

ENGINEERING
TOMORROW

Danfoss

Catalog

Optyma™ condensing units



Easy

installation, easy
service and reliable
performance

www.danfoss.us/aftermarket

Optyma™ condensing unit nomenclature / model no.

Application	Design	Refrigerant	Condenser size	HP rating	Certification	Version	Electrical code
H	N	X	M	0300	U	WG000	Q

Application:

L: Low
H: High or Medium / High
M: Medium or Low/Medium
U: Universal Low / Medium / High

Design:

C: Air cooled condenser, Single fan, Recip
J: Air cooled condenser, Slim Design, Recip
G: Air cooled condenser, Twin fan, Recip
N: Air cooled condenser, Slim Design, Scroll
R: Air cooled condenser, Twin fan, Scroll

Refrigerant:

G: R134a
H: R404A/R507/R452A
M: R22 Replacement
N: R290
Z: R404A/R507A/R134a*/R448A/R449A/R452A
X: R448A/R449A/R404A/R507A/R134a/R452A
Y: R448A/R449A/R404A/R507A/R452A
S: R410A/R454B

Condenser size:

C: Fin and Tube condenser size 110F ambient
M: Microchannel Condenser size 115F ambient

HP rating:

HP rating in hundredths of HP,
i.e.: 0033=1/3 HP, 1000 = 10 HP

Certification:

R: UL Recognized
U: UL Listed

Electrical code:

B: Compressor & fan(s), 115V, 1ph, 60 Hz
N: Compressor & fan(s), 230V, 1ph, 60 Hz
Q: Compressor 208-230V, 3ph, 60 Hz
Fan(s) 230V, 1ph, 60 Hz
R: Compressor 460V, 3ph, 60 Hz
Fan(s) 460V, 1ph, 60 Hz

Version:

DF: Plastic baseplate
WA: Power cord
WB: Power cord, Receiver
WC: Electrical box, Receiver
WD: Electrical box, Receiver,
Low pressure control
WE: Electrical box, Receiver, Dual pressure
control, Fan cycling control, larger than 3HP
dual fan units use KPU fan cycling control
WF: WE + Filter drier, Sight glass, Solenoid valve
with coil
WG: BX, Receiver, Dual pressure control, Fan
speed controller or Fan cycling, Defrost
Timer, Outdoor enclosure (MBP)
WH: Electrical box, Receiver, Dual pressure
control, Fan speed controller or Fan cycling,
Defrost timer, Outdoor enclosure, Suction
Accumulator (LBP)
WJ: Electrical box, Receiver, Dual pressure
control, Fan cycling control, Filter drier,
Sight glass
WK: WG + Low Ambient Temperature
WL: WH + Low Ambient Temperature

* R134a is only available in MBP units without low-ambient kit

Rating Conditions (ARI)

Application	LBP	MBP/HBP
Ambient Temp	90°F	90°F
Return Gas	40°F	65°F
SubCooling	5°F	5°F

OPTYMA MADE IN USA

Model: ← HCGC0033RWB000B (Model no.)

Danfoss Code: ← 114N2022 (Code no.)

Serial Number: ← Date Code: XXXXXXXAU0116
7 digits = serial #
AU = Assembled in US
01 = Week of Manufacture
16 = Year of Manufacture

Compressor: 115V-60Hz-1Ph LRA43.1A RLA8.9A
Fan Motor: 115V FLA 0.45 A
MCA: 11.6 A
Max. Fuse/HACR breaker: 20.0

Design Pressure: Low/High side 87/185psi
Refrigerant: R134a
Oil Type: Polyolester
Wiring diagram: 119-3987

OPTYMA ASSEMBLED IN MEXICO

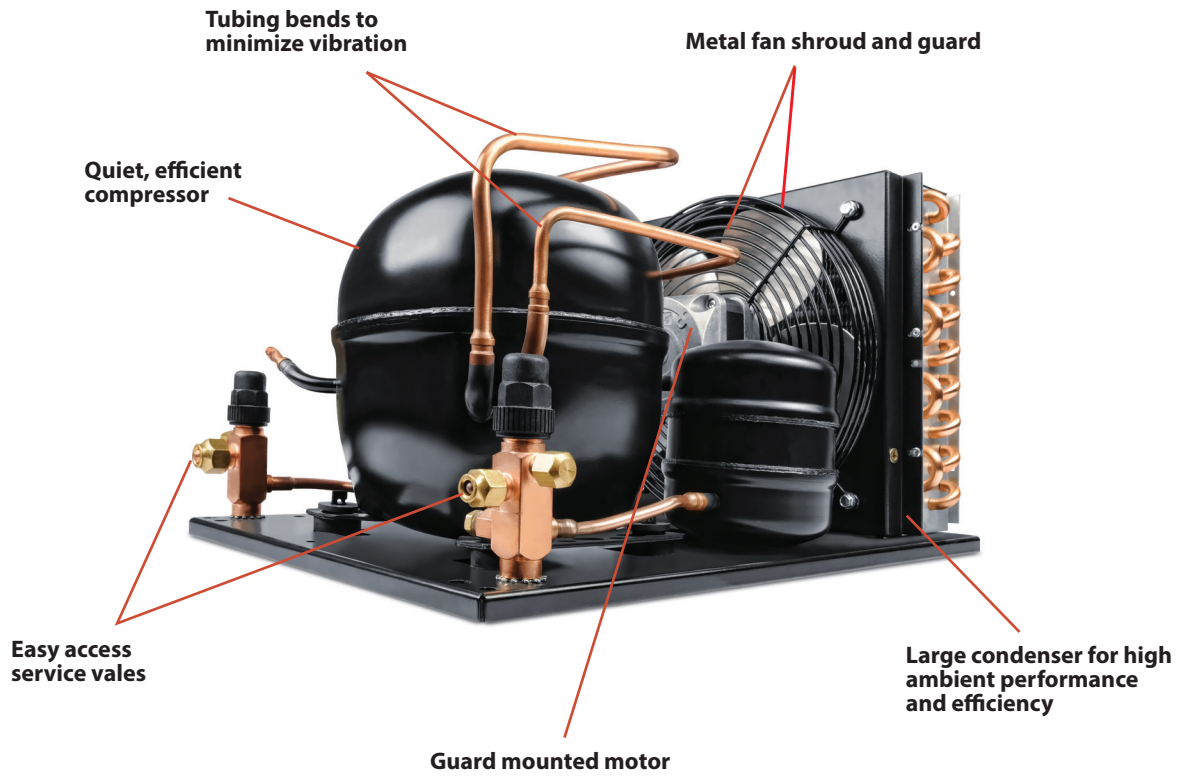
Model: ← HCGC0033RWB000B (Model no.)

Danfoss Code: ← 114N2022 (Code no.)

Serial Number: ← Date Code: XXXXXXXAM0116
7 digits = serial #
AM = Assembled in Mexico
01 = Week of Manufacture
16 = Year of Manufacture

Compressor: 115V-60Hz-1Ph LRA43.1A RLA8.9A
Fan Motor: 115V FLA 0.45 A
MCA: 11.6 A
Max. Fuse/HACR breaker: 20.0

Design Pressure: Low/High side 87/185psi
Refrigerant: R134a
Oil Type: Polyolester
Wiring diagram: 119-3987



Fan	Model no	Version	Electrical code	Code no	Compressor model	Amb. temp.	Capacity range in (btu/hr) at evaporating temperature								Power consumption [W] at evap. temp. -10 F	Power Consumption [W] at evap. Temp. 20°F	
						°F	-30	-20	-10	0	10	20	30	40			50
Single fan	MCNC0015R	DF600 DF602	B	114N2090 114N2117	NBC30NR	90	346	477	627	795	979	1179	1393	1622	114	152	
						95	329	453	597	757	935	1128	1337	1559			
						100	313	430	566	720	891	1078	1280				
						105	297	406	535	683	847						
	MCNC0020R	DF600 DF602	B	114N2092 114N2119	NUT55LRb	90	704	912	1139	1383	1642	1916	2202	2500	201	277	
						95	671	869	1086	1321	1572	1837	2115	2405			
						100	638	826	1034	1259	1501	1758	2028				
						105	604	783	981	1198	1431						
	MCNC0033R	WA000 WA002	B	114N2097 114N2123	DLE6.5CN	90	792	1022	1276	1563	1887	2253	2663	3120	268	361	
						95	758	981	1227	1504	1818	2173	2572	3016			
						100	724	941	1179	1447	1751	2094	2482				
						105	691	901	1132	1391	1684						
	MCNC0050R	DF600 DF602	B	114N2094 114N2121	NLY12NRb	90	1195	1606	2055	2541	3059	3607	4183	4784	417	596	
						95	1148	1540	1971	2438	2939	3470	4030	4617			
						100	1102	1474	1887	2336	2819	3334	3878				
						105	1056	1409	1802	2234	2700						
	MCNC0050R	WA000 WA002	B	114N2091 114N2118	NLY12NRb	90	1228	1666	2150	2680	3251	3863	4512	5198	412	583	
						95	1181	1599	2064	2574	3128	3721	4353	5022			
						100	1134	1532	1978	2469	3004	3579	4194				
						105	1088	1465	1891	2364	2880						
	MCNC0075R	DF600 DF602	B	114N2095 114N2122	NPT14ND	90	1497	1964	2496	3086	3728	4416	5146	5912	546	789	
						95	1435	1880	2390	2959	3581	4250	4961	5711			
						100	1373	1795	2284	2832	3434	4084	4778				
						105	1312	1711	2178	2706	3288						
	LCNC0075R	DF600	B	114N2104	NPT16LR	90	1565	1981	2444	2944	3473				637	N/A	
						95		1887	2331	2813							
						100		1793	2217	2681							
						105											
MCNC0075R	WA000 WA002	B	114N2098 114N2124	NPT14 ND	90	1497	1964	2496	3086	3728	4416	5146	5912	546	789		
					95	1435	1880	2390	2959	3581	4250	4961	5711				
					100	1373	1795	2284	2832	3434	4084	4778					
					105	1312	1711	2178	2706	3288							
MCNC0075R	WA000 WA002	N	114N2099 114N2125	SCE15MNX	90					4142	4859	5596	6355	7140	N/A	718	
					95					3978	4660	5359	6079	6825			
					100					3799	4444	5104	5786				
					105					3600	4208	4831					
MCNC0100R	WA000 WA002	B	114N2100 114N2126	SCE18MNX	90					5039	5942	6874	7828	8796	N/A	850	
					95					4849	5715	6607	7518	8442			
					100					4654	5488	6343	7214				
					105					4456	5261	6083					
MCNC0100R	WA000 WA002	N	114N2101 114N2127	NPT16NF	90	1775	2352	2993	3693	4446	5247	6093	6980	652	938		
					95	1700	2247	2860	3532	4260	5036	5859	6724				
					100	1624	2141	2726	3372	4073	4826	5626					
					105	1549	2036	2592	3211	3887							

Test condition

Return gas temperature 65°F
Subcooling 5°F

Electrical code

B: Compressor & fan(s) 115V, 1 ph, 60 Hz
N: Compressor & fan(s) 230V, 1 ph, 60 Hz

Version

DF000: Multi pack plastic baseplate
DF002: Single pack plastic baseplate
WA000: Multi pack metal baseplate
WA002: Single pack metal baseplate

HP rating in hundredths of HP, ie.: 033=1/3hp, (UCGC0100U:0100=1hp)
Power consumption referred at 90°F ambient temperature

Model no	Condenser fan	Receiver lbs @ 90%	Dimensions (in) ⁽¹⁾						Weight (lbs)		MCA (A)	Oil Type / Charge (oz)	Wiring diagram code ⁽²⁾
	Fan blade Ø (in)		Figure	Height H (in)	Width W (in)	Depth D (in)	Suction line	Liquid line	Gross				
MCNC0015R	4.75	-	12a	8.50	8.27	17.20	1/4" S	2.8 mm S	30.78	2.19	POE / 4.2	119-9261	
MCNC0020R	4.75	-	12a	8.50	8.27	17.20	1/4" S	2.8 mm S	38.34	3.07	POE / 7	119-9262	
MCNC0033R	8	-	13a	8.98	11.26	13.78	1/4" S	1/4" S	35.75	5.65	POE / 7.8	119-3993	
MCNC0050R	10	-	14a	12.44	13.11	17.01	5/16" S	2.8 mm S	49.25	7.39	POE / 13.9	119-9262	
MCNC0050R	10	-	14a	11.89	13.23	17.01	5/16" S	2.8 mm S	48.46	7.39	POE / 13.9	119-9262	
MCNC0075R	10	-	14a	12.44	12.99	17.01	5/16" S	1/4" S	58.01	7.7	POE / 14.1	119-9262	
LCNC0075R	8	-	15a	9.84	10.55	20.08	5/16" S	1/4" S	59.62	7.27	POE / 14.1	119-9262	
MCNC0075R	10	-	14a	11.89	13.23	17.01	5/16" S	1/4" S	60.21	7.7	POE / 14.1	119-9262	
MCNC0075R	10	-	14a	11.89	13.23	17.01	3/8" S	1/4" S	64.5	5.21	POE / 19.4	119-3990	
MCNC0100R	12	-	16a	13.94	15.98	19.02	3/8" S	1/4" S	64.5	11.93	POE / 19.4	119-3992	
MCNC0100R	12	-	16a	13.94	15.98	19.02	5/16" S	1/4" S	59.91	4.39	POE / 15.8	119-9263	

⁽¹⁾ Dimensions (in) available on page 40

⁽²⁾ Wiring diagram available on page 33
For spare parts, see pages 28