

OPTYMA Scroll condensing units



Performance Data R404A

Medium Temperature units R404A refrigerant - Single Fan models

Condensing Unit	Evaporating Temperature °C (Capacities in Watts)						
	-20	-15	-10	-5	0	5	10
MCUC034	TBA	TBA	TBA	TBA	TBA	TBA	TBA
MCUC043	2,813	3,401	4,048	4,762	5,546	6,407	7,339
MCUC057	3,715	4,487	5,347	6,297	7,335	8,461	9,659
MCUC068	4,397	5,297	6,301	7,406	8,609	9,907	11,287
MCUC080	5,429	6,573	7,853	9,272	10,829	12,531	14,367
MCUC107	7,052	8,526	10,155	11,953	13,933	16,109	18,472
MGUC149	10,034	12,201	14,622	17,312	20,277	23,527	27,039
MGUC162	11,482	13,738	16,204	18,926	21,918	25,213	28,845

Medium Temperature units R404A refrigerant - Twin Fan models

Condensing Unit	Evaporating Temperature °C (Capacities in Watts)						
	-20	-15	-10	-5	0	5	10
MGUD034	2,501	3,086	3,671	4,339	5,060	5,861	6,661
MGUD043	2,887	3,500	4,180	4,936	5,772	6,693	7,703
MGUD057	3,988	4,855	5,838	6,946	8,183	9,549	11,050
MGUD068	4,661	5,655	6,781	8,039	9,429	10,950	12,601
MGUD080	5,645	6,866	8,247	9,794	11,513	13,406	15,483
MGUD107	7,408	9,007	10,797	12,802	15,041	17,529	20,284
MGUD149	9,832	11,931	14,262	16,834	19,649	22,714	26,003
MGUD162	11,834	14,243	16,905	19,873	23,169	26,834	30,893

Capacities are based on an ambient of 32 C, superheat 10K, liquid sub cooled to condenser limits.

PRELIMINARY DATA - SUBJECT TO CHANGE

June 2009



OPTYMA Scroll condensing units



Medium Temperature units

Unit Designation	Compressor Model	Physical Dimensions			Weight (Kg)	Receiver (L)	Condenser		Connections	
		Width (mm)	Depth (mm)	Height (mm)			No of fans	Power Input (w)	Suct	Liquid
MGUC034	MLZ015	630	650	442	62	6	1 x 350	230	5/8	1/2
MGUD034	MLZ015	800	600	442	64	6	2 x 300	170	5/8	1/2
MGUC043	MLZ019	630	650	555	87	6	1 X 350	230	5/8	1/2
MGUD043	MLZ019	800	600	442	88	6	2 x 300	170	5/8	1/2
MGUC057	MLZ026	630	650	605	89	8	1 x 400	240	5/8	1/2
MGUD057	MLZ026	1000	700	555	90	8	2 x 355	230	5/8	1/2
MGUC068	MLZ030	755	700	656	106	8	1 x 400	240	7/8	1/2
MGUD068	MLZ030	1000	700	555	107	8	2 x 355	230	7/8	1/2
MGUC080	MLZ038	755	700	656	111	8	1 x 400	770	7/8	1/2
MGUD080	MLZ038	1000	700	555	112	10	2 x 400	240	7/8	1/2
MGUC107	MLZ048	900	900	759	126	10	1 x 500	770	1.1/8	1/2
MGUD107	MLZ048	1200	800	671	128	10	2 x 450	400	1.1/8	1/2
MGUC148	MLZ066	1350	820	759	135	10	2 x 500	770	1.1/8	5/8
MGUD148	MLZ066	1200	800	671	135	14	2 x 450	400	1.1/8	5/8
MGUC162	MLZ076	1350	820	759	167	14	2 x 500	770	1.1/8	5/8
MGUD162	MLZ076	1350	820	759	167	14	2 x 500	770	1.1/8	5/8

Condensing unit designation: **M** Application range - M = Medium temperature; L = Low temperature
C/G **C = Single-fan unit; G = Twin fan unit**
U U = Multi Refrigerant, R404A, R507, R407C, R134a, R22
C/D **C = Standard Optyma single-fan condenser up to 46°C ambient, R404A.**
D = Large Optyma twin-fan condenser up to 48°C ambient, R404A.
068 Swept volume in cc for compressor
ML Compressor model: **ML = MLZ Scroll**
A02 Version: **A02 = HP/LP switch (selectable auto / manual reset), Flexible hose, full wired terminal box**
D/E/G Voltage Code: **D = Compressor 400v 3ph, Fan 400v, 3ph**
E = Compressor 400v 3ph, Fan 230v 1ph
G = Compressor 230v 1ph, Fan 230v 1ph

Example: **MGUD148MLA02E =** This unit has a three phase compressor with a swept volume of 148cc (MLZ066), two single phase condenser fans, dual HP/LP switch with selectable auto or manual reset function on HP, flexible hoses on pressure switch, and a fully pre-wired terminal box.

Electrical Data

Unit Designation	Compressor				Fans	
	Locked rotor amps		Running current		Locked rotor amps	Running current
	3Ph	1Ph	3Ph	1Ph	1Ph	1Ph
MGUC034	TBA	TBA	TBA	TBA	1 x 6.0	1 x 1.2
MGUD034	TBA	TBA	TBA	TBA	2 x 4.25	2 x 0.85
MGUC043	45	97	6.7	18.3	1 x 6.0	1 x 1.2
MGUD043	45	97	6.7	18.3	2 x 4.25	2 x 0.85
MGUC057	45	97	8.3	24.2	1 x 6.5	1 x 1.3
MGUD057	45	97	8.3	24.2	2 x 6.0	2 x 1.20
MGUC068	60	127	9.8	28.9	1 x 6.5	1 x 1.3
MGUD068	60	127	9.8	28.9	2 x 6.0	2 x 1.20
MGUC080	60	130	11.7	33.9	1 x 17.0	1 x 3.4
MGUD080	70	130	11.7	33.9	2 x 6.5	2 x 1.30
MGUC107	87	-	15.3	-	1 x 17.0	1 x 3.4
MGUD107	87	-	15.3	-	2 x 8.5	2 x 1.70
MGUC148	110	-	20.3	-	2 x 17.0	2 x 3.40
MGUD148	110	-	20.3	-	2 x 8.5	2 x 1.70
MGUC162	140	-	23.9	-	2 x 17.0	2 x 3.40
MGUD162	140	-	23.9	-	2 x 17.0	2 x 3.40

Note1: Fan electrical data may vary slightly depending on motor manufacturer

Note 2: The compressor nameplate will show the locked rotor amps and the Max amps figure. The Max amps figure (MCC) is the current at which the internal protector will cut out and is higher than the running amps.

Note 3: The figure quoted for the running amps of the compressor are at ARI conditions, evaporating at +7.2 C, condensing at 54.4C, superheat 11.1K for medium temperature units.

Note 4: Figures for three-phase compressors are shown in "amps per phase"

