Mbsm.pro, Compressor, Lg, Lbp, MB88NA, 151 w, 1/5 hp, r600a, 1ph-220v-50hz

Category: compressor
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Compressor Specifications:

1. **Model Name:** LG LBP MB88NA
   - This is the specific model number of the compressor manufactured by LG.
2. **Power Consumption:** 151 W

    - The compressor consumes **151 watts** of electrical power during operation. This indicates the energy efficiency of the unit.
3. **Horsepower (HP):** 1/5 HP
    - The compressor has a motor rated at **1/5 horsepower** , which is equivalent to **0.2 HP** . This is a relatively small compressor, typically used in compact refrigeration systems or appliances like mini-fridges or beverage coolers.
4. **Refrigerant Type:** R600a
    - **R600a** (isobutane) is an eco-friendly refrigerant with low global warming potential (GWP). It is commonly used in domestic refrigerators and freezers due to its energy efficiency and minimal environmental impact. However, it is flammable, so proper handling is required.
5. **Electrical Configuration:** 1 Phase, 220V, 50Hz
    - The compressor operates on a **single-phase power supply** with a voltage of **220 volts** and a frequency of **50 hertz** . This configuration is typical for residential applications in regions like Europe, Asia, and parts of Africa.

Applications:

Given the specifications, this compressor is likely designed for use in **low-back pressure (LBP)** systems. LBP compressors are typically used in:

- **Household refrigerators**
- **Freezers**
- **Beverage coolers**
- **Compact cooling appliances**

https://www.mbsm.pro/files/53179
https://www.mbsm.pro/wp-content/uploads/2025/04/Mbsm_dot_pro_private_PDF-MB88NA.pdf

The **R600a refrigerant** further confirms that this compressor is intended for smaller, energy-efficient cooling systems.

								POWER				
	V	Hz		cc	kcal/h	w	Btu/h	w	w/w	kcal/h	w	Btu/h
LBP	220-240	50	NR45NAEG	4.50	54	63	215	61	1.04	40	47	160
			NR52NAEG	5.19	66	76	261	70	1.09	49	57	195
			NR52NAEM	5.19	66	76	261	67	1.14	49	57	195
			NR62NAEG	6.23	78	91	311	77	1.18	58	68	232
			NR69NAEG	6.89	86	101	343	80	1.25	65	75	256
			NR69NAEM	6.89	86	101	343	77	1.30	65	75	256
			NR80NAEM*	8.06	96	111	380	90	1.24	71	83	283
			NR88NAEM*	8.78	115	134	458	103	1.30	86	100	341
			NR88NAEG	8.78	115	134	458	107	1.25	86	100	341
			ND45NAEG	4.50	54	63	215	61	1.04	40	47	160
			ND45NAEM	4.50	54	63	215	59	1.07	40	47	160
			ND62NAEG	6.23	76	88	302	71	1.24	57	66	225
			ND62NAEM	6.23	76	88	302	67	1.32	57	66	225
			ND69NAEG	6.89	86	101	343	79	1.27	65	75	256
			ND69NAEM	6.89	86	101	343	74	1.35	65	75	256
			ND80NAEG	8.06	112	130	444	95	1.37	83	97	331
			ND80NAEM	8.06	112	130	444	92	1.42	83	97	331
			ND88NAEG	8.78	116	135	462	106	1.27	87	101	345
			ND88NAEM	8.78	116	135	462	100	1.35	87	101	345
			NDA52NAEG	5.23	67	78	265	64	1.22	50	58	198
			NDA52NAEM*	5.23	67	78	265	62	1.26	50	58	198
			NDA62NAEG	6.23	83	96	329	70	1.38	62	72	246
			NDA62NAEM	6.23	83	96	329	67	1.44	62	72	246
			NDA69NAEG	6.89	92	107	366	77	1.39	69	80	273
			NDA69NAEM	6.89	92	107	366	74	1.44	69	80	273
			NDA80NAEG	8.06	111	129	439	94	1.37	83	96	328
			NDA80NAEM	8.06	111	129	439	89	1.44	83	96	328
			NDA88NAEG	8.78	124	145	494	104	1.39	93	108	369
			NDA88NAEM	8.78	124	145	494	98	1.47	93	108	369
			MB62NAEG	6.24	86	101	343	68	1.48	65	75	256
			MB62NAEM	6.24	86	101	343	64	1.57	65	75	256
			MB69NAEM*	6.90	103	119	407	75	1.58	77	89	304
			MB82NAEG	8.15	122	142	485	94	1.51	91	106	362
			MB82NAEM	8.15	122	142	485	89	1.60	91	106	362
			MB88NAEM*	8.84	130	151	517	96	1.58	97	113	386
			MC53NAEM*	5.25	75	87	297	53	1.64	56	65	222
			MC57NAEM*	5.71	83	96	329	59	1.64	62	72	246
			MC62NAEM*	6.24	90	105	357	63	1.69	67	78	266

Key Considerations:

1. **Environmental Impact:**
   - R600a is a hydrocarbon refrigerant, making it environmentally friendly compared to older refrigerants like R134a or R22. However, it requires careful handling due to its flammability.
2. **Voltage Compatibility:**
   - Ensure that the power supply matches the compressor's requirements (220V, 50Hz). Using incompatible voltage can damage the compressor or cause it to malfunction.
3. **System Design:**
   - Since this is an LBP compressor, it is optimized for systems with lower evaporating temperatures, such as freezers or deep-freeze applications.

Conclusion:

The **LG LBP MB88NA** compressor is a compact, energy-efficient unit designed for small-scale refrigeration systems. Its key features include:

- Low power consumption (151W)
- Eco-friendly refrigerant (R600a)
- Compatibility with 220V, 50Hz power supplies
- Suitable for low-back pressure applications