	620	1/2"	3/8"	56	47
OP-MCZC048	C4	2150	2.3	1 × 350	6	1	555	630	650	1/2"	1/2"	64	57
OP-MCZC054	C4	2150	2.3	1 × 350	6	1	555	630	650	5/8"	1/2"	65	58
OP-MCZC060	D4	2000	3.1	1 × 350	6	1	555	630	650	5/8"	1/2"	68	61
OP-MCZC068	E4	3150	2.5	1 × 400	6	1	605	630	650	5/8"	1/2"	72	65
OP-MCZC086	F4	3300	3.1	1 × 400	8	1	656	755	700	7/8"	1/2"	95	83
OP-MCZC096	G4	3150	4.1	1 × 400	8	1	656	755	700	7/8"	1/2"	100	88
OP-MCZC108	H4	4300	4.1	1 × 500	8	1	656	755	700	7/8"	1/2"	113	101
OP-MCZC121	J4	6000	4.4	1 × 500	10	1	708	900	900	1 1/8"	1/2"	127	113
OP-MCZC136	K4	6200	4.7	1 × 500	10	1	759	900	900	1 1/8"	1/2"	140	126
OP-MCZC171	L4	5850	6.3	1 × 500	14	1	759	900	900	1 1/8"	5/8"	162	147
OP-MGZC215	M4	11000	7.4	2 × 500	14	2	759	1350	820	1 1/8"	5/8"	191	176
OP-MGZC242	M4	11000	7.4	2 × 500	14	2	759	1350	820	1 1/8"	5/8"	194	179
OP-MGZC271	N4	9200	12.3	2 × 500	14	2	759	1350	820	1 1/8"	5/8"	199	184
OP-MGZD030	C3	1300	1.7	2 × 254	3	2	392	700	500	1/2"	3/8"	56	46
OP-MGZD038	D3	2800	1.5	2 × 300	6	2	442	800	600	1/2"	1/2"	60	53
OP-MGZD048	E3	2600	2.2	2 × 300	6	2	442	800	600	1/2"	1/2"	64	57
OP-MGZD054	E3	2600	2.2	2 × 300	6	2	442	800	600	5/8"	1/2"	65	58
OP-MGZD060	G3	4600	2.3	2 × 355	8	2	555	1000	700	5/8"	1/2"	88	75
OP-MGZD068	H3	3600	4.7	2 × 355	8	2	555	1000	700	5/8"	1/2"	96	82
OP-MGZD086	H3	3600	4.7	2 × 355	8	2	555	1000	700	7/8"	1/2"	107	93
OP-MGZD096	H3	3600	4.7	2 × 355	8	2	555	1000	700	7/8"	1/2"	109	95
OP-MGZD108	J3	5400	4.7	2 × 400	10	2	555	1000	700	7/8"	1/2"	113	99
OP-MGZD121	J3	5400	4.7	2 × 400	10	2	555	1000	700	7/8"	1/2"	115	101
OP-MGZD136	L3	8600	5.1	2 × 450	10	2	671	1200	800	1 1/8"	1/2"	133	118
OP-MGZD171	M3	8200	6.8	2 × 450	14	2	671	1200	800	1 1/8"	5/8"	158	144
OP-MGZD215	N4	9200	12.25	2 × 500	14	2	759	1350	820	1 1/8"	5/8"	196	180
OP-MGZD242	N4	9200	12.25	2 × 500	14	2	759	1350	820	1 1/8"	5/8"	199	183
OP-MGZD271	U	14000	14.2	2 × 600	14	2	975	1500	870	1 1/8"	5/8"	230	212

**Electrical characteristics - 230V/1phase**

Unit	Wiring diagram	LRA compressor [A] 230 V/ 1 phase	MCC compressor [A] 230 V/ 1 phase	MCC Fan [A] 230 V/ 1 phase
OP-LCHC048	6002113P02	37	11	0.85
OP-LCHC068	6002113P02	53	17	1.2
OP-LGHC048	6002113P02	37	11	2x0,32
OP-LGHC068	6002113P02	53	17	2x0,85

**Electrical characteristics - 400V/3phase**

Unit	Wiring diagram	LRA compressor [A] 400 V/ 3phase	MCC compressor [A] 400 V/ 3phase	MCC Fan [A] 230 V/ 1 phase	MCC Fan [A] 400 V/3 phase
OP-LCHC048	6002113P06	16	4.8	0.85	0.35
OP-LCHC068	6002113P06	25	8.4	1.2	0.5
OP-LCHC096	6002113P06	32	10.1	1.2	0.5
OP-LCHC108	6002113P06	45	12.1	1.3	0.7
OP-LCHC136	6002113P06	51	14.3	1.3	0.7
OP-LCHC215	6002113P06	74	22.3	3.4	1.2
OP-LCHC271	6002113P06	96	27	3.4	1.2
OP-LGHC048	6002113P06	16	4.8	2x0.32	
OP-LGHC068	6002113P06	25	8.4	2x0.85	2x0.35
OP-LGHC096	6002113P06	32	10.1	2x0.85	2x0.35
OP-LGHC108	6002113P06	45	12.1	2x1.2	2x0.5
OP-LGHC136	6002113P06	51	14.3	2x1.2	2x0.5
OP-LGHC215	6002113P06	74	22.3	2x1.7	2x1.2
OP-LGHC271	6002113P06	96	27	2x1.7	2x1.2

Note  
 LRA (Locked Rotor Amps)  
 MCC (Maximum Continuous Current)

**Spare parts**

Unit	Condenser	Receiver	Rotalock valve		Fan motor		Weatherproof Housing	Filter drier Type	Sight glass type	Pressure control type	Solenoid valve type (excl coil)
			Suction	Discharge	230Volts	400 Volts					
OP-LCHC048	118U8000	8168179	7968014	7968012	8176043	8176044	118U8030	DML/DCL 053	SGN 10	KP1/KP7/KP17	EVR 3
OP-LCHC068	118U8002	8168180	7968014	7968013	8176045	8176046	118U8031	DML/DCL 084	SGN 12	KP1/KP7/KP17	EVR 3
OP-LCHC096	118U8003	8168180	7968017	7968014	8176045	8176046	118U8031	DML/DCL 084	SGN 12	KP1/KP7/KP17	EVR 3
OP-LCHC108	118U8004	8168180	7968017	7968014	8176047	8176048	118U8031	DML/DCL 084	SGN 12	KP1/KP7/KP17	EVR 3
OP-LCHC136	118U8006	8168181	7968017	7968014	8176047	8176048	118U8032	DML/DCL 084	SGN 12	KP1/KP7/KP17	EVR 6
OP-LCHC215	118U8008	8168183	7968018	7968015	118U8023	118U8017	118U8033	DML/DCL 165	SGN 16	KP1/KP7/KP17	EVR 6
OP-LCHC271	118U8010	8168183	7968018	7968015	118U8023	118U8017	118U8033	DML/DCL 165	SGN 16	KP1/KP7/KP17	EVR 6
OP-LGHC048	8174036	8168179	7968014	7968012	8176018	8176039	7710017	DML/DCL 053	SGN 10	KP1/KP7/KP17	EVR 3
OP-LGHC068	8174037	8168180	7968014	7968013	8176043	8176044	7710018	DML/DCL 084	SGN 12	KP1/KP7/KP17	EVR 3
OP-LGHC096	8174038	8168180	7968017	7968014	8176043	8176044	7710018	DML/DCL 084	SGN 12	KP1/KP7/KP17	EVR 3
OP-LGHC108	8174041	8168181	7968017	7968014	8176045	8176046	7710019	DML/DCL 084	SGN 12	KP1/KP7/KP17	EVR 3
OP-LGHC136	8174041	8168181	7968017	7968014	8176045	8176046	7710019	DML/DCL 084	SGN 12	KP1/KP7/KP17	EVR 6
OP-LGHC215	8174044	8168183	7968018	7968015	8176070	8176069	7710020	DML/DCL 165	SGN 16	KP1/KP7/KP17	EVR 6
OP-LGHC271	8174044	8168183	7968018	7968015	8176070	8176069	7710020	DML/DCL 165	SGN 16	KP1/KP7/KP17	EVR 6

**Electrical characteristics - 230V/1phase**

Unit	Wiring diagram	LRA compressor [A] 230 V/ 1 phase	MCC compressor [A] 230 V/ 1 phase	MCC Fan [A] 230 V/ 1 phase
OP-MCZC030	6002113P02	40	10	0.85
OP-MCZC038	6002113P02	41	15	1.2
OP-MCZC048	6002113P02	55	16	1.2
OP-MCZC054	6002113P02	70	20	1.2
OP-MCZC060	6002113P02	70	20	1.2
OP-MCZC086	6002113P02	92	29	1.3
OP-MGZD030	6002113P02	40	10	2x0.32
OP-MGZD038	6002113P02	41	15	2x0.85
OP-MGZD048	6002113P02	55	16	2x0.85
OP-MGZD054	6002113P02	70	20	2x0.85
OP-MGZD060	6002113P02	70	20	2x1.2
OP-MGZD086	6002113P02	92	29	2x1.2

**Electrical characteristics - 400V/3phase**

Unit	Wiring diagram	LRA compressor [A] 400 V/ 3phase	MCC compressor [A] 400 V/ 3phase	MCC Fan [A] 230 V/ 1 phase	MCC Fan [A] 400 V/ 3 phase
OP-MCZC030	6002113P06	20	5	0.85	0.35
OP-MCZC038	6002113P06	16	6	1.2	0.5
OP-MCZC048	6002113P06	23	7.5	1.2	0.5
OP-MCZC054	6002113P06	25	8	1.2	0.5
OP-MCZC060	6002113P06	30	9	1.2	0.5
OP-MCZC068	6002113P06	38	10	1.3	0.7
OP-MCZC086	6002113P06	48.5	11.5	1.3	0.7
OP-MCZC096	6002113P06	64	12	1.3	0.7
OP-MCZC108	6002113P06	64	14	3.4	1.2
OP-MCZC121	6002113P06	80	17	3.4	1.2
OP-MCZC136	6002113P06	80	19	3.4	1.2
OP-MCZC171	6002113P06	90	22	3.4	1.2
OP-MGZC215	6002113P06	105	27	2 x 3.4	2 x 1.2
OP-MGZC242	6002113P06	115	30	2 x 3.4	2 x 1.2
OP-MGZC271	6002113P06	140	36	2 x 3.4	2 x 1.2
OP-MGZD030	6002113P06	20	5	2x0.32	-
OP-MGZD038	6002113P06	16	6	2x0.85	2 x 0.35
OP-MGZD048	6002113P06	23	7.5	2x0.85	2 x 0.35
OP-MGZD054	6002113P06	25	8	2x0.85	2 x 0.35
OP-MGZD060	6002113P06	30	9	2x1.2	2 x 0.5
OP-MGZD068	6002113P06	38	10	2x1.2	2 x 0.5
OP-MGZD086	6002113P06	48.5	11.5	2x1.2	2 x 0.5
OP-MGZD096	6002113P06	64	12	2x1.2	2 x 0.5
OP-MGZD108	6002113P06	64	14	2x1.3	2 x 0.7
OP-MGZD121	6002113P06	80	17	2x1.3	2 x 0.7
OP-MGZD136	6002113P06	80	19	2x1.7	2 x 1.2
OP-MGZD171	6002113P06	90	22	2x1.7	2 x 1.2
OP-MGZD215	6002113P06	105	27	2x3.4	2 x 1.2
OP-MGZD242	6002113P06	115	30	2x3.4	2 x 1.2
OP-MGZD271	6002113P06	140	36	2x3	2 x 1.6

Note  
LRA (Locked Rotor Amps)  
MCC (Maximum Continuous Current)

Spare parts

Unit	Condenser	Receiver	Rotolock valve		Fan motor		Weatherproof housing	Filter drier type	Sight glass type	Pressure control type	Solenoid valve type (excl coil)
			Suction	Discharge	230Volts	400 Volts					
OP-MCZC030	118U8000	8168179	7968013	7968012	8176043	8176044	118U8030	DML/DCL053	SGN10	KP1/KP7/KP17	EVR 3
OP-MCZC038	118U8001	8168179	7968013	7968012	8176045	8176046	118U8030	DML/DCL053	SGN10	KP1/KP7/KP17	EVR 3
OP-MCZC048	118U8002	8168180	7968013	7968013	8176045	8176046	118U8031	DML/DCL084	SGN12	KP1/KP7/KP17	EVR 3
OP-MCZC054	118U8002	8168180	7968014	7968013	8176045	8176046	118U8031	DML/DCL084	SGN12	KP1/KP7/KP17	EVR 3
OP-MCZC060	118U8003	8168180	7968014	7968013	8176045	8176046	118U8031	DML/DCL084	SGN12	KP1/KP7/KP17	EVR 3
OP-MCZC068	118U8004	8168180	7968014	7968013	8176047	8176048	118U8031	DML/DCL084	SGN12	KP1/KP7/KP17	EVR 3
OP-MCZC086	118U8005	8168181	7968017	7968014	8176047	8176048	118U8032	DML/DCL084	SGN12	KP1/KP7/KP17	EVR 3
OP-MCZC096	118U8006	8168181	7968017	7968014	8176047	8176048	118U8032	DML/DCL084	SGN12	KP1/KP7/KP17	EVR 3
OP-MCZC108	118U8007	8168181	7968017	7968014	118U8023	118U8017	118U8032	DML/DCL084	SGN12	KP1/KP7/KP17	EVR 3
OP-MCZC121	118U8008	8168182	7968018	7968015	118U8023	118U8017	118U8033	DML/DCL084	SGN12	KP1/KP7/KP17	EVR 3
OP-MCZC136	118U8010	8168182	7968018	7968015	118U8023	118U8017	118U8033	DML/DCL084	SGN12	KP1/KP7/KP17	EVR 3
OP-MCZC171	118U8010	8168183	7968018	7968015	118U8023	118U8017	118U8033	DML/DCL165	SGN16	KP1/KP7/KP17	EVR 6
OP-MGZC215	118U8012	8168183	7968018	7968016	118U8023	118U8017	118U8034	DML/DCL165	SGN16	KP1/KP7/KP17	EVR 6
OP-MGZC242	118U8012	8168183	7968018	7968016	118U8023	118U8017	118U8034	DML/DCL165	SGN16	KP1/KP7/KP17	EVR 6
OP-MGZC271	118U8012	8168183	7968018	7968016	118U8023	118U8017	118U8034	DML/DCL165	SGN16	KP1/KP7/KP17	EVR 6
OP-MGZD030	8174036	8168179	7968013	7968012	8176018	8176039	7710017	DML/DCL053	SGN10	KP1/KP7/KP17	EVR 3
OP-MGZD038	8174037	8168180	7968013	7968013	8176043	8176044	7710018	DML/DCL053	SGN10	KP1/KP7/KP17	EVR 3
OP-MGZD048	8174038	8168180	7968013	7968013	8176043	8176044	7710018	DML/DCL084	SGN12	KP1/KP7/KP17	EVR 3
OP-MGZD054	8174038	8168180	7968014	7968013	8176043	8176044	7710018	DML/DCL084	SGN12	KP1/KP7/KP17	EVR 3
OP-MGZD060	8174041	8168181	7968014	7968013	8176045	8176046	7710019	DML/DCL084	SGN12	KP1/KP7/KP17	EVR 3
OP-MGZD068	8174041	8168181	7968014	7968013	8176045	8176046	7710019	DML/DCL084	SGN12	KP1/KP7/KP17	EVR 3
OP-MGZD086	8174041	8168181	7968017	7968014	8176045	8176046	7710019	DML/DCL084	SGN12	KP1/KP7/KP17	EVR 3
OP-MGZD096	8174041	8168181	7968017	7968014	8176045	8176046	7710019	DML/DCL084	SGN12	KP1/KP7/KP17	EVR 3
OP-MGZD108	8174042	8168182	7968017	7968014	8176047	8176048	7710019	DML/DCL084	SGN12	KP1/KP7/KP17	EVR 3
OP-MGZD121	8174042	8168182	7968017	7968014	8176047	8176048	7710019	DML/DCL084	SGN12	KP1/KP7/KP17	EVR 3
OP-MGZD136	8174044	8168182	7968018	7968015	8176070	8176069	7710020	DML/DCL084	SGN12	KP1/KP7/KP17	EVR 3
OP-MGZD171	8174045	8168183	7968018	7968015	8176070	8176069	7710020	DML/DCL165	SGN16	KP1/KP7/KP17	EVR 6
OP-MGZD215	118U8012	8168183	7968018	7968016	118U8023	118U8017	118U8034	DML/DCL165	SGN16	KP1/KP7/KP17	EVR 6
OP-MGZD242	118U8012	8168183	7968018	7968016	118U8023	118U8017	118U8034	DML/DCL165	SGN16	KP1/KP7/KP17	EVR 6
OP-MGZD271	8174048	8168183	7968018	7968016	8176098	8176099	7710021	DML/DCL165	SGN16	KP1/KP7/KP17	EVR 6

**Electrical characteristics - 230V/1phase**

Unit	Wiring diagram	LRA compressor [A] 230 V/ 1 phase	MCC compressor [A] 230 V/ 1 phase	MCC Fan [A] 230 V/ 1 phase
OP-MCUC034	6002235P01	60	19	1.2
OP-MCUC043	6002235P01	97	23	1.2
OP-MCUC057	6002235P01	97	27	1.3
OP-MCUC068	6002235P01	127	32	1.3
OP-MGUD034	6002235P01	60	19	2x0.85
OP-MGUD043	6002235P01	97	23	2x0.85
OP-MGUD057	6002235P01	97	27	2x1.2
OP-MGUD068	6002235P01	127	32	2x1.3

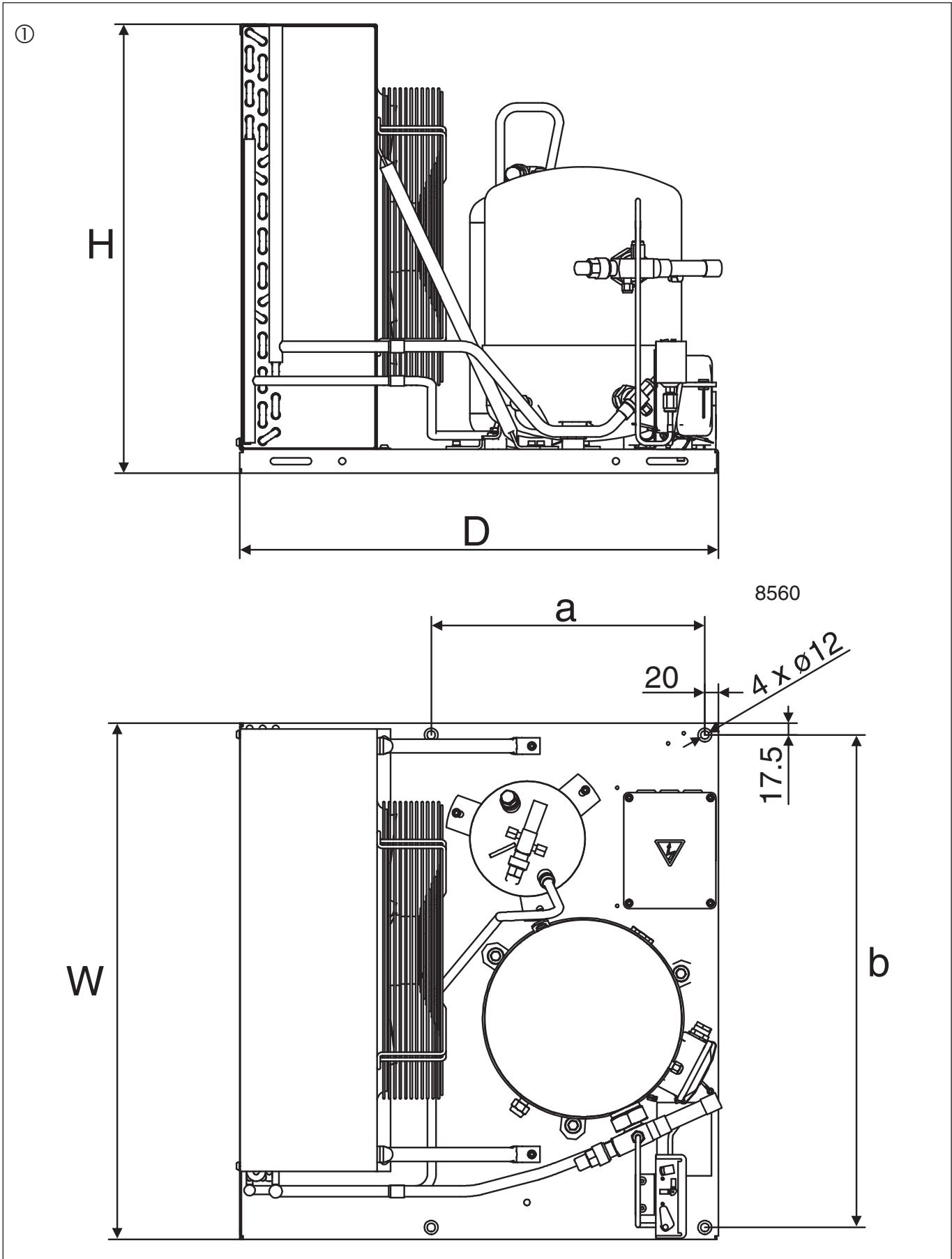
**Electrical characteristics - 400V/3phase**

Unit	Wiring diagram	LRA compressor [A] 400 V/ 3phase	MCC compressor [A] 400 V/ 3phase	MCC Fan [A] 230 V/ 1 phase	MCC Fan [A] 400 V/ 3 phase
OP-MCUC034	6002235P02	30	7	1.2	0.5
OP-MCUC043	6002235P02	45	9.5	1.2	0.5
OP-MCUC057	6002235P02	45	11	1.3	0.7
OP-MCUC068	6002235P02	60	13	1.3	0.7
OP-MCUC080	6002235P02	70	15	3.4	1.2
OP-MCUC107	6002235P02	87	16	3.4	1.2
OP-MGUC149	6002235P02	110	24	2x1.7	2 x 1.2
OP-MGUC162	6002235P02	140	25	2x3.4	2 x 1.2
OP-MGUD034	6002235P02	30	7	2x0.85	2 x 0.35
OP-MGUD043	6002235P02	45	9.5	2x0.85	2 x 0.35
OP-MGUD057	6002235P02	45	11	2x1.2	2 x 0.5
OP-MGUD068	6002235P02	60	13	2x1.3	2 x 0.7
OP-MGUD080	6002235P02	70	15	2x1.3	2 x 0.7
OP-MGUD107	6002235P02	87	16	2x1.7	2 x 1.2
OP-MGUD148	6002235P02	110	24	2x1.7	2 x 1.2
OP-MGUD162	6002235P02	140	25	2x3.4	2 x 1.2

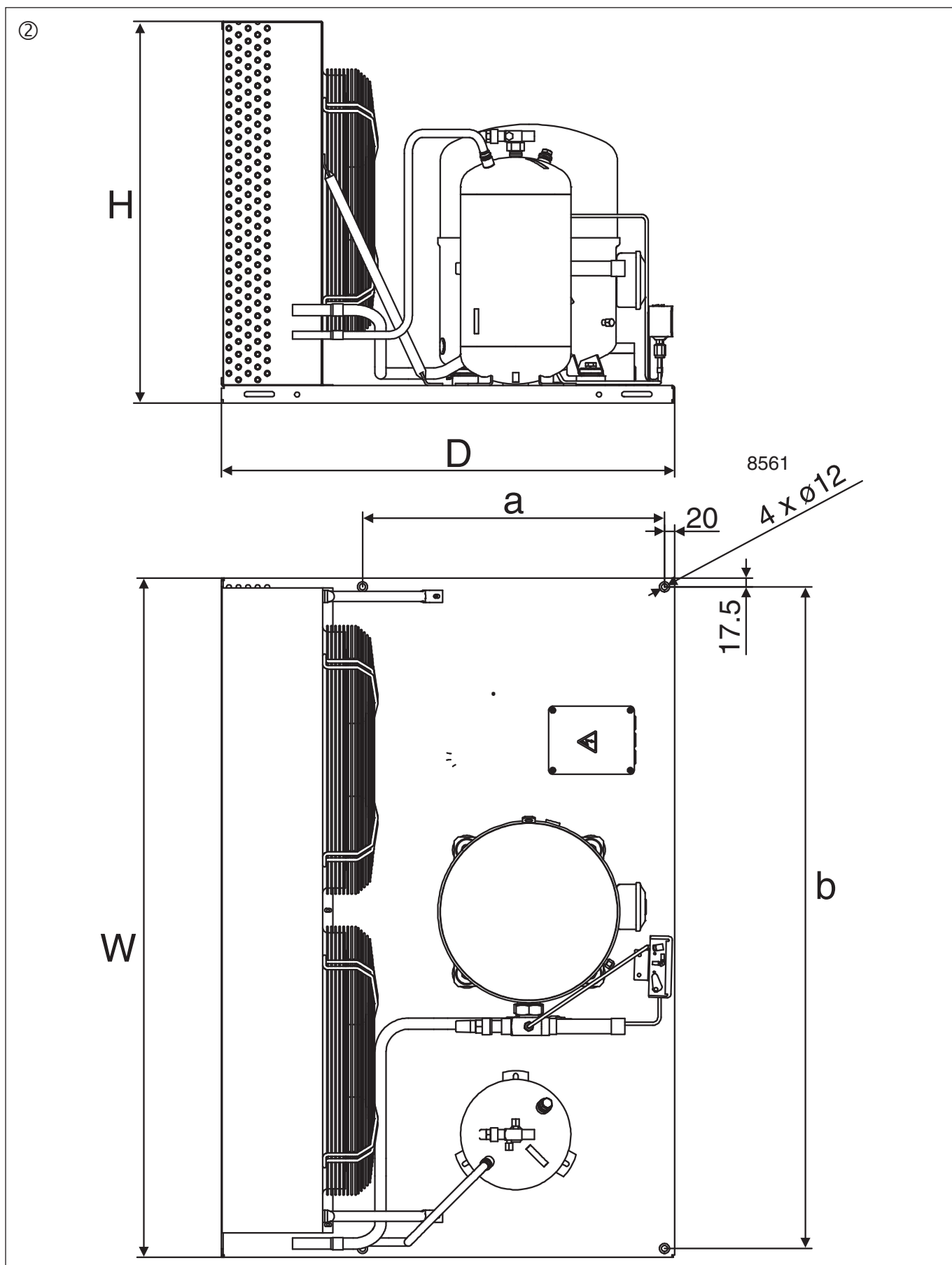
Note  
 LRA (Locked Rotor Amps)  
 MCC (Maximum Continuous Current)

**Spare parts (components)**

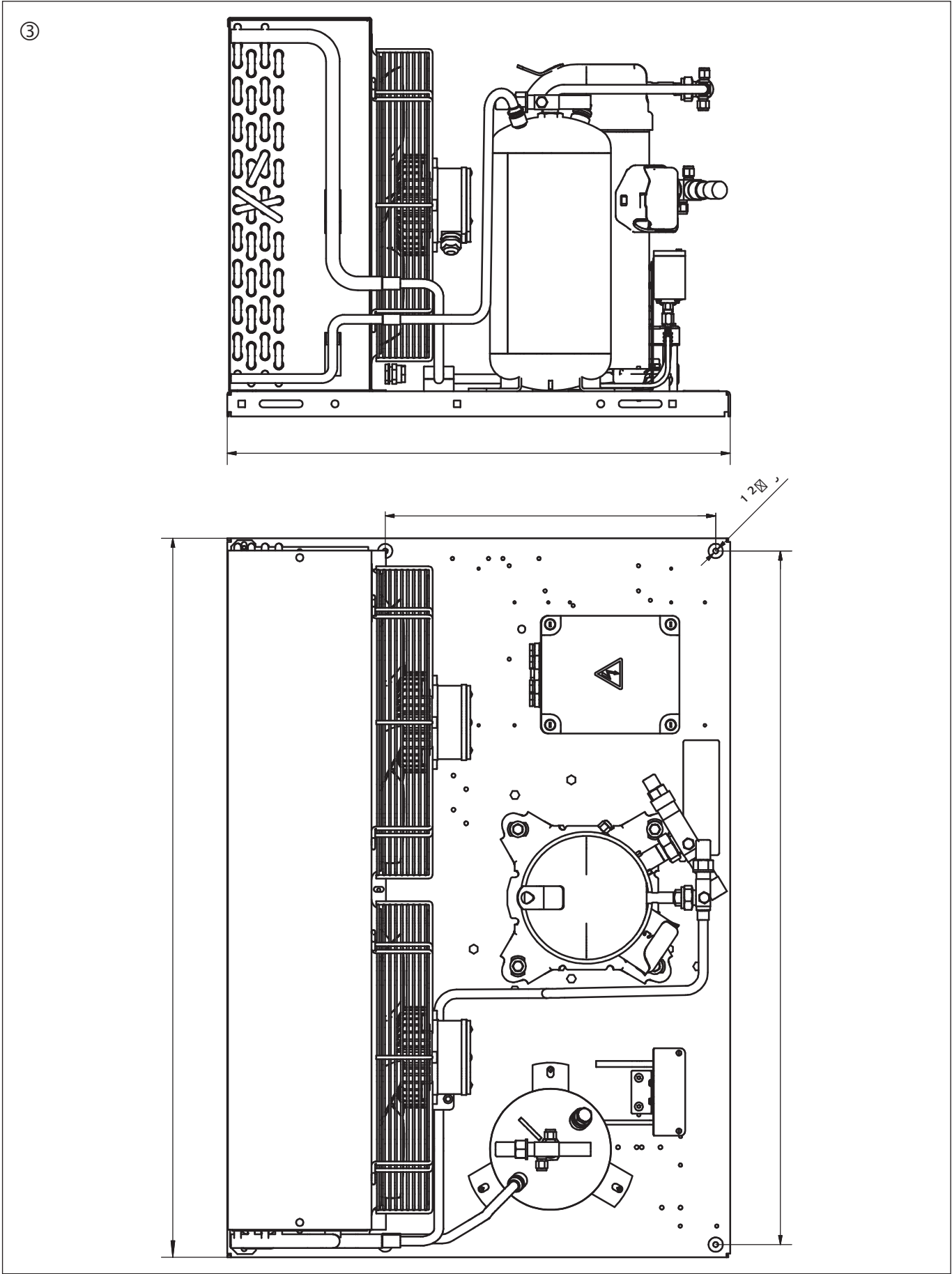
Unit	Condenser	Receiver	Rotalock valve		Fan motor		Weatherproof housing	Filter drier Type	Sight glass type	Pressure control type	Solenoid valve type (excl coil)
			Suction	Discharge	230Volts	400 Volts					
OP-MCUC034	118U8002	8168180	7968015	7968013	8176045	8176046	118U8031	DML/DCL084	SGN12	KP1/KP5/KP17	EVR3
OP-MCUC043	118U8002	8168180	7968015	7968013	8176045	8176046	118U8031	DML/DCL084	SGN12	KP1/KP5/KP17	EVR6
OP-MCUC057	118U8004	8168180	7968015	7968013	8176047	8176048	118U8031	DML/DCL084	SGN12	KP1/KP5/KP17	EVR6
OP-MCUC068	118U8005	8168181	7968016	7968013	8176047	8176048	118U8032	DML/DCL084	SGN12	KP1/KP5/KP17	EVR6
OP-MCUC080	118U8007	8168181	7968016	7968013	118U8023	118U8017	118U8032	DML/DCL084	SGN12	KP1/KP5/KP17	EVR6
OP-MCUC107	118U8010	8168182	7968016	7968015	118U8023	118U8017	118U8033	DML/DCL164	SGN12	KP1/KP5/KP17	EVR6
OP-MGUC149	8174044	8168182	7968018	7968016	8176070	8176069	7710020	DML/DCL164	SGN12	KP1/KP5/KP17	EVR10
OP-MGUC162	118U8012	8168183	7968018	7968016	118U8023	118U8017	118U8034	DML/DCL165	SGN16	KP1/KP5/KP17	EVR15
OP-MGUD034	8174037	8168180	7968015	7968013	8176043	8176044	7710018	DML/DCL084	SGN12	KP1/KP5/KP17	EVR3
OP-MGUD043	8174038	8168180	7968015	7968013	8176043	8176044	7710018	DML/DCL084	SGN12	KP1/KP5/KP17	EVR6
OP-MGUD057	8174041	8168181	7968015	7968013	8176045	8176046	7710019	DML/DCL084	SGN12	KP1/KP5/KP17	EVR6
OP-MGUD068	8174041	8168181	7968016	7968013	8176045	8176046	7710019	DML/DCL084	SGN12	KP1/KP5/KP17	EVR6
OP-MGUD080	8174042	8168181	7968016	7968013	8176047	8176048	7710019	DML/DCL084	SGN12	KP1/KP5/KP17	EVR6
OP-MGUD107	8174044	8168182	7968016	7968015	8176070	8176069	7710020	DML/DCL164	SGN12	KP1/KP5/KP17	EVR6
OP-MGUD148	8174045	8168182	7968018	7968016	8176070	8176069	7710020	DML/DCL164	SGN12	KP1/KP5/KP17	EVR10
OP-MGUD162	118U8012	8168183	7968018	7968016	118U8023	118U8017	118U8034	DML/DCL165	SGN16	KP1/KP5/KP17	EVR15







QUICK REFERENCE



50 Hz			
COMPRESSOR MODEL	DISPLACEMENT cm <sup>3</sup>	A	
		μF/450VAC	
MPZ038	038	40	100
MPZ048	048	40	100
MPZ054	054	40	100
MPZ061	061	45	100
MPZ068	086	45	100
NTZ048	048	30	100
NTZ068	068	30	100

60 Hz			
COMPRESSOR MODEL	DISPLACEMENT cm <sup>3</sup>	A	
		μF/450VAC	
MPZ038	038	40	100
MPZ048	048	40	100
MPZ054	054	40	100
MPZ061	061	45	100
MPZ068	086	45	100
NTZ048	048	25	100
NTZ068	068	50	135

D (Capacitor Fan)				
FAN DIAMETER	ZIEHL FMV		ebmpapst	
	μF/450VAC	μF/450VAC	μF/450VAC	μF/450VAC
	50 Hz	60 Hz	50 Hz	60 Hz
300	3.5	5	2	2
350	3.5	5	4	5
400	5	5	6	X
450	12	12	X	X

\* Not delivered

N: NOIR-BLACK    B: BLEU-BLUE or GRIS-GREY  
M: MARRON-BROWN    W: BLANC-WHITE  
R: ROUGE-RED

6002113P02-W

One or two fans for Danfoss condensing units

50 Hz		
COMPRESSOR MODEL	DISPLACEMENT cm <sup>3</sup>	A
		μF/450VAC
MLZ019	043	70
MLZ021	046	70
MLZ026	057	70
MLZ030	068	50
MLZ038	080	55

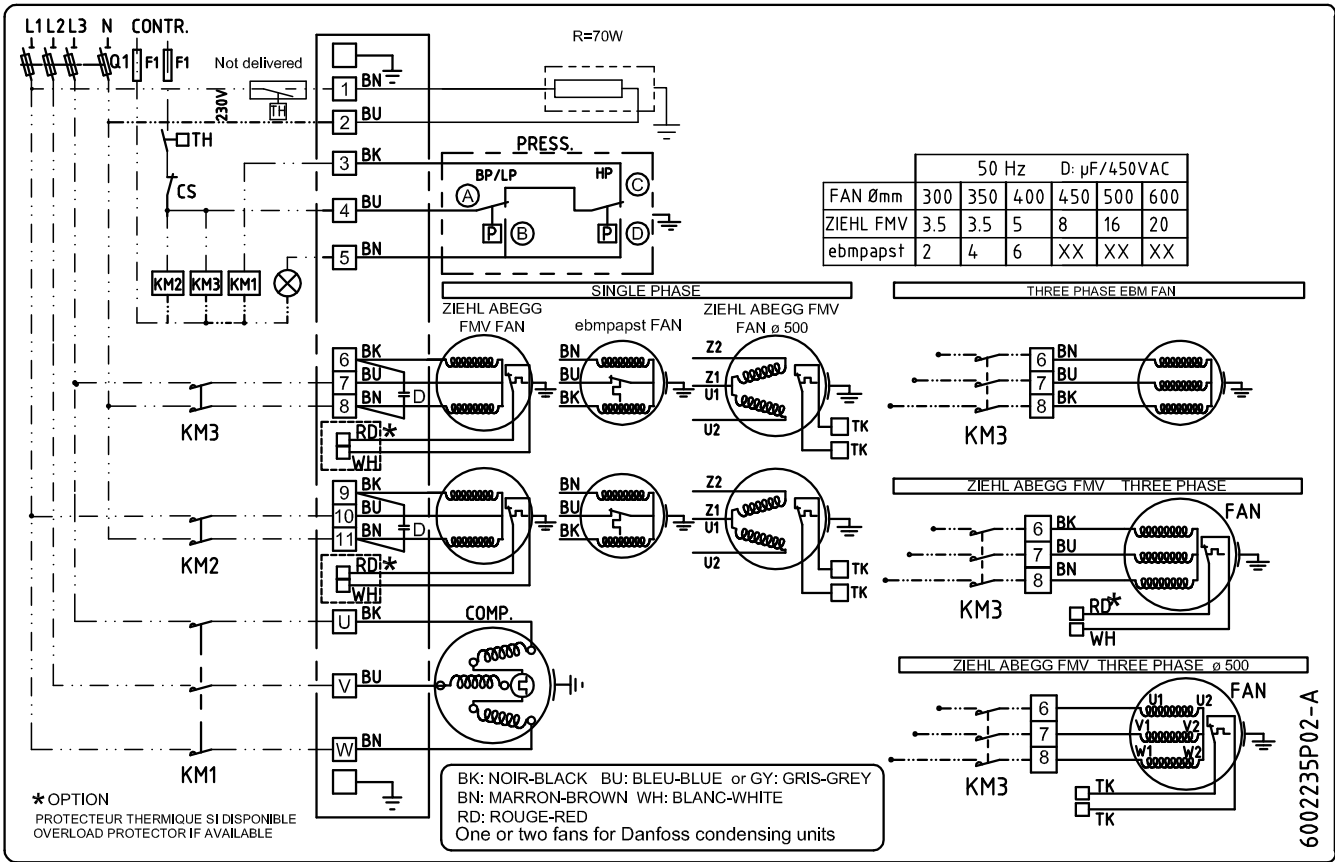
D (Capacitor Fan)				
FAN DIAMETER	ZIEHL FMV		ebmpapst	
	μF/450VAC	μF/450VAC	μF/450VAC	μF/450VAC
	50 Hz	60 Hz	50 Hz	60 Hz
300	3.5	5	2	2
350	3.5	5	4	5
400	5	5	6	X
450	12	12	X	X

\* Not delivered

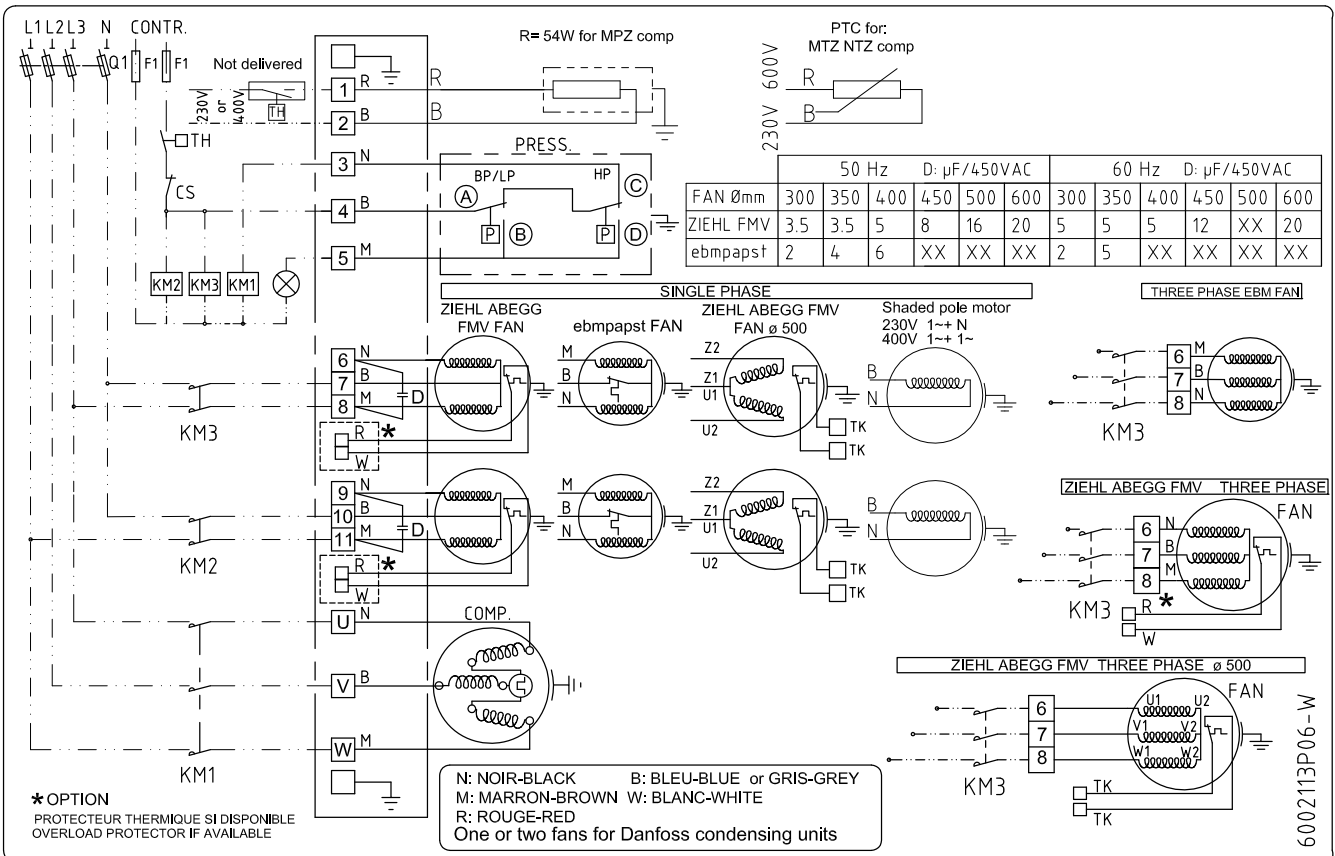
N: NOIR-BLACK    B: BLEU-BLUE or GRIS-GREY  
M: MARRON-BROWN    W: BLANC-WHITE  
R: ROUGE-RED

6002235P01-A

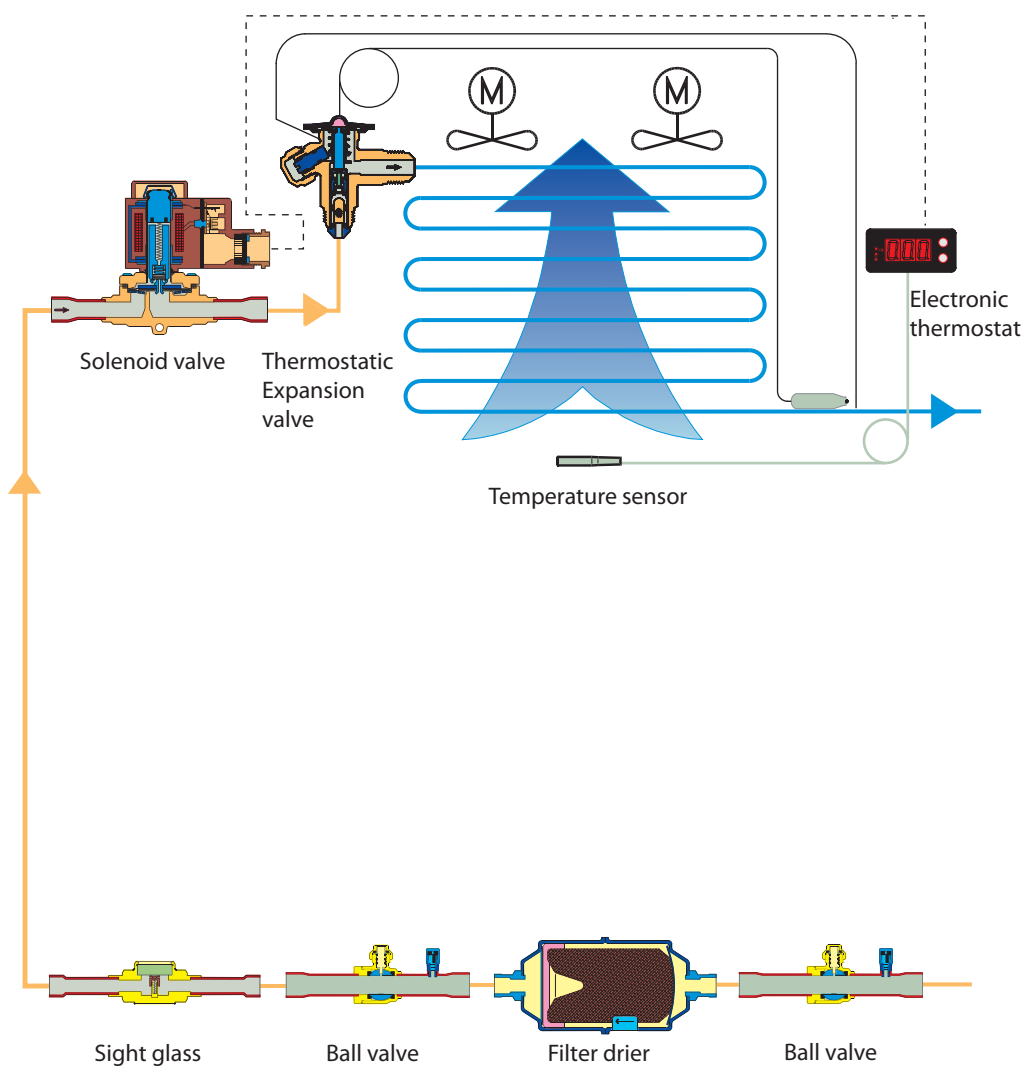
One or two fans for Danfoss condensing units



6002235P02-A



6002113P06-W



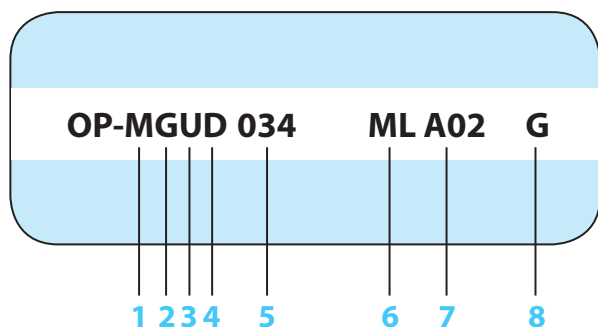
R404A/R507

R134a

R407C

### Designation system for the Optyma™ standard programme

(additional programme frequency etc.: please contact your local wholesaler)



<p><b>1</b> Application</p>	<p>L = Low M = Medium</p>
<p><b>2</b> Platform or design</p>	<p><b>C:</b> Air cooled condensing unit with 1 fan and hermetic compressor <b>G:</b> Air cooled condensing unit with 2 fan and hermetic compressor</p>
<p><b>3</b> Refrigerant</p>	<p>H = R404A/R507 Z = R404A/R134a/R507/R407C U = R404A/R134a/R507/R407C/R22</p>
<p><b>4</b> Condenser option</p>	<p>C = Standard D = With oversized condenser (for higher ambient temperature and / or higher efficiency)</p>
<p><b>5</b> Displacement</p>	<p>034 = 34 cm<sup>3</sup></p>
<p><b>6</b> Compressor platform</p>	<p>MT NT ML</p>
<p><b>7</b> Version</p>	<p>A02 = With receiver, stop valves, universal pressure switch (KP17WB), flexible hoses and electrical box</p>
<p><b>8</b> Electrical code</p>	<p><b>D:</b> Compressor 400 V/3~/50 Hz, fan 400 V/3~/50 Hz <b>E:</b> Compressor 400 V/3~/50 Hz, fan 230 V/1~/50 Hz <b>G:</b> Compressor 230 V/1~/50 Hz, fan 230 V/1~/50 Hz</p>





Danfoss Commercial Compressors is a worldwide manufacturer of compressors and condensing units for refrigeration and HVAC applications. With a wide range of high quality and innovative products we help your company to find the best possible energy efficient solution that respects the environment and reduces total life cycle costs.

We have 40 years of experience within the development of hermeting compressors and today we operate engineering and manufacturing facilities spread across three continents.



Performer Variable Speed scroll compressors



Performer Air Conditioning scroll compressors



Performer Heat Pump scroll compressors



Maneurop Variable Speed reciprocating compressors



Performer Refrigeration scroll compressors



Maneurop Reciprocating Compressors



Optyma Plus Condensing Units



Optyma Condensing Units

Our products can be found in a variety of applications such as rooftops, chillers, residential air conditioners, heatpumps, coldrooms, supermarkets, milk tank cooling and industrial cooling processes.

member of:



[www.asercom.org](http://www.asercom.org)

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