



Catalogue

# Optyma™ condensing unit Scroll and reciprocating compressors

for R404A / R507, R134a, R407C and R22 - 60 Hz









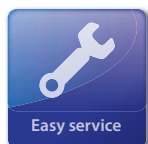
### Reduce your customers' running costs

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. This multifunctional condensing unit for a wide variety of applications 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 to our customers 100 % factory tested units 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 cover a large range of commercial refrigeration applications, reduce costs and complexity of the systems.

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

where noise and vibration are matter in 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 and R22 refrigerants, so that you can really optimize your stock.

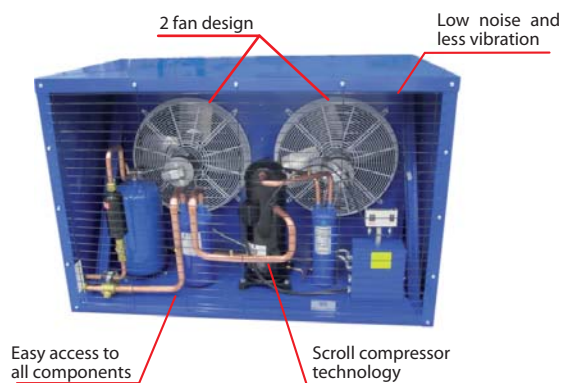
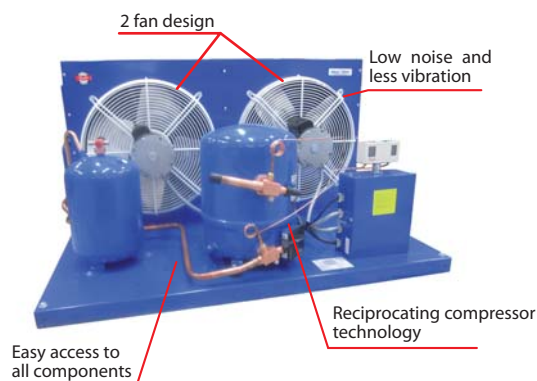
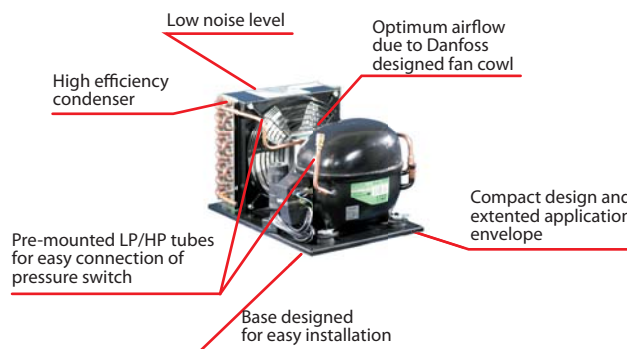
In addition to the wide Optyma™ range we also include local support and guidance if needed. A network of partner wholesalers and local Danfoss teams can offer you help and will do their utmost to fulfil your needs. At Danfoss we simply believe it is important to offer an "Optimum service".

**Benefits**

- High-efficiency condensers allowing an extended application envelope in higher ambient conditions than standard
- Low electrical consumption and low running costs
- Reliable components for longer life and less warranty call out costs
- Fully pre-wired and factory tested, reducing commissioning time on site
- Base plate designed to allow easy mounting on wall brackets
- Flexible add-on design options including: oil separator (optional for integral units), 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
- 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



Unit		Version			Electrical code	Compressor	Amb. temp. °C	Capacity range in [W] at evaporating temperature [°C]					Power consumption (W) at -32°C evap temp	Application range [°C]		
		WA	WB	WC				-30°C	-20°C	-10°C	0°C	+5°C				
	OP-UCHC0020R	114N2316			B	TF4CLX	32°C	165	253	380	438	584	195	32°C: -40°C till +7.2°C 43°C: -40°C till +1.7°C		
							38°C	145	225	340	395	525	196			
							43°C	127	201	307	352		198			
	OP-UCHC0025R		114N2318			B	NF5.5CLX	32°C	285	429	640	750	1010		270	
								38°C	255	390	590	690	920		275	
								43°C	225	350	530	610			280	
	OP-UCHC0033R		114N2320	114N2321	B	NF7CLX	32°C	340	520	780	900	1190	335			
									38°C	310	470	710	815		1100	340
									43°C	280	430	660	765			345
	OP-UCHC0050R		114N2322	114N2324	B	SC10CL	32°C	385	632	942	1313	1516	373			
									38°C	332	565	855	1202			371
									43°C	278	498	769				368
OP-LCHC0060R		114N2333	114N2335	B	SC15CLX.2	32°C	630	960	1430			650				
								38°C	550	850	1260			662		
								43°C	470	745				675		

**Test condition:** RGT @ 18°C

**Electrical code**

- B** Compressor 115 V/1 phase/60 Hz, fan 115 V/1 phase/60 Hz
- N** Compressor 230V/1 phase/60 Hz, fan 230 V/1 phase/60 Hz

**Version**

- WA:** wholesale model power cord
- WB:** wholesale model power cord, receiver
- WC:** wholesale model BX, receiver

Model	Receiver volume [L]	Fig.	Dimensions [mm]					Weight [kg]
			Height H [mm]	Width W [mm]	Length D [mm]	Suction line	Liquid line	
OP-UHC0020R	-	1	259	312	356	3/8" F	1/4" F	15
OP-UHC0025R	0.88	2	262	343	432	3/8" F	1/4" F	19
OP-UHC0033R	0.88	2	262	343	432	1/2" F	1/4" F	17
OP-UHC0050R	0.88	2	300	343	432	1/2" F	1/4" F	22
OP-LHC0060R	0.88	2	300	343	432	1/2" F	1/4" F	22

Unit	Code (basic version)	Electrical code	Compressor	Amb. temp. °C	Capacity range in [W] at evaporating temperature [°C]						Power consumption (W) at -32°C evap temp	Application range [°C]	
					-35°C	-30°C	-25°C	-20°C	-15°C	-10°C			
	OP-LCZ022E	114N8001	N	NTZ048	35°C	1111	1506	1935	2389	2865	3357	1329	43°C: -35°C to -15°C 48°C: -35°C to -25°C
		114N8002	Q		43°C	861	1200	1562	1942	2335	2739	1283	
		114N8003	R		48°C	711	1014	1334	1668			1230	
	OP-LCZ028E	114N8006	N	NTZ068	35°C	1875	2437	3043	3683	4345	5013	2149	
		114N8007	Q		43°C	1537	2021	2538	3076	3628	4178	2224	
		114N8008	R		48°C	1340	1777	2237				2267	
	OP-LCZ044E	114N8011	N	NTZ108	35°C	2704	3721	4856	6089	7394	8747	3038	
		114N8012	Q		43°C	2160	3028	3981	5006	6083	7187	3011	
		114N8013	R		48°C	1803	2578	3421	4317	5252		2970	
	OP-LCZ050E	114N8016	N	NTZ136	35°C	3435	4597	5865	7212	8618	10049	4032	
		114N8017	Q		43°C	2719	3738	4835	5993	7185		3987	
		114N8018	R		48°C	2280	3207	4197	5233			3924	
	OP-LGZ088E	114N8021	Q	NTZ215	35°C	5489	7257	9216	11342	13608	15982	5914	
		114N8022	R		43°C	4226	5770	7458	9274	11192	13188	5818	
					48°C	3421	4818	6338	7957	9663		5665	
	OP-LGZ100E	114N8025	Q	NTZ271	35°C	7316	9430	11703	14091	16540	18984	7978	
					43°C	5882	7672	9574	11541			8051	
		114N8026	R		48°C	4974	6561	8225				8032	

**Test condition:** SH 10 K

**Electrical code**

- N** Compressor 230V/1 phase/60 Hz, fan 230 V/1 phase/60 Hz
- Q** Compressor 208-230V/3 phase/60 Hz, fan 230 V/1 phase/60 Hz
- R** Compressor 460 V/3 phase/60 Hz, fan 460 V/1 phase/60 Hz



Model	Receiver volume [L]	Fig.	Dimensions [mm]					Weight [kg]
			Height H [mm]	Width W [mm]	Length D [mm]	Suction line	Liquid line	
OP-LCZ022E	3.1	3	442	700	500	1/2 "	3/8 "	51
OP-LCZ028E	3.1	3	442	700	500	1/2 "	3/8 "	62
OP-LCZ044E	8	3	696	800	700	7/8 "	1/2 "	85
OP-LCZ050E	8	3	696	800	700	7/8 "	1/2 "	98
OP-LGZ088E	10	4	671	1200	800	1 1/8 "	5/8 "	144
OP-LGZ100E	10	4	671	1200	800	1 1/8 "	1/2 "	150

Unit		Version			Electrical code	Compressor	Amb. temp. °C	Capacity range in [W] at evaporating temperature [°C]					Power consumption (W) at -32°C evap temp	Application range [°C]
		WA	WB	WC				-15°C	-10°C	-5°C	-0°C	+5°C		
	OP-UCGC0017R	114N2016			B	TL4G	32°C	143.1	183.4	229.3	281.2	339.2	134	43°C: -15°C to +5°C
			38°C	161.1			204.9	254.2	309.2	370.1	131			
			43°C	180.1			228.6	282.4	341.7	406.7	126			
	OP-UCGC0020R	114N2017			B	NF6.1FX2	32°C	294	364	443	532	629	236	
			38°C	323			398	483	579	684	228			
			43°C	350.6			431.7	523.4	625.6	738.2	220			
	OP-UCGC0025R	114N2019			B	NF7.3FX2	32°C	341	419	507.1	605.4	713.6	290	
			38°C	368.9			453.2	548.4	654.6	771.3	281			
			43°C	396.9			487.4	589.7	703.8	829	273			
	OP-HCGC0033R	114N2021	114N2022		B	NF11FX	32°C	429	535	656	790	937	403	
				38°C			465	580	709	854	1013	392		
				43°C			501.3	624.13	763.27	918.43	1088.6	382		
OP-UCGC0050R	114N2023	114N2024		B	SC18G	32°C	665.6	836.7	1024	1229	1450	632		
			38°C			726	908.2	1111	1335	1578	620			
			43°C			786.4	979.7	1198	1441	1707	608			

Test condition: RGT @ 18°C

**Electrical code**

**B** Compressor 115 V/1 phase/60 Hz, fan 115 V/1 phase/60 Hz

**Version**

**WA:** wholesale model power cord

**WB:** wholesale model power cord, receiver

**WC:** wholesale model BX, receiver

Model	Receiver volume [L]	Fig.	Dimensions [mm]					Weight [kg]
			Height H [mm]	Width W [mm]	Length D [mm]	Suction line	Liquid line	
OP-UCGC0017R	-	1	229	279	356	3/8" F	1/4" F	12
OP-UCGC0020R	-	1	229	279	356	3/8" F	1/4" F	12
OP-UCGC0025R	0.8	2	231	343	432	3/8" F	1/4" F	17
OP-HCGC0033R	0.8	2	259	343	432	3/8" F	1/4" F	18
OP-UCGC0050R	0.8	2	300	343	432	3/8" F	1/4" F	24

**Electrical characteristics - single phase**

Model	Wiring diagram	MCA [A] 115 V/ 1 phase	MCA [A] 230 V/ 1 phase
OP-UCHC0020R	119-3987	5.1	
OP-UCHC0025R	119-3987	6.2	
OP-UCHC0033R	119-3987	7.6	
OP-UCHC0050R	119-3993 (115V) 119-3995 (230V)	11.6	4.2
OP-LCHC0060R	119-3983 (115V) 119-3990 (230V)	13.9	6.3
OP-UCGC0017R	119-3987	4.1	
OP-UCGC0020R	119-3987	6.1	
OP-UCGC0025R	119-3987	6.4	
OP-HCGC0033R	119-3995	11.7	
OP-UCGC0050R	119-3992	13.4	
OP-LCZ022E	191U601500		12.2
OP-LCZ028E	191U601500		19.9
OP-LCZ044E	191U601500		33
OP-LCZ050E	191U601500		40.2

**Electrical characteristics - 3phases**

Model	Wiring diagram	MCA [A] 230V/3P	MCA [A] 460V/3P
OP-LCZ022E	191U601600 (230V) 191U601700 (460V)	9.5	6
OP-LCZ028E	191U601600 (230V) 191U601700 (460V)	14.4	7.5
OP-LCZ044E	191U601600 (230V) 191U601700 (460V)	27.7	9.5
OP-LCZ050E	191U601600 (230V) 191U601700 (460V)	29.4	12
OP-LGZ088E	191U601610 (230V) 191U601710 (460V)	41.3	22
OP-LGZ100E	191U601610 (230V) 191U601710 (460V)	54	27

**Spare parts**

Model	Condenser	Receiver	Service valve			Fan motor			Filter drier	Sight glass	Pressure control
			Suction		Discharge	115V	230V	460V			
			Elect Code B	Elect Code N							
OP-UCHC0020R			119-3610		119-3609	119-5662					
OP-UCHC0025R			119-3610		119-3611	119-5662					
OP-UCHC0033R			119-3978		119-3611	119-5662					
OP-UCHC0050R			119-3610	119-3978	119-3611	119-5663	119-5665				
OP-LCHC0060R			119-3978	119-3978	119-3611	119-5663	119-5665				
OP-UCGC0017R			119-3610		119-3609	119-5661					
OP-UCGC0020R			119-3610		119-3609	119-5662					
OP-UCGC0025R			119-3610		119-3611	119-5662					
OP-HCGC0033R			119-3610		119-3611	119-5662					
OP-UCGC0050R			119-3978		119-3611	119-5663					
OP-LCZ022E	191U131500	118U6009		6804531V15 *	6804501V06		191U137020	191U137520		060-518466	
OP-LCZ028E	191U131600	118U6009		6804531V15 *	6804501V06		191U137120	191U137620		060-518466	
OP-LCZ044E	191U131900	118U6011		6804505V07 *	6804502V09		191U137320	191U137820	023Z5044	014-0173	
OP-LCZ050E	191U131900	118U6011		6804505V07 *	6804502V09		191U137320	191U137820		060-518466	
OP-LGZ088E	191U131000	118U6012		6804502V02 *	6804503V04		191U137320	191U137820		060-512566	
OP-LGZ100E	191U131000	118U6012		6804506V02 *	6804503V04		191U137320	191U137820		060-512566	

\* for electrical codes N, Q and R

Unit	Code (basic version)	Electrical code	Compressor	Amb. temp. °C	Capacity range in [W] at evaporating temperature [°C]					Power consumption (W) at -32°C evap temp	Application range [°C]	
					-15°C	-10°C	-5°C	0°C	+5°C			
	OP-HCZ018E	114N3001	N	MTZ018	35°C	1717	2223	2772	3362	3986	1656	43°C: -15°C to +5°C 48°C: -15°C to 0°C
		114N3002	Q		43°C	1344	1772	2238	2737	3268	1685	
		114N3003	R		48°C	1113	1492	1904	2347		1686	
	OP-HCZ022E	114N3006	N	MTZ022	35°C	2523	3174	3888	4660	5480	1901	
		114N3007	Q		43°C	2038	2582	3180	3824	4510	1984	
		114N3008	R		48°C	1722	2197	2720	3286		2018	
	OP-HCZ028E	114N3011	N	MTZ028	35°C	3508	4356	5295	6316	7417	2457	
		114N3012	Q		43°C	2907	3635	4437	5310	6251	2586	
		114N3013	R		48°C	2516	3165	3879	4658	5499	2649	
	OP-HCZ032E	114N3016	N	MTZ032	35°C	3836	4796	5866	7036	8301	2713	
		114N3017	Q		43°C	3193	4005	4906	5894	6962	2856	
		114N3018	R		48°C	2783	3504	4301	5175	6124	2921	
	OP-HCZ036E	114N3021	N	MTZ036	35°C	4292	5377	6570	7864	9247	3045	
		114N3022	Q		43°C	3508	4434	5454	6561	7742	3164	
		114N3023	R		48°C	3018	3845	4755	5742		3230	
	OP-HCZ040E	114N3026	N	MTZ040	35°C	4886	6095	7417	8844	10359	3447	
		114N3027	Q		43°C	4011	5039	6164	7377	8668	3606	
		114N3028	R		48°C	3469	4381	5380	6460		3684	
OP-HCZ044E	114N3031	N	MTZ044	35°C	5608	7014	8557	10214	11959	3893		
	114N3032	Q		43°C	4501	5711	7026	8422	9885	3919		
	114N3033	R		48°C	3833	4904	6062	7290	8572	3903		
OP-HCZ050E	114N3036	N	MTZ050	35°C	6557	8116	9809	11609	13481	4499		
	114N3037	Q		43°C	5310	6653	8092	9608	11177	4547		
	114N3038	R		48°C	4554	5746	7016	8344		4548		
	OP-HGZ064E	114N3046	N	MTZ064	35°C	8940	11030	13306	15748	18328	5651	43°C: -15°C to +5°C 48°C: -15°C to 0°C
		114N3047	Q		43°C	7345	9173	11147	13243	15445	5724	
		114N3048	R		48°C	6352	8002	9770	11642		5731	
	OP-HGZ072E	114N3051	Q	MTZ072	35°C	10172	12489	15033	17774	20692	6380	
		114N3052	R		43°C	8392	10427	12642	15017	17523	6522	
			48°C		7286	9128	11121	13250		6567		
	OP-HGZ080E	114N3055	Q	MTZ080	35°C	11255	13716	16371	19194	22148	7439	
		114N3056	R		43°C	9318	11457	13744	16147	18644	7579	
			48°C		8105	10024	12061			7634		
	OP-HGZ100E	114N3059	Q	MTZ100	35°C	11183	13898	16871	20086	23516	8148	
		114N3060	R		43°C	8979	11288	13821	16561	19495	8406	
			48°C		7625	9674	11924			8516		
	OP-HGZ125E	114N3063	Q	MTZ125	35°C	15047	18443	22197	26280	30688	10521	
		114N3064	R		43°C	12265	15173	18387	21899	25684	10947	
			48°C		10519	13116	15987	19129		11112		
	OP-HGZ144E	114N3067	Q	MTZ144	35°C	17195	20913	24979	29377	34067	12158	
		114N3068	R		43°C	14012	17170	20635	24377	28381	12636	
			48°C		12015	14809	17882			12848		
OP-HGZ160E	114N3071	Q	MTZ160	35°C	18742	22735	27103	31832	36883	13714		
	114N3072	R		43°C	15341	18750	22490	26529	30852	14150		
		48°C		13220	16253	19584	23201		14381			

**Test condition:** SH 10 K

**Electrical code**

- N** Compressor 230V/1 phase/60 Hz, fan 230 V/1 phase/60 Hz
- Q** Compressor 208-230V/3 phase/60 Hz, fan 230 V/1 phase/60 Hz
- R** Compressor 460 V/3 phase/60 Hz, fan 460 V/1 phase/60 Hz

Model	Receiver volume [L]	Fig.	Dimensions [mm]					Weight [kg]
			Height H [mm]	Width W [mm]	Length D [mm]	Suction line	Liquid line	
OP-HCZ018E	3.1	3	442	700	500	1/2 "	3/8 "	45
OP-HCZ022E	3.1	3	442	700	500	1/2 "	3/8 "	54
OP-HCZ028E	6	3	548	800	600	1/2 "	1/2 "	61
OP-HCZ032E	8	3	548	800	600	5/8 "	1/2 "	69
OP-HCZ036E	8	3	548	800	600	5/8 "	1/2 "	70
OP-HCZ040E	8	3	696	800	700	5/8 "	1/2 "	81
OP-HCZ044E	8	3	696	800	700	7/8 "	1/2 "	85
OP-HCZ050E	8	3	696	800	700	7/8 "	1/2 "	91
OP-HGZ064E	8	4	671	1200	800	7/8 "	1/2 "	119
OP-HGZ072E	14	4	671	1200	800	1 1/8 "	5/8 "	122
OP-HGZ080E	14	4	671	1200	800	1 1/8 "	5/8 "	128
OP-HGZ100E	14	4	671	1200	800	1 1/8 "	5/8 "	154
OP-HGZ125E	14	4	975	1500	870	1 1/8 "	5/8 "	225
OP-HGZ144E	14	4	975	1500	870	1 1/8 "	5/8 "	230
OP-HGZ160E	14	4	975	1500	870	1 1/8 "	5/8 "	245

Unit	Code (basic version)	Electrical code	Compressor	Amb. temp. °C	Capacity range in [W] at evaporating temperature [°C]					Power consumption (W) at -32°C evap temp	Application range [°C]	
					-15°C	-10°C	-5°C	0°C	+5°C			
	OP-HCZ018E	114N3001	N	MTZ018	35°C	1186	1560	2019	2569	3211	814	48°C: -15°C to +5°C
		114N3002	Q		43°C	952	1294	1712	2212	2796	820	
		114N3003	R		48°C	810	1129	1519	1986	2532	803	
	OP-HCZ022E	114N3006	N	MTZ022	35°C	1564	2100	2736	3478	4323	1015	
		114N3007	Q		43°C	1326	1809	2380	3043	3799	1040	
		114N3008	R		48°C	1172	1617	2144	2754	3450	1038	
	OP-HCZ028E	114N3011	N	MTZ028	35°C	2127	2874	3732	4704	5792	1301	
		114N3012	Q		43°C	1781	2477	3271	4167	5166	1335	
		114N3013	R		48°C	1562	2222	2972	3816	4756	1342	
	OP-HCZ032E	114N3016	N	MTZ032	35°C	2192	3029	3998	5100	6338	1540	
		114N3017	Q		43°C	1980	2728	3587	4562	5651	1606	
		114N3018	R		48°C	1823	2508	3292	4180	5172	1633	
OP-HCZ036E	114N3021	N	MTZ036	35°C	2851	3734	4756	5921	7234	1774		
	114N3022	Q		43°C	2392	3215	4161	5234	6438	1805		
	114N3023	R		48°C	2115	2894	3786	4796	5927	1804		
OP-HCZ040E	114N3026	N	MTZ040	35°C	3508	4443	5529	6775	8188	1984		
	114N3027	Q		43°C	2805	3708	4753	5947	7301	1980		
	114N3028	R		48°C	2407	3289	4306	5468	6784	1953		
OP-HCZ044E	114N3031	N	MTZ044	35°C	3150	4216	5511	7046	8830	2110		
	114N3032	Q		43°C	2650	3615	4784	6169	7778	2153		
	114N3033	R		48°C	2361	3254	4335	5619	7112	2149		
OP-HCZ050E	114N3036	N	MTZ050	35°C	3696	4922	6365	8035	9929	2406		
	114N3037	Q		43°C	3128	4244	5553	7062	8771	2451		
	114N3038	R		48°C	2789	3828	5045	6445	8032	2451		
	OP-HGZ064E	114N3046	N	MTZ064	35°C	5194	6897	8846	11047	13499	3060	
		114N3047	Q		43°C	4441	6016	7807	9817	12048	3141	
		114N3048	R		48°C	3968	5451	7131	9014	11098	3166	
	OP-HGZ072E	114N3051	Q	MTZ072	35°C	5906	7791	9938	12348	15025	3333	
		114N3052	R		43°C	5001	6765	8759	10987	13452	3426	
			48°C		4410	6087	7974	10080	12403	3456		
	OP-HGZ080E	114N3055	Q	MTZ080	35°C	6709	8788	11137	13760	16651	3900	
			R		43°C	5725	7662	9838	12250	14899	4009	
		48°C	5108		6946	9002	11275	13765	4050			
	OP-HGZ100E	114N3059	Q	MTZ100	35°C	6797	9220	12039	15265	18895	4334	
		114N3060	R		43°C	5488	7711	10283	13209	16496	4412	
			48°C		4696	6778	9177	11903	14963	4416		
OP-HGZ125E	114N3063	Q	MTZ125	35°C	8732	11778	15338	19420	24030	4984		
	114N3064	R		43°C	7205	9982	13203	16882	21022	5038		
		48°C		6292	8873	11856	15259	19085	5026			
OP-HGZ144E	114N3067	Q	MTZ144	35°C	11740	15140	19007	23345	28143	6783		
	114N3068	R		43°C	10062	13199	16739	20688	25044	6975		
		48°C		8993	11942	15261	18948	23009	7044			
OP-HGZ160E	114N3071	Q	MTZ160	35°C	13121	16876	21138	25910	31180	7352		
		R		43°C	11171	14656	18584	22961	27784	7507		
	114N3072	R		48°C	9920	13218	16923	21038	25564	7543		

**Test condition:** SH 10 K

**Electrical code**

- N** Compressor 230V/1 phase/60 Hz, fan 230 V/1 phase/60 Hz
- Q** Compressor 208-230V/3 phase/60 Hz, fan 230 V/1 phase/60 Hz
- R** Compressor 460 V/3 phase/60 Hz, fan 460 V/1 phase/60 Hz



Model	Receiver volume [L]	Fig.	Dimensions [mm]					Weight [kg]
			Height H [mm]	Width W [mm]	Length D [mm]	Suction line	Liquid line	
OP-HCZ018E	3.1	3	442	700	500	1/2 "	3/8 "	45
OP-HCZ022E	3.1	3	442	700	500	1/2 "	3/8 "	54
OP-HCZ028E	6	3	548	800	600	1/2 "	1/2 "	61
OP-HCZ032E	8	3	548	800	600	5/8 "	1/2 "	69
OP-HCZ036E	8	3	548	800	600	5/8 "	1/2 "	70
OP-HCZ040E	8	3	696	800	700	5/8 "	1/2 "	81
OP-HCZ044E	8	3	696	800	700	7/8 "	1/2 "	85
OP-HCZ050E	8	3	696	800	700	7/8 "	1/2 "	91
OP-HGZ064E	8	4	671	1200	800	7/8 "	1/2 "	119
OP-HGZ072E	14	4	671	1200	800	1 1/8 "	5/8 "	122
OP-HGZ080E	14	4	671	1200	800	1 1/8 "	5/8 "	128
OP-HGZ100E	14	4	671	1200	800	1 1/8 "	5/8 "	154
OP-HGZ125E	14	4	975	1500	870	1 1/8 "	5/8 "	225
OP-HGZ144E	14	4	975	1500	870	1 1/8 "	5/8 "	230
OP-HGZ160E	14	4	975	1500	870	1 1/8 "	5/8 "	245

Electrical characteristics - 230V/1phase

Model	Wiring diagram	MCA [A] 115 V/ 1 phase	MCA [A] 230 V/ 1 phase
OP-UCGC0017R	119-3987	4.1	
OP-UCGC0020R	119-3987	6.1	
OP-UCGC0025R	119-3987	6.4	
OP-HCGC0033R	119-3987	11.6	
OP-UCGC0050R	119-3992	13.7	
OP-HCZ018E	191U601500		12.1
OP-HCZ022E	191U601500		16.3
OP-HCZ028E	191U601500		25.9
OP-HCZ032E	191U601500		27.2
OP-HCZ036E	191U601500		30.3
OP-HCZ040E	191U601500		33.9
OP-HCZ044E	191U601500		31.2
OP-HCZ050E	191U601500		35.7
OP-HGZ064E	191U601510		48.2

Electrical characteristics - 3phases

Unit	Wiring diagram	MCA [A] 220V/3P	MCA [A] 460V/3P
OP-HCZ018E	191U601600 (230V) 191U601700 (460V)	8.5	
OP-HCZ022E	191U601600 (230V) 191U601700 (460V)	11	
OP-HCZ028E	191U601600 (230V) 191U601700 (460V)	17.8	
OP-HCZ032E	191U601600 (230V) 191U601700 (460V)	19.6	
OP-HCZ036E	191U601600 (230V) 191U601700 (460V)	18.7	
OP-HCZ040E	191U601600 (230V) 191U601700 (460V)	23.2	
OP-HCZ044E	191U601600 (230V) 191U601700 (460V)	23.2	
OP-HCZ050E	191U601600 (230V) 191U601700 (460V)	25.9	
OP-HGZ064E	191U601600 (230V) 191U601700 (460V)	33	
OP-HGZ072E	191U601610 (230V) 191U601710 (460V)	34.8	17.4
OP-HGZ080E	191U601610 (230V) 191U601710 (460V)	35.8	19.7
OP-HGZ100E	191U601610 (230V) 191U601710 (460V)	45.6	23.2
OP-HGZ125E	191U601610 (230V) 191U601710 (460V)	55.8	27.9
OP-HGZ144E	191U601610 (230V) 191U601710 (460V)	64.7	30.6
OP-HGZ160E	191U601610 (230V) 191U601710 (460V)	70.1	35.9

**Spare parts**

Model	Condenser	Receiver	Service valve		Fan motor			Filter drier	Sight glass	Pressure control
			Suction	Discharge	115V	230V	460V			
OP-UCGC0017R	119-3176		119-3610	119-3609	119-3250					
OP-UCGC0020R	119-3169		119-3610	119-3609	119-3256					
OP-UCGC0025R	119-3169	118U0520	119-3610	119-3609	119-3256					
OP-HCGC0033R	119-3170	118U0520	119-3610	119-3611	119-3257					
OP-UCGC0050R	119-3172	118U0520	119-3978	119-3611	119-3257					
OP-HCZ018E	191U131500	118U6009	6804501V06	6804501V06		191U137020	191U137520	023Z5040	014-0182	060-518466
OP-HCZ022E	191U131600	118U6009	*	6804501V06		191U137120	191U137620	023Z5040	014-0182	060-518466
OP-HCZ028E	191U131700	118U6010	**	6804501V06		191U137320	191U137820	023Z5041	014-0173	060-518466
OP-HCZ032E	191U131700	118U6011	6804502V09	6804501V06		191U137320	191U137820	023Z5041	014-0173	060-518466
OP-HCZ036E	191U131800	118U6011	6804502V09	6804501V06		191U137320	191U137820	023Z5041	014-0173	060-518466
OP-HCZ040E	191U131900	118U6011	6804503V04	6804501V06		191U137320	191U137820	023Z5044	014-0173	060-518466
OP-HCZ044E	191U132000	118U6011	6804505V07	6804502V09		191U137320	191U137820	023Z5044	014-0173	060-518466
OP-HCZ050E	191U132000	118U6011	6804505V07	6804502V09		191U137320	191U137820	023Z5044	014-0173	060-518466
OP-HGZ064E	191U131000	118U6012	6804505V07	6804503V04		191U137320	191U137820	023Z5044	014-0173	060-512566
OP-HGZ072E	191U131100	118U6013	6804505V07	6804503V04		191U137320	191U137820	023Z5045	014-0174	060-512566
OP-HGZ080E	191U131100	118U6013	6804505V07	6804503V04		191U137320	191U137820	023Z5045	014-0174	060-512566
OP-HGZ100E	191U131200	118U6013	6804506V02	6804503V04		191U137320	191U137820	023Z5045	014-0174	060-512566
OP-HGZ125E	191U131305	118U6013	6804506V02	6804504V05		191U137420	191U137920	023Z5045	014-0174	060-512566
OP-HGZ144E	191U131305	118U6013	6804506V02	6804504V05		191U137420	191U137920	023Z5045	014-0174	060-512566
OP-HGZ160E	19U131405	118U6013	6804506V02	6804504V05		191U137420	191U137920	023Z5045	014-0174	060-512566

\* HCZ022E - code Q & R, suction: 6804501V06

HCZ022E - code N, suction: 6804531V15

\*\* HCZ028E - code Q & R, suction: 6804501V06

HCZ028E - code N, suction: 6804531V15

Unit	Code (basic version)	Electrical code	Compressor	Amb. temp. °C	Capacity range in [W] at evaporating temperature [°C]					Power consumption (W) at -32°C evap temp	Application range [°C]
					-15°C	-10°C	-5°C	-0°C	+5°C		
OP-HRU015E	114N8251	N	MLZ015	35°C	3230	3914	4666	5489	6387.4	2200	43°C: -15°C to +5°C 48°C: -15°C to -10°C
	114N8252	Q		43°C	2666	3269	3927	4646	5431.3	2600	
				48°C	2290	2843				2900	
OP-HRU021E	114N8256	N	MLZ021	35°C	4750	5704	6767	7942	9227.7	2800	
	114N8257	Q		43°C	4046	4888	5832	6883	8042.6	3400	
				48°C	3583	4356				3700	
OP-HRU030E	114N8261	N	MLZ030	35°C	6887	8259	9791	11483	13334	4000	
	114N8262	Q		43°C	5841	7041	8390	9893	11554	4800	
				48°C	5152	6244				5300	
OP-HRU038E	114N8266	N	MLZ038	35°C	8322	9976	11801	13807	16013	4900	
	114N8267	Q		43°C	7069	8529	10137	11910	13866	5700	
				48°C	6224	7566				6300	
OP-HRU048E	114N8271	Q	MLZ048	35°C	11064	13000	15087	17306	19641	6700	
				43°C	9424	11075	12860	14765		7900	
				48°C	8319						
OP-HRU058E	114N8275	Q	MLZ058	35°C	13344	16295	19537	23088	26960	7100	
				43°C	11044	13611	16417	19484	22829	8300	
				48°C	9545	11862	14386	17143	20155	9200	
OP-HRU076E	114N8279	Q	MLZ076	35°C	17214	20541	24244	28328	32801	9800	
				43°C	14625	17466	20621	24120	27948	11400	
				48°C	12924	15458	18269			12500	

**Test condition:** SH 10K

**Electrical code**

- N** Compressor 230V/1 phase/60 Hz, fan 230 V/1 phase/60 Hz
- Q** Compressor 208-230V/3 phase/60 Hz, fan 230 V/1 phase/60 Hz

**QUICK REFERENCE**
**R404A/R507 MBP SCROLL**

Model	Receiver volume [L]	Fig.	Dimensions [mm]								Weight [kg]
			Height H [mm]	Height with housing H [mm]	Width W [mm]	Width with housing W [mm]	Length D [mm]	Length with housing D [mm]	Suction line	Liquid line	
OP-HRU015E	3	5	442	494	800	805	600	609	5/8"	1/2"	60
OP-HRU021E	8	5	558	590	1000	1005	700	715	5/8"	1/2"	90
OP-HRU030E	8	5	558	590	1000	1005	700	715	7/8"	1/2"	90
OP-HRU038E	10	5	671	704	1200	1204	800	805	3/4"	1/2"	118
OP-HRU048E	10	5	671	704	1200	1204	800	805	7/8"	1/2"	118
OP-HRU058E	14	5	975	1003	1500	1505	870	880	1 1/8"	5/8"	237
OP-HRU076E	14	5	975	1003	1500	1505	870	880	1 1/8"	5/8"	237

Unit	Code (basic version)	Electrical code	Compressor	Amb. temp. °C	Capacity range in [W] at evaporating temperature [°C]					Power consumption (W) at -32°C evap temp	Application range [°C]
					-15°C	-10°C	-5°C	0°C	+5°C		
OP-HRU015E	114N8251	N	MLZ015	35°C	1986	2535	3178	3910	4727	1119	48°C: -15°C to +5°C
	114N8252	Q		43°C	1762	2274	2873	3555	4316	1296	
				48°C	1616	2101	2670	3319	4043	1418	
OP-HRU021E	114N8256	N	MLZ021	35°C	2663	3461	4351	5342	6440	1497	
	114N8257	Q		43°C	2325	3089	3933	4863	5887	1721	
				48°C	2096	2839	3651	4542	5519	1867	
OP-HRU030E	114N8261	N	MLZ030	35°C	4017	5132	6427	7896	9529	2238	
	114N8262	Q		43°C	3545	4590	5802	7171	8693	2583	
				48°C	3232	4229	5384	6689	8137	2814	
OP-HRU038E	114N8266	N	MLZ038	35°C	4843	6120	7661	9445	11449	2589	
	114N8267	Q		43°C	4364	5525	6945	8602	10471	3035	
				48°C	4060	5138	6473	8041	9817	3346	
OP-HRU048E	114N8271	Q	MLZ048	35°C	6322	7986	9931	12151	14641	3284	
				43°C	5582	7099	8884	10932	13237	3847	
				48°C	5115	6532	8209	10143	12328	4241	
OP-HRU058E	114N8275	Q	MLZ058	35°C	7687	9677	11985	14615	17570	3883	
				43°C	6910	8706	10812	13236	15980	4544	
				48°C	6433	8092	10060	12341	14940	4994	
OP-HRU076E	114N8279	Q	MLZ076	35°C	9841	12264	15127	18401	22058	5251	
				43°C	8700	10963	13624	16658	20037	6136	
				48°C	7943	10102	12633	15515	18716	6733	

**Test condition:** SH 10 K

**Electrical code**

N: compressor 230V/1 phase/60 Hz, fan 230 V/1 phase/60 Hz

Q: compressor 208-230V/3 phase/60 Hz, fan 230 V/1 phase/60 Hz

Model	Receiver volume [L]	Fig.	Dimensions [mm]								Weight [kg]
			Height H [mm]	Height with housing H [mm]	Width W [mm]	Width with housing W [mm]	Length D [mm]	Length with housing D [mm]	Suction line	Liquid line	
OP-HRU015E	3	5	442	494	800	805	600	609	5/8"	1/2"	60
OP-HRU021E	8	5	558	590	1000	1005	700	715	5/8"	1/2"	90
OP-HRU030E	8	5	558	590	1000	1005	700	715	7/8"	1/2"	90
OP-HRU038E	10	5	671	704	1200	1204	800	805	3/4"	1/2"	118
OP-HRU048E	10	5	671	704	1200	1204	800	805	7/8"	1/2"	81
OP-HRU058E	14	5	975	1003	1500	1505	870	880	1 1/8"	5/8"	237
OP-HRU076E	14	5	975	1003	1500	1505	870	880	1 1/8"	5/8"	237

Unit	Code (basic version)	Electrical code	Compressor	Amb. temp. °C	Capacity range in [W] at evaporating temperature [°C]					Power consumption (W) at -32°C evap temp	Application range [°C]
					-15°C	-10°C	-5°C	0°C	+5°C		
OP-HRU015E	114N8251	N	MLZ015	35°C	3277	4050	4873	5761	6725	1800	43°C: -15°C to +5°C 48°C: -5°C to +5°C
	114N8252	Q		43°C	2965	3682	4443	5261	6148	2000	
				48°C			4172	4940	5776		
OP-HRU021E	114N8256	N	MLZ021	35°C	4962	5757	6792	8016	9388	2600	
	114N8257	Q		43°C		5258	6202	7336	8621	2900	
				48°C			5859	6940	8171		
OP-HRU030E	114N8261	N	MLZ030	35°C	6619	8241	9946	11769	13744	3600	
	114N8262	Q		43°C	6077	7527	9067	10732	12556	4200	
				48°C			8489	10050	11774		
OP-HRU038E	114N8266	N	MLZ038	35°C	8305	9888	11778	13930	16301	4100	
	114N8267	Q		43°C	7521	8968	10718	12728	14953	4800	
				48°C			10062	11978	14119		
OP-HRU048E	114N8271	Q	MLZ048	35°C	10350	12647	15182	17932	20886	5700	
				43°C		11310	13630	16148	18843	7600	
				48°C			12573	14933	17460		
OP-HRU058E	114N8275	Q	MLZ058	35°C	13185	15821	19017	22726	26895	6200	
				43°C	11579	14112	17167	20694	24644	7300	
				48°C		12945	15912	19326	23142	8000	
OP-HRU076E	114N8279	Q	MLZ076	35°C	17542	20890	24780	29169	34018	8700	
				43°C	15880	18953	22548	26629	31160	10300	
				48°C			21091	24984	29323		

**Test condition:** SH 10 K

**Electrical code**

- N Compressor 230V/1 phase/60 Hz, fan 230 V/1 phase/60 Hz
- Q Compressor 208-230V/3 phase/60 Hz, fan 230 V/1 phase/60 Hz



Model	Receiver volume [L]	Fig.	Dimensions [mm]								Weight [kg]
			Height H [mm]	Height with housing H [mm]	Width W [mm]	Width with housing W [mm]	Length D [mm]	Length with housing D [mm]	Suction line	Liquid line	
OP-HRU015E	3	5	442	494	800	805	600	609	5/8"	1/2"	60
OP-HRU021E	8	5	558	590	1000	1005	700	715	5/8"	1/2"	90
OP-HRU030E	8	5	558	590	1000	1005	700	715	7/8"	1/2"	90
OP-HRU038E	10	5	671	704	1200	1204	800	805	3/4"	1/2"	118
OP-HRU048E	10	5	671	704	1200	1204	800	805	7/8"	1/2"	81
OP-HRU058E	14	5	975	1003	1500	1505	870	880	1 1/8"	5/8"	237
OP-HRU076E	14	5	975	1003	1500	1505	870	880	1 1/8"	5/8"	237

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

Model	Wiring diagram	MCA [A] 230 V/ 1 phase
OP-HRU015E	119-7201	19
OP-HRU021E	119-7201	20
OP-HRU030E	119-7201	35
OP-HRU038E	119-7201	41

**Electrical characteristics - 3phases**

Unit	Wiring diagram	MCA [A] 220V/3P
OP-HRU015E	118R0050	13
OP-HRU021E	118R0050	15
OP-HRU030E	118R0050	25
OP-HRU038E	118R0050	28
OP-HRU048E	118R0050	34.8
OP-HRU058E	118R0050	45
OP-HRU076E	118R0050	51

Spare parts (components)

Unit	Condenser	Receiver	Fan motor	Weatherproof Housing	Filter drier Type	Sight glass type	Pressure control type
			230Volts				
OP-HRU015E	118U0162	118U6009	7605518	119-7588	023Z5040	014-0172	060-126466
OP-HRU021E	191U130600	118U6011	191U137120	119-7586	023Z5041	014-0173	060-126466
OP-HRU030E	191U130700	118U6011	191U137120	119-7586	023Z5041	014-0173	060-126466
OP-HRU038E	191U131000	118U6012	7605524	119-7584	023Z5044	014-0173	060-126466
OP-HRU048E	191U131200	118U6012	7605524	119-7584	023Z5044	014-0173	060-126466
OP-HRU058E	191U131305	118U6013	191U137420	119-7582	023Z5045	014-0174	060-126466
OP-HRU076E	191U131305	118U6013	191U137420	119-7582	023Z5045	014-0174	060-126466

R404A/R507

R134a

R407C

R22

Unit	Code (basic version)	Electrical code	Compressor	Amb. temp. °C	Capacity range in [W] at evaporating temperature [°C]					Power consumption (W) at -32°C Evap temp	Application range [°C]	
					-15°C	-10°C	-5°C	0°C	+5°C			
	OP-HCM018E	114N5001	N	MT018	35°C	1599	2125	2731	3411	4161	1207	48°C: -15°C to +5°C
		114N5002	Q		43°C	1354	1811	2336	2926	3578	1268	
		114N5003	R		48°C	1208	1617	2087	2619	3206	1303	
	OP-HCM022E	114N5006	N	MT022	35°C	2375	3128	3962	4874	5858	1554	
		114N5007	Q		43°C	1954	2640	3397	4219	5105	1606	
		114N5008	R		48°C	1693	2334	3038	3804	4626	1626	
	OP-HCM028E	114N5011	N	MT028	35°C	3749	4767	5889	7112	8433	2180	
		114N5012	Q		43°C	3224	4167	5200	6322	7527	2270	
		114N5013	R		48°C	2886	3779	4752	5807	6938	2316	
	OP-HCM032E	114N5016	N	MT032	35°C	3978	5086	6332	7717	9239	2535	
		114N5017	Q		43°C	3433	4461	5612	6888	8286	2656	
		114N5018	R		48°C	3122	4096	5183	6386	7702	2727	
	OP-HCM036E	114N5021	N	MT036	35°C	4784	6020	7365	8818	10369	2857	
		114N5022	Q		43°C	4099	5249	6496	7832	9254	3026	
		114N5023	R		48°C	3663	4755	5935	7197	8535	3131	
OP-HCM040E	114N5026	N	MT040	35°C	5163	6540	8068	9752	11593	3254		
	114N5027	Q		43°C	4422	5748	7217	8829	10588	3438		
	114N5028	R		48°C	3959	5252	6681	8248	9954	3527		
OP-HCM044E	114N5031	N	MT044	35°C	5236	6626	8218	10009	11994	3320		
	114N5032	Q		43°C	4599	5839	7257	8849	10613	3508		
	114N5033	R		48°C	4220	5357	6658	8120	9741	3593		
OP-HCM050E	114N5036	N	MT050	35°C	5748	7269	9037	11060	13334	3590		
	114N5037	Q		43°C	4927	6309	7918	9756	11826	3803		
	114N5038	R		48°C	4419	5707	7209	8928	10865	3915		
	OP-HGM064E	114N5046	N	MT064	35°C	7687	9847	12292	15020	18030	4661	
		114N5047	Q		43°C	6764	8750	10986	13478	16216	4955	
		114N5048	R		48°C	6259	8124	10219	12550	15112	5098	
	OP-HGM072E	114N5051	Q	MT072	35°C	8650	11053	13729	16670	19867	5118	
		114N5052	R		43°C	7689	9895	12335	15007	17898	5569	
			48°C		7188	9254	11531	14017	16705	5890		
	OP-HGM080E	114N5055	Q	MT080	35°C	9712	12385	15344	18572	22059	5852	
			R		43°C	8627	11077	13772	16699	19847	6380	
		48°C	8048		10342	12855	15580	18498	6753			
	OP-HGM100E	114N5059	Q	MT100	35°C	11146	14195	17654	21527	25800	7009	
		114N5060	R		43°C	9528	12333	15506	19041	22932	7341	
			48°C		8674	11311	14285	17595	7551			
	OP-HGM125E	114N5063	Q	MT125	35°C	15353	19357	23868	28865	34337	9120	
		114N5064	R		43°C	13392	16991	21028	25493	30370	9659	
			48°C		12252	15572	19290	23402	27886	9946		
OP-HGM144E	114N5067	Q	MT144	35°C	17082	21424	26289	31661	37500	10338		
	114N5068	R		43°C	14844	18715	23039	27790	32946	10909		
		48°C		13555	17099	21052	25395	30107	11210			
OP-HGM160E	114N5071	Q	MT160	35°C	18979	23775	29164	35133	41640	11602		
		R		43°C	16560	20849	25657	30954	36721	12234		
	48°C			19083	23491	28349		12569				

**Test condition:** SH 10 K

**Electrical code**

- N** Compressor 230V/1 phase/60 Hz, fan 230 V/1 phase/60 Hz
- Q** Compressor 208-230V/3 phase/60 Hz, fan 230 V/1 phase/60 Hz
- R** Compressor 460 V/3 phase/60 Hz, fan 460V/1 phase/60 Hz

Model	Receiver volume [L]	Fig.	Dimensions [mm]					Weight [kg]
			Width W [mm]	Length D [mm]	Height H [mm]	Suction line	Liquid line	
OP-HCM018E	3.1	3	700	500	442	1/2 "	3/8 "	45
OP-HCM022E	3.1	3	700	500	442	1/2 "	3/8 "	54
OP-HCM028E	6	3	800	600	548	1/2 "	1/2 "	61
OP-HCM032E	8	3	800	600	548	5/8 "	1/2 "	69
OP-HCM036E	8	3	800	600	548	5/8 "	1/2 "	70
OP-HCM040E	8	3	800	700	696	5/8 "	1/2 "	81
OP-HCM044E	8	3	800	700	696	7/8 "	1/2 "	85
OP-HCM050E	8	3	800	700	696	7/8 "	1/2 "	91
OP-HGM064E	8	4	1200	800	671	7/8 "	1/2 "	119
OP-HGM072E	14	4	1200	800	671	1 1/8 "	5/8 "	122
OP-HGM080E	14	4	1200	800	671	1 1/8 "	5/8 "	128
OP-HGM100E	14	4	1200	800	671	1 1/8 "	5/8 "	154
OP-HGM125E	14	4	1500	870	975	1 1/8 "	5/8 "	225
OP-HGM144E	14	4	1500	870	975	1 1/8 "	5/8 "	230
OP-HGM160E	14	4	1500	870	975	1 1/8 "	5/8 "	245

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

Model	Wiring diagram	MCA [A] 230 V/ 1 phase
OP-HCM018E	191U601500	12.1
OP-HCM022E	191U601500	16.4
OP-HCM028E	191U601500	25.9
OP-HCM032E	191U601500	27.3
OP-HCM036E	191U601500	30.4
OP-HCM040E	191U601500	34
OP-HCM044E	191U601500	31.3
OP-HCM050E	191U601500	35.7
OP-HGM064E	191U601510	48.3

**Electrical characteristics - 3phase**

Unit	Wiring diagram	MCA [A] 220V/3P	MCA [A] 440V/3P
OP-HCM018E	191U601600 (230V) 191U601700 (460V)	8.5	4.7
OP-HCM022E	191U601600 (230V) 191U601700 (460V)	11	6
OP-HCM028E	191U601600 (230V) 191U601700 (460V)	17.9	8.5
OP-HCM032E	191U601600 (230V) 191U601700 (460V)	19.7	8.9
OP-HCM036E	191U601600 (230V) 191U601700 (460V)	18.8	9.8
OP-HCM040E	191U601600 (230V) 191U601700 (460V)	23.2	10.7
OP-HCM044E	191U601600 (230V) 191U601700 (460V)	23.2	10.3
OP-HCM050E	191U601600 (230V) 191U601700 (460V)	25.9	12.5
OP-HGM064E	191U601610 (230V) 191U601710 (460V)	33.1	17
OP-HGM072E	191U601610 (230V) 191U601710 (460V)	34.9	17.4
OP-HGM080E	191U601610 (230V) 191U601710 (460V)	35.8	19.7
OP-HGM100E	191U601610 (230V) 191U601710 (460V)	45.6	23.2
OP-HGM125E	191U601610 (230V) 191U601710 (460V)	55.8	27.9
OP-HGM144E	191U601610 (230V) 191U601710 (460V)	64.7	30.6
OP-HGM160E	191U601610 (230V) 191U601710 (460V)	70.1	35.9

**Spare parts (components)**

Unit	Condenser	Receiver	Rotalock valve		Fan motor		Filter drier	Sight glass	Pressure control
			Suction	Discharge	230V	460V			
OP-HCM018E	191U131500	118U6009	6804501V06	6804501V06	191U137020	191U137520	023Z5005	014-0035	060-518466
OP-HCM022E	191U131600	118U6009	6804501V06	6804501V06	191U137120	191U137620	023Z5005	014-0035	060-518466
OP-HCM028E	191U131700	118U6010	*	6804501V06	191U137320	191U137820	023Z5006	014-0025	060-518466
OP-HCM032E	191U131700	118U6011	**	6804501V06	191U137320	191U137820	023Z5006	014-0025	060-518466
OP-HCM036E	191U131800	118U6011	6804502V09	6804501V06	191U137320	191U137820	023Z5006	014-0025	060-518466
OP-HCM040E	191U131900	118U6011	6804502V09	6804501V06	191U137320	191U137820	023Z5009	014-0025	060-518466
OP-HCM044E	191U132000	118U6011	6804502V09	6804501V06	191U137320	191U137820	023Z5009	014-0025	060-518466
OP-HCM050E	191U132000	118U6011	6804502V09	6804501V06	191U137320	191U137820	023Z5009	014-0025	060-518466
OP-HGM064E	191U131000	118U6012	6804505V07	6804503V04	191U137320	191U137820	023Z5009	014-0025	060-512566
OP-HGM072E	191U131100	118U6013	6804505V07	6804503V04	191U137320	191U137820	023Z5010	014-0026	060-512566
OP-HGM080E	191U131100	118U6013	6804506V02	6804503V04	191U137320	191U137820	023Z5010	014-0026	060-512566
OP-HGM100E	191U131200	118U6013	6804506V02	6804503V04	191U137320	191U137820	023Z5010	014-0026	060-512566
OP-HGM125E	191U131305	118U6013	6804506V02	6804504V05	191U137420	191U137920	023Z5010	014-0026	060-512566
OP-HGM144E	191U131305	118U6013	6804506V02	6804504V05	191U137420	191U137920	023Z5010	014-0026	060-512566
OP-HGM160E	191U131405	118U6013	6804506V02	6804504V05	191U137420	191U137920	023Z5010	014-0026	060-512566

\* HCM022E - code Q & R , suction: 6804501V06

HCM022E - code N , suction: 6804531V15

\*\* HCM028E - code Q & R, suction: 6804501V06

HCM028E - code N, suction: 6804531V15

Figure 1

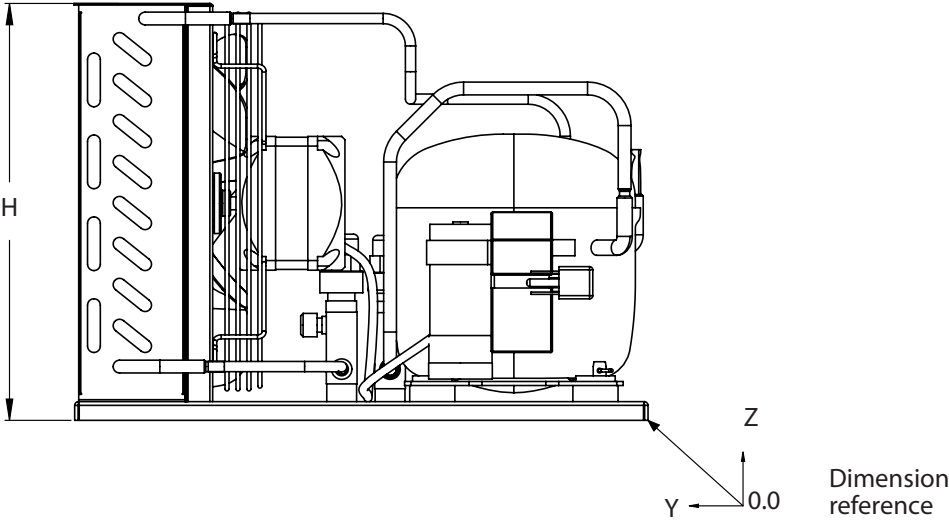
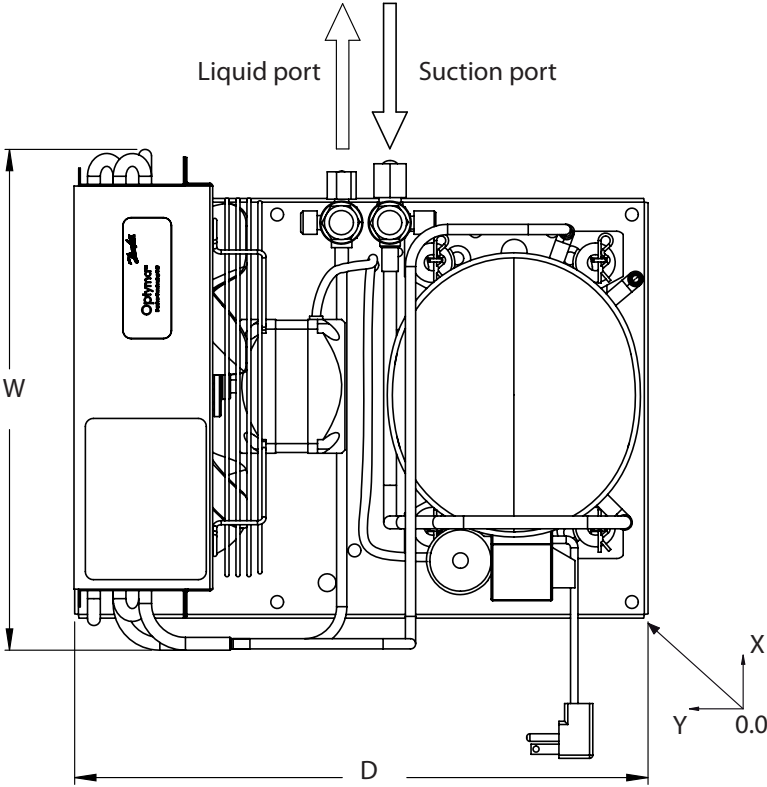




Figure 2

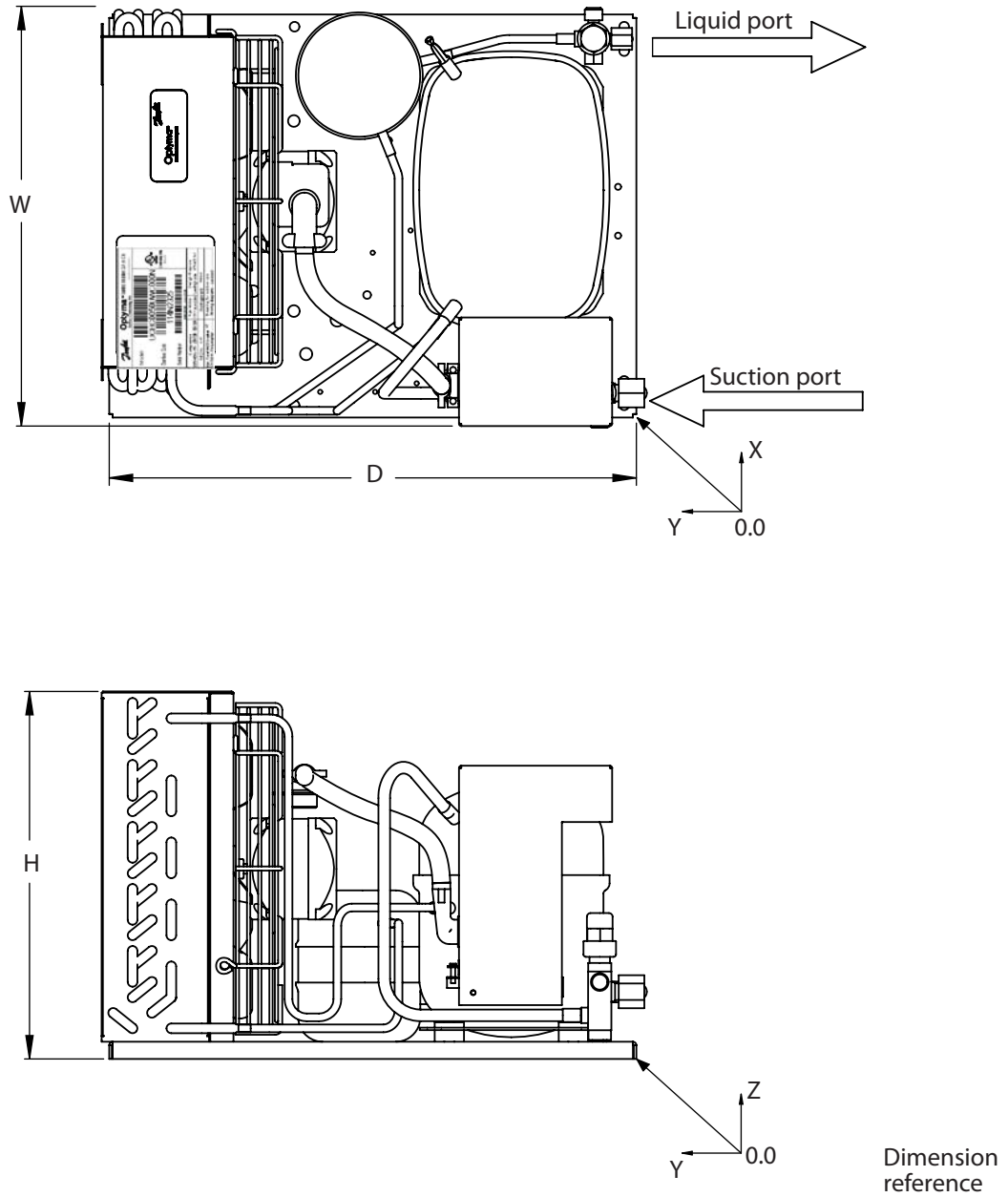


Figure 3

HCM - LCZ - HCZ

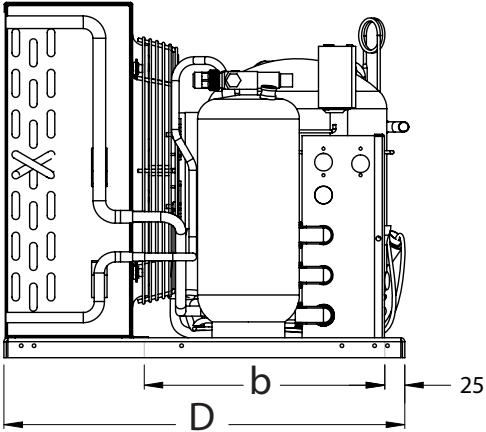
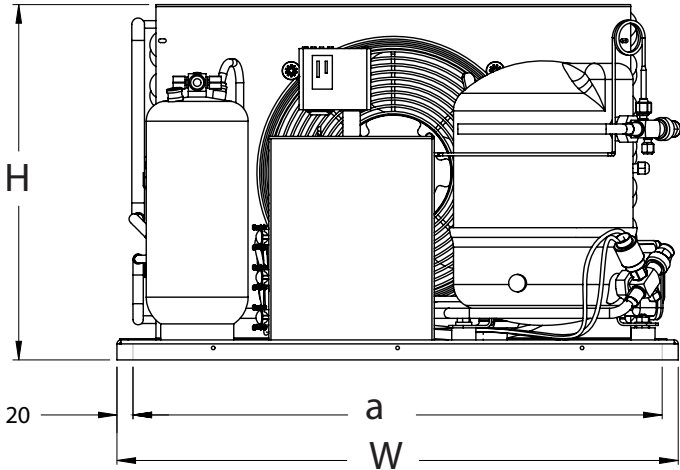


Figure 4

HGM - LGZ - HGZ

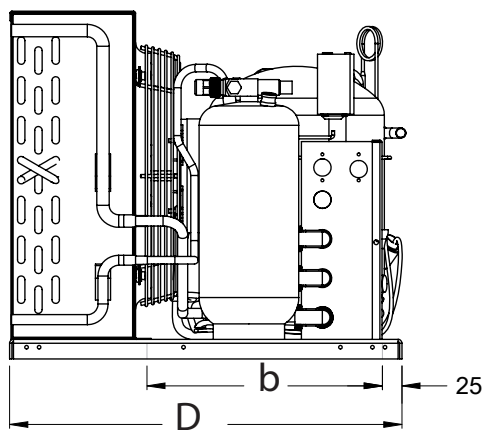
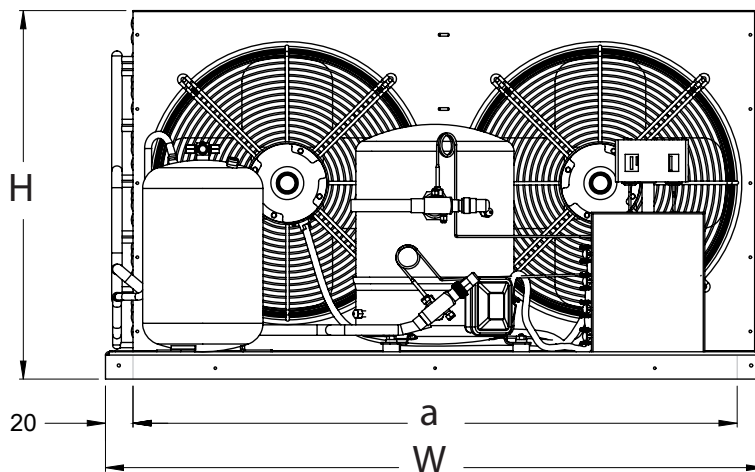
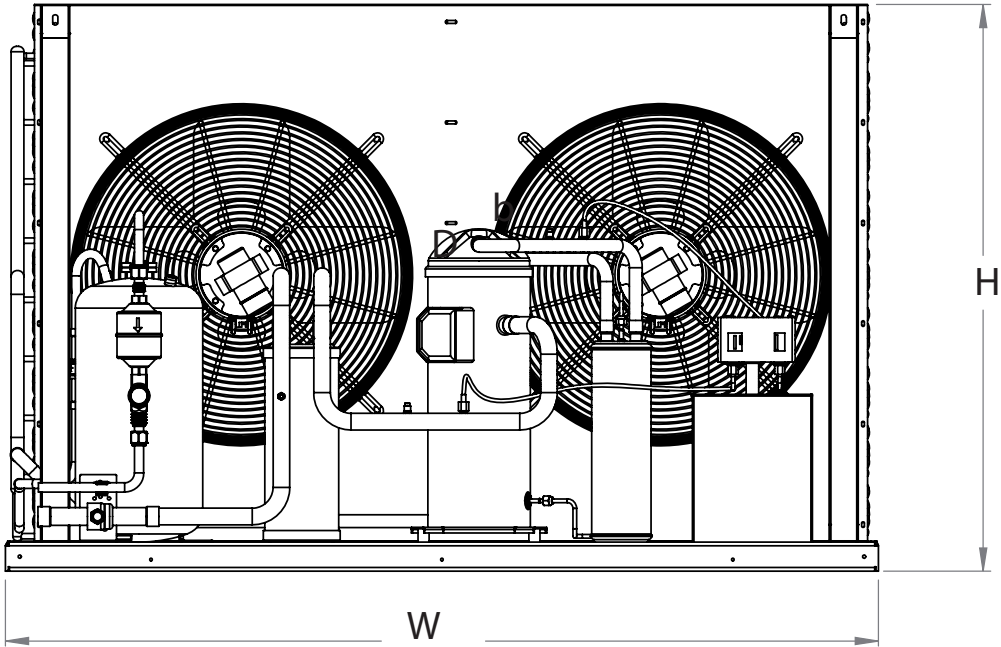
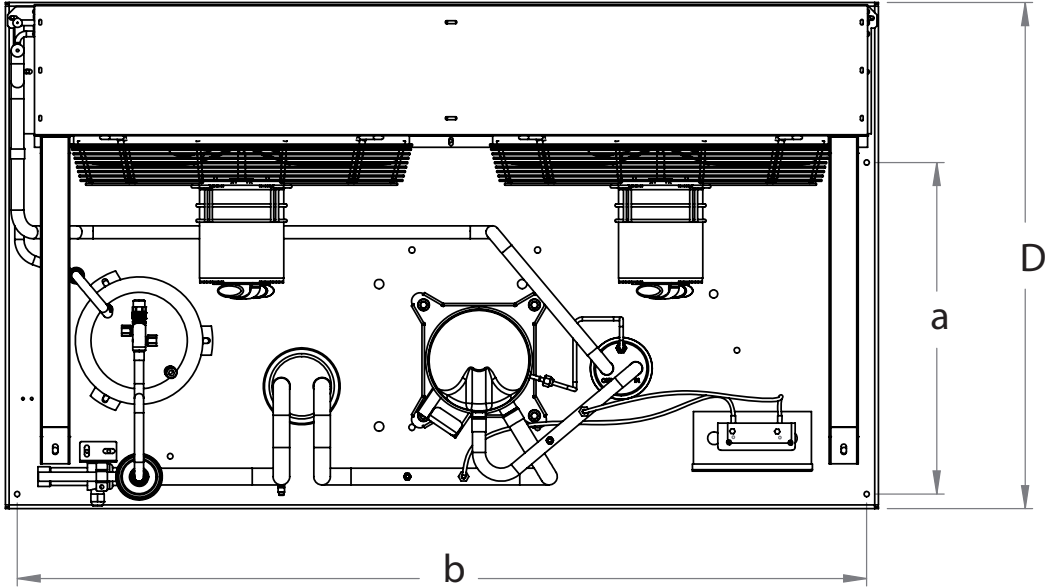
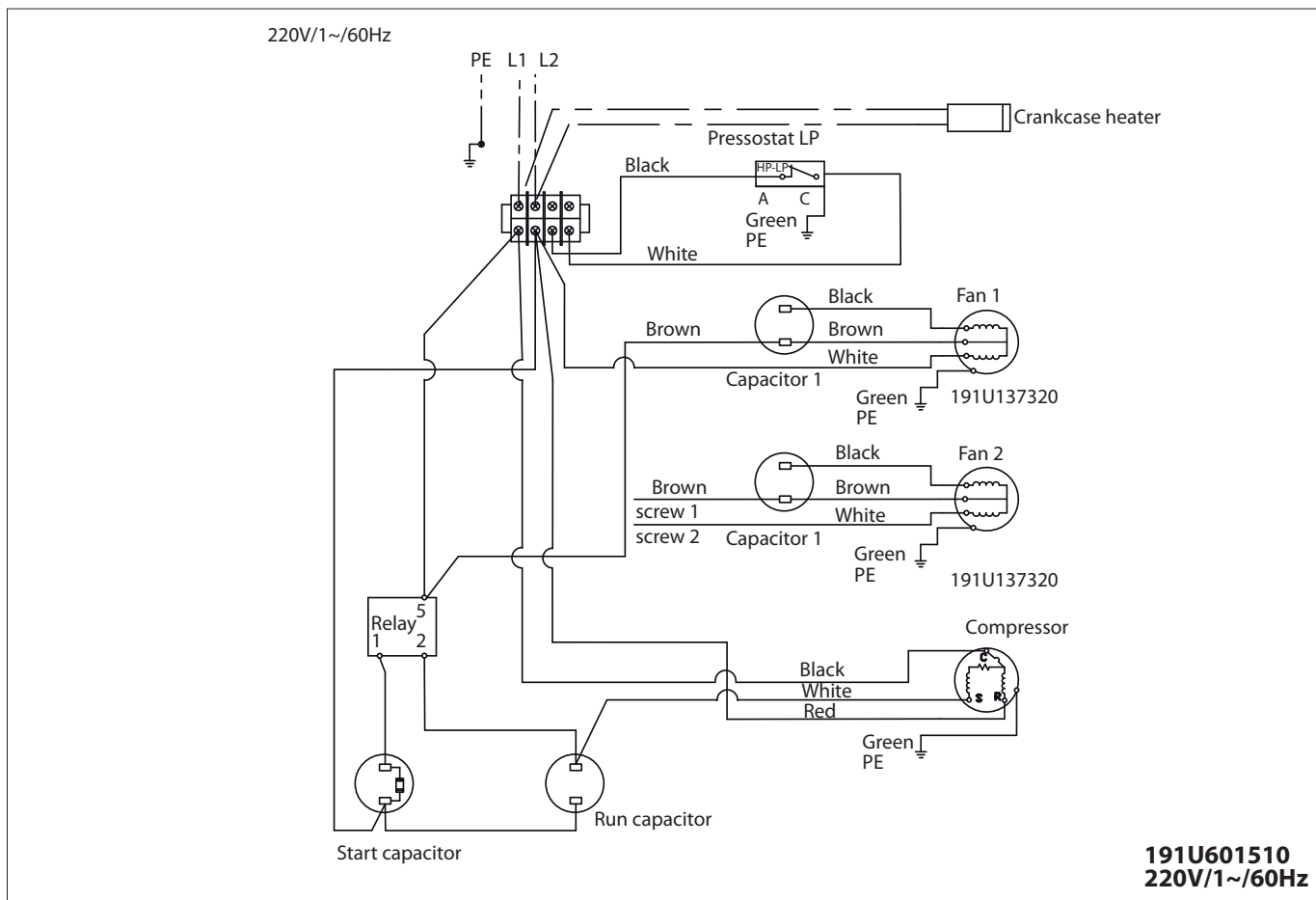
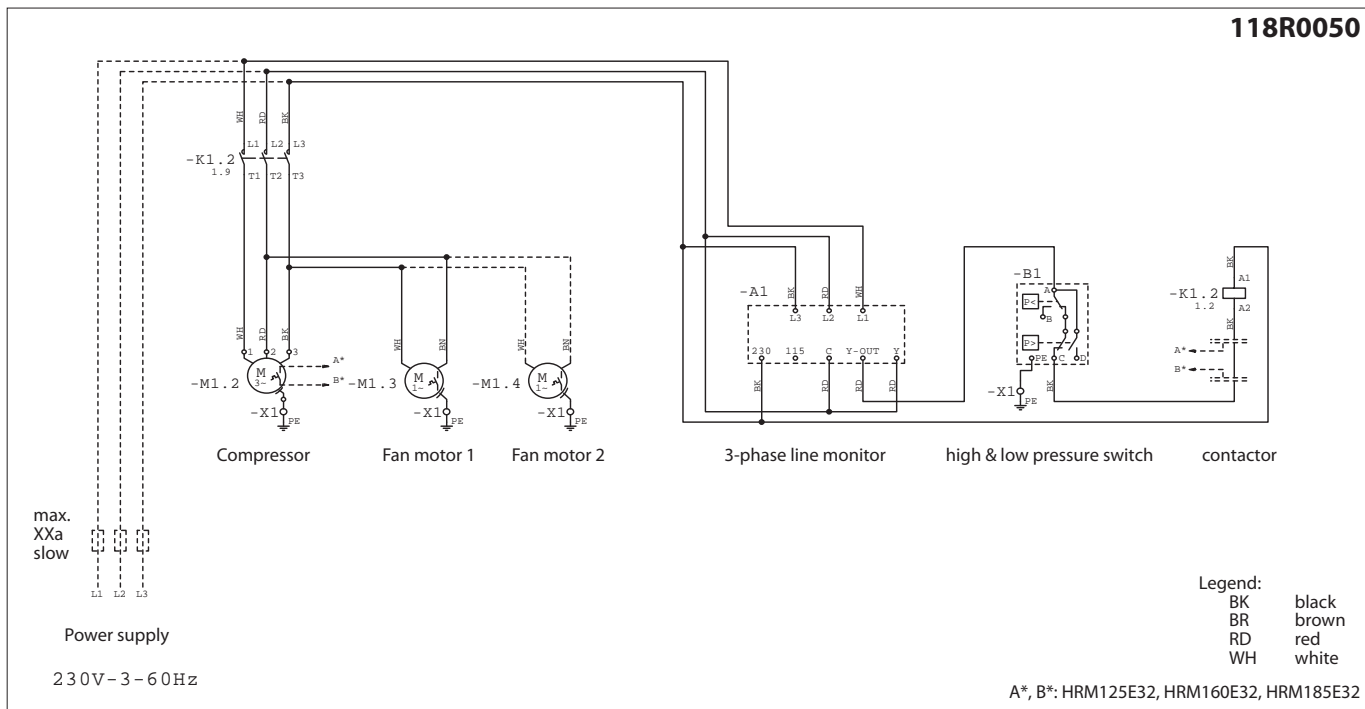
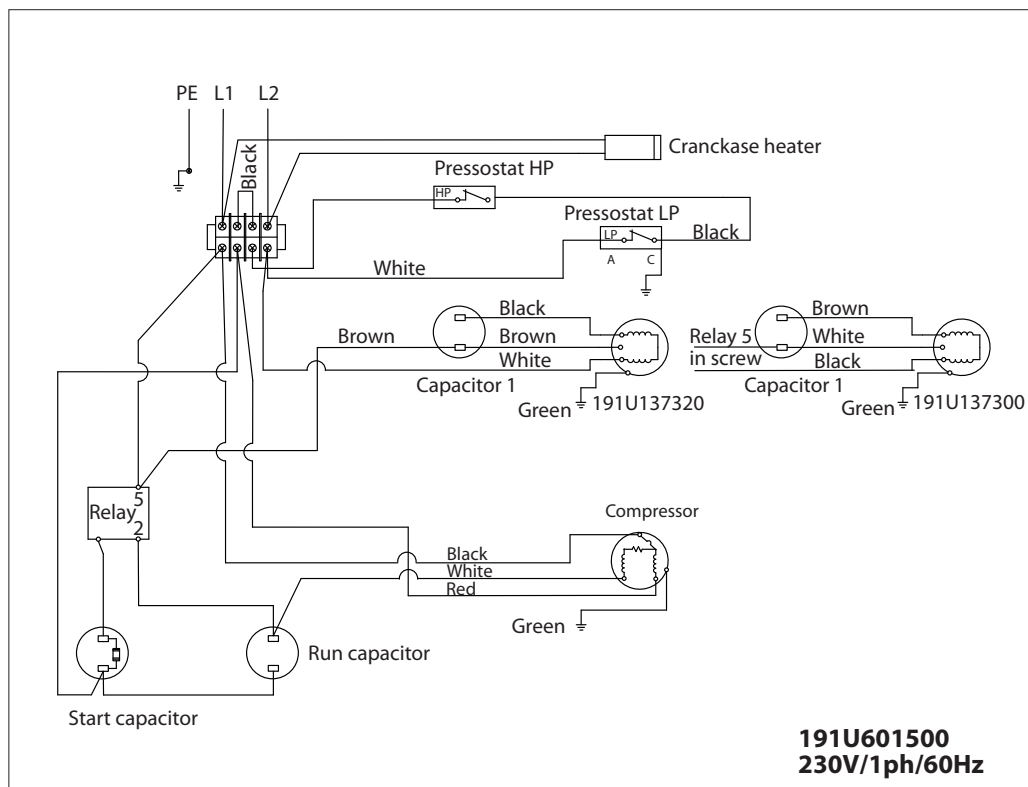
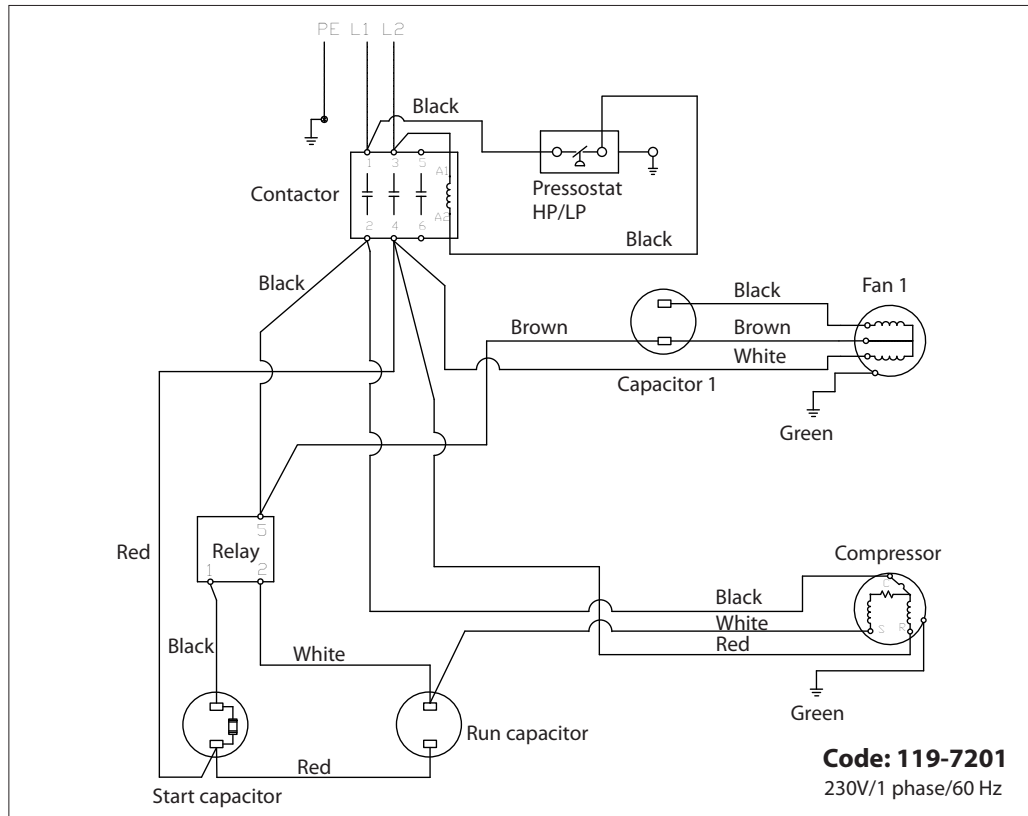


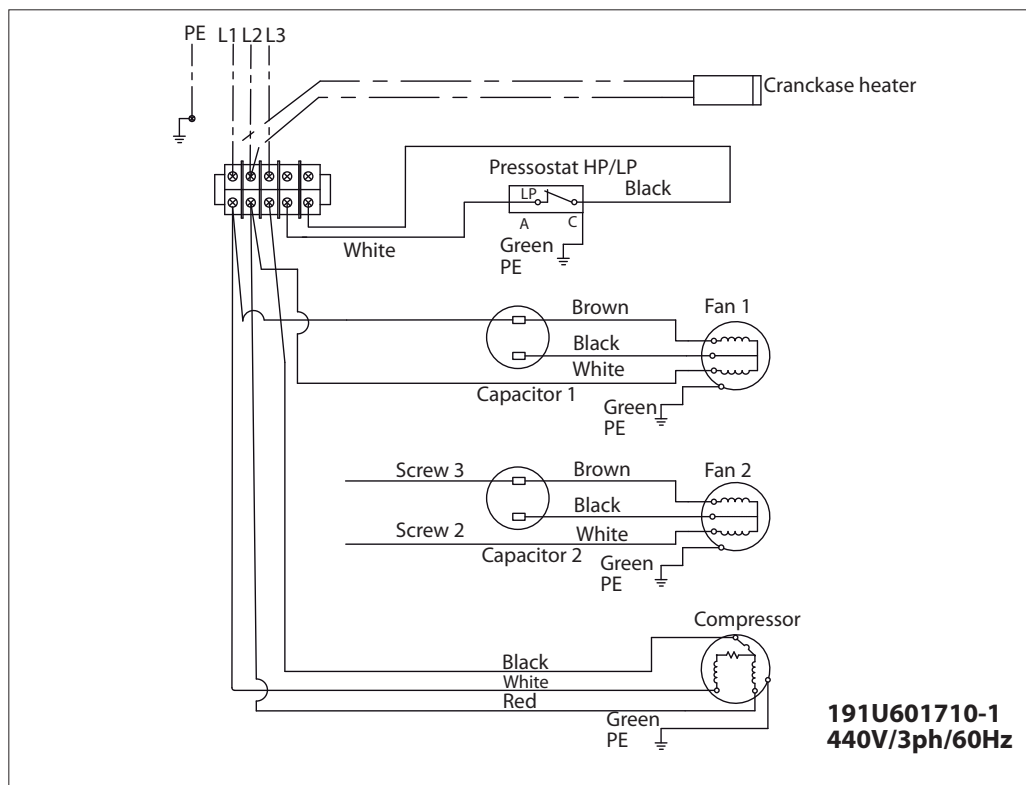
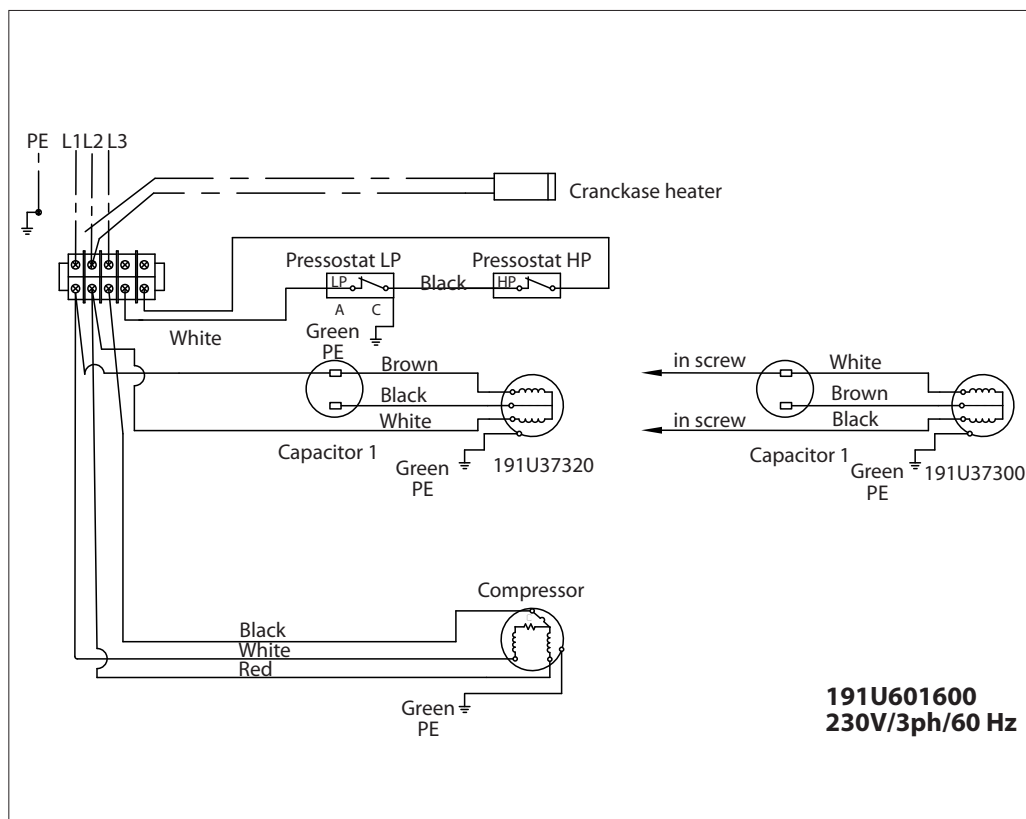
Figure 5

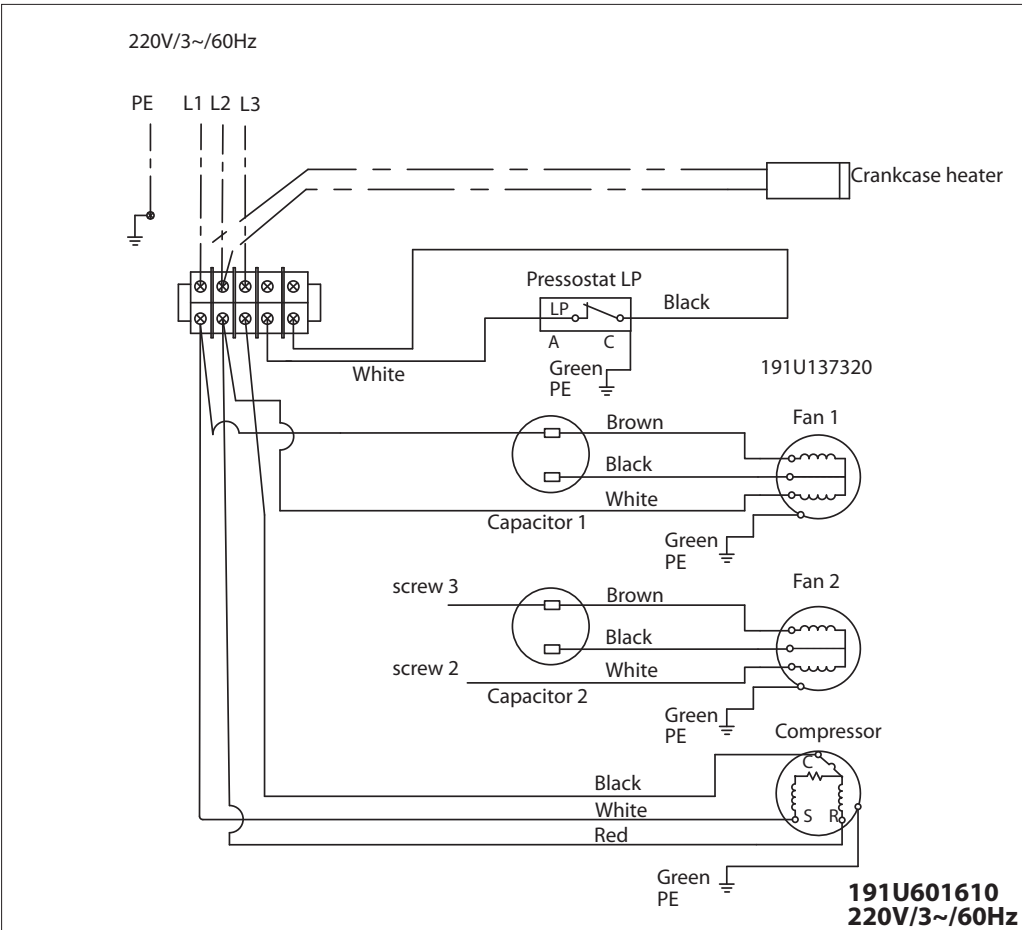
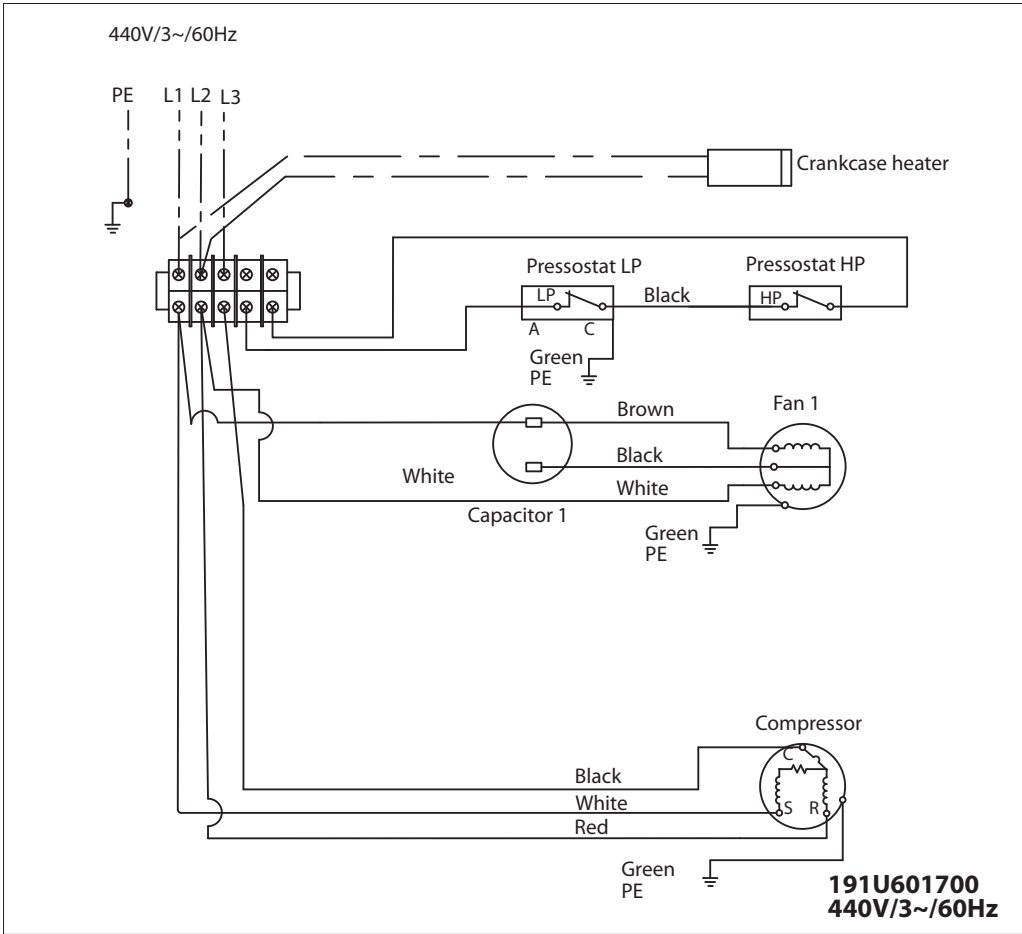


Models: HRU models in voltage Q

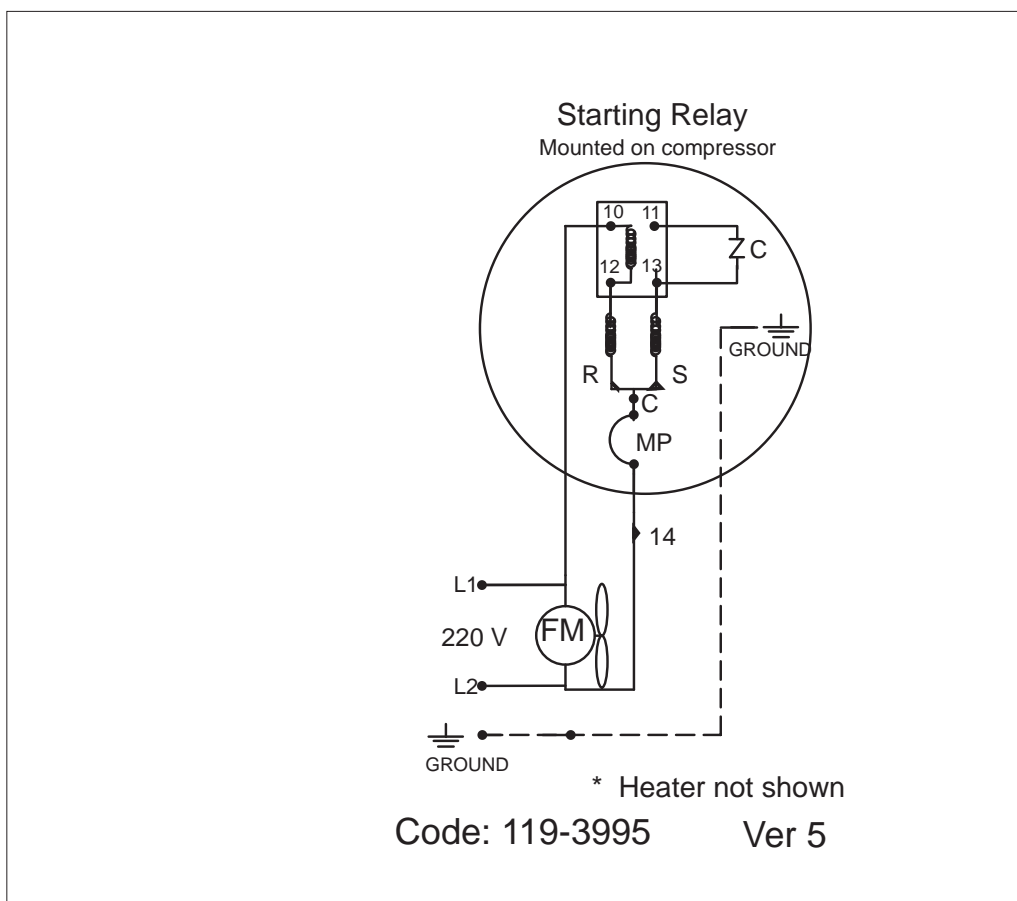
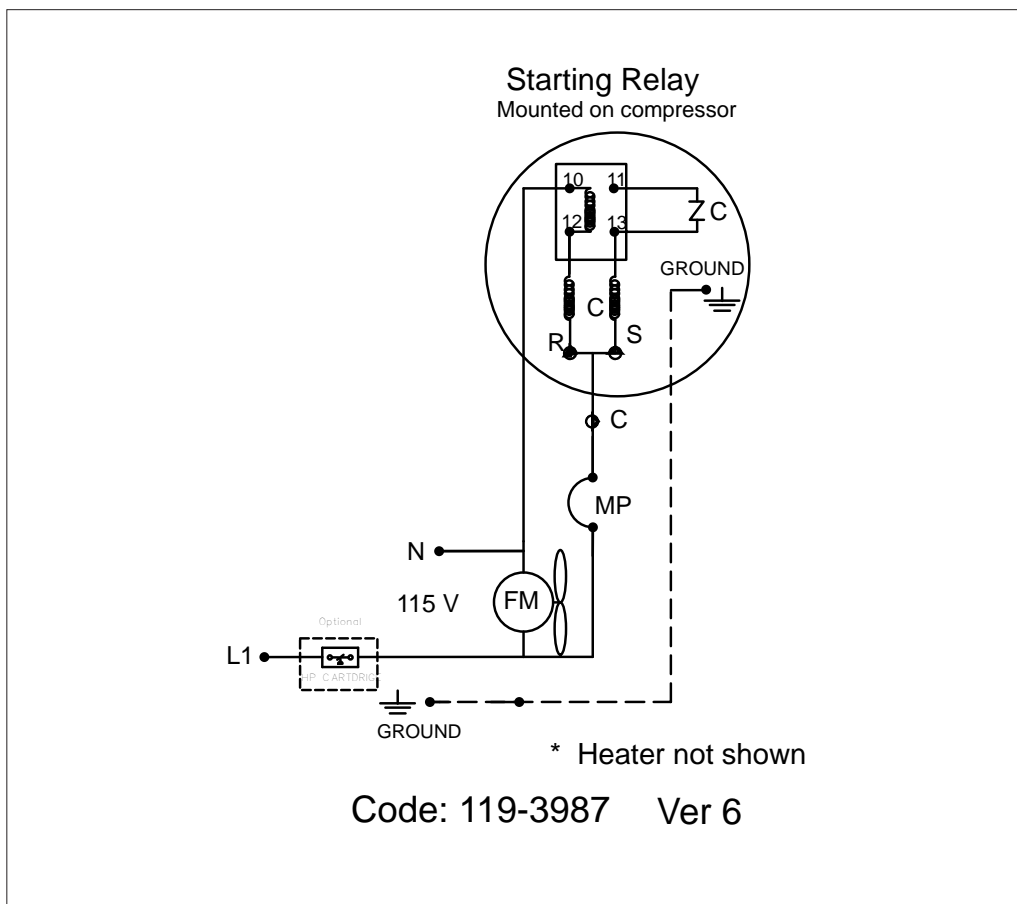


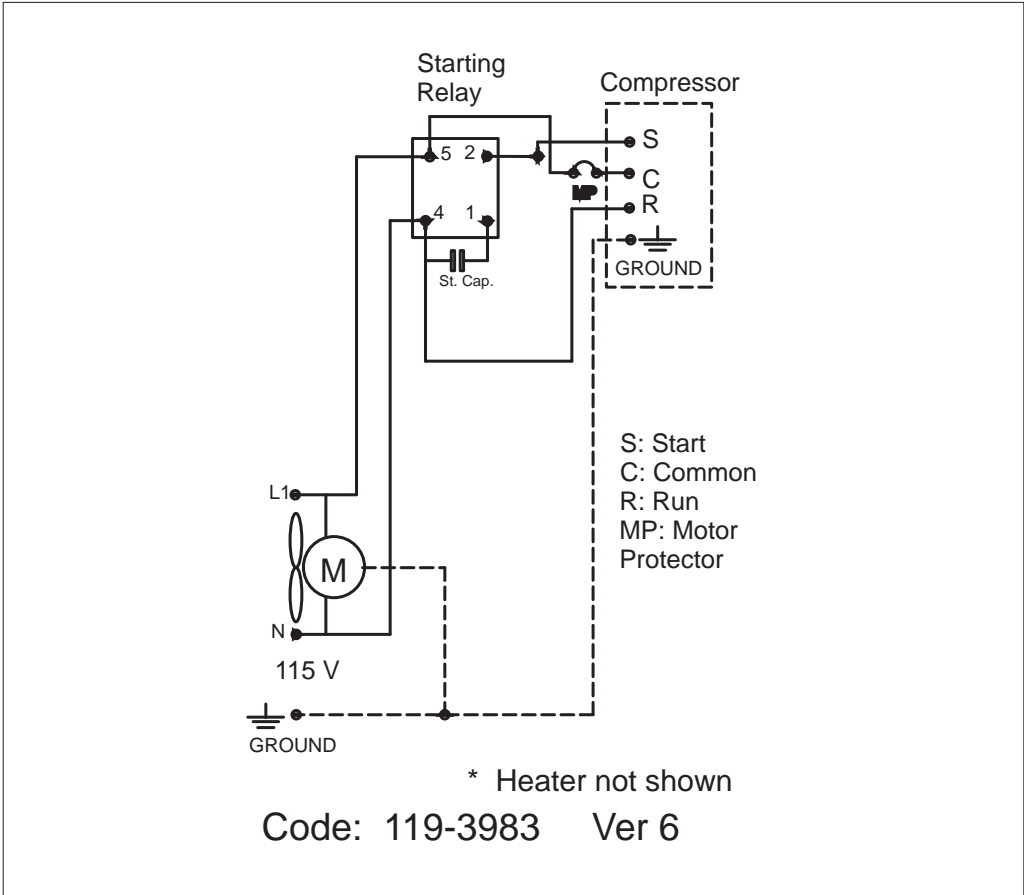
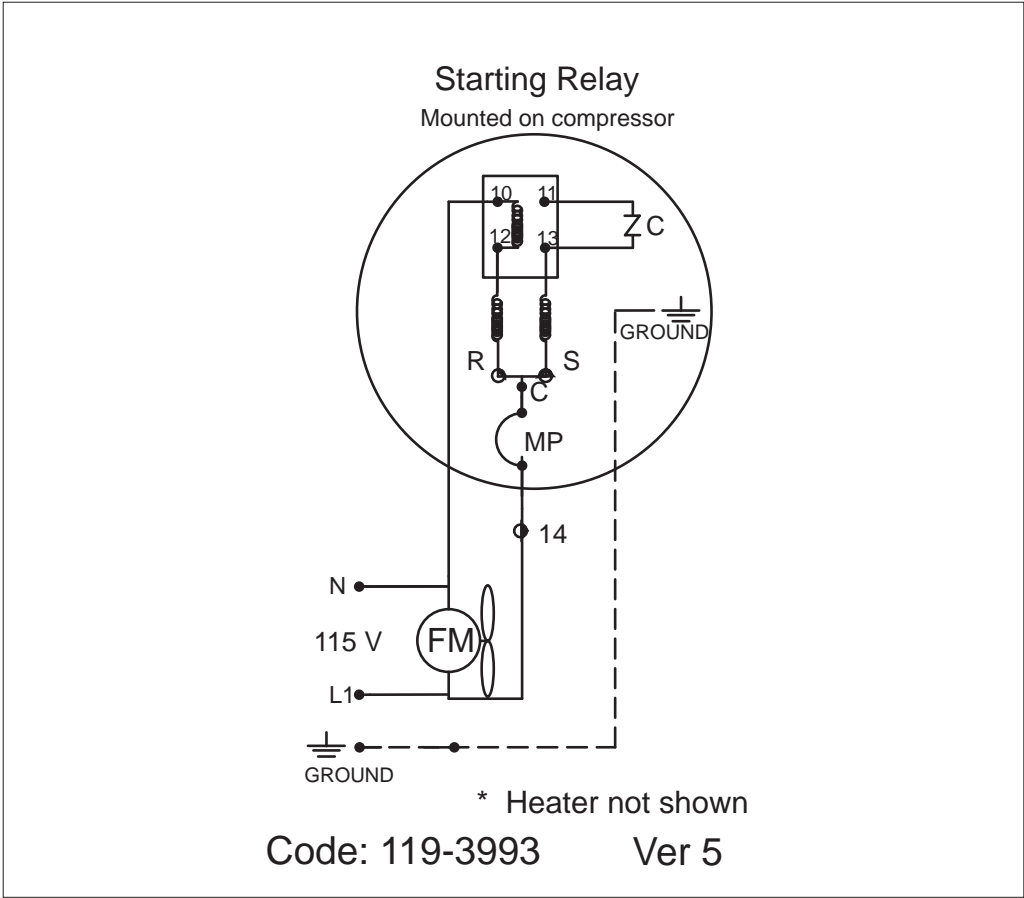


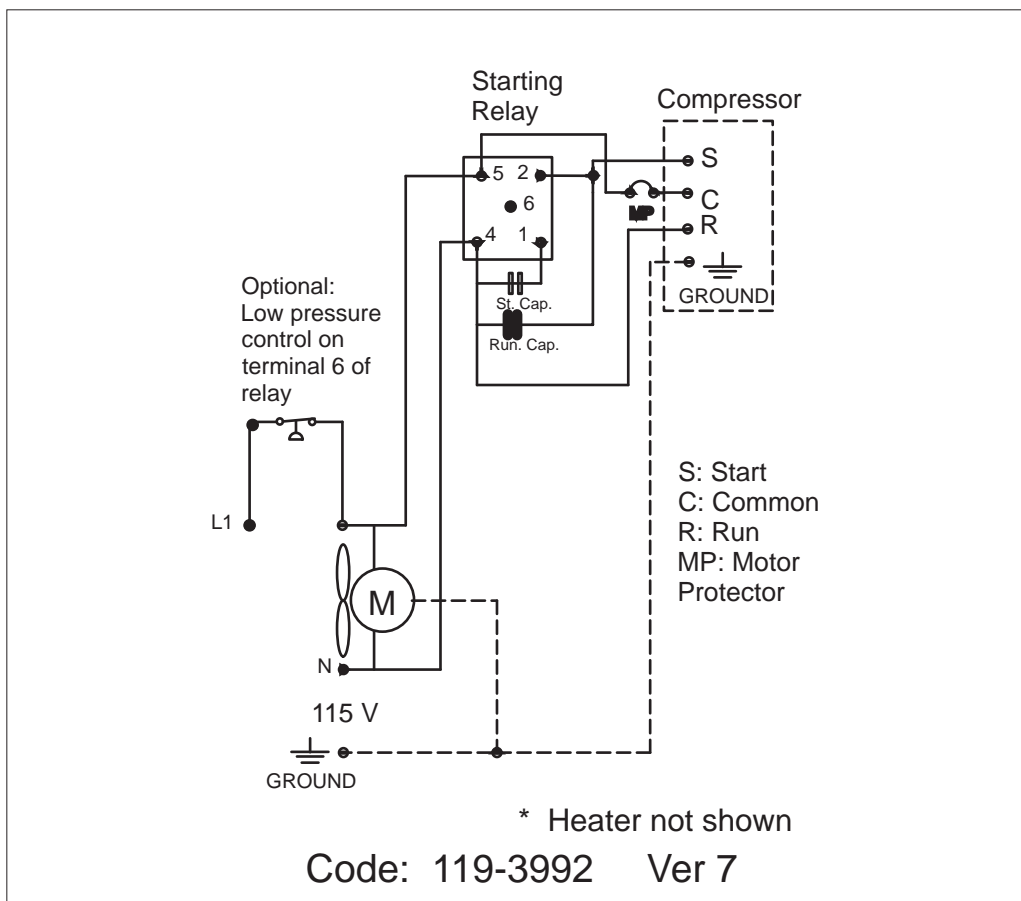
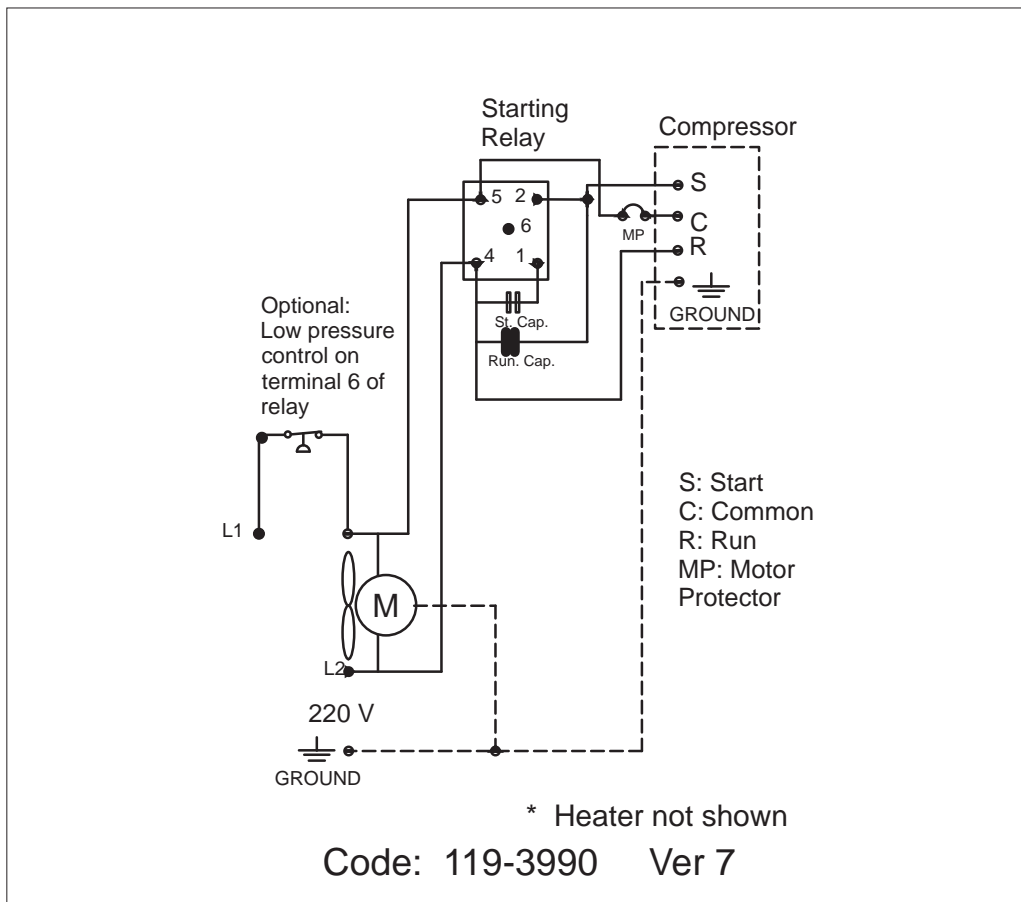






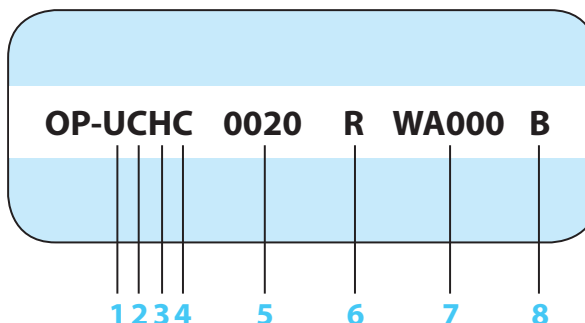






### Designation system for the Optyma™ fractional units

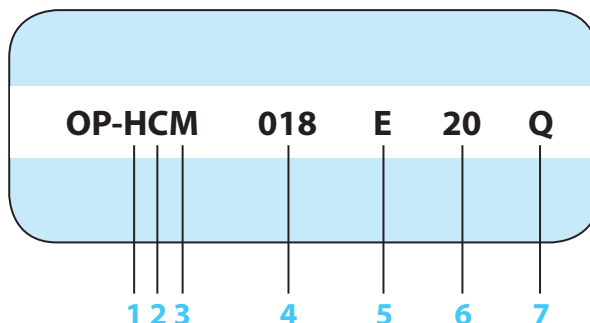
(additional programme frequency etc.: please contact your local wholesaler)



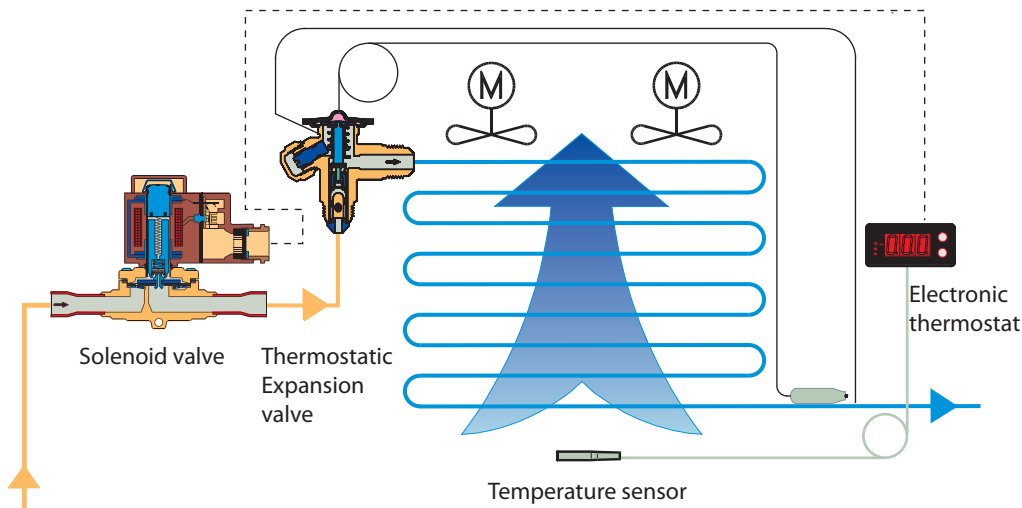
<p><b>1</b> Application</p>	<p><b>H</b> = High medium temperature  <b>L</b> = Low  <b>U</b> = Universal Low / Medium / High</p>
<p><b>2</b> Design</p>	<p><b>C</b>: Air cooled condensing unit with 1 fan and hermetic reciprocating compressor  <b>G</b>: Air cooled condensing unit with 2 fan and hermetic reciprocating compressor</p>
<p><b>3</b> Refrigerant</p>	<p><b>M</b> = R22 / mineral oil  <b>Z</b> = R134a / R404A / R507 / Polyolester oil  <b>U</b> = R22 / R404A / R134a / Polyvinyl ester (PVE) oil</p>
<p><b>4</b> Condenser size</p>	<p><b>A</b>: 32°C Max. ambient  <b>B</b>: 38°C Max. ambient  <b>C</b>: 43°C Max. ambient  <b>D</b>: 48°C Max. ambient</p>
<p><b>5</b> HP rating</p>	<p>in hundredths of HP  i.e. 0033 = 1/3 HP  1000 = 10 HP</p>
<p><b>6</b> Certification</p>	<p><b>R</b>: UL recognized  <b>U</b>: UL listed</p>
<p><b>7</b> Version</p>	<p><b>W</b>: Wholesale model  <b>A</b>: Power cord  <b>B</b>: Power cord, receiver  <b>C</b>: BX, Receiver</p>
<p><b>8</b> Voltage code</p>	<p><b>B</b>: Compressor 115V/1~/60 Hz, fan 115V/1~/60Hz  <b>N</b>: Compressor 208-230 V/1~/60 Hz, fan 230 V/1~/60 Hz  <b>Q</b>: Compressor 200-230 V/3~/60 Hz, fan 230 V/1~/60 Hz  <b>R</b>: Compressor 460V/3~/60 Hz, fan 460V/1~/60 Hz</p>

### Designation system for the Optyma™ integral HP units 60 Hz

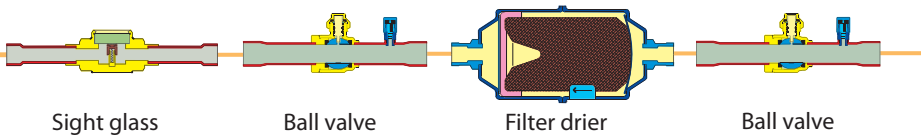
(additional programme frequency etc.: please contact your local wholesaler)



<b>1</b> Application	<b>H</b> = High-Medium temperature <b>L</b> = Low <b>M</b> = Medium
<b>2</b> Design	<b>C</b> : Air cooled condensing unit with 1 fan and hermetic reciprocating compressor <b>G</b> : Air cooled condensing unit with 2 fan and hermetic reciprocating compressor <b>R</b> : Condensing unit with scroll compressor
<b>3</b> Refrigerant	<b>M</b> = R22 / mineral oil <b>Z</b> = R134a / R404A / R507 / Polyolester oil <b>U</b> = R22 / R404A / R134a / Polyvinyl ester (PVE) oil
<b>4</b> Unit size	Unit size (number)
<b>5</b> Platform & origin	<b>E</b> : Manufactured in Mexico
<b>6</b> Version	Configuration / equipment
<b>7</b> Voltage code	<b>B</b> : Compressor 115V/1~/60 Hz, fan 115V/1~/60Hz <b>N</b> : Compressor 208-230 V/1~/60 Hz, fan 230 V/1~/60 Hz <b>Q</b> : Compressor 200-230 V/3~/60 Hz, fan 230 V/1~/60 Hz <b>R</b> : Compressor 460V/3~/60 Hz, fan 460V/1~/60 Hz



Condensing unit



Sight glass

Ball valve

Filter drier

Ball valve







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)

Danfoss can accept no responsibility for possible errors in catalogues, brochures and other printed material. Danfoss reserves the right to alter its products without notice. This also applies to products already on order provided that such alterations can be made without subsequential changes being necessary in specifications already agreed. All trademarks in this material are property of the respective companies. Danfoss and the Danfoss logotype are trademarks of Danfoss A/S. All rights reserved.